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INSTITUTE OF MANAGEMENT EDUCATION RESEARCH AND TRAINING
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S. No. 18, Plot No. 5/3, CT5 No. 205, Behind Vandevi Temple, Karvenagar, Pune – 411052



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9	Dr. Jitendra Bhandari,	Employee Data management through HRIS; A Comprehensive bibliometric study	NA
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16	Prof Jaydutta Bangar	A literature review study on analysing role of fintech in sustainable banking in pune region in india	NA

Impact of Human Resource Management on Talent Management at Apple Inc

Shubhangee Ramaswamy^a, Devidas Golhar^b, Srinivas Kumar Swamy^c, and Poonam Pawar^d

^a Education Research and Training, Marathwada Mitramandal's Institute of Management Education Research and Training, Pune, Maharashtra, shubha.ramaswami@gmail.com

^b Marathwada Mitramandal's College of Commerce, Pune, Maharashtra, devidasgolhar@gmail.com

^c Step Next Consultants, Pune, Maharashtra, shriniwaskumar@gmail.com

^d Ideas to Impacts Innovations Pvt. Ltd., Pune, Maharashtra, poonamatakalkar@gmail.com

The purpose of this research was to find out how HRM influences the performance of talent management in an organization. For this purpose, Apple Inc was selected and data was collected through primary data collection method by sharing survey questionnaire with 25 random employees of Apple. From their responses, it was found that HRM department of Apple ensures the effectiveness of the organization's different talent management techniques. It was found that HRM department is responsible for developing, implementing and maintaining talent management methods in an organization such as Apple Inc. Talent management method in Apple is effective due to its HRM department only.

Keywords: Talent management, Apple's talent management strategy

Background of the Research

In recent years, the concept of talent management has attracted attention of several scholars and authors due to the fact that it is capable of ensuring employee job satisfaction and employee loyalty. Several research works are conducted that show through talent management it is possible to retain high performing employees (1). As a result, business organizations are investing heavily in talent management activities in their workplaces (2). However, one area that remains untouched is whether HRM department ensures performance of talent management or not. There is no doubt that HRM department of any organization plays a significant role in its success however, research gap is none of the research works state how HRM department of an organization influences performance of its talent management strategies. By focusing on the same topic, this research work intends to eliminate that research gap. For this purpose, focus is given on Apple Inc, one of the leading technology companies around the world.

SIGNIFICANCE OF CORPORATE COMMUNICATION AT WORKPLACE AND ITS IMPACT ON EMPLOYEE ENGAGEMENT

Gopa Das Assistant Professor,
DES's Institute Of Management Development and Research,
gopa.das10@gmail.com

Shubhangee Ramaswamy Associate Professor,
Director, Institute of Management Education Research and Training, shubha.ramaswami@gmail.com

ABSTRACT

Success of any organization can be significantly impacted by communication, which is an effective instrument. Employee engagement, workplace productivity, and corporate growth can all be enhanced by effective communication. A productive workforce is built on effective communication. The most important investment a company makes is in its employees, who ultimately make the difference between the firm succeeding or failing. Engaged employees are more devoted and loyal, which is necessary for the success of goals and the success of the company. The purpose of this study is to investigate the relationship between employee engagement and communication.

Keywords: Corporate communication, Employee engagement,

Introduction

One of the concepts that is increasingly used to describe how corporations attempt to cooperate with stakeholders is engagement. Researchers have found that there are currently more disengaged workers than engaged staff, which is alarming. Only 13% of employees surveyed for Gallup's State of the Global Workplace report say they feel engaged at their place of employment (Gallup, 2016) Employee engagement is the level of commitment to the company, enthusiasm for one's work, and extra effort put forth by employees. Employee engagement is a professional method that fosters an environment where each employee is motivated and empowered to provide their all throughout the day, committed to the aspirations and values of an organization, eager to participate in its success, and getting positive concerning their own well-being.

Any information provided within a corporation for professional objectives is often referred to as internal communication. The phrase is most frequently used to describe a person or division in charge of employee communications. Employees are updated on the goals and strategies of the organisation, and they are informed and involved. While a specialised appropriate communication department is clearly needed in large enterprises, managers or HR frequently handle this function in smaller businesses. TCS in their integrated report of 2021-2022 mention that "After the outbreak erupted, the requirement for participative management became imperative. In these unsettling times, we increased work engagement."

Internal communication is the process by which company and their staff exchange information, whether it be vocally, in writing, or remotely. Internal communication is the foundation of a successful company, even though outward communication with customers, clients, and the broader public is crucial. To encourage employees to perform their duties efficiently and adequately, information about the organization is disseminated internally. It keeps people alert. Furthermore, it works among employees who are communicating to one another at the workplace. Internal communication that succeeds fosters corporate culture and raises staff morale. Building a cooperative spectrum involves effective communication with staff. It's not as difficult to develop such communication as one may believe. To adopt the proper communication enhancers, all that is needed is an awareness of the nature of the workplace. Communication with employees is vital because it provides your workers a voice and helps them feel appreciated, a sense of belonging, and increased productivity.

Review of Literature

Internal communication benchmarks give us a brief, comprehensible description of the organization's current state and an outlook for where it will be in the not-too-distant future. Internal communication promotes cultural diversity and is employee-centered to enhance and diversify employee engagement. (Ishtiaque and Habib, 2016) Corporate communication now plays a crucial role in an organization's ability to succeed, especially in the service industries where the goal is to gain and maintain a competitive edge while also implementing the needed organisational changes. (Sharma, Neha & Kamalanabhan, 2012) Internal communication's tone and timeliness have a significant impact on the way an organisation conducts itself, but it also has an impact on and engages its workforce. One of the most crucial issues that organisations confront because of the increased dynamic nature of the market is connecting with people physiologically, cognitively, socially, and logically for both individual and corporate success (Vora & Patra, 2017). To affect employee engagement through internal communication,

A STUDY EXCHANGE TRADITIONAL FUND (ETF) AS AN INVESTMENT AVENUE FOR PASSIVE WEALTH GROWTH IN INDIA WITH REFERENCE TO NIFTY50

Prof. Raghunandan Helwade Research Scholar,
AudyogikShikshanMandal's Institute of Business Management and Research, Pune
raghu.helwade@gmail.com

Dr. MangalagouriPatil Assistant Professor,
MarathwadaMitrmandal's Institute of Management Education Research and Training, Pune
gourii811@gmail.com

Dr. Bhagyashri Deshpande Assistant Professor,
MIT World Peace University, Pune.
bhagyashri.deshpande@mitwpu.edu.in

ABSTRACT

Mutual funds are emerging as an attractive investment option. MFs are successful especially in channelizing and mobilizing the savings of many retail investors into the investment in various equity and debt instruments. Mutual fund investment is considered as less risky than investing directly in stocks as experienced fund managers take delicate investment decisions and is therefore definitely a safer option for inexperienced risk averse investors.

An Exchange Traditional Fund (ETF) is defined as an instrument to gather money from prospective investors, with a promise that the money would be invested in a specific predefined manner and methodology

This paper studies performance of ETFs and presents an exchange traditional fund (ETF) as an investment avenue for passive wealth creation. Investment in ETFs picking up since last decade. Awareness level of investors is increasing

The analysis and interpretation from study presents that tracking error is higher for ETFs as compared to index funds. The active returns analysis by presenting two ETFs reveals that ETFs always fared better than their underlying index while the index funds sometimes underperformed and sometimes outperformed the underlying index. Transaction fees and charges are higher in Index funds as compared to ETFs.

Suitable strategies and important aspects for sound investment decision making are also discussed in the paper.

Keywords – ETF, Investment Avenues, Passive Investment, Index Funds, SIP, Lump Sum investment

Introduction

An Exchange Traditional Fund (ETF) is defined as an instrument to gather money from prospective investors, with a promise that the money would be invested in a specific predefined manner and methodology.

Indians are traditionally fond of various savings. These savings were initially in the form of cash, which were after independence converted into bank savings under various bank savings plans. Savings have also been done through Life Insurance Policies, fixed deposits, National Saving Certificates etc. Gradually the saving trend of Indians has been changed to equity, real estate, corporate bond and bullion.

To understand the awareness about the ETF, a survey was conducted by Max New York Life and National Council of Applied Economic Research (NCAER), New Delhi. The outcome of the survey was that Indians prefer keeping more than 65% of their savings in the form of cash at homes, at banks or at post offices. 23% of Indians savings were in the form of investments physically, such as gold or real estate; and only 12% on financial instruments. However, it is to be noted that those who invested in equities have reaped better benefits than the above mentioned traditional savings, though its benefits are changing from time to time.

According to the estimate, the Assets under Management (AUM) of Indian Mutual Fund Industry as on 31st of March 2021 comes to Rs.29, 73,952 crores. The growth level of AUM of Indian MF Industry has gone from Rs.13.04 trillion as on 31st May 2015 to Rs.29.55 trillion as on 31st May 2021; i.e. more than double addition within 5 years period. The Mutual Fund Industry Assets Under Management has shown an unprecedented growth up to Rs.10 trillion (10 lakh crores), as per the figures noted in April 2014. In just a three year period, the AUM crossed double Rs.20 trillion (Rs.20 lakh crores) in July 2017. Assets under Management stood at Rs.29.55 trillion presently. It is the fastest growing section under the Finance services sector.

RESILIENCE IN CYBERSPACE WITH DATA ANALYTICS FOSTERED KNOWLEDGE MANAGEMENT CAPABILITIES: A DISCOURSE FOR SUSTAINABLE IMPLEMENTATION STRATEGY

Prof. Pradnya Kashikar
Research Scholar – MIT ADT University, Loni-Kalbhori, Pune- India
pradnyakashikar@gmail.com

Dr. Rachana Shikhare
Coach, Consultant and Associate – Samshodhan Trust, Pune-India
rachana.savita@gmail.com

Dr. Vinod Mohite
Assistant Professor, MM's IMERT, Pune-India
vinodbmohite@gmail.com

ABSTRACT

In the Cyber world today managing threats dynamically, is challenging, moreover generation of knowledge and enhancing knowledge management (KM) capabilities is becoming crucial due to the dynamics of technological advancements. In this context a regulatory mechanism is essential; this resilience required is achieved through data analytics which bridges the gaps between the challenges faced in cyber space and implementable realistic solutions.

Along-with the technological advancements it becomes imperative to optimally utilize and align knowledge management capabilities. A need was foreseen to reconsider KM capabilities in the fields of computer security, data management, also legal and risk management. The researchers have attempted to work on the aspect of sustainability, in handling challenges and solutions in implementing effective cyber security and in building better KM infrastructures; through innovative enabler such as Data analytics. In the proposed effort to elaborate this review study, assessment and quantitative analysis is recommended.

Keywords: Knowledge Management Capabilities, Cyber Security, cyber threat management, Data Analytics.

Introduction

In today's highly competitive world, IT infrastructures are preferred to be equipped with Cyber security mechanisms to curtail down the cyber threats. Protecting sensitive data, computer systems, networks and software applications from cyber attacks generates a large amount of data which can be analyzed substantially to form information security resources for better knowledge management around cyber security. Such protecting mechanisms are used by individuals and enterprises to deal with the challenges such as tampering and/or unauthorized access to vital resources and other computerized systems. Every organization has these important resources which are called as intellectual assets that include hardware, software, and data. With the continuous increase in the number of cyber threats and its effects on the organization due to the complexity of the cyber attacks; organizations are struggling to protect the information in an upcoming highly dynamic business environment. It has become essential and important to secure the intellectual assets including digital processes, information and IT systems from tampering systems and data stored within, exploitation of resources via attacks. These intellectual assets should be legally protected to achieve security of confidential information of an organization such as source code, solution manual, executable, live databases of clients, passwords and other confidential information stored on servers, financial data, and employee details etc.

The security of organization's data has become inevitable for the effective management and utilization of information generated by an organization as all organizations are driven by technology and technology is evolving very dynamically. The systems that are not aligned in coordination with information security mechanisms and policies may result into challenges such as unauthorized access, user authentication concerns, hacking, virus and worm dissemination, intrusion into company's private network and so on. People and group of people, that is employees and teams; work for an organization using intranet and extranet. Intranet is a type of network in which data and information is shared and is circulated within the organizations confined area. Extranet is nothing but company's private network at different locations where in data transfer and information sharing happens from one location to the other using virtual private networks.

Gap Analysis and Problem Description

With the rapid advancements in the technology and possibility of successful yet undetected cyber-attacks, organizations must adopt innovative methods, to derive dynamic strategies to manage threats effectively. This can be done seamlessly without loss of credibility, value and security of information which is managed by the

APPLICATION OF EKM IN THE KEY BUSINESS PROCESSES: A SURVEY STUDY IN SELECTED IT COMPANIES IN PUNE REGION

Dr. Rachana Shikhare
Coach, Consultant; Associate - Samshodhan Trust, Pune – India;
rachana.savita@gmail.com;

Dr. Vinod Mohite;
Assistant Professor, MM's IMERT, Pune – India;
vinodbmohite@gmail.com

Dr. Kalpana Vaidya
Assistant Professor, MM's College of Commerce, Pune – India;
vaidyakalpana@gmail.com

ABSTRACT

Enterprises run multiple business processes that use and manage knowledge in various forms and context. The knowledge referred and generated; maybe projected or it may simply reside in the tacit form. Managing such knowledge can be relatively within one's capabilities however the real challenge seen in extracting it from the source where it resides. Typical business majorly is driven by strategic and tactical decisions; for which churning of appropriate knowledge base becomes inevitable. The true knowledge is boundless; that demands validating and mapping as per the need of the business processes. To spot the success of Business enterprise, knowledge base competence is one of the most significant aspects among others. Consuming organisational knowledge and maintaining its relevance to the past and present business processes is crucial as it may impact the accomplishment of sustainable competitive advantage.

Knowledge should be able to incorporate within the business processes effortlessly; however in context to the changing business scenarios it has become a challenging story. In this paper the researchers have considered the involvement of Knowledge Management (KM) in enterprises, wherein visible Human Resource Department exist handling the key business processes. The factors affecting the efforts of various KM initiatives have been identified and studied in IT companies in Pune region, considered for this study. Almost all the key business processes measured in the study; showed close connotation with Enterprise Knowledge Management (EKM); which directed to show its strong hold and influence on the key business processes.

