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Contemporary Issues in Social Sciences

**Proceedings of Yogananda International Conference
on Contemporary Issues in Social Sciences-2021**

Editors

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Dr. Vinay Negi



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By
Prof. Kuldeep Chand Rojhe
Dr. Amar Rao
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Acknowledgement

Shoolini prides itself on a proficient and accomplished team of faculty members. Our students learn from some of the best teachers in India. The faculty members are trained and educated at the best universities of the world such as National Cancer Institute, USA, NIH, USA, IISc and Oxford.

We would like to acknowledge the encouragement and patronage provided by our esteemed Chancellor, Prof. Prem Kumar Khosla for conducting 'Two days Yogananda International Conference on Contemporary Issues in Social Sciences-YICCISS 2021. Creating a research oriented culture at Shoolini University is remarkable and to achieve this end, our gratitude is also extended to our Honorable Vice Chancellor, Prof. Atul Khosla for his unconditional and motivational support. Sustaining the same research culture requires a strong and clear pathway for which we would like to acknowledge the important contributions of Honorable Pro Chancellor, Mr. Vishal Anand for always being a constant support for us. Our sincere thanks go as well to our Registrar, Dr. Sunil Puri for proving his all-time pearls of wisdom to achieve this objective. Finally, we thank Faculty of Management Sciences and Liberal Arts superb team for their continuous and unconditional support in making this conference a success.

Prof. Kuldeep Chand Rojhe

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Dr. Vinay Negi

Shoolini University

Shoolini University is a research-driven private university recognized for its focus on excellence in teaching, innovation, quality placements, and world-class faculty. The university was set up in 2009 and has full-recognition from the UGC.

Our Vision is to among top 200 University by 2022” and Our Mission is to bring deep “Research and iNNovation” to our students, faculty and community, to be “Honest and Compliant” in everything we do, to provide “World Class” education and learning to the lesser privileged, to bring “Happiness” into the life of Shoolinians and all we touch.

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3. Honesty and integrity in everything we do
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About the Conference

Yogananda International Conference on Contemporary Issues in Social Sciences is an initiative of Faculty of Management Sciences and Liberal Arts, Shoolini University

The primary objective of the conference is to provide opportunities for academicians, industry experts, practitioners, professionals, researchers, and policymakers from different domains in social sciences to engage in discussion on issues related to the dynamic and challenging economic environment.

It will also provide a platform to get acquainted with the latest developments and trends in the economy and business environment coupled with their implications on the organizations and society.

The forum will facilitate interaction among members inside and outside their own respective disciplines to enjoy the fellowship of other professionals and scholars in the field.

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School of Business Management, FMSLA, Shoolini University aspires to provide quality and relevant education to our students at an affordable and subsidized fee structure. Developing a top quality and industry relevant Business School is core to this strategy. SBM have actively involved in discussions with CEOs of several leading Indian companies around this vision. Most students graduating from Indian management schools do not consistently have appropriate knowledge, competencies, communication skills and the attitude to succeed in the corporate world. Shoolini University's School of Business Management believes in imparting industry relevant management education to its students so that an immediate employable pool of managers can be created. We have implemented several innovative programmes such as strategic partnerships with Genpact, alliance with British Council of India, mentorship programmes with India's leading managers, regular guest and visiting faculty from India's best companies, etc. We are trying to build one of India's most innovative, credible, and excellent professionals and I can assure you that we will leave no stone unturned to meet this goal. We warmly welcome you to experience our campus and meet our young professionals, who, we believe, can be efficient and effective change agents for your organization and the society.

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A Study on Talent Management Practice and its Impact on Organisational Performance

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Abstract

The main objective of this study is to find the impact of talent management on organisation performance. The study is based on secondary data from different articles, research papers and literatures in order to identify the impact of talent management on organisation performance. Talent Management plays a vital role in the globalised era. Organisations focuses in Talent management practices to enhance the performance of organisation. Talent management is a very complex and crucial task and it makes the organisation distinct from competitors. Here, tasks of HR managers does not limits to recruitment but to manage the pool of talent is another important task. In current situation it is important to hire a workforce with multitasking skill, finding such workforce is very difficult and once the workforce is hired, next challenge is to retain them for longer period of time. To overcome the challenges of future an organisation must upgrade the core competencies of workforce. The present study expose the qualitative and exploratory roles in the field of Talent management. Good talent management practices plays a primary role in retaining employees. With changing times, to sustain in a globalised economy the demand for competent employee is rising therefore organisation are exposed to continuous evaluation of workforce to retain finest employee. Today's scenario requires HR to act strategically to make organisation more competitive. If organisation implements Talent management practices effectively, it will enhance employee acquisition, employee retention and employee development which in turns helps them to improve organisation performance. The study reveals that if the talent is appropriately managed and the concept of right person at right place is implemented, it will increase the growth and profitability of organisation. Research proves that

organisation can gain competitive advantage by acting strategically and by investing in talented workforce.

Keywords: Talent Management, Employee Retention, Organisation Performance, Talent Acquisition.

Introduction

“The war for talent” a phrase coined by Mckinsey consultants in 1997 attracts the eye of every organisation (Michaels E, 2001). It is true that the war for talent is on. Today’s scenario demands for best talent to face the competition. Talent management shifts the traditional HR practices with strategic HR practices. Talent management focuses on attracting, developing, and retaining the best talent to gain competitive advantage. Such practices can lead to higher level performance and higher satisfaction level among employees. To sustain in a market an organisation must have the right person at right place. The real success comes when the employee works with all his mind and heart to fulfil the organisation’s goal. Human acts as a key resource of an organisation therefore they must be given a positive environment to work. Research proves that organisation can gain competitive advantage by acting strategically and by investing in talented workforce. Most of the previous studies have exposed that the relationship between organizational performance and talent management. USA and Europe have conducted numerous studies where talent management is perceived as a grown factor in community.

➤ Talent Management

Talent management encompasses all the human resources processes, administration and technologies. It refers to the sourcing, screening, selection, on boarding, retention, development, deployment, and proper workforce planning (Heinen S, 2004). Another research said about talent management is to be associated with typical human resource practices such as recruiting, selection, training, development, and career and succession management. Talent management is a process which deals with the development and identification of all the talent especially of high potential talent for the future projects, positions and assignments (Heinen & O’Neill 2012, 2014). Talent management is the processes of ensuring that talented people are attracted, retained, motivated and developed in line with the needs of the organization (M. Armstrong, 2011). Talent management is the “attraction, development, and retention” of the talents, i.e. the most valuable staff members, by creating conditions conducive to their potential development, so that they can be put to use for the company’s operations for

as long as possible. At last, the talent management is a systematic process of identifying, assessing, developing and retaining people with critical knowledge, skills and competencies. Competence, capability and talents are human assets of organizations (Jamka B, 2011). The talent management is the way of employers in which they anticipate and meet their need for human capital which is about to getting the right people with the right skills at right time (Keller and Cappelli, 2014),

➤ **Emergence of Talent Management**

“The new generation didn’t sign up for the old deal” (Kinsey Goman, President of Kinsey Consulting Services quoted in Bates, 2004). Recent researches has suggested that MNCs are frequently unable to identify who their most talented employees are and where they are located (Scullion H, 2010, Michale E, 2001). In today’s rapidly changing environment the organisations are realising the importance of talented workforce. Talent management plays a vital role in retaining the employees in an organisation. Talent management is a very crucial process which involves some challenges tasks. In the time of a globalised economy the demand for competent employee is increasing therefore organizations are exposed to a continuous competitive fight for the finest employees. According to Chartered Institute of Professional Development (Phillips DR, 2009), talent consists of those people who can make a difference to organizational performance by demonstrating the highest levels of potential. Organizations must learn to manage tomorrow’s opportunities as they manage today’s businesses, therefore building core competencies becomes essential to gain competitive advantage (Dahan AA, 2018).McKinsey group also stated that “the war for talent” is another notion of talent management in which an organization find it hard to bring and keep quality for individuals in order to talent management for organizational performance (Pantelica, D, 2016).

Objectives of the paper

1. To review earlier studies on the relationship between talent management and employee retention.
2. To review earlier studies on talent management and competitive advantage.
3. To review earlier studies on talent management and organisation performance.
4. To summarise the previous papers and to identify gaps in the existing literature.

Methodology

➤ Research Design

The present study is qualitative and exploratory in nature.

➤ Data Collection

The present study is based on secondary data retrieved from various research articles, Journals and ongoing Research papers.

Review of Literature

The following sections review the prior literature on talent management and organisation performance. Review of literature was divided into three sub sections:

- a) Talent management and employee retention
- b) Talent management and competitive advantage
- c) Talent management and Organisation performance

➤ Talent Management and Employee Retention

MBA Tutorials (2018): Talent management helps to increase the employee retention in the organization, provide contribution for good performance management system and resulting meaningful work.

Tiwari et al (2013): investigated the strategies and practices of talent management and their impact on employee retention and effectiveness of its execution. The study revealed that age of employees is independent from satisfaction but experience of employees does affect the satisfaction with the practices of talent management.

Lalitha (2012): identified that employee retention is the biggest challenge faced by HR in the modern economy. The author suggested some effective retention strategies and Procedures i.e. employer branding, changing hiring practices, talent management, and exit interview.

Burrow (2012): noted that employees from an organisation might leave one job for a different one or go to a similar organisation and hold similar responsibilities if they felt safer and recognised in such organisations, therefore the need for human resource managers to focus on retaining such employees.

Chitsaz-Istahani (2010): noted that employees will always stay longer in a company where their development is taken into consideration and reward and recognition strategies are fair.

Pallavi Srivastava and Jyotsna Bhatnagar (2008): identified that by reflecting recruitment and culture need fit, an environment is created at the workplace where employees feel more passionate about their work and exhibit the behaviours that organizations need to drive better results. They also investigated the relationship between talent acquisition and employee engagement which in turn lead to employee retention. Both researchers argued that with better talent acquisition, employee engagement improves and so does the productivity. Thus, better is the recruitment-culture-need fit, the higher would be the engagement and lesser will be the attrition. On the same lines, another study asserted that the organizations should keep on educating its employees to meet the ever-increasing technical demands after recruitment.

Hughes JC (2008): in their study exposed in Research "A strategy for improving employee recruitment, retention and engagement within hospitality organizations" investigated the effect of Talent management on employee recruitment, retention and engagement. The study revealed that the benefits of an effectively implemented talent management strategy include improved employee recruitment and staffs retention rates, and enhanced staffs engagement. These outcomes have been associated with improved operational and financial performance.

Mohsen (2007): concluded from the studies that the success of organizations depends on employee retention which helps the organization in reducing employees turnover intention and enhancing organizational efficiency so, organizations pay more attention on retention and attraction rather than recruitments and selection to survive in competitive environment and talent management plays an important role in this process.

Walsh and Taylor (2007): in article "Developing in-house careers and retaining management talent" revealed that although compensation and work and life balance are important, it is the absence of opportunity for professional and organizational growth and development that affects management retention.

Ross (2005): revealed that the retention war starts at the hiring stage, with companies recruiting employees whose talents and interests fit with both the short- and long-term needs of the organization.

Interpretation & Finding: The prior studies showed that talent management tends to improve the retention of workers in the organisation. Some effective retention techniques and processes, such as employer branding, evolving recruiting methods, talent management, and exit interviews. Employees will often remain longer in a business where their growth is taken into account and policies of compensation and appreciation are rational. Instead of recruiting and choosing to succeed in a competitive market, companies pay more attention to retention and attraction, and talent management plays an important role in this process.

➤ **Talent management and Competitive Advantage**

Heba Ismaeel AlNsour (2018): revealed that a moderate practice level of talent management in the form of recruiting, developing, retaining, and deploying talent will lead to high level of competitive advantage achievement in the form of quality, flexibility, differentiation, and cost.

Shoekand and Verma (2015): exposed that the talent management concept is very tedious and slow process in nowadays business picture. According to human capital, the organization serve as the major component of getting competitive edge at the organizational level which can realize their importance and values.

Oladapo (2014): observed that when an organizational is successful in retaining the talent, it will definitely expose the profit of organization and also cited that if the organization is capable to arrange its talent effectively by having the talent management practice for long term process.

Rana and Abbasi (2013): observed the impact of competitive advantage and organizational performance on the efficacy of the Pakistan telecom sectors. They also noted that all the variables are directly interconnected and have an impact on each other simultaneously.

Hanif and yunfei (2013): also cited that the various kinds of practices correlated talent management play an important role in talent organizational performance. And various types of functions like training, recruitments, performance management etc. gives an important factor in the competitive advantage and effective talent management.

Lewis and Heckman (2006): revealed that talent management is made-up of 3 various conception such as 1) A collection of typical human resource department practices, 2) the respective human resources in whole organization and the 3) regarding sourcing, developing, and rewarding employee talent.

Heinen and O'Neill (2004): in their study identified that talent management is correlated with the organizational performance as well as competitive advantage such as training, recruiting, and development. McKinsey suggested that the global war of the talent management is increasing rapidly in corporate competitiveness and organizational performance.

In case of competitive advantage, we committed to hire, manage, and retain the most talented employees in the organization. Some reasons why industries should invest in talent management such as 1) attract apex talent 2) employee appreciation 3) increase employee performance 4) engaged employee talent 5) retain apex talent 6) improve business performance.

Interpretation & Finding: The study revealed that a moderate level of talent management practice in the form of hiring, developing, maintaining, and deploying talent would result in a high level of achievement of competitive advantage in the form of quality, versatility, differentiation, and expense. If a company is effective in maintaining the talent, the organization's benefit will undoubtedly be exposed. Talent management is associated with organizational success and competitive advantage such as training, recruiting, and performance management.

➤ **Talent Management and Organisation Performance**

Organizational performance is defined as the outcome of all operations carried out by the organization, and it is a reflection of how the organization uses its resources and investments in a way that makes it able to achieve its goals. The organizational performance, according to the comprehensiveness criterion, can be divided into the following -

Overall Performance

It is embodied in the accomplishments that all the functions and subsystems of the organization have contributed to achieving without a single part or unit of unity in achieving them, and through the overall performance it is possible to judge the extent to which the organization has achieved and attained its general goals such as continuity, growth and profitability.

Partial Performance

It refers to the performance that is achieved at the level of the organization's subsystems and their primary functions, as each sub-system seeks to achieve its own goals, not the goals of other systems. By achieving the sum of the subsystem performances, the overall performance of the organization is achieved.

Table 1.Represent the data of Organizational Performance Study

Sr. No.	Talent Performance Study	Reference
1	Talent Management as a process of interrelated organisational activities such as identifying, selecting, developing and retaining the talented employees and ensure their development that will contribute towards employee engagement leading to better organisational performance.	(Almaaitah MF, 2015)
2	Talent management creates a significant impact on organisational performance by enhancing the increased organisational productivity by retaining key personnel's. Lusthaus and also determines the aspect that the talent management is essential it's not just losing the talented employee but also the knowledge is also moved out that affects the working of the organisation and also the brand value of the firm itself.	(Collings DG,2009)
3	If companies want to develop leaders from within their current talent pool and have the free time and resources required establishing a beneficial and effective TM program, it would become an essential component of a long-term strategy for human capital. Organizations all over the world have been facing various challenges in attracting talented and intelligent human resources, which are considered a valuable resource in the organizational structure. To that end, they began to develop strategies and means for managing talent, linking it to development plans for future procurement of human resources for system development. Organizations have also begun suggesting the mechanisms necessary for providing the appropriate regulatory environment for the growth of their talent and leadership.	(Collings DG, 2009)
4	Talent in the twenty-first century, being characterized by high speed and competitiveness, has become one of the most vital pillars which companies and organizations rely on in achieving their strategic vision, not to mention that the demand for it has increased. Starting with a good selection of qualified employees and discovering, developing and maintaining their talents can confer a competitive advantage that enables organizations to easily achieve their goals.	(Michaels E, 2001)

5	Talent Management concentrates on the future needs of the organization. It works within a strategic method to achieve the company's future goals by assigning jobs that are important for growth and development and selecting the best candidates for these jobs.	(Dyer L,1995)
6	There is a consensus that TM is the achievement of incorporated strategies or systems intended to improve the recruitment and development processes of individuals and to hold on to those with the required skills and prepare to meet existing and prospect organizational needs.	(Dyer L, 1995)

Interpretation & Finding: The findings of the study revealed that Talent management is linked to organizational success in a constructive way. Talent management, by maintaining key employees, has a huge effect on organizational success by growing organizational efficiency.

Research Gap

From the thorough review of the available literature it is clear that there are some research gaps which need to be addressed for further research.

1. No study has been done to examine the factors that leads to a talented workforce.
2. Comparative study on talent management practices in private and government educational institutions.
3. Comparative study on relationship between talent management and employee retention in banks residing in urban and rural areas.
4. A study where variables should be analysed in order to make up strong relationship between outcomes and talent management.

Conclusion & Recommendations

From the review of earlier studies, it can be concluded that the talent management practices are positively correlated to organizational performance. Talent Management is the achievement of integrated techniques or programs aimed at enhancing people's recruitment and advancement processes, holding on to those with the skills required, and planning to meet current and prospective organizational needs. It will become an integral component of a long-term plan for human capital if businesses want to grow leaders from within their existing talent pool and have the free time and resources needed to develop a beneficial and efficient TM program.

This study exposes that the retention and attraction of talented employee is one of the critical problems faced by many recruiters. There is one positive relationship between employee retention and talent management practice so organization have to work on implementing and designing more effective talent retention strategies which will raise employee satisfaction, performance.

It can also be observed from the review that by being creative in their sector, talented workers are able to gain competitive advantage and have the capacity to make strategic decisions to achieve goals. A significant factor in the competitive advantage and efficient talent management is provided by various functions such as recruiting, hiring, performance management, etc. Talent Management can really help to find the right talent, grow that talent, and keep that talent in the company for its growth and progress. According to this study, we will recommend that you plan an enabling environment for talent management and also include expertise-based talent creativity, survival qualification and retention.

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Morse Code Decoder using MSP430 LunchBox

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Abstract

Morse code decoder is used to decode the International Morse codes into the form of alphanumeric characters which is easy to understand. International Morse code contains specific set of dots and dashes to represent each and every alphabet and integer. Main purpose of this paper is to avoid errors while decoding. Remembering the Morse code for each and every character is a hectic task. This paper specifies that there is no need to remember the Morse code, and the accurate output will be displayed on the monitor through software. We are using a MSP 430 Lunch Box to process the data which was given by the Morse code trainer. Code Composer Studio software is used to write the code and the code dumping is done through a cable which was provided with MSP 430 Lunch box using the computer. It is mostly used in Military applications for sending highly confidential information.

Keywords: MSP430 Lunchbox, CCS, Morse Code Trainer, LCD monitor.

Introduction

Morse code is a technique for communicating text data as an arrangement of on-off tones, lights, or snaps that can be straightforwardly perceived by a talented audience or eyewitness without extraordinary equipment. Each character (letter or numeral) is spoken to by a special succession of specks and runs. The term of a run is multiple times the length of a dab. Each speck or run is followed by a short quietness, equivalent to the spot term. The letters of a word are isolated by a space equivalent to three spots (one scramble), and two words are isolated by a space equivalent to seven spots. The dab span is the fundamental unit of time estimation in code transmission. For effectiveness, the length of each character in Morse is roughly contrarily

corresponding to its recurrence of event in English. In this manner, the most widely recognized letter in English, the letter "E," has the briefest code, a solitary dot. Morse code is generally famous among novice radio administrators, despite the fact that it is not, at this point needed for permitting in most nations, including the US. Pilot and air traffic regulators generally need just a quick agreement.

Background Study

A paper published by Ming-Che Hsieh in September 2000, named “Unstable Morse Code Recognition with Adaptive Variable-Ratio Threshold Prediction for Physically Disabled Persons” proposed a versatile variable-proportion edge expectation (AVRTP) calculation to investigate the Morse code time arrangement with variable unit time span and proportion. Two least-mean-square (LMS) indicators are applied to follow the dab span and the spot run distinction simultaneously, and afterward an anticipated edge dependent on a variable-proportion choice principle is utilized to recognize specks and runs. He likewise utilized a PC reenactment and a fundamental clinical assessment for this strategy that show AVRTP.

A paper presented by Cheng-Hong Yang in December 2003, named “Morse Code Application for Wireless Environmental Control Systems for Severely Disabled Individuals” planned and actualized a remote ecological control framework utilizing Morse code as an adjusted admittance specialized apparatus. It comprises of information control module, acknowledgment module, remote control module and electronic-gear control module. This framework gives a simple to-work climate and permits an impaired client to get to an electronic office by Morse code. Morse code was chosen as the versatile specialized gadget.

In September 2004, Andrés Sole, chipped away at Morse Description and Geometric Encoding of Digital Elevation Maps. In this work two reciprocal mathematical structures are created for the geological portrayal of a picture. The first processes a depiction of the Morse-topological structure of the picture, while the subsequent one registers an improved rendition of its waste structure. The geographical noteworthiness of the Morse and seepage structures of computerized height maps (DEMs) proposes that they can be utilized as the premise of a productive encoding plan. This mathematical portrayal is joined with an insertion calculation and lossless information pressure plans to build up a pressure plot for DEMs. This calculation accomplishes high pressure while controlling the greatest mistake in the decoded rise map, a property that is fundamental for most of uses managing DEMs.

Proposed Design

The proposed system consists of Morse Code trainer as input which is connected to MSP430 LunchBox. The output is displayed on the Software which in this paper is Code Composer Studio.

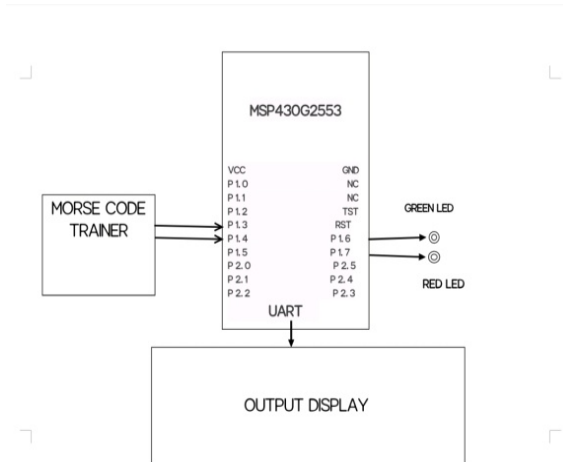


Figure 1. Block Diagram of the Proposed System

International Morse Code

Morse code has been being used for over 160 years longer than some other electrical coding framework what is called Morse code today which is quite unique in relation to what it was initially evolved by Vail and Morse.

Morse's unique code determination, to a great extent restricted to use in the United States and Canada, got known as American Morse code or railroad code. American Morse code is currently only sometimes utilized besides in recorded re-institutions. The issue for a great many people is the non-constant nature of the cycle, i.e., recording the last character while tuning in to, and deciphering the mark of the following character. Besides, when you commit an error, the whole cycle falls as your brain attempts to perform mistake amendment, attempting to fill in the missing spaces, making you miss much more characters. One way out of this plan is to eliminate the weight of recording the characters out and out during the way toward developing your code speed.

However, to do this you need a gadget that duplicates and shows the code in corresponding with you, which is the thing that the independent gadget depicted in this article, is intended to perform. The decoder is intended for code speeds going from around 6 words for each moment (WPM) to more

noteworthy than 36 WPM. The rate versatile calculation reacts rapidly to code speed changes, so you can duplicate the two parts of a QSO, in any event, when the gatherings communicate at various rates.

International Morse Codes

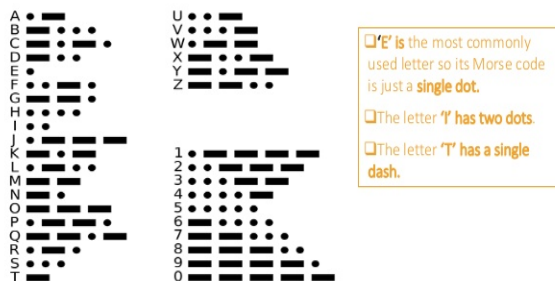


Figure 2. International Morse Code format

Hardware and Software Description

➤ MSP430 Lunch Box

The msp430 lunch box consists of 20 pins, where it has 14 GPIO pins, one RST, one TST, two NC pins (No Connection), Vcc pin as 3V3 pin, Ground pin. The output voltage of the lunchbox kit is 3.3V. It has three led's, two push buttons. It has 2 jumpers for selecting the mode. There are 2 modes one is programming mode and other is communication mode. By varying the jumper directions, we can vary the modes.

With the MSP430 lunch box, the work is easier. Turns out, the MSP430 already includes an inherent boot loader on-chip. All that's needed is a mechanism to invoke the bootloader and send serial information to – each of USB to UART Bridge. one of the most affordable USB to UART Bridge chips obtainable within the market nowadays is that the CH340G – a full speed USB device that emulates serial interface with two Mbps, additionally have a 10-bit analog-to-digital (A/D) converter.

MSP430 Lunchbox is used as a DIY stage for figuring out how to interface and controlling various peripherals dependent on the prerequisites. It underpins TI MSP430G arrangement esteem line microcontroller arrangement. The advancement stage is easy and simple to program. Smaller than expected USB link is accommodated utilizing the MSP430 LunchBox with Computer.

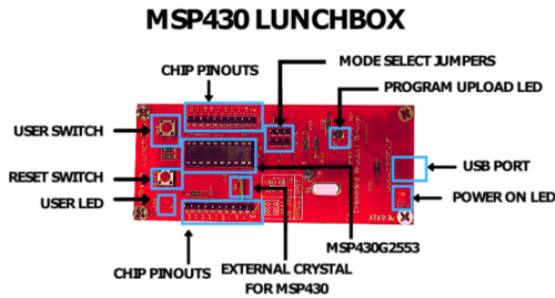


Figure 3.MSP430 LunchBox

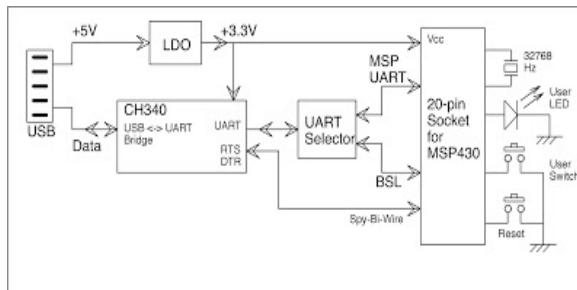


Figure 4. Block Diagram of MSP430 LunchBox

➤ Morse Code Trainer

We are utilizing a home-made morse code mentor which can create the signs speck and run by implication. Here we are predefining the dot with a worth 0 and a dash with a worth 1. By squeezing the tap key on to left side plate it will be considered as dot signal was produced. By squeezing the tap key on to the right-side plate it will be considered as dash signal was produced. In the wake of producing the information, signs will be prepared through MSP 430 Lunch box and the yield will be shown on the screen.

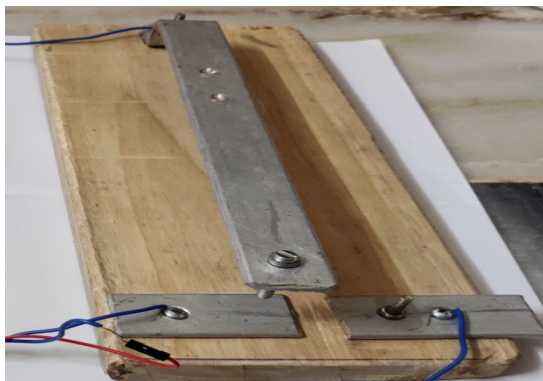


Figure 5. Morse code trainer

➤ Code Composer Studio

Code Composer Studio is essentially planned with respect to implanted task plan and low-level (BareMetal) JTAG based troubleshooting. Notwithstanding, the most recent deliveries depend on unmodified forms of the Eclipse open-source IDE, which can be effortlessly reached out to incorporate help for OS level application troubleshoot (Linux, Android, Windows Embedded) and open-source compiler suites, for example, GCC.

Initially Code Composer was an item from an organization called GO DSP situated in Toronto, Canada, and it was gained by TI in 1997. After the obtaining, Code Composer was packaged with a continuous part named DSP/BIOS and its name was annexed with the word Studio.

CS delivers up until 3.3 depended on a restrictive interface, yet TI was at that point working in equal on the advancement of an IDE dependent on the open-source Eclipse. This IDE was named Code Composer Essentials (CCE) and was intended for the MSP430 line of microcontrollers. This ability was utilized to totally update the past CCS and beginning with discharge 4.0 all adaptations is additionally founded on Eclipse.

Code Composer was initially created for DSP improvement, thusly one of its primary differentiators at the time was the accessibility of graphical perception apparatuses (XY charts, FFT greatness and stage, star grouping, crude picture representation) and backing for imagining memory in a few numeric arrangements.

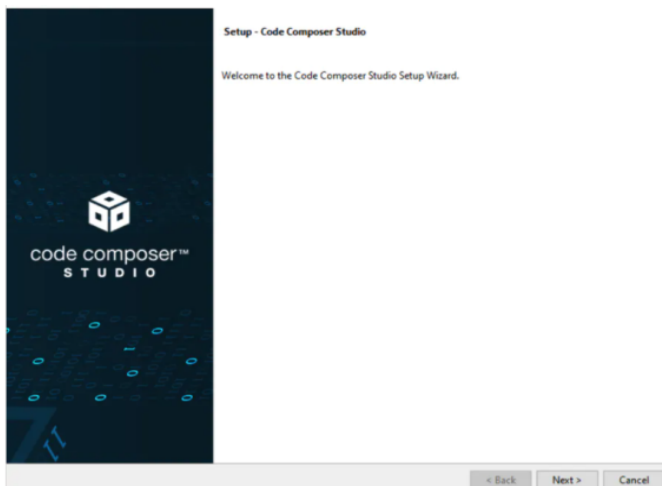


Figure 6.CCS outlook

Results

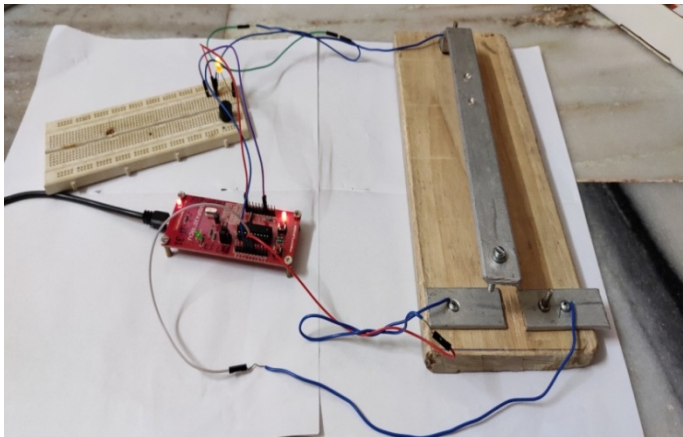


Figure 9.Circuit Connections

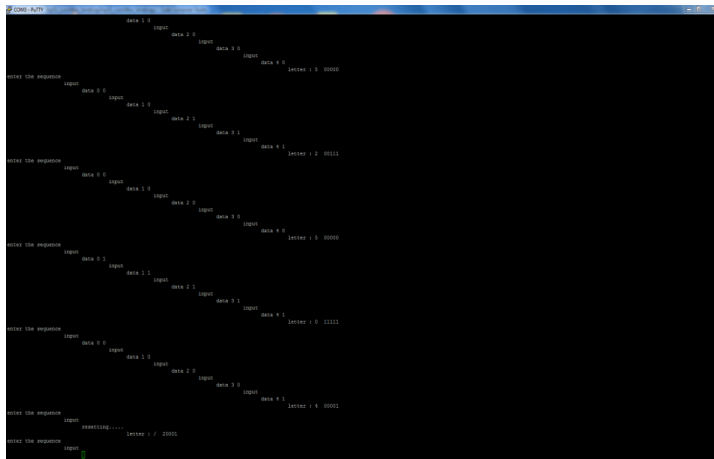


Figure 10.Output

➤ Applications

Morse Code as an Assistive Technology

Morse code has been utilized as an assistive innovation, assisting individuals with an assortment of incapacities to impart. For instance, the Android working framework adaptations 5.0 and higher permit clients to enter text utilizing Morse Code as an option in contrast to a keypad or penmanship acknowledgment. Morse can be sent by people with serious movement incapacities, as long as they have some negligible engine control. A unique answer for the issue that guardians need to figure out how to decipher has been an electronic typewriter with the codes composed on the keys.

Signalling for Help through SOS

A significant application is motioning for help through SOS. This can be sent numerous ways: keying a radio on and off, blazing a mirror, flipping an electric lamp, and comparative strategies. SOS isn't three separate characters, rather, it is a pro-sign SOS, and is keyed without holes between characters.

Conclusion

The challenges happen in sending and accepting information physically can be overwhelmed by utilizing this plan. In this task, the Morse code information is decoded precisely and straightforwardly showed on display. This will assist with diminishing the mistakes made by human administrators. Additionally, it improves the information communicating speed. The most well-known current utilization of Morse code is by novice radio administrators, despite the fact that it is not, at this point a prerequisite for novice authorizing in numerous nations. It likewise keeps on being utilized for particular purposes, including ID of navigational radio reference point and land portable transmitters. Morse code is intended to be perused by people without a deciphering gadget, making it helpful for sending computerized advanced information in voice channels.

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Rise in Consumer Privacy Concerns -Scenario amidst Indian consumers

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Abstract

The paper gives insights into consumer privacy concerns. In this paper, researchers have discussed ascend in security, privacy, or protection concerns of the people. With the expanding number of transactions that are held online every day, digital frauds, data fraud, information extortion or the odds of an individual being exposed to the dark web are also increasing. Additionally, the paper gives a brief about the cybercrime that occurred in India, the reason behind the crimes, persons arrested, and charge-sheeted for cybercrime, which further portrays that the individuals currently are now taking responsibility for their information or data and they are getting worried with time. Likewise, the investigation brings up the issue that how one should deal with these crimes and also stay protected, as the crooks are thinking of new tricks to harm people daily. Additionally, how government and associations should guard the information and data.

Keywords: Consumer Privacy Concerns, Cyber Crimes, Digital Frauds, Information Theft.

Introduction

In the latest decade, the world has seen critical events in humanity's history- the Web Revolution. The immediate expanding usage of the web, the Internet, Intranet and Extranet, e-business or online business, and portable exchange has changed how business is done in essentially all the affiliations. The 'e-Revolution' has placed essentially the entire trading world on the web and this new universe where individuals are doing their business electronically in the lap of the web is known as 'Digital Economy'. Data Privacy can likewise be called a digital resource or asset protection of a person. Computerized resources are seen as electronic informational sets having a future money worth and having lawful exclusive rights. With the

increasing number of transactions that are held online daily, the cybercrime or the chances of a person being exposed to cybercrime are also increasing. However, this was not the case in the earlier times. **Burgoon (1982)** has given insights about the various definitions of privacy by the different authors from 1950^s to 1970^s.

- Control of encouragement contributions from others; control of common manner and level of information about each other (Simmel, 1950).
- Want to be a mystery to other people; want to control others' perceptions of and confidence about self; self-secrecy (Jourard, 1966).
- Control of development of data across a limit to and from people and groups (Shils, 1966).
- The opportunity of a decision in a specific circumstance to control what, how, and to whom the individual imparts data about oneself (Proshansky, Ittleson, and Rivlin, 1970).
- The case of people, gatherings, or foundations to decide for themselves when, how, and how much data about them is imparted to other people (Westin, 1970).
- Self-rule of activity inside an unviolated living-space (Conklin, 1976).
- Co-operatively settled upon the right to keep up limits and reject access to other people (Warren and Laslett, 1977).

Yet, with technology updating almost every day, the rise of privacy concerns is also increasing. Privacy has evolved every bit in the last decades. A great part of the literature on privacy has been stressed over "attacks or intrusions of security," in which individuals' personal lives are checked against their desires (**Derlega, Chaikin 1977**). Privacy is directed by respect for an individual. It is the claim of people, gatherings, or foundations to decide for themselves when, how, and how much data about them is imparted to other people (**McCloskey 1980**). According to **Turn, Ware (1976)** privacy and security arose independently as trouble spots in the PC field during the 1960s. The privacy cause célèbre was a recommendation in 1965 that an information administration focus should be set up within the government to be a centralized data set of all personal data gathered by bureaucratic offices for statistical purposes.

Dimensions of Privacy

- 1) Definitions contrast on the unit encountering the privacy.
- 2) There are different concepts among "desired" and "accomplished" privacy.
- 3) There is a somewhat related difference between the conditions favorable for privacy and the genuine experience of privacy.

- 4) Variation may be cast as the justice of privacy requests.

Categories of Privacy

- 1) **Isolation:** It exists when an individual is totally detached from others, liberated from observation, and alone.
- 2) **Closeness:** It exists when a group limits tangible inputs from "outsiders" to expand personal connections.
- 3) **Secrecy:** It includes independence from the acknowledgment and immediate, individual observation while in a public setting.
- 4) **Hold Back:** It includes the capacity to raise a mental barrier against "undesirable interruption" and to reserve from disclosing individual or humiliating data about oneself.

Literature Review

- **Evolution of Privacy Concerns-** *Privacy concerns have been modified in the last few decades.*

Westin (1968) reviewed the book *Privacy and Freedom* in which he describes the function of privacy in society. *Privacy and Freedom* is a complete and broad assessment of the dispute among security and surveillance in the present day. Moreover, the creator builds up the social value of privacy, a methodology that is missing from different works with surveillance. Furthermore, since World War II upgradations in electronic spying gadgets have introduced expanding dangers to security in the public arena. Also, the author says that American law has starting to react. Besides, the surveillance is used for greater protection of privacy.

Feistel (1973) says that PC frameworks in general and individual "information banks" specifically need security. This can be accomplished by encrypting all material and validating the genuine beginning of any command to the PC. There is developing worry that PCs currently comprise, or will soon establish, a risky danger to individual privacy. Researchers in this study have also talked about the techniques one can use for the protection of their passwords and also about cryptography. However, the study says that it would be amazing if cryptography, the customary methods for guaranteeing confidentiality in communication, couldn't give protection to a local area of information bank clients.

Laufer, Wolfe (1977) says that the word privacy is an idea consolidating a large number of implications and evoking a wide scope of human feelings. Privacy is a mystery that is loaded with risk; as it guarantees commonality

and sharing, it contacts significant requirements; and as it undermines rejection, it raises fears. In both law and sociology, the inquiry emerges concerning whether privacy is to be seen from an individual or cultural viewpoint. The researchers also say that the connection between privacy and private conduct can be portrayed regarding the freedom to pick one's development across the limit that recognizes one's self as being and working alone versus one's self as a different individual communicating and working with others.

Posner (1981) investigated the economic research on protection/privacy. The idea of "privacy" has gotten a decent deal of consideration from attorneys, political researchers, sociologists, philosophers, and analysts, yet up to this point next to no from financial economists. Privacy today is utilized in any three detects. To start with, it is utilized to mean the concealment of data. Second, it is utilized to mean harmony and calm, as when somebody whines that phone solicitations are an intrusion of his security. Third, it is utilized as an equivalent word for opportunity and independence. Researchers concluded that in the early time-frame there was a "right of privacy" if the business attempts to "pry" into his private life.

Apostolou (1988) says that a major inquiry that has arisen with the approach of new data innovation is how the government can operate data systems without abusing the resident's right to protection. Privacy Act of 1974, needs amendment to reflect completely the challenges faced by individual protection by new utilisation of data innovation. The study also talked about the OTA, 1986 i.e. Office of Technology Assessment which was enforced by the government for the security of individual data gathered, kept up, or scattered by the central government has been based on the adjusting of the protection of individual residents versus the board proficiency and law implementation of government.

Katz, Tassone (1990) give insights about a few patterns from results about privacy in general and concerning data technology. While there have been various cross-sectional examinations of public opinion toward protection, and particularly PCs and security, there have been not many pattern investigations. Are public concerns rising? One response to this inquiry is an unmistakable "No." Basing their situation on an audit of reviews on protection, presumed that "the apparent probability of security attacks and their effect on American life has stayed stable since 1974. Privacy, as a theoretical idea, is one that most Americans worth and judge significantly, although we discovered just slight proof that individuals will do something to protect it.

Furnell, Karweni (1999) analyze the overall necessity for security technology to give a premise to trust in the internet business climate. Organizations speak with clients and companies through numerous channels, however, the Internet is one of the most current and, for some, reasons, best business correspondence channels. It is quick, reliable, not costly, all around available and it arrives at basically every significant business and more than 100 million purchasers from everywhere in the world. However, there is a huge worry among Internet-based buyers concerning the security of their buying exercises, these are exceeded by the benefits offered by the medium. Moreover, an absence of awareness or comprehension of the security technologies that are accessible, and it is concluded that conquering this issue would assist with setting up a more extensive establishment of trust in the innovation.

Gupta, Rohet Sareen (2001) recognizes the critical attributes of electronic cash and its utilization by shoppers as well as considers the different issues and worries of shoppers concerning e-installments. The study talks about the different E-payment services in India offered by various public and private sector banks. In the arising web drove business climate, electronic cash, and electronic installment frameworks for retail exchanges are at the first spot on the list of significant issues for those with significant interests in monetary administrations. Among the numerous difficulties these arising technologies make, is deciding the suitable job for the government in the new computerized universe of monetary services. In conclusion, monetary proficiency can help address access concerns, hence, the public authority and industry should empower monetary education endeavors by industry agents and buyer associations, in collaboration with the government, that address the utilization of innovation in monetary services.

Wu et al. (2002) The Internet has become an essential piece of our lives. It has penetrated all parts of our day by day exercises: work, communication, shopping, and individual life. There are different kinds of online exercises offered as of now for example-Internet shopping, Web administration, email, gathering, blog, web-based games, banking, learning, and so on. The Internet has no outskirts or restrictions and security turns into a significant concern for every single online activity. The study explored trust and protection concerns related to the willingness to give individual data online affected by cross-cultural effects as well as the connections among the content of online security articulations, buyer trust, protection concerns, and the moderating impact of various cultural backgrounds of the respondents, which turns out to be significant in the findings. Moreover, the study says data gathered may impact the willingness to give individual information, however, this

examination doesn't indicate what sort of data is being gathered and how it applies to the purpose of gathering information.

Phelps, Nowak, Ferrell (2002) examine possible connections among categories of individual data, convictions about direct marketing, protection concerns, and customers' direct marketing shopping propensities. Today retailers, producers, service providers, and non-benefit associations routinely gather and utilize shopper data (which is also a primary source of customer concerns). Moreover, most purchasers are willing to surrender some of their privacy to participate in a consumer society. Furthermore, study came up with a conceptual model for understanding consumer privacy concern where they input different factors which includes-a) type of personal information requested (demographic data, lifestyle interests, media habits), b) Amount of information control offered (no, some and full), potential consequences and benefits (increase or decrease in advertising mail, future shopping time and efforts saving), d) consumer characteristics (demographics characteristics, attitude towards direct mail, advertising mail control preferences), to see outcomes and future outcomes. Besides, these factors are found to be important correlates of privacy concerns.

Xu and Gupta (2009) Researchers discussed the objective of this study was to combine theories and exploration from data security and innovation acceptance. Researchers have discussed the LBS, which is characterized as system-based services that combine a derived estimate of a cell phone's area or position with other data to give added value to the client. Location data frequently uncover the position of an individual in real-time, accordingly rendering the expected intrusion of security, an increasing and intense concern. Moreover, these worries relate to the secrecy of gathered buyer information and the potential dangers that purchasers experience over the possible breach of confidentiality. Furthermore, individual creativity didn't moderate the connection between protection concerns and behavioral intentions. Protection concerns didn't directly affect the behavioral intentions. The study concluded that protection concerns are viewed as the dread of losing control over personal data.

Akhter (2014) intends to look at the impacts of web self-efficacy and web involvement on privacy concerns and the impact of protection worry on the frequency of online exchanges. Privacy becomes significant particularly when customers manage online exchanges in light of the individual and monetary data required. The warning about the danger to privacy came early. In 1973, Horst Feistel saw that "PCs currently establish, or will before long comprise, a danger to security". According to the study web self-efficacy and

involvement influence security concern adversely; and protection worry, thusly, influences the frequency of online exchanges negatively.

Mosteller, Poddar (2017) study analyses components identified with purchasers' web-based media engagement and online security assurance practices. Reducing security worries by protecting purchaser information from outside substances may receive marketplace rewards. Moreover, results propose that while individual security violation experience is influential antecedents, protection concerns and trust in online media sites intervene everyone. Also, the study concluded that by building up a framework that incorporates administrative concentration and social trade theories to guide future exploration for safeguarding privacy. Besides, the researchers say that only a few people make moves to prevent violations of their protection.

Cloarec 2020 tries to give an insight into the personalization-privacy paradox. This refers to a continuous strain, between an association's requirement for shopper data to customize buyer encounters and a purchaser's requirement for protection. Firms by and large utilize the data to customize buyers' online routes and improve their online experience, however, the dangers of abuses additionally make security concerns. Researchers in this study have talked about the Antecedents-Privacy-Concerns-Outcomes (APCO) model. Also, the study attempts to depend on data innovation (e.g., anonymizing methods, shared communication) to address protection concerns generally have proven ineffective, regularly because they are excessively modern for customers.

➤ **Marketing Tactics-** *Various marketing strategies have been used by the companies overtime to gather and utilize the data of the consumers. In this basically, the different type of marketing strategies has been discussed such as direct marketing, permission or consent marketing and eye-tracking methodology.*

Nowak, Phelps (1994) attempts to increment direct advertisers that have an understanding of protection/privacy issues by looking at how much-educated customers are for data assembling and usage practices. Also, the study gives a structure to understand purchaser security worries by addressing significant arrangements of inquiries, for example, How concerned are shoppers about dangers to individual protection and What, all things are considered, ought to be done about purchasers' protection and data-related concerns. However, the study concluded that numerous individuals are not entirely educated about explicit direct promoting practices, buyer concern is influenced by kind of training and type of data. Besides, the outcomes recommend purchaser ignorance might be a huge supporter of security concerns and that a solid

commitment to customer education might be important to dodge privacy theft/crimes.

Krafft, Arden, Verhoef (2017) talked about a system that is created to investigate the impact of drivers of shoppers giving consent to get customized messages. Shoppers regularly see such messages as an interruption of their security, which makes a challenge for organizations. To address such concerns and meet lawful necessities, upfront consent by purchasers gives an intriguing alternative to future interaction. This idea, known as authorization promoting, refers to direct advertising exercises that require purchasers' agreement to be reached by a particular organization. However, the current conversation on results of data protection concerns is more on the allowable utilization of information next to the increasing utilization of data in an incorrect manner.

Krishen et al. (2017) inspect the purchaser's concerns about the protection that relate to various administrations. The study talks about the literature that analyses the impacts of government protection arrangements on buyers' concerns toward risk. Location-based administrations are advancements that include information, for example, route, tracking, and data services. Given the significance of purchasers' protection concerns, a need exists to deliver marketing questions related to security and how to successfully improve protection function. In particular, administrative associations should see how to convey protection functions with an accurate balance so that worries about data security accomplish prominence. Researchers demonstrate that perceptions of security-related strategies are improved when a purchaser has a higher internal locus of control, higher mentality toward the correspondence, and lower level of protection concern.

Sheng et al. (2019) recognize various factors that drive shopper's visual consideration regarding the protection and security-related data. To address purchasers' privacy and security concerns, associations ordinarily use protection approaches, clarifying in detail how they gather, use, share, and ensure customers' very own data. In the most recent years, a few organizations have added protection symbols to give a visual that immediately portrays how information is being utilized. Also, they plan to improve protection approaches. Protection and security strengthening is important as customers now hang in an online world that requests the sharing of individual data.

Okazaki et al. (2019) investigate how the sensitivity of the information mentioned by retailers may affect attitude and behavior outcomes around client protection concerns. Also, this paper offers necessary insights of

knowledge of how client protection concerns differentially impact client evaluative and social results across a range of retail channels. Despite imperative advances in principle and retail practice, the scholarship on client security concerns is scattered. Various security episodes and information breaks are relied upon to rise and controllers around the planet are embracing more rigid interventions, for example, the European Union's General Data Protection Regulation. However, with regards to client protection concerns, the proceeding with a challenge for specialists and editors is to help retailers in outlining the inquiries.

Hayes, Cappa, Le-Khac (2020) raises a few worries about the gathering and sharing of individual information led by versatile applications without the information or assent of the client. The assortment of data past the consent of the individual addresses a security concern. The security concerns identified with the personal identifiable data of representatives gathered through portable applications, which are also dangerous for public security. Data gathered by a versatile application is additionally essential to recognizing security issues and expected violations by organizations. However, one cannot tell that an application is secure or not based on its privacy policies. From a corporate point of view, the results of this examination are critical to see the number of portable applications that put representatives, and licensed property, in danger.

Ioannou, Tussyadiah, Lu (2020) offers insights about the privacy conduct of online purchasers in the travel setting and comprises one of few focusing on the social parts of biometric validation. The study analysis traveler's online security concerns (TOPC) and their effect on eagerness to disclose information to travel suppliers. While the advantages of sharing biometric and social information are obvious for the two purchasers and suppliers, the assortment and utilization of individual information saw as delicate can make complexities decline shopper worries over information security, and mounting significant issues in the travel industry. However, the study concluded that seen expected advantages exceed security concerns when travelers are confronted with such protection choices, underlining the significant part of incentives in the assortment of individual data.

Degirmenci 2020 investigates the part of application consent requests and compares the effect on protection concerns with different antecedents of data security concerns, i.e., earlier security experience, PC nervousness, and perceived control. Some protection-related episodes of mobile administrations have indicated that application stores and suppliers face the challenge of mobile client's data security concerns, which can keep clients from introducing phone applications or initiate them to uninstall an

application. Data security concerns have been the focal point of the latest Facebook privacy scandal, where 14 million clients have accidentally presented private data to general society because of a software bug. Also, the results show that earlier security experience, PC anxiety, and perceived control affects protection concerns.

Xie, Chen, Guo (2020) study analyze the unwanted impact of anthropomorphized promoting endeavors and individual factors on customers' online security concern. Protection concern has become a significant moral issue of the information age as well as has become an ethical and administrative issue for internet retailing. Researchers say that they know various marketing strategies or functions done by the companies may lead customers to privacy protection concerns. Moreover, the study found that people in the social exclusion conditions reported higher worry about their protection on an anthropomorphic (vs. a non-anthropomorphic) website. Furthermore, results recommend that customers who have a low requirement for interaction in business experiences and who experience social avoidance show a higher protection concern.

➤ **Cyber Crime:** It is a new type of crime that has been emerged and rising rapidly.

Kshetri, Dholakia (2009) inspects the jobs of experts and trade affiliations effects on foundations related to a developmental area of a developing economy. Moreover, the study offers a top to bottom contextual analysis of India's National Association of Software and Services Companies (NASSCOM) on institutional changes identified with the off shoring business. NASSCOM is working with the Indian government and associations regarding making and authorizing laws to handle PC related crimes. Apart from this, the researchers discuss the various case studies about the NASSCOM. Indian law on PC frauds, for instance, is "fuzzy", and protection enforcement is not strong. The study concluded that the Indian government is thinking about NASSCOM's solicitation to make a unique court to attempt individuals blamed for cybercrimes and different infringement of the nation's Information Technology Act.

Gandhi (2012) endeavor to give a brief look at cybercrime in India and also gives a brief about Cyber-stalking, Hacking, Phishing, Cross-Site Scripting, and Bot Networks. Additionally, how these assaults can hurt monetarily anybody. Cybercrime is arising as a genuine danger. Overall governments, police departments, and other surveillance units have begun to respond. Activities to check cross line digital dangers have started working. Internet surfing by youths draws them into the hazardous area. Moreover, the print

media must instruct unwary guardians and youths about the threats inborn in stepping risky zones in the digital world. Furthermore, terrorists have been utilizing the Internet to convey, blackmail, threaten, raise assets, and facilitate tasks. Antagonistic states have exceptionally evolved capacities to wage digital wars and they can incapacitate enormous pieces of correspondence organizations and cause a significant monetary emergency.

Bamrara (2014) focuses on a variety of concerns identified with cybercrime and the part of the Government to battle the problem. The PC is utilized in the commission of a fraud, or it very well might be the target. Digital Crime is a crime done utilizing PCs and the Internet which incorporates anything from downloading illicit music documents to taking a great many dollars from online financial accounts. It likewise incorporates non-financial offenses, for example, making and distributing viruses on different PCs or posting private business data on the Internet. The IT frameworks' importance to the nation has acquired vision in the last few years because of cybercrime and fast development in identity and monetary frauds. Cybercrimes cells have been set up in significant urban communities of the country however most instances of Spamming, Hacking, phishing stays unreported because of the absence of awareness among web clients and workers of monetary institutions.

Cassim (2015) describes that the Internet has brought resultant dangers and threats and it has gotten vulnerable against digital attacks. Data fraud has been depicted by some as the "quickest developing white-collar crime. It makes the monetary loss to buyers, banks, monetary foundations, and the economy overall. Apart from this, the study gives a brief about the RFPA (Right to Financial Privacy Act 1978), CFAA (Computer Fraud and Abuse Act 1984), CDPA (California Database Protection Act), and EUDPD (European Union Data Protection Directives of 1995). Criminal law ought to be effectively used to guarantee that procedural or specialized barriers don't discourage the prosecution of the online fraudster. Also, the researchers concluded that there is a need for financial regulatory/institutions and present financial institutions should freely provide details regarding fraud occurrences without violating the rights of the buyer, and this will make a market for identity fraud prevention.

Discussion

Abuse of data given to associations can bring about an assortment of privacy breaches and trust worries for buyers. The recent statements of information and security breaches by significant associations, for example, Equifax and web-based media giant, Facebook, may have expanded customers' protection

concerns and weaken consumer trust in these associations. Because of the continuous information and security frauds related to digitized information, the nature and effects on the functions of online media brands or associations are more complex and obstruct contrasted with old media of communication (Ayaburi, Treku 2020). Flynn (2016) reports that there is a requirement for more technological assets and higher staffing levels to oversee security cheats. It was discovered that the dominant part of respondents agree that extortion is a significant worry for organizations and that enterprises should do something for fraud awareness Siregar, Tenoyo (2015). Also, people are reporting these crimes (as shown in table 1), which shows that they are now concerned for their privacy. Besides, people have started taking responsibility for their data. The government is also running campaigns and is issuing guidelines on what to do to be secure.

Cyber Crimes in Metropolitan Cities - 2017-2019

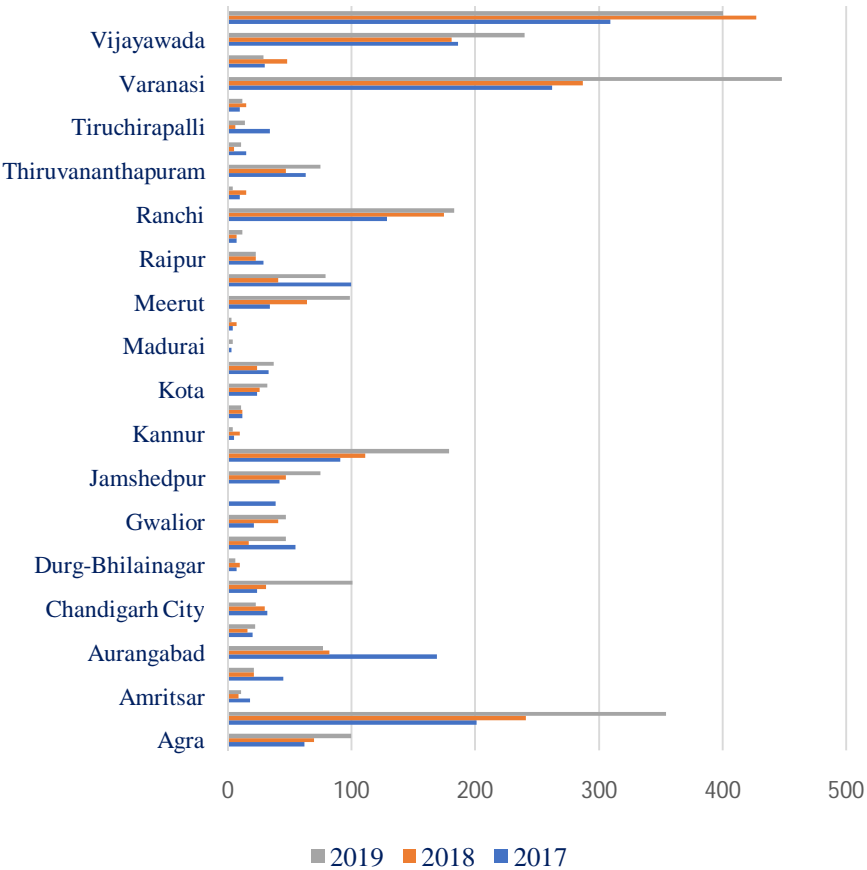


Table 1.Source- cybercrime.gov.in

Cyber Crimes Motives in Metropolitan Cities - 2019

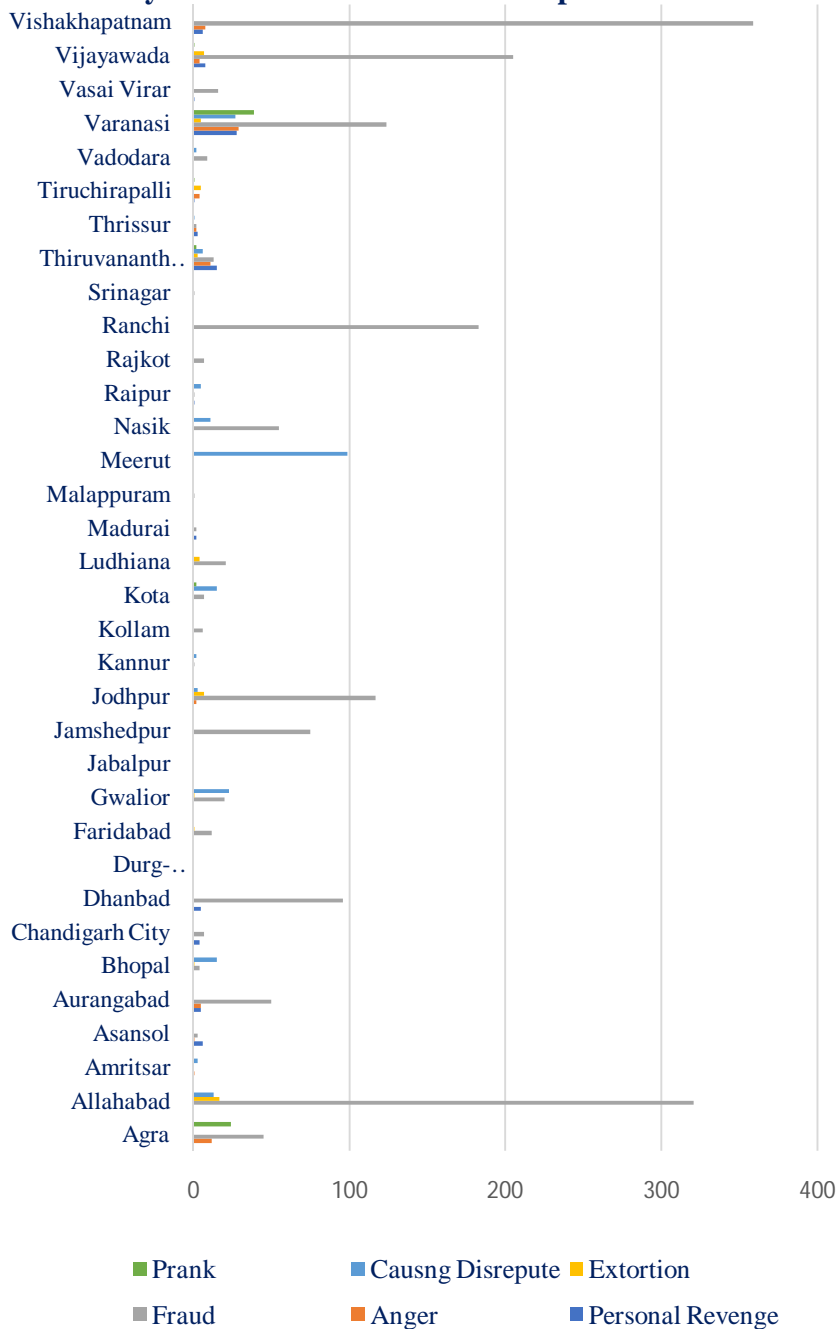


Table 2.Source-cybercrime.gov.in

Persons arrested and charge sheeted

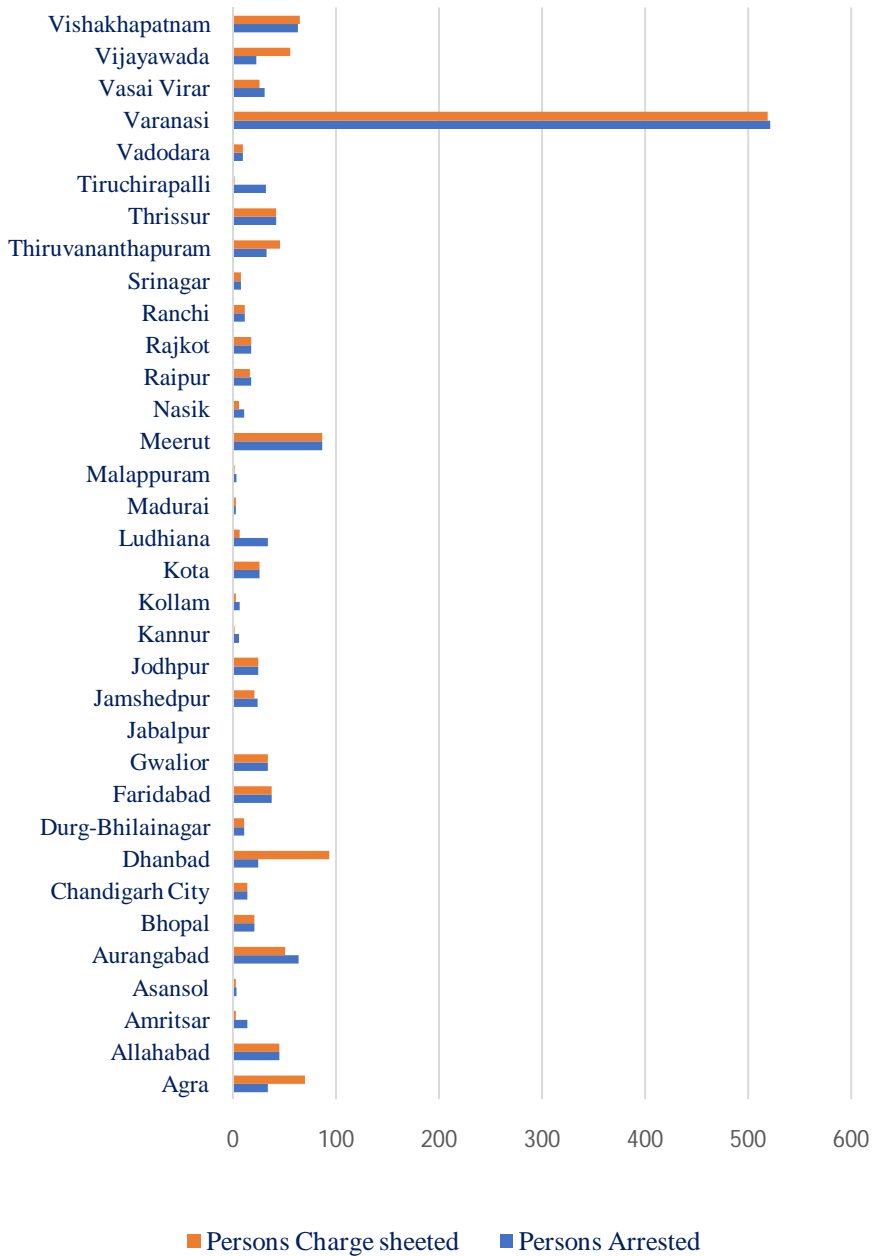


Table 3.Source-cybercrime.gov.in

Conclusion

The IT structures' significance to the country has obtained visibility over the recent couple of years due to cybercrime and fast advancement in data and monetary frauds. The web is logically being used for various frauds and different kinds of cybercrimes, making huge financial mishaps to the associations and individuals. Due to less awareness about online exercises, neither data nor resources are secure. Hence, it is transforming into the requirement for strong instruments and systems which are more fit for banning unapproved access to the outsider/criminal. Indirect protection is given against the breach. In any case, it isn't adequate and government needs to carefully push the laws and need to change the current laws with the objective that one cannot get hurt on account of their unprotected security. Buyers anticipate that organizations should protect their data and are especially sensitive when they neglect to do as such **Anic, Škare, Milaković (2019)**. To guarantee the assurance from cybercrimes, India has approved the Information Technology Act, 2000. The Information Technology Act, 2000 is seen as Bible on Indian Cyber law; regardless, web banking cheats have not stopped. The present computerized culprits are continuously talented at gaining undetected access and keeping a constant, low-profile, long term presence in IT conditions. But various affiliations may be leaving themselves powerless against cybercrime subject to a mistaken feeling that everything is great with the world. Information education can help in addressing the concerns, thusly, the government and industry players should empower information education attempt by industry representatives and consumer associations, that address the protected approaches to utilize technology. Moreover, **(Martin, Palmatier 2020)** says that firms can profit by fortifying security rehearses and executing client ensuring protection approaches. Government should make or modify some severe laws **(Kaushik, Ashima Garg 2020)**.

In conclusion, cybercrime can be a win or lose situation for all parties. But, considering marketing, it is a losing situation, as companies will not be able to retain their customers, which further will lead it to shut down. Also, winning the trust back of the customers will not be an easy task. So, companies have to provide a safe environment to the people in which one can perform all his functions safely. The study also comes with a question that what one should do to be safe as the criminals are coming up with new tricks daily. Hence this is a gap that has to plugin.

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Impact of Coronavirus on Front line Healthcare Workers from the Perspective of Work-Life Balance

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Abstract

Front line health care workers who are directly involved in the diagnosis, treatment, and care of COVID-19 patients are at risk of having mental distress and other symptoms of personal wellbeing. Large numbers of identified and confirmed cases, excessive workload, continuous shifts with increased patient number and frequency, lack of personal safety facilities, extensive media attention, shortage of specific medications, rising unemployment, financial uncertainty, fear of having to carry the virus home or not being able to see family due to the pandemic and feelings of insufficient care can all add to the emotional stress of Health care workers. There is a real need to balance work and life among these front-line workers to avoid such incidents from happening. To balance work and life, Healthcare workers and associations must work together and thereby protect the mental health of these front line workers.

Keyword: Coronavirus, Front Line Healthcare Workers, Work Life Balance.

Introduction

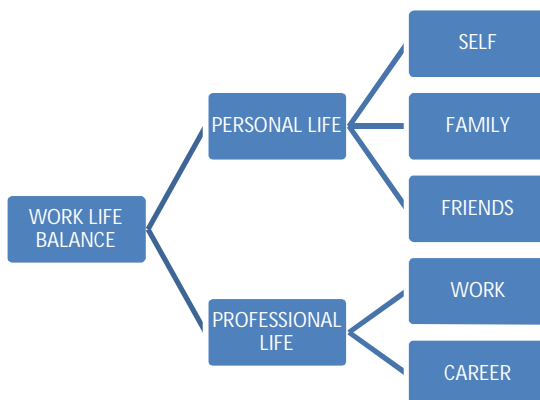
At first known as COVID, the COVID-19 has become a pandemic spread all through the world (Wolor, Christian Wiradendi, et al.2020). It has an extremely extraordinary effect on our healthcare system and society, in general, all the healthcare workers like nurses, doctors, technicians, and disinfection laborers are working all day every day. The covid-19 pandemic has abundant burdened healthcare workers throughout the world (Muller, Ashley Elizabeth, et al. 2020). Confronting this critical situation, healthcare workers on the forefront who are directly engaged with the diagnosis,

treatment, and care of patients with COVID-19 are at risk of creating stress. A new report in Wuhan, China exhibited that ladies, nurses, and forefront healthcare workers are especially powerless experiencing depression, anxiety, sleep deprivation, and stress in these work conditions. Another cross-sectional examination on mental status and weariness of cutting edge staff reasoned that there is a high occurrence of sadness, tension, a sleeping disorder, and exhaustion among the staff battling COVID-19 (Teng, Ziwei, et al. 2020). The always expanding number of affirmed and suspected cases, the overcoming work task loads, long shifts with expanded volume and seriousness of patients, consumption of individual security equipment, boundless media inclusion, absence of explicit medications, job insecurity, monetary instability, fear of conveying the infection to home or failure of seeing family because of a pandemic. To prevent such events to occur, there is a high need for balancing work and life among these healthcare workers (Mullen, Kathleen.2015). Work-life balance (WLB) is a current phrase for manage the balance between work and life (Simmons, Susan. 2012). Achieving balance work and life at the individual as well as the organization level especially during this COVID crisis.

Meaning and definitions of work-life balance

Work: Work is the physical as well as the mental effort put in by the person to complete a task or create something. It implies an activity that we do regularly and consistently, resulting in earning, which is often in terms related to income. This financial gain may also be increased or supplemented by non-money-related benefits.

Life: Life refers to the reality of the desire to develop, accomplish, and acquire, which is defined by distinct drives and wants. Throughout daily life, these drives and wants trigger strain and affect the work a person undertakes.



"Work-life balance" is a virtually elusive and complicated marvel, and there is no commonly accepted sense of the word as a result. H.J., Greenhaus, Collins, M.K. Shaw, D.J (2003) and Shaw, D.J (2003) define the "degree to which a person is equally occupied with and satisfied with their work job and their family job" is described as "work-family equilibrium." The degree of individual happiness and satisfaction achieved when all facets of life are in harmony is referred to as work-life balance (Joshi et al, 2002; Greenhaus, 2003; Grady et al, 2008).Based on a study by Kahn et al. (1964), according to (2004, p.54) Work-family conflict is "a form of inter-role conflict in which the role demands from work and family realms are mutually incompatible,".

Work-life Balance

Dundas (2008) Work-life balance is about the better control of the balancing act between skilled employment and other such actions important to individuals, such as family, social activities, charity work, personal growth, and leisure and entertainment.

Benito-Osorio (2009) Formulate and change personal and professional needs so that both are fairly equal in proportion.

Veiga (2010) Integrate the relationship between work and other activities that are important to maintaining a safe and balanced existence both physiologically and materially and immaterially, such as household chores, childcare, recreation, community engagements, etc.

Greenhaus & Allen (2011) The degree to which the productivity and happiness of an individual in work and family life are consistent with the life relevant aspects goals of the individual at a given point in time.

Yuile et al. (2012) A condition in which a variety of needs are fulfilled by allocating time according to a mixture of individual interests and demands of work and life to both work and life functions.

Ahmad et al. (2013) The degree to which a person is equally involved in his or her job position and role in the family.

Evolution of Work-life Balance

Work-life Balance programs were accounted to be in the existence from 1930's In 1930's, the W.K. Kellogg Company has implemented the four shifts of six-hour to take over the traditional daily three-hour shifts.

This new shift has brought a change by expanded workers' spirit and effectiveness. The term Work-life Balance (WLB) was officially instituted for the first time in 1970's, to state the balance between one's work and individual life. In the 1980's many companies have started to offer child care programs and employee assistance programs (EAP). The 1990s were a significant epoch in which work-life balance services became more widely recognized as a critical issue for women. The initial goal of these initiatives was to help women and children by providing work-life solutions. Vast research in this decade viewed that job preferences are based on their Work-life issues. Despite many policies implemented in the 1990's, they failed due to a lack of better impact on real-life challenges faced by the employees.

The eyeball view towards Work-life Balance programs by all Work-life professionals started after the failure of Work-life Balance programs implemented by human resource departments in the first years of the 21st century.

Models of Work-life Balance

- a) **The Working Hours Model:** Work-life balance's Working Hours Model as suggested by Alam, et al (2009). The inter-link between long working hours and work-family conflict illuminates this model. This model shows that work-family conflict at the level of healthcare workers expands to psychological distress and is transformed into possible loss of capability at the operational level. Healthcare staffs have a deep need to preserve work-family unity because of long working hours (9-10 hours). Long working hours lead to friction between work and family. The inflexibility of schedules, stressors at work, and working hours have contributed to conflict between work and family. More restricted working hours (5-7 hours) allow employees to maintain their work-life balance. The Working Hours Model, therefore, advises that an enterprise should have more restricted working hours for the workforce, such as five to seven hours so that they have a greater Work-life Balance and a comparative commitment to authoritative effectiveness.
- b) **Emotional Exhaustion Model:** According to the Emotional Exhaustion Study proposed by Yavas, et.al, (2008) it is shown that the examination conflicts arising from the demands of the two components, i.e. adult life, work, and family, lead to emotional exhaustion. The consequences of emotional stress are poor work productivity and a greater tendency to leave the job. Work-family conflict and family-work conflict affect both positively and negatively on the work results of success and financial performance through the resolving role of emotional exhaustion.

Therefore, the Emotional Exhaustion Concept believes that workers facing problems are emotionally drained from their job and family lives. Gender appears as a facilitator of the relationship between emotional stress and job performance. By formulating and executing gender-specific strategies, organizations can reduce the emotional fatigue of workers.

- c) **Work Commitment Model:** The Work-Life Balance's Work Commitment Model was suggested by Azeem and Akhtar (2014). The model recognizes that work-life balance and work performance are essential for healthcare workers to grow and improve job performance. Employees' better work-life balance creates job satisfaction. If Work-Life Balance is achieved, the work commitment between employees often increases. The job of healthcare professionals is difficult and challenging at all levels, i.e., physicians, nurses, and other personnel, and they are hospital identity creators. To incorporate Work-life Balance strategies for health care staff, quality management and dedication are required. The Work Commitment Model, therefore, indicates that Work-Life Balance creates job satisfaction among workers, leading in the long run to organizational engagement.

Career Progression Model: (Asiedu-Appiah 2014). et.al., has proposed the WLB Career Progression Model. This model recognizes that work-life balance activities must be actively planned by the organizations if more female workers are present in the organizations. This model indicates that family life has a significant impact on female participants' career development. Work-life balance activities that encourage female participants, in particular, to undertake further research projects, and build career development opportunities are important sources of work satisfaction, employee loyalty, and career growth.

- d) **Job Satisfaction Model:** WLB's Work Satisfaction Model was suggested by (Nikkhah et. al 2013). Employment satisfaction has an excellent association with individuals Job factors for workers and the balance of family life. Family life balance, employee work, and organizational characteristics have a direct connection to worker's quality of life. There is also a strong correlation between individual variables and organizational variables with employee satisfaction and quality of life.

Reasons of work-life imbalance during Coronavirus

- Heavy work pressure
- Long working hours

- Job insecurity
- Financial instability
- Limited PPE's
- No Rest
- Fear of caring virus to home

Theory of work-life balance

Conflict Theory: Work-family conflict has been represented in terms of job difficulty in which workplace and family structure stresses are typically opposed in certain ways, i.e. the engagement in work is made more difficult by the consistency of assistance in family work. They were differentiated and based on three kinds of work-family conflicts. There are conflicts based on time, conflicts based on pressure, and conflicts based on actions. It is defined as a time-based dispute at the stage where time requirements for one job make it impossible to take an active role in another job. (Greenhaus and Beutell, 1985). For example, to conclude a demonstration and be available at the same time at a family event (In 1997, Parasuraman & Greenhaus).

Work-family conflicts were initially seen as simplistic, but they are currently conceptualized as two-dimensional, i.e. worked effectively with family and the other way just over (Frone et al. 1992).

Most research on work-family conflicts showed that its more significant existence was among members, so the degree of work frequency response with family conductivity was a more prominent focus (Kelly et al. 2008).

Provisions for healthcare workers during COVID-19 by WHO

Rising reports of Infections, illnesses, and attacks against health workers fighting COVID-19

COVID-19 has placed health care staff and their families at risk at never-before-seen levels. COVID-19 infections among health workers are much higher than those among the general population, according to evidence from several countries across WHO regions. Thousands of health workers have died as a result of COVID-19 infection around the world.

Aside from the physical dangers, the pandemic has placed a huge amount of stress symptoms on health workers who have to work in high-demand environments for long periods of time, living in constant fear of disease transmission while being isolated from their families and facing social stigma.

5 steps to improve health worker safety

Establish synergies between health worker safety policies and strategies:

- Make connections between programs for occupational health and safety, patient safety, quality improvement, and infection prevention and control.
- Incorporate health and safety expertise in personal and patient safety through all stages of health worker education and training.
- Health care licensing and standards should provide provisions for health worker and patient protection.

Develop and introduce national health and safety programs for health care workers:

- Develop and enforce national occupational health and safety programs for health employees in accordance with national policies.
- Review and, where possible, upgrade national legislation and laws governing occupational health and safety to ensure that all health employees are protected from harm at work.
- At the national and facility levels, appoint responsible officers with jurisdiction over workplace health and safety for health employees.
- Develop occupational health and safety regulations, protocols, and codes of conduct.

Protect health workers from violence in the workplace:

- Adopt and enforce applicable policies and mechanisms to prevent and reduce violence in the health sector in compliance with national legislation.
- Promote a zero-tolerance policy for violence against health-care employees.
- To avoid violence against health workers, review labor laws and other regulations, and introduce new legislation where appropriate.
- Ensure that policies and legislation for preventing abuse and protecting health workers are efficiently enforced.

Improve mental health and emotional well-being:

- Establish policies to ensure that deployments are adequate and equal in length, that working hours are reasonable, that rest breaks are taken, and that administrative burdens on health workers are kept to a minimum.
- Define and establish acceptable levels of secure staffing in health-care facilities.

- Provide coverage for job-related risks, especially for those who work in high-risk areas.
- Establish a "blame-free" and "just" working culture through open communication and legal and administrative security from retaliation for disclosing unsafe conditions.

Protect health workers from physical and biological dangers:

- Ensure that all health care facilities in the health system follow minimum patient protection, infection prevention and control, and occupational safety requirements.
- Ensure that personal protective equipment (PPE) is available at all times, as required for the roles and tasks performed, in sufficient quantity, fit, and quality. Ensure that there is a sufficient buffer stock of personal protective equipment (PPE) kept locally. Ensure sufficient instruction on the proper use of personal protective equipment (PPE) and safety measures.
- Ensure that all health care facilities provide sufficient environmental amenities, such as water, sanitation and hygiene, disinfection, and adequate ventilation.
- Ensure that all health workers at risk are vaccinated against all vaccine-preventable diseases, including Hepatitis B and seasonal influenza, in compliance with the national immunization program, and that health workers have priority access to newly licensed and accessible vaccines in the event of an emergency.
- Provide sufficient services to protect health care staff from accidents and hazardous chemical and radiation exposure; provide functional and ergonomically constructed equipment and workstations to reduce musculoskeletal injuries and falls.

Provisions for healthcare workers during COVID-19 by Govt. of India

Hospitals must enable their Hospital Infection Control Committee as an institutional mechanism for preventing and reacting to Healthcare Associated Infections (HAIs) among HCWs (HICC).

Infection Prevention and Control (IPC) programs are implemented by the HICC in the health facility, and routine IPC training for HCWs is organized.

Healthcare staff in various hospital settings must wear PPE that is suitable for their risk profile, as outlined in the Ministry's guidelines.

- All healthcare workers have received infection prevention and control training, and they are familiar with common signs and symptoms, the

need for self-health monitoring, and the importance of reporting those symptoms promptly.

- Both hospital employees will be subjected to routine (thermal) screening.
- Chemoprophylaxis is being provided to all healthcare workers who are handling COVID-19 cases under medical supervision.
- Provisions have been provided for hospital personnel to report any breaches of personal protective equipment (PPE) immediately and to take appropriate action.

Action for Healthcare Workers

- Ensure that all preventive measures are taken at all times, such as regular hand washing/use of alcohol-based hand sanitizer, respiratory etiquettes (using tissue/handkerchief while coughing or sneezing), and so on.
- While on service, he/she must wear suitable PPE at all times.
- To ensure that infection prevention management practices are not breached, a buddy system* should be used.
- After leaving the patient care units (wards/OPDs/ICUs) at the doctor's duty rooms/hostels/canteen or outside the HCF, HCWs must observe social distancing and masking to avoid transmission to/acquisition of infection from other HCWs who may be positive.

Literature Review

Impact of coronavirus on front line Healthcare workers: The Coronavirus has heavily impacted to healthcare system throughout the world.

(Armocida et al., 2020; Xie et al., 2020), Health care workers have a variety of fields, positions, and exposure risks are reporting anxiety, depression, and distress, and sleep problems during coronavirus. Healthcare systems and healthcare workers have been heavily burdened and in many cases exhausted by the covid-19 pandemic.

(WHO, 2020) The WHO has stressed the incredibly high pressure on health workers and called for action to resolve the urgent needs and steps required to save people from danger the physical and mental health of health workers from having a significant impact.

(JoobB., Wiwanitkit, 2020) Quite often, most health workers employed in isolation units and hospitals do not undergo any mental health care training explained how the confinement "caused a sense of collective hysteria, leading to desperate measures for the employees."

(Li et al. 2020) The number of persons and medical personnel suffering from vicarious trauma and how this is recorded Traumatization of non-front-line Healthcare workers are more extreme than that of front-line Healthcare workers.

(Bargellini et al., 2000) This would not only adversely affect whether a Healthcare worker has been in a state of distress for a long time, But their physical fitness can also contribute to a loss of productivity in the job.

(Jonathan J.Y. Ong et.al. 2020) Genetic alterations headaches and pre-existing, worsening headaches among the high-risk frontline healthcare workers employed during the COVID-19, areas of a hospital. The severity of this condition is clinically relevant and could worsen if the current epidemic spreads widely and stays for a prolonged time, impacting healthcare workers' job performance. Perhaps better techniques are required to design different personal protection equipment and decrease healthcare workers' exposure time.

(Yuanyuan et.al 2020) COVID-19 brings significant social protection and prevention and front-line care problems. The psychological burden of nurses should be concentrated in public health emergencies. Nurses who endorsed care with COVID-19 were usually under pressure. The key factors that affected the stress load of nurses was whether the participants were the only children in their households, working hours a week, and anxiety.

Vindegaard and Eriksen Benros (2020) identified healthcare workers, and their qualitative overview concluded that healthcare workers typically experienced more anxiety, depression, and sleep problems relative to the general population.

Work-life Balance of Healthcare workers

(Wolor, et. al 2020) Work-life balance is also how a safe and comfortable work environment can be developed, helping workers to balance work and private responsibility and thus enhance employee efficiency.

(Rama Swathiet. al 2020) Work-life balance is better seen as a condition of human life that contributes to the effectiveness of professional and personal quality of life. Work-life balance is adversely linked to timeline inflexibility, working hours stressors, decreased productivity, and mental fatigue. Enhanced work-life Employee balance builds workplace satisfaction and contributes to organizational loyalty. Family-life balance, employee work, and organizational variables are directly linked to employee quality of life.

(Sharma T. 2020) Worldwide, the meteoric increase in COVID-19 cases has resulted in the work burden of nurses all over the world is rising tremendously. Therefore, there is a great need for a balance between work and life for those staff on the front line. Both nurses and organizations must operate to keep a positive job together-life balance and life balance Solve this monster that is rising.

(Lai Jianboet. al 2020) High rates of symptoms of depression, anxiety, insomnia, and distress were identified by healthcare workers reacting to the spread of COVID-19. A significant aspect of public health initiatives to overcome the COVID-19 crisis is protecting health care workers. Special measures to encourage the mental well-being of health care staff exposed to COVID-19 need to be introduced urgently, with particular attention being paid to women, nurses, and frontline workers.

(Teng, Ziweiet. al 2020) A high incidence of depression, anxiety, insomnia, and fatigue was recorded among frontline employees battling COVID-19. To strengthen the mental health of employees on the COVID-19 frontline, with community staff, women, young people, and those with physical and mental illnesses needing special care, proactive solutions need to be given immediately.

(Mullen, K. 2015) Nurses should begin by defining specific focus areas with an inventory of individual needs and stressors that are the results of work-life imbalance. The first phase in Work-life Balance enhancement. A second step is for nurses to acknowledge that it is difficult to alter habits, needing guidance, motivation, permission, and confidence in personality.

Discussion

Studies have identified several results and conditions, including the introduction of policies to avoid or reduce mental health issues, other tools and techniques used by health workers, and the mental health responses of health workers to re-deployment as frontline workers. Some small forms of bias are seen towards health care workers who may have a higher risk of being infected and against front-line medical staff among non-front-line medical staff. We need not forget that many doctors and nurses have been affected and many have died as a result of COVID-19 infection. Healthcare workers have appeared bright shortages of Personal Protective Equipment that create stress of getting infected with the pandemic. Healthcare managers, politicians, governments, and industry are taking urgent action supported. The work-life balance of Healthcare Workers was imbalanced during Coronavirus Pandemic. Work-life balance is critically linked to timetable

inflexibility, working hour's stressors, poor work quality, and emotional fatigue. Enhanced Work-Life Employee balance builds workplace satisfaction and contributes to organizational engagement. Family-life balance, an employee's role, and organizational variables are directly linked to employee quality of life.

Conclusion

Healthcare workers are experiencing anxiety, depression, distress, and sleep issues during the covid-19 pandemic in a number of areas, roles, and exposure risks. Causes differ, but in particular, for those on the frontline, a lack of opportunity to sufficiently rest and sleep is likely to be associated with exceptionally high workloads, and a lack of personal protective equipment or training may affect mental health. It seems important to have sufficient personal protective equipment and work rotation schedules to allow adequate rest in the face of long-lasting disasters such as the Covid-19 pandemic. Work-life balance is better seen as a condition of human life that contributes to the achievement of professional and personal life satisfaction. Work-life balance is adversely linked to schedule inflexibility, working hours stressors, poor job performance, and emotional fatigue during Coronavirus. Enhanced Work-life Employee Balance enhances workplace satisfaction and contributes to organizational engagement. Family-life balance, an employee's role, and organizational variables are directly linked to an employee's quality of life.

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Brand Performance in Digital Campaigns- Brand Owners Turn Story-Tellers

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Abstract

With the advent of social media, brands have brought a massive impact of their advertisements upon their target audiences through their social media campaigns. To do so, the brands have undertaken the method of storytelling, a powerful tool for persuasion in combination with an idea attached to an emotion. The aim of this paper is to show the power of branding literature in enhancing the consumers. After the emergence of social media, the role of the consumers have undergone a major shift-that from passive listeners to active participants. The main purposes of using storytelling mode of narration for digital campaigns of brands are to connect with the consumers, tap into their emotions and augment the respective brands.

Presently, brand storytelling in social media is one of the finest ways to influence customers by attracting new followers, increasing brand awareness as well as reach. Once a story is attached to the brand, customers tend to remember it automatically. With the help of storytelling technique, brands not only clear the concept, but also aim to project an inspiring story, sometimes keeping a social message at the core of their digital media campaign. In a way, brands try to connect with the everyday lives of the customers. Therefore, the stronger the connection, the more people are likely to take notice of it.

Further, this paper manifests how the ‘Media Ecology Theory’ of Marshall McLuhan is in sync with the storytelling strategy that brands have undertaken to bring a social change and enhance their brand value.

Keywords: Brand Storytelling, Digital Campaigns, Social Media, Brand.

Introduction

Now-a-days, ‘storytelling’ and ‘social media’, these two concepts are being merged by the brand owners and advertisers to portray a human side of their brands. Just like stories comprise a beginning, middle and end, brand owners today, have landed in the process of crafting great advertisements accommodated with a moral lesson or a social message and posting them on the brand’s social media sites. The stories created by the brands are not just an amalgamation of few words but are a desperate attempt to propagate an idea to the world, to bring a change in some of the persistent social stigmas as well as be remembered in the minds of their target audience. People today show keen interest to get along with a brand that has a meaningful mission, rather than purchasing ‘cool’ stuff. Brand owners today, have accommodated the technique of ‘branding literature’ so as to enhance brand awareness, reach out more to their target audiences and above all, be remembered by the customers.

In today’s speedy world, where everyone is busy in a rat race, brands have taken to ushering ‘humanity’ through their advertisements. What makes brand storytelling so engaging is:

- a. It connects with the audiences
- b. Taps the emotions of the audiences
- c. Includes in-depth involvement of audiences

Kaitlin Loyal has defined brand storytelling as: “Using a narrative to connect your brand to customers, with a focus on linking what you stand for to the values you share with your customer” (2018). She has divided the elements of her definition into three parts which are:

- a. **‘A narrative’:** A story can be divided into characters, setting, conflict, rising action, climax and denouement.
- b. **‘What you stand for’:** This is the driving force that works behind a brand, precisely the USP that differentiates a brand from the other.
- c. **‘Values’:** Features of a company that defines it.

Storytelling technique (illustration with examples)

Stories consist of indices like character, location, actions, etc. that not only create empathy in the minds of the listener (Woodside, 2010) but also help them recall the story again and again (Schank, 1999). A story with more indices has more chance of being remembered and recalled. Christian Salmon in his book-length essay ‘Storytelling-Bewitching the Modern Mind’ has

defined storytelling as: ‘Storytelling is what allows brands and products to ‘un-thing-themselves’ so that they can actually speak and captivate (2007). Let’s consider few examples for better understanding.

a. ‘Reunion’

The Google search engine had flawlessly launched a captivating campaign titled ‘Reunion’. Being the most shared ad of 2013, it captures the emotional reunion of two friends who were separated by the India-Pakistan partition of 1947. Google Search helps them reunite. Although the ad questions the futility and the inevitable consequences of the devastating war, yet it manifests Google as a true friend who has a solution to every problem. The visuals used in the ad are a grandfather talking to his granddaughter about his friend, residing in Pakistan. He shares the good old memories of their mischievous childhood. Later, the granddaughter locates her grandfather’s friend, connects with him and organizes a meeting of two friends on the occasion of her grand-father’s birthday.

This ad has achieved its goal of reaching out to people through storytelling: The protagonist cum speaker is the grandfather; the locations used are Delhi and Lahore; the granddaughter and the friend are the supporting characters; there is a tale of partition and longing friendship at the backdrop and everything is connected well with a heart-wrenching background score. ‘Reunion’ has a powerful message at its core-rekindling friendships before barriers existed. Through this campaign, Google Search tried to build the concept in three different ways:

- a. It is relatable to both the young and the old generation.
- b. It touches the history of the nation.
- c. The product attempts to bridge the gap between two generations and regions.

After the launch of ‘Reunion’, the Senior Vice-President of NewsCorp, Raju Narisetti said, “If anyone doubts brands can’t become compelling storytellers, try watching this Google Hindi video without tearing” (2013). After the campaign was launched, it received 4 million hits in a month.

Through this storytelling strategy, the brand owners try to build up a connection with the customers. The theme that the brand provides helps the customer to forge a conversation in two aspects-first, between customers and the brand and second, among the customers themselves. This is how the customers try to relate their own stories and experiences with that of the brand (Escalas, 2004).

b. ‘Mom’s Touch-Stories of Extraordinary Mothers’

One such popular skincare brand, Nivea India, had been successful enough in engaging customers into their campaign entitled ‘Mom’s Touch-Stories of Extraordinary Mothers’, where children were seen sharing the arresting and exceptional stories of their mothers’ lives. Nivea had collaborated with Aseema Charitable Trust, an organization that imparts quality education to children belonging to marginalized communities. This social media campaign portrayed the story of extraordinary mothers who, despite facing adversities, wanted to impart a better future to their children. Viewers could participate in this noble cause by directly donating to the charitable trust or by sharing the video on social platforms. Each time the video was shared, Nivea contributes 100 grams of rice to the charitable trust. Nivea’s ‘Mom’s Touch’ gave every consumer the opportunity to participate freely for a noble cause. Therefore, storytelling is beyond simply promoting a brand. It is more about augmenting a brand and leaving a mark in the minds of its customers.

c. ‘#SoWhatIfIDontCook’-Zomato

One of the upcoming food delivery start-up brands Zomato has aced their Woman’s Day 2020 campaign with a short video with the hashtag ‘#SoWhatIfIDontCook’. The one-minute film shows a middle-aged man, P.V. Raman, the father of the famous badminton player P.V. Sindhu, claiming himself to be famous not for preparing finger-licking Biriyani, but for breaking the social stigma and entering into the kitchen, which is mostly regarded as a woman’s job. The video then proceeds with a blurb, a comment by P.V. Sindhu stating ‘I play for my country #SoWhatIfIDontCook.’ The campaign proves women to be all-rounders even if they do not know how to cook. Zomato encourages people to celebrate their choice.

d. ‘#WeMissYouToo’-Maggi

The year 2015 was a nightmare for Nestle. Maggi was banned on June 5, 2015, on the grounds of containing lead and MSG (monosodium glutamate) beyond the permissible limits. After several lab tests, Maggi came back with a bang. While fighting back obstacles, Maggi filmed each phase and made its customers known about the hard work that they are putting into to return to their customers. After it was completely free from all accusations, Maggi launched a series of short films with the hashtag ‘#WeMissYouToo’. When the newly manufactured stocks were tested perfectly by the NABL laboratories, Maggi launched a video named ‘Late Night’ featuring mothers, their journey with the brand Maggi over these years, and the safety of the product. Also, Maggi posted a picture on their Instagram page ‘Meri Maggi’

saying all its samples cleared additional tests for lead. Maggi did not leave any stone unturned to communicate with its customers about the controversy raised about the brand in 2015.

e. ‘DermaSeries’-Dove

Dove has done a commendable job with its ‘DermaSeries’. This DermaSeries is basically for people struggling with several skin diseases like psoriasis, excessively dry skin, eczema, etc. Considering the fact that these skin conditions can be a sensitive issue to some, Dove asked people to share their pictures and the stories behind their struggle with skin issues.

f. ‘#ShareTheLoad’-Ariel

Likewise, a very promising example of breaking societal stereotypes is the detergent brand ‘Ariel’. Their #ShareTheLoad campaign raises the question of progressive gender roles which they started in 2015. Ariel weaved digital films to nurture the thought of equality, preventing gender biases and inspiring men of the house to extend their helping hand to the women to share the load equally. In 2016, Ariel took up the ‘Dads Share the Load’ movement followed by ‘Sons #ShareTheLoad’. The campaign stresses the fact that laundry is not a woman’s job only.

g. ‘#BraveAndBeautiful’-Dabur Vatika

Another captivating digital media campaign that engages consumers is the Dabur Vatika campaign entitled ‘#BraveAndBeautiful’. The brand salutes the female cancer survivors who are not only fighting back the disease but also are battling with the challenges in their everyday lives, especially with their looks. The campaign highlights the maxim-‘Beauty is not always what you see outside, a lot of it is what is inside.’ The 4-minute video casts a bald cancer survivor who is trying to fit into her family and social life as she was, before being diagnosed with the disease.

The film starts with the bald woman taking a look at the photograph of her former self with the man as she wakes up. While the woman holds the photo frame, the camera focuses on her needle marks in the wrists. Then she proceeds with her household chores followed by getting ready to go to her workplace. After trying several outfits to check what suits her present baldness best, the husband helps her to keep away all hesitations and puts a bindi on the side of her forehead, wishing to avert all evil eyes on her beauty. When the woman enters her workplace, she is greeted cordially-one staff comes up to apply kohl from her eyes while the other puts her bindi right beside the one that her husband had put. The film ends with a close-up shot of

the cancer survivor and a blurb appears stating ‘Some people don’t need hair to look beautiful’. Through this campaign, Dabur has invited cancer survivors to share their stories. The campaign has taught the lesson of banning sexism and accepting people just the way they are. Also, the campaign gives a strong meaning to the real standards of beauty.

Elements for a powerful brand storytelling

In a highly competitive market scenario, amidst the plethora of advertisements, brands are facing difficulties to be remembered. In such a situation, powerful storytelling matters as the brands have to survive, influence the customers as well as build an intrinsic relationship with them. In order to build up a storytelling narrative, brands have to incorporate these elements into their digital campaign:

➤ Unique brand narrative

The value of the brand is linked with the story it tells. The benefits that the brand provides are communicated through this story. The more unique the story, the better it is registered in the minds of the audience.

➤ Target audience

Target audience or target market is a selected group of potential or existing customers for whom a brand creates a particular message that intends to address its products or services. In order to persuade people to choose a particular brand, the brand has to know what influences its customers. In this case, intensive research and data gathered from the customers help to create a story.

➤ Communication of the problem

An integral part of an effective brand story is to talk about the problem that the brand has solved. A pertinent example who communicated its problem and the solution to the problem is Maggi.

➤ Character building

In order to ensure effective brand storytelling, the brand has to build a character that is relatable to its audience. In the case of corporate houses, the language of the story has to be authoritative and formal while, for brands whose customers are the millennials, the brand story may have humour infused with it.

➤ **Connecting with the community**

Connecting with the audience is a great way to keep a brand alive. Establishing this connection can be through reposting images, providing feedbacks, commenting, tagging or by linking an image or comment.

Media ecology theory

The way brands today are making use of the digital media and trying to bring a change in the society with the help of branding literature by creating a brand story, is a clear indication of the implication of the Media Ecology Theory into the process. Propagated by Marshall McLuhan in 1964, the Media Ecology Theory aims at building up a relationship between environment, media, human beings and interactions. According to Postman, the environment shapes what people see, do and say. Further, it is the environment that assigns specific roles and people are somewhat pressured to play these roles. In a speech delivered at Denver in March 1998 Postman pointed out that “technological change is not additive; it is ecological” (3-5, 1998). To elaborate, he substantiated his statement with an example saying, “A new medium does not add something; it changes everything. In the year 1500, after the printing press was invented, you did not have old Europe plus the printing press. You had a different Europe” (Postman, 1998).

As has been noted by McLuhan, society tends to be more dependent on electronic media, precisely the social networking sites, for its efficiency and flexibility. The more society became comfortable with the upcoming forms of new media, the more the researchers have gained interest to analyse how people are connecting to the communication elements and elements of humanity online. Using social media as a medium and storytelling technique as a narrative strategy, brands are nurturing their connections with the consumers. Sometimes, brands are co-creating their stories with the consumers. When brands invest in consumer-generated content, it automatically enhances the credibility of the brand.

Challenges of brand storytelling technique

Along with the benefits, brand storytelling is a tedious process that has to face certain difficulties too. To follow a particular story, the viewers have to subscribe to get the follow-up, especially if the story is launched on the social media page of the respective brand. This may affect your promotions because not everyone would prefer to subscribe. The fact that brand story marketing is time-consuming cannot be denied. Designing the campaign and developing a

good story surrounding it takes lots of effort and time, which is why the final output of the campaign may be delayed.

Again, creating a brand story and filming it demands the skill and expertise of an experienced production team. Without thorough market research, it is impossible for brands to create a storyline. If the campaign does not concern the tastes and preferences of the target audience, the entire effort is sure to go in vain. When a brand's campaign has a story entwined with its advertisement, there can be a possibility that the viewers can interpret it in multiple ways. With irrelevant interpretation comes negative word-of-mouth publicity that is harmful to each and every brand. This mostly happens when brands take up sensitive issues. The concept of the 'digital divide' cannot be overlooked. When brands in India create an engaging digital campaign using the storytelling technique, the customers of the grass root level, those without the facility of the internet connection are deprived of viewing it. In fact, if the campaign is a participatory one, the people of rural India fail to be aware of it and be a part of the campaign.

Conclusion

Marketers all over the world seem to respect the storytelling technique. Today, storytelling is not just about telling a story in a traditional manner. It has evolved and has entered into various businesses, one of which is its occurrence and repetitive use in various brand advertisements and campaigns. With each passing day, one brand is competing and surpassing the other and getting the desired attention of the customers with their brand campaigns. The credit for this success should be attributed entirely to branding literature.

Despite the many drawbacks that storytelling comes up with, brands have not stepped down from their motive of entering into the minds of their target audiences, tapping into their emotions and being remembered. To reach out to the rural people, brands must popularize their campaigns not just in new media, but also in a medium that is accessible to all. However, not all advertisements are meant for persuading customers. Some have a powerful and deep message conveyed through them. What stands commendable behind the success of such engaging advertisements is the creativity and uniqueness that they possess. The advertisements mentioned previously in this paper have all been able to question the stereotypes prevalent in Indian society without distorting the harmony and peace of the country.

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Consumerism to Minimalism: Has COVID-19 Induced a Change?

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Abstract

Purpose: This article attempts to understand the change in consumer behavior during the COVID-19 pandemic by application of fundamental marketing concepts and analyze the difference between the two behaviors. This paper also attempts to understand the consumer sentiments and the shift in behavior from consumerism to minimalism.

Approach: The paper consolidates the available literature on consumer behavior and reinforces it with the various assessment reports published by the leading consulting organizations during the lockdown phase. This helps us to build a parallel between similar situations in the past which lead to change in consumer behavior which is then backed with data collected by various consulting organizations.

Findings: The paper was able to see consumer sentiments shifting from a materialistic approach of purchasing goods to buying "what is enough". We also see the shift of consumer behavior shift throughout the multiple stages of the decision-making process with the change in need, how consumers gather information and its implication on marketers, change in evaluation criteria's and the mode of purchasing all because of COVID-19. We were also able to analyze different motivated behaviors due to the pandemic.

Research Limitation: The paper was only able to focus on aspects that were supported by assessment reports published by the consulting organizations.

Implications: The learning's of the study could further be used in the development of new models of consumer behavior taking

into consideration the behaviors which are considered as the new normal.

Keywords: Consumer Behaviour, Economic Crisis, COVID-19.

Introduction

Gates (2020) emphasized the immediate danger of the 2009 H1N1 Pandemic, the dangers, and various implications due to the weak health care system of the country claiming India was unprepared for such outbreaks on so many levels. All the research articles at that time focused on the health implications due to such pandemics if they occur. A report published by Global Preparedness Monitoring Board (2018) highlighted how the various gaps existing in global preparedness will increase the various implications due to a prospective pandemic which will extend beyond the mortality impacting national security, disrupting the global economy leading to change in the consumption behavior of consumer across the globe. In collaboration with the John Hopkins center for health security and the Bill & Melinda Gates Foundation, the World Economic Forum (WEF) hosted an event in October 2019 bringing together governments, businesses, and public health leaders across the globe to address the case of a hypothetical pandemic, learnings from which was used to prepare a response system to fight COVID-19 across countries the effects of which can be seen in the exponential increase in the number of positive cases across the globe (Relief Web, 2020).

The COVID-19 pandemic has changed the world as we know it in so many ways. One of the implications was seen in the way people socialize. We saw business meetings, birthday parties, and many other events shifting from a physical activity over to zoom. Not only that in many ways people have started to think differently. Suppliers started to shift to online modes of selling goods due to the failure of supply chains all over the country. Consumers shopping in physical stores started consuming goods through the new lens of eCommerce. The pandemic has not only reshaped the entire consumer good industry but continues to change the long-established consumer trends in the time of mere weeks. Consumers have been opened to many new experiences further changing their attitude, perception, and personality aspects. In this paper, we explore the impact of the outbreak on consumer behavior, discussing how the pandemic has impacted the consumption of goods and the shopping behavior of the consumers.

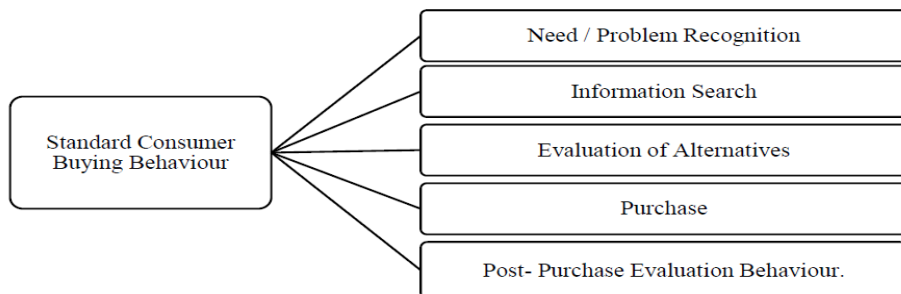
Understanding Consumer Behaviour

A consumer can be explained as an individual who identifies the needs or desires to purchase to fulfill a need and further disposes of the product at the end of the production process. A typical consumer's utility depends on the consumption of goods such as agricultural & industrial, also in extension the various services, housing, and wealth (Grundey, 2009). The behavior displayed by consumers while making decisions to search, acquire, use, evaluate and further dispose of the products is known as consumer behavior (Valaskova et al., 2015). To understand the change in buying behavior one must first understand the basics of said behavior. Consumer behavior can be explained as the decision-making process to buy a product which in its essence is very complex and difficult to understand. In simpler terms, consumer behavior is the process by which individuals decide what, when, where, how, and from whom to buy goods and services (Walter & Paul, 1970). Further, it can be explained as the attitude or expression of the consumers while they purchase products to satisfy their needs. Webster (1975) explained the consumer buying behavior has a close association with the various societal factors. If taken into consideration, the social influence on the consumers has a direct impact on the buying behavior.

The concept of consumer behavior is predicted based on the lifestyle of the individual which has a direct impact on the consuming attitude. (Engel et al, 1982) stated how an individual's lifestyle is impacted by factors like society, culture, family background, personality, and perception of a consumer. It has been noted that consumers have a certain goal or purpose while purchasing something, hence buying behavior can be explained as goal-oriented behavior that ends with a business transaction (Peter et al, 2005). Consumer behavior can also be explained as the act of obtaining and using goods that are determined by the consumer during the process of buying (Kurtz and Boone, 2007). As explained by Hoch & Deighton (1989) consumers learn and develop their understanding through the four-stage process of experience. First, through the consumer speculation and hypothesis or about the product. Second, the consumer is exposed to any experience with product or packaging. Third, the consumer experience with the encoded information. Fourth, the consumer will integrate the acquired information and update his behavior.

In recent years, researchers have developed consumer buying behavior models that integrated aspects such as attitude, preference, intentions, and decisions regarding the consumer's behavior in the marketplace while purchasing a good or service (Bashir and Kokas, 2015). The standard

consumer buying behavior broadly has five components which are represented by the following flow chart:



Source: (Stanton, 1984, p. 131)

Figure 1.Consumer Decision Making Model

In the first stage of consumer behavior individual focus on the recognition of the need or the problem he is trying to solve with a product. The second stage focuses on how an individual can access and gather information to develop alternatives. The third stage aims to evaluate various alternatives by providing weightage to different decision-making criteria and ensuring the availability of funds to make the purchase. Ultimately the consumers decide to purchase the good taking into consideration the price and availability of the product. At the last stage, the consumer forms an opinion about the product, based on whether he is satisfied with the product or not. This is the basic model of the consumer decision-making process which an individual goes through while purchasing goods and services. This paper aims to apply the decision-making process of consumers and test it in the time of COVID-19 to understand the shift in consumer behavior.

Consumer Sentiments during COVID-19

The global pandemic was expected to create market and economic volatility, as well as to create uncertainty in consumers, these effects have been highly increased during the during of COVID-19 pandemic due to the unavailability of a vaccine (Li and De Clercq 2020; Liu et al. 2020). As uncertainty in consumer increase the consumption patterns, consumer decision making had further been negatively affected by the period of government-enforced self-isolation of 14 days for returning travelers or individuals who feel they might have been exposed to the virus. The mandatory social distancing also made individuals be largely locked up in their homes. Hence it was seen consumers movement, capabilities, and purchases were restricted to their homes. Many organizations focused on

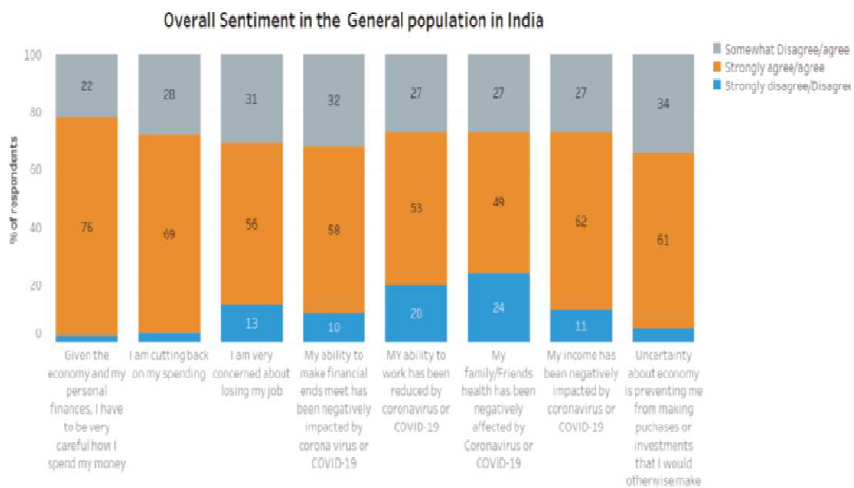
understanding the consumer's sentiments with the aims of understanding and predicting the changes in their behaviors. Accenture (2020) through their study aimed to understand what consumers feared the most due to the COVID-19 pandemic.



Source: Accenture COVID-19 Consumer Research, conducted April 2-6.

Figure 2. Consumers' fear for themselves along with the broader society

Across the globe, it was seen that people were worried for their health (64% respondents) or the health of the people they care about (82% respondents), which led to an increase in the purchase of health-conscious goods. Another survey conducted by McKinsey (2020) aimed to understand the overall sentiment of the general population also revealed some interesting facts.



Source: McKinsey & company COVID-19 India Consumer Pulse Survey

Figure 3. Indian Consumer Changing Sentiments Towards Spending During the COVID-19 Crisis

It was seen in that consumers became conscious about their spending habits (76% respondents) and cutting back on their spending (69% respondents) aiming to save more money and making conscious decisions on what to spend. Consumers also stated due to COVID-19 health of their family/friends has been negatively impacted (49% of respondents). Across India, it was seen that consumers realized the importance of health due to the pandemic. As a result, we saw a shift of priorities from a materialistic approach to health-conscious decision making and hygiene.

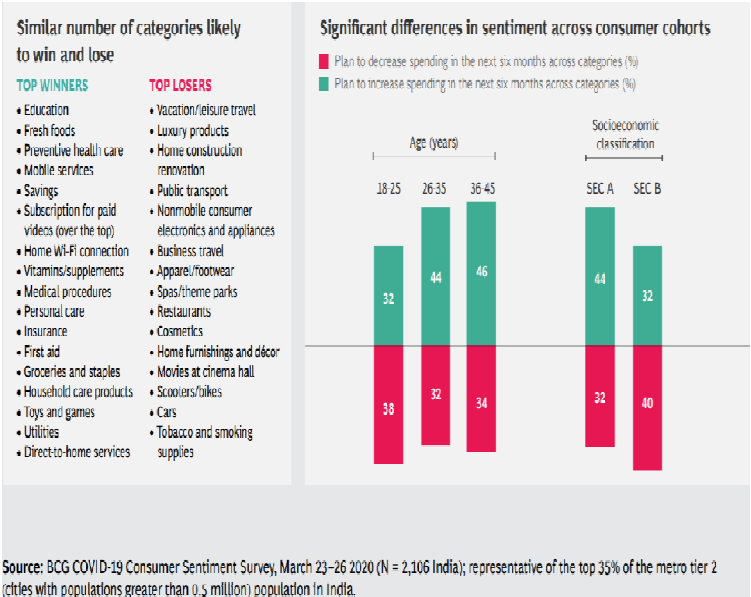
The Shift in Needs of Consumers

Hoon Ang et al. (2001) stated that in times of risk such as economic crisis the personality characteristics such as degree of materialism & value consciousness of individual may moderate various changes in their consumption behavior. Flatters and Willmott (2009) stated during the time of crisis there are significant changes in the consumer behavior of individuals which saw an increase in need-based demand due to limited offers. As consumer movement was restricted, they were forced to try new brands & products to satisfy the needs and wants. People moved away from their personality instinct of materialism (Richins, 2010) and went into survival psychology. Survival Psychology acknowledges that individuals will undergo various changes in their behavior due to the occurrence of events such as natural disasters, healthcare crises, and terrorist attacks (Forbes 2017).

In the study to understand the aftermath of the 2011 Christchurch earthquake, Forbes (2017) examined the short-term consumption patterns of consumers. He noticed within the first week, consumers shifted their demand towards products that met the basic physiological need of survival (i.e., water, food, baby care), products providing communication services (i.e., batteries, radio, telephones), products for cleaning up and restoring (i.e., paper towels, rubber gloves, paper towels). In the case of the COVID-19 pandemic, a parallel can be drawn with the help of a study done by Forbes. As consumer's priorities shifted to health and hygiene products, a shift in need from materialism to health-conscious decisions was seen in the first stage of consumer decision making during the time of COVID-19.

In Boston Consulting Group report (2020) focused on the fact that as part of a change in the spending patterns of individuals, there will be a substantial fall in sales across different sectors in Indian Markets. The results of the study revealed some very interesting facts about consumer buying behavior during the time of COVID-19. It was seen that

individuals not only prioritizing products categories such as preventive health care, vitamins/ supplements, personal care, first aid, and insurance displaying a shift in consumer needs during the time (Fig. 4: Top winners across product categories)



Source: Boston Consulting Group et al. (2020) Week 4, 23-26 March 2020

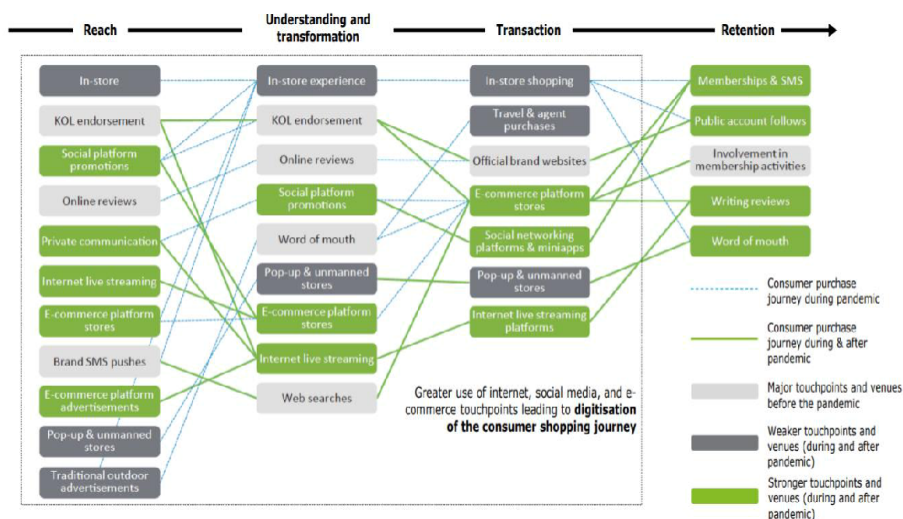
Figure 4.Significant Differences Emerge Across Product Categories and Consumer Cohorts in India.

The results also displayed consumers refraining from materialistic product categories such as Vacations, luxury products, apparel, cosmetics, cars, and even tobacco products (Fig. 4 Top losers across product categories. The overall consumer sentiments of prioritizing health across India can be seen in the buying behavior of consumers across different product categories. The results of the survey also displayed that younger consumers who are more prone to making an impulsive purchase (Sofi & Nika, 2017) showed a propensity to reduce their spending across materialistic categories (Fig 4. Top Losers).

Searching for Information

By late May 2020, with the spread of the pandemic, almost all the regions across the globe implemented lockdowns. India acted even before that, implementing the nationwide lockdown on 24 March 2020, shutting down all activities which required human gathering and interactions. As consumers were trapped in the boundary of their homes they were cut off

from all traditional sources of acquiring information altogether. A study done by Srivastava (2020), stated how the internet has played a very crucial role during the time of COVID-19 by moving forward the day-to-day life of consumer into the IT-sphere. Studies also focused on the fact of how consumers were engaging in problematic internet use because of lockdown across the globe (Xiang, Zhang, & Kuwahara, 2020) as a coping mechanism. Due to the weak presence of traditional outdoor advertisements and shopping malls visits due to the mandate lockdown and social distancing norms, the digital platforms and technology are expected to play an even significant role in reaching, spreading awareness, transactions, building relations, and finally the retention of the customers in the post-COVID world along with word of mouth. (Deloitte, 2020) Fig 5.



Source: "Future Consumer" Series: Omni channel Transformation Begins by Grasping the Key to Consumer Mentalities, Deloitte; KOL - Key Opinion Leader

Source: Deloitte (2020)

Figure 5.Changes in consumer shopping journey Before, During & After the pandemic

According to the study by Deloitte (2020), it was stated that to reach consumers Social platform promotions, internet live streaming platforms, eCommerce platform stores & advertising platforms are the best way. Understanding and transformation can be done more effectively through Social platform promotions, e-commerce platform stores, and internet live streaming. For retention membership & SMS, the public account follows, writing reviews, word of mouth are the most effective ways. This was the total opposite back from the traditional models of reaching out to consumers such as outdoor advertisements, demonstration centers (New

Ways to Reach Your Customers, 2014). Hence the marketers also must amend their strategies while aligning with this new way of acquiring information to reach out to the consumer. During the time of COVID-19, the stage of information search in the decision-making process has also seen a shift.

Criteria for Evaluation of Alternatives

The third stage of the consumer decision-making process focuses on how consumers use the information available to them and evaluate various alternatives of goods and services. As stated in their study, Hoch & Deighton (1989) stated consumers gather information from different experiences, further using this information to update their behavior. In the time of COVID-19, individuals. As the COVID-19 pandemic has impacted consumer behavior by making them shift their priorities, further drifting from materialism, and entering a survival mode, these changes have also had an impact on what are the different criteria on which they evaluate a brand or a product to make the purchase decision. In multiple studies attributes such as price, country of origin, or subjective criteria such as quality, comfort and design were considered (Grapentine, 1995; Myers and Shocker, 1981) while making the final purchase of the goods. But with the changing environment, these criteria also have changed. Brown (1950) in his study stated that a combination of external and internal factors of consumer behavior such as "Physical characteristics of the brand, users experience with the brand, packaging, price, premium, guarantees, recommendation by friends & expert, the convenience of dealer's location, social acceptance of the brand, etc were recognized to give more importance while choosing a new brand.

McKinsey (2020) in a study conducted to understand what factors influence them while considering a new brand, the responses of consumers displayed that consumers are moving away from materialism and choosing new brands that provided more value and quality.

The results of the study stated that consumer-focused on factors such as value provided by the brand (72%), whether the product provides quality or is organically made (62%) and whether the brand itself is purpose-driven (30%) were given high priority while choosing a new brand.

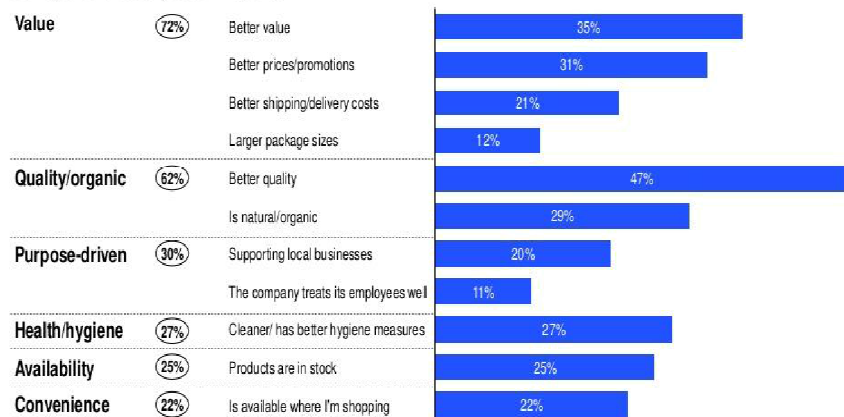
Health/ hygiene (27%) and availability (25%) were the new factors that entered the consumer purchasing decisions making process while purchasing products that were not seen before the COVID-19 Pandemic.

Value and quality are the top two drivers for consumers when considering trying a new brand

Reason for trying a new brand since COVID-19 started¹

% of respondents selecting reason in top three

Net % of respondents per category



¹ Q: You mentioned you tried a new/different brand than what you normally buy. What was the main reason that drove this decision? Select up to 3. "Brand" includes different brand, new private label/store brand.