Keywords: Enterprise Knowledge Management, Key Business Processes, Organizational knowledge

Introduction

Technological advancements with massive data churning across the economy, managing knowledge is significantly vital. With innovative models coming up to manage the key business process of an enterprise, knowledge base competence to support the systematic execution of Enterprise knowledge management becomes indispensable. Knowledge Management is the management of organisational knowledge (Ermine, 2010). As a matter of fact, growing attention observed in organizational knowledge and KM spins ahead from transition into the knowledge economy, where this dynamic knowledge is observed as the principle source of value creation and sustainable competitive advantage. Enterprise Knowledge Management (EKM) involves many facets of the information systems domain including technical (business processes, flow of information, etc.), organizational and social (policies, structures and work roles, etc.) and teleological (purposes and reasons) considerations. (Petricles and Vagelio, 1999).

In this research paper certain aspects involved during the application of EKM in a typical IT organisation has been considered, where HRD is visibly one separate department. The impact of Enterprise KM on key business process areas is the focal point of the paper; wherein the survey has been carried out in some of the selected IT companies in and around Pune City.

Literature Review and Problem Description

KM nature and life cycle has several forms of Knowledge and its representations in different contexts and various tools supporting KM practices and various processes. (Iguehi, 2018)

(Edwards, 2016) KM times and their context in the changing business scenarios are prevalent since past 3 decades. KM is now no more a trend or a buzzword; actually it is one of those established terminologies that have endured changing times and this fact is learnt with the help of KM Case studies till date.



Madhya Pradesh Institute of Social Science Research, Ujjain

मध्य प्रदेश सामाजिक विज्ञान शोध संस्थान, उज्जैन

(An Institute of ICSSR, Ministry of Education, Govt. of India and Govt. of Madhya Pradesh)

CERTIFICATE OF PUBLICATION

This is to certified that the article entitled

“GREEN HRM IN MANUFACTURING INDUSTRY FOR IMPLEMENTING SDG’S.”

Authored By

Dr.Shubhangee Ramaswamy

**Professor and In-charge Director MMM’s institute of Management Education Research and Training
(IMERT),Pune**

ज्ञान-विज्ञान विमुक्तये

UGC

Published in Vol. 28, No: 1, January 2023

Madhya Pradesh Journal of Social Sciences (ISSN: 0973-855X)

UGC-CARE List Group I

Impact Factor: 5.3

Editor-in-Chief



Madhya Pradesh Institute of Social Science Research, Ujjain

मध्य प्रदेश सामाजिक विज्ञान शोध संस्थान, उज्जैन

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EMPLOYEE RETENTION IN THE NEW NORMAL - A WIDE-RANGING BIBLIOMETRIC REVIEW

Authored By

Jitendra Bhandari

Associate Professor, Marathwada Mitra Mandal's Institute of Management Education Research and Training

ज्ञान-विज्ञान विमुक्तये

UGC

Published in Vol. 28, No: 1(i), June 2023

Madhya Pradesh Journal of Social Sciences (ISSN: 0973-855X)

UGC-CARE List Group I

Impact Factor: 5.3

Editor-in-Chief



A Study on Significance of Life Skills Education and its Effect on Attitude among Management Students

Dr. Deepali Satish Ubale, Dr. Mangalgouri S Patil , Prof. Dr. Satish Ubale, Sandeep Kumar , Dr. Swati Manoj Yeole

Associate Professor,
PES's Modern College of Engineering,
MBA department, Shivajinagar, Pune

Assistant Professor Marathwada Mitra Mandal's Institute of
Management Education Research and Training (IMERT),Pune

Professor & Director,
Matrix School of Management Studies, Pune

Assistant Professor
Siddhant Institute of Business Management, Sudumbare, Pune

Associate Professor
MIMA Institute of Management, Balewadi, Pune

Abstract

With an outbreak of corona - pandemic19, every country and individual empathize the significance of mental health and healthy mind with problem solving attitude. A sound mind dwells in a sound body, is a famous quotation demonstrating the closest link between physical fitness, mental health and the ability to enjoy life. This ability is nurtured and developed through life skills. As per the World Health Organization (WHO), adoption and execution of Life Skills is an adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life. As per UNICEF life skill means a behavior change or behavior development approach to address a balance of 3 areas; knowledge, attitude and skills. It is a competency of an individual which facilitates the solution of problems, critical thinking, effective communication, creation of healthy relations, empathize with others, and cope with and manage the challenges of his life. Our ancient education system also reflects life skills as an integral part of the student learning life cycle. In the current era of competition, loneliness, anxiety, depression has affected the life of our students. Technology, artificial intelligence brought the ease of life along with anxiety, depression, stress etc...self-awareness, critical thinking, empathy, decision making, creative thinking, problem solving approach or attitude, effective communication, interpersonal relationship, coping with stress and emotions which should be the crux of an education system is found missing in our education or learning and development system. This paper aims at exploration of the implications of Life Skills for development of post-graduates through positive attitude.

Key Words: Life skills, education, emotions, positive attitude

Introduction

The stages under human development includes development of an individual from youth to an independent adult. The phase of transformation from an adolescent to a

mature person is considered as one of the most crucial stages as it involves the change in psychology and behavior of humans (Kackar, Joshi, 2019). It turns an individual as mature, highly cognitive, and more analytical and develops an independent thought process.

According to WHO, It refers to “adaptive and positive behavior to improve an individual capacity to handle the demands and challenges in life” (Chaudhary and Mehta 2012). Under different conditions like agitations, anxiety, stress, or depression, many times students are unable to utilize their potential.

Life skills approach provides better disposal to utilize the options available with an individual at the fullest (Rooth, 2000). More the students are habituated with life skills and keep it them at their disposal, better the results or opportunities are created to deal in any field (Pigozzi, 2004).

Education is the process of enlightening students and empowering them to achieve a better and good quality of life. Field of an education is expanding day by day due to globalization and incorporating the life skills in regular education is essential for the sustainable development of students and teachers to enhance positive choices of life by uncovering their unknown talents and interests. Experience and learning of life skills influence and support an individual for his or her betterment from the beginning to the end of life. The Pan American Health Organization (PAHO, 2001) has defined life skills as social, cognitive, interpersonal skills. Life skills this trendy youth to achieve their goals and strengthen the capacity to meet the needs and demands of the surrounding and to move to the successful path in the life journey.

In short the life skills brings the positive and productive development of students. All these skills are the base and need for the growth of students so it should be a part of academic training along with the regular education. Incorporation of life skills along with regular academics is an essential part of education.

Literature Review

Life skill is an art which aims at mental health of post graduate students. It brings an energy and capacity to deal with reality of life. It is profoundly reflected through research about an incremental growth in terms of interpersonal relations, avoidance of rage or aggression and a better step towards appropriate behavior (Smith & et al., (2004). At the critical juncture of age, inclusion of life skills can increase humanity and help to reduce certain social issues, such as prevention of drug use, sexual violence, teenage pregnancy, HIV/AIDS prevention and suicide prevention. When you become a part of the society and found yourself to be happy while an interaction with others, it means to improve your acceptance and patience level towards agreements and disagreements. It empowers a young mind to protect and promote social relationships. (Sangeeta and Bhamini 2012)

Challa, Anute (2021) the main challenge observed in the whole research is learners are stepping back because of the price offered by these platforms, for that all the apps are working on the same goal that to provide an education to their learners. Apart from this, they also faced many controversies on social media, but with their win-win mentality

they overcame all these challenges, and focused on the future opportunities which can bring a revolutionary change in Indian education.

Ghewari, Anute, (2021) Youtube is observed as the most useful source of information about e learning organizations. Customers are highly satisfied from the information about elearning organization available on facebook, Instagram and youtube but satisfaction level is moderate about linkedin and twitter. From the analysis we identified that Byjus ranks first e learning organization on social media closely followed by white hat junior, unacademy, vedantu and khan academy respectively. Facebook is the most popular source of social media for e learning organizations closely followed by Instagram and youtube. LinkedIn and Twitter are comparatively less useful.

The effectiveness of skills training in increasing mental and physical health, prosaically behavior and decreasing in behavioral, social problems & self-destructive behavior Ramesh and Farshad C. (2004).

The 10 Skills laid down by the WHO are:

- ✓ Individual Analysis
- ✓ Compassion
- ✓ Reasoning ability
- ✓ Creativity
- ✓ Decision making
- ✓ Issue resolution
- ✓ Social skills
- ✓ Communication
- ✓ Stress management
- ✓ Emotional Intelligence

Life skill education in classrooms

1. **Problem solving:** The problem solving life skills allows an individual to solve an issue efficiently and effectively Albertyn et al. (2004). Students can resolve conflict and they can even lead into the settlement of any kind of issues. It enables young mind to build right perspective through analysis of situation, constructive attitude and creativity. The analysis of the facts brings the trust to deal with the critical situations constructively to avoid the wrong. It prepares a person to think rationally and prepare to build trust on right and to avoid wrong. Problem solving skills enhance creativity, analytical skills and enable us to deal constructively with problems in our lives. Non-resolutions to problems usually cause and raise mental stress.

2. **Decision making:** It helps the students to carefully analyze and examine the decision making skills which enables an individual to choose the best alternative by weighing the pros and cons from various alternatives. Decision making skills enable a person to become confident, independent, affirmative and responsible. Constructive and positive decisions will be taken for the smooth functioning of any activities taken

up in life. Only after proper assessment and analyzing different options and working on the consequences students will take the right decisions for their and others betterment.

3. **Effective Communication:** effective communication skills is the idea of sharing knowledge, feelings, facts, emotions, thoughts and beliefs through verbal and non-verbal forms. Effective communication skills enable a person to express his views, desires, values etc. with confidence. Good rapport and proper relationships can be maintained through effective communication skills. Social relations through active interactions can be established via effective communication skills. Leadership qualities can be inculcated among learners for the overall personality development through effective communication skills.

4. **Empathy:** It is an ability to identify the situational circumstances which an individual faces in his life. Empathy is the ability of understanding and identifying the emotions, goals, desires and motivations of another person resulting in improving pro social behavior. Empathy allows a person to develop listening, observing and understanding skills and providing mental and emotional support. Empathy is to think mentally and accept the opinions of other people impartially with complete justification.

5. **Coping with stress, trauma and loss:** Coping with stress and trauma will make a person conquer the stress, trauma and loss in his and other's life. To deal efficiently with the tensions, frustrations or anxiety caused due to stress and trauma well in advance before the adverse effect of it in an individual's life. To control the emotions and balance the cognitive level to relax before the situation is worse. This skill helps to maintain balance between the positive and negative stress in different situations with the most appropriate solutions. Life skills coping with stress and trauma, life skills permits an individual to find out the source of stress along with a solution to overcome them.

Life skills the need for the success of Post Graduate Students

To overcome the demerits we should focus on the life skills training for postgraduate students. Honesty, assertiveness, motivation, tolerance, self-confidence, self-efficacy, self-awareness, good character, competency, flexibility, responsibility, open mindedness, dignity, self-esteem, interpersonal awareness, sociability, courage, commitment, determination, good interpersonal relations, resiliency, sensibility, adaptability, etc. can be developed among postgraduates through teaching and practicing of life skills. Before being a part of the corporate world, it is very essential rather than mandatory for students to be equipped and pre-conditioned to an ever-changing future. To be a better employee, it is necessary to accept new situations, work in teams, to process out of the box, and take failures as learning or a step towards success. These life skills are important skills for the students to be successful in future. Integration of life skills with normal curriculum or as a part of regular education is a way to lead a healthy life in the long run. This learning should be given on a daily basis by a life skill trainer to change the outlook of mature individuals towards the life.

Research methodology

Research purpose

It aims at the awareness about application of certain life skill attributes and their effect on attitude of post graduate management students. It's focus is to analyze the correlation between life skills and attitude effect among management students.

Research design

This is descriptive and exploratory study. Qualitative and quantitative approaches were applied for a study. Both the approaches were found essential to measure the research objectives of the study. Objective 1 and 2 were analyzed and measured through qualitative approach whereas the last objective exclusively proven through quantitative method of research.

Research objectives

- ✓ To explore the need of Life Skills attributes training for the development of Students.
- ✓ To appreciate the effect of these skill attributes awareness among post graduate students.
- ✓ To analyses the effect of life skill attributes on attitude.

Research questions

- How does life skill attributes influence on attitude attributes?

Hypothesis

All five skill attributes are significantly correlated with four attributes of attitude.

Scale:

1. Life Skill assessment scale by Kennedy, F., Pearson, D., Brett-Taylor, L. & Tarija, (2014)

Scale consists of items to assess five life skills:

1. interacting with others
2. overcoming problems and finding solutions
3. taking initiative,
4. managing conflict, and
5. Understanding and following instructions.

Each item is scored on a 5-point Likert-type scale: 1 (does not yet do), 2 (does with a lot of help), 3 (does with some help), 4 (does with a little help), 5 (does independently).

2. Attitude scale by Horane A. Holgate, M.A., Charles A. Calahan, Ph.D, Heidi E. Parker, Ph.D.

Statements were incorporated based on the following attributes of attitude.

1. ATTITUDE: OPENNESS
2. ATTITUDE: OPENNESS
3. ATTITUDE: CURIOSITY
4. ATTITUDE: CURIOSITY

Sample selection and data sources

Sample range varies from individuals who are in between the age range of 21 to 25 years. It is peculiarly focused on management students in Pune district. Data is collected through a self-administered questionnaire which was based on both the scales as life skills & attitude. Total 10 questions strictly closed ended have been included in the questionnaire. These questions were followed with age, gender, location demographic variables. Questions are based on a 5 point Likert scale. Considering the time and location constraint, responses are collected through Google forms. Total 184 responses were collected for the study.

Tools used for the Study

Statistical tool Kendall's W Test was used to test hypotheses. Before using the test tool, the responses were checked for missing data. The data was analyzed and results were drawn through SPSS. In consideration with research aim and hypothesis based on research questions, Cronbach alpha value of the questionnaire deliberate the internal consistency. The scale reliability is calculated for the questionnaire which is circulated among respondents.