Source: McKinsey & Company COVID-19 India Consumer Pulse Survey 11/9-11/20/2020, n = 1,031, compiled and weighted to match India's general population 18+ years

McKinsey & Company 17

Source: McKinsey & company COVID-19 India Consumer Pulse Survey
Figure 6. Drivers for considering a New brand

The Purchase Decision

As mentioned earlier, many researchers have focused on how the surge of technologies due to the different phases of lockdown across nations, forcing people to stay inside their home to maintain social distancing norms have played a very crucial role during the COVID-19 period (Srivastava, 2020). The excessive use of internet during this time has not only transformed how individuals acquire information but further made it a big part of our day-to-day life by introducing us to the sphere of IT. In a study done by Christenson (2020), he focuses on the fact how consumers have been forced by COVID-19 protocols to shift their habits towards online transactions. Madhukalya (2020), in his study, aims to understand the increase of online consumption during the time of COVID-19. The results of the study stated that an increase to 13% of daily average consumption was seen which was 9% in the pre-pandemic. Consumers were seen using social media not only for personal entertainment but to carry out official transactions as well.

These major changes in the consumption patterns of the consumers have led them to change their attitude about online mediums of acquiring goods

and services as they now prefer to shop online with the help of the internet. Earlier in many countries, online shopping had not been easy due to the underdeveloped infrastructure and the reluctance of consumers and suppliers which has led to stalled growth across many parts of the world but due to COVID-19's disruption, there has been a forced but rapid change (Digital Commerce 360, 2021). In the COVID Era, consumers were forced to go on the official websites, social media pages, and various mobile platforms of their loved brands to make purchases. To understand the consumer attitude towards online shopping, in a survey conducted by Mckinsey (2020), it was noted that more people are aiming to shift a portion of their purchase from offline modes of purchase to an online post-COVID-19 crisis. The results of the survey saw an increase of 17% was seen in ordering medicines, 14% in ordering dominantly offline groceries. Based on the responses of consumers, a much more positive attitude towards purchasing goods through an online platform was seen. Online purchases across different product categories saw an average growth of 15-25%.

Flight to digital and omnichannel



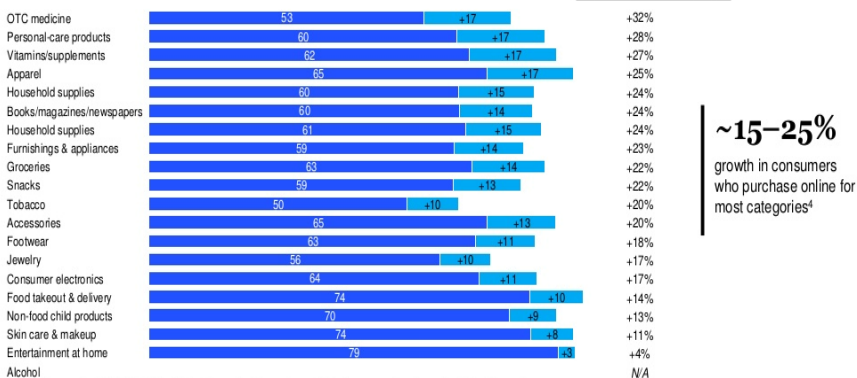
More people expect to make a portion of their purchases online post-COVID-19 than before...

Consumers' use of online channel before and expected use after COVID-19^{1,2}

% of respondents purchasing online³

■ Pre-COVID-19 ■ Expected growth after COVID-19

% growth in customers purchasing category online



~15-25%
growth in consumers who purchase online for most categories⁴

¹ Q: Before the coronavirus (COVID-19) situation started, what proportion of your purchases in this category were online vs from a physical store/in-person?

² Q: Once the coronavirus (COVID-19) situation has subsided, tell us what proportion of your purchases in this category you think will be online vs from a physical store/in-person?

³ Includes respondents who chose "some online," "most online," and "all online." Respondents who indicated that they have not bought the category online and do not intend to do so in the next two weeks are classified as not purchasing online.

⁴ Expected growth after COVID-19 compared to pre-COVID-19 slightly lower than previous waves due to respondents reporting higher online activity in pre-COVID-19 situation.

Source: McKinsey & Company COVID-19 India Consumer Pulse Survey 11/9-11/20/2020, n = 1,091, sampled and weighted to match India's general population 18+ years

Source: McKinsey & company COVID-19 India Consumer Pulse Survey
Figure 7. People Expected to shift to online purchases (Proportionate Shift)

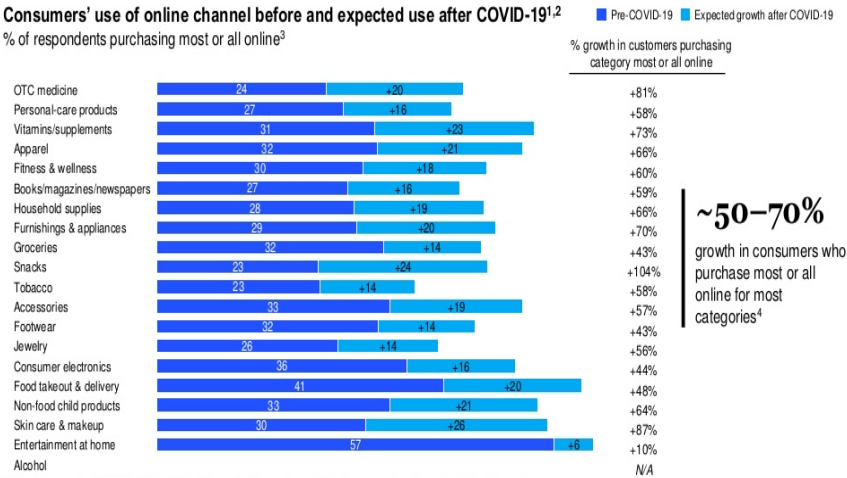
The survey also pointed out that many consumers are planning to shift entirely over to the online modes of shopping after the pandemic. Ordering medicine saw a growth of 81%, Vitamin, and supplements category saw

an increase of 58%, Tobacco saw an exponential growth of 104% in consumers who will be shifting entirely online for the purchase of these goods after the pandemic. When consumers were asked whether they will shift their entire purchasing to online platforms, a much more positive image can be seen developing with an average of 50-70% of consumers responding positively displaying a shift in their purchasing behavior.

Fight to digital and omnichannel



...with many consumers planning to shift almost completely online



¹Q: Before the coronavirus (COVID-19) situation started, what proportion of your purchases in this category were online vs from a physical store/in-person?

²Q: Once the coronavirus (COVID-19) situation has subsided, tell us what proportion of your purchases in this category you think will be online vs from a physical store/in-person?

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Source: McKinsey & Company COVID-19 India Consumer Pulse Survey 11/19-11/20/2020, n = 1,091, sampled and weighted to match India's general population 18+ years

McKinsey & Company 11

Source: McKinsey & company COVID-19 India Consumer Pulse Survey
Figure 8. People Expected to shift to online purchases (Complete shift)

Influencing Factors of Consumer Behaviour

Many factors influence the buying behavior of consumers from broad cultural aspects to social influences, motivation, beliefs, and attitudes lying deep in the individuals themselves (Kotler & Armstrong, 2018). In general, it can be stated that consumer behavior is a combination of internal factors and external existing factors (Hoyer et al., 2008; Solomon, 2016). It can be further divided into four groups: Cultural Factors (Factors that influence the larger consumer group), Social Factors (such as family, social role, the status of the consumer), Personal Factors (Age, profession, income, lifestyle), and Psychological Factors (Motivation, attitude, perception, and learning) (Kotler & Armstrong, 2018).

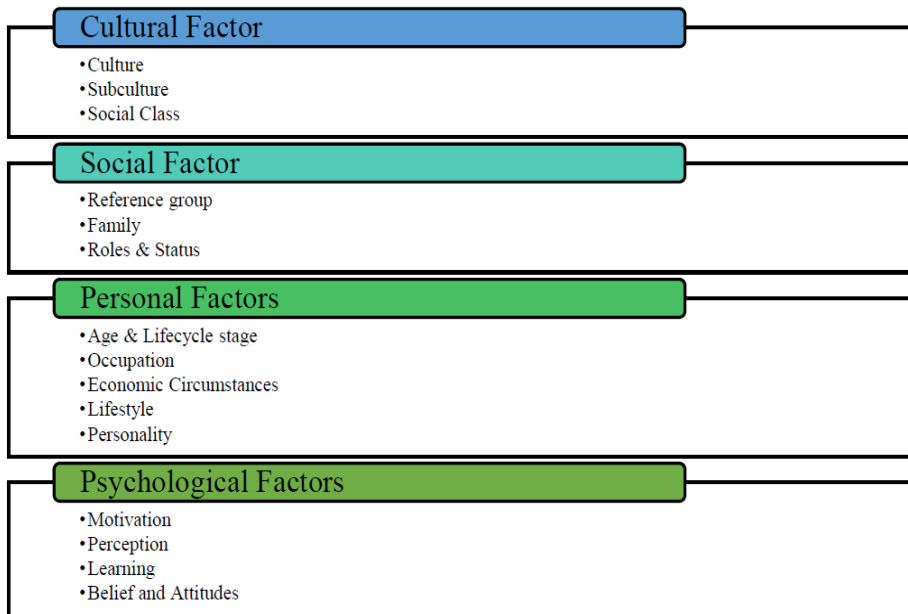


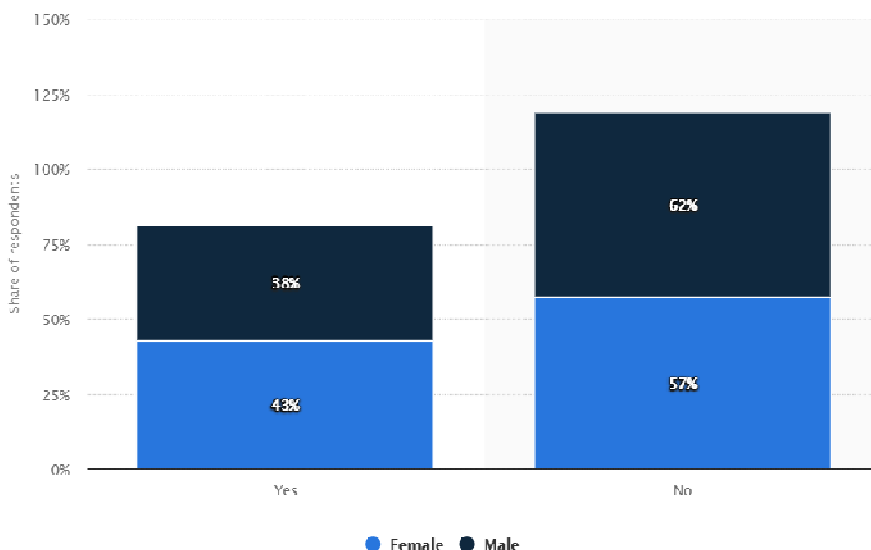
Figure 9. Factors influencing Buying Behavior (Kotler & Armstrong, 2018)

Motivated Behaviour due to the COVID-19

COVID-19 has not only impacted how consumer decision-making processes have changed but it has been also acted as a triggering factor, motivating consumers to display certain behavior as well. As a psychological factor influencing buying behavior, it plays an important role for consumers to act a certain way. Further in this paper, we focus on behaviors that were motivated due to the COVID-19 Pandemic.

Panic Buying Behaviour

It has been observed that each pandemic in recorded history has an immediate and direct impact on the social behavior of individuals as they get affected in terms of life quality, health financial, and food security (LeMay, 2016). The COVID-19 pandemic like no other has deeply impacted the economies around the globe leading to change in the various market dynamics. Abe (2020) in her report on 'Market Trends and D2C opportunities in the COVID-19' observed changes such as people raiding grocery stores and hoarding goods as a form of panic buying. Panic buying is recognized as the consumer behavior displayed by purchasing large quantities of goods in anticipation of, during, or after a disaster or a perceived disaster or in anticipation of large prices (Yoon et al. 2017; Yuen et al. 2020).



Source: Statista 2020

Figure 10. Share of people engaged in panic buying due to coronavirus in India

During the pandemic fear of not having enough due to mandate lockdown and cancellation of gatherings, panic buying was on the rise by consumers. to cancellation of any form of social gatherings by mandating lockdown across the nation and closing of non-essential businesses to stop the spread of the virus. When asked consumers reasons for panic buying, they responded that they felt safe by having supplies during a time of uncertainty (Statista, 2020b).

Consumerism to Minimalism

During the time of COVID-19, we saw a tremendous change in the behavior displayed by the consumers. We saw a shift in consumer behavior where consumers shifted from the materialistic aspect of their personalities further moving into the behavior of buying and consuming what is needed. Minimalism has been the theme of existence for several households ever since the lockdown was imposed to prevent the COVID-19. And if you think minimalism is the way moving forward as well (Lockdown Lessons: How to Make Minimalism a Way of Life, 2020). In a study done by Kantar (2020), it was seen that consumers were postponing their purchase on non-essential items and further moving forward purchasing goods that are considered vital for survival during this time. In the report on "Market Dynamic during COVID-19 Indian consumer sentiments analysis" published by Kantar (2020) a noticeable change in the consumer's attitude and buying behavior was also seen. This survey

was carried out with consumers belonging from 18+ from 11,000 households across India. Consumer conveyed heavy concern about their health (31%). The survey also reported how consumers planned purchases being deferred and new learning to live with less.

Table 1. Percentage of People Planning to Defer Purchases due to Coronavirus Outbreak in Different Sectors

Sr No.	Items of Purchase	Percentage People
1.	Vacations/holidays	77
2.	Automobiles	64
3.	Luxury items	63
4.	Home Decorations	62
5.	Real Estate	61
6.	Apparels	60
7.	Insurance Products	53
8.	Investment Schemes	46

Source: Kantar (2020)

In examining these instances of changing consumer behavior in response to a natural disaster it is very important to understand the consumer decision-making processes. In applying the Maslow's Need Hierarchy Theory (1943), we can analyze the level of satisfaction or utility behind wants and needs, hence the ways that consumer gets motivated to prioritize spending. Lester (2013) outlined the five needs as, (1) Physiological, (2) safety and wellbeing, (3) love & belonging, (4) self-esteem, and (5) self-actualization. As stated by Black and Cusbert (2012), Maslow's higher-order needs are generally deferred during the period of crisis. As it was seen in 2008 consumer spending on durable / luxury goods such as machinery and investment equipment were considered volatile than consumption of non-durable essentials. In the case of COVID-19, the practical application of this behavior was seen, as a shift of consumer purchasing goods from the satisfaction of the self-esteem need back to the need of safety and wellbeing, which can be seen through an increase in health-conscious goods and services. The survey also points out the consumer's interest in saving through investment, health and hygiene, and insurance products. Further through the survey done by Accenture (2020), it was seen that consumers attitude towards health products have changed as they now prioritize and focus on products that fulfill the most basic needs such as hygiene, cleaning, and staple products a detailed representation of which can be seen through Fig 11.

The panic index: Consumer types help understand how purchasing is shifting

34% of consumers are increasing their purchase of personal hygiene products while cutting back on more discretionary categories

Net purchases*	The Worrier 21% of consumers	The Individualist 22% of consumers	The Rationalist 38% of consumers	The Activist 8% of consumers	The Indifferent 11% of consumers	Total net change	Change Wave 1-Wave 2
Personal hygiene	50.0%	42.5%	27.6%	29.1%	10.4%	33.7%	-
Cleaning products	42.4%	25.9%	21.0%	24.4%	5.5%	25.2%	-
Tinned food	40.4%	26.2%	12.6%	11.1%	5.6%	20.6%	-
Fresh food	32.8%	15.1%	13.8%	15.8%	3.4%	17.1%	-
Frozen food	25.2%	17.2%	4.4%	8.1%	3.4%	11.7%	-
Online entertainment	20.1%	11.2%	5.1%	7.7%	2.8%	9.5%	-
Communication	19.2%	2.6%	4.4%	12.8%	-1.2%	7.2%	-
Wellness	22.8%	6.6%	0.6%	0.9%	-1.6%	8.4%	-
OTC	19.8%	3.4%	0.5%	2.1%	-0.9%	5.4%	-
Pet care	6.3%	-2.2%	-6.8%	-9.0%	-0.6%	-2.5%	-
Non-alcohol beverage	8.2%	-1.0%	-7.3%	-6.0%	-1.2%	-1.9%	-
Toys and games	3.9%	-8.2%	-12.9%	-15.6%	-6.1%	-7.9%	-
Consumer electronics	-4.2%	-10.8%	-18.6%	-25.2%	-5.6%	-15.0%	-
Alcohol beverage	-10.6%	-17.0%	-15.3%	-19.2%	-6.7%	-15.9%	-
Beauty	-12.5%	-13.2%	-23.0%	-25.2%	-5.2%	-16.9%	-
Home décor	-12.2%	-21.5%	-27.5%	-34.2%	-10.4%	-21.7%	↓
Fashion	-23.4%	-29.2%	-35.3%	-44.0%	-16.3%	-29.4%	↓

*Net purchases measured as a % of consumers increasing purchasing, less the % decreasing purchasing vs. prior two weeks
Source: Accenture Covid-19 Consumer Research, conducted April 2-6

Consumption: Increasing > 5% As Normal Decreasing > 5%

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Source: Accenture COVID-19 Consumer Research, conducted April 2-6

Figure 11. The shift in online purchases

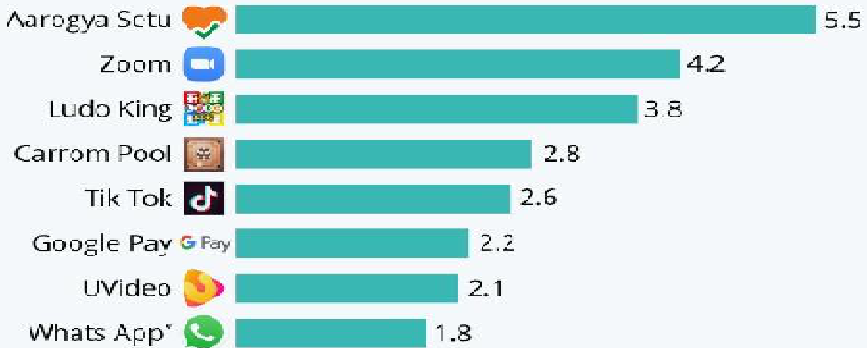
Based on the responses of the research, across various categories of products, personal hygiene saw an increase of 33.7%. Cleaning products saw an increase of 25.2%, whereas non-essential product categories like beauty, home décor, fashion saw a decrease of 16.9%, 21.7%, and 29.4% respectively.

Increasing Digitalization

As stated by Madhukalya (2020), the use of internet consumption of consumers has increased from an average of 9% to 13% because of people being locked up in their homes. As the government had prohibited any form of outdoor activity internet has played the role to connect people helping them to follow the social distancing norms (Udas, 2020). People have spent more time on social media through different OTT platforms like Netflix, Hotstar, and Prime (Shahidi, 2020). It must be noted that there is a difference between the physical world and the digital world which causes a lot of misinformation. Sengupta (2020) stated that the longer people will be kept under lockdown the more acquainted the individuals will become with the digital media.

Health and Video Chat Apps Top the Download Charts

Most downloaded apps in India from April 8-14, 2020
(in million downloads)



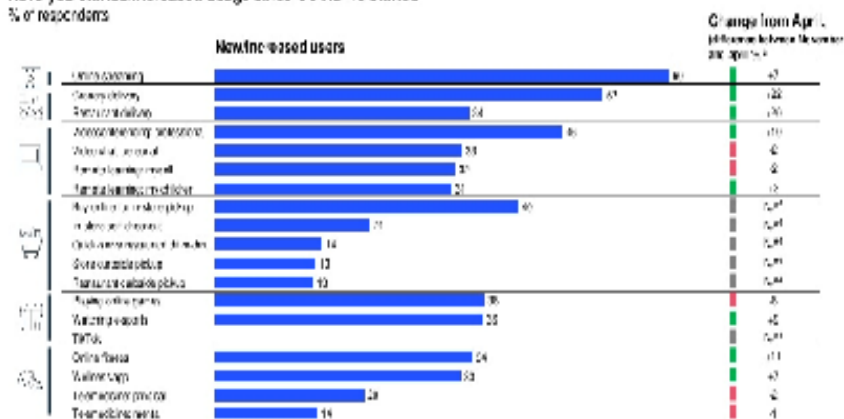
Source: Statista (2020)

Figure 12. Top App Download in India

As consumer's need for necessities of life takes precedence leading to major shifts in consumer behavior. Marketers are experiencing a shift in consumers' priorities as buying luxury items has gone to the bottom of except and consumers are reducing consumption of goods expect for groceries and at-home entertainment (McKinsey Survey Data Second Week of Lockdown: Indian Consumer Sentiment During the Coronavirus Crisis' 2020).

This trend can be seen in the types of apps consumers are downloading, relation to entertainment, news, healthcare, and education as reported by (Accenture, 2020). As the use of video and audio-conferencing tools have increased significantly, organization have ramped up their technology infrastructure to account for the surge. Education is one of the areas which have seen a dramatic shift to the online mode of transactions. Since the beginning of the lockdown, schools, colleges, and universities across the world have shifted their classes to video conferencing platforms such as Google meet and Zoom. Along with that platforms like edX and Coursera have also seen an increase in their enrolments. (Shah, 2020). Fig 13. Gives a detailed representation of various activities that individuals indulged in during the time of the COVID-19 pandemic. People were seen indulged in activities like videoconferencing professionals, Remote learning, online fitness, online streaming.

Have you started/increased usage since COVID-19 started?^{1,2}
% of respondents



19. The purpose of this survey is to determine the impact of the proposed changes on the community. The survey will be conducted in a confidential manner and the results will be used to inform the decision-making process. The survey will be conducted in a confidential manner and the results will be used to inform the decision-making process.

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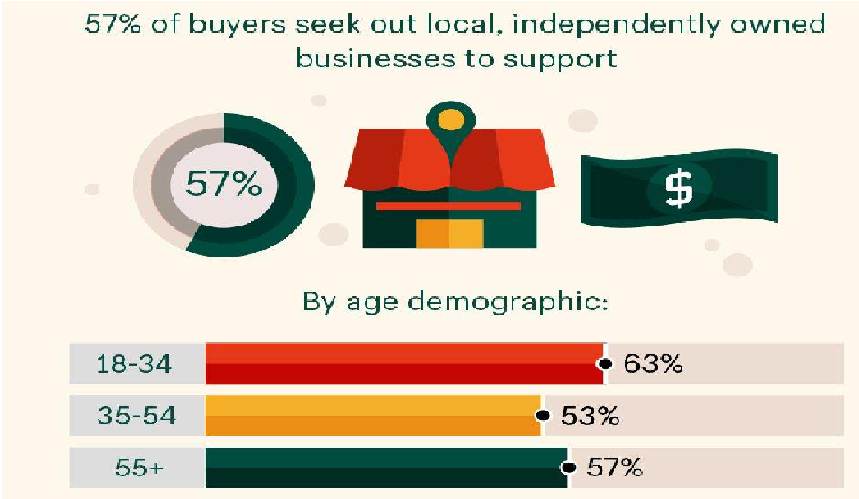
Figure 13. Online activities during the pandemic

With the employees becoming more acclimatized to the idea of work from home (WFH), meetings, and online transactions, firms will shift to the WFH model of working rather than as an exception. This has been adopted by various firms (Akala, 2020; BBC News, 2020; Khetarpal, 2020) which have the capability and infrastructure to support the employees. This might lead these individuals to feel more comfortable using online platforms for shopping and outdoor activities.

Support for local

Small businesses, from local Kiryana shops to the vegetable vendors, pharmacies, or small bookstores, form the backbone of the hyperlocal economic ecosystem and have been instrumental in serving the society, especially during the strict lockdown phase across the nation. The consumers were also seen shifting from large, organized retail chains to smaller retail stores, which came forward in a time of need, going beyond the call of duty delivering goods in safe and hygienic. Not only that various community-wide drives have encouraged consumers to go vocal for local. Organizations such as Your Story in collaboration with FICCI launched the "Make Small Strong" Initiative to build on the "Grow with

Google Small Business Hub" effort. This was a direct response to feedback received from SMSE captured in the Small Business tracker research conducted by Google-Kantar (2020).



Source: Shopify (2020)

Figure 14. Percentage people shifting to the local businesses

In a sense of togetherness, communities joined hands in support of small, local. As these businesses were the most that suffered, the mantra of “Buy Local” could be seen spreading across various social media platforms to save local jobs and vendors.

The New Normal: India Consumer Behaviour Post Pandemic

In the light of the COVID-19, we have seen consumers changing every aspect of their behavior, whether it may be how to acquire products, the living arrangements, or how they socialize. The behavioral approaches that have ruled the market for the last many decades might not be applicable anymore. Kotler & Keller (2012) stated that to have a good understanding of consumers' lives we need to ensure the right goods and services are reaching the right customer most effectively. Sheth (2020) stated consumer develop their habits over time as they learn what to consume when to consume and from where to consume. As the pandemic started impacting the world, between the mandatory lockdowns and inability to move from one place to another, the consumers were only left with the digital media to connect. Researchers after having detailed discussions with marketing professionals that the pandemic has evolved the consumer behavior. The following table gives us a glimpse into how the COVID-19 pandemic has changed the behavior of consumers.

Table 2.Long Term Changes in consumer behavior

Long Term Changes			
Sr No.	Behavior	Reason	References
1.	Health-Conscious Purchasing	As people have realized the importance of their health & wellbeing, their attitude towards health has changed further impacting consumer's decision-making process	Accenture (2020), Mickensey (2020), Boston Consulting Group et al. (2020)
2.	Online Shopping	As consumers have realized the benefits of online shopping, it is here to stay.	Mickensey (2020)
3.	Online Activities: (Online Conferencing, Grocery delivery, Online Streaming, Online Learning)	Technological advancements have made the life of many individuals easier, online activities will Be much preferred by individuals long after the pandemic is over.	Shah (2020), Udas (2020) Shahidi (2020), Statista (2020)
4.	Work from Home	As WFH has become common during the time of COVID, this might make these individuals feel more comfortable with online platforms of shopping and other	Akala (2020), BBC News (2020), Khetarpal, 2020
		Simulated versions of Outdoor activities changing their attitude towards such experiences. The WFH will stay here in long run.	
5.	Marketing Strategies	Due to the lockdown, how consumers access information has changed Which will directly impact the traditional modes of marketing.	Deloitte (2020)

Table 2 show some of the changes in behavior that will stay with us even after the Pandemic has been long gone.

Table 3.Short Term Changes in consumer behavior

Short Term Changes		
Sr No.	Behavior	Reason
1.	Support for Local Businesses	During the COVID 19 pandemic, communities shifted their demand to local suppliers in support. This may not stay here for a long period after the pandemic is over as consumers to brands will shift their demand back.
2.	Materialistic approach to purchasing	As we can contain the virus, businesses opening back, and the economy recovering, the consumers will go back to their old ways of materialism.

As the coronavirus pandemic is categorized as a broader healthcare crisis than any experienced in recent history, it is not possible to anticipate all the changes that will be seen in consumer behavior. As a coping up mechanism to the shocks of the COVID-19 pandemic, we saw consumers altering their behavior, attitude, and perceptions about different aspects. One of the examples can be seen in consumers realizing buying what is needed departing from the materialistic aspect of their personality. Thich (2019), in his commentary on “A Buddhist approach to consumption” also stated the consumers break their habitual ways in which they realize they do not need more things than needed. We also saw consumers focusing on goods that provide them value and adapting frugality as one of the deciding factors while making purchases which has been recognized as a guiding force in many different Asian cultures (e.g., Anderson & Wadkins, 1991). We saw consumers opening to new experiences and changing their attitude towards different online versions of physical activities. We saw individuals moving to Zoom for business meetings, edX, and Coursera for education, and various online platforms for purchasing goods and services. When asked consumers stated they might shift a proportion of their demand or their entire demand to these online platforms which might be seen long after the pandemic is gone. As we saw consumers shifting their demand to various online platforms, marketers also must change their strategies. As demonstrated by Deloitte (2020) in Fig. 5 how the marketers

reach consumers, provide the information, and retain them will change entirely. This is the direct effect of the mandate lockdowns and consumers' inability to move outside their homes. Table 2 & 3 gives us a glimpse into what are some of the long-term changes that we might see even after the pandemic is long gone. These are the observations made based on different surveys conducted by leading consulting organizations. With new information and experiences, consumer behavior also changes. As COVID-19 changed the long-held trends & traditional ways of communicating in a matter of weeks, right now it is impossible to analyze the direction it will take after the pandemic is over. For now, a new normal has been developed as factors like frugality and value have become the crucial parts of the consumer decisions making process but what will "the new normal" look like in the next year is uncertain.

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Un-supporting Regulations for the Implementation of ISO 37001:2016 in the Indonesian Parliament

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Abstract

Transparency International in ‘Global Corruption Barometer Asia 2020’, states Indonesia has 3rd ranked overall bribery rate in 17 countries and territories throughout the Asia region. Also one in three citizens thinks that most or all parliamentarian or the senate are involved in corruption. This report is in line with the Corruption Eradication Commission’s data for 2020 that bribery is a major corruption crime, which parliament is the profession/position with the most bribery cases in Indonesia. Regulations in Indonesia have attempted to prevent bribery with the basic and additional punishments, one of which is the revocation of the right to vote and be elected in general election. The General Election Commission, through its regulation, has required that parliamentary candidates have never been convicted of corruption in an effort to create a clean and corruption-free parliament. However, the Supreme Court canceled The General Election Commission’s Regulation because it was against the Election Law. This proves that the law alone is not sufficient to solve the problem of bribery. Parliament as an organization has the responsibility to proactively contribute to fighting bribery. Interesting points in this interdisciplinary study are to combine legal and management research, aiming to analyze the conflict between regulations and ISO 37001:2016 (anti-bribery management systems). In the normative juridical aspect, this study analyzes legal problems in dogmatic, philosophy and legal theory against bribery. Meanwhile, in the management aspect, this study analyzes the requirements and guidelines in ISO 37001:2016. The results of this interdisciplinary study shows that the regulations made by parliament do not support the implementation of ISO 37001:2016. In particular, the regulations that allow ex-corruption convicts to run for parliament are not in accordance with Clause 8.2

concerning Due Diligence in ISO 37001:2016, and even contradict to the people's sovereignty to have clean and bribery-free parliament.

Keywords: Regulations, Parliament, Bribery, ISO 37001:2016.

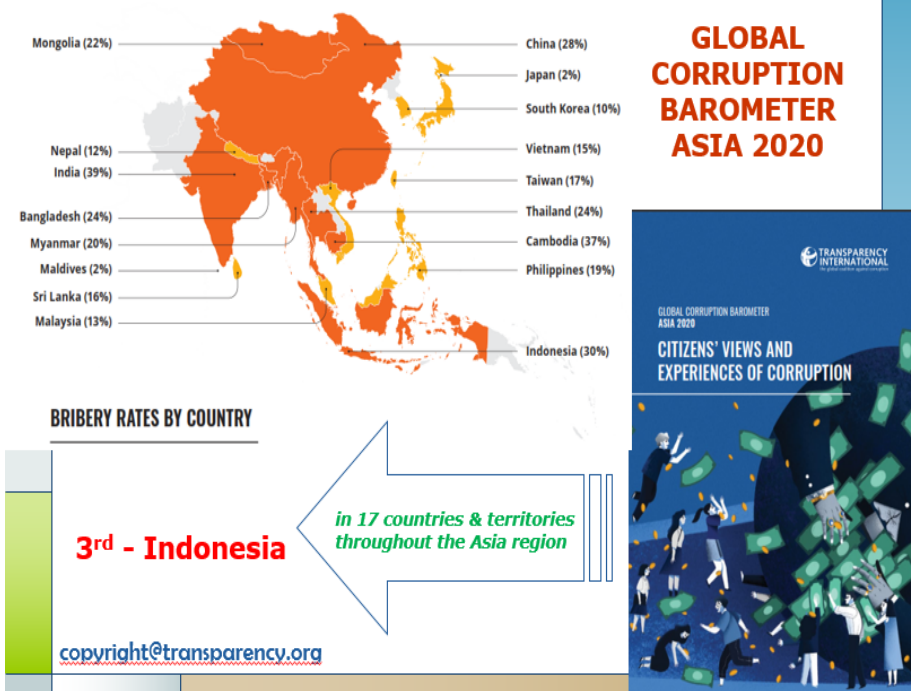
Introduction

Bribery is one type of corruption, which becomes the most serious crime concern to international community (Hatta and Zulfan (ed), 2019, p. vi).Corruption can still be debatable as an extra ordinary crime because of *Rome Statute of International Criminal Court* 1998, United Nation Convention Against Corruption 2003, and United Nation on Trans National Organized Crime did not classify corruption as an extraordinary crime (Prahassacitta, 2016). However, Indonesia has ratified the United Nations Convention Against Corruption 2003 through The Law No. 7 of 2006, United Nations Convention Against Transnational Organized Crime through The Law No. 5 of 2009, and Agreement For The Establishment Of The International Anti-Corruption Academy As An International Organization through The Presidential Decree No. 49 of 2013.Indonesia also have participated as observers in the Working Group on Convention on Combating Bribery of Foreign Public Officials in International Business Transactions 1997.

The global corruption index monitoring agency, Transparency International, released a report entitled 'Global Corruption Barometer Asia 2020' (Vrush, 2020, p. 21, 14, 42).Based on surveys on corruption and bribery in 17 countries and territories throughout the Asia region, India has the highest overall bribery rate (39 per cent), followed by Cambodia (37 per cent) and Indonesia (30 per cent).One in three citizens thinks that most or all parliamentarian or the senate are involved in corruption. Interestingly, in Indonesia, more than half of citizens think that most or all parliamentarians are involved in corruption (51 per cent of citizens respectively).Related to bribery and personal connection rates, respondents in Indonesia think government corruption is a big problem (92 per cent) and offered bribes in exchange for votes (26 per cent).

The report by Transparency International, in fact, in inline with the Corruption Eradication Commission's data in Indonesia. In the year of 2004-2020, bribery mostly become a major corruption crimes. Meanwhile, the parliamentarian become the highest rank on corruption based on profession/position.

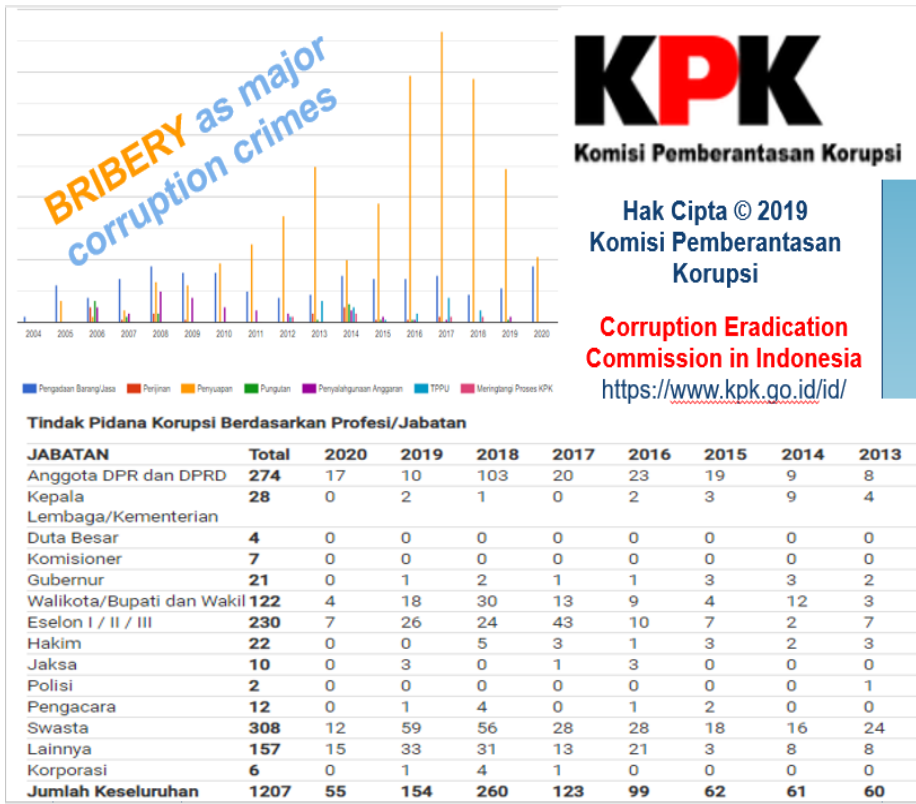
TRANSPARENCY INTERNATIONAL



Source: <https://www.transparency.org>

Graphic 1. Bribery Rates by Country

Bribery involving the Parliamentarian or the senate is a widespread phenomenon. It raises serious ethical, moral and political concerns, treason against the law, also undermines good governance. Furthermore, it questions the legality of general elections and doubts the quality of democracy. However, the law alone is not sufficient to solve this problem (ISO 37001: 2016, p. v). The parliament as organization has a responsibility to proactively contribute to combating bribery. Is it possible for the Parliament in Indonesia to implement ISO 37001:2016 (anti-bribery management systems) for combating bribery in its organization? In fact, many regulations drafted by Indonesian's Parliament do not support the efforts for combating bribery.



Source: <https://www.kpk.go.id>

Graphic 2. Bribery Involving the Parliamentarian

Literature Review

Parliament is defined by Black's Law Dictionary as the supreme legislative assembly of Great Britain and Ireland, consisting of the king or queen and the three estates of the realm, viz., the lords spiritual, the lords temporal, and the commons (Black, 1968, p. 1272). As one of the state institutions based on Article 2 paragraph 1 The 1945 Constitution of The Republic of Indonesia, The People's Consultative Assembly (MPR) consists of the members of The House of Representatives (DPR) and The Regional Representative Council (DPD). While parliamentarian is a member of a parliament (www.merriam-webster.com/dictionary/parliamentarian).

According to Black's Law Dictionary, regulation is the act of regulating; a rule or order prescribed for management or government; a regulating principle; a precept (Black, 1968, p.1451). Based on Article 7 paragraph 1 Law No. 12 of 2011 juncto Law No. 15 of 2019 concerning The Formulation of Laws and Regulations, Indonesia regulations consists the hierarchy of : 1)

The 1945 Constitution Of The Republic Of Indonesia; 2) Decision of The People's Consultative Assembly; 3) Law or Government Regulation as substitute for Law; 4) Government Regulation; 5) Presidential Decree; and Local Regulation.

Tiki (2018, p.ii) claimed that payments of money or gifts paid before the delivery of public goods and services were perceived as bribery, while payments given after the delivery of goods and services were considered as gifts. While bribery is defined by Black's Law Dictionary as the offering, giving, receiving, or soliciting of anything of value to influence action as official or in discharge of legal or public duty (Black, 1968, p. 239). Same as Indonesia, in Nigeria bribery is condemned as evil, but they condone 'goodwill payment' 'greasing payment' and 'solvent donations' from or to persons in positions of authority for facilitation of files, jobs, contracts and appointment, etc., thus, practicing bribery and corruption in disguise (Sunday, 2017, p. 13).

According to Hock (2019), even though it violates ethics and law, corporate bribery is common practice in business. Different from corporate bribery, bribery in parliament to influence his conduct as a member/ of any fee, compensation / reward in connection with the promotion of,/ opposition to any bill, resolution, matter or thing submitted to either House or to a Committee (Nasrawin, 2011).

Levi (2019) suggests the need for a more multi-faceted approach in studying bribery. For example, Theilig (2015) discussed the ethical issues connected to the actions of bribery and proposed solutions to address these issues. Studies that focus on parliamentary bribery are numerous, whereas implementation ISO 37001:2016 by parliament as anti-bribery organization has never been studied. Since there has been no research on parliamentary bribery that analyze both regulations and ISO 37001:2016 (Anti-Bribery Management Systems), this is the importance and novelty of this interdisciplinary research. Continuing this research, further studies is needed on other clauses in ISO 37001:2016 as well as the potential bribery in other state institutions.

Research Methodology

In 2019, researcher conducted a normative juridical research for 6 months entitled Problems of Prohibiting Corrupt Legislative Members for Re-Nomination in The Legislative Election. The research has never been published, so the researchers revised it to be presented at YICCISS 2021 by changing normative juridical research into interdisciplinary research.

This interdisciplinary study was conducted for 1 month in 2021, combining law and management research, aims to analyze the conflict between regulations and the ISO 37001: 2016 (anti-bribery management systems). This normative juridical study, aims to analyze legal problems in dogmatic philosophy, theories, and legal philosophy (Marzuki, 2011, p. 65, 72, 77). Normative juridical study is a type of research that overcomes research problems and followed certain scientific procedure to find the true logic of law from normative perspective. Simply said, normative legal study included the principle of law, the systematic study of law, the synchronization of law, the legal history, and the comparative law. On the other hand, this management research analyzes the requirements and guidelines in anti-bribery management systems (ISO 37001:2016).

To answer the legal issue, the researcher analyzed both regulations regarding clasification of bribery and the general election of the Indonesian Parliamentarian, to analyze the integrity of the Indonesian Parliamentarian in combating bribery. Conceptual approach was undertaken using the doctrine that developed in the science of law, for the researcher to find ideas that began the definition of law, legal concepts, and legal principles relevant to legal issues in this study. The concept of law could also be found in more general laws (*ius generalis*), as well as court rulings on similar cases (Bruggink, 2015, p. 60–61).

Data were collected through document technique, a non-interactive technique of collecting data from nonhuman resources such as documents. The researcher is the main or key instrument in collecting and interpreting the document. The regulations was obtained from Network of Documentation and Legal Information from the official website of The Indonesian Ministry of State Secretary (<https://jdih.setneg.go.id/Produk>) and official website of Badan Standardisasi Nasional (<https://www.bsn.go.id>). The research focus was only on the regulations and requirements for anti-bribery management systems, not on its implementation in Parliament's organization. Therefore, the researcher did not conduct interviews with Indonesian Parliamentarian.

The type of parliament in Indonesia is bicameral, because The House of Representatives (DPR) and The Regional Representative Council (DPD) each have their own group that they represent and both carry out legislative functions. The House of Representatives (DPR) is a people's representative institution, which consists of members of political parties who are elected through general elections (575 members). Whereas The Regional Representative Council (DPD) is also a people's representative institution, which consists of four members representing each of the 34 provinces who are elected through general elections (136 members).

However, the focus of this research is on The House of Representatives (DPR), so the use of the term Parliament in this study is limited to The House of Representatives (DPR) only. Based on Article 20 paragraph 1 The 1945 Constitution Of The Republic Of Indonesia, The House of Representatives (DPR) holds the power to make laws, while under Article 22D paragraph 1 The 1945 Constitution Of The Republic Of Indonesia, The Regional Representative Council (DPD) may propose to The House of Representatives (DPR) draft law related to regional autonomy, the relations of central and local government, formation, expansion and merger of regions, management of natural resources and other economic resources, and draft law related to the financial balance between the center and the regions. Provided in Article 22D paragraph 2 The 1945 Constitution Of The Republic Of Indonesia, The Regional Representative Council (DPD) also participates in the discussion of draft law related to regional autonomy etc, and provides consideration to The House of Representatives (DPR) over draft law on the state budget and on draft law related to taxation, education, or religion.

Result

a. Punishments for People who Give or Receive Bribes

Based on Article 10 of Indonesian Penal Code, the punishments are:

- 1) Basic punishments (capital punishment/death penalty, imprisonment, light imprisonment/detention, and fine);
- 2) Additional punishments (deprivation of certain rights, forfeiture of specific property, publication of judicial verdict).

Additional penalties in the form of deprivation of political rights are expected to have a deterrent effect on corruptors and reduce the intention of state officials to commit corruption (Ramadani & Mamonto, 2019, p.64). The rights of which the offender in cases determined by Article 35 Indonesian Penal Code or by another general regulation may be deprived by judicial verdict, are to hold offices or specific offices; to serve with the armed forces; to vote and be elected for in elections based on general regulations; to be a counselor or a legal manager and to be a guardian, co-guardian, supervisor or cocurator over other children than his own; the paternal authority, the guardianship and the curatorship over one's own children; and to exercise specific professions. The competence of the judge to deprive an official of a specific office shall not exist if by regulation another power is exclusively designated for said deprivation.

Article 38 Indonesian Penal Code states: Revocation of rights shall take effect on the day the judge's decision can be executed. If a right is revoked, the judge determines the duration of the revocation as follows:

- 1) In the case of a death penalty or life imprisonment, the duration is the same as life imprisonment;
- 2) In the case of imprisonment for specified period of time or detention, the duration is at least two years and a maximum of five years longer than the basic punishment;
- 3) In the case of a fine, the duration is at least two years and a maximum of five years.

b. Parliamentarian who are Clean and Free from Corruption, Collusion and Nepotism

Based on Article 1 point 1 Law No. 28 of 1999 concerning State Administrators who are Clean and Free from Corruption, Collusion and Nepotism, what is meant by State administrators are State Officials who carry out executive, legislative or judicial functions and other officials whose functions and main tasks are related to state administration in accordance with the provisions of the prevailing laws and regulations. As one of the state administrators, The Parliament has the position of legislative (the legislature), so that The Member of Parliament or The Parliamentarian also state officials.

In performing its functions, The Parliament must comply with the General Principles of Good State Governance that uphold the norms of decency, propriety and legal norms (Article 1 point 6 Law No. 28 of 1999 concerning State Administrators who are Clean and Free from Corruption, Collusion and Nepotism). General principles of state administration include the Principles of: 1) Legal Certainty; 2) Orderly State Administration; 3) Public Interest; 4) Openness/Transparency; 5) Proportionality; 6) Professionalism; and 7) Accountability (Article 3 Law No. 28 of 1999 concerning State Administrators Who Are Clean And Free From Corruption, Collusion And Nepotism).

Supporting The Parliamentarian who are clean and free from corruption, collusion and nepotism, General Election Commission promulgates its regulation No. 20 of 2018 concerning Nominations for Members of The House of Representatives (DPR), Regional House of Representatives in Province (DPRD provinsi), and Regional House of Representatives in Regency or City (DPRD kabupaten/kota). The General Election Commission Regulation (PKPU) No. 20 of 2018 requires:

- Political parties in nominating prospective candidates for the Parliamentarian have the right, opportunity and receive equal services based on statutory regulations (Article 4 paragraph 1 General Election Commission Regulation (PKPU) No. 20 of 2018)
- Every Political Party shall conduct a democratic and open selection of candidates for the Parliamentarian in accordance with the articles of association, bylaws and/or internal regulations of each Political Parties (Article 4 paragraph 2 General Election Commission Regulation (PKPU) No. 20 of 2018)
- The democratic and open selection of candidates for the Parliamentarian shall not include former convicted drug dealers, sexual crimes against children, and corruption (Article 4 paragraph 3 General Election Commission Regulation (PKPU) No. 20 of 2018)
- A statement letter from the Central Board of a political party stating that the relevant political party has carried out a democratic and open candidate selection process in accordance with the statutes or the internal rules of a political party (Article 11 paragraph 1 General Election Commission Regulation (PKPU) No. 20 of 2018)
- The Integrity Pact was signed by the Chairperson and Secretary of Political Parties, stating that:
 - In the process of candidate selection, the Party's Central Board guarantees that all the proposed candidates for the Parliamentarian for the 2019 Election submitted to the General Election Commission (KPU) have high integrity and commitment not to commit acts of corruption, collusion and nepotism or commit violations of the law.
 - The names of the candidates for the Parliamentarian listed on the form are not former convicts or drug dealers, sexual crimes against children and/or corruption.

If the Party's Central Board violate the statements in this Integrity Pact, namely:

- there are prospective candidates proposed, or
- prospective candidates listed in the Provisional Candidates List, or
- candidates listed in the Permanent Candidate List, or
- elected candidates who have the status of former convicted drug dealer, sexual crimes against children and/or corruption,

the Party's Central Board is willing to be subject to administrative sanctions in the form of cancellation of the proposed candidates listed in the Provisional Candidates List/ candidates listed in the Permanent Candidate List/ elected candidates for the Parliamentarian in the relevant electoral district.

The Parliamentarian are prohibited from involved in bribery (Article 236 paragraph 3 Law No. 17 of 2014 concerning People's Representative Assembly, House of Representatives (DPR), Regional Representative Council (DPD), and Regional House of Representatives (DPRD)). For those proven to have involved in bribery based on a court decision that has permanent legal force, will be subject to dismissal as The Parliamentarian (Article 237 paragraph 3 Law No. 17 of 2014 concerning People's Representative Assembly, House of Representatives (DPR), Regional Representative Council (DPD), and Regional House of Representatives (DPRD)).

According to Article 22 E paragraph 3 The 1945 Constitution Of The Republic Of Indonesia *junc to* Article 172 and 173 paragraph 1 of Law No. 7 of 2017 concerning General Elections, the participants in the general election for the election of The Parliamentarian are political parties which have been determined/ passed verification by the General Election Commission (KPU). The political parties may become Election Contestants after meeting the following requirements (Article 173 paragraph 2 Law No. 7 of 2017 concerning General Election):

- a. has the status of a legal entity in accordance with the Law on Political Parties;
- b. has management in all provinces;
- c. having management in 75% (seventy five per cent) of the number of regencies / cities in the province concerned;
- d. having management in 50% (fifty pre cent) of the number of districts in the regency / city concerned;
- e. Include at least 30% (thirty per cent) women's representation in the management of central political parties.
- f. has members of at least 1.000 (one thousand) people or 1/1.000 (one thousandth) of the total population in the management of a political party as referred to in letter c, which is proven by ownership of a membership card;
- g. having a permanent office for management at the central, provincial and regency/city levels until the last stage of the General Election;
- h. submitting the names and symbols of political parties to the General Election Commission (KPU); and
- i. Submitting the account number for the Election Campaign funds in the name of the political party to the General Election Commission (KPU).

The Political Parties as Election Contestants shall select prospective candidates for The Parliamentarian in a democratic and open manner in accordance with the articles of association, bylaws and/or internal regulations

of the Election Contesting Political Parties (Article 241 Law No. 7 of 2017 concerning General Election). Provisions regarding political parties are prohibited from receiving compensation in any form in the process of nominating the President and Vice President which applies *mutatis mutandis* to the selection of candidates for The Parliamentarian (Article 242 Law No. 7 of 2017 concerning General Election). In terms of Political Party is proven to have received the compensation as mentioned above, the Political Party concerned is prohibited from nominating a candidate for the next period. The political party that receives the compensation as mentioned above must be proven by a court decision that has obtained permanent legal force. Furthermore, any person or institution is prohibited from giving compensation to a political party in any form in the process of selecting candidates for The Parliamentarian (Article 228 Law No. 7 of 2017 concerning General Election). Also the election observers are prohibited from receiving or giving gifts, compensations, or any facilities from or to Election Contestants (Article 442 letter f Law No. 7 of 2017 concerning General Election).

c. Un-supporting Regulations for the Implementation of ISO 37001: 2016 in the Indonesian Parliament

As previously explained, Article 4 paragraph 3 The General Election Commission Regulation (PKPU) No. 20 of 2018 requires candidates for the Parliamentarian shall not include former convicted drug dealers, sexual crimes against children, and corruption. Unfortunately, The General Election Commission Regulation (PKPU) No. 20 of 2018 was canceled by the Supreme Court Decision No. 46 P/HUM/2018, after a judicial review was filled by the former convict of corruption.

The petitioner for judicial review, Jumanto, as a citizen has been sentenced to imprisonment based on a court decision that has obtained permanent legal force for committing corruption, without any additional punishment in the form of prohibitions from being active in political activities and/or being elected or voting in a general election. The Petitioner has served his sentence, returned to his activities as an ordinary citizen and intends to run in general election for membership in parliament. However, the existence of the rules in The General Election Commission Regulation (PKPU) No. 20 of 2018 made it impossible for Jumanto to run as the Parliamentarian in general election.

The legal basis for the consideration of Supreme Court, that the norm in Article 4 paragraph 3 of the General Election Commission Regulation No. 20 of 2008 contradicts to:

- Article 28 of the 1945 Indonesian Constitution
- The International Covenant on Civil and Political Rights (ICCPR) established by the General Assembly of the United Nations, as ratified through Law No 12 of 2005 concerning Ratification of the International Covenant on Civil and Political Rights, which guarantee the right to vote and be elected as a Parliamentarian as a basic right in the political field
- Article 73 of Law No 39 of 1999 concerning Human Rights also stipulates that “The rights and freedoms set forth in this Law can only be limited by and based on Law, solely to guarantee recognition and respect for human rights, human beings and other people’s basic freedoms, morality, public order, and the interest of the nation.
- Article 18 paragraph 1 letter d of Law No 31 of 1999 concerning Eradication of Corruption in conjunction with Article 35 paragraph 1 Indonesian Penal Code which regulates the revocation of political rights (the right to vote and be voted) is decided by a Judge’s Decision as an additional punishment that has obtained permanent legal force.
- Article 240 paragraph 1 letter g of Law No. 7 of 2017 concerning General Election which states that candidates for the Parliamentarian are Indonesian citizens and must meet the following requirements that never been sentenced to imprisonment based on a court decision that has obtained permanent legal force for committing a punishment by imprisonment of 5 (five) years or more, unless openly and honestly informing the public that the person concerned is a former convict. This means, in the Election Law there is no norms or rules prohibiting former corruption convicts from running as candidates for Parliamentarian in the general election as stated in the General Election Commission Regulation.
- Article 12 letter d of Law No 12 of 2011 concerning the Formation of Legislation wich determines: “regulatins under the Law contain material to carry out the Law properly.” General Election Commission Regulation has made provisions that are not ordered by the Laws and regulations above it.

The Supreme Court understands that a fair and integrity election, as the spirit of the General Election Commission Regulation No 20 of 2018 (the object of judicial review) is a necessity that the candidacy of Parliamentarian must come from clean figures and never have a track record of integrity defects. However, the regulation of limiting the political rights must be in the Law, not regulated in General Election Commission Regulation.

Regarding the status of former corruption convicts, the Law No. 7 of 2017 concerning General Election determine different requirements between

candidates for president and parliamentarian. Article 240 paragraph 1 letter g of Law No. 7 of 2017 allows former corruption convicts to run as candidates for Parliamentarian after publicly and honestly informing the public that the person concerned is a former convict of corruption. While Article 169 letters j and p of Law No 7 of 2017 concerning General Election states “requirements to become presidential and vice presidential candidates are: never do anything disgraceful and have never been sentenced to imprisonment based on a court decision that has obtained permanent legal force for committing a crime which is punishable by imprisonment of 5 (five) years or more.” Since corruption is one of the crimes punishable by imprisonment of 5 (five) years or more, a former convict of corruption is prohibited from running as presidential and vice presidential candidates in the general election.

Therefore, regulations that allow former convicted corruptors to nominate themselves as the Parliamentarian do not comply with Clause 8.2 Due Diligent in ISO 37001:2016 especially poin c. Clause 8.2 Due Diligent in ISO 37001:2016 states: Where the organization’s bribery risk assessment (as conducted in Clause 4.5) has assessed a more than low bribery risk in relation to :

- a) Specific categories of transactions, projects or activities,
- b) Planned or on-going relationships with specific categories of business associates, or
- c) Specific categories of personal in certain positions ((as conducted in Clause 7.2.2. Employment Process)

Former convicts of corruption are high bribery risk, because there is a risk of repeating the bribery. Permana (2019, p. iv) states that recidivists commit repetition of crimes based on a rational and emotional basis that is influenced by environmental conditions and within the recidivist himself. Interaction or socialization between criminals in prison is a natural thing because they feel the same fate and interests which are supported by the existence of a time, place and situation to interact with each other (Pujianto, 2004, p. 277).

Bribery in its various forms and characteristics is contrary to the morals of Pancasila which endangers the life f the people and the nation (Consideration letter a Law No 11 of 1980 concerning Bribery). As ideology mentioned in forth paragraph of The 1945 Constitution Of The Republic Of Indonesia, Pancasila is the origin of all sources of law (Article 2 Law No. 12 of 2011 juncto Law No. 15 of 2019 concerning The Formulation of Laws and Regulations). Pancasila consists of 5 (five) principles : 1) belief in the One and Only God; 2) just and civilized humanity; 3) the unity of Indonesia; 4)

democratic life led by wisdom of thoughts in deliberation amongst representatives of the people; and 5) social justice for all the people of Indonesia (Susmayanti, 2020, p. 361).

Brenninkmeijer (2019, p. 101) argues moral leadership as an answer to corruption and fraud. Bribery is negations of the true principles of a gift, which is a conscious inducement for an after favor, and thus, violates the principles of public life. Gift in whatever form is not bad in itself, but becomes bad or a bribe when the intents and circumstances is already pre-staged (Deezia, 2017, p. 13) This means the intentions and circumstances in the beginning were destructive.

The former convict of corruption is legally disabled, lack of integrity and moral defects who do not qualify as personnel in anti-bribery management. Allowing former convicted corruptors to run for Parliamentarian (with or without publicity and honestly informing that the person concerned is a forer corruption convict) shows there is no effort to elect and select candidates with clean figures and never have track record of integrity defects. If the goodwill to eridicate bribery in parliament by implementing ISO 37001:2016 are not supported by regulations, there is no legal certainty regarding the commitment to eradicate bribery in parliament.

Therefore, the Law that regulates the prohibition of former corruptors from running as candidates for Parlimantarian in the election, depends on the Parliament and the Presidents who has the authority to draft the Laws. Pope (2006, p. 63) states that laws contributing to an administrative and social environment in which corrupt acts are less likely to take place. That is why the laws must be drafted by clean legislative.

Revocation of political rights does not violate the human rights of ex-corruptor, because the additional punishment is intended to provide a deterrent effect on the perpetrators and a domino effect on societ so as not to do the same thing (prevention). Based on the principle of margin or apreciation in International Human Rights which allows the state to limit individual rights as long as it is accordance with the laws, terms and conditions that are predetermined (Sari, 2018, p. xvii). Revocation of political rights has become a necessity for judges as a standard imposing sanctions for corruptors in the context of eradicating corruption (Hamdi, 2018, p. 245).

Former Parliamentarian who are convicted of corruption still have the constitutional rights to work and to have a decent living for humanity (Article 27 paragraph 2 The 1945 Constitution Of The Republic Of Indonesia), but are no longer as Parliamentarian because they are legally disabled, lack of

integrity and moral defects who do not qualify as people's representatives. By involving in bribery, they have abused their authority.

Conclusion

The President and Parliament are responsible for drafting the Law that regulate the prohibition for former corruptors from running as candidates for Parliamentarian in general election. ISO 37001:2016 (anti-bribery management systems) is a complete system with requirements and guidance for use. But the efforts for combating bribery in Parliament were traced to the recruitment process for The Parliamentarian through general election. The entry point for implementing ISO 37001:2016 (Anti-Bribery Management Systems) in the Parliament is the intention to combat bribery and the quality of Parliamentary who are clean and free from corruption, collusion and nepotism. The selection process through general elections must ensure that quality. That is our present focus. We encourage other researcher to explore more in the next research.

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Analyzing and Understanding Dog's behavior using Convolutional Neural Networks

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Abstract

In recent times, focus on deep learning algorithms that mimic a human brain has increased tremendously, be it with the application of self-driving cars, the use of natural language processing, virtual assistants etc. Deep learning can help in achieving great results in the challenging field of computer vision. Image Classification, one of the techniques belonging to object recognition can be used in analysing objects appearing in an image. This paper presents an application of image classification to analyse the behaviour of a dog whether it is calm, angry, playful, curious or want to grab your attention and the activity it is doing, be it sleeping, running or sitting. With the help of Convolution Neural Networks, we have built three models that take an input of the dog's image and combining the output of each, we can accurately predict the behaviour of the dog. This research presents the use of Convolutional Neural Network trained in six separate classes; each class depicts one activity of a dog like sitting, running, sleeping, angry/barking, playful and serious. A database of dog's images is taken into consideration while carrying out this research and related image classification problems are illustrated with a model which uses two hidden layers.

Keywords: Behavior Analysis, Image Classification, Deep Learning, Object Detection, Convolutional Neural Network.

Introduction

The ability to perform like the human brain, able to see an image and detect objects in it has been grabbing a lot of attention in recent years. Convolutional Neural Networks (CNNs) used to solve complex image-driven

tasks are one of the most brilliantly performing image classification models. CNNs present the opportunity to construct the model according to one's own needs. The architecture is fairly simple, consisting of various layers, where at each layer the features of images are fine-tuned and thus depending on the dataset and requirements, every model can differ from the other.

Based on facial features, the emotion of any human can be detected. We tried to extend this idea and apply it to predict the behaviour of dogs. Dogs can be found everywhere, from our homes to hospitals to the frontline and thus if machines were able to detect their behaviour, it can be even easier to work with them. The features of a dog like their posture, tongue, eyes, ears and tail can be used to analyse their behaviour and activity. We have used six features (angry, sleeping, running, sitting, playful and serious) to train three CNN models. All the models have the same configuration and have been trained on two classes each. The combination of the output of all models is used to predict the behaviour and activity done by the dog in the input image. All the three models have given varying accuracy and this way we were able to observe and comment on how CNNs perform on different datasets.

Related Literature

An introduction to CNNs and how they are used in the field of pattern recognition within images has been presented in (O'Shea and Nash). CNNs are primarily focused on the architecture that the input will be in the form of the image, and thus they are best suited for tasks that are image-driven. A simple CNN architecture comprises five layers, an input layer, convolutional layer, pooling layer and fully connected layers. Based on different inputs, the architecture can be optimised to give the best possible results.

The Sequential trajectory prediction model has been explained by (SHANGGUAN et al.). The sequential model in CNN can easily stack the network layers and can build a model by adding layer by layer by using the 'add()' function, based on which we have made use of this model. The processes involved in the sequential prediction method are data pre-processing, CNN sequential model construction, model training and prediction on the test set.

(Sharma et al.) have given a brief explanation of various types of activation functions (AF) and their importance. These functions help us in developing an efficient and very effective deep learning model and can improve and manage the learning rate which in turn helps in processes like feature detection, extraction and prediction. The most used activation functions are Binary Step Function, Linear, Sigmoid, Tanh, ReLU, Leaky ReLU,

Parametrized ReLU, Exponential Linear Unit, Swish and SoftMax. (Lin and Shen) have worked on the activation function ReLu as it shows the best results and is easier to achieve and calculate. It has a fast convergence speed which helps in reducing the gradient descent problem. We have used the ReLu as the activation function for our Conv2D layers.

Adam (Adaptive Moment Estimation) optimization is a method of Stochastic Gradient Descent which is based on the estimation of the first order and second-order moments, as explained by (Kingma and Ba). The optimizer combines the prominent properties of AdaGrad and RMS Prop algorithms which in result provide an optimization algorithm that can manage the sparse gradients and noisy problems. In most cases, it always produces better results in minimizing the cost function in the training neural networks.

The learning's through these have helped us in choosing the model parameters accordingly.

Research Methodology

The following steps are used as research methodology of this paper:

- Step 1: Collecting images belonging to each class and preparing the training dataset.
- Step 2: Constructing CNN sequential model by adding various layers.
- Step 3: Addition of Activation Function along with layers for linear transformation.
- Step 4: Compiling and training the model.

a. Dataset

For the best performance of deep convolutional neural networks, a large corpus of training data is required. However, the collection of a huge amount of image data can be challenging as well as labour intensive. Training of CNNs on a small amount of data can lead to over fitting, hindering the capabilities of it to perform the best.

(Krizhevsky et al.) have used generic data augmentation methods to achieve the state-of-the-art results in reducing the over fitting in the CNNs models. Feeding input images into a CNN with different orientations has given better results than using a smaller dataset.

The images to train our model have been taken from the web, with around 300 images belonging to every class. We have used Geometric transformations that are flipping, cropping and rotating the images which

have increased the dataset three times with approximately 1000 images belonging to each class.

After the collection of the images, we needed to prepare them for the input layer. All the images are captured by the camera and taken from different sources; therefore, they vary from each other in terms of size. An image is a two-dimensional array of pixels ranging from 0 to 255. It is a function $f(x,y)$ where x and y are the horizontal and vertical coordinates and its value at any point of an image is represented as a pixel value of that point. The CNN model requires all images to be of constant dimensionality, thus we should provide a base image size to all of them so that they can be easily fed into our model. We down sampled all our images to 100 x 100, which gave more focus to the actual object present in the image. Also, since the colour of the images is not an important factor for classification and we want to feed two dimensions in our convolutional layers, we converted all our images to grayscale which in turn sharpened and gave structure to them. For any CNN architecture, we need to identify a tradeoff between training time and performance of the model. The conversion of the images as described above have thus helped to achieve the optimal tradeoff.

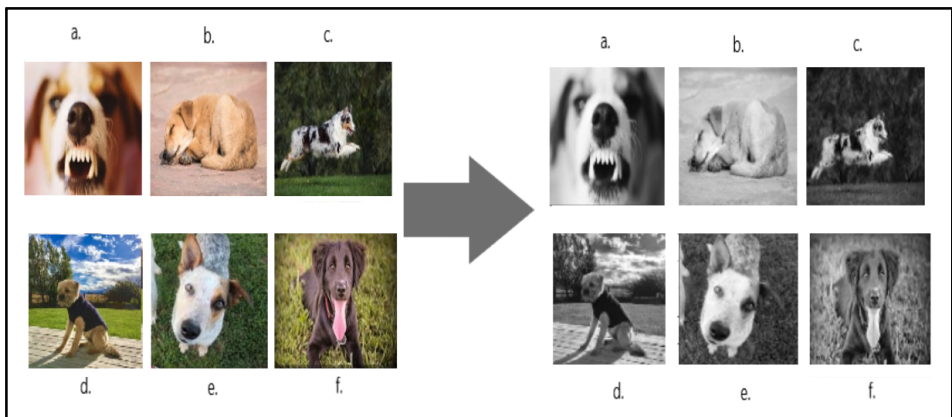


Figure 1.Example of one image belonging to every class. The classes are a) angry, b) sleeping, c) running, d) sitting, e) serious and f) playful. The images have been converted to grayscale and resized to (100,100) pixels

b. CNN sequential model construction

The basic architecture of any sequential CNN includes three layers, the input layer, hidden layer and the output layer. The input layer takes in the processed image data and feeds it into the hidden layer. Based on the requirements, the hidden layer which comprises convolutional layer and

pooling layers vary from model to model. And the last layer is the fully connected layer which is the output layer.

While constructing the CNN sequential model we added two convolutional layers (both Conv2D layers of 64 nodes) which deals with our input image data. The two max Pooling layers are used to select the maximum element from the feature map covered by the filter, therefore, the output after the max pooling will be a feature map which contains the most prominent features of the previous feature map.

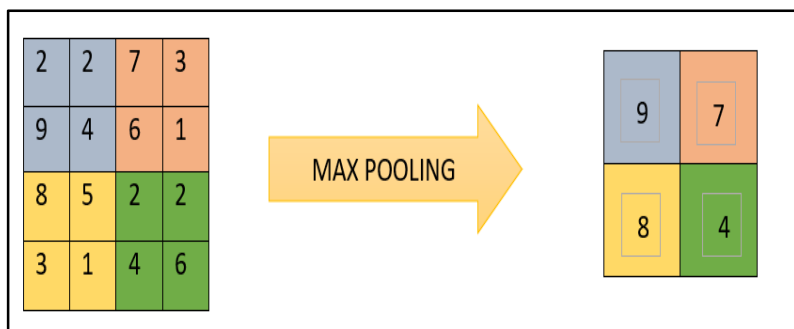


Figure 2.Example we take a convolved matrix of filter size 4x4 and from the matrix maximum element is selected through the feature map covered by the filter size (2x2), and the output is a matrix which contains the most important features of the previous feature map

The final layer is the dense Layer which is the fully connected layer that receives input from all the layers before it. It is used as an output layer and is one of the most used layers in the Neural Network. Between the two convolutional layers and the dense layer, there is a flatten layer, which opens the matrix and creates the input for the Artificial Neural Network and therefore serves as a connection between the convolutional layer and the dense layers.

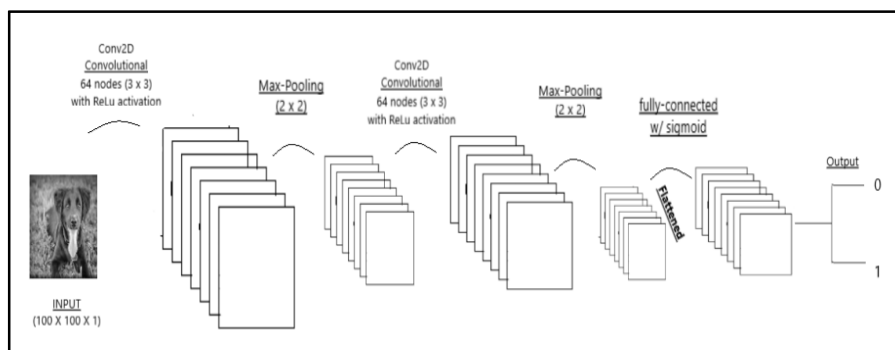


Figure 3.Architecture of Convolutional Neural Network

c. Activation Function

Activation functions are very important as they help in learning and making sense of non-linear and complicated mappings between the inputs and corresponding outputs (Sharma et al.). Every deep neural network's most important step is the linear transformation which is performed by the activation function. One of the most used activation functions, $f(x) = \max(x, 0)$ is the Rectified Linear Unit (ReLU). The ease of working with ReLU, its performance and the consistency across various models and datasets outperform other activation functions. When the dataset is large, various other activation functions deal with the problem of gradient descent, however, the slope of ReLU does not plateau or descend when the dataset gets large. Based on all the mentioned advantages of ReLU, it was the best fit for the Conv2D layers in our model.

For the dense layer, we needed a classification function that would be able to give good accuracy between two classes (as our every CNN model deals with 2 classes each). The sigmoid function transforms all inputs to a value between 0 and 1 based on the function $f(x) = 1/e^{-x}$, which best suited as the activation function for the dense layer in our models.

d. Model Training

The final step was to compile our model for which we used the `compile()` function. The function takes in 3 parameters as loss, optimizer and metrics. We have used 'binary_crossentropy' as a loss function as it is the most acceptable choice for binary classification and 'Adam' as optimizer as it produces the best results by minimizing the cost function and also manages the learning rate during the training. During model training, the 'accuracy' metrics makes it easier to see the accuracy score in the validation set and to judge the performance of the model and therefore we chose it as our model metrics.

Results

For model training, we used the `fit()` function which takes in the following parameters: `train_data (X)`, `test_data (y)`, `epochs` and `validation_split`. The no. of epochs refers to as the no. of times the algorithm will go through the data. After fitting multiple values, we set our model to train on 32 epochs. The `validation_split` was set to 0.1 and close observation of loss and accuracy at every epoch helped in avoiding over fitting.

Table 1 shows the result of all the three models trained. Loss and Validation Loss refers to the value of cost function for the training data and validation data, respectively. Accuracy and Validation Accuracy gives the value of accuracy metrics corresponding to training data and validation data.

With the observed results, we were able to easily predict the behaviour of any dog given its image. The output of all three models was combined to give out a prediction. The combination of all three models gave out eight predictions in total, which were calm, sleeping, angry, curious, grabbing attention, happy, playing, and tired.

Table 1.Performance comparison of all three models and the results observed

Model	Classes	Validation Loss	Validation Accuracy	Loss	Accuracy	Average Time
Model 1	Sitting/Running	0.0354	0.9880	0.0472	0.9893	10 Ms/ Sample
Model 2	Angry/Sleeping	0.1908	0.9843	0.0229	0.9913	31ms/ Sample
Model 3	Playful/Serious	2.8451	0.7784	0.0127	0.6670	22 Ms/ Sample

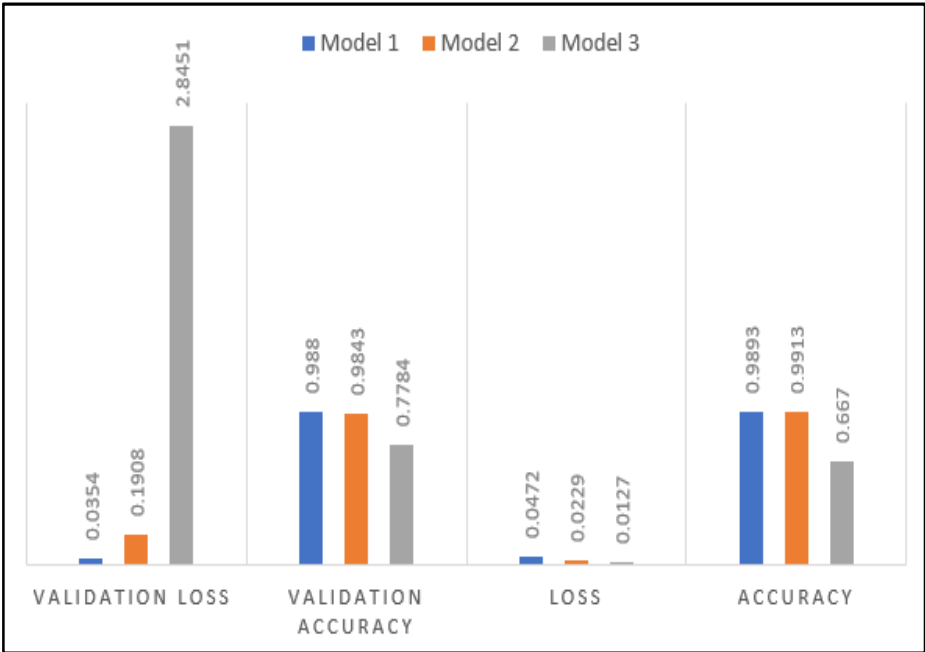


Figure 4.Visual Representation of the results observed by all three models and their performance comparison

Conclusion and Discussion

A lot of work is being done in the field of object detection and convolutional neural networks are the steppingstones towards it. This paper has outlined how image classification based on features can be easily achieved using CNNs. The architecture of the network, the activation functions and the parameters chosen to train the model have been provided in the paper. We have trained three separate models with the same configurations on two classes each. For any input image of a dog, based on the combination of outputs from all three models, we can give out eight predictions about its behaviour or activity. For the trained models, the following has been observed:

1. For binary classification of images, CNN performs well if all the parameters are chosen precisely.
2. CNN architecture comprising of only three hidden layers gave higher accuracy when it came to less complex input images and both classes had very varied features (like sitting and running posture of a dog).
3. The average time per sample taken by every model depended on the depth of features of the input image. The model took more time to train if the image features were more detailed (like teeth when the dog is angry and closed eyes when it is sleeping).
4. The model did not perform well in the case where the classes did not diverge much. The features of the images in model 3 only differed around the mouth, which comprised a tiny part of the entire image.

Every convolutional neural network performs differently if changes are made in the parameters passed, composition and number of layers. By adding more hidden layers, the performance can greatly increase as in the case of model 3. More features like tail, ears, posture and eyes etc can be used for training as they will give rise to a wider range of predictions. Later, real-time object detection techniques can be adopted for further development.

Acknowledgement(s)

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Complaint Management: Key to customer retention in contemporary times

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Abstract

The recent advancement in commerce has led to economic fluctuation and competition. Today customers have multiple alternatives available to exceed his expectations in purchase decisions. Customer satisfaction plays pivotal role in impacting customer loyalty, word of mouth and profits. Loyal customers are the vital ingredient of a sustainable business operation. It has been suggested that retaining an existing customer costs a lot less than attracting a new one and repeat customers are considerably more profitable than the single transaction customers. Therefore, customer retention systematically influences the long term success of any enterprise and work like vaccine that must be utilized by enterprises to diminish the risk of substitutes. One way of retaining existing customers is an effective complaint management system. In order to attain the state of customer satisfaction, this article underlines the conceptual framework on the importance of customer complaint management in relation to customer retention in modern marketing dynamics.

Keywords: Customer Retention, Complaint, Complaint Management, Customer Satisfaction.

Introduction

In the last few years, we have witnessed the changing face of Indian consumer industry. It is acknowledged that industries are growing due to the presence of new age marketing factors. In fact, India's retail market is expected to increase by 60 per cent to reach US\$ 1.1 trillion by 2021 according to the report of Assocham. One of the most visible aspects is its progression in to a highly competitive market. Consequently, in the contemporary times the challenge to outperform competitors and maintain growth is far more challenging than in the past. Tronvoll (2012) posits that to beat competition, company's needs to employ different measures to attract

new customers and to retain existing ones. To increase market share companies must ensure customer satisfaction through counter measures before sales, during sales and after sales. One of the most significant counter measure companies can adopt is customer service, for which customer complaint management is a critical component. Thus to focus on customer complaint management and its potential is likely to be quite opportune. Rising competition has proven that opportunities are open for the one who is aiming to deliver customer delight and customer will not stay with any brand if they are not satisfied. Existing customers are less costly in terms of marketing and have tendency to do higher value purchases. According to Invespro increasing customer retention rates by 5% can increase profits by 25% to 95%. In addition, the average repeat buyer spends 33% more than a new customer does. Lower cost of marketing and higher spending of existing customer results in high return on investment for firms in the long term (Stauss & Schoeler, 2004). In this paper a conceptual framework is presented on the importance of customer complaint management in modern marketing dynamics, which can provide meaningful insights to the new age marketers on the concept of complaint management.

Concept & Definition

A complaint is a negative expression of dissatisfied customer about the product, service or organization action (Ngai et al. (2007) cited in Kumar & Kaur (2020)). According to Tronvoll (2007) it is an action taken by dissatisfied individuals which involves communicating something unacceptable regarding product or service. Complaints are the result of customer dissatisfaction. Complaint management is the process and procedure by which companies systematically handle problems of customer. According to Hansen et al. (2009) it involves the receiving, inquiry, resolution and prevention of customer complaints and recovery of the customer. This phenomenon is critical because Complaints have never been taken positively by firms and they always dissuade registering of complaints therefore cause more distress and dissatisfaction in customers (Stauss & Seidel, 2019). Company's policy to reduce the number of complaints actually leaves dissatisfied customer behind. Currently focus on customer complaint is increased due to the influence of social media as it has empowered the customers in terms of raising and sharing dissatisfaction. Now customers are more demanding, have options to spread negative word of mouth with bigger group on a click and additionally firms can collect constructive feedback from customer complaint which can be helpful in product and performance improvement in future. It is therefore essential to view complaint management as just not for complaint handling procedures but also as a

potent marketing intelligence tool. Data derived in such processes can help in classify type of complaints, identify poor performing product or services, classify complainers on various demographic factors and discern patterns in complaint etc. undoubtedly this is an area which demands attention from academicians and practitioners.

Cotemporary Marketing Dynamics

In the contemporary times, marketing practices are no longer like traditional marketing practices. New era of marketing is all about customer experience at every touch point. All the marketing strategies are revolves around customer satisfaction. Traditional methods still matters but they must be incorporated in to modern marketing strategies. The same are highlighted in brief.

- a. *Technology advancement*** has profoundly changed the business landscape and its impact will continue to grow as long as more business continue to adopt technologies and add value to customers lives, specifically emergence of social media which made customers very powerful and changed communication level from one to many. Customers are giving importance to reviews and referrals, which made them more, empowered than earlier. One negative review is highly impactful as it can change customer's idea of purchasing and on the other hand, one positive review can attract many new customers. Business should consider the technological advancement as a positive change for business growth. Now a day's customer data base management is very much easy with the technology and firms can do customer engagement of high level, which probably strengthen the relationship and lead customer retention for longer time.
- b. *Growth of E-tailing*** is a widely accepted phenomenon. Establishment of e-commerce platform has provided easy and convenient method of purchasing than ever before. Increasingly, customers are shifting from physical retailing to e- tailing. E-tailing offers unique advantages to the customers such as customer engagement, user friendly, affordability and especially pricing, Which results customer attraction easily but all these advancement in the market are making customers more demanding day by day.
- c. *Switching cost*** is the cost that results from switching to a new product or new services. Switching cost usually consider financial cost incurred by customer when they switch brand, product or suppliers. It is important to note that switching also includes non financial cost, which includes psychological, time and effort based cost. Growth of e-tailing has one

main drawback that switching cost on online platforms is very much less, which makes challenging to retain customers.

Complaint Management in the Core

Complaint management includes planning, conduct and monitoring of the measures taken by firms regarding complaints. Broadly complaint management has strategic relevance because of two reasons, one is that complaint management has strategic importance for customer relationship management as it can turn dissatisfied customers in satisfied and kept them loyal. On the other hand complaint management has strategic potential for quality management as firms can use the collected information through complaints for product and service improvement. Customers are always going to complain about product or services as it is not possible to provide fully error free product or service. Therefore, it is in the hands of firms how they can convert customer's complaints into competitive advantage instead of disadvantage. The main reason for downfall of many businesses is there negative attitude toward complaining and to not spend enough time and efforts to deal customer complaints. Therefore, the importance of having a good complaint management mechanism cannot be understated. Next the general conceptual model is presented to highlight the role of complaint management in creating customer satisfaction and ultimately to achieve customer loyalty through increasing customer retention.

Conceptual Framework

The conceptual basis for this model is the customer relationship life cycle (Stauss & Seidel, 2019). The customer relationship life cycle differentiated customers in three group's i.e. potential customers (acquisition management), current customers (retention management) and lost customers (regain management). Acquisition management works on attracting new customers. Retention management focuses on sustainable growth with existing customers. Regain management aims at winning back the customers who terminated or have intention to terminate the relationship with firm. Complaint management deals with the current customers, where high chances that customer can terminate the relationship if they get dissatisfied. Thus, complaint management is prevents the migration of dissatisfied customers and represents the core of any customer retention management.



Figure 1. Conceptual model.

a. Complaint management to customer satisfaction

Customer satisfaction is defined as a measurement that determines how product or services provided by company meet customer expectations. Customer satisfaction is one of the most important indicators of customer purchase intention and loyalty. Customer dissatisfaction increases massively if company does not react to the customer complaint appropriately. Which resulting double dissatisfaction often leads to immediate customer migration? In complaint handling efforts employee response or the way employee handle customer complaint is the crucial aspect of complaint management strategy. Many studies in literature highlighted the importance of employee response which affects the customer evaluation of firm's complaint handling efforts results in increased customer satisfaction and decreased negative word of mouth. According to Boshoff (2005) communication in complaint management has positive impact on customer satisfaction. Therefore, firms should focus on them to enhance customer satisfaction.

b. Customer Satisfaction to customer retention

Customer retention is the act of keeping existing customers engaged with a brand so that they return to do business with the brand again and again. It is the firm's actions or efforts to reduce customer's attrition. Comparatively it is easier to retain those customers who already express their interest in the product or service. In fact, retention is a more sustainable business model and it is a key to sustainable growth. The probability of converting existing customer in to repeat customer is always high then the converting a new lead. Existing and loyal customers are highly profitable. Returning customers spend up to 33 percent more than new customers and acquiring new customers is averagely five times expensive then retaining your current customer. Customer satisfaction has positive impact on customer retention. In most businesses averagely 25 to 40 percent of their total revenue comes from their returning customers. Mere 5 percent increase in retention can results in 25 to 95 percent escalation in revenue. The level of retained customer depicts the extent of current satisfied customers.

c. Customer retention to customer loyalty

Loyalty has been described as a repetitive purchasing behavior for the same product or brand over time (Jacoby & Kyner, 1973). Loyal customers spread positive word of mouth. (Fisher, 2001). Customer satisfaction is a predictor of repetitive behavioral intention (Berry & Parasuraman, 1991). It is self-evident that satisfied customers tend to behave more loyally than dissatisfied ones, but there is no guarantee that satisfaction always leads to customer loyalty. According to (Oliva, Oliver & MacMillan, 1992) when satisfaction achieves certain point, loyalty increases dramatically and minor downturn in satisfaction can lead significant fall in loyalty. So the ultimate fact is that instead of satisfied customer firms should aim to extremely satisfied customers in order to boost customer loyalty.

Conclusion

In general, as customer needs increase, companies should start regarding complaints as a strategic tool to become aware of aspects of their product and services provided still unknown to them and understand that customer complaints are not merely inconveniences but a useful asset. Firms and managers need to create efficient complaint management system, which not only focused on how to deal with complaints but also helpful to make complaint useful to firms. Customer complaint is most accessible and still untapped area, which provides firms opportunity to come closer to the customers and strengthen relationship.

Managerial Implication

This study has several practical implications for managers. The first is that in the era of technological advancement and social media, firms and managers can set up efficient communication system with customers and can increase their engagement, which leads to customer satisfaction and create strong bond between firm and customers. Second is that social media has changed the pattern of spreading negative word of mouth which cannot be ignored as social media post by dissatisfied customers affects existing customers as well as potential ones. Third is that managers, by efficiently resolving customers complaints can encourage customers to share their experience through story or testimonial on social media as social proof as it is highly impactful to gain customer confidence and trust. Fourth is that manager should try to take out positive out of complaints, which can improve firm's efficiency. A well-communicated and well-concerned system should be designed, which should not be complex or time consuming for complainers. Fifth, Manager should

consider operational efficiency as a strategy to create efficient system, which keep customers happy and form loyal customer base.

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Comparative Study on Financial Literacy and Investment Habits of Individuals of Urban & Rural Areas of Shimla

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Abstract

Sustainable growth of economy of developing country like India is dependent on how deep is the financial sector, which in turn is dependent on financial literacy level of their population and demand for financial products and services. Advancement in technology and introduction of various online investment portals has increased the complexity of financial products. Due to lack of financial knowledge and skills among the poor and venerable section of the society they are not able to access the financial services provided by the banks and they rely on unreliable sources to gather financial information. This paper focuses on comparing financial literacy and investment habits of individuals of urban & rural areas of Shimla. Statistical tools like Regression, Correlation, T- test and Chi square test was used to calculate difference in financial literacy level, awareness level and investment habits of an individual based on financial literacy. T-test reveals that there is a significant difference in financial literacy level and awareness level of individuals of urban and rural areas of Shimla. Result of Regression analysis indicates financial literacy has a significant impact on financial behaviour of individuals residing in urban and rural areas of Shimla. It was also found out that there is a positive but moderate relationship between financial literacy and awareness level of individuals. Chi square test reveals that there is a no significant association between financial literacy and use of traditional products and services but use of modern and new age product is based on financial literacy level of individuals.

Keywords: Financial Knowledge, Financial Attitude, Financial Behaviour, Correlation, Regression, T-Test & Chi Square Test.

Introduction

Sustainable growth of economy of developing country like India is dependent on how deep is the financial sector, which in turn is dependent on financial literacy level of their population and demand for financial products and services. Liberalisation and globalisation had resulted in transformation of financial markets through creation of ample investment opportunities, increased scope of investments and easy and quick access to investment product and services.

Substantial efforts have been made by the government, policy makers & regulators to promote financial education & literacy. Government of India has set up the Investor Education and Protection Fund (IEPF) to support activities relating to education, empowerment and protection of investors. IEPF provides necessary knowledge, skills and information to the investors so that they can take efficient investment decisions.

OECD (2005), defines financial literacy as the combination of consumers'/ investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. Financial Literacy is generally considered as special knowledge related to how an individual manages his or her financial (Ummy Kalsum, Buyung Sarita, Edi Cahyono & Andi Basru Wawo 2018). Financial literacy helps general public in understanding the needs and benefits of the products and services offered by the banks and accelerate the pace of financial inclusion (RBI 2013).

Advancement in technology and introduction of various online investment portals has increased the complexity of financial products. In the era where financial markets, products & services became complex and cost of living is surging, individuals have to be more financially literate and have to be responsible in managing personal finance. Financially illiterate individual may rely on unreliable sources to gather financial information which leads to inefficient distribution of surplus money and increases the chances that individuals might caught in debt trap.

Improved level of financial literacy results into high awareness level, increase in the demand for financial products & services and introduction of improved or innovative products by the companies. Thus, financial literacy derives and distorts investment habits and converts the savers of money into investors.

Literature Review

➤ Financial Literacy Level

Vibhuti Shivam Dube & Dr. Pradeep Kumar Asthana (2019) assessed the level of financial literacy among the government college students of Luknow, Uttar Pradesh. Result of the study reveals that college students lack in the financial knowledge related to risk, purchasing power, inflation and time value of money. Students possess negative financial attitude and behaviour towards managing personal finance hence dependent on others for financial decision. Debabrata, Abhijit & Arindam (2017) in their study of financial literacy in the unorganised sector in west Bengal found male respondents (86%) are more acquainted with different financial terms than the female respondents (14%). Juris C. Ponio & Raymond C. Timog (2017) identified that 60% of micro business owners in Philippines have average level of financial knowledge i.e. basic knowledge about risk, return, interest, and diversification whereas only 8% have low level of financial knowledge. It was also observed that 40% of the business owners have scored average in terms of financial behaviour and financial literacy. Akshita Arora (2016) conducts a survey to assess the financial literacy level among the working women in the state of Rajasthan. It was found that women living in cities and towns are more knowledgeable than women living in rural areas. The results show that many women have positive behaviour about money and finance matters, Women lie in middle income-group and middle education level are cautious about saving money for future. Javed Iqbal Bhabha, Shadiullah Khan & Abdul Naeem (2014) revealed that women in Pakistan lack knowledge about advanced financial concepts, women only know about the mechanism of depositing money in banks for profits but they are ignorant about the functions and existence of financial market.

➤ Financial Literacy Level & Demographic Factors

Madhulata (2016) surveyed 200 respondents from rural areas of Sonapat district of Haryana. Findings indicate that gender, income, nature of work and education level have association with basic financial literacy but there is no association between age and literacy. Tirupati Basutkar (2016) conducted a survey to find out financial literacy in the metropolitan region of Mumbai. It was found that ratio of financial literacy of male respondents are 15.19 times greater than their female counterpart. Respondents having post graduate degree are 20 to 34 times more financially literate than the respondents having graduate or low education level. Swati Narula (2015) assesses the impact of different demographic factors on financial literacy and result indicates that Females are more literate than males in terms of financial

knowledge. Investors in the age group of 46-55 are more literate than young investors in the age group of 26-35. Fachrudin K.R. & Fachrudin K.A. (2016) examined the influence of education and experience on investment decisions in the city of Medan. Critical Ratio (1.938) & (1.072) reveals that Education and experience have little influence on investment decisions. Hussein A. Hassan Al-Tamimi & Al Anood Bin Kalli (2009) identified that, there is a significant difference in the level of financial literacy of men and women. Respondents with high income, good education and those who are working in finance or banking field had a higher financial literacy level.

➤ **Awareness & Preferred Investment Instruments**

Million Assefa & Dr Durga Rao P.V. (2018) surveyed 209 employees of Wolaita Sodo town, Ethiopia their result indicates that financial literacy level does not influence the investment preference of salaried employees towards various investment avenues, except for government bonds and due to lack of knowledge they prefer to invest money in traditional instruments. Sharif Mohd & O.P. Verma (2018) explores the awareness level of rural households of Chamba district of Himachal Pradesh. The study indentified that investors are unaware of modern investment instruments like mutual funds, pension funds, UTI etc. Abhay Kumar Gasti (2017) analyse the saving and investment behaviour of rural household in Karnataka districts. Researcher indentified that employees and businessmen are highly aware about investment avenues in comparison to landless labours and farmers. Awareness level improves with age and income. Bhavna Sharma (2016) found that 94% of people of Greater Noida are aware of mutual funds, PPF and few people are aware of tax free bond. Dr. Mohinder Singh & Bhushan Singh (2015) studied the investment preferences of individuals of Kangra district. The study found that most preferred source of investment is government bonds followed by post office savings, bank deposits, insurance, mutual fund and least preferred is equity investment.

➤ **Financial Literacy and Investment Habits**

Bharti Wadhwa, Aakanksha Uppal, Anubha Vashisht & Devinder Kaur (2019) Surveyed 300 respondents of Delhi NCR region to study investor behaviour and preferences of investors towards various investment alternatives. Result indicates that respondents having low knowledge level rely on sources like financial portals, news channels, expert advice and newspaper etc. Safety, liquidity and stability of the income are the major factors which investors take into consideration before making investment decision. Karan Gupta, Sunil Kumar Gupta & Kulwant Singh Pathani (2018) found that preference of investors will change according to their literacy

level. Financially literate investor will prefer to invest money in modern instruments like mutual funds. Anne Wangeci Mwathi, Alex Kubasu & Nyang'aya Richard Akuno (2017) identified that financial literacy impacts the personal financial decision of employees of Egerton University of Kenya. Employees having lack of financial skills are dependent on the advice of professional experts before buying or selling financial instruments. Financial attitude influences to a very small extent savings and investments decisions and to a moderate extent on debt management decisions. Dr Rahul Sharma & Ajay Singh (2016) analysed that impact of financial literacy on investment habits. The result of the study suggests that that 40% of investors are investing for less than 1 year and only 17% investors are investing for more than 7 years. Almost 43% respondents invest annually between Rs 1, 00,000 to Rs 1, 50,000; only 3% invest above Rs 1, 50,000.

Objectives

- a) To compare the financial literacy level of individuals residing in urban and rural areas of Shimla.
- b) To study the impact of financial literacy on financial behaviour.
- c) To study the relationship between financial literacy and investment decisions (based on awareness level)
- d) To study the investment habits of the investors on the basis of their financial literacy level.

Statement of Hypothesis

In the context of the research objectives, the following hypotheses were framed:

Ho1: There is no significant difference in the financial literacy level of individuals in Urban and Rural areas of Shimla.

Ho2: There is no significant impact of financial literacy on Financial Behaviour.

Ho3: There is no significant relationship between level of financial literacy and awareness level of individuals in urban and rural areas of Shimla.

Ho4: There is no significant association between financial literacy level and usage of financial product and services.

Research Methodology

- a) **Research Design:** Study is based on Exploratory and Descriptive research design
- b) **Sampling:** For the purpose of the study a survey was conducted amongst the individuals residing in urban and rural areas of Shimla. Two sub divisions i.e. Shimla urban and Shimla rural were selected from Shimla district randomly. Convenience sampling technique was used to select 400 respondents from four wards from Shimla urban and one block from Shimla rural were selected randomly.
- c) **Data Collection:** Study is based on primary data. For the purpose of survey questionnaire was prepared and circulated through personal visit and through email among the respondents from urban and rural area of Shimla, Himachal Pradesh.
- d) **Data Analysis tools:** The data was analysed using Excel and IBM Statistical Package for Social Sciences (26.0). Reliability of the construct was checked using Cronbach alpha coefficient. Statistical tools and techniques such as descriptive statistics, Linear Regression Analysis, Correlation Analysis, and test like T & Chi- Square were used for analysis and hypothesis testing.

Results and Discussion

➤ Financial Literacy Analysis: A Comparative Study of Urban and Rural Areas of Shimla

Financial literacy level of people of urban and rural area of Shimla has been assessed by using the comprehensive approach developed by OECD. Under OECD approach dimensions like financial knowledge, financial behaviour and financial attitude was used to assess the financial literacy level.'

Cronbach's Alpha Value of Financial Literacy Factors

In the present study, the reliability of the scale was tested with the help of Cronbach's Alpha reliability statistics. Cronbach's Alpha is used to measure the internal consistency of a summated scale.

Reliability Statistics

Table 6.1.Cronbach's Alpha Value of Dimensions of Financial Literacy

Sr. No	Dimensions	Variables	Cronbach's Alpha
1	Financial Knowledge	Interest Charged on Financial Instruments	0.854
		Inflation	
		Time Value of Money	
		Saving & Investment Principle	
2	Financial Behaviour	Affordability	0.718
		Timely Payment	
		Financial Goals	
		Financial Affairs	
		Emergency Funds	
		Monthly Income & Expenditure	
3	Financial Attitude	Budget	0.690
		Spending Habit	
		Trust Factor	
		Financial Goals	
		Debts	

Source: Output from SPSS 26.0

Table 6.1 indicates that values of Cronbach Alpha for each of the dimensions namely financial knowledge, financial behaviour and financial attitude are above the acceptable limit; hence scale was found to be reliable for measuring the financial literacy level of individuals in urban and rural areas of Shimla.

Measurement of Composite Financial Literacy Score/Level

Composite financial literacy level was obtained by adding the individual score of three dimensions i.e. financial knowledge (four items), financial behaviour (six items) and financial attitude (five items). All the three dimensions were measured on five point Likert scale, maximum possible score for each dimension is 5. Thus the maximum composite financial literacy score is 15. Median score of the sample was considered to classify the respondents in two group's i.e. high financial literacy level and low financial literacy level. Mean score of different dimensions of financial literacy of respondents from urban and rural community was computed by

dividing the total summated value by the number of respondents in the particular category/community.

**Table 6.2.Composite Mean Score of Financial Literacy
in Urban & Rural Areas of Shimla**

COMMUNITY	Financial Knowledge	Financial Behaviour	Financial Attitude	Composite Financial Literacy
URBAN	3.63	4.26	2.94	3.61
RURAL	3.11	4.17	3.11	3.46

Source: Primary Data, 2019-2020.

Table 6.2 reveals that the composite financial literacy score based on dimensions like financial knowledge, financial behaviour and financial attitude was highest in case of individuals belonging to urban areas of Shimla i.e. 3.61 as compared to the individuals from rural areas i.e. 3.46. From the above table and figure it was also inferred that individuals from both the communities show positive financial behaviour as mean score is above 4 in both the communities & individuals are in a habit of setting financial goals, purchase things according to their purchasing power and adhere to the timely payment of bills. Table 6.2 indicates that mean score of financial attitude is more than in rural area as compared to urban areas of Shimla. In terms of financial knowledge individuals from urban areas are more knowledgeable than their counterparts from the rural area i.e. they are familiar with the concept of simple interest, compound interest, principles of saving etc. From the analysis it was also found out that maximum individuals are not familiar with the impact of inflation.

Difference in Financial Literacy level in Urban & Rural Areas of Shimla

Table 6.3.T-test result to measure significant difference in financial literacy level of respondent in urban and rural areas of Shimla

URBAN			RURAL			t- Value	*p-value
N	Mean	S.D	N	Mean	S.D		
200	3.61	0.412	200	3.46	0.395	3.51	0.000

*Level of significance 5%

Source: Output from SPSS 26.0

Results show that at 5% significance level the t-value (3.51) is significant (p-value=0.000; $p < 0.05$) which leads to the rejection of null hypothesis and acceptance of alternative hypothesis. So it can be concluded that the individuals residing in urban are more financially literate than the individuals residing in rural areas of Shimla.

➤ Analysis of Impact of Financial Literacy on Financial Behaviour

Regression Analysis of Impact of Financial Literacy on Financial Behaviour in Urban & Rural Areas of Shimla

Table 6.4. Model Summary Impact of Financial Literacy on Financial Behaviour (Urban)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.525 ^b	.275	.271	.42468

Source: Output from SPSS 26.0

In order to access the impact of financial literacy on financial behaviour, regression was calculated between composite financial literacy mean score and mean score of financial behaviour. Table 6.4 revealed that value of R-square is .275 which implies that dimensions of financial literacy have contributed 27.5% variance towards the financial behaviour of individuals of urban area of Shimla.

Table 6.5. ANOVA Impact of Financial Literacy on Financial Behaviour (Urban)

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.556	1	13.556	75.163	.000 ^c
	Residual	35.710	198	.180		
	Total	49.267	199			
a. Community = Urban						
b. Dependent Variable: Average FB						
c. Predictors: (Constant), Total F.L Average						
From the ANOVA table it is found out that F=75.163 and p= .000 are statistically significant at 5%. Hence the overall regression model for financial literacy has relationship with financial behaviour.						

Table 6.6 Coefficients Impact of Financial Literacy on Financial Behaviour (Urban)

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.972	.265		7.435	.000
	Total Financial literacy Score	.633	.073	.525	8.670	.000
a. Community = Urban						
b. Dependent Variable: Financial Behaviour						

From the coefficient table 6.6 value for financial literacy score ($\beta=.525$, $t=8.670$, $p=.000$) inferred that independent variable financial literacy has impact on the dependent variable financial behaviour of the individuals of the urban area of Shimla. It was found out those individuals those who are familiar with the concept of interest, principles of savings and familiar with the concept of time value of money and those who maintain budgets are aware of their income and expenditure, pay bills on time and always keep watch on their financial affairs. Individuals with higher financial knowledge pay their bills on time and exhibits financial planning behaviour.

Table 6.7 Model Summary Impact of Financial Literacy on Financial Behaviour (Rural)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.528 ^b	.279	.275	.46290

Source: Output from SPSS 26.0

In order to access the impact of financial literacy on financial behaviour, regression was calculated between composite financial literacy mean score and mean score of financial behaviour. Table 6.7 revealed that value of R-square is .279 which implies that dimensions of financial literacy have contributed 27.9% variance towards the financial behaviour of individuals of rural area of Shimla.

Table 6.8.ANOVA Impact of Financial Literacy on Financial Behaviour (Rural)

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.411	1	16.411	76.590	.000 ^c
	Residual	42.426	198	.214		
	Total	58.838	199			

From the ANOVA table it is found out that $F=76.590$ and $p=.000$ are statistically significant at 5%. Hence the overall regression model for financial literacy has relationship with financial behaviour.

Table 6.9 Coefficients Impact of Financial Literacy on Financial Behaviour (Rural)

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.660	.290		5.733	.000
	Total Financial Literacy Score	.726	.083	.528	8.752	.000
a. Community = Rural						
b. Dependent Variable: Average FB						

From the coefficient table 6.9 financial literacy score ($\beta=.528$, $t=8.752$, $p=.000$) are statistically significant at 5% and can be inferred that individuals with high financial literacy score have positive financial behaviour i.e. they are aware of their income and expenditure, pay bills on time, set their financial goals and always keep watch on their financial affairs. Individuals with higher financial knowledge pay their bills on time and exhibits financial planning behaviour.

➤ Analysis of Relation Between Financial Literacy Level & Investment Decision Based on Awareness Level

Correlation between Financial Literacy and Overall Awareness Level of Individuals in Urban Areas of Shimla

Table 6.10. Correlation between Financial Literacy and Overall Awareness in Urban Area

Correlation			
		Awareness Level	Financial Literacy
Awareness Level	Pearson Correlation	1	.564**
	Sig. (2-tailed)		.000
	N	200	200
Financial Literacy	Pearson Correlation	.564**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			
a. Community = Urban			

Source: Primary Data, 2019-20

Table 6.11. Correlation between Financial Literacy and Overall Awareness in Rural Area

Correlation			
		Awareness Level	Financial Literacy
Awareness Level	Pearson Correlation	1	.525**
	Sig. (2-tailed)		.000
	N	200	200
Financial Literacy	Pearson Correlation	.525**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			
a. Community = Rural			

Source: Primary Data, 2019-20

From the above two tables (6.10 & 6.11) it can be inferred that there is a positive and significant relationship between financial literacy and overall awareness level of individuals residing in urban and rural areas of Shimla. Significant value in both the communities is .000 which is less than 0.05, thus null hypothesis was rejected in both the cases. Value of correlation (r) .564 in urban and .525 in rural indicates that there is a moderate positive correlation between two variables in urban and rural areas of Shimla district, Thus we can conclude that in both the communities as financial literacy level of individuals improves they become more aware of financial organisations, instruments and terms.. Thus, it may be concluded that there is a statically significant relationship between financial literacy and investment decision.

➤ Analysis of Investment Habits and Financial Literacy Level

Association between Financial Literacy Level and Usage of Financial Products & Services in Urban Areas of Shimla

Table 6.12.Financial Literacy Level and Usage of Financial Products & Services (URBAN)

USAGE OF FINANCIAL PRODUCTS/SERVICES (URBAN)							
FINANCIAL PRODUCTS/SERVICES	High Financial Literacy Group		Low Financial Literacy Group		Chi Sqaure Value	Phi Value	Asymp.Sig. (2-sided)
	Frequency	Percentage	Frequency	Percentage			
Saving Account	104	97.20	89	95.70	0.33	-0.04	0.565
Credit Card	19	17.76	10	10.75	1.96	-0.10	0.161
Debit Card	67	62.62	55	59.14	0.25	-0.04	0.615
Life Insurance	73	68.22	57	61.29	1.05	-0.07	0.305
General Insurance	36	33.64	19	20.43	4.35	-0.15	0.037
Loan	12	11.21	4	4.30	3.23	-0.13	0.072
Shares	21	19.63	16	17.20	0.19	-0.03	0.660
SIP/Mutual Fund	51	47.66	23	24.73	11.22	-0.24	0.001

Source: Primary Data 2019-2020

Table 6.12 shows that above 95% respondents in high financial literacy group and low financial literacy group are holding saving account in banks. 68% of respondents from high financial literacy group (n=73) and 61% from low financial literacy group (n=57) have life insurance cover, thus it can be said that still penetration of Life Insurance Company is not 100% and both high and low financial literate people are still not concerned about having insurance cover or protect themselves from any mishappening. Ratio of users debit card holders (50%) are more than credit card holders (10%-20%) in both the categories, thus it can be inferred that slowly or staidly individuals are moving towards a use of plastic money. Percentage of respondents

investing money in mutual fund or SIP is more in high financially literacy group (approx.48%) (n=51) as compared to low financial literacy group (approx.25%) (n=23). Minimum number of respondents from both the category i.e. 20% from high financial literacy (n=21) and 17% from low financial literacy (n=16) is presently investing money in shares. Chi square value at 5% significance level shows that there is no significant association between financial literacy and usage of financial products and services except for general insurance and SIP/Mutual funds as their p value is less than 0.05. From Phi value it can be concluded that there is a weak and negative association between financial literacy and usage of financial products and services.

Table 6.13.Financial Literacy Level and Usage of Financial Products & Services (RURAL)

USAGE OF FINANCIAL PRODUCTS/SERVICES (RURAL)							
FINANCIAL PRODUCTS/SERVICES	High Financial Literacy Group		Low Financial Literacy Group		Chi Square Value	Phi Value	Asymp.Sig. (2-sided)
	Frequency	Percentage	Frequency	Percentage			
Saving Account	92	98.92	102	95.33	2.21	-0.11	0.137
Credit Card	11	11.83	6	5.61	2.47	-0.11	0.116
Debit Card	47	50.54	49	45.79	0.45	-0.05	0.503
Life Insurance	76	81.72	71	66.36	6.03	-0.17	0.014
General Insurance	35	37.63	19	17.76	9.97	-0.22	0.002
Loan	8	8.60	3	2.80	3.21	-0.13	0.073
Shares	15	16.13	7	6.54	4.67	-0.15	0.031
SIP/Mutual Fund	17	18.28	2	1.87	15.58	-0.28	0.000

Source: Primary Data 2019-2020

Table 6.13 shows that above 95% respondents in high financial literacy group and low financial literacy group are holding saving account in banks. 81% of respondents from high financial literacy group (n=76) and 66% from low financial literacy group (n=71) have life insurance cover, thus it can be said that low financial literate individuals are least concerned in minimizing a risk arising from loss of life and show least interest in having an insurance coverage. Ratio of users of debit card holders (45%-50%) are more than credit card holders (6%-12%) in both the categories, thus it can be inferred that even in rural area individuals are moving slowly or staidly towards a use of plastic money. Almost 16% (n=15)-18% (n=17) individuals from high financially literacy group, invests money in mutual fund or SIP and shares. Minimum number of respondents i.e. 2% (n=2) - 5% (n=7) from low financial literacy is presently investing money in shares and mutual funds.

Chi square value at 5% significance level shows that there is no significant association between financial literacy and usage of financial products and services except for life insurance, general insurance, shares and SIP/Mutual funds as their p value is less than 0.05, this indicates that as financial literacy level of respondents will increase their preference for usage of financial products and services like insurance, shares and mutual funds will increase. From Phi value it can be concluded that there is a weak and negative association between financial literacy and usage of financial products and services.

Findings

1. From calculation of composite financial literacy score it was inferred that financial literacy level of individuals residing in urban area (3.61) is higher than the individuals from rural areas of Shimla (3.46).
2. The result of analysis of T- test shows that there is a significant difference in financial literacy level of individuals residing in urban and rural areas of Shimla.
3. In both the communities of Shimla financial literacy level does have moderate positive correlation and statistically significant relationship with awareness level of individuals.
4. From the analysis of Chi-square it was inferred that in urban area there is no significant association between financial literacy and usage of financial products and services except for general insurance and SIP/Mutual funds.
5. From the analysis of Chi-square it was inferred that in rural area there is no significant association between financial literacy and usage of financial products and services except for life insurance, general insurance, shares and SIP/Mutual funds.

Conclusion

After careful analysis and interpretation, the findings of the study suggest that there is a gap in the various dimensions of financial literacy and composite financial literacy level of the individuals residing in the urban and rural areas of Shimla. There is a moderate positive and significant relationship between financial literacy level of individual and his or her awareness level. With improvement in financial literacy level, individuals become more aware and start investing money in modern and new age financial products and services. It is also concluded that there is no association between financial literacy level of respondents and use of traditional products or services like saving accounts and insurance but use of modern products like shares or mutual funds are dependent on the financial literacy level of individuals.

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Stress Management & Human Rights of Police Officers: An Analysis of the Twin Cities of Kalka and Pinjore

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Abstract

The concept of stress management is not of ancient origin. Stress has been the part of civil society ever since the society has progressed on the path of globalization and development. It is pertinent to note that stress management is required at all levels and the police department is no exception. Indian Police is force is one of the most hackled, maligned and at the same time progressive in its dealings, however, there are a few shortcomings in police conduct that has led to the police being an object of mockery by the media. However, every department of the force has stress imbibed as a sine quo none of their job profile and the twin cities of Haryana, that is Kalka and Pinjore are no exception. The officers are considered to be delivering emergency services and therefore are mostly on their feet the entire day along-with minimal payment of overtime and conveyance. However, they are expected to be doing community service and therefore well behaved and compassionate towards the society and the victims as well efficient in dealings with the perpetrators of crime. But the truth lies in the fact that they are overburdened and the quantum of work that they do along with the administrative responsibilities take a toll on their health resulting in them forgetting the oath they had taken before joining the service and the work becomes monotonous and nothing but a source of livelihood. The unavailability of proper leisure hours makes them cynic, ill-tempered and other vices in their personality too, which affects the force and their respective families too. The present seeks to explore the problems of leisure and its impact on the personal and professional lives of police officers of Kalka and Pinjore and also suggests remedies for stress management and ensuring the basic human rights dictated by the Constitution to the law enforcers.

Keywords: Stress, Leisure, Police, Human Rights, Management.

Introduction

Policies categorically assessed as a wing of the criminal justice administration possessing authority, hazards and diverseness of functions. It is a round the clock dedicated service to the people and is projected to be community-friendly. The service demands a lot of sacrifice as well as living up to the expectations of the people and is subjected to criticism if it fails to live up to the same. The electronic and the print media have always been very loquacious with any kind of failure of the policemen to fulfill the demands of the society. Police is supposed to be polite, agile and always on their toes. Police personality is hugely dependent upon the role they exercise as an official and therefore, their personality which involves a wide array of decision making which at time leads to numerous speculations, also, the constant threat to life results them in being isolated from the society at large take a toll on them. The **stress** [1] they undergo makes them have a negative towards life, cynic, and a plethora of other problems affecting their personal lives and equally affecting their professional lives which are most commonly categorized as '**job-related problematic behavior**' [2].

While recommendations have been made by the different commissions on police reforms in India on the duties and responsibilities of the police, the stress related to police service has been a neglected area. The dearth of relevant literature in India on job-stress with special reference to the police make it all the more important to explore a primary cause of police atrocities. In this regard the present work attempts to assess the job satisfaction of the police officers of Haryana. It evaluates the perception of the police officers about police work in comparison to the other occupations. In lieu of this, the **leisure** and recreational activities of the police officers are also explored. [3] Again, the involvement of officers in household work was appraised to assess whether fulfillment of familial responsibilities suffered owing to their job pleasure.

Policing, Police Culture and Stress

Jones and Newburn define policing as "those organized forms of order maintenance, peacekeeping or law enforcement, crime investigation and prevention and other forms of investigation and associated information brokering which may involve a conscious exercise of coercive power-undertaken by individuals and organizations, where such activities are viewed by them and by others as a central or key defining part of purpose". Policing ensures specific patterns of behavior and attributes of those involved setting a

culture of its own. [4] According to Morgan, organizational culture refers to “shared meanings, shared undertaking, and shared sense making.” Early police research has shown concern for police culture in the writings of for instance Wilson (1968), Skolnick (1966), Manning (1977) and Reiner (1985). [5] “Police culture is defined as an occupational culture because it provides a shared and transmitted lifestyle consisting of material and none material elements.” [6] Police culture is often characterized as being suspicious, authoritarian, isolationist and conservative. [7] Maintenance of these negative values and attitudes which are the attributes of police culture separate the police from the general public and make them the villains of the society. [8] The police officers often believe that no one else understands their problems and that their job is made more difficult by an apathetic, unearning, unsupportive, antagonistic and sometime hostile public. Police officers have a tendency to withdraw behind what Goldstein has referred to as the ‘blue curtain’ in order to shield themselves from public criticism. [9] Thus, the officers’ forming a part of the culture known as the police organisation, are categorized to be cynic in nature and prone to insults from the public also referred to as the ‘blue curtain’ and thereby isolated from the general masses. Police officers tend to socialize together and believe that their occupation cuts them from relationships with civilians. Police officers perceive their working environments to be laden with danger or risk of danger, and they preoccupied with the danger and violence that surrounds them, always anticipating both. [10] However, police culture is not negative in itself because it encourages group loyalty which is necessary for officers working under frequently dangerous, unpredictable and alienating condition. [11]

Six core beliefs are viewed as being at the heart of the police culture:

- 1) Police are the crime fighters;
- 2) No one else understands the real nature of police work;
- 3) Loyalty to colleagues counts above everything else;
- 4) The war against crime cannot be won without bending the rules. Courts have awarded criminal defendants too many civil rights;
- 5) People are quick to criticize police unless they need police help themselves and
- 6) Patrol work is the pits. Detective work is glamorous and exiting.[12]

The complexity of police work makes it difficult for the police officers to maintain social and familial relationships. They suffer stress in their family lives when they bring the work home or when their work hours are shifted.

Police psychologists have divided stressors into four distinct categories:

- 1) External stressors such as verbal abuse from the public, justice system inefficiency, and liberal court decisions that favor the criminal. It may alienate police and reduce their self-confidence;
- 2) Organizational stressors such as low pay, excessive paperwork, arbitrary rules and limited opportunity for promotion;
- 3) Duty stressors such as rotating shifts, work load, boredom, fear and danger and
- 4) Individual stressors such as discrimination, familial discord and personality problems. [13] These result in physical (fatigue, nausea, rapid heart rate, headache, thirst, dizziness, vomiting, weakness and profuse sweating); cognitive (confusion, memory problems, difficulty accepting responsibility, concentration problems, disturbed thinking and hyper vigilance); emotional (anxiety, denial, fear guilt, depression, intense anger, loss of emotional control, and agitation) and behavioral (alcohol consumption, hypersensitivity, withdrawal, change in sexual functioning, change in speech pattern or communication and loss or increase in appetite) stress. Traditional management practices which rely heavily on authority, discipline, and obedience to rules to gain compliance by members of the organization irritates police officers. [14]

Methodology

In this exploratory study, the necessary data has been collected by multiple methods. The Haryana Police personnel have been interviewed through open-ended questions to get access to relevant data. Observation of non-verbal attributes of the police officers was also studied. The Haryana Police website, print media and electronic media reports have yielded necessary information.

51 police personnel were interviewed to get access to primary data and about 30% of them were Indian Police Service (henceforth IPS) officers, 16% of the respondents are Additional & Joint Commissioner of Police, 18% of respondents were Deputy Commissioner of Police out of whom 1 was a non-IPS officer. The total number of IPS officers interviewed was 16, which is 31% of the total sample, 43% of the officers were Officer-in-Charge or Additional officer-in-charge of the local police stations. 10 of the officers were-in- charge of different departments under Detective Department, Computer Cell, Traffic Department, Women Police, 6 to 12% of the policer officers were women.

Empirical Findings

➤ Job Contentment in Police Service

78% of the officers who were in service for more than eighteen years were non-IPS officers while the rest were IPS officers. 92% of the police officers who were in service for more than 29 years were non-IPS officers. Promotion in the service period of the non-IPS officers is after every seven years. This system requires change as such long gaps in promotion do not lure either the professionals or the future ones towards this occupation. Promotion should be speedy and based on performance rather than period of service/ this can result in greater tenacity of the officers towards their jobs and erase the accusations on the police of being sloppy and sloth.

➤ Police work in Comparison to other Services

19% of the IPS officers were not interested in joining police service. This may be because they were interested in other options like Indian Administrative or Foreign.

Service, so possibly they took up the police service out of compulsion of being the only available option. Again, for non-IPS officers the percentage of officers not willing to join the police service is only 11%. This may be because they had other compulsions like family pressure forcing them to take up this service. The security of a government job often forces the officers to take up police service. They need to provide security to their family members and relieve their parents during old age from familial responsibilities.

58% of non-IPS officers who were interested in joining the police service felt that police service is a good career option while 30% of the IPS officers felt the same. 46% of the IPS officers believed the police service to be dynamic and noble profession. While officers in the higher rank considered policing as an august profession, those down in rank admire the perks and the benefits that it brings forth. So, we can say that value of serving the people and the community is possibly more grounded in the superior officers than those lower down. Since the lower ranks of police officers face the public more regularly then often face the wrath and the distrust of the common people. This makes them frustrated and police service becomes just a source of secure 3 officers believed that there is no difference between policing and other careers. More than 90% of the police officers feel that police service is different from other occupations. However, the reason put forward by them is that unlike any other public service policemen are always in direct contact with the people of all sections of the society. Some of the non-IPS officers

complained that policemen earn poor salary in comparison to the labor that they have to put every day. Any other career would have been more lucrative and less strenuous.

More than 80% of the officers consider police service as a good choice for a career. Although police work is strenuous, it ensures job security. Quite a few officers considered this profession to be noble and challenging. The experiences in this service are vivid and every day they have to face newer challenges. It is also novel as they get a direct chance to serve the people of every section of society. The police are supposed to provide the public with security and a healthy and safe environment. Policemen are entitled to come to the help of all sections of the society and bring relief and safety in their lives. They are the people whom we rush to during an crisis. The services that they provide range from crime management to help lines for medical assistance, from traffic control to disaster management. These diverse arrays of services make this work pulsating and zestful.

➤ **Police Service and Leisure**

50% of the IPS officers believed that they got normal leave while not a single superior officer complained about not getting any holidays in their job. However, 23% of the non-IPS officers who were all Officer-in-charge and Additional Officers-in-charge of different police stations of the city complained that they do not get any holidays. 54% of the non-IPS officers had grudges for not having very few leave or day-off.

The senior subordinate officers have to work for longer hours and enjoy very few leave. The first and second in command of the police stations enjoys the least breaks. They even have to visit the police station on Sundays. They have complaints for not having single day-off. The officer and additional officer-in-charge of police stations suggested that they can manage at least one day-off at an alternative basis between themselves but that too is not permissible. They have to go for two or three rounds of the area under the jurisdiction of that particular police station every day and manage the administration and other affairs till midnight. They only manage a small break in afternoon but that too is hampered most of the time because of emergency calls. The long and tedious working hours in the police stations take a toll on their health and have severe effect on their mental state. A report stated that diagnosing 5000 policemen of Haryana, revealed that many of the policemen suffered from diabetes, high blood pressure and pulmonary disorders owing to pollution. Too much of the work pressure makes them short-tempered and they tend to suffer from chronic ailments like diabetes and hypertension due to extensive stress.

50% of the IPS officers spent their leisure in entertainment while only 23% of the non-IPS officers indulge in recreation during their leisure time. 20% of the non-IPS officers complained that they have no leisure, while 34% of them like to spend their spare time with family members. The disparity in choice of spending leisure among IPS and non-IPS officers may be as a result of difference in socio-economic status. While IPS officers can spend their leisure in luxuries like watching movies, visiting clubs, sports or other medium of entertainment the same is not possible for the lower rank officers. The officers of lower rank belong to the middle-income group and cannot permit too much indulgence. A good percentage of them do not get any leisure due to rigorous hours of work. Those who get it prefer to spend it with their family. Some of them even help their children in their studies. They have a feeling of depriving their families of their companionship and whenever they get time, they like to spend it with their near and dear ones. A senior officer-in-charge of a police station regretted “My wife has been complaining about some health problem but I cannot manage to get time to take her to the doctor, I feel deeply embarrassed and guilty for not being able to find time for her.” This is common problem among officers who are in charge of local police stations. They have to spend extensive hours in the police station which not only affects their health but also their psychological frame of mind. They suffer from guilt, frustration and fatigue which affects the quality of work that they put in.