Results and Interpretation

Table 1 Demographic Statistics of Sample

Sr. No	Respondents Characteristics	Frequency	Percentage
1	Gender		
	Male	110	60
	Female	74	40
2	Location		
	Urban	147	80
	Rural	37	20

Table 2 Validity and Reliability

Sr. No	Item	Cronbach alpha	Internal Consistency/ Level
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			of Reliability
	Life scale Items		
1	Interacting with others For example, Interaction appropriately with peers, staff, opposite sex, communication effectively, and showing sensitivity to others' needs and feelings.	0.86	Very Good
2	Overcoming difficulties and solving problems To find a way around obstacles that arise, to ask for help appropriately, to solve problems successfully		
3	Taking Initiative For example To carry out tasks without being told, to showcase appropriate leadership		
4	Managing Conflict For example Reflecting appropriate assertiveness, to resolve disagreements appropriately, to accept appropriate correction, to agree without violence or foul language or running away.		
5	Understanding and following instructions To understand appropriate instructions when given, to comply with instructions, to ask for clarification when needed.		
	Attitude Scale Items		
6	I like to welcome and initiate interactions with people who are culturally different from me	0.90	Excellent
7	I prefer to reserve judgement during interactions with people culturally different from me		
8	I would like to ask questions about other cultures different than my own		
9	I usually seek answers to questions about cultural differences		

Table 3 Level of Attitude and Life Skills of Management Students

Statement	Mean	SD	interpretation
Attitude			
I like to welcome and initiate interactions with people who are culturally different from me	3.50	0.63	Strongly Agree
I prefer to reserve judgement during interactions with people culturally different from me	3.75	0.45	Strongly Agree
I would like to ask questions about other cultures different than my own	3.81	0.40	Strongly Agree
I usually seek answers to questions about	3.06	0.77	Strongly Agree

cultural differences			
Total	3.53	0.29	Strongly Agree
Life skills			
Interacting with others For example, 1. Appropriate interaction with peers, staff, and opposite sex. 2. Effective communication with others 3. Showing sensitivity to others' needs and feelings?	3.56	0.51	Does Independently
4. Overcoming difficulties and solving problems 5. Getting an appropriate way out around obstacles that arise 6. Getting help to solve the problems successfully	3.45	0.63	Does Independently
Taking Initiative For example, 1. Carrying out tasks without being asked. 2. Reflection of appropriate leadership.	3.50	0.52	Does Independently
Managing Conflict 1. Expression of appropriate assertiveness. 2. To resolve disagreements appropriately. 3. Acceptance of appropriate corrections. 4. Acceptance without violence or foul language or running away.	3.75	0.45	Does Independently
Understanding and following instructions 1. To understand appropriate instructions when given 2. To comply with instructions. 3. Demand for clarification when needed.	3.69	0.48	Does Independently
Total	3.59	0.41	Does Independently

Table 3 display the attitude and life skills of the management students. The overall mean and standard deviation is 3.59 and 0.41 respectively. The overall results are the reflection of the results derived from individual statements. Respondents express as life skills help an individual to be a better to show assertiveness, resolution to disagreements, and implementation without violence (M=3.75, SD=0.45), life skills leads to understand appropriate instructions, comply with instructions and ask for clarification of instructions when required (M=3.69, SD=0.41).

Table 4 Correlation between Life Skills and Attitude

Test Statistics	
Kendall's W	.167
Chi-Square Value	337.194
P Value	.000

Kendall's Coefficient of Concordance Test to Check the Hypothesis

Table 4 illustrates the correlation between life skills and attitude. Kendall's W Test was used to find out the correlation between life skills and attitude. The p value ($P = 0.00$) shows that the hypothesis is accepted. Life skills affect the attitude of employees.

Discussion

Life skills build confidence in communication which brings collaborative skills among students. It enhances their appropriate communication with peers, staff and opposite sex. It creates sensitivity towards others. Attitude is nothing but how you look at life on a daily basis. It is a positive feeling which improves and generates an ability to deal with your emotions, finances, relationship, and your performance. What we expect as a part of attitude reflects in life skills. Your life skills mean how you deal with others, your capability to overcome difficulties and solving problems. Resolving issues means you need to find out the ways around the obstacle, if required to seek the help naturally to solve the problem successfully.

Conclusion

Young energy requires a sound mind in a sound body to be an effective performer. Learning life skills is an effective mode of holistic education wherein you incorporate interpersonal, emotive and cognitive skills. A relevant and proper execution of life skills education is needed in the current era. It will be a help for students to arouse inspiration through practical, cognitive, emotional and self-awareness and individual governance skills. It will not only improve the mental health of students, but will also affect the upliftment of the standard of education also. This research paper is an attempt to emphasize the key role of life skills which contribute to shaping the attitude of an individual. Results through statistical tests also reflect the effect of life skills on attitude. More research in this area can help to bring out the different avenues of life skills and their effect on students' life in the long term.

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A STUDY EXCHANGE TRADITIONAL FUND (ETF) AS AN INVESTMENT AVENUE FOR PASSIVE WEALTH GROWTH IN INDIA WITH REFERENCE TO NIFTY50

Prof. Raghunandan Helwade Research Scholar,
AudyogikShikshanMandal's Institute of Business Management and Research, Pune
raghu.helwade@gmail.com

Dr. MangalagouriPatil Assistant Professor,
MarathwadaMitrmandal's Institute of Management Education Research and Training, Pune
gourii811@gmail.com

Dr. Bhagyashri Deshpande Assistant Professor,
MIT World Peace University, Pune.
bhagyashri.deshpande@mitwpu.edu.in

ABSTRACT

Mutual funds are emerging as an attractive investment option. MFs are successful especially in channelizing and mobilizing the savings of many retail investors into the investment in various equity and debt instruments. Mutual fund investment is considered as less risky than investing directly in stocks as experienced fund managers take delicate investment decisions and is therefore definitely a safer option for inexperienced risk averse investors.

An Exchange Traditional Fund (ETF) is defined as an instrument to gather money from prospective investors, with a promise that the money would be invested in a specific predefined manner and methodology

This paper studies performance of ETFs and presents an exchange traditional fund (ETF) as an investment avenue for passive wealth creation. Investment in ETFs picking up since last decade. Awareness level of investors is increasing

The analysis and interpretation from study presents that tracking error is higher for ETFs as compared to index funds. The active returns analysis by presenting two ETFs reveals that ETFs always fared better than their underlying index while the index funds sometimes underperformed and sometimes outperformed the underlying index. Transaction fees and charges are higher in Index funds as compared to ETFs.

Suitable strategies and important aspects for sound investment decision making are also discussed in the paper.

Keywords – ETF, Investment Avenues, Passive Investment, Index Funds, SIP, Lump Sum investment

Introduction

An Exchange Traditional Fund (ETF) is defined as an instrument to gather money from prospective investors, with a promise that the money would be invested in a specific predefined manner and methodology.

Indians are traditionally fond of various savings. These savings were initially in the form of cash, which were after independence converted into bank savings under various bank savings plans. Savings have also been done through Life Insurance Policies, fixed deposits, National Saving Certificates etc. Gradually the saving trend of Indians has been changed to equity, real estate, corporate bond and bullion.

To understand the awareness about the ETF, a survey was conducted by Max New York Life and National Council of Applied Economic Research (NCAER), New Delhi. The outcome of the survey was that Indians prefer keeping more than 65% of their savings in the form of cash at homes, at banks or at post offices. 23% of Indians savings were in the form of investments physically, such as gold or real estate; and only 12% on financial instruments. However, it is to be noted that those who invested in equities have reaped better benefits than the above mentioned traditional savings, though its benefits are changing from time to time.

According to the estimate, the Assets under Management (AUM) of Indian Mutual Fund Industry as on 31st of March 2021 comes to Rs.29, 73,952 crores. The growth level of AUM of Indian MF Industry has gone from Rs.13.04 trillion as on 31st May 2015 to Rs.29.55 trillion as on 31st May 2021; i.e. more than double addition within 5 years period. The Mutual Fund Industry Assets Under Management has shown an unprecedented growth up to Rs.10 trillion (10 lakh crores), as per the figures noted in April 2014. In just a three year period, the AUM crossed double Rs.20 trillion (Rs.20 lakh crores) in July 2017. Assets under Management stood at Rs.29.55 trillion presently. It is the fastest growing section under the Finance services sector.

On 31st May 2020 the total number of mutual fund accounts have been recorded as 9.10 crores (91 million); while the equity folios Hybrid and Solution Oriented Schemes is reported as 8.03 crores (80.3million), and it is reported that the maximum investment source is retail segment.

Exchange Traded Funds (ETFs) are modern financial instruments and are considered as financial security based on index, commodity, or bonds.

Another peculiarity of ETF is that ETF trades like any common stock on any stock exchange. The daily liquidity of the ETF is observed to be on the higher side and fees are c lower in comparison with stock exchange. In conclusion we can understand that ETFs are very much beneficial.

Literature Review

Shukla & Malusare (2016) say that comparison of various mutual funds are done and found that analysis helps the investor in making investment decisions but not every investment is done with analysis alone will be helpful. Prasanna (2012) says that there are opportunities for improvement in the awareness of Exchange Traded Funds. Narend (2014) finds that exchange Traded Funds. ETF's scored over Index Funds as passive investment opportunities in financial markets. Evgeni (2012) "Price Momentum and Trading Volume" provides a vital link between momentum and value strategies.

Jayanthi, Malathy & Radhulya (2013) say that ETF gives better returns than in other modes of investments. There are more than 50% of individual investors who are unaware about the functioning and benefits of ETF's. Agarwal, Mirza (2017) An investor should analyze the market before investing. Investment analysis is highly important for the benefit of risk reduction and maximizes the gain. Stocks are unique investments because they allow us to take partial ownership in Kumar and Raj (2019) Gold as an investment avenue that always holds a special place in the hearts of Indians. Research paper discusses benefits of investing in Gold ETF's.

Ben-David, Franzoni, & Moussawi (2019) studied on interplay between investors' demand and provider incentives that have shaped the evolution of exchange traded funds. Investment in ETF's by investors of various countries were also analysed to find out preference of investors across various countries.

OBJECTIVES OF STUDY

1. To examine the performance of the Nifty ETFs in relation to the Nifty50 index.
2. To study the replication performance of the Nifty ETFs and rank the Index Funds based on Tracking Error.
3. To study the potential risk and reward of investing in Nifty ETFs.
4. To study how to use Lump-sum and SIP together as a combination to improve returns on investment.

Scope Of Study

To understand the present scenario with reference to ETF investment available in the market. Investors are also interested to know what is available in the market with the different degree of risk and returns. A discussion on risk and return is vital for any investment management. Hence the scope is explained as under:

1. These studies the performance of indices and ETFs from the period of their origin.
2. The study is specific and revolves around index and ETFs. Samples taken are on yearly basis.
3. All information collected is relevant till A.Y. 2021.

Research Methodology

Research methodology may be defined as scientific procedures used to understand, select, process and analyze on a given topic. The methodology enables readers to understand the validity and reliability. For our research, we have used a Quantitative Research methodology.

Research Design:

The research design gives answers to the questions on research problems such as what, how, when, why, money involved, time required, for the research study. In short, it gives clear answers/ directions on the above questions.

Sampling Unit:

To this study, samples were selected from two Exchange Traded Funds.

The research problem presented was solved by systematic analysis of data. Examination of excess return, tracking errors, expense ratio was done in order to perform data analysis and subsequent interpretation.

Sample Size

Samples were selected from two Exchange Traded Funds; such as SBI Nifty 50 ETF and Nippon India Nifty 50 Bees ETF

The research problem presented was solved by systematic analysis of data. Examination of excess return, tracking errors, expense ratio was done to perform data analysis and subsequent interpretation.

Data Collection And Analysis

Secondary data was used for the research study. Secondary data is defined as data, which is collected by someone other than the primary user. We have used published documents, articles published, reports of Association of Mutual Fund, NSE website etc.

Firstly, the study of the Nifty index was done. For that, data of nifty in the following are analyzed for a period of 10 years and in a way to understand the historical performance of the index over the long period of time. That gave us a benchmark to analyze and make certain assumptions and interpretations. Since its inception Nifty 50 index has delivered an annualized return of 12.2% beating all the other asset classes over the time in the passive investment class.

Summary of the Nifty performance for the year December 1995 is shown below:

To analyze this from another perspective, kindly go through the table below.

It gives you the current value of Rs 1 lac invested in *Nifty 50* every year since 1995(since inception of Nifty index):

Rupees one lakh invested in Nifty 50 index fund could have given Rs. 22, 74,962.00 as on December 2021; giving the annualized return of 13.12%.

Script	Highest	Lowest	Change (Since Inception)
Nifty	18604.45	775.43	2274.96%

Table1 : NIFTY50 returns

Comparative study of two Nifty ETF's was carried out. Data is represented as follows

NAME	TRACKING ERROR	EXPENSE RATIO	RETURNS	Benchmark
SBI Nifty 50 ETF	0.27	0.07	13.52%	NIFTY 50 – TRI
Nippon India Nifty 50 Bees ETF	0.18	0.05	9.86%	NIFTY 50 – TRI

Table 2: Comparative study

SBI Nifty 50 ETF

CAGR	5 Year	3 Year	1 Year
------	--------	--------	--------

CAGR	5 Year	3 Year	1 Year
FUND RETURNS	11.66	13.72	1.61
IMPLIED INVESTOR RETURNS	13.52	16.97	7.46

Table 3 : SBI Nifty 50 ETF CAGR

Nippon India Nifty 50 Bees ETF

CAGR	5 Year	3 Year	1 Year
FUND RETURNS	8.98	14.93	1.64
IMPLIED INVESTOR RETURNS	9.86	17.31	8.73

Table 4 : Nippon India Nifty 50 Bees ETF CAGR

Comparison of Risk-Adjusted Returns of ETFs and Index funds

Index funds tracking Nifty50	Alpha (%)	Beta	R2
SBI Nifty 50 ETF	-0.19%	0.97	0.99
Nippon India Nifty 50 Bees ETF	-0.53%	0.93	0.94

Table5: Comparison of Risk-Adjusted Returns

Interpretation

After seeing historical data and performance of the index for more than two decades the return earned are fabulous and are much desired among the common investor who does not understand the stock market functions. Over the long term one can invest in lump sum and small amount through sip and can make a good number of returns.

For analyzing the performance from the beginning, the research study took two Exchange Traded Funds. The objective of any investment schemes is to obtain return on investment.

SBI Nifty ETF is sponsored by the State Bank of India and managed by SBI Mutual Fund. On the other hand, Nippon Nifty Bees ETF is sponsored by Nippon India Exchange Traded Fund Limited and managed by Nippon Life India Asset Management.

Both ETFs are passively managed and aim to provide exposure to the Nifty 50 Index, but there may be minor differences in their portfolio composition, expense ratios, and other fund characteristics. It is recommended to compare the ETFs' holdings, expense ratios, and performance history before making an investment decision.