➤ **Police Service & Discharge of Household Duties**

Nearly 70% of the IPS officers could afford to take part in household work. About 45% of the non-IPS officers hold grudges that their service does not allow them to shoulder familial responsibilities. 13 out of 15 non-IPS officers who believe that it is not possible to participate in household work were officers-in-charge of police stations.

A senior Deputy Commissioner of Police (non-IPS) remarked, “The long hours of service hamper our social life for which we lose the respect of our spouses.” All the officers who believed that police service does not allow them to take part in household chores agreed to the fact that their family life has been suffering. They gave full credit to their spouses for shouldering majority of the responsibilities, they also felt guilty for making their family life suffer. The family gratifies one emotional need and any sort of guilt of dissatisfaction at that front can have serious effect on one’s mentality and performance in the professional field.

6 out of 8 officers, who said that they do everything as far as household work is concerned were women. 73% of the police officers take part in less than

three households works. It was found that most common household duty they performed was the weekly shopping of raw food products and the monthly marketing of basic needs of family like grocery. Some of the officers even managed to find time to teach their children. Attending social functions, entertaining guests at home are other commonly performed family chores. Women officers, mostly have to fulfill all of the household's responsibilities even after being engaged in such a demanding profession. The data reveal that policing eventually does not allow officers to give much of time to perform household responsibilities. The family life is neglected and it is their spouses, children and their nearest kin who are the most sufferers. The long and demanding hour of work deprives them of a healthy family life and possibly takes a toll on their physical and mental health. Even some of the officers suffer from guilt for not being able to give enough time to their family members.

74% of the IPS officers do their household work on Sundays, holidays or on leave. Only two IPS officers do so before and after office. 41% of the non-IPS officers execute their household responsibilities before and after office hours. 51% of the officers perform their family chores on Sundays or during leisure hours.

The number of household tasks which most of the police officers do is few. The officers-in-charge of police stations attend long hours in the office while the inspectors and sub inspectors also have extensive duty hours. As policing is a 24-hour service all officers have minimum holidays. Their holidays are cancelled one month before important festivals like Durga puja, Diwali and Independence Day or during General Elections. This points out the plight of the families of the senior non-IPS police officers as their family members are deprived of their support most of the time. So, when they manage little amount of leisure they prefer to look after their families and spend time with them.

The IPS officers prefer to do their household chores on normal holidays when they manage to find time for their families and even for themselves. Their social and economic status also allows them certain amount of luxury which officers in the lower rank cannot afford.

Stress Management

Officers have stated that the amount of stress in the department has led to the drastic deterioration of their commitment to the force. The force is under paid and the strenuous work hours have led them to be deviated from their duty and the oath they had taken while entering the force. [15] Although, there are

various programmes that are being catered to for the welfare of the officers including various promotional schemes but it is to the dismay that the police officers still bear the burden on themselves with regard to the meagre amount of salary. The gallantry medals also provided for in the force, they do not forego the other problems and mostly it has been observed that the part of stress management with regard to schemes and other activities has not yet been encompassed. [16] They are still at logger heads with regard to accountability in the force along with stress management practices which are not followed at all in the force with the same diligence that need to be followed. Needless to say, that although various measures are in place, but on a larger perspective it is only for the privileged personnel who can get away with corruption and reap the benefits of the society but not otherwise. [17] Therefore, a lot needs to be achieved with respect to stress management within the force.

Human Rights of Police in the Twin City

The police force of the twin city is at logger heads always. The police are always overburdened with excessive work load with affects both the professional as well as the personal lives of the officers disregarding their human rights. [18] Actually, it is unforeseen to see that the law enforcers are themselves being subjected to unjust enrichment which is not acceptable under any circumstances. But the thrive for proper payment of salaries and the tag of being in the service is something which has now become the predominant factor in the determination of the officer's welfare. This has somehow been against the welfare of the officers, but sadly they choose to continue as they know their grievances will not be heard, rather, cynicism in their work due to these pressures will be highlighted by the media and they would be unnecessary subjected to Commission meetings which would be derogatory for them and the stigma would ruin their any chance of promotion as they would be subjected to suspension. [19] Thus, it can be concluded that human rights are violated in almost the force entirely, although, seldom measures are also incorporated for betterment but accountability would be beneficial and therefore changes are needed to ensure the same.

Conclusion

Job satisfaction in police service is lacking among the non-IPS officers of the Haryana Police force. Long hours of work, few days-off and rigorous amount of labor hassle the officers both physically and psychologically. [20] They are not contented with their job as it deprives them of fulfillment of familial duties. They are working like machines and the basic needs of a healthy life like having proper leisure and recreation is nearly absent in the lives of lower

ranks of police officers. Again, the guilt of not being able to spend quality time with kids and family also affects their mental frame. The non-IPS officers suffer from guilt and lack of motivation which affects their efficiency at work. [21] Weekly day-off and distribution of work at a roster basis will result less stress and higher overall job productivity. Greater use of information and communication technologies in administrative and field work can reduce job stress and ensure speed and accuracy. A Police Welfare Board can play constructive role by focusing on the tribulations of the police service and disentangling issues of health, housing insurance and other anxieties of police personnel. An employee-friendly work environment, greater perks and healthy work culture can make police service attractive and interesting to future generations and entire entice them to opt for it.

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Importance of Work-Life Balance: A Review from Gender Perspective

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Abstract

Work-life balance is a term used to describe the harmony between a person's individual life and professional life. Family-work conflict (FWC) and work-family struggle (WFS) is bound to apply negative impacts in the family area, bringing about lower life fulfillment and more noteworthy inside clash inside the family. Studies have distinguished a few factor +s that impact the degree of WFS and FWC. Factors, for example, the size of the family, the time of kids, the work hours, and the degree of social help sway the experience of WFS and FWC. Notwithstanding, these factors have been conceptualized as precursors of WFS and FWC. The present study reviews the work-life balance literature among women employees in the education sector, identifies research gaps, and offers a future research agenda. By developing a conceptual model that informs our theoretical understanding of the balance of work-life among women's employees in the educational system, this review contributes to the literature in doing so, it provides interesting bits of knowledge on how social, monetary, and institutional elements influence the work-life interface's representative impression. The current study focuses on methodological development, multi-level research, and the enhancement of work-life balance among women's education employees.

Keywords: Work-Life Balance, Gender, Family-Work Conflict, Work-Life Interface.

Introduction

India has a large population with 1,366 million people, representing 17.7% of the world's population, India ranks number 2 in the list of countries. China and India being the most populous countries (Asian Century Institute, 2014). An organization needs to attract and maintain valued workers in a highly

valued setting. The dynamic labor market is a strong driving force for improved corporate understanding and action regarding the policies and procedures of human resources that address the balance of work life. Work-life balance is an important field of management of human resources that is attracting growing attention from government, scientists, leadership, and members of workers and mainstream media (**Pocock, Van Wanrooy, Strazzare and Bridge, 2001; Russell and Bowman, 2000**).

Work-life balance was first used in 1986 to define individual patterns. Spending more time on the job and less time on other facets of life (**2003, Lockwood**). The word 'Work-Life Balance' was used to characterize the balance between the work and personal life of an individual and feeling relaxed for both job duties and non-work obligations.

Work-life equilibrium has been described differently by various scholars. To get to expand our views, such concepts are presented. The **Greenhaus (2002)** Identified work-life balance as satisfaction at work and work and functioning well at home with a minimum of a dispute over the position.

Subjective variables and their consequences on professional life

To understand the findings from empirical work on work-life research in the education sector, we must first consider its cultural, economic, and institutional context. **Powell, Francesco, and Ling (2009)** argue that most key concepts examined in the work-life literature (e.g., perceptions about the WLI, normative levels of work involvement, the meaning of work in individual's lives, gender role ideology, and family division of labor), are rooted in cultural values and the socio-institutional regimes of a country. Cultural, economic and institutional factors exert a significant influence on work-life policies and practices (**Ollier-Malaterre & Foucreault, 2017**). People's career experience is therefore very sensitive to cultural differences in the national context (**Allen et al., 2015; Ollier-Malaterre et al., 2013**).

➤ Effect on the WLI of cultural factors

Cultural factors determine the shaping of WLI's perceptions and views of individuals. Culture has been defined as "shared motivational factors, values, beliefs, identities, and interpretations or meanings of significant events that result from shared experiences of members of collectives that are given down over generations" (**House & Javidan, 2004, p. 15**). Examples of cultural beliefs in WLI research include the relationship between groups and individuals, gender role ideology, and emphasis on material success vs the standard of living (**Ollier-Malaterre & Foucreault, 2017**).

Gender egalitarianism. This cultural perspective has been utilized to explain the social roles of individuals in different societies. Gender egalitarianism denotes how people believe social roles should be based on gender (**House, Hanges, Javidan, Dorfman, & Gupta, 2004**)

➤ **Effect on the WLI of economic and structural variables**

Several developing and developed economies have seen strong population development in the education sector in the last few years. (**Budhwar et al., 2016**). These developments have resulted in far higher job demands for jobs in India's education sector, the blurring of job-home boundaries, and a greater emphasis on work-life problems than in the past. (**Chandra, 2012**). **Ollier-Malaterre and Foucreault (2017)** The level of industrial growth will impact the nature of the needs of the work-family, This will have an impact on the requirements of workers (nature of the job, percentage of students, medical conditions) as well as on resource base (income, access to quality food, housing, education, health care).

Methods

To perform this systematic analysis, we have adopted a general approach on how to execute the evaluations (Short, 2009). We performed a comprehensive review of the Scientific Website, Google Scholar, and other related databases in particular. Authors selected articles that set out appropriate context criteria: (1) peer-reviewed, evidential publications that used clear client and project team measures (including work-life balance; work-life balance). Enrichment or facilitation of the family (life or home), and work-family (life) dispute or spillover or intervention, using keywords associated with the above steps or going to look at work problems if qualitative research has been undertaken. (2) At least one set of data in the publications would have to be obtained from the education/Gender sector. We excluded-anti-documents (i.e., theses, reviews, or research papers written by unknown publishing houses on quality issues), book chapters, and perceptual and review papers. We haven't set a timeline yet to ensure that we've included all the relevant one's papers to date on this topic.

Work-life interface: a detailed analysis of the scientific observation

➤ **WLI Renovation Conceptualization in Education Sector**

Since before the term work-family or work-life functionality has been most usually used throughout past studies, (**Grzywacz, 2006; Carlson, Kacmar,**

& Williams, 2000; Greenhaus & Beutell, 1985; Grzywacz & Marks, 2000), the specified Training Interface (WLI) is being used in the review as a grab term for work-life balance, confrontation, interaction, intervention, and improvement, etc WLI is described to use both a harmful (e.g. work-family and family-work conflict) and a beneficial (e.g. work-family and family-work-enrichment) focus. (**Arye, Fields, & Luk, 1999; Hill, Yang, Hawkins, & Ferris, 2004**).

Powell (2006) are obeyed by classifying these two concepts into a set of organizations:

- a. Ideas that quantify the positive aspect of WLI, such as work-family advancement (**Carlson et al., 2006**); beneficial work-family spillover effects as well as work-home interaction and homework interaction.
 - b. Structures that quantify the bad aspects of WLI, such as work-family conflict, that is also linked to work-family interference. (**Carlson et al., 2000; Gutek, Searle, & Klepa, 1991; Netemeyer,**); Constructions that enhance the comparative work-life balance (**Haar, 2013**), which is categorized as characteristics of students about their work-life balance. Balance among work as well as non-work
 - c. Structures that evaluate work-family culture (**Thompson, Beauvais, 1999**). WLI Renovation Conceptualization in Education Sector
- **Study design and measurement of work-life construction in the education sector.**

Designs of research

The results from previous studies were using cross-sectional comparative design ideas in this evaluation, relied on the particular source and personality data collected, and carried out the individual-level analysis. Only studies included in this review used frequency surveys, two diary studies, or used four multi-source data used. These findings are consistent with the findings of the **Casper et al. (2007)** family work-study reviews.

The reflective practice on experts, including working women, is easy to understand due to the increased involvement of participants in the workplace in many nations in the last few years (**Cooke, 2010**) and the fact that women in specific areas are more often required in this review to balance work and family roles and obligations than their male colleagues.

Scales to quantify negative WLI

Many measures developed in the Western context have been used to discuss work-life issues. These measures are often multidimensional (e.g., work-family conflict or work-family enrichment) or involve both directions (e.g., work-family conflict and family-work conflict).

Scales to quantify positive WLI

This shows all of the measures (multi-items) used to capture the positive aspects (enrichment) of WLI in the education sector. The work-family enrichment measure developed by Carlson et al. (2006) appears to be the most commonly adopted measure when the study found the positive side of the WLI. This may be because the measure has been widely validated and has been used in several work-family studies.

Analyses that enhance the comparative assignment balance of issues and work-family culture

No dominant construction was used to quantify the productivity of employees, especially in comparison to dispute and advancement measures. Moreover, the work-life balance scales used during WLI are often one-dimensional. A percentage of work-life balances are included in **Brett & Stroh's, 2003; Haar's, 2013; Lawler, & Lei, 2007.**

Summary and discussions

Many significant results have contributed to our study of how distinct work-life structures have been evaluated in the education sector. We learned first, usually; studies have paid greater attention to calculating the WLI's negative side (i.e., work-family conflict) than the WLI's positive side (i.e., work-family enrichment). The positive side (i.e., enrichment of work-life, positive spillover), though **Eby, Casper, Lockwood, Bordeaux, and Brinley (2005)** Observed that Modern studies have switched from concentrating on the negative side of WLI in early work to the positive side, in line with WLI's positive side. The optimistic trend in psychology since the early 2000s (see also **Siu et al., 2015**).

Second, the present study, similar to the review of **Casper et al. (2007)**, found that well-validated conflict or enrichment between work and family Western measures (e.g., measures developed by **Carlson et al., 2000; Carlson et al., 2006; Netemeyer et al., 1991; Gutek et al., 1991; 1996**) was commonly used in education sector to capture work-life problems. However, compared to meta-analytic analytics from **Casper et al. (2018)**.

➤ **Work-life history structures**

The variables in work and non-work areas that may promote or hinder the work-life experiences of individuals have been examined by a growing number of studies. To help organizations develop programs and support employees to maintain work-life balance, knowledge of the antecedents of different work-life constructs is important (**Zheng, Kashi, Fan, Molineux, & Ee, 2016**).

Interpretations related to work

Baral and Bhargava (2010, 2011) focused on the theory of social exchange and the theory of organizational support to argue that positive Organizational commitment perceptions and work-life policies are key to helping employees manage their work and family responsibilities, which in India lead to work-family enrichment.

Non- interpretations related to work

Aryee et al. (2005) discovered a negative relationship between the family involvement of new families and work-family enrichment. Other researchers have identified family support as a key precedent of work-family or family-work enrichment. (**2011 by Baral & Bhargava**). In a study of the manufacturing and information and communications technology industry in India, core self-evaluations of employees were found to predict family-work enrichment (**Baral & Bhargava, 2011**).

Summary and Discussions

In conclusion, our analysis highlighted that much attention has been paid to factors such as long hours and work overload that cause work-family conflict. This is representative of the rapid growth witnessed in the economy. (**Budwar et al. 2016**), and a higher number of irregularly working women (**Cooke, 2010**), contributing to greater pressure on workers to manage the roles of work and family. Second, we found several common work-family dispute antecedents to those highlighted in meta-analytical work (**Michel et al., 2011**), such as support for organizations, managers, and colleagues, and family-friendly practices, support for communities, and social support. In our study, however, several additional histories of work-life constructs were found, and include interpersonal conflict at work, organizational constraints, monthly salary, servant leadership, elderly domestic.

➤ **Work-life results Structures**

Work-related outcomes

The conflict between work and family has been found to have a detrimental effect on job satisfaction in the education sector (**Rathi & Barath, 2013**). The work-family culture has been linked to Indian employees' job satisfaction and organizational commitment (**Baral & Bhargava, 2010**). Work-family enrichment has also been believed to impact work commitment (**Aryee et al., 2005; Baral & Bhargava, 2010**).

Non-work-related outcomes

Most studies have centered, far more than other nations, on health and well-being effects. Studies have found, for instance, negative effects on psychological anxiety, depression, and distress of working women, employed parents, and working couples with children from both work-family conflict and family-work conflict. (e.g., **Seto et al., 2004; Shimada et al., 2010; Shimazu et al., 2010; Shimazu et al., 2013**).

Description and discussion

A small number of studies have investigated its relationship to the work habits of workers, despite a large body of literature on WLI's effects, such as employee work attitudes and well-being. Furthermore, while we found that empirical work in the education sector on the WLI based on similar findings to those reviewed in meta-analytical work drawing (**Amstad et al., 2011**).

➤ **Moderators of work-life constructs**

Work-related moderators

Researchers have started to pay attention to the factors related to work that moderate the relationship between work-life structures. Examining the work-life balance of scholars **Soomro et al. (2018)** highlighted that the relationships between three predictors, work-life balance, work-family conflict, and family-work conflict and employee performance as an outcome variable are negatively moderated by job satisfaction.

Non-Work-related moderators

Lau, Wong, and Chow (2013) reported in a survey of full-time working parents in Hong Kong that a proactive personality. The relationship between work-family conflict and results, including life satisfaction, social networks,

and private networks, has been mitigated. Development, in such a way that the negative effects of conflict between work and family were weaker for individuals with higher levels of proactive personality.

Summary

Our analysis is among the first to define different moderators of the relationship between WLI constructs and their effects (i.e., personality attributes, norms of peer drinking, and individualism/collectivism). Although previous research highlights several factors at the individual level that may moderate the relationship between WLI and its educational sector outcomes, the role played by culture, economic and institutional factors as moderators remain less clear. This is a gap that can be addressed in future research.

Opinions and instructions for study in the future

Despite growing interest among WLI researchers in the education sector, there has been no systematic analysis to date on how the results from WLI research in the education sector differ, and how the context in the education sector could affect the perceptions and experiences of work-life of employees. We sum up our research in the following parts and highlight prospects for empirical and theoretical advancement of the WLI literature in the education sector.

Limitation

In this analysis, we recognize a range of limitations. First, while new variables have been established that affect work-life systems and their outcomes in the education sector, many results have been found, with some exceptions. It is difficult to ascertain the exact explanation for discrepancies or similarities in education without doing cross-cultural research or doing a study of all WLI studies to make a comparison. Therefore, future research should suggest performing cross-cultural work in multiple sectors to make comparisons based on facts. Second, although our analysis established a range of factors such as cultural, economic, and institutional factors that influenced WLI in the education field, economic and institutional factors seem to have a weaker impact on WLI than cultural factors. To some extent, the variations found in the sense of the education sector may not be reliable due to cultural differences because some of them are different from other cultures, conclusions differed. This may be because at the time of study designs, samples, or particular political or economic circumstances. More study is therefore needed to determine why variations have arisen between cultures.

Conclusion

In conclusion, this present study explores the context and findings of main work-life constructs in the education sector, such as work-life balance, work-family conflict, enrichment of work-family, and work-family culture. This systematic analysis emphasizes the network of constructs correlated with various work-life constructs and the hypotheses that have been used to understand how the work-life experiences of workers evolve and how they affect the effects of work and non-work. Second, several concerns relating to the methodological shortcomings of work-life structures were highlighted in the study. Second, we highlighted that Confucianism and collectivism seem to play the most important role in explaining the disparities between workers in the education sector, the ethics of Protestant work, and economic and institutional factors in WLI. Finally, we addressed areas for future research that could expand the network of factors that affect work-life systems and alternate theoretical bases to direct future research. As such, this analysis provides a valuable framework for the design of future research that explores how the cultural, economic, and institutional context in the education sector affects the work-life experiences of employees and the effect on different work and life outcomes of those experiences.

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HDI as Reflector of Quality of Life: A Comparative Study of Some South Asian Countries

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Abstract

Though economic Indicators are important to assess the development of any nation, but, this alone cannot capture the level of human potential and the quality of life. Development is to improve the quality of people's lives by creating an environment for them and to engage in a wide range activities to be healthy, well-nourished, to be knowledgeable and to be able to participate in the community life. The Most acceptable Measure of these all things is the 'Human Development Index' (HDI). The HDI is a multi-dimensional index of development as it is the combination of three development indices- life expectancy at birth or health index, adult literacy rate or education index and economic benefits expressed by production or income index. The proposed paper is an attempt to compare the HDI and its components between various South Asian countries. The study is based on secondary data. The HDI was first developed in 1990 under the United Nations Development Program (UNDP) and is published as Human Development Reports (HDR). At present, it has become the most widely used complex indicator for international comparisons and assessments of the achieved development level of a particular country or region. Although along with developed countries, developing countries have also launched several schemes to improve the health indicators, to provide education to every child and to alleviate poverty, still some countries have a long way to go in achieving an acceptable HDI.

Keywords: Developing countries, Human Development Index, indicators of HDI, UNDP.

Introduction

Human development is one of the most important component of social sector development and role of human development in facilitating social and economic progress is well recognised. For many years growth has been a major economic goal of policy makers as delivering a larger quantity of goods and services is the best way to improve people's standard of living. But quality of people's lives can be poor in the midst of plenty so undoubtedly more economic growth is needed but more attention must go to the structure and quality of that growth-to ensure that it is directed to supporting human development, reducing poverty, reducing inequalities, protecting the environment and ensuring sustainability.

South Asia, in general, and countries in the region (especially India), in particular, have experienced unprecedented growth since 1991s. It helped in poverty reduction and raised the human development index. However, though there is hardly any improvement in the relative HDI ranking. Despite the high growth rate, the absolute number of people in poverty has not gone down, and health and education are still areas of serious concern. The region is still grappling with the problems of human development, both in absolute and relative terms.

Amartya Sen also emphasized that the case of human well being is freedom of choice. Both the fasting monk and the starving pauper may be hungry-the difference is that one exercises a free choice, and the other does not. Human development goes far beyond income and growth to cover the full flourishing of all human capabilities. Human development reports have defined Human Development as the process of enlarging people's choices. The most critical areas are to lead a long and healthy life, to be educated and to enjoy a decent standard of living.

The region has to increase economic growth. It also needs to focus on the character of the growth process, including its equity and sustainability. The agenda for achieving the new patterns of people-centred growth must include. Accelerating economic growth to improve human development with special focus on education, health and population control. Formulating employment generating growth strategies to ensure inclusion of women, youth, uneducated, unskilled, minorities and disabled and ensuring the long-term sustainability of growth by giving more attention to poverty reduction and people's empowerment.

HDI

The Human Development Index (HDI) is a composite statistic used to rank countries by level of “human development”, taken as a synonym of the older term standards of living or quality of life, and distinguish “very high human development”, “high human development”, “medium human development”, and “low human development” countries.[3] It measures the average achievements in a country in three basic dimensions of human development: A long and healthy life, access to knowledge and a decent standard of living. The HDI is the geometric mean of normalized indices measuring achievements in each dimension depicted in Figure 1.[4]

Health index

Health index is constructed using life expectancy at birth, which is indicative of a long and healthy life.

- Life expectancy at birth: Number of years a newborn infant could expect to live if prevailing patterns of age specific mortality rates at the time of birth stay the same throughout the infant’s life.[4]

Education index

Education index is constructed using adjusting mean years of schooling and expected years of schooling

- Mean years of schooling: Average number of years of education received by people ages 25 years and older, converted from education attainment levels using official durations of each level.[4]
- Expected years of schooling: Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child’s life.[4]

Income index

Income index is constructed from gross national income (GNI) per capita.

- Gross national income (GNI) per capita: Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using purchasing power parity (PPP) rates, divided by midyear population.[4]

Non-income HDI

Value of the HDI computed from the life expectancy and education indicators only.

New method for 2011 data onwards

Published on 4 November 2010 (and updated on 10 June 2011), starting with the 2011 Human Development Report the HDI combines three dimensions:

- A long and healthy life: Life expectancy at birth
- Education index: Mean years of schooling and Expected years of schooling
- A decent standard of living: GNI per capita (PPP US\$)

Other studied Indices to note development

- Quality of Air Index
- Governance Index

Views of Economic Giants

Asian Development Bank

Stance of Asian Development Bank (ADB) about inclusive growth is stated by Klasen (2010) as a strategic pillar for guiding the activities of the Asian Development Bank (ADB). ADB's Strategy 2020 about concept of inclusive growth was demonstrated by Zhuang (2010); Ali and Zhuang (2007). This strategy is based on three main pillars, which is more elaborated by Ali (2007); Zhuang (2010). First is the expansion of economic activities which lead to increase the employment opportunity, second is the expansion of social inclusions which leads to equal access towards opportunity and lastly the enhancement of social safety nets by increasing the government expenditures on welfare. Along with three pillars existence of strong institutions with a good level of governance is also key feature for inclusive growth. Bottom-line is that according to ADB increased economic activity, greater level of social inclusion and social safety nets along with a good governance leads to inclusive growth.

UNDP

Version of UNDP about inclusive growth described by Klasen (2010) in this way that inclusive growth is process and outcome, income and non-income, and participation and decision making. On the other hand World Bank's

version is expressed in the words that inclusive growth focuses on productive employment which shows that World Bank define inclusive growth as a part of process of growth and measure it as income as well as non-income measures. Similar argument is made by Commission on Growth and Development (2008).

World Bank

World Bank's approach of inclusive growth is more elaborately described as sustainable inclusive growth guarantee by enhancing the productivity of employment. This will also generate job opportunities as well as increase the income of individuals. So according to Ianchovichina and Lundstrom (2009) inclusive growth reduce the unemployment as well as underemployment, which is the major problem of developing countries. Similarly, according to Anand, Tulin, and Kumar (2014) well-educated labor force is the building block of inclusive growth and poverty reduction for India. So the Indian states which have greater educational expenditures have attained inclusive growth. Poverty and inequality cannot be reduced without good governance as Balakrishnan et al. (2013) stated that research of International Monetary Fund (IMF) high level of corruption leads to poverty and inequality. In case of two growing economies of Asia (i.e., China and India), corruption is considered as a crucial challenge, so governments are considering governance reform on its top agenda point.

Objective of the Study

The present study aims at analysing and comparing the human development in south Asia with special reference to decade growth rate from 1990 to 2000 then 2000 to 2010 and lastly 2010 to 2020.

Database and Methods of Study

UNDP report 2020 is used as database. In present study the decade growth indicator is used for analysing and comparing the human development in South Asia from 1990 to 2000 then 2000 to 2010 and lastly 2010 to 2020.

Result and Discussion

Southern Asia is a term used to represent the southern region of the Asian continent, which comprises the sub-Himalayan SAARC countries and, for some authorities, adjoining countries to the west and east. The current territories of Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, India, Pakistan and Sri Lanka form the countries of South Asia. South Asia covers

about 5.1 million km², which is 11.51% of Asian continent or 3.4% of the world's land surface area. The population of South Asia as about 1.721 billion. India is the largest and fastest growing economy in the region and makes up almost 82% of South Asian economy. India is the only member of powerful G-20 major economies and BRICS from the region. It is the fastest growing major economy in the world. Pakistan has the next largest economy and the 5th highest GDP per capita in the region. The current study includes all the countries of South Asia.

Table 1.UNDP Report 2020

HDI RANK	Human Development Index (HDI)								Change in HDI rank	Average annual HDI growth			
	Value									(%)			
	1990	2000	2010	2014	2015	2017	2018	2019		1990-2000	2000-2010	2010-2019	1990-2019
185 South Sudan	-	-	0.410	0.428	0.425	0.426	0.429	0.433	-3	-	-	0.61	-
187 Chad	-	0.293	0.369	0.401	0.398	0.396	0.397	0.398	-1	-	2.33	0.84	-
188 Central African Republic	0.334	0.325	0.365	0.368	0.375	0.391	0.395	0.397	-1	-0.27	1.17	0.94	0.60
189 Niger	0.220	0.262	0.331	0.365	0.372	0.386	0.391	0.394	-1	1.76	2.37	1.95	2.03
Other countries or territories													
Korea (Democratic People's Rep. of)	-	-	-	-	-	-	-	-	-	-	-	-	-
Monaco	-	-	-	-	-	-	-	-	-	-	-	-	-
Nauru	-	-	-	-	-	-	-	-	-	-	-	-	-
San Marino	-	-	-	-	-	-	-	-	-	-	-	-	-
Somalia	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	-	-	-	-	-	-	-	-	-	-	-	-	-
Human development groups													
Very high human development	0.782	0.826	0.870	0.885	0.889	0.894	0.896	0.898	-	0.55	0.52	0.35	0.48
High human development	0.567	0.629	0.705	0.730	0.735	0.744	0.748	0.753	-	1.04	1.15	0.73	0.98
Medium human development	0.433	0.492	0.571	0.601	0.609	0.624	0.627	0.631	-	1.29	1.50	1.12	1.31
Low human development	0.345	0.381	0.468	0.497	0.500	0.507	0.509	0.513	-	1.00	2.08	1.03	1.38
Developing countries	0.517	0.571	0.642	0.668	0.673	0.683	0.685	0.689	-	1.00	1.18	0.79	1.00
Regions													
Arab States	0.556	0.614	0.676	0.687	0.691	0.699	0.702	0.705	-	1.00	0.97	0.47	0.82
East Asia and the Pacific	0.517	0.595	0.688	0.718	0.724	0.735	0.740	0.747	-	1.42	1.46	0.92	1.28
Europe and Central Asia	0.662	0.675	0.739	0.772	0.775	0.785	0.787	0.791	-	0.19	0.91	0.76	0.62
Latin America and the Caribbean	0.632	0.690	0.736	0.756	0.759	0.762	0.764	0.766	-	0.88	0.65	0.44	0.67
South Asia	0.437	0.501	0.580	0.612	0.620	0.635	0.637	0.641	-	1.38	1.47	1.12	1.33
Sub-Saharan Africa	0.404	0.426	0.501	0.530	0.535	0.542	0.544	0.547	-	0.53	1.63	0.98	1.05
Least developed countries	0.353	0.403	0.489	0.513	0.520	0.531	0.534	0.538	-	1.33	1.95	1.07	1.46
Small island developing states	0.599	0.646	0.706	0.715	0.720	0.724	0.726	0.728	-	0.76	0.89	0.34	0.67
Organisation for Economic Co-operation and Development	0.786	0.835	0.874	0.888	0.891	0.896	0.898	0.900	-	0.61	0.46	0.33	0.47
World	0.601	0.644	0.699	0.720	0.724	0.732	0.734	0.737	-	0.69	0.82	0.59	0.71

From Table 1 we see that growth rate of South Asia from 1990 to 2000 was 1.38 %, while growth rate of South Asia from 2000 to 2010 was 1.47 % and growth rate of South Asia from 2010 to 2020 was 1.12 % only.

This shows that 2nd decade had been best amongst studied three decades while 3rd decade had been worst amongst studied three decades. The reasons for fall in HDI from 2010 to 2020 can be attributed to many factors like political instability, or lack of implementation of various programs by Governments and so on.

Conclusion

From the study, it is concluded that the study of the Human Development Index is generally regarded as a key factor in countries' industrialization and modernization. It is also necessary to make deliberate efforts to implement non-educational policies along with educational policies that promote greater human growth, such as policies to enhance early childhood health and nutrition, build a favorable business climate, and improve national infrastructure.

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Innovative Approach on Sustainable Development Goals in Haryana: Vision-2030

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Abstract

Haryana covers around 1.34 percent geographical areas of the country, India, and comparing 2.9 percent of its total population. Since 2004-05, Haryana has outperformed the National GDP growth rate for 9 out of 13 years. This state has several areas of improvement charted out in India's human development report 2011. It ranks poverty on key human development indicators which suggests the need to renewed and focused efforts to achieve its full potential. Indian Government has spelt out its vision to transform India into a prosperous, healthy, secure, and highly motivated, energy abundant, environmentally clean and globally influential nation by 2031-32. In view of this the strategies and areas chosen by the Government of Haryana based on UN SDGs for 2030 embraces the PM's transformation 8 point agenda. The proposed paper has made an attempt to explain the agenda in detail for its comprehensive understanding and further help us to get an innovative approach to reach the vision successfully.

Keywords: Innovative Approach, Sustainable Development, Human Development Report, Vision 2030.

Introduction

United Nations adopted the Millennium Development Goals (MDGs) as an outcome of deliberations in the United Nations Millennium Summit on 8 September 2000. It gave a new vision to the global efforts on development over the next 15 years. The Report of the United Nations Conference on Sustainable Development held in Rio-de-Janeiro, Brazil in June 2012 (also known as Rio+20) called "The Future We Want" paved the way for formal consultations on post-2015 development agenda in the

form of Sustainable Development Goals (SDGs) based on three dimensions of development, economic, social and environmental. Agenda for Sustainable Development 2030 was adopted by all United Nations Member States in 2015 which provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. There are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries-developed and developing-in a global partnership. They recognize that ending poverty, gender inequality, hunger and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth. SDGs are viewed as extensions of MDGs with sustainability parameter added to each MDG to be implemented in the post-2015 era along with a set of all new goals which were ignored in the MDGs. Thus, SDGs are a set of 17 specific goals offering special focus on important areas related to sustainable development that require urgent and extensive attention at present and in the near future. The SDG framework undertakes to provide systematic solutions to the obstacles identified in case of the MDGs like inequality, sustainability, institutional resource fullness, implementation efficacy, environmental deterioration, etc. In order to set the background for SDG for the next 15 years, we must evaluate the impact of SDGs in India. At 44,212 sq km, Haryana covers 1.34% of India's geographical area and comprising 2.9% of India's population. The population density of the state is 573 persons per sq km with a sex ratio of 879 females per 1,000 males.

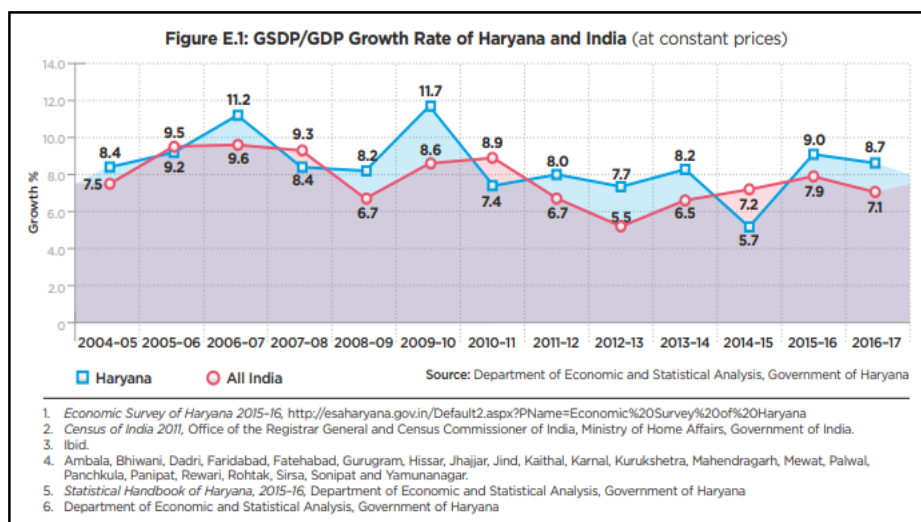
On the other hand, with the fast-paced economic growth of India, Haryana too has witnessed healthy growth in its gross state domestic product (GSDP) averaging 8.6% per annum since 2004- 05 making it a sign cant contributor to the national growth story. The last released India Human Development Report in 2011 points out that Haryana has several areas of improvement charted out in its human 22 development agenda. The state has witnessed a concentration of poverty in its rural areas with deeper poverty in low-income districts. The per capita income of the richest district of Haryana was 3.7 times that of its poorest district in 200405, a ratio that jumped to 8.6 in 201314, showing a sharp increase in inter-district 23 income differentials. A typical household in Gurugram (a prosperous and largely urban district) consumes on average 33,881 per month versus 5,097 in Mewat (a poor and largely rural 24 district). Since Haryana is contiguous with the north. Despite high productivity in agriculture, malnutrition and other deprivations including challenges related to the health and nutrition of children remain widespread. Though Haryana has consistently outperformed other states in terms of economic and agriculture growth, it ranks poorly on key human development

indicators, which suggests the need for renewed and focussed efforts to achieve its full potential.

The UN General Assembly in September 2015 adopted a global development vision entitled Transforming Our World: The 2030 Agenda for Sustainable Development. This 2030 Agenda was designed as a plan of action for people, planet and prosperity. It lays out 17 new Sustainable Development Goals (SDGs) and 169 targets, to stimulate global action over the next 15 years on issues critical to humanity and the planet. It recognizes that ending poverty must go hand-in hand with strategies that build economic growth and addresses a range of social needs including education, health, social protection and job opportunities, while tackling climate change and environmental protection. India committed to these SDGs at the September 2015 UN Summit and the SDGs officially came into force on 1 January 2016. Within India, the NITI Aayog has been entrusted with the role of coordinating the implementation of the SDGs. In view of India's commitment to the 2030 Agenda, Haryana too has set itself targets for achieving the SDGs within the state. The state aims to align its existing schemes and programmes with the SDG targets and prepare a Vision 2030 document and an action plan for achieving these goals. In the coming years, Haryana sees itself evolving as a development leader, not only in the country, but also in South Asia, making its presence felt in the global arena.

About Haryana

Haryana is a land locked state in northern India that lies between 27°39' N and 30°35' N and between 74°28' E and 77°36' E. The altitude of Haryana varies 1 between 700 ft and 3,600 ft above sea level. At 44,212 sq km, Haryana covers 1.34% of India's geographical area and is home to 2.53 crore people that is, 48.58 lakh households (30.44 lakh rural plus 18.14 lakh urban) comprising 2.9% of 2 India's population. The population density of the state is 573 persons per sq km with a sex ratio of 879 females per 1,000 males. Though Haryana has witnessed gradual urbanization since 2001, as per 3 the Census of 2011, 65.1% of its population (1.65 crore persons) still lives in rural areas a drop of 6 percentage points from 71.1% recorded in the Census of 2001. Haryana is divided into six 4 administrative divisions and has 22 districts constituted by 140 blocks, 154 towns and 6,841 5 villages. With the fast-paced economic growth of India, Haryana too has witnessed healthy growth in its gross state domestic product (GSDP) averaging 8.6% per annum since 2004/05 making it a significant contributor to the national growth.



Haryana SDG Vision 2030

Aligned to Prime Ministers 15-year Long-term Vision for India from 2017 to 2032 (Based on the Third Governing Council Meeting of NITI Aayog on 23 April 2017) Honorable Prime Minister of India Shri Narendra Modi has spelt out his vision to transform India into a prosperous, highly educated, healthy, secure, corruption-free, energy abundant, environmentally clean and globally influential nation by 2032. In line with the strategies and focus areas laid out in this Vision document, based on the United Nations Sustainable Goals for 2030, Government of Haryana embraces the PM's Transformative 8-point Agenda as enumerated in the table below:

Table 1. PM's Transformative Agenda and Haryana's SDG Vision 2030

PM's Transformative Agenda	Haryana SDG 2030 Vision	Haryana Targets 2030
Prosperity not Poverty	SDG 1 No Poverty SDG 2 Zero Hunger	Eradicate extreme poverty Housing for all 100% Open Defecation Free Status in rural and urban areas Reduce the percentage of underweight and wasted children to nil Per capita availability of milk to be greater than 1,250g per day

	SDG 4 Quality Education SDG 5 Gender Equality SDG 8 Decent Work and Economic Growth SDG 10 Reduced Inequalities SDG 11 Sustainable Cities and Communities	Net enrolment ratio at pre-primary level 100%; primary level 97%; upper primary level 95% Attain sex ratio of 1,000 girls per 1,000 boys for children aged 06 years } Decrease the unemployment gap between men and women to 0% Reduce the proportion of crime against women to total crime to 12% Lower the rate of domestic violence among partners to 17% Diversify industrial growth to emerging sectors to generate employment to the tune of 18 lakh Increase the number of houses constructed under affordable housing schemes to 6.65 lakh
Justice not Injustice	SDG 10 Reduced Inequalities SDG 16 Peace, Justice and Strong Institutions	50,000 persons with disabilities to undergo skill development and job training 40,000 soft loans to be provided to scheduled castes and 20,000 to backward classes for income generating schemes Increase the number of police stations to 500 Increase the percentage of women in the police force to 20%
Cleanliness not Impurity	SDG 6 Clean Water and Sanitation SDG 12 Sustainable Consumption and Production	100% drinking water for rural and urban areas 100% sewerage system coverage in urban areas Increase the solar renewable energy purchase obligation to 5000MW Reduce the quantity of total pesticides used in agriculture by 18.30MT
Transparency not Corruption	SDG 9 Industry,	Increase the number of police stations to 500 }

	<p>Innovation and Infrastructure SDG 16 Peace, Justice and Strong Institutions SDG 17 Partnerships for the Goals</p>	<p>A State Resident Database (SRDB) is being built to drive direct benefits transfer schemes across departments and weed out ghost beneficiaries</p> <p>Delivery of G2C e-services through AtalSevaKendras (ASKs) is in progress</p> <p>100% Aadhaar saturation to be obtained in the State</p> <p>Haryana is the state to start the use of Aadhaar Enabled Biometric Attendance System (AEBS) for government employees</p> <p>The state government has already implemented an Integrated Financial Management System and most of the payments from the state treasury are being made through electronic mode</p> <p>Facility has been provided to pay online state taxes using payment aggregator</p> <p>The government has signed an MOU with the State Bank of India to install 3,000 POS machines at various state government offices. Instructions have been issued to all state government departments to encourage receipt of payments of more than 5,000 only through cashless methods</p> <p>100% PradhanMantri Jan DhanYojana (PMJDY) accounts seeded by Aadhaar</p>
	<p>3 SDG 4 Quality Education SDG 5 Gender Equality SDG 8 Decent Work and</p>	<p>95% students in Grades IV to be at grade level competencies in 5 years; 95% students in Grades V to VIII to be at grade level competencies in 7 years</p> <p>All secondary and senior secondary schools to provide skills education</p>

	Economic Growth 33 3	<p>Decrease the unemployment gap between men and women to 0%</p> <p>Diversify industrial growth to emerging sectors to generate employment to the tune of 18 lakh</p> <p>Create 252 training facilities in the state</p>
	<p>SDG 3 Good Health and Well-Being</p> <p>SDG 4 Quality Education</p> <p>SDG 5 Gender Equality 33 33</p>	<p>Reduce maternal mortality rate to 70 per 1,00,000 live births, under 5 mortality rate to 25 per 1,000 live births and neonatal mortality rate to 12 per 1,000 live births</p> <p>Net enrolment ratio at pre-primary level 100%; primary level 97%; upper primary level 95%</p> <p>95% students in Grades IV to be at grade level competencies in 5 years; 95% students in Grades VIVIII to be at grade level competencies in 7 years</p> <p>Attain sex ratio of 1,000 girls per 1,000 boys for children aged 06 years</p> <p>Decrease the unemployment gap between men and women to 0%</p> <p>Reduce the proportion of crime against women to total crime to 12%</p> <p>Lower the rate of domestic violence among partners to 17%</p>
	<p>SDG 3 Good Health and Well-Being</p> <p>SDG 4 Quality Education</p> <p>SDG 7 Affordable and Clean Energy</p> <p>SDG 13 & 14 Climate Action & Life Below</p>	<p>Reduce maternal mortality rate to 70 per 1,00,000 live births, under 5 mortality rate to 25 per 1,000 live births and neonatal mortality rate to 12 per 1,000 live births</p> <p>24 * 7 power for all</p> <p>100% coverage of energy efficient domestic and street lighting</p> <p>100% elimination of stubble burning</p> <p>Establish 400 climate smart villages</p>

	Water SDG 15 Life on Land 33	Increase tree cover by 10% (of gross area)
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Source: <http://esaharyana.gov.in/Portals/0/undp-2030.pdf>

Next Steps for Implementing Haryana SDG Vision 2030

Haryana is well placed to be one of the most developed states of India by 2030 and is committed to ensuring that in coherence with Honourable Prime Ministers transformative Vision of India and through its rigorous integrated approach to development, none of its residents is left poor, uneducated, undernourished and uncared for by 2031³². Meeting its ambitious targets set for 2030 calls for a new way of governance instead of the business as-usual approach. It is resolved to establish an SDG Coordination Centre (as part of the Swarna Jayanti Haryana Institute for Fiscal Management supported by the Finance and Planning Department, Government of Haryana), in partnership with United Nation Development Programme. The main activities of the centre would be to act as a catalyst/resources centre/ think tank/knowledge centre/monitoring post/capacity building centre for all supporting departments and ministries. The SDG Coordination Centre will have the following focus areas: 1. Resource Mobilization & Utilization

- Need: To meet the unprecedented need for human, nancial and physical resources.
- Tool: Resource Planning Board; Integrated Planning Models
- Output 'Seven-year strategic plan based on the inputs of state departments through a workshop on the further elaboration of the step strategic imperatives identified for Haryana to develop sustainably.' Three-year action plan for each department based on the Vision document and aligned to the seven-year strategic plan for the state. 'Outcome-based budget FY 2018 onwards 2. Capacity Building, Awareness Generation & Partnership
- Need: To build internal state capacity on SDGs and support public digital literacy, awareness creation, high quality knowledge management and capacity building system and partnerships
- Tool: Strategy Support Group
- Output: 'New online cortication tools' Awareness workshops 'Public private partnerships' Case studies 3. Change Management & Innovation

- Need: To create new policies, change old rules and laws, start administrative reforms, initiate new instruments and adapt world class best practices.
- Tool: Policy Review Board plus Innovation Lab
- Output: 'Incubation centres in districts' Master trainers 'Innovative pilots/models 4. SDG Implementation in Districts and Villages
- Need: To develop integrated sectoral initiatives through a single IT/technology-based platform which combines the State Resident Database with the Direct Benet Transfer mechanism thus linking citizens service centres in a way that is transparent and corruption free
- Tool: Single Synergized Mega IT Initiative
- Output: Direct Benet Transfer on real time basis 5. Concurrent Monitoring & Data Collection
- Need: To ensure concurrent monitoring of targets and data feedback
- Tool: SDG website and online dashboard
- Output: Bi-annual SDG Review Report

Formation of Cluster Groups

Annex 1: Clustering of SDGs for Working Groups for Haryana

Working Group	SDG Thematic Cluster	Administrative Departments	Chairman of Working Group	Member Secretary of Working Group
Group 1	SDG 1: End Poverty	<ul style="list-style-type: none"> • Development and Panchayats • Agriculture (including Animal Husbandry, Dairy, Horticulture) • Fisheries • Health (Food and Drugs Administration) • Food and Supplies • Revenue • Industries • Urban Local Bodies • Welfare of SCs and ECs • Public Health Engineering • Social Justice and Empowerment • Medical Education 	ACS Development and Panchayats	Director cum Special Secretary, Development and Panchayats
	SDG 2: No Hunger (except nutrition)			
	SDG 12: Sustainable Consumption and Production			
Group 2	SDG 2: Zero Hunger (Nutrition)	<ul style="list-style-type: none"> • Health • Public Health Engineering • Labour and Employment • Women and Child Development • Haryana Urban Development Authority (HUDA) • Urban Local Bodies • Town and Country Planning • Medical Education • Development and Panchayats • Revenue • Social Justice and Empowerment • Agriculture 	ACS, Health Department	Director General, Health Department
	SDG 3: Good Health and Well Being			
	SDG 6: Clean Water and Sanitation			
Group 3	SDG 4: Quality Education	<ul style="list-style-type: none"> • School Education (Elementary and Secondary) • Electronics & I.T. • Higher Education • Industrial Training • Welfare of SCs and ECs • Technical Education • Social Justice and Empowerment • Revenue 	ACS, School Education Department	Director, Elementary Education Department
Group 4	SDG 7: Affordable and Clean Energy	<ul style="list-style-type: none"> • Power • New and Renewable Energy • Urban Development 	ACS, Power Department	MD HVPNL cum Principal Secretary, Power Department
Group 5	SDG 5: Gender Equality	<ul style="list-style-type: none"> • Women and Child Development • Development & Panchayats • Revenue • Social Justice and Empowerment • Welfare of SCs and ECs • Home and Administration of Justice 	ACS, Women and Child Development	Director cum Special Secretary, Women and Child Development
	SDG 10: Reduced Inequalities			
	SDG 16: Peace, Justice and Strong Institutions			
	SDG 17: Partnerships for the Goals			

Working Group	SDG Thematic Cluster	Administrative Departments	Chairman of Working Group	Member Secretary of Working Group
Group 6	SDG 13: Climate Action	<ul style="list-style-type: none"> • Environment • Forest and Wildlife • Mines and Geology • Fisheries • Irrigation • Revenue and Disaster Management and Consolidation • Tourism 	Principal Secretary, Environment Department	Director, Environment Department
	SDG 14: Life below Water			
	SDG 15: Life on Land			
Group 7	SDG 8: Decent Work and Economic Growth	<ul style="list-style-type: none"> • Industries • Development and Panchayats • Urban Local Bodies • Social Justice and Empowerment • Electronics and IT • Public Works (Bridges and Roads) • Transport • Civil Aviation • Agriculture • Labour and Employment • Town and Country planning • Industrial training • Haryana Urban Development Authority • Tourism 	Principal Secretary, Industries Department	Director cum Special Secretary, Industries Department
	SDG 9: Industry Innovation and Infrastructure			
	SDG 11: Sustainable Cities and Communities			

Source: <http://esaharyana.gov.in/Portals/0/undp-2030.pdf>

Conclusion

The ambitious targets set for 2030 call for a new way of governance instead of the business-as usual approach. Haryana must upgrade to a modern digital state with information technology at the core for all sectors. The sustainable development of Haryana is only possible if the state follows the principles in the new way of governance. These are:

- Integrated planning and decentralized implementation instead of the business-as usual route of working in silos.
- Focusing on equitable development instead of the business-as-usual scenario of gender biased and regional imbalance.
- Building human capital through educational attainment and skill enhancement instead of the business-as-usual promotion of economic growth sans job growth.
- Citizen-centric services promoting rule of law, transparency and accountability, instead of the business-as-usual scenario where the ordinary citizens find it difficult to access essential services.
- Green growth instead of the business-as-usual approach of promoting infrastructural and physical growth with scant regard for the environmental implications and natural resources depletion.

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A Review Paper on the Study of Organizational Culture and Dynamics

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Abstract

The knowledge of organizational culture has increasingly received attention among researchers in many fields of study. Every organization has something unique about the way it operates. The ways an organization operates its beliefs, values, objectives and assumption are conceptualized as organizational culture. organizational culture has several dimensions. The culture of an organization, to a very large extent, determines the performance of the individual that work in that organization and by extension the organizational performance. There are several measures of organizational culture, quantitative and qualitative. The proposed review paper is based on secondary sources and focus on the definition and measurement of organizational culture and also sheds the light on the important studies on the topic. Several dimensions of organizational culture will also be explained. The study also proposed to identify the factors that affect reliability of organizational culture measurement; some selected scales of organizational culture are reviewed in this paper. The review paper has also showed a number of studies that linked the relationship between organizational culture and the organizational performance.

Keywords: Organizational Culture, Dimensions, Measurement, Organizational Performance.

Introduction

An understanding of organization culture plays very vital role for someone who is interested in the study of organizational growth and development because it gives an organization a strong competitive advantage. The term 'culture', as applied to human societies of group, has its origin in the

discipline of anthropology (Smircich, 1983). Sackman 1991, suggests that subjectivity of various writers may have a bearing on this lack of consensus. This paper seeks to examine the construct of culture and it relates to organization and its effectiveness by looking at the various dimensions of culture as well as the characteristics of culture.

What is Culture

Getting a universally acceptable definition of culture has been a very difficult exercise for both management and practitioner. Organizational culture uses different definition, different method of determining what they meant by culture, and different standard for evaluating how culture affects organization. Generally accepted definition of culture are as follows-

Meek 1988 agrees that culture studies derive their framework of reference mainly from anthropology and suggests that there is a danger in borrowing concepts from one discipline to applied to another; in complete understanding or inappropriate application can lead to misleading conclusions.

Harrison (1972) describes culture as: that distinctive constellation of beliefs, values, work, style and relationship that distinguishes one organization from another in other words the sum of those aspects of an organization which give it a particular climate or feel.

Baron and Walters (1994) working definition of culture... commonly held and relatively stable beliefs, attitudes and values that exists within an organization.”

According to Schein, Culture is the pattern of basic assumption that a given group has invented. Or developed in learning to cope with its problems of external adaptation and internal integration that have worked well enough to be considered valid, and, therefore to be taught to new members as the correct way to perceive, think and feel in relation to those problem. (as cited in sun , 2008 p: 138)

Culture is “the collective programming of the mind which distinguishes the member of one group or category of people from another” (Hofstede 1994, p: 5)

Cameron (2003) posits that “culture is an enduring slow to change, core characteristics of an organization (as cited in Owoyemi, Ekwoaba, 2014, p: 168)

Concept of Organizational Culture

Hofstede (1991) “organization culture” can be defined as the collective programming of the mind which distinguishes the members of one organization from another”

O ‘Donell and boyle (2008) “organization culture is made up of more ‘superficial’ aspects such as patterns of behavior and observable symbols and ceremonies, and deeper seated and underlying values, assumption and beliefs.”

Agwn (2014) organization culture is the set of shared values, beliefs and norms that influence the way employees think feel and behave in the workplace.”

Meesko (2017) defined organizational culture as a company’s orientation towards its internal stakeholders which forms the basic rules that guide employees’ behaviors, developed and shared within an organization (p .3)

Characteristics of Organizational Culture

As individuals come into contact with organization, they come into contact with dress norms, organizations formal rules and procedures, its formal codes of behavior, rituals tasks, pay systems understood by insider and so on.

Trice and Beyer, 2002 cited by Loisch, 2007 and further cited by Himmer, 2013.

Collective: It is assumed that cultures are not created by individuals alone, but as a result of collective actions. Belonging to a culture involves believing what the group believes and handling things the way they handle them.

Emotional: the substance and forms of cultures are filled with emotions as well as meanings, which is why they help to manage and overcome anxieties. member of a group seldom doubts the core values and attitudes of the organizational culture.

Historic: Cultural phenomena are connected to the history of the organization and its tradition and cannot be separated or changed rapidly.

Symbolic: symbols are on the one hand a specific type of cultural form, but on the other hand they are most general and persuasive form of culture. furthermore, symbols are not directly sizeable, but have to be interpreted in order to understand their meaning.

Dynamic: Even though culture is connected to the organization's history it still is not static, but rather dynamic. Culture changes continually due to several factors.

Diffuse: The more complex the circumstances are, the more diffuse the elements of organizational culture will get.

Robbins and Judge (2011) examine seven basic characteristics of organizational culture:

Innovation and Risk Taking; Attention to detail; Outcome, people orientation; Team orientation; Aggressiveness; and Stability.

Hofstede Model of Organizational Culture

Hofstede sees culture as a programming of the mind which categorizes members of the organization in different sections. Hofstede sectionalized culture into four different levels which are symbols, heroes, rituals and values. According to him, history is the source of values, identity and institutions regulations and under condition of relativism these sections are as follows:

Values: It stands as the life of culture in the organization, values cannot do without ethics and moral identity ability of the employees to be creative on the task to be carried out and able to find out if it suits both the employees and the employers.

Ritual: This is the organization of activities that makes the employees to come together for easy familiarization and socialization as this helps to enhance good relationship among the employees of an organization.

Heroes: These set of employees in the organization are champions they are always taking the trophies, award winner, they can be termed as top achievers. They can be termed as top achievers. The hero always motivates others in the organization (Deal and Kennedy, 1982).

Symbols: this is something that is mostly practice in the organization which can be acts words, gestures and objective that shows different things but has meaning with the group of people or individual.

Methods of Learning Culture

‘Artefacts, Language, Behavior patterns; Norms of behavior; Heroes; Symbols and Symbolic action; Beliefs, values and attitudes; Basic assumption; and history’ (Ahmed, & Shafiq, 2014, p.23)

Importance of Organizational Culture

Every organization has its unique style of working which often contributes to its culture. The beliefs, ideologies, principles and values of an organization from its culture. The culture of the work place controls the way employees behave amongst themselves as well as with people outside the organization.

- The culture decides the way employees interact at their workplace.
- The culture of the workplace also goes a long way in promoting healthy competition at their workplace.
- Every organization must have set guidelines for the employees to work accordingly. The culture of an organization represents certain predefined policies which guide the employees and give them a sense of direction at the workplace.
- No two organization can have the same work culture. It is the culture of an organization which makes it distinct from others. The work culture goes a long way in creating the brand image of the organization.
- The organization culture brings all the employees on a common platform.
- The work culture unites the employees who are otherwise from different background, families and have varied attitudes and mentalities. The culture gives the employees a sense of unity at the workplace.
- The work culture promotes amongst the employees.

Conclusion

Culture has been defined as a way of life of a group of people. It is concerned with how employees perceived the characteristics of their organization not with whether they like it or not. Organizational culture plays a significant role in motivating employees. In other words, we should only encourage those aspects of the culture that will help to shape high ethical standards among employees. This, in turn, will about high productivity among employees and on the aggregate bring about increased organizational performance.

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Fiscal Federalism with Special Reference to Finance Commission in India

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Abstract

Finances play a pivotal report in federal provincial relation. In any federal set up, the Constitution framers have a delicate and complex task of ensuring that there exists resource expenditure equilibrium at all levels of government. But in practice it is almost impossible to have perfect match between the expenditure and resources and there exists asymmetry in expenditures and resources. The mismatch is there in all federal systems though in varying degrees. The idea of establishing Finance Commission was inspired from the Commonwealth Grants Commission of Australia. But in India, the Finance Commission who has much wide range of functions to discharge is not a permanent body and it sits once in five years and its functions are over once it submits its report. The President of India by the recommendation of Finance Commission in respect of the distribution and allocation of the net proceeds of the taxes to be shared between the Centre and States, payment by the Union of grants in aid to the revenue of the States and; other matters relating the Fiscal Federal structure. The recommendations of the Finance Commission are laid before each house of the Parliament along with explanatory memorandum. In this paper the Authors will analyse the mismatch between resources and liabilities as per the present changing financial conditions. In this Paper the authors will analyse constitutional provisions pertaining to Centre-State Financial Relations by putting emphasis upon the expenditure responsibilities of the Union and the States, resources assigned to the Union and the States; and the working of Finance Commission in the Fiscal Federalism.

Keywords: Finance, Fiscal Federalism, Finance Commission, Centre-State Financial Relationships.

Introduction

Finance is the heart and soul of every organization for working on day to day basis. Likewise for generation of revenue both Centre and State governments have taxing powers. The revenue earned from taxes so collected is not sufficient for efficient working of government at State level. For that the Constitution provides for some other modes of revenue generation for creation equilibrium. The Constitution of India expressly provided the provisions for distribution of revenue between Centre and State by making provisions for transfer of a part of Centre's revenue to States through tax sharing.

In order to understand the concept of Federalism let us trace its very first foundation stone. According to some historian's like P. Spear the traces of federalism in administrative elements can be seen from the time of Mughal's specially Sher Shah's land revenue system and taken shape during the time of Akbar's, when he divided his empire into 12 provinces. It has been argued that during the time mughal there was a fluctuation between strong centre and local. Morley Minto Reforms failed to give India a parliamentary form of government. In 1917 the British government made a declaration for involving Indian into administration.

Part XII Chapter 3 of the Constitution of India, 1950 deals with the financial relationship between Union and State government and also contains miscellaneous financial provisions. Power to tax matters contained under Union list rests with Union Government, Power to tax matters contained under State list rests with state government and there is no concurrent list provision thus residuary matters are to be dealt by the Union list.

Finance commission plays a very role in Union-State financial relationship and it can give recommendations under Article 281 of the Constitution of India. Further Article 280 provides that there shall be a Finance Commission to be constituted by the President on expiration of every five year from the date of commencement of the Constitution as per the provision. Finance commission is empowered to make recommendations to the President on the following matters:

- i. Distribution of revenue earned (by the way of taxes) between Centre and State Government
- ii. Grants-in-aids from Consolidated fund of India to States
- iii. Or any other financial matter to the Commission by the President.

There are particular ways in which Union government collects taxes. Those can be broadly divided under four heads (Article 268-270)

- i. Duty charged by Union but collected by States
- ii. Service tax charged by Union but collected both by Union as well as States.
- iii. Taxes charged as well as collected by the Union government but distributed amongst the States and
- iv. Taxes charged and distributed amongst Union and States.

The Indian financial structure have seen lots of instances where there was conflict regarding the distribution of taxes. In the present case there was a conflict regarding whether Union have power to impose tax or State. A narrower interpretation was given in *Union of India v. H.S Dhillon*¹ when the matter came up before the Supreme Court. But later on, this judgment was overruled in *ITC v. State of Haryana*² and it was held that matters under both the list will be given wider interpretation. Matters relating to subject under a particular list will be taxed by the same authority and not by the Union as a power to tax on residuary matter.

Exemption of property from tax

The property and income of states is exempted from the taxes of Union under Article 289. Further the States cannot impose tax on water or electricity used by Union under Article 288. By looking closely into the financial relation between the Union and State government it is very clear that States are empowered to levied tax on the matters contained under the State list thus states are not at all subordinate to the Union for revenue. Only Union government provides for additional revenue as well it acts as a life saver in cases of scarcity of funds by giving loans and grants to states.

In order to understand the role of Finance Commission in respect of Centre-State financial relationship we need to examine the scheme followed by it since its Constitution. There have been thirteen finance commission constituted since its creation. There are as follows-

➤ First Finance Commission³

The First Finance Commission was constituted on 20 November 1951, under the chairmanship of Mr. K.C. Neogy. In practice no particular terms of

¹AIR 1972 SC 1061

²AIR 1981 SC 774

³<https://fincomindia.nic.in/>

reference was spelt out so it has decided its own functions in terms of the provisions of Article 280 of the Constitution. The First Finance Commission reviewed the evolution of Centre-state relationship leading to the relevant provisions in the Constitution. It was now the responsibility of the states to focus on the development and welfare of its citizen. This is further supplemented by the additional revenue supply from centre. But such supplementation was subjected to a certain conditions attached. Those conditions were-

- i. revenue generation power of centre and
- ii. given after the needs of centre were being satisfied.

The First Finance Commission had laid down two major principles that were followed by the subsequent Commissions. The principles are:

- i. while distribution of revenues between different states, principle of uniformity must be followed in case of the determination of grants-in-aid; and
- ii. The aim of distribution of revenue shall focus on curbing the problem inequalities between the different States.

➤ **Second Finance Commission⁴**

The Second Finance Commission was constituted on 1 June 1956 under the chairmanship of Shri K. Santhanam In order to supplement the two principles laid down by the First Finance Commission, an equally important third principle was laid down by the Second Finance Commission. The third principle stated that “on a balance between devolution by transfer of shares of taxes and devolution by fixed grant-in-aid. The sharing of tax was done with the motive to fulfill the gaps between the revenue earned and expenses incurred. Further according to the commission the purpose of Grants-in-aid should be largely be of residuary type and must be given a broader perspective.”

➤ **Third Finance Commission⁵**

The Third Finance Commission was appointed in 1960, chaired by Shri A.K. Chanda and the its other members. The Commission was appointed to give recommendations to the president in respect of

⁴Ibid.

⁵Ibid.

- i. Tax Sharing between the Centre and the State and allocation of Income Tax and Central Excise Duties
- ii. To provide financial assistance by way of Grants-in-Aid to states.

➤ **Fourth Finance Commission⁶**

The Fourth Finance Commission was constituted on 18 May 1964, under the chairmanship of Dr. P.V. Rajamannar, the Commission broadened its own scope. It observed that “there is no distinction between plan and non-plan expenditure in the Constitution. Further the capital expenditure is also falls within the scope of the Finance Commission. On one hand it supported the view of third finance commission by stating that finance commission cannot ‘fill-up non-plan revenue deficits reported by the states’. On the other it differed from the view of the Third Commission that ‘the relative financial weaknesses of the states’ should be the marked as a criterion for determining the shares of states in the divisible pool.”

➤ **Fifth Finance Commission⁷**

The Fifth finance Commission constituted in on 15 March 1968, was of the view that the revenue deficits of states shall be met by the states by raising the finance from different resources. However this will not be a principle which will be followed as it is difficult for any outside authority to judge the policies of the states in respect of taxation, expenditure and investment. The commission came across with a problem that the existing levels of taxations both at the Centre as well as states were not adequately to meet their expenses.

➤ **Sixth Finance Commission⁸**

The Sixth Finance Commission was constituted in 1973 under the chairmanship of Shri K. Brahmananda Reddi. The Commission felt that the provisions of the Constitution relating to Union-state financial relationship had been framed with due care and diligence to meet the demands of changing society. And if there are strains and stress in the society will be curbed by a scheme under which decisions regarding revenue will be taken after the widest possible measure of consultations. With the evolution of concept of economic planning, the commission has acquired a position in developmental activities, cutting across the Constitutional delimitation of powers under the Constitution. As per the scheme of commission devolution

⁶<https://fincomindia.nic.in/>

⁷Ibid.

⁸Ibid.

meant that the resources are for the development of nation and must reach to places where they were required the most.

➤ **Seventh Finance Commission.**⁹

The Seventh Finance Commission was constituted in 1978 under the chairmanship of Shri J.M. Shelat. The major recommendation of the commission was regarding increasing the share of the net proceeds to be shared with states.

➤ **Eight Finance Commission**¹⁰

The Eight Finance commission was constituted in 1984 under the chairmanship of Shri Y.B. Chavan. The Commission followed the same scheme followed by the previous commission in respect of sharing of tax and grant-in-aids. The major objective of the Eighth Finance Commission was to reduce interstate disparities through their scheme of devolution.

➤ **Ninth Finance Commission**¹¹

The Ninth Finance Commission was constituted in June 1987 under the chairmanship of Mr. N.K.P Salve. The Commission was asked to give recommendations as to changing the principles that govern the distribution of net proceeds of central taxes between the union and the states. The Commission recommended that “85% of the divisible pool of the income tax shall be assigned to the state and out of the net distributable proceeds a sum equal to 1.437% should be deemed to represent the proceeds attributable to the union territories. The loans given to the federal states for drought relief during 1986-89 as outstanding on 31 March 1989 are to be waived.”

➤ **Tenth Finance Commission**¹²

The Tenth Finance Commission was constituted in 1995 under chairmanship of Shri Krishna Chandra Pant. The question before the Commission was regarding the grounds on which the shares of Union Territories are to be determined. The Commission recommended that “share cannot be determined on the same grounds used for determining the share of States. The percentage would be 0.927% for the years 1995–2000. The share of the net proceeds would be 77.5% for five years. The distribution of the net proceeds among

⁹<https://fincomindia.nic.in/>

¹⁰Ibid.

¹¹Ibid.

¹²<https://fincomindia.nic.in/>

states would be as 20% on the basis of population, 60% on basis the of distance of per capita income, 5% on the basis of area adjusted, 5% on basis of infrastructure index and 10% on the basis of tax effort.”

➤ **Eleventh Finance Commission**¹³

The Eleventh Finance Commission was constituted on 3 July 1998 under the chairmanship of Prof. A.M. Khusro. The Commission was asked to give recommendations regarding centre-state financial relationship i.e., distribution of the net proceeds of taxes and the allocation between the States of the shares of these proceeds, to formulate principles governing the grants-in-aid given to States out of the Consolidated Fund of India, measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State.

➤ **Twelfth Finance Commission**¹⁴

The Twelfth Finance Commission was constituted on 1 November 2002 under the chairmanship of C. Rangrajan, to make recommendations on the distribution of net proceeds of tax to be shared between union and states. The major recommendation of the Commission was that “the share of tax to be given to State was fixed to 30.5%. The total sum total of grant that to be given to panchayati raj institutions and local urban bodies for the period of 2005-09 will be Rs 200 billion & Rs 50 billion respectively. The total non-plan revenue deficit grant of Rs 568.56 billion is recommended to 15 states and the total grant of Rs 10172 is recommended for 8 educationally backward states.”

➤ **Thirteen Finance Commission**¹⁵

The Thirteen Finance Commission was constituted in 2007 under the chairmanship of Shri Vijay Kelkar. The major recommendations of the Commission were “as regarding increasing the share of tax to be shared by Union with States which is 32%, which is 1.5% points higher than the recommendation of 12th Finance Commission. Both Union and states should conclude 'Grand Bargain' to implement the model Goods and Services Act (GST), as an incentive to the states, the commission recommended a sanction of the grant of Rs500 billion.”

¹³Ibid.

¹⁴Ibid.

¹⁵https://fincomindia.nic.in/writereaddata/html_en_files/oldcommission_html/fincom13/index13fc.htm

➤ Fourteen Finance Commission¹⁶

The Fourteenth Finance Commission was constituted in 2013 under the chairmanship of Dr. Y.V. Reddy. The commission was of view that tax devolution shall be the principal means for transfer of resources to the States. Further the Commission has divided the grants into two categories: “First for gram panchayats and second for municipal bodies. In furtherance grants are of two types i.e., basic grant and performance. The ration of basic to performance grant is 90:10 for panchayats; and 80:20 for municipalities. Eight centrally sponsored schemes (CSSes) will be delinked from support from the Centre¹⁰². There are recommendations on cooperative federalism, GST, fiscal consolidation road map, pricing of public utilities and PSUs, too.”

Thus we can say that Finance Commission has tried to promote and maintain the autonomy enjoyed by the State in financial matters. Further has focused on providing sufficient finance assistance to States who are in need of it.

Fiscal Federalism in Constitution of India

According to Article 268 of the Constitution of India, 1950 there are certain classes of items which taxed by the Centre but are collected by the States. Such as stamp duties duty on toilet preparation, these do not form part of consolidated fund of India. For the legislative purpose these items are kept in Union list but in practice utilizes by the States as a source of revenue.

Article 268(A)¹⁷ was inserted by the Eighty Eight Constitutional (Amendment) Act 2003.¹⁸ According to this provision the taxes on services are to be levied by the Centre and collected by the Centre government as well as the State government in the ratio prescribed by the President. Further in *All India Federation of Tax practitioners v. Union of India*,¹⁹ it was held that it is not true that only State governments have power to collect tax on service and profession. Both the Centre and State shall enjoy jurisdiction on collection of taxes on service by giving it a widest interpretation.²⁰

¹⁶https://fincomindia.nic.in/writereaddata/html_en_files/oldcommission_html/fincom14/index14fc.htm

¹⁷ Article 268 of the Constitution of India, 1950

¹⁸ <http://indiacode.nic.in/coiweb/amend/amend88.htm>

¹⁹ AIR 2007 SC 2990

²⁰ Ibid.

There are two clauses in Article 269²¹ substituted by the Eighty Constitutional (Amendment) Act 2000. As per the Clause (1) of present provision tax on sale, purchase and consignment of goods shall be levied and collected by the Centre, shall be assigned to states in the manner provided by the law of parliament. For the purpose of understanding Sale and Purchase of goods excludes newspaper. Clause(2) further provides that net proceeds so collected in any financial year, except those form part of consolidated fund of India shall be distributed between states in manner provided by the law of parliament. Subject to the amendment 29% of total income from tax and duties shall be assigned to States.²²

The Article 270²³ is substituted by the Eighty Constitutional (Amendment) Act 2000, which provides that taxes and duties under Union List except those provided under Article 268, 268-A, 269 shall be levied and collected by the Union but distributed between Union and States in manner provided by the President on consultation with Finance Commission. In *T.M. Kanniyar v. I.T.O*²⁴ Supreme Court held that “the income tax attributable to Union territories forms a part of the Consolidated Fund of India. It is not necessary to make any distribution of income tax with respect to Union territories as those territories are centrally administered through the President.”²⁵

According to Article 271²⁶ the Parliament by law may increase or decrease surcharge on duties and taxes which is not to be distributed forming part of consolidated fund of India.

The Article 276²⁷ empowers the State to levie and collect tax on trade, profession, calling and employment. These taxes are collected to be used by the State, municipalities and local bodies. In *All India Tax practitioners v. Union of India*²⁸ The issue was with regard to legislative competency of Union to levy tax on Chartered accountant. The appeal was dismissed and the Supreme Court defined the term services as the services are broadly classified as Performance service i.e., practising chartered accountants, travel agent etc and Property based services i.e., architects, engineers etc.

²¹ Article 269 of the Constitution of India, 1950

²² Narendrakumar, “*CONSTITUTIONAL LAW OF INDIA*”, Allahabad Law Agency, Faridabad, 2015, pp.898

²³ Article 270 of the Constitution of India, 1950

²⁴ (1968) ITR 244

²⁵ Ibid.

²⁶ Article 271 of the Constitution of India, 1950

²⁷ Article 271 of the Constitution of India, 1950

²⁸ AIR 2007 SC 2990

Grants-in-Aid

Other than the source of finance, the Union of India provides for certain grants to States. Grant is basically transfers of resource from Union to State. Under the Constitution of India grants are discussed in following provisions:

1. Grants in lieu Article 273

Earlier in the Government of India Act, there was a provision regarding sharing of net proceeds of jute export duty by the centre with its provinces. But there is no as such provision in the Constitution of India. As per Article 273 from the period of 10 years from the commencement of the Constitution, the jute growing states of West Bengal, Bihar, Orissa and Assam will receive grants-in-aid from the Union in lieu of the above share of the jute export duty.

2. Fiscal Grants Article 275

The present Article 275 was amended by Twenty second Constitutional (Amendment) Act 1969. The Parliament is empowered to provide fiscal grants to states that are in need of financial assistance as per the President on recommendation of Finance Commission.

3. Specific Purpose Grants Article 275

Article 275 also provides for some specific purpose grants to meet developmental schemes for promotion and welfare of Schedule Tribe and for administration of Assam and other autonomous state as prescribed by the President of India.

4. Article 282

Article 282 gives power to Union and the State to give discretionary grants in aid for specific purposes. The term used public purpose in Article 282 gives a very wide ambit to the Article with respect to grant in aid. Article 282 is out of purview of finance commission it is discretionary and granted to meet specific purposes. The financial planning of a State largely depends upon the Grants under Article 282 as substantial amount of revenue is allotted under this provision. There are many centrally sponsored schemes like 'UDAAN i.e., Udey Dish kaaaamnagrik', 'Ladli Lakshmi Yojana, 'Make in India' etc are dependent upon the grants given under this provision. This provision gives power to the Union government to make discretionary grants to the States for carrying out some specific tasks such as upliftment of scheduled class and scheduled tribes or to render social services. By virtue of Article

282 the rants can be of any subjects whether they fall in List I, List II or List III of seventh schedule of the Constitution.

The concept of fiscal federalism under this Article stands diluted as it promotes the unity trend through these grants. The autonomy of States is very often encroached by the Union government. This unrestricted discretion on the part of the Union evolves concept of favouritism and nepotism in financial relation of Union and State. As the ruling party at the Centre will always favour the same at the State level leaving behind the other States which are in need of financial assistance.

In *Bhim Singh v. U.O.I & Ors*²⁹, it was held that “both Articles 275 and 282 are sources of spending powers under the Constitution. Article 282 acts as an enabling provision to allow the Union or the State to make any grant by conferring the widest possible power.”

Borrowings

The Union government can borrow upon the consolidated fund of India within the prescribed limit if fixed by the Parliament that means the power to raise foreign loan rests with Union under List I Entry 37. Same as Union's power to borrow loan, the States also have power to do so under the limit prescribed by the State legislature. But States cannot borrow from Foreign Nations it can only borrow on the Consolidated Fund of State within the territorial limits. Furthermore Government of India has certain powers in respect of borrowings by State. Government of India can give loan on guarantee of Consolidated fund of State Government on behalf of State can give guarantee. Prior permission of Government of India is required by State before raising loan from any other source. But such power to raise loan or borrowings is subject to certain limits that a State cannot borrow when already taken loan was not repaid back.

The Sixth Schedule Area and Taxing Regime

The taxing regime in India itself is a complex scenario let alone the schedule area. With a continuous struggle between the Centre and the State as to who shall have a lion's share of the revenue, the matter becomes much more intriguing in the union territories; under this complexities, two propositions is sparingly and frequently put forward, the first one being that the State are the real actors running the states therefore, it is them who shall have the lion's share of the revenue and the other being that it is the Union without which the

²⁹AIR 2010 SC 358

machinery of the State cannot mimic as a functional machinery, therefore, it is the Union who shall have the lion's share of the revenue. However, the endeavour for discerning a compromise between the two Sovereign powers is yet to materialize, but under the present chapter, effort has been made to comprehend the taxing situation in the scheduled areas, which forms an essential part of the Indian democracy and possess potential of augmenting or abrogating financial growth of India.

Strains in Centre-State Financial Relations

The responsibility of the States, after the reform in 1991 has been increased the need of the basic services of the people. Over the years, the Centre has become more powerful in terms of revenue while the States are overburdened with more financial responsibilities. Several Commissions and Committees were appointed by the Union Government to deal with the problem in Centre-State Financial relations. The frictions between Centre and States were not resolved. These issues are as follows:

Regional Imbalances

Since First Five Year Plan, regional imbalances were of the core concern and almost every successive plans have stressed the need to develop these areas. The Twelfth Five Year Plan, noted that the regional imbalances continue to prevail with visible gaps in production and consumption (sales), as the northern and central regions account for bulk of the exports.³⁰ Good governance at the State level is the best way to realize the benefits of public investments.

Vertical Imbalance in Resource Sharing

The contributing areas agriculture, education, skill development, provision of health services, welfare of weaker sections etc. are in the dominion of States. As the Sixth Finance Commission observed, "When the emphasis is on social justice, there is no escape from realignment of resources in favour of States, because services and programmes which are at the core of a more equitable social order come within the purview of the States under the Constitution."³¹

³⁰ Government of India, Planning Commission Report, *Twelfth Five Year Plan (2012-17)*, Vol. II, p. 402

³¹ Government of India, *Report of the Commission on Centre-State Relations (Punchhi Commission)*, Vol. III, 2010, p. 48.

Growing Central Expenditure on Functions in the State List

These are increasing discretionary transfers in the form of assistance for CSS i.e. special plan assistance and special Central assistance. The States were constrained in drawing and implementing schemes according to their priorities and the felt needs of people with growing discretionary transfers from the Centre. Since mandate is vast, the compositions of all transfers to the States are not easy to track down.

Compliance and Enforcement Cost of Central Legislation

The compliance and enforcement cost of the number of central legislations are entirely borne by the States, such as; the *Environment Protection Act*, the *Wildlife Protection Act*, the *Forest Conservation Act*, the *Biodiversity Conservation Act*, the *Tribal Conservation Act* etc. At present, States are not compensated for the cost loss on account of compliance. Additional costs were imposed on the States by central legislation or administrative instructions. These mainly relate to schemes of “Central Government like Sarva Siksha Abhiyan (SSA); Climate Change and Environment Management; judicial work resulting in increased case load on the courts; and fulfilment of international treaty obligations entered into by the Central Government.”

Impact of Pay Revision by the Central Government on State Finances

The periodic pay revision by the Central Government gives rise to demand on the part of State government employees for a similar pay hike. Various States have revised their pay scales and others are in the process of doing so in accordance with the recommendation of Sixth Central Pay Commission. The FC-XIV have noticed that the total expenditure of Union Government was increased in 2008-10 due to the impact of pay revision based on the recommendation of Sixth Central Pay Commission.³² The most important recommendation of the FC-XIV is:

*“We recommend the linking of pay with productivity, with a simultaneous focus on technology, skills and incentives. Further, we recommend that Pay Commissions be designated as 'Pay and Productivity Commissions', with a clear mandate to recommend measures to improve 'productivity of an employee', in conjunction with pay revisions. We urge that, in future, additional remuneration be linked to increase in productivity.”*³³ So, it is desirable that with the implementation of the above mentioned

³² Government of India, *Report of Fourteenth Finance Commission*, 2014

³³ Government of India, *Report of the Twelfth Finance Commission*, 2004

recommendation, the fiscal imbalance caused due to pay revision will be reduced and a new era of strong relation will emerge.

Revision of Royalty Rates on Major Minerals

The power to fix royalty on major minerals is vested with the Central Government. Under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957, the Central Government shall not enhance the royalty in respect of any mineral more than once during any period of three years. Punchhi Commission has recommended that “the royalty rates should be revised at least every three years without any delay. States should be properly compensated for any delay in the revision of royalty beyond three years.”³⁴ The revision of royalty rates affected in 2009 addressed the concerns of the States partly with regard to the conversion of specific rates into ad valorem rates on certain minerals.”³⁵

Sharing of Off-Shore Royalty and Sale Proceeds of Spectrum

With the increased exploitation of offshore oil and gas reserves, the non-tax revenues of the Centre are likely to improve considerably through higher royalty collections. Within the parameters of present Constitutional arrangements, offshore royalty accrues entirely to the Centre. Punchhi Commission, has noticed following: “*States are largely responsible for the development of infrastructure and creating an enabling environment for the industry and business. We recommend that a part of the sale proceeds of spectrum should be devolved to the States for expenditure on infrastructure projects.*”³⁶

Conclusion

Inter-governmental financial relationship in a federation is vital or one may say even a critical matter. The concept of modern federalism is very much heart touched, which directly affects the whole content and working of a federal polity. It is however an arduous exercise to create a viable scheme of inter-governmental financial relationship in a federal polity, as federalism has its own peculiar problems. Finance is a pre-requisite of Good Governance.

³⁴Report of the Commission on Centre-State Relations (Punchhi Commission), Vol. III, 2010, p. 43

³⁵Ibid.

³⁶Government of India, Report of the Commission on Centre-State Relations (Punchhi Commission), Vol. III, 2010, p. 43

Thus by looking into the working scheme of Finance Commission it is clear that the commission have always worked to enhance the autonomy of states as enshrined under the Constitution of India. The Commission have devolved the revenue from Centre and distributed it to the States as the revenue generated by the States are not sufficient to carry out their governance dealt under Article 268- Article 276 of the Constitution There are certain cases where the revenue devolution from Centre to States are not sufficient. So for that purpose in the Constitution of India there is a provision of grants. A grant is a like financial assistance given to States who are in need of financial help during the crisis. Further as per the Constitution of India specific grants are also given by Centre to States. The specific purpose grants are given to meet developmental schemes for promotion and welfare of Schedule Tribes. Centre-State relations are complex and have come under rigorous strains in all federations and India is no exception to it.

Suggestion

The laws should be made for the States to give more financial autonomy. Income Tax from companies should be shared directly with the States to increase the revenue to be distributed. To remove the problem of disparities of revenue distribution, the revenue shall be distributed in the manner of the social and economic needs. The surcharge on Income tax shall be levied with the consent of States. More coordination rather than overlapping of functions on part of Finance Commission and Planning Commission is required. There are a number of Central legislations, the compliance and enforcement cost of which are entirely borne by the States. So, it is desirable that all future Central legislations should provide for cost sharing to the States. The Permanent Finance Commission should be established by amending the provisions of Constitution of India.

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Minority Class Classification: State of the Art

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Abstract

In Artificial Intelligence, classification is a very critical activity pertaining to decision making. The class imbalance learning, which allows us to detect the groups from datasets that are not balanced. In separate actual cases, in which we need to find exceptional cases, such as the issue with credit cards, the diagnosis of brain tumors, etc. The traditional algorithms of classification fail since they are constructed in such a way, either their findings are overshadowed by the larger class, or they neglect the minority class. It has been found that the problem of class imbalance itself is not a problem, but there are many other issues. Complexities, when coupled with the issue of class imbalance, degrades the classifier's efficiency. The article compares the class imbalance learning methods, namely, oversampling and undersampling.

Keywords: Undersampling, Oversampling.

Introduction

Classification is a method for classifying datasets into separate groups, and it functions nicely if it is applied to balanced data, i.e. data sets of exactly the same class size, although in the case of unbalanced datasets, where there is a large disparity between class sizes, classes are not identified by these algorithms. The explanation behind the loss is that these algorithms are designed to work with balanced classes such that their effects either deviate from the greater class when they are applied to the dataset of unequal classes, or because of the nature of conventional classification algorithms, they disregard the smaller class as noise. This problem of classification is called the problem of class imbalance and was established a decade ago. In the case of certain real-time problems, this problem can be dangerous if we use conventional classification algorithms to solve them, such as in the case of medical diagnosis identification, fraudulent phone type detection, credit card

transactions, etc. [1] [2]. To resolve the topic of class imbalance, researchers have taken different approaches and the name class imbalance learning, which is a recent area of research and is evolving from day to day, identifies a new field of research.

Until we begin describing class imbalance teaching, we want to share some terms referred to in different papers in this area. The minority class is known as the smaller class and the greater class is known as the majority class. In truth, class imbalance problem persists since the issue is the identity of minority groups. The ratio of instances of a dominant class to instances of a minority class is called the imbalance ratio. If this ratio increases, the dilemma becomes more dangerous, since in such a situation, the dataset is extremely unbalanced. Various methods to address the class imbalance taken by researchers data-level approach (preprocessing techniques), algorithm-level approach, algorithm-level process, and their hybrid forms [3] [4]. The researchers have attempted to align the datasets in the data-level approach before implementing conventional classification algorithms so that findings will not be skewed by the rest of the results.

Methods

Random Oversampling

It's a strategy that generates instances synthetically by randomly selecting instances from the minority class and using the method of interpolation to generate instances between the selected point and its nearby instances. Each minority class instance is considered in this process and fresh minority class instances are created along the line segment that joins its neighbors. Based on the percentage of oversampling required, the number of synthetic instances is produced.

SMOTE

Synthetic Minority Over-sampling Technique [5]. Any training data with samples and f attributes in the data function space are taken into account to explain how this methodology operates. Notice that these attributes are continuous, for convenience. Take a subset from the dataset and take into account the closest neighbors k (in feature space). Take the vector between one of those k neighbors and the actual data point, to construct a virtual data point. Multiply this vector by a random integer x that ranges from 0 to 1. To build a new, synthetic data point, apply this to the existing data point.

ADASYN

Adaptive synthetic sampling for imbalanced data set management. There is no need to consider all minority samples in the synthetic sample generation process, as the issue of overlapping could be. The weighted allocation of minority samples is used by ADASYN. Based on the value of the minority sample, this gives weight to the minority sample. Samples that are hard to classify have a higher weight than most. For a sample with a greater weight, more samples are produced.

RAMOBoost

Ranked Minority Oversampling in Boosting (RAMOBoost) It is a technique which, depending on sampling weights, systematically generates synthetic samples. It sets these minority sample weights in compliance with their distribution. This technique operates in two steps. The judgment boundary in the first stage is moved to samples that are difficult to learn from both the majority and minority groups. A graded sampling probability distribution is used in the second step to produce synthetic samples. If RAMOBoost adopts techniques used in the SMOTE-N process, data sets with nominal features can be treated.

Random Undersampling

It's is a rather easy approach to undersampling that randomly eliminates instances from the plurality class to balance the dataset before implementing the technique of classification. The idea of Random Undersampling is rather easy and, as compared to Random Oversampling, it is quick. With this method, the only limitation is that the important information contained in the majority class can be removed, which in some cases may not be acceptable.

MLPUS

MLP-based undersampling technique (MLPUS) which will preserve the distribution of information while doing undersampling [6]. Three main mechanisms are used in the MLPUS: a) clustering of majority class samples b) sorting of important samples using SM assessment c) training of MLP using chosen samples in SM assessment. It is clustered again using k -means to pick representative samples from the majority class, and here, k is proportional to the number of samples in the minority class. Here, the definition uses Multilayer Perceptron (MLP). MLP efficiency is primarily dependent on learning rate and epoch values.

Easy Ensemble

The majority class is divided into several subsets under the EasyEnsemble system, and the size of each subset is equal to the size of the minority class. Then it constructs a classifier for each sub-set using the whole minority class and majority class subset. To get the final judgment, results generated from all the classifiers are combined. It uses Adaboost to build a classifier. It can be viewed as an unsupervised learning algorithm since EasyEnsemble uses independent random sampling with substitution [7].

Balance Cascade

This methodology follows the approach of supervised learning. The BalanceCascade method functions as follows: a subclass is created of the majority class comprising a number of samples equal to the number of samples of the minority class. The samples from a correctly categorized majority subset are excluded while the C1 classifier is trained using the majority class sub-set and the entire minority class. The newly created sampled majority class sample set is given as an input to C2. The same method is iterated until it enters the final classifier. The size of the plurality subset is reduced in any classifier. There is a temporal dependence between classifiers in BalanceCascade. BalanceCascade differs from EasyEnsemble when it lacks true majority samples to decrease redundancy [7].

Related Work

The authors in this paper [8] says that a combination of the minority (abnormal) class over-sampling method and the majority (normal) class under-sampling method will achieve better classifier efficiency (in ROC space) than just the majority class under-sampling. The author also demonstrates that a combination of our approach of over-sampling the minority class and under-sampling the majority class will achieve better classifier efficiency (in ROC space) than varying the loss ratios in Naive Bayes in Ripper or class priors.

Traditional classification algorithms do not work very well on imbalanced data sets and limited sample sizes, the authors of the paper[4] said. A novel approach is proposed to modify the class distribution by inserting virtual samples created by the Windowed Regression Over-Sampling (WRO) method to resolve the problem [5]. Not only does the proposed WRO approach represent the additive effects, but also the multiplicative effect between samples.

In this article, the author [9] gives way to deal with data mining issues where previous class probabilities and/or misclassification costs between classes are extremely disproportionate is to resample the data before a new, ideal class distribution is obtained in the training data. The author proposed the generative algorithm of oversampling here, a resampling algorithm that generates artificial data points from a distribution of probability learned from the minority class. The author has demonstrated, empirically, that generative oversampling works well with linear SVMs for a number of text classification datasets.

The paper [10] presents the significance of data mining of imbalanced data sets and their wide implementation domains, and then summarizes the measurement criteria and current approaches for evaluating and solving the problem of imbalance. Most of the over-sampling techniques concerned with this topic is the synthetic minority oversampling technique (SMOTE). Author proposes two new minority over-sampling techniques, borderline-SMOTE1 and borderline-SMOTE2, based on the SMOTE process, in which over-sampling is only feasible for minority examples near the borderline. More readily misclassified are the borderline examples of the minority class than those further from the borderline.

In this paper [11], the author indicated that the predictive model's accuracy score is not an acceptable indicator where there is an imbalanced issue since it would be skewed against the dominant class. The efficiency of the classifier is then calculated using sensitivity and accuracy. Oversampling and undersampling work well to enhance the classification. Two new strategies for balancing the datasets called bagging and boosting were proposed here by the author. The bagging technique is a form of bootstrap ensemble that can be implemented to increase the reliability of the model. Both instances in the training dataset have the same chance of being picked in the Bagging strategy.

In this article, the author [12] claimed that the downsizing of the dominant class results in a lack of data that may lead to excessively general laws. If a cluster contains more samples of the majority and less samples of the minority class, it would function as a sample of the majority class. In the other hand, if a party has more minority class samples and less majority class samples, it does not have the attributes of the samples of the majority class and performs more like the samples of the minority class.

The author reported in this paper [13] that several classification algorithms for machine learning presume that the target classes share identical prior probabilities and cost of misclassification. The problem of classification

where one class in the training set has a much lower previous likelihood is called the problem of imbalanced dataset. Resampling the training set is one common approach to solving the imbalanced dataset dilemma. Nevertheless, few experiments in the past have considered resampling algorithms with high dimensionality on data sets. Here, in the field of text classification, the author discusses the imbalanced data set issue. Text has the additional issues of sparsity as well as high dimensionality.

Conclusion

Unbalanced learning is currently becoming a daunting and active research subject in the field of machine learning. This paper provides a short overview of different approaches for studying and addressing the dilemma of imbalanced learning. It also offers a short summary of all approaches under review. There are several research avenues for undersampling to deal with imbalanced learning difficulties, such as MLPUS, EasyEnsemble, BalanceCascade and oversampling strategies such as SMOTE, ADASYN and RAMOBoost. To solve the dilemma of multi-class imbalanced instruction, all these methods can be extended. In addition, to promote incremental learning implementations and balance the datasets, these approaches can also be changed.

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Job Satisfaction Status of Faculty Members of Pokhara University

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Abstract

The aim of this paper is to measure the job satisfaction status and factors affecting job satisfaction among the faculty members of Pokhara University. The research is based on primary sources of data collected through structured questionnaires. The researchers have selected 100 respondents, who have been teaching in Pokhara University constituent college, using a purposive sampling technique. The study finds that majority of the respondents were agreed on their job is prestigious and it helps to increase their status, value & recognition on society. Likewise, the study shows that there is significant difference in opinion regarding career development among faculty members of different faculties and different job status. The correlation analysis shows that job satisfaction has significant positive relationship with prestige & status, working environment, compensation & pay, career development, value & recognition, teacher's union, and working shift. The regression analysis finds that factors affecting job satisfaction are value & recognition, working shift and prestige & status.

Keywords: Job Satisfaction, Compensation and Pay, Career Development, Value & Recognition, Working Shift, Prestige & Status.

Introduction

Job satisfaction is workers positive emotional expression towards their jobs and work experiences. Armstrong (2006) defines job satisfaction as the attitudes and feelings people have about their work. Positive and favorable attitude towards the job indicate job satisfaction. Negative and unfavorable attitude indicate dissatisfaction. An individual joins an organization with certain expectations and when these expectations come true the individual

become pleased with his or her organization and job, and this increase efficiency and working performance of employees. Previous research has revealed that employees who are satisfied with their job are more likely to be creative, innovative and initiate the breakthroughs that can increase their job performance. Job satisfaction improves productivity, reduces turnover, increases retention, improves morale, and enhances creativity. However, dissatisfaction has a negative effect on many aspects of work life such as personal development, work load and stress, learning and career development and so on.

Education system is one of the key factors for the development of the nation. It is generally believed that a teacher, considered as an engineer of the human soul, plays an important role in society. In current scenario, teachers choose their own performance by their own will; they consider teaching as a respectful profession. A teacher who is dissatisfied with his or her job may become irritable and tense which may bring inefficiency and other negative effects to the students' learning process. Hence education system should be strategically planned in order to provide the quality education. To provide the quality education it is necessary to have highly skilled and knowledgeable teachers. Teachers' quality is also based on the motivation level they are perceived and their job satisfaction level.

Job satisfaction can be influenced by a variety of factors, e.g., the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, degree of fulfillment in their work, co-workers etc. Rose (2001) views that job satisfaction as a dimensional concept consisting of intrinsic and extrinsic satisfaction dimensions. According to Rose intrinsic sources of satisfaction depend on the individual characteristics of the person such as the ability to initiative relation with supervisors on the work that the person actually performs. Extrinsic sources as satisfaction are situational and depend on the environment such as pay, promotion, job security these are financial and other material rewards of job.

Various studies have been conducted regarding the job satisfaction of employees. This study has focused on measuring the determinants of job satisfaction among the faculties of Pokhara University. Additionally, the study has investigated the factors that contribute significantly to the teachers' job satisfaction.

Literature Review

Various theories have been developed on job satisfaction. One of the oldest theories is Abraham Maslow's (1954) Hierarchy of Needs. This model ranks

needs from lowest to highest with the premise that an individual moves to the next level once the previous one is fulfilled. The needs progress from basic physiological needs, safety and security needs, social needs, esteem needs, to the need for self-actualization. In applying this theory to job satisfaction, it is presumed that once an individual's basic needs such as pay and security have been met, higher order needs such as esteem and self-actualization (fulfillment) can be desired.

Similarly, another important theory is two-factor theory of job satisfaction, developed by Herzberg, Mausner, and Snyderman (1959) has been used to characterize what leads to worker satisfaction. The factors, which are known as motivator and hygiene factors, that produce job satisfaction are intrinsic and separate from those factors which produce job dissatisfaction. Motivator or intrinsic factors consist of variables such as achievement, recognition, advancement, responsibility, and work itself. These factors correspond to the level of self-actualization in Maslow's hierarchy (1954). Hygiene or extrinsic factors consist of variables such as pay, security, and physical working conditions. These factors correspond to the lower needs of Maslow's hierarchy.

Various studies have been conducted on job satisfaction. Shabbir and Wei (2017) suggest that for a teacher to attain full satisfaction in their school there must be adequate facilities, proper instructional materials, sound security measures, fair contract conditions, and a functional school community. A good school environment involves key personalities who are supportive of the welfare of teachers-like administrators, students and parents. These attributes help create assertiveness and positivity in educators, which are traits associated with employees experiencing job fulfilment and satisfaction.

Nayak and Nayak (2016) conducted a study to determine the job satisfaction among university teachers in the area of Delhi working in a management institute and to investigate effect of various demographic factor like gender, marital status on employees' job satisfaction. The study was done on 234 teachers working in a management institute in Delhi and results showed that the important factors that have an impact on job satisfaction are supervision, relationship with co-workers, present pay, nature of work, and opportunities for promotion. Descriptive analysis performed to determine level of teacher's job satisfaction. Demographic variables were tested to find the association between the job satisfaction and various demographic variables. The findings suggest that married teachers are more satisfied than unmarried ones. Gender was not found to have any effect on job satisfaction. Teachers working in government universities are found to be most satisfied. Context job satisfaction factors (i.e. Satisfaction with pay, variety of activities,

environment & security) are more descriptive of employee job satisfaction than the content factors (i.e. satisfaction with work, customer interaction, promotion).

Pathak (2015) analyzes the level of job satisfaction among employees of commercial banks along with the consideration of gender, age and experience differences. He found that almost 66% of employees are satisfied or highly satisfied with their jobs. ‘Job security’ is the most significant factor of job satisfaction to the employees of commercial banks in Nepal. Level of job satisfaction does not differ significantly between male and female employees. However, there are significant differences in level of job satisfaction among various age groups of employees.

Deshwal (2017) also found that the factors named as working conditions, organizational policies, independence, promotion opportunities, work variety, creativity, compensation, work itself, colleagues’ cooperation, responsibility, social status of job, job security, achievement and students’ interaction were associated with job satisfaction.

Different studies related to job satisfactions have been carried out by different researchers in different parts of the world and in different organization. However, very few studies have been carried out related to teachers’ job satisfaction in Nepal. So, this topic on faculty members job satisfaction in Pokhara University is very new and relevant topic for research.

The conceptual framework followed for this study is as follows;

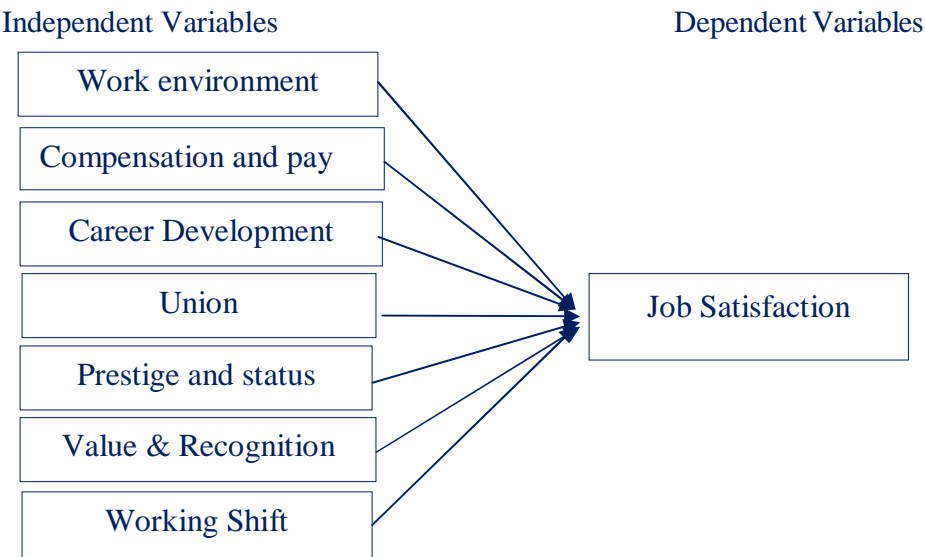


Figure 1. Conceptual Framework

Research Methodology

The study has adopted descriptive and analytical research design. The study employs quantitative approach and relies on primary data to meet the study objectives. All the faculty members (teaching staffs) of constituent colleges of Pokhara University are the population of this study. Out of total 203, 100 respondents have been taken as a sample for this study at 7% margin of error and 95% confidence level. Data are collected using survey questionnaire. Data analysis has been done using SPSS and MS-Excel. Both descriptive as well as inferential statistics are used to meet the objectives. Descriptive statistics like frequency analysis, percentage analysis have been computed and ANOVA, regression is applied to find the different factors associated and affecting the level of job satisfaction.

Result and Discussion

➤ Demographic Profile of the Respondent

The demographic profile of the respondents is characterized by sex, faculty, education, age group, job status, job position, monthly income and working duration have been presented Table 1.

Table 1 shows that majority of respondents are male that comprise of 91 percent of total respondents and only 9 percent of respondents are female. Likewise, the majority of the respondents are from school of engineering that comprises of 33 percent, followed by school of health and allied sciences, school of business and school of development and social engineering respectively. Similarly, majority of the respondents have master's degree which comprises 73 percent of total respondents. It is followed by PhD that consists of 20 percent of the respondents. Only 4 percent respondents have bachelor's degree and 3 percent respondents have MPhil. The age group of respondents shows that 39 percent respondents are of 35 to 39 years old followed by 40 years & above that consists of 31 percent of total respondents and 30 percent respondents are less than 35 years old. In job status, it shows that majority of the respondents are permanent faculty that comprises of 74 percent of total respondents. It is followed by fulltime contract faculty that consists of 18 percent and only 8 percent respondents are course contract faculty in Pokhara University. Similarly, in job position of respondents, majority of the respondents are lecturer that comprises of 73 percent of total respondents. It is followed by associate professor that consists of 16 percent, teaching assistant 9 percent and only 2 percent respondents are professor. In the same manner, majority (51 percent) of the respondent have the monthly income of Rs.50,001 to Rs.75,000 which is followed by 44 percent have

monthly income of Rs.25001 to Rs.50000 rupees. Only 3 percent respondents have monthly income of Rs.25,000 and less and 2 percent respondents have monthly income of more than Rs.75,000. And half of the respondents have been working for 5 years and less and around half of the respondents have been working for more than 5 years.

Table 1.Demographic Profile of the Respondent

Variables	Categories	Frequency	Percent
Sex	Male	91	91
	Female	9	9
Faculty	SOB	25	25
	SOE	33	33
	SHAS	31	31
	SDSE	11	11
Education	Bachelors	4	4
	Masters	73	73
	MPhil	3	3
	PhD	20	20
Age Group	Less than 35 years	30	30
	35 to 39 years	39	39
	40 and above years	31	31
Job status	Permanent	74	74
	Fulltime contract	18	18
	Course contract	8	8
Job position	Teaching Assistant	9	9
	Lecturer	73	73
	Associate Professor	16	16
	Professor	2	2
Monthly Gross Income	Up to Rs.25,000	3	3
	Rs.25,001 to 50,000	44	44
	Rs.50,001 to 75,000	51	51
	More than Rs.75,000	2	2
Working Duration	5 years or less	51	51
	More than 5 years	49	49
Total		100	100

Source: Field Survey, 2019

➤ Descriptive Analysis

Different statements have been used to measure the opinion of respondents in different job satisfaction variable. Five point likert scale from 1 to 5 were used in this study in each statement where 1 refers to strongly disagree, 2

refers to disagree, 3 refers to neutral, 4 refers to agree and 5 refers to strongly agree. The following table presents the descriptive statistics of different statements used for this study.

Table 2. Mean Score Evaluation of Job Satisfaction

Statements	Mean	SD
Society perceives me as a change agent	3.61	0.72
My social position is due to my job	3.75	0.8
My success at work is appreciated by my colleagues	3.73	0.76
I am respected everywhere due to my job	3.39	0.72
My coworkers are supportive	4.1	0.8
Working condition is pleasant in my organization	3.3	0.85
The layout of classroom is comfortable for teaching	3.34	0.86
Compensation package of my university is satisfactory	3.35	0.77
The provision of payment for extra load is satisfactory	3.36	0.93
My overall level of pay in comparison with other universities	3.08	0.9
University provides me sufficient time for research activity	2.99	1.04
There is opportunity to participate in faculty development program	3.16	1.12
The criteria for promotion is satisfactory	3.08	1.11
University provides me sufficient paid leave for my higher studies	3.08	1.18
I feel I am valued in my organization	3.41	0.77
I get freedom in my job	4.08	0.77
University provides me reward for my hard work	2.75	0.89
I am involved on decision making activities	2.53	0.98
The activities of teachers' union of the university is constructive	2.36	0.8
I feel secure being member of union	2.61	0.95
Union organizes academic activities frequently	2.03	0.85
Our teachers' union works for the development of my institution	2.12	0.89
I am satisfied with my working hour	3.79	0.61
University provides extra facilities for working in odd shift	3.08	0.95
Working shift of university is well defined and convenience	3.05	0.9

N=100; Score: 1= Strongly Disagree, 3 = Neutral, 5= Strongly Agree
Source: Field Survey, 2019

Table 2 reveals the mean score evaluation of the scales used in assessing the job satisfaction. On the basis of mean score achieved, it shows that most of the statements have mean score more than 3, which indicate that the respondents were agreed on the given statements of job satisfaction and the mean score less than 3 indicates that the respondents were disagreed on the given statements of job satisfaction. Table shows that most of the respondents have agreed that society perceive them as a change agent, their social position is due to their job, they are respected everywhere due to their job. Similarly, it shows that most of the respondents have agreed that their coworkers are supportive, their working condition is pleasant, and their layout of classroom is comfortable for teaching.

In the same manner, table reveals that most of the respondents have agreed that compensation package of their university is satisfactory, the provision of payment for extra load is satisfactory and their overall level of pay in comparison with other universities is satisfactory. Similarly, it shows that most of the respondents have agreed on there is opportunity to participate in faculty development program, the criteria for promotion is satisfactory and university provide sufficient paid leave for higher studies. However, majority of the respondents are disagreed that university provide them sufficient time for research activity and university provides support in very situations.

Furthermore, the mean score indicates that most of the respondents have agreed on they feel they are being valued in their organization and they get freedom in their job. However, majority of the respondents are disagreed that university provide them reward for their hard work and they are being involved on decision making activities. Similarly, table reveals that most of the respondents are agreed on they are satisfied with their working hour, university provides them extra facilities for working in odd shift and working shift of university is well defined and convenience. However, most of the respondents are disagreed that the activities of teachers' union of the university is constructive, they feel secure being member of union, union organizes academic activities frequently, and teachers' union works for the development of their institutions.

Table 3. Mean Score Differences among Different Faculties

Output of One-Way ANOVA test					
Variables	Faculty	N	Mean	F	P-value
Prestige and Status	SOB	25	3.79	1.853	0.151
	SOE	33	3.65		
	SHAS	31	3.57		
	SDSE	11	3.45		
Working Environment	SOB	25	3.23	1.071	0.372
	SOE	33	3.42		
	SHAS	31	3.36		
	SDSE	11	3.16		
Compensation and Pay	SOB	25	2.99	1.041	0.385
	SOE	33	3.22		
	SHAS	31	3.31		
	SDSE	11	3.27		
Career Development	SOB	25	3.58	9.152	< .001
	SOE	33	2.75		
	SHAS	31	2.83		
	SDSE	11	3		
Value and Recognition	SOB	25	3.34	1.879	0.145
	SOE	33	2.99		
	SHAS	31	3.1		
	SDSE	11	3.18		
Teacher's Union	SOB	25	2.62	1.981	0.133
	SOE	33	2.32		
	SHAS	31	2.23		
	SDSE	11	2.25		
Work shift	SOB	25	3.27	0.13	0.942
	SOE	33	3.3		
	SHAS	31	3.35		
	SDSE	11	3.27		

Table 3 shows the results on whether there are any significant differences in opinion on independent variables among different faculties. The table reveals that there is significant difference in opinion regarding career development among different faculties. The p-value less than 5 percent level of significance justifies it. It shows that faculties of SOB are more agreed that University provides opportunity to participate in career development program. However, there is no significant difference in opinion regarding prestige and status, working environment, compensation and pay, value & recognition, teacher's union and working shift among different faculties. The

insignificant F-statistics and p-value more than 5 percent level of significance indicates that.

Table 4. Mean Score Differences among Different Job Status

Output of One-Way ANOVA test					
Variables	Job Status	N	Mean	F	P-value
Prestige and Status	Permanent	74	3.68	1.28	0.301
	Fulltime contract	18	3.51		
	Course contract	8	3.5		
Working Environment	Permanent	74	3.21	7.745	0.004
	Fulltime contract	18	3.69		
	Course contract	8	3.58		
Compensation and Pay	Permanent	74	3.18	0.404	0.674
	Fulltime contract	18	3.31		
	Course contract	8	3.1		
Career Development	Permanent	74	3.25	26.476	< .001
	Fulltime contract	18	2.4		
	Course contract	8	2.13		
Value and Recognition	Permanent	74	3.12	2.282	0.129
	Fulltime contract	18	3.29		
	Course contract	8	2.95		
Teacher's Union	Permanent	74	2.35	0.477	0.629
	Fulltime contract	18	2.47		
	Course contract	8	2.2		
Work Shift	Permanent	74	3.26	1.635	0.219
	Fulltime contract	18	3.54		
	Course contract	8	3.25		

Table 4 shows the results on whether there are any significant differences in opinion on independent variables among respondents of different job status. The p-value less than 5 percent level of significance reveals that there is significant difference in opinion regarding working environment and career development among respondents of different job status. It shows that contract teachers are more agreed that university has good working environment than permanent faculties. Similarly, permanent faculties are more agreed on faculty development programs and higher studies opportunities provided by the university than the contract teachers. However, there is insignificant difference in opinion regarding prestige and status, compensation and pay, value & recognition, teacher's union and working shift among faculties of different job status. The p-value more than 5 percent level of significance justifies that.

Correlation Analysis

It includes the correlation among independent variables and between dependent variable- job satisfaction and the independent variables. The result of correlation analysis is presented in Table 5.

Table 5. Correlation between Dependent Variables and Independent Variable

Variable		P&S	WE	C&P	CD	V&R	TU	WS	JS
P&S	Pearson's r	1							
WE	Pearson's r	0.383**	1						
C&P	Pearson's r	0.146	0.332**	1					
CD	Pearson's r	0.471**	0.124	0.142	1				
V&R	Pearson's r	0.424**	0.434**	0.287**	0.479**	1			
TU	Pearson's r	0.336**	0.218*	0.087	0.278**	0.51*	1		
WS	Pearson's r	0.337**	0.368**	0.297**	0.147	0.314**	0.135	1	
JS	Pearson's r	0.441**	0.363**	0.295**	0.4**	0.505**	0.265**	0.418**	1

Note: 1) P&S=prestige and status, WE=Working environment, C&P= Compensation and pay, CD= Career development, V&R=Value and recognition, TU=Teacher's union, WS=Working shift, JS=Job satisfaction 2) The asterisk sign (**) and (*) refers that the results are significant at 1 percent and 5 percent level of significance respectively.

The Pearson Correlation Coefficients have been computed and the results are presented in Table 5. All the correlations between independent variables can be considered as low and moderate. This indicates that there is no multicollinearity exists among the independent variables.

The positive correlation coefficient indicates that the overall job satisfaction is positively related prestige & status, working environment, compensation & pay, career development, value & recognition, teacher's union and working shift. All the correlation coefficients have p-value less than 1 percent which indicates that there is significant positive relationship between all independent variables and job satisfaction.

➤ Regression Analysis

The regression of different independent variables such as prestige and status, working environment, compensation and pay, career development, value & recognition, teacher's union and working shift on job satisfaction has been analysed in this study.

The regression equation model is, $JS = \beta_0 + \beta_1PS + \beta_2WE + \beta_3CP + \beta_4CD + \beta_5VR + \beta_6TU + \beta_7WS + e$.

Where, P&S=prestige and status, WE=Working environment, C&P= Compensation and pay, CD= Career development, VR= Value & Recognition, TU=Teacher's union, WS=Working shift

Table 6.Model Fit Measures

					Overall Model Test			
Model	R ²	Adjusted R ²	AIC	BIC	F	df1	df2	P
1	0.4	0.349	194	218	8.6	7	92	< .001
2	0.39	0.359	191	209	12	5	94	< .001
3	0.37	0.347	191	204	19	3	96	< .001

Table 7.Model Coefficients-Job Satisfaction

Model	Predictor	Estimate	SE	T	P
1	Intercept	-0.21024	0.5363	-0.392	0.696
	P&S	0.21431	0.1458	1.4702	0.145
	WE	0.09244	0.1273	0.7263	0.47
	C&P	0.11909	0.1136	1.0483	0.297
	CD	0.14652	0.0914	1.6034	0.112
	V&R	0.32423	0.1535	2.1125	0.037
	TU	-0.00842	0.1104	-0.0763	0.939
	WS	0.26765	0.115	2.3281	0.022
2	Intercept	-0.16	0.5261	-0.304	0.762
	P&S	0.24	0.138	1.737	0.086
	C&P	0.137	0.1101	1.242	0.217
	CD	0.133	0.0888	1.502	0.137
	V&R	0.35	0.1326	2.64	0.01
	WS	0.282	0.1123	2.509	0.014
3	Intercept	0.0559	0.491	0.114	0.91
	P&S	0.3074	0.13	2.355	0.021
	V&R	0.4528	0.123	3.69	< .001
	WS	0.2985	0.11	2.714	0.008

The table 7 shows the coefficients of regression models of job satisfaction. Three models are presented in above table. In model 1, all the independent variables are used to measure the job satisfaction where only two variables- value & recognition and working shift is found significant at 5 percent level of significance and other variables are insignificant as their p-value is more than 5 percent level of significance. Similarly, in model 2 highly insignificant variable teacher's union and working environment are removed and the effect of other variables are measured. From model 2 also it is found that value & recognition and working shift is found significant at 5 percent level of significance where as, prestige & status is found significant at 10 percent level of significance. However, other variable are such as compensation & pay and career development were found insignificant. Likewise, in model 3 only three variables value& recognition, working shift and prestige & status are used to measure the effect on job satisfaction and all three independent variables are found significant at 5 percent level of significance. So it can be concluded value& recognition, working shift and prestige & status are the major factors that affect job satisfaction and these factors have positive effect on job satisfaction.

Table 6 presents the model fit measures. From the table the p-value of F-statistic of all 3 models are less than 1 percent level of significance which indicates that all models presented here are good. Similarly, the adjusted R^2 of all 3 models and AIC of model 1 and 2 are also similar. However, BIC of model 3 is less than the model 1 and 2, so the researcher suggest the best fitted model of job satisfaction is model 3. And the regression equation is;

$$JS = 0.0559 + 0.3074PS + 0.4528VR + 0.2985 WS + e$$

Here the adjusted R^2 is 0.347 which indicates that 34.7 percent variation in job satisfaction is explained by three variable- value& recognition, working shift and prestige & status and remaining 65.3 percent variation in job satisfaction is explained by other variables. Model diagnostics for job satisfaction shows that the residuals are independent and there is no multicollinearity among independent variables. So, all these statistics shows that the models of job satisfactions are robustness.

Conclusion and Implications

This study finds that majority of the faculty members of Pokhara University are agreed on their job is prestigious and it helps to increase their status, value & recognition on society. Likewise, the study finds that the working environment of their workplace is good, their compensation and pay is good, career development programs of university is good and the working shift of

university is convenience. So, it is concluded that the faculty members of Pokhara University are satisfied with their current job.

Similarly, the study shows there is significant difference in opinion regarding career development among faculty members of different faculties and different job status. It is also found that job satisfaction of faculty members is positively related with prestige & status, working environment, compensation & pay, career development, value & recognition, teacher's union and working shift. From regression analysis it is concluded that value & recognition, working shift and prestige & status are the major factors that affect job satisfaction of faculty members of Pokhara University. It is advised to the higher authority of university that value & recognition and prestige & status of job should be increased and working shift should be flexible to the faculty members to increase the job satisfaction. Similarly, university should more focus on providing career opportunities such as faculty development and higher studies opportunities to permanent faculties where as better working environment should be provided to contract teacher for job satisfaction.

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Appendix

Model Diagnostics

Cook's Distance					
				Range	
Model	Mean	Median	SD	Min	Max
1	0.0127	0.00341	0.0259	1.37E-07	0.158
2	0.0132	0.00327	0.0288	3.03E-06	0.165
3	0.0115	0.00283	0.024	1.09E-08	0.115

Durbin–Watson Test for Autocorrelation			
Model	Autocorrelation	DW Statistic	p
1	-0.0503	2.09	0.712
2	-0.0348	2.06	0.84
3	-0.067	2.13	0.508

Collinearity Statistics								
	Model 1			Model 2			Model 3	
Variable	VIF	Tolerance	Variable	VIF	Tolerance	Variable	VIF	Tolerance
P&S	1.62	0.618	P&S	1.47	0.679	P&S	1.29	0.774
WE	1.5	0.667	C&P	1.15	0.869	V&R	1.27	0.787
C&P	1.21	0.829	CD	1.48	0.677	WS	1.18	0.851
CD	1.54	0.65	V&R	1.51	0.661			
V&R	1.99	0.502	WS	1.25	0.8			
TU	1.4	0.715						
WS	1.29	0.776						

Participation of Women in the Workforce in South Asian Countries

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Abstract

Globally, the Percentage of Women Participating in the workforce is diminishing.¹ At the same time, Women have taken great steps in education and the utilization of that education in the workforce over the past sixty years and this led to growth in women's status in the labour-force by entering the workforce with high hopes and dreams of future victory. Although women are still making progress, they encounter numerous blocks that significantly hinder that progress. These obstacles have led to a substantial Gender-gap in the workforce.² Several factors have lop-sided effects on women's ability to effectively participate in the labour market which includes Unpaid Work-time (Childcare & Housework), Unsuitable Family Support Policies, Uncertain future of Work-potential & Work-opportunities, Under-representation in high-skilled subjects, Lesser Leadership-opportunities, Harassment at Work & in Public Transportation, Mismatch in Labour-utilization, Existing Societal Biases in certain geographies of the world and Pay-gap is disparate. closing gender gaps in employment and entrepreneurship in South Asia would help grow the economy by about 25 per cent.³

The objective of this article is to investigate the causes and factors which contribute to the Increase/ Decrease/ Stagnation Rate in Women's Participation in Labour-force with emphasis on South Asian Countries.

Keywords: Women Labour Force-Workforce-South Asian Countries-Gender Gap-Leadership-Harassment-Societal Bias-Pay Gap.

Introduction

Work is the main source of income for individuals, especially in the world's poorest countries. Therefore, the contribution of men and women play an

important role in sustainable and resilient growth globally, particularly in low-income countries like South Asian. Moreover, it benefits in poverty reduction and promoting shared success.⁴ Southern Asia is consisting of Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh, Maldives and Sri Lanka. all the countries of South Asia are considered low-income, apart from lower-middle-income Sri Lanka.⁵ South Asian countries are expected to continue a strong growth trajectory in coming years--up to 6.7% is projected by the World Bank in 2021.