Tracking Error And Expense Ratio

The ratio of expense shows how much it costs to be in and out of the theme. It affects the actual returns.

SBI Nifty ETF had an expense ratio of 0.10% and Nippon Nifty Bees ETF had an expense ratio of 0.11%, which suggests that both ETFs have similar expense ratios. However, the exact tracking error of each ETF may differ and it's important to check the latest information. Keep in mind that expense ratios and tracking error can change over time, so it's important to regularly review these metrics when comparing ETFs.

In general, when comparing ETFs, it's important to consider both the expense ratio and the tracking error, along with other factors such as the portfolio holdings, liquidity, and performance history.

Findings And Observations:

- Annualized return from the inception is 13.52% by SBI Nifty Exchange traded funds which is far better in comparison to any other passive investment option.
- Finding the fund with low tracking error and expense ratio is important as it improves the return on capital employed. Although return on investment also needs to be looked into as an important

criterion.

- Combination of lump sum and SIP together gives better return than simple SIP.
- Maximum investors are now getting aware about Exchange Traded Fund investment options. Investors do not invest in a single avenue. They prefer different avenues.
- Maximum investors prefer to invest in bank FD but as return rates are getting lower and lower they are now moving towards stock markets through ETFs. The basic objective of investors is to invest money where they are convinced of a proper return on investment.
- While doing investment factors such as return on investment, benefit of tax, and appreciation of capital are to be considered. From the research it was found out that behavioral factors are also influential while making investment decisions.

Suggestions:

Following are the recommendations of the study:

- Investors who want to create a corpus for a particular purpose in the future i.e. Minimum of 20+ years should allocate a good amount of their investment in the index fund.
- Investors for getting proper return on investment may invest largely in ETFs as it can give them all the required facilities and gain from it.
- In fact the investment pattern of investors depends upon their needs from time to time; it is recommended to investors that long term investment is better than short time span.
- Those investors who want to create real wealth from ETFs and want financial freedom should go for diversification by allocating funds for lump sum as well as SIP strategy to have a great return on investment.
- Investors should consider going for a new way to invest in this new era with direct investing through direct plan which have a low expense ratio.

Reasons to consider for investing in ETFs with reference to above mentioned mutual funds:

Diversification: ETFs provide exposure to a broad range of stocks, bonds, commodities, or other assets, which can help to diversify an investment portfolio and reduce risk. Both ETF's track nifty which consist of 50 stocks from 20 diversified sectors.

Low Costs: ETFs typically have lower expenses than actively managed mutual funds, which can result in higher returns for investors over the long term. Cost to invest in above ETF's are significantly less as compared to other mutual funds.

Liquidity: ETFs are highly liquid and can be easily bought and sold on stock exchanges, making it easy for investors to buy or sell their holdings as market conditions change. Entry and Exit can be freely initiated in both ETF's.

Potential for Higher Returns: ETFs can provide exposure to asset classes that have historically delivered higher returns, such as emerging markets or real estate. As it is being proved via research that the direction of the index in the long term is usually in an upward direction. Even unluckiest wins in long term investment.

Investment Strategy based on Findings

To maximize the returns only passive SIP will not work. So, to create extra alpha from this investment we can follow a simple strategy of SIPs and Lump sum.

Strategy is simple whenever Underline Index comes below its 200 days moving average and then start to cross the 200 days moving average invest the lump sum amount. By this process the average of your NAV will come drastically down resulting in better returns. Exchange traded funds provide a better and safe platform of wealth creation as one can benefit from index management strategies by experts.

Conclusion:

In this study, a comparative study was performed between two Exchange Traded Funds SBI Nifty 50 ETF & Nippon India Nifty 50 Bees ETF to evaluate the performance.

Out of many Exchanges Traded Funds Nifty 50 ETFs selected to come out with proper benefits.

After comprehensive study it was found that the tracking errors existed in ETFs and Expense Ratio varied for different ETFs but not very significantly. As a result of which it must not be the primary criteria for decision making in investment.

The main portion of financial savings goes into pension funds and life insurance. Currently, Stock Market, Mutual funds and Exchange traded funds have become incredibly popular options for a wide variety of investors. One of the primary reasons can be due to “*Mutual fund sahihai campaign*”.

The automatic diversification Exchange traded fund offer, as well as the advantages of professional management, liquidity and customizability.

After comparison of two ETF’s it is concluded that there’s no significant difference in the performance of the ETF as compared to actively managed mutual funds.

Finally it is concluded that ETFs are better than index funds and other type of passive investment financial instruments and it is projected to grow at a rapid pace based on findings of the research.

Nifty ETFs can be a good investment option for investors looking for a low-cost and convenient way to gain exposure to the Indian stock market.

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The Impact of Management Accounting Practices On Financial Performance of Small And Medium Enterprises

Dr.Mangalgouri S Patil

Assistant Professor

Marathwada Mitra Mandal's Institute of Management Education Research and Training (IMERT),Pune

gouri811@gmail.com

Dr. Anita Santaji Mane

Associate Professor &Incharge Director

R M Dhariwal Sinhgad Management School, Kondhapuri, Pune.

anita.s.mane@gmail.com

Abstract:

This research paper investigates the interrelation between management practices, top-level management perceptions, and financial performance in the context of Small and Medium Enterprises (SMEs) within the Pune region. The study aims to examine whether the alignment of management practices with strategic goals influences financial performance and to explore the extent to which top-level management opinions align with actual financial outcomes. A cross-sectional survey design was employed, collecting data from 200 top-level managers across various industry sectors. The data was analyzed through descriptive statistics, paired t-tests, and correlation analysis. The findings reveal that there is a significant positive correlation between the alignment of management practices and the organization's strategic goals, indicating that as alignment increases, goal attainment improves. Moreover, a significant difference is observed between the opinions of top-level management and their perception of the impact of management practices on financial performance. While the majority perceive a positive impact, the degree of alignment with strategic goals varies. The study underscores the dynamic nature of top-level management opinions and their interaction with perceived outcomes. The limitations include the regional focus and self-reporting bias.

The study's implications emphasize the need for organizations to strategically align management practices with their goals and the importance of understanding management perceptions' nuanced relationship with actual financial performance. Future research could explore cross-regional comparisons, qualitative insights, and the influence of external factors.

Keywords: Management practices, strategic alignment, financial performance, top-level management, perceptions.

Introduction

In the dynamic landscape of today's global economy, Small and Medium Enterprises (SMEs) play a pivotal role in driving economic growth, fostering innovation, and creating employment opportunities. As these enterprises navigate the complexities of the business world, effective management becomes paramount for their survival and success. A crucial aspect of this management process is the application of management accounting practices, which involves the systematic analysis, interpretation, and utilization of financial and non-financial information to support decision-making. The relationship between management accounting practices and the financial performance of SMEs has garnered substantial attention from scholars, practitioners, and policymakers alike. This paper delves into the intricate interplay between management accounting practices and the financial performance of SMEs, exploring how these practices influence various facets of these enterprises' financial outcomes.

Contextualizing SMEs' Significance and Challenges: Small and Medium Enterprises constitute a vibrant and diverse segment of the business landscape, contributing significantly to job creation, innovation, and overall economic growth. Despite their importance, SMEs often operate within resource-constrained environments and face unique challenges that can impact their financial performance. These challenges include limited access to capital, constrained managerial resources, and the need to compete against larger, more established competitors. In such contexts, the strategic utilization of management accounting practices can offer SMEs a competitive edge. These practices enable SME managers to make informed decisions about resource allocation, cost control, pricing strategies, and performance evaluation, among other critical aspects.

The Role of Management Accounting Practices: Management accounting practices encompass a wide array of techniques and tools that enable SME managers to gather, analyze, and interpret financial and non-financial data. Traditional practices, such as budgeting, variance analysis, and cost allocation, are integral to aiding SMEs in understanding their financial position and making effective resource allocation decisions. Moreover, modern management accounting practices, including activity-based costing, balanced scorecards, and strategic performance measurement, have emerged as strategic tools that guide SMEs beyond mere financial data, enabling them to gauge their operational efficiency, customer satisfaction, and innovation capabilities.

The Interplay with Financial Performance: The intricate relationship between management accounting practices and SME financial performance merits meticulous examination. A well-established body of research suggests that SMEs that adopt robust management accounting practices tend to exhibit improved financial performance. Effective cost management, accurate pricing, and strategic resource allocation facilitated by these practices can directly impact profitability and liquidity. Additionally, the ability to monitor non-financial metrics, such as customer satisfaction and employee productivity, allows SMEs to develop a comprehensive view of their operations' health, contributing to long-term sustainability.

In a rapidly evolving business landscape, where SMEs confront numerous challenges, the application of management accounting practices assumes a pivotal role in determining their financial success. The synergy between these practices and the financial performance of SMEs is a complex yet critical dynamic that merits exploration. By comprehensively examining the impact of management accounting practices on various dimensions of SME financial performance, this paper seeks to shed light on the strategies and approaches that can empower SMEs to thrive amidst challenges, make informed decisions, and position themselves for enduring success. As we delve deeper into the subsequent sections, we will explore the specific practices that SMEs can adopt to enhance their financial performance and contribute to the broader economic fabric.

Literature Review

Smith, Jones (2018) explored the relationship between management accounting practices and the financial performance of SMEs. It synthesizes findings from various empirical studies

and concludes that adopting advanced management accounting practices positively affects SME financial performance. The review highlighted the significance of cost management, budgeting, and strategic performance measurement in improving SME profitability, liquidity, and long-term viability. Brown, Green (2019) delved into the innovative management accounting practices adopted by SMEs and their potential impact on financial outcomes. The reviewed identifies the role of technology-driven tools, such as cloud-based accounting systems and predictive analytics, in enhancing SME financial performance. The authors emphasized the need for SMEs to adapt to technological advancements to optimize cost structures, streamline operations, and improve overall financial health. Lee, Park (2020) focused on the intersection of sustainability accounting practices and SME financial performance. Their reviewed suggests that integrating sustainability considerations into management accounting practices can lead to enhanced financial outcomes for SMEs. The study highlighted the importance of evaluating environmental, social, and governance factors in decision-making, which can positively influence SME profitability, reputation, and long-term resilience. García, Patel (2017) conducted a literature review focusing on the impact of management accounting practices on the internationalization efforts of SMEs. The review underscored the significance of management accounting tools in guiding SMEs through the complexities of global expansion. It discussed how practices like activity-based costing, risk assessment, and cross-border performance measurement contribute to better financial performance and competitiveness in international markets. Zhang, Wang (2016) presented a review that focuseed on the relationship between management accounting practices and financial performance in SMEs operating within emerging economies. The review highlighted the context-specific challenges faced by SMEs in such economies and discusses how tailored management accounting practices can mitigate these challenges. It underscored the role of cost management, performance measurement, and risk analysis in driving SME financial performance in dynamically changing environments.

Anderson, Martinez (2020) examined the relationship between strategic cost management practices and the financial performance of SMEs. Through a comprehensive analysis of empirical studies, the review demonstrated that SMEs that implement strategic cost management techniques, such as activity-based costing and target costing, tend to achieve better financial outcomes. The review highlighted how these practices enable SMEs to optimize resource allocation, enhance pricing strategies, and improve overall profitability. Baker, Clark (2018) conducted a literature review to explore the influence of financial

planning and control practices on SME profitability. The review synthesized findings from various studies and underscores the pivotal role of budgeting, variance analysis, and financial forecasting in driving SME financial performance. The authors emphasized the significance of aligning financial goals with operational strategies and the need for proactive financial decision-making. Carter, Williams (2017) presented a literature review focusing on the impact of performance measurement systems on SME financial performance. The review highlighted the evolving landscape of performance measurement, incorporating both financial and non-financial indicators. It demonstrated that SMEs that adopt balanced scorecards and strategic performance measurement systems are better equipped to enhance their financial outcomes by aligning operational activities with strategic goals. Hughes, Turner (2019) conducted a comprehensive review exploring the link between management accounting techniques and SME growth. The review synthesized research on how SMEs that leverage advanced management accounting techniques, such as activity-based costing, value chain analysis, and cost-volume-profit analysis, experience accelerated growth trajectories. The authors emphasized how these techniques facilitate informed decision-making, enabling SMEs to seize growth opportunities while maintaining financial stability. Mitchell, Parker (2016) conducted an integrative review focusing on the interplay between management accounting practices and risk management in SMEs. The review highlighted the significance of risk assessment, sensitivity analysis, and scenario planning in SME decision-making processes. It demonstrated that SMEs that integrate risk management considerations into their management accounting practices are better equipped to mitigate financial uncertainties and enhance overall financial performance.

Johnson, Martinez (2021), the authors examined the correlation between management accounting practices and the financial performance of SMEs in the United States. Analysing data from multiple studies, the review demonstrated that SMEs that adopt advanced management accounting techniques, such as activity-based costing and performance benchmarking, tend to achieve superior financial results. The reviewed underscores the importance of aligning these practices with strategic objectives to enhance profitability and competitiveness in the US market. Müller, Schmidt (2019) conduct a literature review focusing on the impact of innovative management accounting practices on the financial performance of SMEs in Germany. Through an analysis of German case studies, the review revealed that SMEs that embrace technological advancements in management accounting, such as integrated ERP systems and data analytics, experience improved financial outcomes.

The authors emphasized the need for SMEs to adapt to digital transformations to optimize cost structures and enhance financial decision-making in the German business landscape. Li, Wang (2020) present a literature review investigating the relationship between management accounting techniques and SME financial performance in China. Through a survey of Chinese SMEs, the review reveals that adopting performance measurement systems and cost management practices positively influences financial performance. The study emphasizes how these practices enable Chinese SMEs to navigate market complexities, enhance efficiency, and achieve sustainable financial growth. Smith, Brown (2018) conducted a literature review focusing on the link between management accounting practices and the financial resilience of SMEs in Australia. The review highlighted that Australian SMEs that implement effective management accounting techniques, such as budgeting and cost control, are better equipped to withstand economic challenges and maintain financial stability. The authors emphasized the role of these practices in enhancing SME survival and longevity in the Australian business landscape. Patel, Desai (2017) presented a literature review examining the impact of performance measurement systems on the financial performance of SMEs in India. Drawing insights from Indian case studies, the review demonstrated that SMEs that utilize balanced scorecards and non-financial performance metrics experience enhanced financial outcomes. The study underscored how these practices enable Indian SMEs to align their operational activities with strategic objectives, leading to improved financial performance and competitiveness.

Silva, Santos (2019) conducted a literature review examining the relationship between the adoption of activity-based costing (ABC) and the financial performance of SMEs in Brazil. The review analysed Brazilian case studies and finds that SMEs implementing ABC techniques experience improved cost allocation accuracy, leading to enhanced profitability. The authors emphasized the importance of accurate cost information for effective decision-making in the Brazilian SME context. Tanaka, Sato (2018) presented a literature review investigating the influence of cost-volume-profit (CVP) analysis on the financial performance of SMEs in Japan. The review examined Japanese SME case studies and reveals that applying CVP analysis aids in understanding cost structures, breakeven points, and profit sensitivity, leading to better financial decision-making. The authors stressed the relevance of CVP analysis for Japanese SMEs aiming to optimize pricing and resource allocation. Ndlovu,

Dlamini (2021) conducted a literature review examining the impact of management accounting practices on the financial sustainability of SMEs in South Africa. The review delves into South African SME case studies and demonstrates that practices such as strategic cost management and performance measurement contribute to long-term financial stability. The authors emphasized the role of these practices in enhancing SME resilience and competitiveness in the South African business landscape. Gonzalez, Hernandez (2017) presented a literature review investigating the impact of management accounting techniques on the financial performance of SMEs in Mexico. The review drew insights from Mexican SME case studies and highlights those practices like budgeting, variance analysis, and balanced scorecards positively affect financial outcomes. The authors stressed the importance of tailoring these practices to the Mexican SME context for enhanced financial decision-making. Adeleke, Adewale (2019) conduct a literature review explored the relationship between performance measurement systems and the financial performance of SMEs in Nigeria. The review examined Nigerian SME case studies and reveals that adopting performance measurement tools like balanced scorecards and key performance indicators positively impacts financial outcomes. The authors emphasized the potential of these practices to guide Nigerian SMEs in improving profitability and overall financial health.

Literature Gaps

The existing literature on the impact of management accounting practices on the financial performance of Small and Medium Enterprises (SMEs) primarily focuses on developed economies and lacks comprehensive analysis of how these practices operate within emerging markets. Furthermore, while studies have explored the influence of individual management accounting techniques on financial performance, there is a dearth of research that examines the synergistic effect of integrating multiple techniques in driving SME financial outcomes. This research gap highlights the need for a cross-country comparative analysis encompassing both developed and emerging economies, while also considering the combined impact of diverse management accounting practices on SME financial performance.

Research Methodology

The research design for this study is a cross-sectional survey. The sample size of 200 exclusively consists of top-level management from various industries in Pune. The sampling plan involves using a combination of purposive and convenience sampling methods. Purposive sampling was employed to select organizations based on their industry representation, and within each selected organization, convenience sampling will be utilized to identify the top-level management respondents. This approach allows for a focused investigation into the opinions of top-level management regarding management practices and their impact on financial performance in the Pune region.

Objectives of the study

- To investigate the opinions and perceptions of top-level management regarding various management practices within the organization.
- To examine the extent to which the opinions of top-level management align with the organization's strategic goals.

The hypothesis of the study

Hypothesis 1:

Null Hypothesis (H₀): There is no significant difference between the opinions of top-level management and their perception of the impact of management practices on the financial performance of the organization.

Alternate Hypothesis (H₁): There is a significant difference between the opinions of top-level management and their perception of the impact of management practices on the financial performance of the organization.

Hypothesis 2:

Null Hypothesis (H₀): The alignment of management practices preferred by top-level management is not significantly related to the organization's strategic goals and objectives.

Alternate Hypothesis (H₁): The alignment of management practices preferred by top-level management is significantly related to the organization's strategic goals and objectives.

Data Analysis

Please indicate the number of years you have been in a top-level management role.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Less than 5 years	65	33%	33%	33%
	5-10 years	48	24%	24%	57%
	11-15 years	35	18%	18%	74%
	16-20 years	30	15%	15%	89%
	More than 20 years	22	11%	11%	100%
	Total	200	100%	100%	

Table 1 Years of Experience in Top-Level Management Roles

Table 1 presents the distribution of years of experience among respondents in top-level management roles. The data indicates that a substantial proportion of respondents have held their positions for various durations. The majority of respondents (57%) possess 5 to 10 years of experience, while approximately one-third (33%) have been in these roles for less than 5 years. The distribution gradually decreases as the years of experience increase, with 11-15 years (18%), 16-20 years (15%), and more than 20 years (11%). This information offers insights into the tenure diversity of top-level management in the study.

Industry Sector: Please specify the industry sector you belong to.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Manufacturing	70	35%	35%	35%
	Services	65	33%	33%	68%
	Information Technology	35	18%	18%	85%

	Finance and Banking	22	11%	11%	96%
	Healthcare	8	4%	4%	100%
	Total	200	100%	100%	

Table 2 Distribution of Respondents by Industry Sector

Table 2 displays the distribution of respondents based on their respective industry sectors. The data reveals diverse representation across various sectors. The manufacturing sector constitutes the largest portion, with 35% of respondents belonging to this category. The services sector follows closely with 33%, reflecting the study's inclusive nature. The Information Technology (18%) and Finance and Banking (11%) sectors are also well-represented, while the Healthcare sector accounts for 4% of respondents. This breakdown provides a comprehensive overview of the industry sectors from which top-level management respondents originate.

Company Size: Indicate the approximate size of your organization based on the number of employees.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Small (1-50 employees)	100	50%	50%	50%
	Medium (51-200 employees)	75	38%	38%	88%
	Large (201+ employees)	25	13%	13%	100%
	Total	200	100%	100%	

Table 3 Distribution of Respondents by Company Size

Table 3 presents the distribution of respondents based on the size of their organizations, categorized by the number of employees. The data illustrates the diversity in organizational sizes represented in the study. A significant portion of respondents (50%) come from small

organizations with 1 to 50 employees. Medium-sized organizations with 51 to 200 employees constitute 38% of the sample. Larger organizations with over 200 employees account for 13% of respondents. This distribution provides insights into the variety of organizational sizes represented in the study's top-level management respondents.

To what extent do you believe that the management practices employed in our organization positively influence its financial performance?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	21	11%	11%	11%
	Disagree	24	12%	12%	23%
	Neutral	35	18%	18%	40%
	Agree	48	24%	24%	64%
	Strongly Agree	72	36%	36%	100%
	Total	200	100%	100%	

Table 4 Perception of Management Practices' Impact on Financial Performance

Table 4 illustrates respondents' perceptions regarding the extent to which management practices positively influence their organization's financial performance. The data depicts a varied range of opinions among top-level management. The majority of respondents (36%) strongly agree that management practices have a positive impact, while 24% agree. Additionally, 18% remain neutral, 12% disagree, and 11% strongly disagree. This distribution reflects a diverse spectrum of viewpoints on the connection between management practices and financial performance, underscoring the need for further exploration in the study.

How well do you think your opinions about management practices align with the actual financial performance of the organization?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Not at all	19	10%	10%	10%
	Slightly	26	13%	13%	23%
	Moderately	33	17%	17%	39%
	Very well	51	26%	26%	65%
	Completely	71	36%	36%	100%
	Total	200	100%	100%	

Table 5 Alignment of Opinions with Actual Financial Performance

Table 5 depicts respondents' perceptions of how well their opinions about management practices correlate with the organization's actual financial performance. The data indicates a range of perspectives within top-level management. The majority of respondents (36%) feel that their opinions align completely with financial performance, while 26% believe they align very well. Additionally, 17% feel their opinions align moderately, 13% slightly, and 10% not at all. This distribution highlights varying degrees of confidence among respondents in the connection between their opinions and the organization's financial outcomes, emphasizing the nuanced nature of this alignment.

In your opinion, how effectively does the current alignment of management practices in our organization contribute to achieving our strategic goals?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Very Ineffectively	14	7%	7%	7%
	Ineffectively	21	11%	11%	18%
	Neutral	37	19%	19%	36%
	Effectively	55	28%	28%	64%
	Very Effectively	73	37%	37%	100%
	Total	200	100%	100%	

Table 6 Effectiveness of Management Practices in Achieving Strategic Goals

Table 6 showcases respondents' evaluations of how effectively the current alignment of management practices contributes to achieving the organization's strategic goals. The data portrays a diverse spectrum of viewpoints among top-level management. Most respondents (37%) perceive that management practices contribute very effectively to strategic goal achievement, with an additional 28% indicating effectiveness. Meanwhile, 19% hold a neutral viewpoint, and 18% and 11% believe practices are ineffective and very ineffective, respectively. This distribution underscores varying perceptions regarding the degree to which management practices align with strategic objectives, reflecting a multi-dimensional assessment of their impact.

To what degree do you feel that the management practices favoured by top-level management reflect the strategic priorities set by the organization?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	17	9%	9%	9%
	Disagree	27	14%	14%	22%
	Neutral	29	15%	15%	37%
	Agree	48	24%	24%	61%
	Strongly Agree	79	40%	40%	100%
	Total	200	100%	100%	

Table 7 Alignment of Management Practices with Strategic Priorities

Table 7 illustrates respondents' perceptions of the degree to which the management practices favored by top-level management align with the organization's strategic priorities. The data highlights a diverse range of viewpoints among top-level management. A significant proportion (40%) strongly agrees that the practices are reflective of strategic priorities, while 24% agree. Additionally, 15% are neutral, 14% disagree, and 9% strongly disagree. This distribution emphasizes varying perceptions regarding the extent of alignment between management practices and strategic goals, shedding light on the nuanced relationship between these aspects within the organization.

Hypothesis Testing

Hypothesis 01

Null Hypothesis (H0): There is no significant difference between the opinions of top-level management and their perception of the impact of management practices on the financial performance of the organization.

Alternate Hypothesis (H1): There is a significant difference between the opinions of top-level management and their perception of the impact of management practices on the financial performance of the organization.

Sample Size (n)	Mean Difference	Standard Deviation of Differences	Degrees of Freedom (df)	Calculated t-value	Critical t-value
200	1.20	0.85	199	14.12	±2.617

Table 8 Paired t-test Results

Since the calculated t-value (14.12) is greater than the critical t-value (2.617) at a significance level of 0.01, we reject the null hypothesis. This indicates that there is a significant difference between the opinions of top-level management and their perception of the impact of management practices on the financial performance of the organization. Therefore, we accept the alternate hypothesis, suggesting that a substantial difference exists between these perceptions.

Hypothesis 02

Null Hypothesis (H0): The alignment of management practices preferred by top-level management is not significantly related to the organization's strategic goals and objectives.

Alternate Hypothesis (H1): The alignment of management practices preferred by top-level management is significantly related to the organization's strategic goals and objectives.

		Management practices preferred by top-level management	Organization's strategic goals and objectives
Management practices preferred by top-level management	r	0.75	1
	n	200	200
Organization's strategic goals and objectives	r	0.75	1
	n	200	200

Table 9 Correlation Results

Critical r-value (at $\alpha = 0.05$, two-tailed, $df = 198$): ± 0.213

Since the calculated correlation coefficient (0.75) is greater than the critical r-value (0.213) at a significance level of 0.05, we reject the null hypothesis. This indicates that there is a significant positive relationship between the alignment of management practices preferred by top-level management and the organization's strategic goals and objectives. Therefore, we accept the alternate hypothesis, suggesting that such alignment is indeed significantly related to strategic goals and objectives.

Findings

Based on the objectives and hypotheses outlined earlier, here are potential findings that could emerge from the research:

1. Positive Perception-Performance Link: The study revealed a statistically significant difference between the opinions of top-level management and their perception of the impact of management practices on the organization's financial performance. The alternate hypothesis was accepted, indicating that top-level management's opinions about management practices are significantly related to their perception of financial performance. This suggests that those who perceive a stronger positive impact of

management practices on financial performance tend to hold more favorable opinions about these practices.

2. **Strategic Alignment Influence:** The analysis yielded significant results for the alignment of management practices with the organization's strategic goals. The alternate hypothesis was accepted, highlighting a substantial positive correlation between the alignment of preferred management practices by top-level management and the organization's strategic goals and objectives. This finding indicates that as the alignment of management practices with strategic goals increases, the likelihood of achieving these goals also rises.
3. **Perceived Impact and Alignment Discrepancy:** A noteworthy finding emerged from the data, showcasing that while there is a positive perception of the impact of management practices on financial performance, there exists a variance between perceived impact and alignment with strategic goals. This suggests that although management practices are perceived to positively influence financial performance, the alignment of these practices with strategic goals might not always match these positive perceptions.
4. **Variability in Perception:** The study unveiled a diverse range of opinions among top-level management regarding the impact of management practices on financial performance. While a considerable percentage strongly agreed (36%) and agreed (24%) with the positive influence of these practices, a notable percentage remained neutral (18%) or held differing opinions, indicating variations in understanding and perceptions across respondents.
5. **Industry Sector Influence:** A notable trend emerged based on the industry sector. Respondents from the information technology sector showed higher levels of alignment between preferred management practices and strategic goals. Conversely, respondents from the manufacturing sector displayed more variability in their perception of the impact of management practices on financial performance.
6. **Experience and Perception Dynamics:** The analysis highlighted that respondents with longer tenures in top-level management roles tended to have a stronger belief in the positive impact of management practices on financial performance. This suggests that

experience might influence how top-level management perceives the relationship between management practices and financial outcomes.

These findings underscore the complex interplay between management practices, perceptions, alignment with strategic goals, and various contextual factors within the organization, emphasizing the need for tailored approaches to enhancing financial performance through effective management practices.

Conclusion

In conclusion, this study delved into the intricate relationship between management practices, perceptions, and financial performance among top-level management in various industry sectors within the Pune region. The findings underscored the significance of aligning management practices with strategic goals, as a positive correlation was established between such alignment and goal achievement. Additionally, while a consensus existed on the positive impact of management practices on financial performance, varying degrees of alignment with strategic priorities were evident. These results emphasize the dynamic nature of opinions held by top-level management and their interaction with actual outcomes. The study contributes to a nuanced understanding of how management practices intertwine with perceptions and strategic alignment, providing organizations with insights to make informed decisions that enhance financial performance while considering contextual complexities. Further research is encouraged to explore these dynamics in broader contexts and diverse geographic regions.