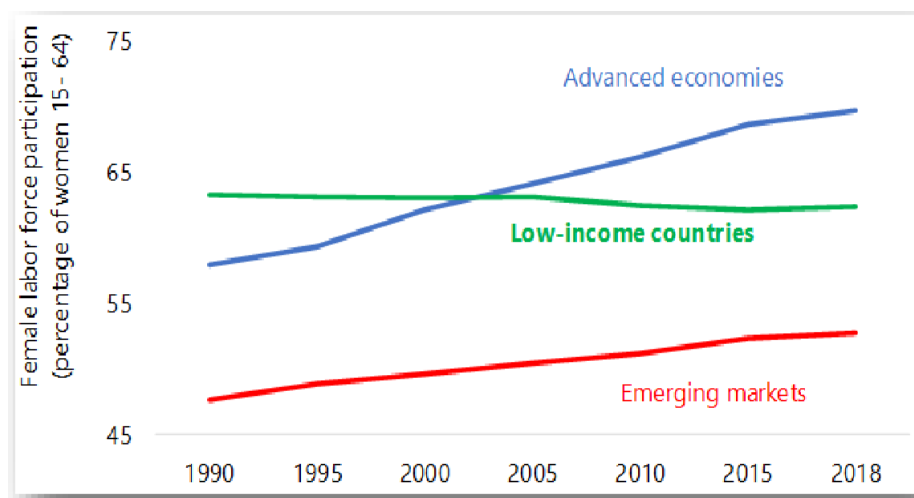


Figure Trends in female labour force participation⁶

Women in South Asia remain to be left out of the region's economic victories. Despite the fact South Asia is the fastest-growing regions in the world, women labour force participation rate is only 23.6% versus 80% for men. There are quite a lot of barriers that have been stopped women from participating at work; including low levels of girls' education, adverse gender norms that limit women's mobility, Gender-based Violence, unpaid care work and domestic duties that render women's labour invisible.³

The strongest economies in South Asia at the moment are Bangladesh, India, and Nepal. In South Asia, countries have grown their economies primarily through investments in infrastructure, agriculture, and manufacturing.⁷

The economic outlook for South Asia is highly divergent across countries. There are some economies, including Bangladesh, Bhutan and India, where economic conditions are largely positive, with GDP growth projected to remain robust in the near term. In contrast, the outlook in the Islamic Republic of Iran and Pakistan has visibly deteriorated.⁸ in this case if women

participation increases in the workforce. It will impact on the overall development of Asian countries especially economic growth.

Women have systematically deprived across the region as structural inequalities and the low status of women affect their rights. Social norms in South Asia prioritise a son getting higher education, so the girl child often loses out on continuing her education. In South Asia, a preference for sons means that the girl child must struggle twice as hard to survive and fulfil her potential. If the girl child manages to overcome health issues and gets a basic education, it is unlikely she will escape child marriage-in the region, 1 in 2 girls are married before the age of 18 Bangladesh has the highest rate of child marriage at 52 per cent, followed by India at 47 per cent, Nepal at 37 per cent, and Afghanistan at 33 per cent. Although Bhutan is a middle-income country, it still has a high rate of women giving birth before the age of 18.⁹

overall since 2001, women's employment participation across South Asian countries has been low and broadly unchanged, the gender employment gap emerges more clearly in middle age brackets, rural female employment is higher than urban, agriculture is the economic sector accounting for the greatest share of female employment, although this is slowly changing in some countries, and, women with mid-level education tend to have lower employment rates than those with both lower and higher education.¹⁰

Business and the Law report shows that all countries in South Asia now have enacted laws prohibiting sexual harassment. South Asia is also the world's top improver toward gender equality in the average regional score. Out of a maximum score of 100, the region rose to 58.36 from 50 in the last decade. Six economies in South Asia reformed in the category of starting a job by introducing laws on workplace sexual harassment, including India, Bangladesh, and Nepal.³

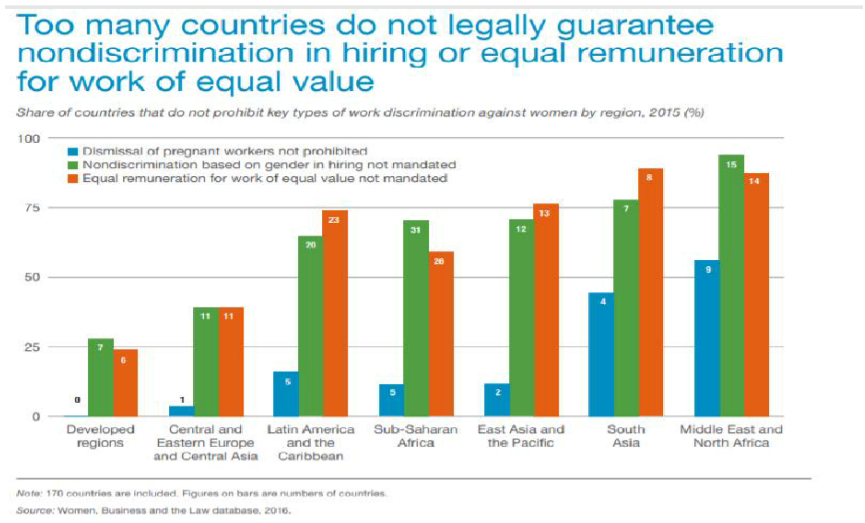
The good update is that South Asian countries are making progress in clearing the way for women to get jobs and creating a safer work environment for them.

Figure¹¹

Level and trends in rates of labour force participation and unemployment by sex, 2009–21										
Country/region	Labour force participation rate (percentages) and gender gap (percentage points)					Unemployment rate (percentages) and female-to-male unemployment rate ratio				
	Men	Women	Gap (Men – Women)			Men	Women	Ratio (Female rate/Male rate)		
	2018	2018	2009–18	2018	2018–21	2018	2018	2009–18	2018	2018–21
World	75.0	48.5	▼	26.5	▲	5.2	6.0	▲	1.2	▲
Developing countries	81.1	69.3	▼	11.8	▶	4.6	6.1	▼	1.3	▲
Emerging countries	76.1	45.6	▲	30.5	▲	5.2	6.1	▲	1.2	▲
Developed countries	68.0	52.4	▼	15.6	▼	5.3	5.6	▶	1.1	▶
Northern Africa	71.9	21.9	▼	50.0	▼	9.1	19.5	▼	2.2	▲
Sub-Saharan Africa	74.0	64.7	▼	9.3	▼	6.4	8.2	▼	1.3	▲
Latin America and the Caribbean	77.1	51.5	▼	25.6	▼	6.8	9.5	▼	1.4	▲
Northern America	67.9	55.8	▶	12.1	▼	4.6	4.4	▲	1.0	▼
Arab States	77.2	18.9	▲	58.3	▼	6.8	16.3	▲	2.4	▼
Eastern Asia	74.7	59.1	▲	15.6	▲	4.8	4.2	▲	0.9	▲
South-Eastern Asia and the Pacific	79.4	56.5	▼	22.8	▼	3.5	3.3	▼	0.9	▶
Southern Asia	79.0	27.6	▼	51.4	▲	3.7	5.2	▲	1.4	▼
Northern, Southern and Western Europe	63.4	51.6	▼	11.9	▼	7.9	8.2	▲	1.0	▶
Eastern Europe	67.0	51.8	▲	15.2	▼	5.6	4.9	▶	0.9	▶
Central and Western Asia	73.5	45.1	▼	28.4	▼	8.0	9.4	▲	1.2	▼

Figure (2) shows that there is still a huge gap of 26.5% in the participation of women in the workforce across the world. And in south Asian countries 51.4% gender gap in the workforce. Meanwhile, globally ratio of 1.2 unemployment (female rate-to-male rate) has existed with the ratio of 1.4 unemployment in south Asia.

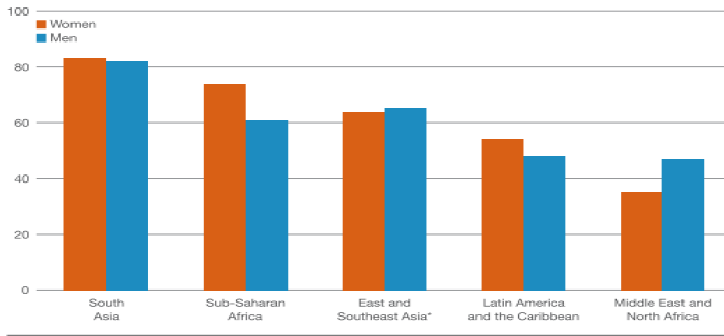
Figure¹³



figure¹³

Most employment is informal in South Asia, Sub-Saharan Africa and East and Southeast Asia

Informal employment as a share of nonagricultural employment, average by region and by sex, 2004–2010 (%)



* East and Southeast Asia excludes China.

Note: Regional estimates are based on 40 countries with direct measures and 60 countries with indirect measures.

Employment segregation: Employment segregation by profession is more severe in Latin America and the Caribbean and less so in South Asia and Sub-Saharan Africa. In Latin America, the average Duncan index across represented countries was the highest (.53), followed by the Middle East and North Africa (.50), Europe and Central Asia (0.46), East Asia and the Pacific (.39), Sub-Saharan Africa (.33), and South Asia (.30). Low occupational segregation in South Asia and Sub-Saharan Africa may be related to the limited granularity of occupational codes within the agriculture sector.¹⁴

While sex-segregation into particular occupations is not worldwide, women do tend to concentrate in low productivity sectors. Examining employment segregation from a broader perspective, the McKinsey Global Institute found that women dominated the services sector in every region of the world except South Asia, and men dominated the industry sector in every region. Agriculture was dominated by women in South Asia, Sub-Saharan

Africa, and the Middle East and North Africa; and gender-balanced or dominated by men elsewhere. In most regions, the industry was the highest productivity sector and agriculture was the lowest. Moreover, within the service sector, on a global level, women are concentrated in low-productivity industries: wholesale and retail trade, health and social work, and education¹⁴

The below figure shows the overall gender gap in Southern Asian countries is 0.661 with the concentration of 0.365 in the economic sector, 0.943 in the education sector, 0.947 in the health sector and 0.387 in the politic sector. Which mean the participation of women in Southern Asia is low in different sectors especially in the economic and political sector.

Figure 15



Gender gap: Women’s participation raised at 48 per cent in 18, compared with 75 per cent for men, in other word means around three in five of the 3.5 billion people in the global labour force in 2018 were men. After a period of quick progression that lasted until 2003, subsequent progress on closing the gender gap in participation rates has hindered. The ample gap of 27 percentage points recorded in 2018.¹⁶ Gender differences in laws affect both developing and developed economies, and women in all regions. Globally, over 2.7 billion women are legally restricted from having the same choice of jobs as men. Of 189 economies assessed in 2018, 104 economies still have laws preventing women from working in specific jobs, 59 economies have no laws on sexual harassment in the workplace, and in 18 economies, husbands can legally prevent their wives from working.

Gender inequality had diminished over the past 30 years. For instance, the gap between male and female labour force participation decreased by eight percentage points due to the large gains in female labour force participation, especially within advanced economies.

Educational opportunity: Despite an increase of women pursuing higher education globally, a gender gap in employment rates remains among highly

educated women and men in some countries. gaps narrowed around the world with 35 countries having achieved full parity, and 120 countries closing at least 95% of their educational gender gaps.

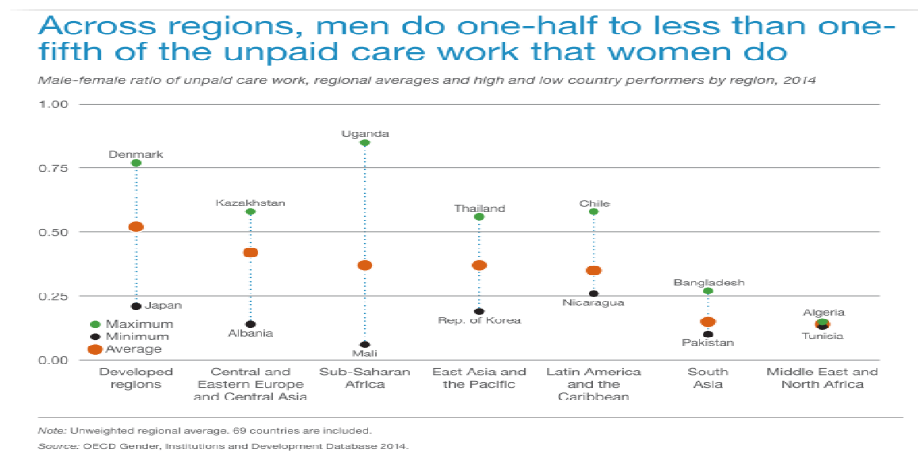
Unpaid Work: (Childcare and Housework) Women spend more time Performing unpaid work. Participation rates fall for married women because of a combination of preferences and social norms around women's roles and responsibilities after getting married. legal frameworks and adequate facilities that might support families in balancing work and family duties are incomplete.¹⁷

Unpaid care giving responsibilities can prevent paid employment opportunities, and this work unequally falls to women. Globally, only 41 million (1.5%) men provide unpaid care on a full-time basis, compared to 606 million (21.7%) women. Mothers are less likely to be employed compared to fathers and women without children¹

Women are over-represented in informal and vulnerable employment. Women are more than twice as likely than men to be contributing family workers. The share of women in informal employment in developing countries was 4.6 percentage points higher than that of men. Women are paid less than men. Women bear disproportionate responsibility for unpaid care and domestic work. Women tend to spend around 2.5 times more time on unpaid care and domestic work than men. The amount of time devoted to unpaid care work is negatively correlated with female labour force participation. Unpaid care work is essential to the functioning of the economy but often goes uncounted and anonymous. It is estimated that if women's unpaid work were allocated a monetary value, it would constitute between 10 per cent and 39 per cent of GDP.¹²

Women are more likely to be unemployed than men. In 2017, global unemployment rates for men and women stood at 5.5 per cent and 6.2 per cent respectively. This is projected to remain relatively unchanged going into 2018 and through 2021. Women are over-represented in informal and vulnerable employment.¹²

figure ¹³



Family Support: Maternity leave is available in 184 economies, with a median leave of 98 days. Paternity leave is mandated in 105 economies with a median leave of only 5 days.

under-represented in high-skilled and roles: Women already have the job skills to position them for roles in high-growth fields of the future, but are over-represented in the industry's most likely to be affected by automation. By 2030, an estimated 40-160 million women may need to transition into higher skilled roles, necessitating higher education or upskilling. Women are less likely than men to have access to financial institutions or have a bank account. While 65 per cent of men report having an account at a formal financial institution, only 58 per cent of women do worldwide. ¹²

Women are currently under-represented in high-skilled subjects like STEM. Globally, women make up 35% of STEM students and only 22% of professionals in the field of Artificial Intelligence (AI)

Leadership: Despite Progress, Women Are Scarce Among Senior Leaders. Very few women are CEOs of the world's largest corporations. As of the May 2019 Fortune list, only 33 women (6.6%) were CEOs of Fortune 500 companies. Women account for less than a third (29%) of senior roles globally. Some Countries Use Quotas to Increase Women on Corporate Boards. Women held 20% of board director seats worldwide in 2019, an increase from 17.9% in 2018. About a quarter (26%) of board directors in the S&P 500 were women in 2019.⁴³ France, Germany, India, Italy, the Netherlands, and Norway have quotas for women on boards of public companies.

Women are less likely to be entrepreneurs and face more disadvantages starting businesses: In 40% of economies, women's early-stage entrepreneurial activity is half or less than half of that of men. Women are constrained from achieving the highest leadership positions: Only 5% of Fortune 500 CEOs are Women.¹²

The pay gaps: The pay gap between women and men is broadening universally. Globally, women earn 16% less in average hourly wages and 22% less in median monthly wages, with large variations between countries. Informal employment, lower levels of labour force participation, gender pay gaps, and interrupted careers contribute to women's lack of access to social protections like pensions, which leads to higher rates of poverty among older women as compared to older men. Women are less likely to participate in the gig economy: 26% of women do, compared to 32% of men.⁵⁰ and even in the gig economy, women face a pay gap. One study of a global online platform for task-based work found that women earn, on average, 37% less than men in hourly wage rates. Another study of Uber rideshare drivers in the United States found that men earned, on average, 7% more per hour than women.

The gender wage gap is estimated to be 23 per cent. This means that women earn 77 per cent of what men earn, though these figures understate the real extent of gender pay gaps, particularly in developing countries where informal self-employment is prevalent. Women also face the motherhood wage penalty, which increases as the number of children a woman has increased.

Harassment: Harassment in the workplace is common, stopping many women from accessing economic opportunities. Poorer women are often strangely affected, for instance, because they are the most reliant on public transport. Around 1 in 3 women in the three countries has ever been verbally harassed in public.¹²

Safety and mobility: Women's movement may be embarrassed by social norms, gender-based violence and general safety. These limitations might affect women's choice of their income-generating activities, and their ability to engage in businesses based outside of the home.¹⁴

Labour underutilization is more dominant among women: Apart from the unemployed, a further 140 million people were in the "potential labour force" in 2018, which means that they have to be classified as underutilized labour. This group of people who are looking for a job but are not available to take up employment, or who are available but are not looking for a job, includes

far more women (85 million) than men (55 million). The corresponding rate of labour underutilization is consequently much higher for women, at 11.0 per cent than for men, at 7.1 per cent. Besides, women are much more likely to work part-time and a significant proportion say they would prefer more hours of employment.¹⁶

Conclusion

Women are insistently less present in the workforce than men contribute to the Economic Participation and Opportunity gap. On average about 78% of adult men (15–64) are in the labour force, while only 55% of women of the same cohort are actively engaged in the workforce. This means that over 30% of the global labour force participation gender gap has yet to be closed.¹⁵ The common factor which exists globally with consideration of south Asian countries are:

- Unpaid Work-time (Childcare & Housework) is high for women.
- Family Support Policies are a challenge for increasing Women's Labour Force Participation Rates.
- Uncertain future of Work-potential & Work-opportunities for Women.
- Marriage and children have reduced woman's probability of working, although with differences across countries.¹⁷
- Women are currently under-represented in high-skilled subjects like STEM (Science, Technology, Engineering, Mathematics).
- Inaccessible Higher Education, Informal & Unorganised work sector.
- Gender-based role distribution is another discouraging factors.¹⁸ like Agricultural occupation.
- Relatively lesser Leadership-opportunities in the professional domain for women. Harassment at work & public transportation remains a huge deterrent.
- Mismatch in Labour-utilization in terms of Availability for Employment & Desire for being Employed in women.
- Existing Societal Biases in certain geographies of the world prevent women from pursuing higher education or professional ambition.
- Pay-gap is disparate between the genders in various countries of the world creating a sense of Economic Inequality.
- Employment segregation

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Study on Role of Microfinance in Woman Empowerment: Review

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Abstract

The advent of liberalization and globalization in India in the early 1990s escalated the issue of women workers in unorganized industries from bad to worse, as most women engaged in different self-employment activities have lost their livelihoods. Typically, microfinance institutions offer small credit services without collateral to low-income customers, micro-saving, and micro-insurance particularly women micro-entrepreneurs. Evidence shows that microcredit programs are an effective tool for the social and financial empowerment of women. Profound effects on psychological well-being support for kids, economic and social growth. More than 60 percent of the clients of microfinance institutions worldwide are women. Basically, three reasons are used to support people's rights to micro-finance services: one is poverty; the other is increased efficiency and sustainability, as well as the third, is reducing gender inequalities and discrimination. Empowerment is a process of transformation in which persons or groups acquire authority and the ability to govern their lives. A sequential study shows a change in the economic, psychological, social, and political aspects of women's lives after introducing women's microfinance participation to the formal credit system, especially through Self Help Groups (SHGs).

Keywords: Microfinance, Microcredit, Literature Review, Women, Empowerment, Empowerment Domains.

Introduction

The primary responsibility of meeting the credit needs in rural areas of India was assigned to the cooperative banking sector until around the mid-1960s. As technological advances in the agricultural sector began to gain pace, it

was expected that commercial banks would play a rising role in the rural credit market through branch expansion and direct lending. The overriding aim of nationalization was to take the banking sector to masses (Christabell, 2012) and to provide easy financial services to those who have been left unattended or under-attended by financial formal agencies framework (Reserve Bank of India, 2006). In a last few decades phenomenal growth has been experienced by the banking system in terms of geographical spread, mobilization of deposits, and disbursement of loans in rural areas (Vatta, 2003). The committee on regional rural banks (RRBs) in Dantwala concluded that the agricultural loans advanced by commercial banks were unable to fill the geographical credit shortage. Despite its exploitative existence, informal lenders continue to hold a large share of the rural credit market. The attractive characteristics of the informal credit scheme are collateral-free lending, proximity, prompt delivery, and loan transaction flexibility (Dhar, 2016). To begin with, any means of financial inclusion must be not only readily available but also accessible for borrowers who do not have access to the formal financial system. Secondly, it should ensure that, over time, borrowers are able to reduce their dependency on informal sources of finance and a certain degree of loyalty to Self-help group (SHGs), which will act to ensure that these borrowers are permanently or effectively included in the formal banking network (Chavanand Birajdar, 2009). In 1972, the formal presence of Micro Finance was established. Self Help Groups in India can be traced back to the establishment of the Self-Employed Women's Association (SEWA) in 1972 as a starting point. Ela Bhatt founded SEWA, with the goal of raising the incomes of self-employed women workers in the unorganized sector, such as weavers, potters, hawkers, and others. In 1992, National Bank for Agriculture and Rural Development (NABARD) formed the SHG Bank Linkage Project, which is the largest microfinance project in the world today (NABARD, 2009).

Undoubtedly, the pace at which microfinance in India has spread has been impressive. Studies on informal groups sponsored by NABARD have shown that self-help savings and credit groups have the ability to put together the formal banking system and the rural poor for mutual benefit. The government envisaged that 40% of commercial banks' overall loans should be directed to priority sectors, groups or regions in order to fund activities that were either considered socially beneficial or highly risky, and at lower interest rates to borrower groups that were likely to be disadvantaged in the credit markets. (Reserve Bank of India, 2015). However, the examination concludes that Indian banks have not accomplished a few targets fixed by Reserve bank of India (RBI). Issuing loans to the priority sector makes numerous issues for the Indian banks like low productivity, high NPAs, exchange cost, and so on.

It is a need of the hour to find solutions to these issues; otherwise the Indian banks' growth will end. If sufficient priority sector developments are made, they can help to reduce the level of poverty (Uppal 2009). The Indian Government has introduced a variety of initiatives to benefit female entrepreneurs. Such schemes have financially motivated women to make a better life and to follow their dreams of becoming an entrepreneur. Rashtriya Mahila Kosh (RMK) was founded in 1993 as a national-level autonomous organization under the guidance of the Ministry of Women and Child Development, extends micro-finance through intermediary organizations such as NGOs for income-generating activities to the poorest and asset-less women entrepreneurs (NABARD, 2009). According to the Rashtriya Mahila Kosh (RMK) database, the amount disbursed in the year 1994 was 140.82 lakh, and this number grew to 766.50 lakh in 2019.

Women accounts for more than 81% of the overall beneficiaries under the "Stand Up India" scheme, which is worth Rs 16,712 crore approved for them over nearly 4 years. The stand-up scheme for India was launched on 5 April 2016 to facilitate bank credits between Rs 10 lakh and Rs 1 crore for the establishment of a green field company by at least one Scheduled Cast (SC) or Scheduled Tribe (ST) borrower and at least one female borrower per bank office of Scheduled Commercial Banks. Women have more than 81% account holders under the Stand-Up India scheme as of February 17, 2020. 73,155 women account holders have been given Rs 16,712,72 Crore for women accounts holders (Business Today, 2020).

Though microfinance has long existed in India, there are three reasons often cited by critics of microfinance for its fall, these are high-interest rates charged, over-indebtedness, and coercive recovery practices. Through two regulations, the Reserve Bank of India (RBI) set a limit on the lending rate of Microfinance Institutions (MFIs) at 26% per annum on May 3, 2011 (Vasudevan, 2012). The interest rate cap was subsequently withdrawn, however a 10 per cent margin cap was set for larger MFIs and 12 per cent for those with loan books below 100 crore (Unnikrishnan, 2014). The Reserve Bank of India announced that for the quarter beginning on January 1, 2020, the applicable average base rate to be paid to its borrowers by Non-Banking Financial Company-Micro Finance Institutions (NBFC-MFIs) would be 9.16 per cent. (Reserve Bank of India, 2019). The other charge is that MFIs lends to the same client beyond their ability to repay. And MFIs had real difficulty in discovering a customer's current borrowings because the customer rarely displayed the true position. The RBI has now laid down a rule that only two MFIs can lend to a single borrower, and both cannot lend beyond Rs.50,000 together. Therefore, this removes the risk of over-

lending. The microfinance institution network (MFIN) worked closely with CRIF High Mark Credit Information Services Pvt. Ltd. is an RBI approved credit bureau in India, to establish a database of the country's micro borrowers. This includes more than 30 million micro borrowers and nearly 60 million loan accounts (Vasudevan, 2012).

Many other schemes such as Pradhan Mantri MUDRA Yojana (PMMY) is a scheme launched on April 8, 2015, by the Honourable Prime Minister to provide non-corporate, non-farm small/micro businesses with loans of up to 10 lakh. Women are 70 percent of the overall loan borrowers. These loans are listed under PMMY as MUDRA loans. Business Banks, RRBs, Small Finance Banks, MFIs, and NBFCs are authorized to disburse such loans. Since the start of the scheme, more than 22.53 crore loans have been approved. Out of this, more than 15.75 crore loans were extended to women, 70 percent of the total loan borrowers are women as on August 28th, 2014. The scheme provides for universal access for every adult to banking facilities with at least one basic banking account. It has 38.13 crore beneficiaries. As on February 19, 2020, 20.33 crore beneficiaries out of 38.13 crore PMJDY beneficiaries are women which amounts to 53 percent (Business Today, 2020).

As the banking regulator requires more borrowers to have access to microfinance credit, the Reserve Bank of India increased borrowing limits on February 2021. The limit on total indebtedness of the borrower has been increased from Rs 1 lakh per year to Rs 1.25 lakh per annum. The loan cap was last updated by the central bank in 2015. According to the document, the current revision cap is set after "taking into account the important role played by MFIs in providing credit to those at the bottom of the economic pyramid and allowing them to play their assigned role in a growing economy". This is supposed to enhance the credit flow to the economically poorer segments of society. The rise in the household income cap would also allow banks to label more loans on their books as "microfinance," enabling NBFC-MFIs to be made available with more liquidity. (Nair, 2019).

Women have already come a long way in their lives in India. For the nation, financial security for women is of prime importance. Thanks to these financial benefits, without having to worry about finances, women can now start their own company. These structures allow women to invest in land, take care of their health, and borrow funds. This help in empowering women in different aspects such as economic, social and physiological.

Empowerment Concept

Empowerment is described by the World Bank as the process of growing individuals' or groups' ability to make decisions and to transform those decisions into acts and results that are needed. Empowerment is the process in which individuals gain such an opportunity to exercise strategic life choices that they have previously been denied, that is. a person must first of all be disempowered (Kabeer, 2001).

In India, MF has become a movement. It has become a rare instrument of empowerment and capacity improvement at the same time. Firstly, by cultivating the habit of thrift and saving, it has introduced millions of individuals to the banking system. Second, it aids in the alleviation of poverty. Third, it supports collective and individual operations that provide livelihoods on a daily basis. Fourthly, through the MF, with the joint efforts of banks, NGOs, microfinance institutions, and other institutions, financial inclusion is possible. Lastly, by making women not only economically, but socially and politically as well, it empowers women (NABARD, 2009).

In many South Asian nations, women's access to finance from formal financial institutions was very difficult in the early '70s. However, when Professor Yunus started a pilot project in the 1970s to provide financial assistance to poor women in Bangladesh through collateral-free micro-loans, progress in funding for women was achieved. Yunus explains poor women are able to work harder to raise themselves out of poverty and their families. They pay more attention, prepare their kids to live better lives, and are more consistent than men in their success. Her visions of success inevitably centre on her children when an unemployed mother begins earning an income. The second priority of a woman is the home. For herself and her family, she wants to purchase utensils, build a stronger roof, or find a bed. A man has a different set of goals altogether. He puts more time and attention on himself. Therefore, money entering a household through a woman provides more benefits to the entire family (Yunus, 2013). It is proven that, because of social norms and traditions, women are often downcast, frequently prevented from engaging in the labour force, or from pursuing entrepreneurial activities, despite having adequate entrepreneurial skills comparable to men. Women are seen as more trustworthy creditors whose senses make them bring more money into the family than men do.

Malhotra et. (2002) list of the most widely used measurements of women's empowerment, drawing from the systems built by different authors in various fields of sociology sciences. These frameworks suggest that women's empowerment needs to measure from multiple dimensions, including

economic, socio-cultural, political, and psychological, family/interpersonal. These dimensions are reviewed as under.

➤ **Economic domain**

In most South Asian countries, the patriarchal social structure makes women economically marginalized and they have limited options while making financial decisions or participating in entrepreneurial activities (Md Aslam Mia). Lending to women is often touted as a way of unlocking the entrepreneurial abilities of the population who have not been able to engage in "the economy" because of cultural biases. Poverty, however, is then largely explained as a product of unfulfilled consumer capacity because of the lack of access to credit for poor women (Young, 2010). A recent World Bank study confirms that gender-based societies pay the price of greater poverty, slower economic growth, poorer governance, and a lower standard of living for all people. At the macro level, that is because women are 70 per cent of the world's poor. In approximately every region, women have a higher unemployment rate than men and make up the majority of the informal sector in most economies. They represent the majority of those who need services in microfinance. Therefore, giving women access to micro-credit loans creates a multiplier effect that enhances the impact of the activities of a microfinance institution, benefiting many generations (Loomba, 2013).

Indian self-help groups' evidence concluded that SHG participants are motivated to participate in the microfinance program in the sense that they are more likely to resist existing gender norms and cultures that hinder their ability to develop and take decisions. Rapid progress in the formation of SHGs has now turned into a movement in empowerment among women across the country (Swain and Wallentin, 2009). To overcome exploitation, microfinance is necessary to create trust in the economic self-reliance of the rural poor, especially among rural women. It is a positive product of these self-help groups (SHGs) and has become a subject of intensive scrutiny as it proves to be a successful way of reducing poverty and economic empowerment (Loomba, 2013).

Many studies concluded that there is a positive impact of the SHG in the lives of women through increase in the income generation capacity. A research explores the factors behind the development of entrepreneurship through the SHG. The development of society is directly linked to the income generation capacity of its members. Women's entrepreneurship contributes to the economic well-being of families and communities. Over time, the number of women enterprises has increased through SHGs, thus empowering women and enhancing their position in society. It is an important mechanism of

grassroots programs that seeks to bring about positive change by working directly with poor women (Das, 2017).

But in contrast some researchers have argued that the effect of microfinance on women is not always positive, women who have set up their enterprises benefits only with a small increase in income at the cost of heavier workload and repayment pressure. Men in the family often use their loans to set up businesses, or sometimes women end up working as unpaid family employees with little profit (Mayoux, 1998).

A study done in Ethiopia concluded through structured interviews and focus group discussions with women small-scale entrepreneurs that credit and saving services have contributed in part to women entrepreneurs' incomes and savings. The income thus secured, however, has not contributed to any qualitative change in their lives other than the repayment of loans and the maintenance of already developed businesses. The services did not contribute much to their business development, as women, with the exception of some family members, were unable to create job opportunities for others. On the personal front, for their personal treatment, medical expenses, and schooling, they could not use the money. In brief, except for some minor changes, the credit and saving services extended by MFIs in Ethiopia have so far been unable to influence the income of female small-scale entrepreneurs to any significant degree (Belwal et.al, 2011). For the benefit of women entrepreneurs, appropriate products and policy initiatives are required for most of the basic and extended MFI services. In terms of the spread of microfinance institutions in India, there has been a major regional difference. Not only in terms of the absolute number of SHGs formed and the bank loans given to these SHGs, but also in terms of their coverage of poor people residing in that area, the Southern Region of India is far ahead of the other regions. It is useful to compare the number of poor people since micro-finance is basically a way of providing bank loans to poor parts of the population. Given that, in terms of banking infrastructure, the Southern Region has traditionally been one of the well-developed regions, this concentration of micro-finance inevitably contributes to regional inequality (Chavanand Birajdar, 2009).

➤ **Social domain**

Microcredit, a wise investment in human resources and a vital anti-poverty instrument. When credit is given to the poorest, especially women, they become economic actors with power. Power to enhance not only their own lives but the lives of their families, their societies, and their nation in a widening circle of impact (Young, 2010).

Not only in India, but throughout the world, women have become the most underprivileged and discriminated strata of society. They have been highly ignorant clients of the financial sector, despite all the efforts of governments and non-government. Microfinance has recently emerged as a powerful tool for empowering women, particularly rural women(Loomba, 2013).

Globally, more than 800 million people are surviving without access to sufficient food, clean drinking water, and sanitation, and still living on less than US\$ 1.25 a day. Rapid economic growth has brought millions out of poverty in countries like China and India, but development has been uneven. Women, due to unequal access to paid jobs, education, and land, are more likely to live in poverty than men. World leaders adopted the Sustainable Development Agenda at the United Nations Sustainable Development Summit on 25 September 2015, which comprises a set of seventeen Sustainable Development Goals (SDGs) aimed at ending poverty, fighting inequality and injustice, and tackling climate change by 2030. Microfinance has emerged in many developing countries as a frontier tool for poverty alleviation (Morduch, 2000). Microfinance will act as an important dynamic plan to ensure the 'no poverty' and 'zero hunger' SDGs by 2030. Microfinance schemes extend small loans for self-employment initiatives to poor people thereby helping clients to enjoy a better quality of life (Morduch, 2000). In order to achieve the aim of financial inclusion, many ground-breaking models of microfinance are being introduced around the world. The term financial inclusion refers to the provision of financial services to the large sectors of deprived and low-income groups at an affordable rate. Access to credit, investments, insurance, payments, and remittance facilities from all forms of formal financial institutions may be included in different financial services. The types of structured financial services offered by regulated financial institutions are not available to an estimated 2 billion working-age adults globally. In Sub-Saharan Africa, for example, just 24 percent of adults have a bank account, while the formal financial sector in Africa has expanded in recent years (Muzigiti and Schmidt, 2013).

This financial inclusion is one of the main determinants of women's favourable attitudes towards SHGs. Rural women had a positive attitude because self-help groups helped them reduce their financial dependence on informal money lenders; they had access to free banking services and started saving money after joining SHGs. In addition, women felt that collective accountability, the spirit of unity, peer pressure, democracy, decentralization, engagement, and group leadership rotation were important to the SHG's good governance. The findings show that 43.34% of rural women had a 'favorable' attitude and 26.66% had a 'strongly favorable' attitude to SHGs. Factor

analysis using the main component method brought forward ‘coping up ability’, ‘personality traits’, ‘resource utilization and building’, ‘entrepreneurial attributes’, ‘organizational governance’, ‘financial inclusion’ and ‘economic upliftment’ are the precursors of attitude (Patil and Kokate, 2017).

Despite the considerable resources invested globally in SHG-based credit measures, there is little evidence of their effects, relying almost exclusively on data from observations. The results of a randomized evaluation of the Bihar Rural Livelihoods Program, also known as Jeevika, an SHG program introduced by the Bihar Government in India, 34 percent of household debt in rural India (Government of India, 2014) and 65.9 percent of household debt in rural Bihar was kept by traditional moneylenders. Compared to conventional rates of 6 to 20 percent provided by formal banks on larger loans, these lenders charge between 12 and 150 percent annual interest (RBI, 2011). Usually, informal loans are secured through personal relationships or collateral. This means that the poorest households and those from scheduled castes face the least favourable borrowing conditions in a context in which social relationships are strongly stratified by caste and income (Hoffmann et.al, 2021).

The empowerment of women research was done at village-level survey in West Bengal through public programs and found that participation in a community can have a significant effect on the empowerment of women. The loans are a great source of self-employment for the women.

The self-esteem that develops among women helps lift their voices against any corruption and uplift their place in their families. Women linked with groups are generally more informed and hence manage to get the panchayat’s assistance for facilities like sanitation and electrification. Groups, however, have to go a long way in terms of organizing women and building a strong connection between women. As the functioning of groups is a bit difficult, low-caste and illiterate women are less involved in groups so far. In the villages, a proper continuation of group forming is lacking. Group participants do not undergo any group formation training and members remain in complete ignorance of group formation (Bose and Ghosh, 2017). In order to understand the degree of total and relative financial exclusion of women, microfinance is seen as a way of drawing more women into the banking system, examining patterns in women’s bank credit and deposits, and contrasting the same with statistics for men. There was an obvious gap between women and men on the bank credit front. There was an average of 21 credit accounts per 10,000 women, compared to 118 credit accounts per 10,000 men in 2007. The disparity in deposits represented the wide gap

prevailing in the financial inclusion of women in comparison to men (Chavan 2009).

➤ **Psychological Domain**

Women were unable to engage in economic activity effectively. Microfinance gives women the financial support they need to start business projects and to engage actively in the economy. It gives them confidence, strengthens their role, and makes them more involved in decision-making, thus promoting gender equality. Long-standing MFIs have also registered a decrease in violence against women since the start of microfinance (Loomba, 2013). The physical aspects of the program were often stressed by the majority of the researchers and the effect of the SHG model on the socio-economic aspects of the rural poor was specifically determined. This suggests that hardly any research has devoted itself to the psychological or behavioural component of SHG-related rural poor. It is very normal that women's favourable or unfavourable attitudes have a direct effect on their involvement and success in SHG operations. Therefore, the degree of the attitude of rural women associated with SHGs is explored and the factors regulating the attitude of rural women towards SHGs are established (Patil and Kokate, 2017).

According to the findings of Such in her paper on the basis of secondary data analysis, aimed to highlight the empirical findings of the study suggests that microfinance has a significant effect on the economic status, decision-making capacity, knowledge, and self-worthiness of women participants in the self-help community. Microfinance is known around the world as a key mantra for achieving and sustaining long-term economic growth (Loomba, 2013).

However, on the other hand, some researchers such as Karlan and Valdivia (2011) have examined the effects of business training, finding little or no economic evidence in business, but noted improvements in business awareness. Another randomized study done which found no major improvements in health, education, or women's empowerment but positive effects on earnings. More research is required on the variety of health programs and services that can be combined with SHGs and the degree to which this leads to better health awareness, attitudes, and outcomes (Banerjee et al., 2015).

➤ **Political Domain**

Studies have shown that 'SHG builds and strengthens leadership as well as management qualities within its members.' In terms of planning, decision-making, implementation, and assessment, the SHG respondents articulated

their managerial empowerment (Sherin, 1999). SHG women may also play a strategic role in Gram Panchayat. This implies that SHG provides rural women with a forum for their political empowerment. In terms of raising their voice in political institutions such as Village Panchayat, political empowerment occurs and some women SHG members are elected and represent the Panchayat Raj Institutions (PRIs). Rural women also have opportunities to develop their leadership and management skills, which in turn help women lift their voices in society and increase their access to social institutions (Patil and Kokate, 2017)

Neha Kumar in her paper explores how membership of SHG is associated with political engagement, understanding, and use of government entitlement programs. It further explores the effects of SHG membership on different social networking and mobility initiatives. There is increase mobility in SHGs among women, the women need to leave their homestead in order to attend the group meetings. This experience of being in a group and engaging with other women can also improve women's self-confidence in itself. Findings show a strong positive association of SHG membership with many measures of political participation. Being an SHG member often makes these women more likely to participate in the gram sabha and to believe that in response to suggestion the gram panchayat will take positive action. However, her results indicate that, despite the positive impact on social networks, self-confidence and mobility, knowledge about public rights is not widespread (Kumar et al., 2019). According to the finding of Sandeep SHG allows rural women to benefit from government schemes and programs, they could generate sustainable income and jobs (Patil and Kokate, 2017). So, more awareness is needed for public programmes.

Conclusion

Overall, the literature review indicates that SHGs can have a positive impact on the economic, political, and social empowerment of women, but emphasizes the need for more comprehensive quantitative research. It was concluded from previous research studies that the services for microfinance and micro-credit had the effective influence on women's lives empowerment.

Micro-credit programs have had both positive and negative effects on women's empowerment and the elimination of poverty worldwide. The positive ones were improving the ability of women to impact family affairs and decision-making; growing self-confidence; improving their status, increasing domestic gender relations and reducing domestic violence; improving group status, and accelerating economic empowerment. On the other hand, the negative impact after a survey into existing literature

considering economic domain were that microfinance institution penetrated deep into various regions of the country; but interestingly, in terms of the concentration of microfinance operations, the Southern Region has almost reached the level of saturation. While the North Eastern zone, which, in terms of coverage by formal financial institutions, remains backward has still a lot remaining to alleviate poverty, reduce regional disparities, reduce inequalities and focus on skill building of the otherwise neglected sections of the society. Under social domain, microfinance has increased the mobility of women, but the coverage of women within the current banking network may also be an indication of the spread of micro finance, as micro finance is mainly directed towards women. The disparity in deposits was reflected in the broad gap prevailing in the financial inclusion of women in comparison to men. To sum up everything that has been stated so far is that microfinance has empowered women but there is a need for more in-depth research. In this sense, an empirical study using first-hand data is required to further support the idea that microfinance has really empowered women, especially in the context of developing nations.

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Human Psychology Study in Digital Sales

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Abstract

Digital marketing is one of the marketing channels to promote products and services that run on the internet and can be promoted through search engine optimization, search engine marketing, content marketing, influencer marketing, content automation, campaign marketing, ecommerce marketing, e-mail marketing and display advertising. As digital platforms are increasingly incorporated into marketing plans, the use of digital marketing campaigns have become the need of hour. Organizations are using digital channels for building the brand, acquiring, and retaining the Consumers. The key performance indicator is to increase the Consumer satisfaction which helps the organizations to sustain and increase the revenues. There are various triggers points which impacts the Consumer purchasing behaviour. The main study and goal for the research is to analyse the human psychology and the motivation factors impacting the purchase decisions. All these framework models are qualitative and quantitative in nature as it involves behaviour, sociological and cultural influences. The scope of the study is why do the Consumers buy online and how they respond to marketing campaigns. The variables for the study which includes conversion rates, brand loyalty and product advocacy referrals. These consumer insights are the foundation to develop digital marketing campaign strategy. The technology is helping the consumer to adopt and transform the new ways of purchasing habits. With constant change and uncertainty in current pandemic situations: What are those additional factors impacting the modern ways of purchase decision in comparison to the traditional ways. This means the data points required for study includes understanding the customer preferences, preferable channels and measuring the campaign responses. The study results can be applied to develop consumer personas and segmentation to run the personalized campaigns.

Keywords: Digital Marketing Campaigns, Digital Channels, SEO, SEM, Content Marketing, Consumer Satisfaction Score, Data Science, Segmentation, Consumer Personas, Personalization.

Introduction: The study of human psychology in Digital sales

Sustainability in the competitive market is the primary objective for all businesses. There are various ways in which the marketing teams aim to reach the goals and improve the business. To succeed in this competitive world, it's imperative to understand the needs and choices of the consumers to promote the products and services at the right time and through the right channel. The success of these campaigns is largely relying on a marketing team's ability to design and develop the campaign strategy to achieve the organization's goals. The key goals of the business are to increase sales conversion, and consumer satisfaction through various marketing programs and campaigns. The introduction to digital channels helped the marketers to reach and connect consumers at a large scale without any boundaries unlike in traditional marketing reach. The digital marketing opened global choices to consumers as well as the sellers. We have observed a tremendous shift in the purchase behaviour of consumers in the last 5 years.

Industry trends:

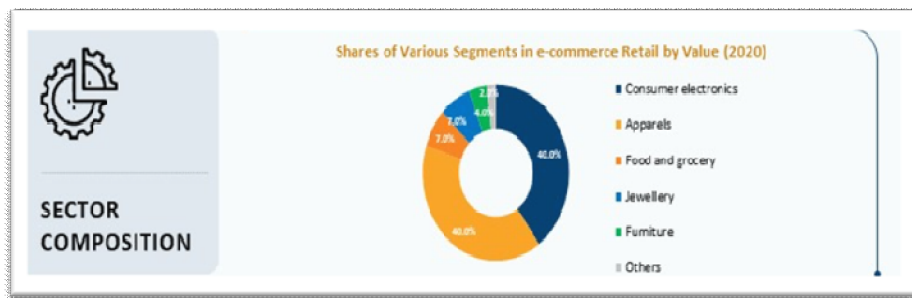
Source: <https://www.ibef.org/industry/ecommerce>

Source: <https://www.statista.com/topics/2454/e-commerce-in-india>

India e-commerce will reach US\$ 99 billion by 2024, growing at a 27% CAGR over 2019-24, with grocery and fashion/apparel likely to be the key drivers of incremental growth.

- 50% of population in India are digital savvy
- 74% are active ecommerce users





By optimizing marketing strategy and aligning to the consumer behaviours has given the potential to increase the conversions for the businesses. The effective use of digital marketing channels linked with consumer choices had opened the doors for better reach and conversions. The cost per conversion through digital marketing is relatively lower than traditional marketing. If the digital channels are targeted with the right choices to the right consumer the cost per acquisition/click rate will decrease significantly. Digital channels are developed to achieve efficiency and better results while traditional channels are for consumer connect and loyalty. The study is to combine both these channels and strengthen the marketing efforts for sustainable growth. Therefore, the consumer personas with 360-degree views model development will ease the transformation and achieve the organization's goals.

Review of Literature

The findings are from the listed literature review papers are

- www.allmultidisciplinaryjournal.com: International Journal of Multi-disciplinary Research and Growth Evaluation
- Digital Marketing strategy: An integrated approach to online Marketing
- Marko Merisavo 2008: The interaction between Digital Marketing communication and customer loyalty

Problem Statement

The paradigm shifts from traditional to Digital channels for purchasing the products added disadvantages to the businesses in terms of loyalty to the brand. As the businesses connect with consumers through the different channels, the consumer is empowered to choose from the different brands. The purchase details of consumer through traditional and digital channels are not connected hence the single view information is incomplete. Due to

this, the marketers are unable to create a 360-degree view of consumers and the choices they prefer. These stumbling blocks are affecting consumer retention and repetitive sale conversions for the businesses in long run.

Objectives of the study

The main objective is to study and identify the areas that influence the consumer to buy from the same brand repetitively. The key analysis which covers the listed points are:

1. The factors that influence purchase decisions.
2. The trigger points lead to call to action for the repetitive purchases
3. To study the consumer feedback and the inputs for the conversion

These objectives will help us to study the consumer psychology in detail and predict the choices and make suggestions and recommendations to the retail organizations.

Research Methodology

The purpose of doing this research is to understand the consumer behaviour while choosing the specific brand/ product through online channels.

The research methodology is designed to use qualitative and quantitative methods with the usage of primary and secondary data sources. Data collection methods are both qualitative and quantitative data includes use of statistical methods, synthesis and literature reviews.

The Primary data is of company internal data and external data like consumer interviews, sales numbers, campaigns, conversions, consumer feedback, consumer demographics and transaction, conversion reports of various campaign promotions and feedback to study the consumer choices.

Secondary data sources are collected from previous marketing research reports and some freely available information which supports the digital marketing channel inputs.

Data analysis method follows the procedures listed under the following sections.

The research methodology is finalized for the study as Hybrid methodology

1. Qualitative Analysis: Consumer interviews, feedback study (offline and online data), Survey data
 - How the consumer feels about the brand?
 - Do they know your products?
 - Do they prefer to shop online?
 - Consumer communication style?
2. Quantitative Analysis: Consumer transactions data, Demographic data, Product transactions historical data, communication channels, campaign responses

Data Analytics Process includes

1. Data Collection
2. Data quality
3. Building the model
4. Training the model
5. Running the model with full data

Data analysis software

The digital channels produce vast amount of data ranging from click stream data, consumer feedbacks, website visitor's data, campaign data with conversions. To study, analyse and develop the model framework, the following tools and technologies are performed. The analysis will be performed using Excel and SPSS and for Descriptive reports -Tableau as visualization software.

Conclusion

The usage of consumer behaviour data linked with digital marketing channels for campaigns has many advantages to build a sustainable marketing program for the organizations. These programs will help in strategizing the businesses to streamline the processes and to progress with remarkable growth and returns. The further study involves developing the customer persona model to strengthen the system while targeting the campaign promotions. The research will be strengthened with Data science approach for long-term success. In addition to the model, the personas segmentation is a value add to enhance the consumer experience at the time of purchase.

‘Disguise in the Blessings’: Rapid Assessment of Urban Youth Employment in Hawassa Industrial Park

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Abstract

Industrial parks are ushering the purposes of economic transformations in developing economies. They are becoming platforms of transitions to industrialization. Equally, they are homes of employment opportunities and technology transfer. In Ethiopia, while industrial parks development is a recent experience, they are serving more purposes like attracting FDI and generating hard currencies. Moreover, they targeted in creating jobs for the skilled urban youth. However, state’s ‘cheap labour’ motto driven promotion of nations potential, among other things, during attracting the FDI is resulting in disguises within the blessings of the employment opportunities. The data collected from Hawassa Industrial park for this participatory rapid assessment indicated that most of the employed youth were using the employment in the park as transits to ‘better’ life and opportunities. Hence, most of them were either looking for other ‘better’ jobs and opportunities or unwilling to stay longer while working just for weeks in the park. This in turn was yielding absenteeism and high turnover, which in turn affected the productivity and efficacy of the industries. It was found that low wage, poor human resource management and little forward and backward linkages to the local economy were among the underlying factors leading to these disguise. These imply the emerging shifts in employment-unemployment typologies and trends while the state praised the industrial park for creating ample job opportunities. Consequently, we recommend the need to integrate effective human resource management policies like minimum wage policy, unionization, and incnetivization to enhance employees’ productivity and ensure the creation of stable

workforce, which will further support the intended economic transformation.

Keywords: Industrial Park, Hawassa, Urban Youth, Employment, Disguise.

Introduction

Rapid urbanization, population growth and youth unemployment are becoming the development issues of sub-Saharan Africa (Grant, 2012 & CSIS, 2018). The co-existence of these demographic and economic factors is severely challenging the region's endeavours towards development. Consequently, there various policy responses from the state side that were intended to manage their effects over the region's development. And Industrial parks development is among the response policies practiced in Africa in general and Ethiopia in particular (Oqubay, 2015; Kihiko, 2018 and Abebe, Buehren, & Goldstein, 2020).

In 2007, the Ethiopian government has launched national plans for economic growth and industrialization, which aimed to transform the agrarian economy into industrialization. This had twofold objectives: one, to transform the agrarian economy and two, to couple the rapid non-industrialized urbanization with industrialization (MoFED, 2007). This was later advanced through introducing industrial parks development in order to achieve three objectives: attracting FDI, generating hard currency and creating youth employment and there by industrializing cities (IPDC, 2019). Consequently, Hawassa Industrial Park (HIP) was established and became operational in 2016. This more advocate by the policy makers (see Oqubay, 2015).

The HIP is a multimillion-dollar state-led investment and the largest industrial park in Africa. It provides shades for factories coupled with all government services organized in one stop shop to ease the business undertakings. At the end of 2019, the HIP employed nearly 30,000 employees working in 21 international and national companies (IPDC, 2019).

International experiences, for example in India; indicated that developments of industrial parks are better in creating employment opportunities if geared better to the political economy and population economic structures of the nation (Saleman & Jordan, 2014). To this end Ethiopia's endeavour in establishing industrial park seems successful as many were employed and the nation generated significant amount of 248USD in 2017 from the Industrial Parks based exports (EIC, 2018).

However, there were complains about the emerging disguises in localizing the benefits of the industrial parks through effective employment mechanisms. Many argue that the parks are paying poverty wage (less than 1.25USD/day). This in turn created effects over the livelihoods of the youth employees and local economic developments in one hand affecting the productivity of the factories within the parks on the other. This rapid appraisal intended to investigate the emerging disguises, forward some human resource management interventions to ensure effective employment and productivity of the labour force.

Methods

This paper employed a rapid assessment method to investigate the employment conditions in HIP. It utilized data from previous works (IPDR, 2019 and Gonsamo, 2019) as a source to secondary data. The researchers also undertook a rapid appraisal through interviewing 52 employees and 4 officials of the park. The data obtained were analysed using descriptive statistics and thematic analysis methods. Accordingly, the issues were categorized in to the blessings of the HIP (employment opportunities and socio-economic effects as blessings of the HIP) and the Disguise (problems affecting employees' livelihood and job satisfaction).

Data presentation and analysis

Many agree that HIP was a blessing in generating local employment opportunities (IPDC, 2019). These can further be seen from Employees' characteristics and opportunities created by the park.

The 'blessings': Employees' Population and Employment Characteristics

Hawassa Industrial Park has created a direct employment opportunity for nearly 30, 000 youth at the end of 2019 and this expected to rise in to 60,000 when the park operates at its full capacity (HIP, 2019). More than 80 percent of the operational workers (among the 86percent of the total employees (IPDR, 2019)) are female youth (aged between 18-35 years (Gonsamo, 2019 and HIP KIIs, 2020). The majority of them were high school graduates who were aspiring to pursue their study in the city (Gonsamo, 2019 and HIP KIIs, 2020) most of them had no other job opportunities (KIIs, 2020 and IPDR, 2019). Thus, it can be said that the HIP is a blessing in creating a massive job opportunity for the traditionally oppressed girls with a little academic performance; no other paid employment opportunities and would have ended-up in early marriage destinations (which is the common practice in the study area see Jikamo, 2017, February).

The Disguise

Despite the massive employment opportunities created by the HIP, there emerging disguises affecting the employees' livelihood and productivities of the factories. Some of them listed below.

A. More operational works with low technology transfer and skills for future opportunities

The KIIs (2020) agreed that many of the employees engaged in the jobs are working in textile sewing activities, which demand low level of training and a little technology transfer. The data presented in Table-1 below stipulated that nearly 85% (N=52) of the respondents to the PRA were working in operational rank. As a result, they claimed that the factories are 'using their young labour while they were gaining a little skill that can't support their future' (KIIs, 2020). They further argued that this was occurring because the Ethiopian government has promised to deliver cheap labour so that the FDI can arrive (KIIs 2020).

Table 1. Distribution of Employees' Job rank (January 2020)

S.N	Job rank	Number of respondents	percentage
1	Operational	44	84.6
2	Supervisors	6	11.5
3	Others	2	3.8
	Total	52	100

(Source: Survey 2020)

Moreover, the respondent employees (2020) claimed that the absence of promotion to other opportunities was perceived as a dead end path to development. They were, thus, considering industrial parks as places of transitions that created opportunities for living in the city and/or benefiting from urban services i.e higher education.

B. Low wage

The respondent employees (2020) claimed that low wage is the major problem affecting their livelihood. Gonsamo (2019) found that the mean average monthly salary of an operational personnel is 815 Ethiopian Birr (ETB) (1USD=32ETB in 31/12/2019). This is equivalent to 25.5 ETB per day or 0.78USD per day. This was a poverty salary. They (2020) claimed that it is a 'neither live nor die' type income. They mentioned that their monthly income was more than inadequate to sustain. They believed as 'they were making foreigners and the federal government rich.' The park administrators (KIIs, 2020), contended that even though the base salary is low there were

different mechanisms to support the livelihoods of the employees. These included transport services and low cost food delivery services. However, the employees disagree that the support services did little in supporting their livelihoods.

All the respondents (KIIs, 2020) agree that the low wage problem emanated from the lack of minimum wage policy and government has skewed interest to FDI, hard currency and employment generations. This is further fuelled by the ‘over care to the international companies than its citizens’ (KIIs, 2020). These in turn were leading to further problems like absenteeism and employees’ high turnover (KIIs 2020).

C. Job Related Challenges

Respondent Employees at HIP (2020) mentioned that working in HIP was full of challenges. They mentioned that the challenges were both job-borne and administration borne. The job borne challenges included long working hours, health risks including physical accidents and mismatch between employees’ physical strengths and machine operations.

Table-2.Job Related Challenges in HIP (2019)

		Frequency	Percent
I face no challenge	Yes	3	6%
	No	46	94%
	Total	49	100%
Health Challenges	Yes	15	31%
	No	34	69%
	Total	49	100%
Stress due to the demanding nature of the job	Yes	46	94%
	No	3	6%
	Total	49	100%
Communication challenges	Yes	24	49%
	No	25	51%
	Total	49	100%
Challenge of sharing a room with others	Yes	13	27%
	No	36	73%
	Total	49	100%
Harassment	Yes	9	18%
	No	40	82%
	Total	49	100%

(Source: IPDR, 2019)

The administrative borne challenges including poor transport services, lack of housing services, poor communication of supervisors, expatriate workers and physical harassments. Equally, the data taken from IPDR (2019) and presented in table-2 revealed that stress from demanding nature of the job (94%), communication challenges (49%) and harassments (18%) were among the challenges.

D. Employees’ dissatisfaction

The data from IPDR (2019) presented in table-2 below stipulated that 98% (N=48) of the respondents had a plan to quit their job in the park. This implies the high level of employees’ dissatisfaction. The first three major reasons for thinking to quit were (i) too small salary to live (98%), (ii) Expectation gaps related with the job (92%), and (iii) longer working hours (85%) are related with the employment structure and human resource management issues (table-3).

Implications to Effective Youth Employment

In countries like Ethiopia where the population structure is dominated by the youth bulge (with low skill), industrial parks could be taken as strategies to create significant employment opportunities, in addition to their potential for industrializing the nation, attracting FDI and generating hard currency. They were also becoming home for inclusive development in accommodating the female youth which otherwise would have been subjected for early marriage or oppressed livelihood.

Table 3.Possible reasons to quit working for the HIP (2019)

		Frequency	Percent
I am not thinking of quitting my job	Yes	1	2%
	No	47	98%
	Total	48	100%
Salary is too small to live on	Yes	47	98%
	No	1	2%
	Total	48	100%
The job has not been to my expectations	Yes	44	92%
	No	4	8%
	Total	48	100%
Housing issue challenge	Yes	44	92%
	No	4	8%
	Total	48	100%
Transport is a challenge	Yes	25	52%
	No	23	48%

	Total	48	100%
The job is physically demanding	Yes	20	42%
	No	28	58%
	Total	48	100%
Personal health reasons	Yes	12	25%
	No	36	75%
	Total	48	100%
Family reasons	Yes	32	67%
	No	16	33%
	Total	48	100%
Long working hours	Yes	41	85%
	No	7	15%
	Total	48	100%

(Source: IPDR, 2019)

Yet, more is required to ensure effective youth employment through curbing the emerging disguises listed above. Most of the disguises were seen to emanate from human resource management practice s of the park the job ranks, minimum wages; job related challenges and employees’ dissatisfactions could be addressed through establishing effective human resource management system.

Conclusions

Industrial parks were serving the purposes of creating employment opportunities for the youth. This can be seen as a local benefit of the international market. Yet, though the employment opportunities are among the blessings of the parks at local levels; there is a need for addressing human resource management issues underlying the disguises within the blessings. Among the policy, strategies could be establishing minimum wage policy, establishing effective workers’ unions and establishing incentive mechanisms including effective housing, transportation, medical and insurance etc mechanisms.

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Recommender System: Past, Present and Future

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Abstract

Nowadays technology is developing rapidly and a number of things have become easier for users and developers due to recommendation systems. A huge amount of information is overloaded over the internet which can be sorted by the recommendation system. The Recommender System technique can be deployed to predict or suggest alternative choices to users, for example, Netflix, Amazon, YouTube, etc. The recommendation is based on collaborating filtering or content-based systems that can filter out items that users might like, for example, the recommendation of an e-commerce store. Many things are designed under the prescription of these two approaches. The purpose of this paper is to provide an overview of the past, present, and future state of the recommendation system.

Introduction

One of the major challenges in everyday life is to make the right decision when purchasing online products. From the last few decades, the recommender system has taken more and more place in our daily lives. Due to this, there is the rise of YouTube, Netflix, Amazon, and many other web services that provide the products and time-consuming process. The recommendation is based on the algorithms which are running in the backend and on the behalf of these algorithms list of similar products is displayed. The recommendation system is divided into two approaches: collaborative filtering and content-based filtering. Both approaches are beneficial to users and providers and help to reduce the transaction costs.

Collaborating filtering is a widely used technique used and based upon the user liking the product and the trend is followed by the people in past and continuing the same trend in the future too. With the help of this technology,

we are able to create a mapping. Content-based filtering is based on attributes, for example, buy a mobile phone the recommender would ask about which color you want? Which brand do you want? and also provide a list related to items. In this paper, we start by explaining the evolution of the recommender system which plays a vital role, and describing the current landscape of the system in the technical world. The recommender system is used pervasively across the technical domains and can predict whether a particular user gets an item of their choice or not based on the user's profile. For each of them we will discuss ongoing challenges and with completion of this paper decide where will stand the recommender system in the future, because the recommender system is a pivotal role in our day-to-day life journey.