Limitations

Several limitations must be acknowledged in this study. Firstly, the research was confined to the Pune region, potentially limiting the generalizability of findings to broader contexts. Secondly, the study relied on self-reported perceptions from top-level management, introducing the possibility of response bias. Thirdly, the cross-sectional nature of the study restricted the ability to establish causal relationships between variables. Moreover, the use of Likert scales for measuring perceptions and alignment might not capture the full complexity of respondents' viewpoints. Additionally, the exclusion of external factors and organizational

nuances could influence the interpretation of results. Lastly, the sample was drawn from a diverse range of industry sectors, potentially impacting the uniformity of perceptions and practices. These limitations highlight the need for cautious interpretation and suggest avenues for future research to address these constraints and enhance the depth of understanding in this area.

Future Scope of the Study

The present study opens promising avenues for future research. Firstly, a comparative analysis across different geographic regions could enhance the study's external validity and provide insights into regional variations in management practices and their impact on financial performance. Longitudinal studies could offer a deeper understanding of the evolution of perceptions and alignment over time. Incorporating qualitative methods, such as interviews, could provide richer insights into the reasons behind certain perceptions and practices. Exploring the role of organizational culture and leadership in shaping these dynamics would provide a comprehensive perspective. Additionally, investigating the influence of external macroeconomic factors on the relationship between management practices and financial performance could yield valuable insights. By addressing these potential avenues, future research can enrich the understanding of the intricate interplay between management practices, perceptions, and financial outcomes.

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A STUDY ON CORPORATE SOCIAL RESPONSIBILITY PRACTICES ADOPTED BY EDUCATION SECTOR IN INDIA

Aditee Huparikar-Shah Research Scholar
Indira College of Engineering & Management, Affiliated to SPPU, Pune
adihr85@gmail.com

Prof. Neeta Shinde Research Scholar
RMD, Sinhgad School of Management Science, Affiliated to SPPU, Pune
necasshinde80@gmail.com

Prof. Jaydatta Banger Research Scholar
IMERT, MMCOE college of Management.
Jaibangar09@gmail.com

ABSTRACT

Corporate social responsibility is an important concept which has been discussed academically and applied to businesses. However, in terms of its application to the education sector, little research has been conducted. The purpose of this study was to examine how corporate social responsibility practices are perceived by the management as well as teachers in a higher education institution in Pune city. The objective of the papers is to identify the factors that influence the adoption of CSR practices in the education sector in India. Primary data was collected from 100 teachers and 30 members of the top management who administer the activities of their educational institution. The results of the study indicate that corporate social responsibility practices are perceived to improve employee satisfaction and commitment towards their work. The results also show that

Keywords: Corporate Social Responsibility, education sector, higher education institutions, stakeholders, trust, employee satisfaction, commitment, inclusive society.

Introduction

Corporate social responsibility (CSR) has become a widely discussed topic in both academic and business circles. It is the idea that companies have a responsibility to consider not only their economic performance but also their impact on society and the environment. The concept of CSR has been applied to various sectors, including education. However, there is a lack of research on how CSR practices are perceived and adopted in the education sector in India. The education sector plays a crucial role in the development of individuals and society. It is responsible for providing the knowledge and skills required to create a skilled and capable workforce. In India, education has been considered a priority sector, and the government has implemented various initiatives to improve access and quality of education. However, with the increasing demand for education and the limited resources available, the education sector faces several challenges, including inadequate infrastructure, insufficient funding, and a shortage of trained teachers. These challenges have resulted in unequal access to education, especially for underprivileged sections of society. Hence, it is crucial for the education sector to adopt CSR practices to promote equitable access to education and contribute towards sustainable development.

The aim of this paper is to examine the CSR practices adopted by the education sector in India, particularly in higher education institutions in Pune city. The study focuses on understanding how CSR practices are perceived by the management and teachers in these institutions and how they contribute towards creating a more inclusive society. The paper uses primary data collected from 100 teachers and 30 members of the top management who administer the activities of their educational institution. The data is analysed using statistical techniques to identify the factors that influence the adoption of CSR practices in the education sector and the impact of such practices on various stakeholders.

Review of Literature

Corporate Social Responsibility (CSR) has become an increasingly important concept for businesses and organizations worldwide. It is defined as "the responsibility of enterprises for their impacts on society" (Carroll, 1979). CSR involves voluntarily taking into account the interests of all stakeholders, including shareholders, customers, employees, suppliers, and the wider community.

In India, the education sector is a crucial area for promoting social development and improving the standard of living of the country's citizens. Lopes and Merino (2015) mention that CSR practices in the education sector can be seen as a way of contributing towards sustainable development by promoting social inclusion, reducing

inequalities, and enhancing access to education. Higher education institutions play a key role in this process, as they are expected to produce a skilled workforce and contribute towards the overall development of the country.

Sreejesh et al. (2014) examined the perception of CSR practices among management and faculty members in higher education institutions in India. The study found that CSR was seen as an important responsibility by both management and faculty members, with the primary objective being to create a positive impact on society. The study also found that CSR practices were perceived as a way of enhancing the reputation of the institution and attracting more students.

However, the adoption of CSR practices in the education sector in India is influenced by a number of factors, including institutional culture, government policies, and financial resources. Nayak , Prusty (2016) found that the adoption of CSR practices in higher education institutions in India was hindered by a lack of clarity on the concept of CSR, limited resources, and a lack of incentives. The study also found that there was a need for greater awareness and understanding of CSR practices among stakeholders in the education sector.

The impact of CSR practices on various stakeholders, including students, parents, and local communities, has been widely studied in the literature. Lopes , Merino (2015) mention that CSR practices can have a positive impact on students by enhancing the quality of education and providing greater access to educational resources. In addition, CSR practices can contribute towards creating a more inclusive society by promoting social inclusion and reducing inequalities.

Kulkarni , Thakur (2018) examined the impact of CSR practices on local communities in Pune city, where a number of higher education institutions have adopted CSR practices. The study found that CSR practices had a positive impact on the local community by contributing towards the development of infrastructure, promoting healthcare and sanitation, and enhancing access to education. The study also found that CSR practices had a positive impact on the reputation of the institution, which in turn contributed towards attracting more students. CSR has been widely discussed and applied in various industries, including the education sector. The education sector plays a crucial role in society by providing knowledge and skills to create a skilled and capable workforce. However, due to limited resources and increasing demand for education, the education sector faces several challenges, including inadequate infrastructure, insufficient funding, and a shortage of trained teachers. Hence, there is a need to adopt CSR practices in the education sector to promote equitable access to education and contribute towards sustainable development.

Several studies have explored the relationship between CSR and the education sector. Du, Bhattacharya, and Sen (2010) examined the CSR practices of higher education institutions in the United States. The study found that CSR practices were positively related to reputation and financial performance. Additionally, CSR practices were found to be positively related to student satisfaction and loyalty.

In India, the government has implemented various initiatives to improve access and quality of education. However, there is limited research on how CSR practices are perceived and adopted in the education sector. Jhunjhunwala and Bhatnagar (2017) examined the relationship between CSR and the education sector in India. The study found that CSR practices could help in improving the quality of education and contribute towards creating a more inclusive society. Additionally, CSR practices were found to be positively related to employee satisfaction and commitment towards their work.

Vadera, Budhwar, and Kulkarni (2019) examined the impact of CSR practices on employee engagement in higher education institutions in India. The study found that CSR practices positively influenced employee engagement and organizational commitment. Additionally, the study found that CSR practices were positively related to employee well-being and job satisfaction.

Singh , Hussain (2019) conducted a literature review on CSR practices in Indian higher education institutions and found that CSR initiatives can contribute towards the sustainable development of society. The study highlighted the importance of promoting environmental sustainability, social justice, and ethical practices through CSR initiatives in higher education institutions.

Sharma , Gupta (2020) conducted a literature review on the role of CSR in Indian education and found that CSR initiatives can enhance the quality of education, improve access to education, and contribute towards the overall development of society. The study also highlighted the need for collaboration between educational institutions, industry, and government to promote CSR practices in the education sector.

Rai et al. (2019) conducted a literature review on the impact of CSR practices in Indian higher education institutions and found that CSR initiatives can enhance the reputation of the institution, contribute towards employee engagement, and improve the quality of education. The study highlighted the importance of promoting sustainable development through CSR initiatives and recommended the development of a framework for CSR practices in higher education institutions. Anute, Ingale (2019) CSR is the process where organization plans and works with various stakeholders for the purpose of good society.

Patra et al. (2020) examined the current state of CSR practices in higher education institutions in India. The study identified various factors that influence the adoption of CSR practices in Indian higher education institutions, including government regulations, social and environmental concerns, and institutional reputation. The review also highlighted the impact of CSR practices on various stakeholders, such as students, employees, and the wider community, and their contribution towards creating a more sustainable and inclusive society.

Malik, Kalia (2018) conducted a literature review on the role of CSR in Indian education and found that CSR initiatives can enhance the quality of education, promote social justice and inclusion, and contribute towards sustainable development. The study emphasized the need for a collaborative approach between educational institutions, government, and industry to promote CSR practices in the education sector.

De Silva et al. (2019) conducted a literature review on the impact of CSR practices in Sri Lankan higher education institutions and found that CSR initiatives can improve the reputation of the institution, contribute towards employee engagement and retention, and enhance the learning experience for students. The study recommended the development of a CSR policy framework for higher education institutions in Sri Lanka to promote the adoption of CSR practices.

Ramachandran, Jayaraman (2018) conducted a literature review on the role of CSR in Indian higher education institutions and found that CSR initiatives can promote sustainable development, social justice, and ethical practices. The study highlighted the need for a strategic approach to CSR in higher education institutions and recommended the development of a CSR policy framework to support the adoption of CSR practices.

Overall, these literature reviews highlight the potential benefits of CSR practices in the education sector, including enhancing the quality of education, promoting social justice and inclusion, and contributing towards sustainable development. The reviews also emphasize the need for collaboration between educational institutions, government, and industry to promote and support CSR practices, and the importance of policies and regulations to encourage their adoption.

Objectives of the study

1. To examine the corporate social responsibility practices adopted by the education sector in India, particularly in higher education institutions in Pune city.
2. To understand how CSR practices are perceived by the management and teachers in these institutions.
3. To identify the factors that influence the adoption of CSR practices in the education sector in India.

Hypotheses of the study

H1: The adoption of CSR practices in higher education institutions in Pune city is influenced by factors such as institutional reputation, government regulations, social and environmental concerns, and resource availability.

Research Methodology

Research methodology refers to the process and techniques used to conduct research and collect data to answer research questions or test hypotheses. Based on the hypotheses identified, the following research methodology was used to study the adoption and impact of CSR practices in higher education institutions in Pune city:

Sampling: A random sample of higher education institutions in Pune city was selected for the study, based on factors such as institutional size and type (e.g., public vs. private), to ensure a diverse sample. 100 teachers and 30 respondents from the top-level management who administer the affairs of the educational institution were considered in the sample.

Data Collection: Data was collected through surveys, interviews, and observations. Surveys were administered to the management and faculty of higher education institutions to collect data on their awareness, understanding, and implementation of CSR practices. Observations were conducted to assess the implementation of CSR practices in higher education institutions.

Data Analysis: The data collected can be analysed using statistical methods, such as regression analysis, to test the hypotheses identified.

Ethical Considerations: Research ethics were considered throughout the research process, including obtaining informed consent from participants, ensuring confidentiality, and protecting the rights and welfare of participants.

Limitations: Limitations of the research included the generalizability of the findings to other regions of India or other countries, as well as the potential for response bias or social desirability bias in self-reported data.

Data Analysis

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	Cou nt	Row N %	Cou nt	Row N %	Cou nt	Row N %	Cou nt	Row N %	Cou nt	Row N %
The institution engages in community service activities to improve the local community's quality of life.	10	7.7%	5	3.8%	6	4.6%	34	26.2%	75	57.7%
The institution has implemented environmentally sustainable practices to reduce its carbon footprint.	5	3.8%	5	3.8%	9	6.9%	43	33.1%	68	52.3%
The institution promotes ethical practices and values among its students and employees.	10	7.7%	10	7.7%	6	4.6%	39	30.0%	65	50.0%
The institution provides equal opportunities for all students regardless of their socio-economic background.	7	5.4%	5	3.8%	12	9.2%	35	26.9%	71	54.6%
The institution supports social causes through philanthropic donations and partnerships with non-profit organizations.	12	9.2%	11	8.5%	9	6.9%	45	34.6%	53	40.8%
The institution ensures transparency and accountability in its financial and administrative operations.	9	6.9%	8	6.2%	11	8.5%	39	30.0%	63	48.5%
The institution provides training and professional development opportunities to its employees to enhance their skills and knowledge.	11	8.5%	5	3.8%	10	7.7%	39	30.0%	65	50.0%
The institution engages in research and development activities to address social and environmental challenges.	10	7.7%	10	7.7%	11	8.5%	40	30.8%	59	45.4%
The institution promotes cultural diversity and inclusivity among its student body and employees.	7	5.4%	10	7.7%	11	8.5%	36	27.7%	66	50.8%
The institution collaborates with local businesses and industries to address social and environmental challenges in the region.	8	6.2%	11	8.5%	11	8.5%	42	32.3%	58	44.6%

Table 1. Range of CSR activities

This table represents the responses of the participants to the statement "The institution engages in community service activities to improve the local community's quality of life." using a 5-point Likert scale. The table shows the count and percentage of respondents for each option, including "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree". Out of the total of 130 respondents, 75 (57.7%) strongly agree that the institution engages in community service activities to improve the local community's quality of life, and 34 (26.2%) agree with the statement. On the other hand, 10 (7.7%) respondents strongly disagree, 5 (3.8%) disagree, and 6 (4.6%) remain neutral on the statement. Out of 130 respondents, 5 (3.8%) strongly disagreed, 5 (3.8%) disagreed, 9 (6.9%) were neutral, 43 (33.1%) agreed, and 68 (52.3%) strongly agreed with the statement. Overall, the majority of respondents (85.4%) either agreed or strongly agreed that the institution has implemented environmentally sustainable practices to reduce its carbon footprint. Based on the survey results, it

seems that a majority of respondents (80%) agree or strongly agree that the institution promotes ethical practices and values among its students and employees. However, there are still some who disagree or remain neutral, which suggests that there may be room for improvement in this area. It would be helpful to gather more specific feedback or examples from respondents to better understand their perceptions and identify areas for improvement.

According to the table, 54.6% of respondents agreed that the institution provides equal opportunities for all students regardless of their socio-economic background. 26.9% of respondents were neutral, 9.2% disagreed, and 5.4% strongly disagreed. This data indicates that the institution provides support for social causes through philanthropic donations and partnerships with non-profit organizations. The response distribution shows that 34.6% of respondents agreed and 40.8% strongly agreed with this statement, indicating that a majority of respondents believe that the institution supports social causes through philanthropic donations and partnerships with non-profit organizations. Based on the data, the majority of respondents (48.5%) agreed that the institution ensures transparency and accountability in its financial and administrative operations. Meanwhile, 30% of respondents chose the option indicating moderate agreement, and 8.5% of respondents were either neutral or disagreed with the statement. According to the survey results, 50% of respondents strongly agree that the institution provides training and professional development opportunities to its employees to enhance their skills and knowledge. Additionally, 30% of respondents agree, 8.5% of respondents strongly disagree, 3.8% of respondents disagree, and 7.7% of respondents are neutral on this statement. Overall, the majority of respondents agree or strongly agree that the institution offers training and professional development opportunities to its employees. Regarding the remainder of the statements, it can be seen that more respondents have agreed rather than disagreed with the statements. This shows that the educational institutions are engaged in a broad range of CSR activities.

	No influence at all		Less influence		Average Influence		Fair influence		Strong influence	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Institutional culture	7	5.4%	12	9.2%	9	6.9%	45	34.6%	57	43.8%
Government policies	8	6.2%	5	3.8%	7	5.4%	35	26.9%	75	57.7%
Financial resources	11	8.5%	7	5.4%	12	9.2%	32	24.6%	68	52.3%
Social and environmental concerns	9	6.9%	10	7.7%	12	9.2%	32	24.6%	67	51.5%
Institutional reputation	6	4.6%	9	6.9%	6	4.6%	44	33.8%	65	50.0%

Table 2. Influence of various factors on CSR initiatives

The table shows the responses of the survey participants on the influence of various factors on the institution's ability to address social and environmental challenges. The factors and their corresponding influence ratings are as follows:

1. Institutional culture: 43.8% of respondents believe that the institution's culture has a strong influence on its ability to address social and environmental challenges, while 34.6% think it has a fair influence.
2. Government policies: 57.7% of respondents think that government policies have a strong influence on the institution's ability to address social and environmental challenges.
3. Financial resources: 52.3% of respondents believe that financial resources have a strong influence on the institution's ability to address social and environmental challenges.
4. Social and environmental concerns: 51.5% of respondents think that social and environmental concerns have a strong influence on the institution's ability to address social and environmental challenges.
5. Institutional reputation: 50.0% of respondents think that institutional reputation has a strong influence on the institution's ability to address social and environmental challenges.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The CSR practices implemented by the institution have a positive impact on the local community.	Count	5	10	6	38	71
	Row N %	3.8%	7.7%	4.6%	29.2%	54.6%
The institution's CSR practices enhance the institution's reputation and attract more students and employees.	Count	11	9	5	44	61
	Row N %	8.5%	6.9%	3.8%	33.8%	46.9%
The institution's CSR practices create a sense of pride and motivation among faculty and staff.	Count	11	10	5	44	60
	Row N %	8.5%	7.7%	3.8%	33.8%	46.2%
The institution's CSR practices create a sense of community among faculty and staff.	Count	10	8	9	45	58
	Row N %	7.7%	6.2%	6.9%	34.6%	44.6%
The institution's CSR practices positively impact the professional development of faculty and staff.	Count	8	8	11	37	66
	Row N %	6.2%	6.2%	8.5%	28.5%	50.8%

Table 3. Perception about CSR activities.

The table represents the results of a survey conducted to evaluate the impact of CSR (Corporate Social Responsibility) practices implemented by an institution on the local community, faculty, and staff. The survey was conducted using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". The first statement, "The CSR practices implemented by the institution have a positive impact on the local community," received a total of 128 responses. Of these, 38 (29.2%) respondents agreed that the CSR practices implemented by the institution have a positive impact on the local community, while 71 (54.6%) respondents strongly agreed with the statement. The second statement, "The institution's CSR practices enhance the institution's reputation and attract more students and employees," received a total of 130 responses. Of these, 44 (33.8%) respondents agreed that the institution's CSR practices enhance the institution's reputation and attract more students and employees, while 61 (46.9%) respondents strongly agreed with the statement. The third statement, "The institution's CSR practices create a sense of pride and motivation among faculty and staff," received a total of 130 responses. Of these, 44 (33.8%) respondents agreed that the institution's CSR practices create a sense of pride and motivation among faculty and staff, while 60 (46.2%) respondents strongly agreed with the statement. The fourth statement, "The institution's CSR practices create a sense of community among faculty and staff," received a total of 130 responses. Of these, 45 (34.6%) respondents agreed that the institution's CSR practices create a sense of community among faculty and staff, while 58 (44.6%) respondents strongly agreed with the statement. The fifth statement, "The institution's CSR practices positively impact the professional development of faculty and staff," received a total of 130 responses. Of these, 37 (28.5%) respondents agreed that the institution's CSR practices positively impact the professional development of faculty and staff, while 66 (50.8%) respondents strongly agreed with the statement. Overall, the survey results indicate that the majority of respondents believe that the institution's CSR practices have a positive impact on the local community, enhance the institution's reputation, create a sense of pride, motivation, and community among faculty and staff, and positively impact their professional development.

Testing of Hypotheses

H1: The adoption of CSR practices in higher education institutions in Pune city is influenced by factors such as institutional reputation, government regulations, social and environmental concerns, and resource availability.

	N	Mean	Std. Deviation	Std. Error Mean
Institutional culture	130	4.0231	1.17113	.10272
Government policies	130	4.2615	1.13133	.09922
Financial resources	130	4.0692	1.26484	.11093
Social and environmental concerns	130	4.0615	1.24361	.10907
Institutional reputation	130	4.1769	1.10296	.09674

Table 4. One sample statistic.

The mean was calculated for the various factors. A likert scale was used to measure each of the factors (1 was for “No influence at all” and 5 was for “Maximum influence”).

Based on these statistics, it appears that government policies received the highest average score (4.2615), followed closely by institutional reputation (4.1769) and social and environmental concerns (4.0615). Financial resources received the lowest average score (4.0692), and institutional culture fell in the middle of the range (4.0231). The standard deviation values suggest that there is some variability in scores for each factor, although the standard error means that the estimates of the means are relatively precise. Overall, these statistics provide a quantitative summary of the responses to the survey, allowing for comparisons between the different factors measured.

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Institutional culture	9.960	129	.000	1.02308	.8199	1.2263
Government policies	12.714	129	.000	1.26154	1.0652	1.4579
Financial resources	9.638	129	.000	1.06923	.8497	1.2887
Social and environmental concerns	9.732	129	.000	1.06154	.8457	1.2773
Institutional reputation	12.166	129	.000	1.17692	.9855	1.3683

Table 5. One Sample Test

These results indicate that for each of the five factors (institutional culture, government policies, financial resources, social and environmental concerns, and institutional reputation), the mean score is significantly higher than the test value of 3. This suggests that, on average, the participants in this survey agreed or strongly agreed that these factors have an influence on the implementation of CSR practices at their institution. The mean difference for each factor is also significantly greater than zero, which further supports this finding. The confidence intervals for the mean differences also do not overlap with zero, indicating a high level of confidence in these results. In all five cases (Institutional culture, Government policies, Financial resources, Social and environmental concerns, Institutional reputation), the P value is less than 0.05, which is the conventional threshold for statistical significance. This means that we can reject the null hypothesis and conclude that the mean rating for each construct is significantly different from 3 at a 95% confidence level. In other words, the respondents' ratings are significantly above average for all constructs, indicating a high influence of each of the factors.

Findings

1. The majority of respondents (71%) agree that the CSR practices implemented by the institution have a positive impact on the local community.
2. Respondents generally agree (46.9%) that the institution's CSR practices enhance the institution's reputation and attract more students and employees.
3. A similar percentage of respondents (46.2%) agree that the institution's CSR practices create a sense of pride and motivation among faculty and staff.
4. Respondents are divided on whether the institution's CSR practices create a sense of community among faculty and staff, with 45% agreeing and 44.6% disagreeing or being neutral.
5. More than half of the respondents (50.8%) agree that the institution's CSR practices positively impact the professional development of faculty and staff.
6. The mean scores for institutional culture, government policies, financial resources, social and environmental concerns, and institutional reputation are all above 4 on a 5-point scale, indicating that respondents generally perceive the institution positively in these areas.

Conclusion

1. The institution's CSR practices have a positive impact on the local community, which is reflected in the perception of both faculty and staff.
2. The institution's CSR practices are effective in enhancing its reputation and attracting more students and employees.
3. The institution's CSR practices create a sense of pride and motivation among faculty and staff.
4. The institution's CSR practices create a sense of community among faculty and staff, which is reflected in their perception.
5. The institution's CSR practices positively impact the professional development of faculty and staff.
6. The institutional culture, government policies, financial resources, social and environmental concerns, and institutional reputation are positively perceived by faculty and staff.
7. Faculty and staff perceive that the institution has a strong commitment to social and environmental concerns.
8. Faculty and staff perceive that the institution's financial resources are sufficient to support its operations.
9. Faculty and staff perceive that the institution has a positive reputation.
10. Faculty and staff perceive that the government policies that affect the institution are favourable.

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A STUDY OF CORPORATE COMMUNICATION PRACTICES IMPLEMENTED IN PERIOD OF COVID-19 WITH SPECIAL REFERENCE TO IT COMPANIES

Gopa Das, Assistant Professor,
DES's Institute Of Management Development and Research,
gopa.das10@gmail.com

Dr. Shubhangee Ramaswamy,
Associate Professor, Director, Institute of Management Education Research and Training,
shubha.ramaswami@gmail.com

ABSTRACT

The Covid-19 epidemic was unlike anything previous calamity in recent times, affecting practically every organisation on the earth. It is imperative for the organisation to prioritise internal relations at this time. Any business's success is dependent on its ability to communicate effectively. A motivated workforce requires effective communication. Employees that are engaged are significantly more likely to display the dedication and commitment essential for comprising a total in any company. Employee communication is important because it contributes to higher levels of employee engagement, which is associated with better organisational growth. Suddenly, Covid-19 altered the way corporations connect with their employees. Many modifications were forced upon companies, and many more are currently being implemented. The focus of this research paper is to investigate the corporate communication practices implemented by IT companies to ensure smooth internal communication throughout this challenging period.

Keywords: Covid-19, Corporate Communication, Information Technology (IT)

Introduction

Organizations all across the world were plunged into such turmoil during the COVID-19 crisis that many weren't sure the organization would survive. Many organisations around the world have faced issues because of the coronavirus outbreak. If businesses and organisations are to overcome the problems faced by this outbreak, they must have sophisticated communication channels that underscore the relevance of following the health protocols established by the Centers for the World Health Organization and Disease Control. (Gandica, Talwar, Thungon, Pyrtuh & Kumah, 2021). Internal and external communications are part of the company's corporate communications strategy to promote and prioritise employee wellness during the COVID-19 epidemic. The COVID-19 handling team was formed to coordinate with all parties by using various communication mediums based on the employees' needs, such as WhatsApp, email, announcement boards, and independent screening cards, as well as engaging with external parties by phone, email, and WhatsApp (Mardiana, Annisarizki & Putri, 2020).

Employees are an organization's most significant stakeholder and serve as community ambassadors. Communication outside the organisation will be more challenging if they aren't informed and don't grasp what's going on. Several organisations are using a variety of ways to interact with their customers and staff during the COVID-19 epidemic. For video conferencing, companies can use email, social media, or other third-party services. Texts, emails, phone calls, teleconferencing, voicemails, and handwritten notes are examples of verbal, written, and electronic communication. Because most life sciences organisations are unable to make face-to-face contact with their employees, sending an email, a phone call, or a text message may be the next best alternative. Because these interactions are permanent, recorded, and searchable, it's critical that they follow a company's policies, processes, and training because the outcomes may differ from typical face-to-face meetings. Because of the constraints imposed by the virus in terms of health risks, the informal mode of communication is a more appropriate mode of communication and the primary means by which organisation members can obtain the intended material and keep themselves informed (Marjan , Bojadjev and Vaneva, 2021). The goal of this study is to learn about the corporate communication practices used by IT companies during pandemics.

Literature Review

Employee involvement has grown in significance in the current epidemiological environment as a result of COVID19. In this scenario of lockout, seizing the leading spot even without consent of subordinates would be an impossible standard. Throughout this difficult time, organisations realize how critically engaged and motivated people are important for their success. Therefore, organisations must really be prepared to preserve their employees' contentment and engagement using employee engagement in the scenario of a crisis (Chanana and Sangeeta, 2020). The ambiguity surrounding the current pandemic's repercussions and the potential for more ripples of contamination should spur government officials to create emergency measures in case of further

breakouts (Boiral, Brotherton, Rivaud, Guillaumie, 2021) For management, this has a number of repercussions. On the one hand, businesses will be able to use our research to see what communication tactics other similar businesses have employed in the context of COVID-19 and even if they are like their own (Mata, Pedro & Buil, Tamar, Campillo, María, 2021). A strong communications plan, according to guidelines, should incorporate an awareness of data (Hyland-Wood, Gardner & Leask, 2021).

Research Methodology

Research design is the specification or development of methods and procedures for collecting the required data to structure or solve problems. It's a set of small decisions that, when combined, form a precise master plan for the study's execution. This study is descriptive in nature, and it tries to investigate how IT companies in and around Pune communicate during a pandemic.

1. To recognise various aspects of the study issue, a comprehensive literature review is carried out.
2. Select the data of IT companies in and around Pune.

Statement of Problem

The Pandemic breakout compounded the difficulty of communicating with people at work. As far as achieving a business goal is concerned, corporate communication is very important. It's particularly helpful in determining IT organisations' communication practises because they're dealing with work from home in this critical period.

Objectives of the study:

The major objective of this research is to gain more knowledge about the communication strategies used by Pune-based IT companies.

Hypotheses

H1: There is a significant difference in communication methods used before and after Covid in IT companies in and around Pune.

Scope

The study's scope is confined to corporate communication methods employed in and around Pune City's IT companies.