Concept of Recommendation System

What is Recommender System?

The Recommender system is an engine used to predict the future of any items based on preferences. Users like the products on a star rating scale and review the same product with the help of comments, this kind of data system generates suggestions and choices (Konstan, 2008). For example, if we buy a product on any e-commerce website once we select any item many such preferences related to that item shown below which work under the process of recommendation system. The recommender system is an important class used in machine learning to suggest appropriate results to users (Konstan, 2008).

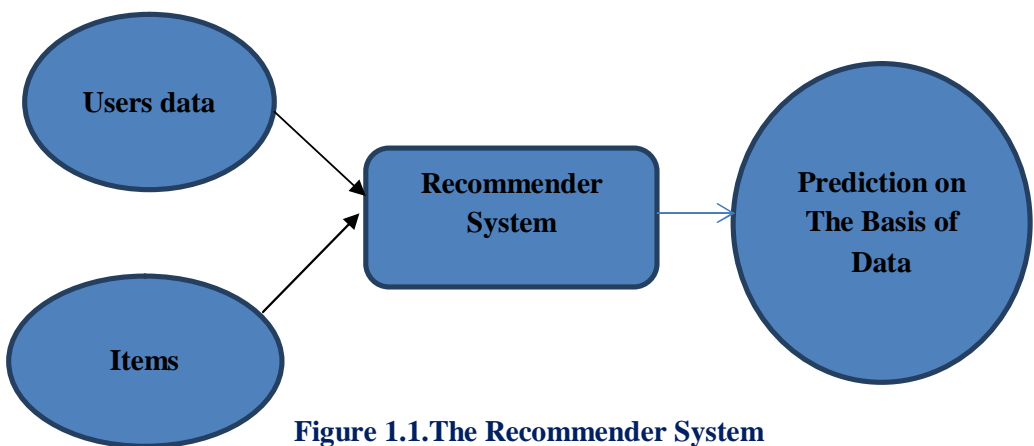


Figure 1.1.The Recommender System

➤ **Past Scenario of Recommender System**

Earlier due to the lack of a recommender system people don't get personalized content, were introduced in the mid-1990s to help people to select suitable products. Now, this system developed in the field of e-commerce with help of a recommender system people can select their favorable choices. Before the 90s the recommendation process was going on offline mode, Suppose there is any occasion or family function one each can invite personally but now there so many choices are available we can make calls, emails and some other ways are also available(Konstan, 2008).

Similarly, as the technology growing too fast, the recommendation process developed to a great extent. For example, Netflix, many years ago there is a big challenge to find the best content to watch because of the amount of data loaded over there but as time passes a lot many algorithms are introduced to improving the state of personalization. Collaborating base filtering is mainly used in Netflix and YouTube which is used to recommend the correct things to users based on historical behaviors (Sharma & Singh, 2016).

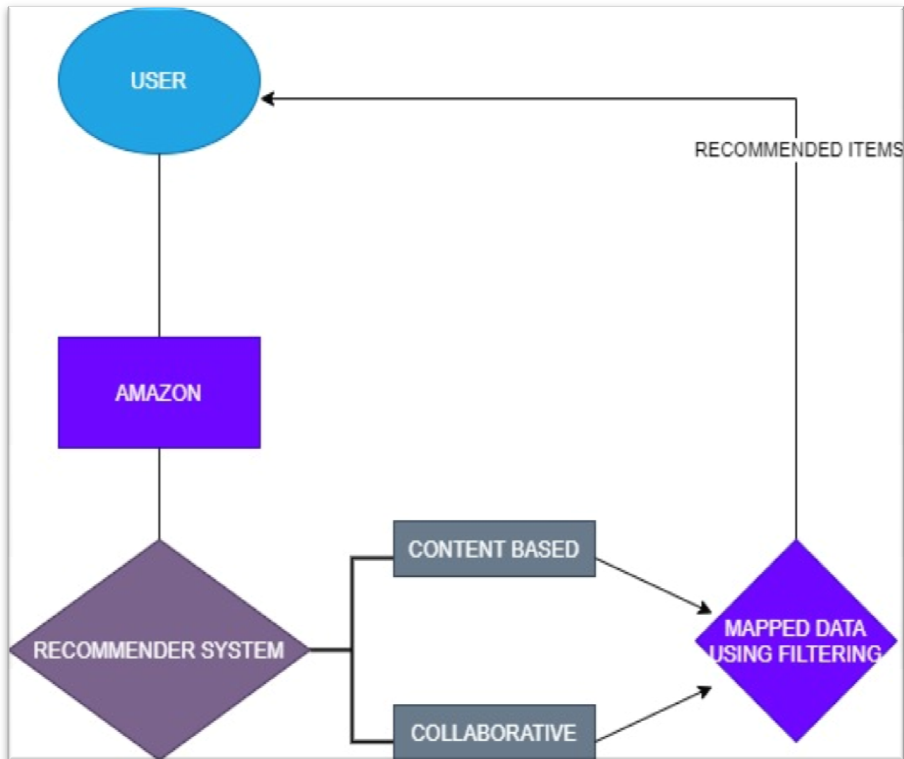
➤ **Present Scenario of Recommender System**

These days we have so many choices while making online purchases, watching TV shows, videos or finding music online, and these activities work on a recommender system. This system can lead to an excellent customer experience while purchasing any product. The use of these systems has increased rapidly as they are used by some e-commerce websites like eBay, Alibaba. Currently, a wide range of algorithms have been introduced in the broad domain of recommender systems that improve the decision-making ability of end-users by providing appropriate recommendations and suggestions. Apart from e-commerce firms, Recommender Systems are extensively used by companies in different fields such as healthcare, agriculture, and tourism (Lu, Wu, Mao, Wang, & Zhang, 2015).

With the setup of tourism companies, maximum revenue collected from this firm with the help of a recommendation system, almost 70-80% of movie and video watched on YouTube and Netflix and that are recommended ones. Apart from solely buying new products, Amazon proactively suggests personalized recommendations to end-users based on their purchase and search history. Amazon uses collaborative filtering which personalized data with help of browsing history and provides users with personalized recommendations.

As the recommender system becomes more powerful with the help of technologies such as Artificial Intelligence and Machine Learning, such technologies provide capabilities to manage the data automatically. Every commercial web service provides individual personalization to every user that provides an individual account to everyone intelligently (Zhang, Lu, & Jin, 2020).

Flow chart: How to recommender systems work in Amazon?



Approaches used by Recommender System

➤ Collaborate-Based Filtering

The collaborating filtering is based on other experiences, as the system recommends items according to historical behavior. The main purpose of the collaborating filter is to get the best recommendation (Bansal & Baliyan, 2019). The recommender system tends to know the taste of people, know what kind of movies they have watched and what kind of movie they will potentially watch in the future. The collaborating based filtering is used in applications such as Netflix and YouTube because these two applications

recommend the video based on popularity (Felfernig, Jeran, Ninaus, Reinfrank, Reiterer, & Stettinger, 2014).

In such context, popularity of a particular product/item will be directly proportional to number of reviews. Higher the number of reviews, higher would be the place of that particular product/item. Interestingly, as the filtering potentially depends on others’ opinion, it might lack an overall degree of transparency.

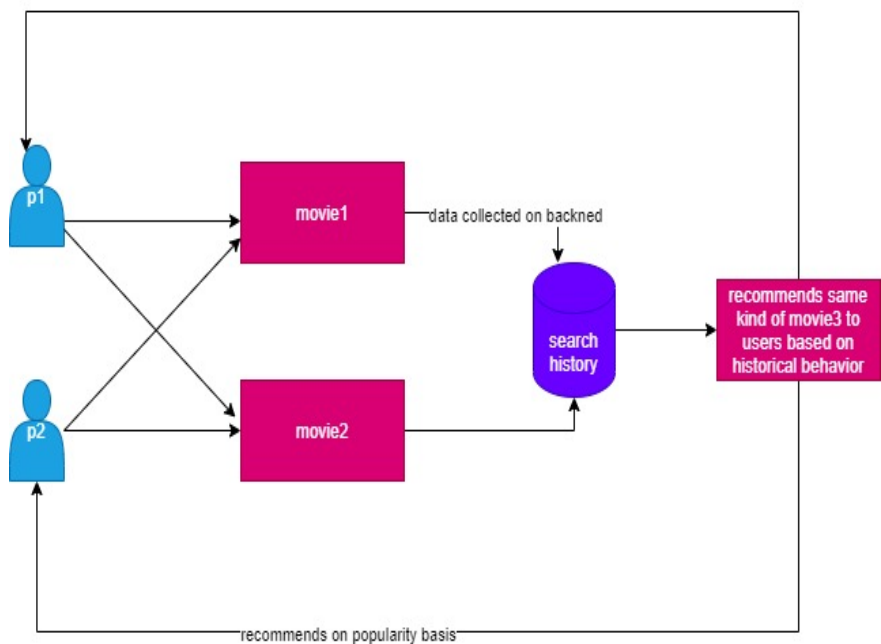


Figure 2. Collaboration-based Filtering

➤ **Content-Based Filtering**

Content-based filtering in recommendation systems is used to recommend additional items with similar features. Content-based filtering is mainly used in e-commerce websites like eBay, Amazon, and many other companies. The system recommends the item based on previous action or explicit feedback. A content-based recommender system doesn’t need any previous data for a recommendation. With the help of content filtering, it is easy to provide an appropriate item to users according to their preferences (Isinkaye, Folajimi, & Ojokoh, 2015).

Content-Based filtering is explained on the two-basis exploitation and exploration, the exploitation is something the system recommends the similar item to the user which are already purchased. On the other hand, with the

help of exploration-based content filtering recommends the items based on instant reaction (Felfernig, Jeran, Ninaus, Reinfrank, Reiterer, & Stettinger, 2014).

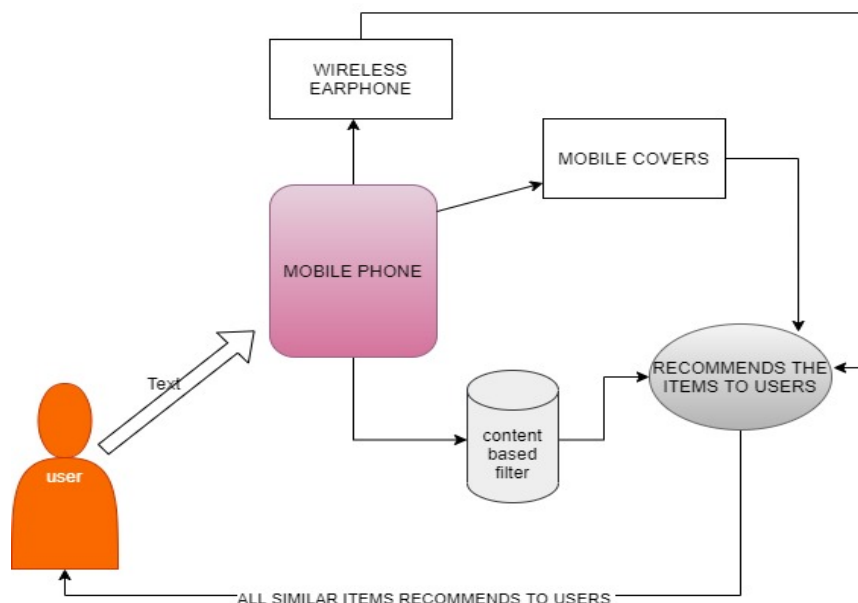


Figure 2.Content-based filtering

➤ Hybrid Filtering

Hybrid filtering consists of both collaborative filtering and content-based filtering implemented concurrently in a recommender system. The combination of both filtering provides a better result. Hybrid filtering performs accurately in comparison of collaborative and content-based filtering (Chandak, Girase, & Mukhopadhyay, 2015). This approach is used to implement the system for better results and improves the weak point of an algorithm individually. For the betterment of hybrid algorithms, we can work with clustering in the recommendation system. Data mining is one of the straight examples of hybrid filtering, to overcome a disability of data (Moreno, Lucas, & López, 2014). The number of data is scattered over the internet, hybrid filtering provided scattered data in a sequential form to users. Hybrid filtering is a mixture of two approaches (Felfernig, Jeran, Ninaus, Reinfrank, Reiterer, & Stettinger, 2014). Users buy an iPhone and users may like wireless earphones, the hybrid function is created, users may like iPhone and earphones.

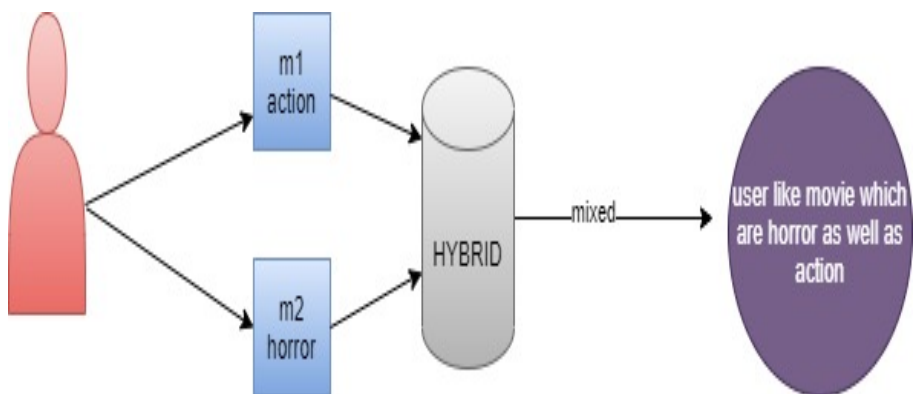


Figure 3

In figure 3 shown that users watched movies like action and horror, with the help of hybrid recommender system the system recommends movies to user which will consider both qualities.

Evolution of Recommender System

Recommender system is transforming day by day and the system provides a better future in the field of recommendation. Many approaches are introduced to handle the metadata. Earlier there was no such system. The evolution of the recommender system, comparison of algorithms, and comparison of various collaborative metrics of recommendation systems (Isinkaye, Folajimi, & Ojokoh, 2015). Many years ago, it was difficult to personalize the items for a user, as time passes so fast the recommender system evolved sequentially. As so many recommender systems are used by different fields but all systems work on a theoretical basis but due to the development in the system now it works on matrix and some artificial techniques are introduced in the recommender system (Sharma & Singh, 2016). With the help of AI easy to manage the scattered data in personalizing form. As the time changes, the recommender system adapts so many AI and ML techniques to overcome metadata issues, and makes the system work smartly (Zhang, Lu, & Jin, 2020). Due to increasing the use of ecommerce web services the recommender system immensely secures their place in the technical world, because currently people are focusing on customization and personalization so with the help of recommender system ecommerce web services are able to fulfill the needs of customers on a daily basis.

Future Works

As we discussed in above about the past current states of the recommender system and also going through some approaches which are used to upgrade

the system. All techniques are discussed on a theoretical basis which is the limitation of paper. In further paper researchers will implement the recommender system on practical basis in paper. For better clarity of recommendation, we will use some mathematical evaluations in further. In this paper, fundamental review has been performed on recommender systems solely on theoretical parameters. For future works, it has been recommended that a practical approach can be taken into consideration which will allow to obtain better results. In addition, an enhanced research methodology can also be practically implemented that would allow to obtain better and concise results with efficacy.

Conclusion

To conclude, it can be summarized that Recommender Systems have a substantial role in the modern dynamic world as it facilitates in providing appropriate recommendations for a wide range of aspects. Overall importance and usability of Recommender Systems have been consistently incrementing and their respective practical use case applications are broadening with efficacy. In this report, a brief overview of such systems has been provided and a complete timeline of evolution has been assessed by considering different parameters of past, present, and future. Further, the report also discusses different types of Recommender Systems-Collaboration-based, Content-based, and Hybrid. This has helped in understanding overall functioning and usability of different types of Recommender Systems. Above all, the primary purpose of this report has been to thoroughly define different aspects of Recommender Systems and briefly understand multivariate parameters.

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Challenges of work from home among IT sector employees in Pune during COVID-19 times

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Abstract

Corona virus originated from the city of Wuhan in China and spread across countries of the world. The virus spread across many countries because of its infectious nature and threatened mankind. The COVID-19 pandemic caused severe health hazards along with major disruptions in business around the world. This humanitarian crisis led to fatalities, unemployment and numerous uncertainties. Every organizations and institutions were rethinking about sustaining through the corona crisis led constraints. Where the threats were many, opportunities for survival and growth were experienced in technology driven businesses around the world. Indian IT industry which is largely people centric also faced huge challenge but showed resilience with quick implementation of work from home operating model. A lot of restructuring in working model changed the HR dynamics with the employees and it gave rise to many unknown internal and external challenges. The major challenge was to bridge the gap created due to physical distance. Many organizations faced identity crisis as this working model impacted their unique organizational culture. The present study thus aims at finding out the challenges faced by employees working in IT companies of Pune. The sample size for the present study is 50, which were selected using purposive sampling. The study revealed that some employees faced infrastructural issues, while many employees suffered from lack of coordination, loss of competitiveness, challenges in learning virtually, mistrust issues with superiors and colleagues, encroachment of personal space, role conflicts, communication gaps in work from home set up.

Keywords: COVID-19 Times, Indian IT Industry, Business Continuity Practices, Remote Working, Organization Unique Culture.

The COVID-19 transmission and preventive measures

The year 2020 happened to be a year of inconsistencies because of the corona pandemic outbreak. The constant fear of catching disease kept everyone across the globe harrowed. The corona virus originated in the city of Wuhan and spread across the borders of other countries because of its infectious nature. As per WHO, the first human case of SARS-COV2, was reported to Wuhan city administration in China. The health care fraternity alerted the public about the possible transmission of the disease. In this direction, the WHO issued guidelines for public to all its member countries about its highly contagious nature. Keeping safe physical distance was the prime need for ensuring safety from contamination to disease. “Social Distancing” was mandated across the countries to reduce the coronavirus transmission speed.

Impact of COVID-19 on business ecosystem

It is very well known that business operates in an around an environment popularly known as PESTEL in management principle. The business ecosystem depends on physical meeting, right from rolling out the business idea to generation of profit and providing after sales services. Person to person interaction is crucial. In this regard, WHO Director-General Dr Tedros Adhanom Ghebreyesus informed member nations that businesses need to be reshaped for business continuity. Expecting normalcy is no solution but to look for effective alternative with focus on social distancing norms is the only need of the situation.

People experienced various challenges and stress because of numerous uncertainties. Accomplishment of personal and professional goals started contributing to stress for many. In the month of March, many countries announced their first ever lockdown as per the guidelines of WHO. This lockdown was announced to curb the disease spread but it affected every economy as it stopped the movement of individuals and goods. This pandemic situation changed how the world operated. Various restrictions needed to be imposed and this caused severe damage to the world economy. This situation caused global socio-economic disruptions. Many factories had to undergo partial to complete shutdown and businesses faced unprecedented loss because of lack of customer demand. Many events got cancelled and the transportation industry remained active only for emergency and essential services in many countries. The executives around the world were already facing recession but this pandemic forced them to plan for immediate contingency planning for survival and also a full proof plan for any future contingency. Some major brunt was faced by tourism, aviation industry and restaurant businesses across the globe. The global pandemic changed how

individuals lived and worked. A Gartner, Inc. Survey of 800 global HR executives on March 17, 2020 found that 88% of organizations have encouraged employees work from home. Nearly all organizations, 97% of them cancelled work related travel. As per the research published by Sandford Institute of Economic Policy & Research (June, 2020), the COVID-19 induced work from home had made around 42% of US labour force working from home completely, led to 33% losing their jobs and remaining 25% of labour force engaged in essential services were working from their business premises. This work from home employees now formed more than two thirds of the US economic activity.

The Sample of HR professionals from SHRM membership was conducted and it was noticed that 34% of employers had no emergency plan ready for COVID-19 preparedness. Around 62% of healthcare organizations, 59% of manufacturing and 53% of trade and transport organizations were revising emergency plans because of pandemic. It was highlighted that 7 out of 10 employers were struggling to adapt to remote work. Maintaining employee morale was experienced as challenge in companies that employed 500 and more employees. Maintaining employee morale in large enterprises was considered more challenging than medium and small sized companies. It was also noticed that one third of employers faced challenge with maintaining companies' culture, managing employees who are facing difficulty in telework, shifting communications to match remote needs and 31% of employers also faced difficulty in managing leave requests. 19% of employers have decreased pay rates and many more are considering it. 38% of employees are working from home as requirements and 40% as COVID- 19 concerns. It was also noticed that one out of ten employers were facing a total shutdown. Over one third of employer were providing resources like mental podcasts, books, newsletters, CDC toolkits, EAP resources.

The change of working model triggered by pandemic in IT industry

India being an overly populated country also announced its first lockdown on March 25, 2020. Many households faced unexpected crisis with sudden announcement of lockdown. It raised alarm in the minds of many people as many lost jobs, companies faced crisis of workers. In order to keep employee safe, companies started rolling out ideas to keep the work flowing. Remote work arrangements were the only solution for business continuity in technology driven companies. The year 2020 marks the harbinger of major reforms, rethinking, it showed how the business can be run.

V Balakrishnan, the Chief Financial Officer of Infosys Ltd said that the lock down during pandemic restricted the ability of IT companies to deliver onsite services, however it was partially addressed by working remotely. As per Mr. Balakrishnan, outlook of the industry growth in 2021 is uncertain given the major target customer segments such as airline, retail, oil and gas and financial services are still struggling for business revival leading to restricted digital spending.

The sudden announcement of lockdown led the Indian IT industry too to adopt a new working model with remote working arrangement to continue the business. The minimal requirement to be able to function with only a personal computer and internet connectivity helped employees to swiftly shift to work from home model post onset of pandemic. For employees who were new to work from home until pandemic were also forced to function remotely. But the initial days of working from home was chaotic for employees as lot of people were not habitual of working in home atmosphere. The atmosphere at home was not conducive for everyone to attend official calls and for many arranging basic infrastructure to work at home was a big challenge during lock down. As per the data released by Ministry of Electronics and Information Technology, (Government of India) IT industry showed resilience during the lockdown, with up to 97% of work force adopting working from anywhere facility to serve domestic and global clients. As per the estimate provided by the industry experts 75% of the IT industry workforce will continue to work from outside a formal office post pandemic as well as Industry has accepted the benefits out of this flexible working model. As per the survey conducted by leading co working space provider “Awfis” in Sep, 2020, 74% of respondents were still willing to work remotely even after pandemic as it leads to significant time and cost savings. As per the estimate by an organization called “Global workplace analytics 25%-30% employees across organizations will be working from home multiple days a week by the end of 2021. One of the surveys conducted by “SAP Concur” an expense management firm at the end of July, 2020, 69% of Indian employees believe that their productivity has increased while working remotely. This percentage amongst employees saying productivity has increased in India is highest in the Asia Pacific (APAC) region.

Quality of work life

According to Harrison, quality of work life is the degree to which the working organization contribute to material and psychological wellbeing of its members. There are many factors like income, health, social relationship and happiness fulfilment that completes it. In the current pandemic situation, the quality of work life degraded for many in India. There are around 200 IT

companies in Pune and majority of employees considered remote work as privilege. In Pune many employees who work for IT companies have a nuclear family set up where the role of house helps and domestic help is crucial for everyday functioning of house. Housing societies voluntarily decided not to call any house help or outsiders in their premises during lockdown. Families with kids suffered as parents who were working, were struggling for availability at job and for online education for school going kids. Kindergartens and day care facilities were closed and employees again faced challenges in delivering task on time. Bachelors felt lack of recreation, difficulty in managing refreshment and food at home, leading to feeling of crisis and chaos. The definition of work life balance, changed miserably in this pandemic oriented work from home practice.

What is work life balance?

Work life balance is defined as an individual's ability to meet their work and family commitments as well as their non-work responsibilities and activities. Greenhaus, defined work life balance as satisfaction and good functioning at work and at home with minimum role conflict. Generally, work life balance is an indicator of job satisfaction which depends on many other job-related factors. Job satisfaction is the most commonly used term in an organization. It is a measure of workers engagement in their job whether or not they like the job or individual aspects or facets of job, such as nature of work or supervision.

Methodology

It was therefore understood that surveys like this need to be carried out in Indian context too, especially in IT sector as it is known that IT sector is the major contributor to India's economy. The researcher therefore focussed on understanding the challenges that is experienced by employees who work from home during the Pandemic. Pune has offices of around 200 IT companies, which are running in large infrastructures across different IT parks and special economic zones, developed by private and government partnership. This motivated the researcher to undertake this study by using experience from employees working in Pune based IT companies doing work from home during this pandemic. The convenient sample size of 50employees was taken and questions about their work from challenges were asked. Generally, the study sought to identify the effects of COVID-19 on remote work arrangement practices enforced for business continuity during pandemic. The study also aims at assessing the effects of COVID-19on employee training, performance management and compensation management.

Result and discussions

Challenges faced by employees due to work from home:

1. The management of many companies were also sceptical about functioning from home. Many were reluctant to provide work from home initially as they did not have such policies in place for their employees in normal circumstances. But they had to abide by the statutory orders issued by government under pandemic situation. In such circumstances, employees felt lot of insecurities and pressure to safeguard health and jobs both. Out of the 50, 37 employees felt that working from home is more challenging than working from office as the schedule of family and kids have disturbed the work schedules of employees such as official calls, virtual team meetings and online training sessions which used to be organized face to face earlier without any glitches and disruption.
2. The new working model came with the own set of challenges as keeping the productivity and level of output from declining in the new system was necessary to keep the business profitable and sustainable. Traditionally, offices were supposed to provide such kind of atmosphere and infrastructure to the IT sector employees to keep up their output and morale both. The employees' homes were never considered as place where official duties could be performed with the same dedication and enthusiasm as compared to office. The disintegration of office and employees also led to separation of HR policies applicable within the office premises and doing work from home during pandemic. The dynamics of HR department with employees changed suddenly, and HR department struggled to bridge the disconnect due to physical separation. Every organization is known for their unique culture which is made up of its people and processes. Due to work from home model, keeping the organizational culture intact has become a big challenge which used to be unique identity of companies. One of the most important function of HR is to assess and monitor productivity and performance of employees. This used to happen on various parameters based on work done under the supervision of managers. But now when the employees are based remotely the performance assessment process need to be redefined. In the earlier working model appraisal system was driven by how employees' function in close group or team. This was largely the basis of 360-degree appraisal system. But the sudden shift of working model away from office changed the meaning and purpose of appraisal system. The requirement of new skill sets such as able to function by using digital platform led to re skilling and re-grooming of existing employees and changing the hiring strategy for future manpower.

3. The work from home arrangement initially kept employees productive, however they faced various role conflicts. This prolonged work from home policy adopted by IT companies in India pulled many employees male and female, bachelor and married, families with kids in an unexpected challenge. To balance responsibilities of home and to balance responsibilities of work again at home created panic among employees and raised anxiety in them. Earlier these IT employee's majority of them understood work from home as "work life balancing policy". But during COVID-19 times, because of this continuous working style, family suffered, employees suffered, organizations also suffered. People did not get time for exercise, kids at home felt unavailability of parents, couples faced dissatisfaction in marriage, elderly population felt mounting isolation, organization felt mistrust and many felt encroachment of personal space, no time for relaxation and recreation, they also felt no meaning for weekends. 50% of the respondents in this survey accepted that working from home resulted in some or other health issues such as back pain, weight gain due to lack of physical mobility and increase in mental anxiety.
4. Degraded quality of work life. The quality of work life deteriorated and employees started aiming only for survival in job as their professional goals. Almost all the respondents felt the quality of life deteriorated during initial period of lock down due to lack of social interaction, forced to getting acquainted to working remotely and maintaining the performance level as usual.
5. New working model and performance assessment glitches: Another function of HR is to measure employee productivity and assess performance. In the traditional model, this used to happen on various parameters of employee performance within the office premises. The employee work and output were directly supervised by the reporting managers in a structured atmosphere where every employee was given same infrastructure. But in the new working model, which was forced upon the employee due to pandemic, measurement of productivity has become a challenge. Every home is not of same size and structure with designated office space where the employee will get same atmosphere which they used to get in office. Some organizations have adopted the method of measuring the amount of time spent in front of computer screen to calculate the productivity, but HR department has to maintain a balance between flexibility and measuring productivity which is a big challenge. Almost all of the respondent accepted that lack of visibility from their superiors have created a gap in the performance management system of organizations and there is a threat biased judgement and assessment of their performance done by their managers.

The training and manpower development is another area where organizations will have to adopt different methodology in the current scenario. Due to corona pandemic, IT industries in Pune adopted new working model for communication (for marking attendance, for grievance redressal). The new working model based on major restructuring, changed the HR dynamics, in terms of physical distance. Impact of pandemic on HR practice.

Conclusion

There were lot of employee specific surveys conducted worldwide to understand the difficulties faced by employees during work from home. In most of these surveys lack of social interaction, disruption from family and pets, fatigue from working on collaborative platform, followed by difficulties in managing personal and professional life were the main challenges highlighted by the employees. Unique characteristic and the culture of an organization is dependent on people and process. But both were majorly impacted by corona crisis when the work station of the employee shifted to their respective homes.

The informal discussion, knowledge sharing which used to happen in a formal office set up are not available for any employee working from home. The visibility of employee in upper layer of management and their ability to approach their seniors on floor, suddenly became restricted and now expected to be done only on scheduled time and from virtual platform. Overall, it impacted the social bonding, and the support system that employee used to rely on in an office set up. It widened the disconnect between employees and management. The practices to achieve work life balance are flexible hours, flexible work, part time work and extended lunch break. But when both work and life were merged together there was uncertainty and dissatisfaction among employees. Many employees became nagging and complaining families missed their happy times, many families suffered from unnecessary and unproductive arguments. Many employees missed their formal counselling sessions and informal spiritual groups which used to infuse positivity in them.

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A Probe into Selective Health Indicators of India

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Abstract

Healthy citizens lay foundation of efficient and growing economy. It is critical aspect for wellbeing of a nation. Health indicators are like barometer to evaluate performance of health management system of economy. This paper is an attempt to take a probe into selective health indicators like life expectancy at birth, infant mortality rate and maternal mortality rate. Data reveals that life expectancy in India is 69.7 years, for Sri Lanka 77 years and for world it is 72.8 years, Infant mortality rate for India is 29.9 whereas for Bhutan its 24.8, at world it is-28.4, maternal mortality rate in India is 147 whereas for Bangladesh its 115. Indian National Health Profile 2019 reveals positive shift in these selective health indicators where as relatively we are still behind our neighbouring developing countries.

Introduction

Status of health plays significant role in determining the level of efficiency of an economy. Healthy citizens lay foundation of efficient and growing economy. It was quite evident in previous year, how health has affected the economies when pandemic hit globally. Health is amongst the most vital and upcoming topic of research. It is drawing attention of researchers. Maintaining healthy citizens in economy has been a challenge for the nations around the world. For meeting the requirement nations around the world build strong health system frame different health policies to meet requirements at domestic level. International bodies like WHO (World Health organisation) and UN (United Nations) have also been working for global equality in terms of providing Right for healthy life.

Millennium Development Goals and Sustainable Development Goals have been set up by UN and followed by WHO¹. Apart from setting machinery for maintaining health system finance is also provided to convert plans and policies into real outcome. In Indian context, health has been regular part of Five-year plans, various health policies have been framed from time to

time, coming up of National Rural Health mission which was later converted National Health Mission are significant moves in meeting health objectives. In regard to public expenditure on health India National Health Profile 2019 reveals eminent data.

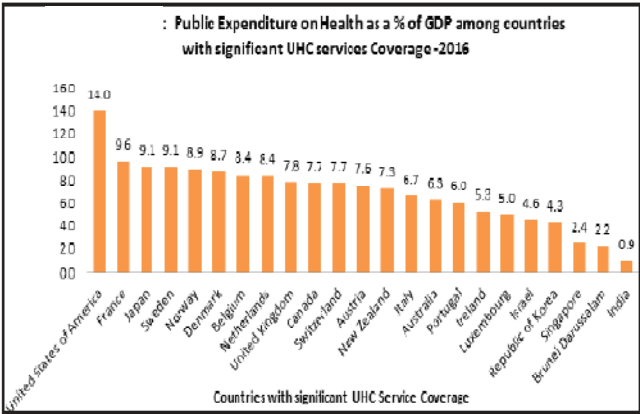


Figure 1

Source: Global Health Expenditure Database, World Health Organization accessed from <http://apps.who.int/nha/database/Select/Indicators/en> as on 20.06.2019 for Public Expenditure on Health as a % of GDP.
 2. http://apps.who.int/gho/data/node.imr.UHC_INDEX_REPORTED?lang=en and Universal Health Coverage Data Portal for UHC Service Coverage Index

Note:

1. UHC Service Coverage Index-Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, new born and child health, infectious diseases, non communicable diseases and service capacity and access, among the general and the most disadvantaged population).
2. Public Expenditure on Health as a % of GDP among countries with UHC Service Coverage Index of 80 and above except India as shown in the chart.

Public Expenditure on health-International Comparison

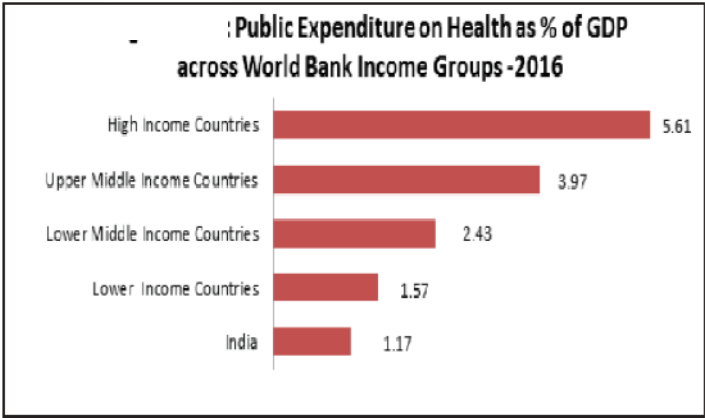


Figure 2

Source: Global Health Expenditure Database, World Health Organization accessed from <http://apps.who.int/nha/database/select/Indicators/en> as on 20.10.2019

Notes:

1. For India, see Table 4.1.2 of Chapter 4
2. As per System of Health Accounts 2011 (SHA 2011), Domestic General Government Health Expenditure as a % of GDP (CGHE-D% GDP) is taken as Public Expenditure on Health as a % of GDP (Technical brief on the Indicators published on the World Health Organization's Global Health Expenditure Database accessed from <http://apps.who.int/nha/database/DocumentationCentre/Index/en>

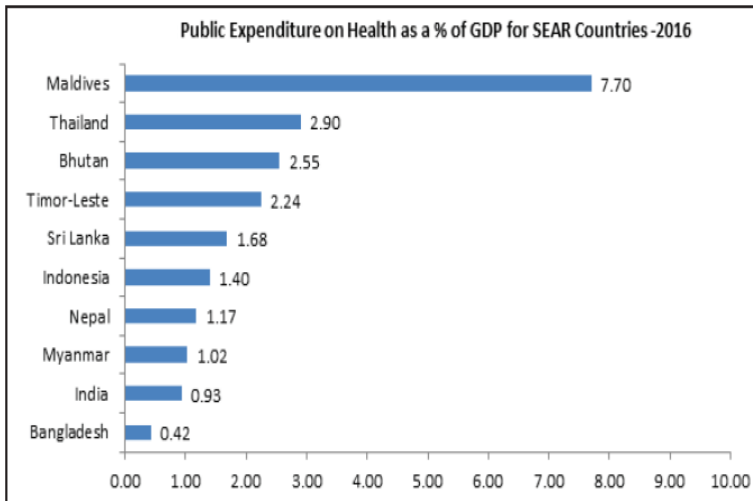


Figure 3

Source: Global Health Expenditure Database, World Health Organization accessed from <http://apps.who.int/nha/database/select/Indicators/en> as on 20.06.2019

Note:

1. For India, see Table 4.1.2 of Chapter 4
2. SERO countries exclude Democratic People's Republic of Korea due to data being unavailable.
3. As per System of Health Accounts 2011 (SHA 2011), Domestic General Government Health Expenditure as a % of GDP (CGHE-D% GDP) is taken as Public Expenditure on Health as a % of GDP (Technical brief on the Indicators published on the World Health Organization's Global Health Expenditure Database accessed from <http://apps.who.int/nha/database/DocumentationCentre/Index/en>

Source: National Health Profile 2019 (Health Indicators)²

<https://www.cbhidghs.nic.in/showfile.php?lid=1147>

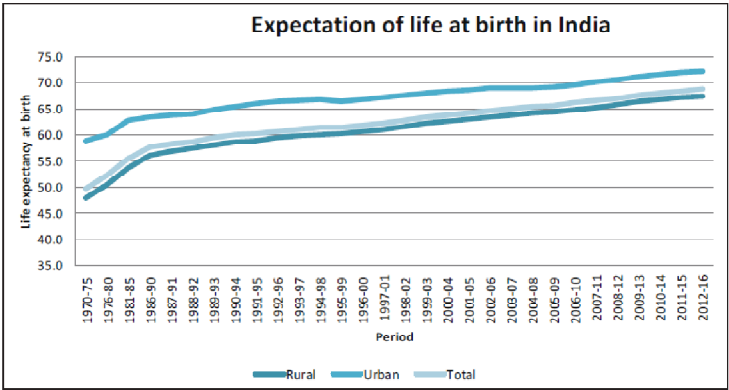
Figure 1, 2 and 3 reveal the status of health expenditure made by India in Public health. In terms of Public expenditure on health as % of GDP (Gross Domestic Product) among countries with significant UHC (Universal Health coverage) services coverage during 2016, India was spending 0.9% of GDP, whereas USA 14.0%, France 9.6%, New Zealand 7.3% and Singapore 2.2%. In terms of Public expenditure of health as % of GDP across world bank income groups 2016 also India is only on 1.17% in comparison to High Income Countries 5.6%, upper middle-income countries 3.97%-and lower-income countries 1.57%. Even in Public expenditure on health as % of GDP for SEAR (South-East Asia Region) countries 2016, India lands lowest for 0.93%, whereas Maldives, Thailand,

Bhutan, Sri Lanka, Indonesia and Nepal are ahead. All the figures make it quite clear that the percentage of GDP being spend by India on health is meagre. Laying the objective and reaching them is a challenge for all the economies around the world, how far the health goals have been achieved can be evaluated through various methods, amongst which health indicators hold significant position.

Health Indicators

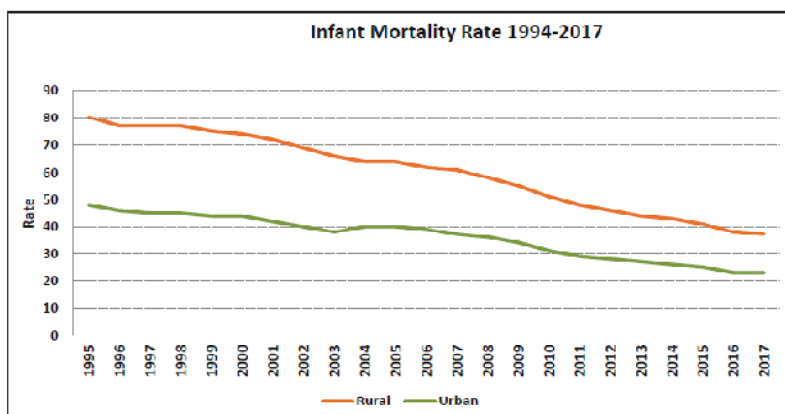
Health indicators are like barometer to evaluate performance of health management system of economy. Indicators have become widely used in many different fields and play a useful role in highlighting problems, identifying trends, and contributing to the process of priority setting, policy formulation and evaluation and monitoring of progress³ Millennium Development Goals target on reducing child mortality and maternal mortality⁴. In Indian context, National Rural Health Mission (NRHM) includes reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) amongst its goals⁵. Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one⁶. Life expectancy at birth reflects the overall mortality level of a population. The average number of years that a new born could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area⁷.The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given time period per 100,000 live births during the same time period⁸.

National Health Profile 2019 - Selective Health Indicators



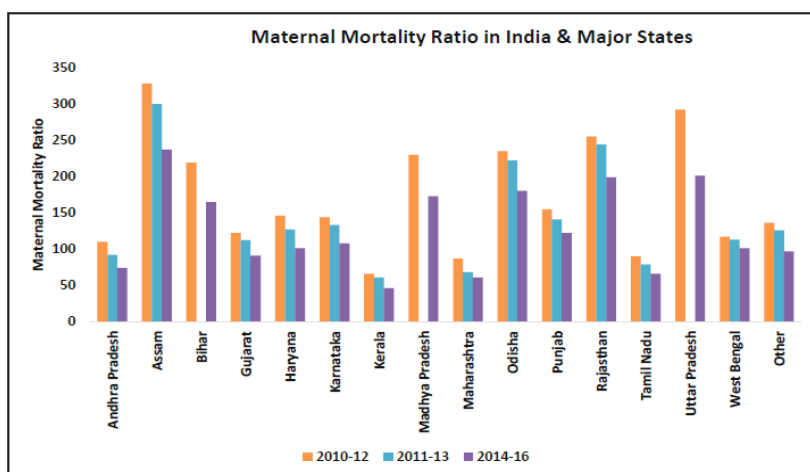
Source: SRS based Abridged Life Tables, C/o Registrar General of India

Figure 4



Source: SRS Bulletin, O/o Registrar General of India

Figure 5



Source: Special bulletin on Maternal Mortality in India, 2011-13, O/o Registrar General of India

<http://www.cbhidghs.nic.in/WriteReadData/1892s/8603321691572511495.pdf>

Figure 6

National health profile 2019, central bureau of health intelligence, directorate general of health services, Ministry of Health and Family welfare, govt of India⁹

Above figures 4, 5 and 6 disclose that Expectation of life at birth in India is showing upward trend, where in people living in rural areas have higher life expectancy as compared to urban. Even Infant mortality rate is showing a falling trend which depicts there is improvement in this indicator although it is better at urban areas than rural areas. Maternal mortality is also depicting downfall in the rate, almost all the states have

improved from previous years. Over all there is a positive trend in selected indicators.

Human Development Report 2020

United Nations Development Programme (UNDP) generates data on Human development index (HDI) which is a composite index measuring average achievements in three basic dimensions of human development- a long and healthy life, knowledge and a decent standard of living. The table displays important health indicators (Life Expectancy, Infant Mortality Rate and Maternal mortality rate) of South Asian Countries.

Table 1.Selected Health Indicators: South Asian Countries

Countries	Life Expectancy at birth in years (2019)	Infant Mortality Rate (per 1000 live births) (2018)	Under-five Mortality Rate (per 1000 live births) (2018)	Maternal Mortality Rate(death per 1,00,000 live births) (2018)
India	69.7	29.9	36.6	147
Pakistan	67.3	57.2	69.3	138
Bangladesh	72.6	25.1	30.2	115
Nepal	70.8	26.7	32.2	130
Sri Lanka	77	6.4	7.4	56
Bhutan	71.8	24.8	29.7	195
Maldives	78.9	7.4	8.6	42
Islamic Republic of Iran	76.7	12.4	14.4	50
World	72.8	28.4	37.2	114

Human Development Report 2020¹⁰

United Nation human development organisation, report 2020 <http://hdr.undp.org/en/data>

It shows that life expectancy at birth in India is 69.7 years which is less than most of other south Asian countries, even if compared to world i.e. 72.8 years, it is quite low. The Infant Mortality Rate is the rate (IMR) in India is 29.9 which are higher as compared to counties like Nepal (26.7), Bangladesh (25.1), Sri lanka (6.4) and Bhutan (24.8), it is still quite high as compared to the overall world's rate of 28.4. The under- five Mortality Rate (per 1000 live births) in India is 36.6 which indicates that children under the age of five die at a higher rate as compared to the world's

average of 37.2. The Maternal mortality rate in India this rate is 147, Bangladesh 115, Sri Lanka 56 whereas at world level it is 114.

Conclusion

In Indian context, it is quite evident from the data that these selective health indicators in comparison to the nearby countries and to the world as a whole do not show high performance in respect of health condition of its general masses. Although Indian National Health Profile 2019 reveals positive shift in these selective health indicators whereas relatively we are still behind our neighbouring developing countries. Increasing population, low expenditure in health sector and less serious attention to health sector have been the major causes of this situation.

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Image Detection based technique for shutting down the Applications opened in Windows Operating Environment

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Abstract

Today most of the organizations' computers are running 24x7 because of the huge software which takes a lot of time in starting and closing. So, to save time computers are forcefully shut down. Under these circumstances, there are losses such as global warming, electricity consumption and hardware retention which affects the environment. In the first case where the computers are kept in the active state, the problem of global warming and electricity consumption leads to a decrement in the overall life of machines which again leads to e-waste problems. This paper presents an Image detection-based technique which can be used to shut down the applications opened in windows 10 environment. This application is based on the Mechanism of coordinate theory applied for automating graphical user interface with the help of computer vision. An extensive review of the research related to this domain has been done by the researchers and this technique is developed for promoting the concept of green computing. The application is tested on real test beds and results are recorded. This research is organized into four parts: Introduction, Related Literature, Methodology and Results.

Keywords: Coordinate Theory, Auto Shut Down, Green Computing, E-Waste, Image Detection.

Introduction

As we know that nowadays environmental crises are becoming a matter of concern and many things need to be done to prevent this. Few of the crises are global warming, e-waste (Gaidajis, Angelakoglou, & Aktsoglou, 2010), polywaste (Singh, Vidani, & Nagoria, 2016), energy consumption (Gupta & Singh, 2012) and human efforts. Till now the computers made by humans are run to their extent without shutting them down at proper time. For example, in companies due to the usage of heavy software, a hard shutdown method is used to shut down the computers due to which the life of the machine is shortened which rises the problem of e-waste and poly waste, whereas in others the machines are ran 24x7 to save the time used for shutting the machine. Due to this problem like global warming and energy consumption rises. Our technique reduces all problems by automating the shutdown technique. In this technique computers are trained to see and act like humans, by supplying the required dataset of images and required algorithms to act according to the situation. It also uses the coordinate geometry to find out the exact locations of the detected images. After detection it closes all the programs and shuts down the machine. Due to this automation now, we do not have to waste our time shutting down our system which saves human time which can be utilised in many other things. Also, when we are automating the stuff it will be done on time means no extra utilization of electricity which means no extra electricity consumption. Also, when we are preventing force shutdown and the process is made smooth, the life of the machine is also increased which will lead into the reduction of poly waste and e-waste.

Related Literature

The industry 4.0 (Yemane, et al., 2020) has started a revolution of automation in the industry, this has come up with various aspects like automation using computers, automation using Artificial Intelligent Techniques and automation using Internet of Things. The automation is networking is also one of the concepts which is evolving. Researchers are using the automatic network restructuring (Sharma, Manuja, & Kishore, Node-Level Self-Adaptive Network Path Restructuring Technique for Internet of Things (IoT), 2020) in the routing techniques. There are numerous ways which can be used for shutting down the PCs (Sharma O. , 2020) like auto shutdown command, Auto Shutdown via Command Prompt and Auto Shutdown via Task Scheduler. In the current scenario we are using computer to automate the processes (Bessen, 2016); some of the processes can be seen as e-mail automation, data extractions from business documents and many more. A

hardware-based system was designed by the researchers (Fadil Habibi Danufane, 2016) which was an electrically controlled system prevents the applications from failure due to sudden outage of power open on the computer system. Although Windows 10 Operating System has come up with the solution where if any application reaches due to sudden outage can be recovered from one drive, but this solution is limited to some of the applications. Now the problem again remains same where in most of the cases the user goes for hard shut down; this led to a research issues where on technique in the system can shut down the applications one by one and shut down the PC with the standard operating procedure. There is need of such a system which can have functionality to close the unused applications and shut down it when required even in large scale systems like data centres and super computing environments (Issam Raïs, 2018). The concept of green computing (Saha, 2018) also focuses on the part where electricity consumption can be decreased. So many other researched have been done on the green computing mechanisms (S.V.S.S. Lakshmi, 2012) and we have seen them in terms of Carbon Free Computing, Quiet Computing Solar Computing and many more. The recent technologies like Cloud Computing (Sharma & Kishore, Internet of Things (IoT): A Review of Integration of Precedent, Existing & Inevitable Technologies, 2017) are also using the green computing mechanisms (Jayalath, Chathumali, Kothalawala, & Kuruwitaarachchi, 2019) to save electricity and protecting the environment. There are various propagation techniques (Open Source Computer Vision, 2020) which has been used in this area of computer graphics.

Research Gaps

On the extensive survey of the literature available from 2010, it has been observed that the technique to shut down the computer systems is not available, and the proposed method will help the system administrators to shut down the PCs safely. This research will also help to decrease the e-waste product by increasing the life of PCs with maximum human comfort.

Research Methodology and Experimental Setup

The researchers have used a local host machine for the experimentation part. The following methodology is used to carry out this research:

- The function for cursor propagation is used in this research which untimely propagate the cursor throughout the screen of the computer system. The technique uses the image comparative system on the windows icon and for other various aspects.

- Based on the formula various algorithms are tested based on the experimentation on local host, a well suitable technique is adopted.
- The tested technique is converted to an algorithm and then implemented on the local host machine.
- After getting the successful and satisfactory testing on the local host the application is tested on different machines installed in the dedicated AI and ML laboratory, Poornima University, Jaipur, Rajasthan, India to analyse the performance of the application.

The following function is used for the cursor propagation in this research:

$$R(x, y) = \frac{\sum_{x', y'} (T'(x', y') \cdot I'(x + x', y + y'))}{\sqrt{\sum_{x', y'} T'(x', y')^2 \cdot \sum_{x', y'} I'(x + x', y + y')^2}}$$

This function is based on the mechanism of coordinate theory used to find out the coordinates in this system and used in the OpenCV library function. The function slithers through a pictorial aspect, makes the comparisons of the coincided patches of size $w \times h$ (where w is width and h is the height of the screen) alongside $templ$ function through the quantified process and accumulates the divergence outcomes in the final result.

The whole process of cursor propagation and image comparison system is based on the following algorithm:

- Step 1: When the application begins it searches all the opened windows which are not minimized and visible on the screen.
- Step 2: After that it closes them and repeats the searching and closing process till all the maximized windows are not closed.
- Step 3: After closing all the maximized windows it searches the windows button and taking it as reference, it finds the minimized programs.
- Step 4: Once the program is found, it closes that particular program and repeats the searching and closing process till all the minimized programs are closed.
- Step 5: Now, after this all the running programs are now closed. So, the next step is closing the windows.
- Step 6: In the next step it shuts down the machine.

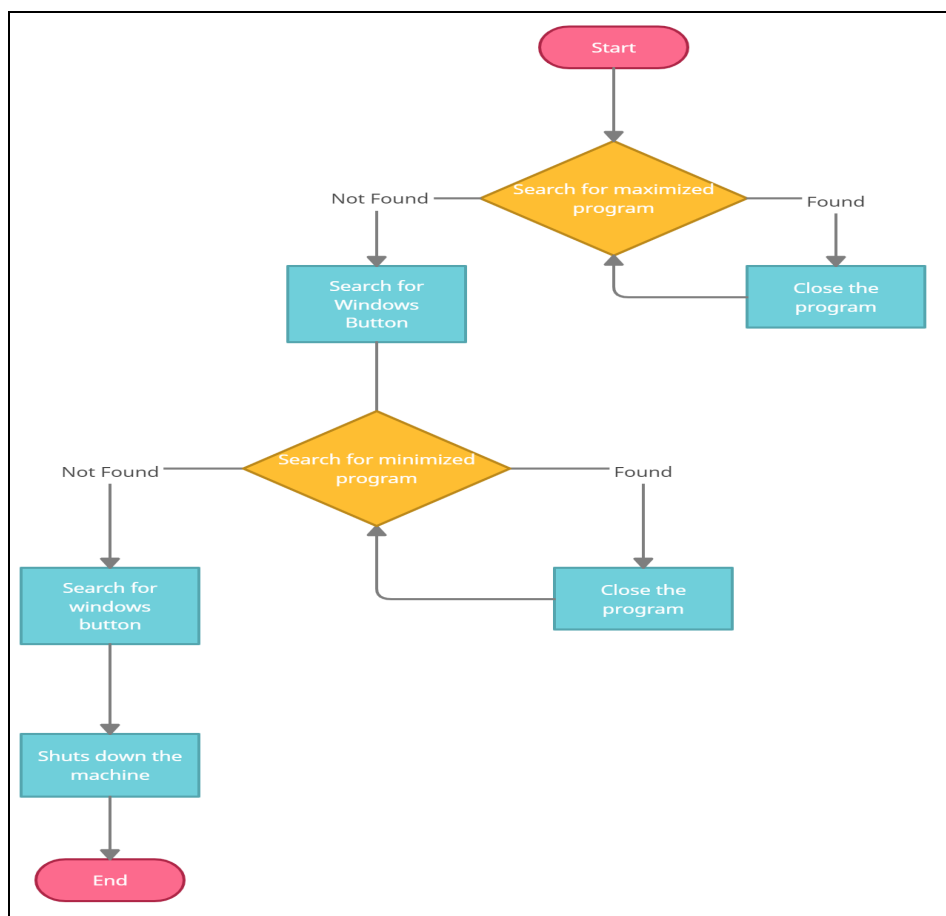


Figure 1.Flowchart for the technique

The application is developed and implemented on a local host which the configuration discussed in the Table No.1.

Table 1.Local Host System Configuration

Sr. No.	Specification Type	Configuration
1	Processor	Intel® Core™ i5 8 th Gen
2	Processor Speed	3.90 GHz
3	RAM Size	8 GB
4	RAM Type	DDR4
5	HDD	1 TB
6	Screen Resolution	1366 x 768
7	Screen Dimension	33.5 x 23.4 x 2 cm

The technique is implemented on the local host and tested by taking the objectives of the research into consideration. This application was made by using python 3.6.8 on a i5 8th generation machine with 4GB DDR4 ram. There are total six steps in the technique and the application is working accordingly.

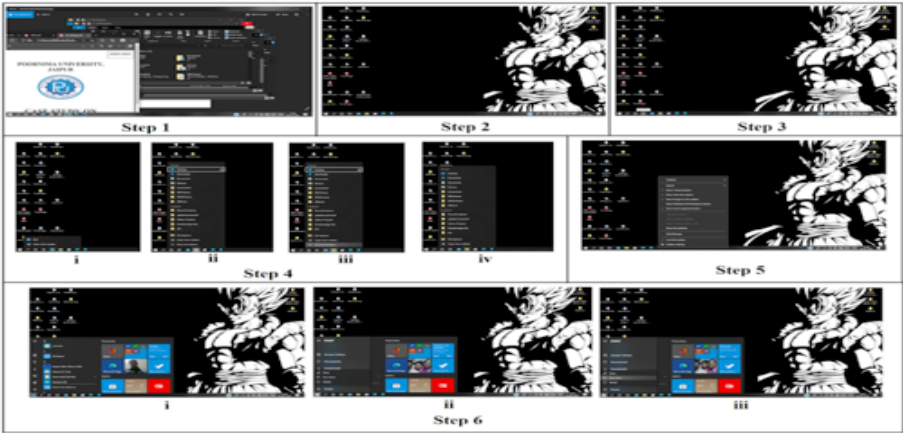


Figure 2.Implementation and working of Technique on local host

After the successful implementation and testing of the application on local host, the application is tested over a pool of heterogeneous machines. The specifications of the machines are given in the Table No. 2.

Table 2.Machine Specifications used for analysing the performance of the application

Specificat ion Type	Machine 1	Machine 2	Machine 3	Machine 4	Machine 5
Processor	Intel®Cor e™ i5 8 th Gen	Intel®Cor e™ i5 8 th Gen	Intel®Cor e™ i79 th Gen	Intel®Cor e™ i7 4 th Gen	Intel®Cor e™ i3 5 th Gen
Processor Speed	3.90 GHz	3.40 GHz	2.60 GHz	2.70 GHz	2.40 GHz
RAM Size	8 GB	8 GB	8 GB	4 GB	4 GB
RAM Type	DDR4	DDR4	DDR4	DDR4	DDR4
HDD	1 TB	1 TB	1 TB	298 GB	1 TB
Screen Resolution	1366 x 768	1366 x 768	1920 x 1080	1920 x 1080	1366 x 768
Screen Dimension	33.5 x 23.4 x 2 cm	34.5 x 24.3 x 2.335 cm	35.8 x 24.0 x 2.3 cm	33.4 x 25 x 3.8 cm	26 x 38 x 2.2 cm

Results and Discussions

The technique is implemented in such a way that it can shut down any number of computers from anywhere by just clicking a button, the person who is in-charge in the computer laboratory or system administrator in any company just has to press a button and the process of shutting down the systems starts. Due to this the machines not in use are closed safely. Although it may not give the result in the short run but in the long run it can denote a lot in saving our mother earth by increasing the life of the machine and reducing global warming by reducing the unwanted heat generated by the machine. The application has been tested on the 6 different machines and following results have been recorded:

Table No. 3. Time taken to shut down the machine with 10 Opened Applications

Specification Type	Machine 1	Machine 2	Machine 3	Machine 4	Machine 5
Performance with 20 Running Applications	102	120	108	115	134
Performance with 15 Running Applications	87	90	94	110	122
Performance with 10 Running Applications	69	80	87	105	110
Performance with 05 Running Applications	60	62	70	100	106
Performance with 00 Running Applications	52	60	66	80	92

The application is tested on five different machines with 5 different set of applications running in it. It has been observed that the application has taken 102 seconds of time to close 20 running applications and shutting down the machine whereas machine 5 have taken 134 seconds to complete the same

task. All the comparative analysis can be observed from figure 3. In the best-case scenario while no application was running on the machine, it has been observed that machine 1 have taken 52 seconds and machine 5 has taken 92 seconds. Form the experimentation it can be concluded that the performance of the application is increasing with the sped of processor speed.

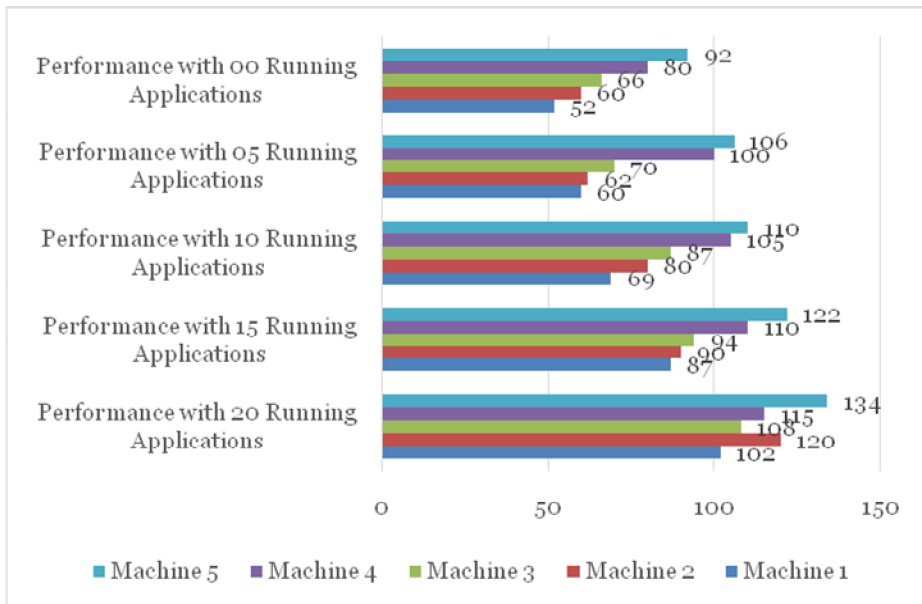


Figure 3. Performance of the application on a pool of heterogeneous machines (in seconds)

Conclusion and Future Scope

From the extensive literature survey, the need of the research is justified that there is a requirement of application which can automatically shut down the PCs safely with minimum human interventions. This will not only save the electricity, but also decrease the chances of hardware failures. This technique is currently limited to windows environment and having the functionality of closing the applications. In the future aspects, the technique can be enhanced with the functionalities like saving the application in the specified folder. The application can also be enhanced with the facility of closing the applications over the network so that all the systems can be shut down safely in a single click, this will also promote Green Computing and minimize the E-Waste production.

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