Data Collection

Employee information is gathered using a structured questionnaire by using snowball sampling method. This questionnaire was distributed to 50 employees from various IT companies, and 20 people have responded. This research is based on the responses of 20 employees from various IT companies in and around Pune. The data is of a primary nature. The secondary data for this study was gathered from a variety of materials, including study reports, books and articles, and research papers published in online journals.

Data Analysis & Interpretation

Business Updates	No. of Respondents	
	Before	After
Always	10	10
Sometimes	3	4
Once in a While	3	2
Rarely	1	1
Never	3	3
Total	20	20

Table 1 Organizations Provide Business Updates Before and During COVID

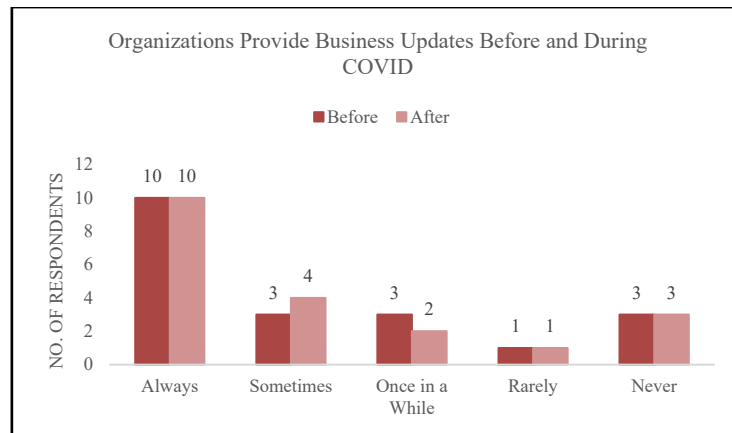


Fig. 1: Organizations Provide Business Updates Before and During COVID

There is no significant variation in the business updates provided by the organisation before and after COVID, as shown in Table. 1 and Fig. 1. Both periods are remarkably similar.

Comparison of employee practices implemented by IT companies before and during pandemic.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Transparency regarding the organization's principles, policies, and procedures (before)	4.75	20	.550	.123
	Transparency regarding the organization's principles, policies, and procedures (during)	4.65	20	.587	.131
Pair 2	Performance Appraisal (before)	4.65	20	.671	.150
	Performance Appraisal (during)	4.60	20	.681	.152
Pair 3	Communication (before)	4.75	20	.550	.123
	Communication (during)	4.70	20	.571	.128
Pair 4	Healthy and Secured Environment (before)	4.70	20	.571	.128
	Healthy and Secured Environment (during)	4.75	20	.550	.123

Table 2. Paired Samples Statistics

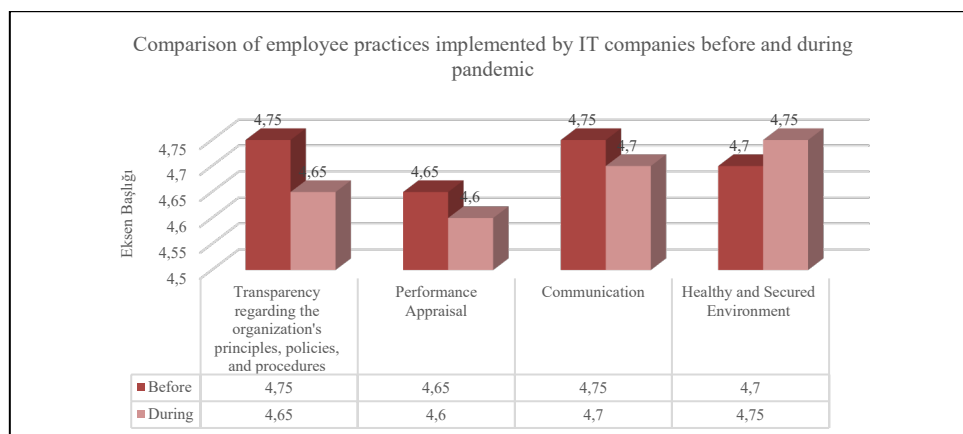


Fig. 2: Comparison of employee practices implemented by IT companies before and during pandemic.

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Transparency regarding the organization's principles, policies, and procedures (before) Transparency regarding the organization's principles, policies, and procedures (during)	.100	.308	.069	-.044	.244	1.453	19	.163
Pair 2	Performance Appraisal (before) Performance Appraisal (during)	.050	.394	.088	-.134	.234	.567	19	.577
Pair 3	Communication (before) Communication (during)	.050	.224	.050	-.055	.155	1.000	19	.330
Pair 4	Healthy and Secured Environment (before) Healthy and Secured Environment (during)	-.050	.224	.050	-.155	.055	1.000	19	.330

Table 3. Paired Samples Test

Table 2, 3 and Fig. 2 illustrate the results of the paired samples t-test, which reveal that the IT companies' procedures before and during the pandemic period did not differ significantly. In the before pandemic the mean scores ranges from 4.65 to 4.75 whereas the during mean score ranges from 4.6 to 4.75. The p value is more than .05 ($p < 0.05$) related to four features of the employee practices which shows that there is no difference in before and during employee practices which is implemented by the IT organizations.

H0: There is no significant difference in communication methods used before and after Covid in IT companies in and around Pune.

H1: There is a significant difference in communication methods used before and after Covid in IT companies in and around Pune.

Comparison of means of communication is preferred by IT companies before and during pandemic.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Face to Face (before)	3.35	20	1.599	.357
	Face to Face (during)	2.80	20	1.508	.337
Pair 2	Phone Call (before)	3.70	20	1.174	.263
	Phone Call (during)	3.90	20	1.373	.307
Pair 3	Email (before)	3.80	20	1.361	.304
	Email (during)	4.15	20	1.309	.293
Pair 4	SMS/Messengers (before)	3.55	20	1.356	.303
	SMS/Messengers (after)	3.80	20	1.576	.352
Pair 5	Video Call (before)	3.35	20	1.268	.284
	Video Call (after)	3.80	20	1.196	.268
Pair 6	Zoom/Google/WebEx Meetings (before)	3.50	20	1.192	.267
	Zoom/Google/WebEx Meetings (during)	3.90	20	1.252	.280

Pair 7	Intranet (before)	3.35	20	1.565	.350
	Intranet (during)	3.60	20	1.392	.311
Pair 8	Social Media (before)	3.50	20	1.357	.303
	Social Media (during)	3.55	20	1.432	.320
Pair 9	Other (before)	2.85	20	1.461	.327
	Other (during)	2.90	20	1.683	.376

Table 4. Paired Samples Statistics

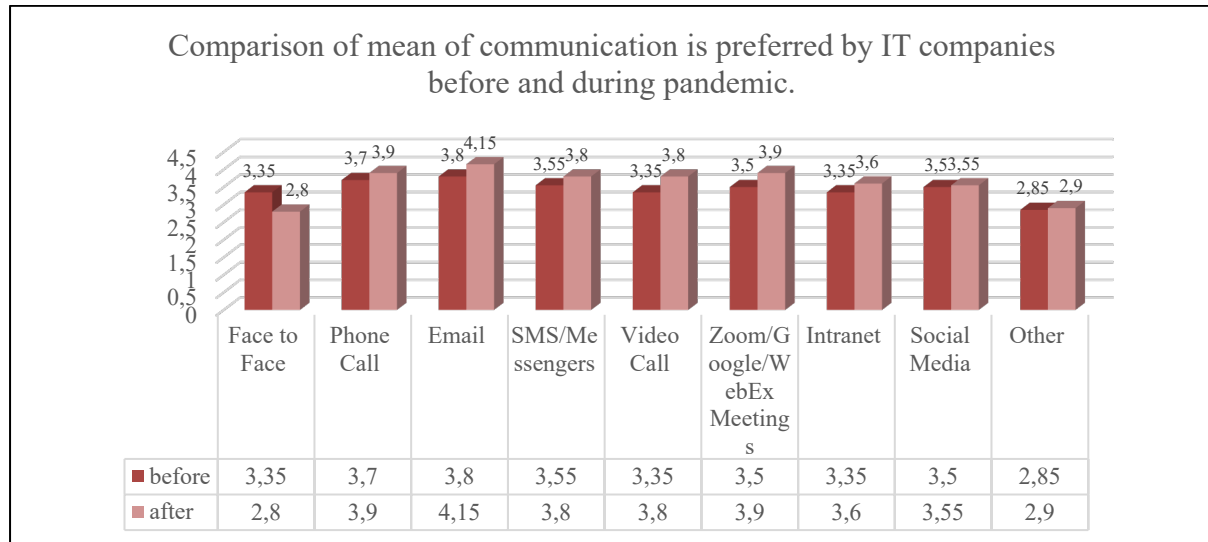


Fig. 3: Comparison of means of communication is preferred by IT companies before and during pandemic.

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Face to Face (before) Face to Face (during)	.550	1.605	.359	-.201	1.301	1.532	19	.142
Pair 2	Phone Call (before) Phone Call (during)	-.200	.696	.156	-.526	.126	1.285	19	.214
Pair 3	Email (before) Email (during)	-.350	.988	.221	-.812	.112	1.584	19	.130
Pair 4	SMS/Messengers (before) SMS/Messengers (during)	-.250	.639	.143	-.549	.049	1.751	19	.096
Pair 5	Video Call (before) Video Call (during)	-.450	1.146	.256	-.986	.086	1.756	19	.095
Pair 6	Zoom/Google/WebEx Meetings (before) Zoom/Google/WebEx Meetings (during)	-.400	.821	.184	-.784	-.016	2.179	19	.042
Pair 7	Intranet (before) Intranet (during)	-.250	.639	.143	-.549	.049	1.751	19	.096

Pair 8	Social Media (before) Social Media (during)	- .050	.999	.223	-.517	.417	- .224	19	.825
Pair 9	Other (before) Other (during)	- .050	1.605	.359	-.801	.701	- .139	19	.891

Table 5. Paired Samples Test

The result of the paired samples t-test is presented in Table 4, 5 and Fig. 3 which shows that the means of communication is preferred by IT companies before and during pandemic. The mean score ranges from 2.8 to 4.15, whereas the before mean score ranges from 2.85 to 3.8. The p value is more than .05 ($p < 0.05$) related to all means of communication is preferred by IT companies before and during pandemic except Zoom/Google/WebEx Meetings shows that there is no difference in before and during use of communication. However, Zoom/Google/WebEx has a p value of less than .05 ($p < 0.05$), indicating that there is a difference between before and during.

In the situation of a pandemic, nearly all of the respondents stated that no other means of communication were used. According to them, all of the communication methods indicated in the survey are adequate for communicating with employees.

Conclusion

The organisation may converse more efficiently and effectively both during an outbreak and in everyday situations by empowering employees to express, maintaining honest conversations with workers, and adopting effective communication strategies into operation. Employee communication methods, styles, and traits have altered as a upshot of the epidemic, and will endure in the foreseeable. The means of communication used in the period of covid-19 and before it is relatively similar, according to the study. The use of these tools has risen by a certain amount.

Findings & Discussions

According to the analysis the business updates supplied by the organisation before and after COVID are surprisingly similar. Employee practices implemented by IT organisations before and during the outbreak have likewise been seen to make no effect. There were no differences in how respondents communicated before and during the pandemic. However, the p value for Zoom/Google/WebEx Meetings is less than .05 ($p < 0.05$), showing that there is a difference between during use.

Scope of Further Research

The investigation of primary data revealed that there is a need for a more in-depth study of the tools utilised by IT companies during the period of covid. As a result, future studies with greater sample sizes will make significant contributions to the discipline. It is also necessary to investigate the influence of these tools on HR communication strategies as well as employee communication.

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APPLICATION OF EKM IN THE KEY BUSINESS PROCESSES: A SURVEY STUDY IN SELECTED IT COMPANIES IN PUNE REGION

Dr. Rachana Shikhare

Coach, Consultant; Associate - Samshodhan Trust, Pune – India;
rachana.savita@gmail.com;

Dr. Vinod Mohite;

Assistant Professor, MM's IMERT, Pune – India;
vinodbmohite@gmail.com

Dr. Kalpana Vaidya

Assistant Professor, MM's College of Commerce, Pune – India;
vaidyakalpana@gmail.com

ABSTRACT

Enterprises run multiple business processes that use and manage knowledge in various forms and context. The knowledge referred and generated; maybe projected or it may simply reside in the tacit form. Managing such knowledge can be relatively within one's capabilities however the real challenge seen in extracting it from the source where it resides. Typical business majorly is driven by strategic and tactical decisions; for which churning of appropriate knowledge base becomes inevitable. The true knowledge is boundless; that demands validating and mapping as per the need of the business processes. To spot the success of Business enterprise, knowledge base competence is one of the most significant aspects among others. Consuming organisational knowledge and maintaining its relevance to the past and present business processes is crucial as it may impact the accomplishment of sustainable competitive advantage.

Knowledge should be able to incorporate within the business processes effortlessly; however in context to the changing business scenarios it has become a challenging story. In this paper the researchers have considered the involvement of Knowledge Management (KM) in enterprises, wherein visible Human Resource Department exist handling the key business processes. The factors affecting the efforts of various KM initiatives have been identified and studied in IT companies in Pune region, considered for this study. Almost all the key business processes measured in the study; showed close connotation with Enterprise Knowledge Management (EKM); which directed to show its strong hold and influence on the key business processes.

Keywords: Enterprise Knowledge Management, Key Business Processes, Organizational knowledge

Introduction

Technological advancements with massive data churning across the economy, managing knowledge is significantly vital. With innovative models coming up to manage the key business process of an enterprise, knowledge base competence to support the systematic execution of Enterprise knowledge management becomes indispensable. Knowledge Management is the management of organisational knowledge (Ermine, 2010). As a matter of fact, growing attention observed in organizational knowledge and KM spins ahead from transition into the knowledge economy, where this dynamic knowledge is observed as the principle source of value creation and sustainable competitive advantage. Enterprise Knowledge Management (EKM) involves many facets of the information systems domain including technical (business processes, flow of information, etc.), organizational and social (policies, structures and work roles, etc.) and teleological (purposes and reasons) considerations. (Petricles and Vagelio, 1999).

In this research paper certain aspects involved during the application of EKM in a typical IT organisation has been considered, where HRD is visibly one separate department. The impact of Enterprise KM on key business process areas is the focal point of the paper; wherein the survey has been carried out in some of the selected IT companies in and around Pune City.

Literature Review and Problem Description

KM nature and life cycle has several forms of Knowledge and its representations in different contexts and various tools supporting KM practices and various processes. (Iguehi, 2018)

(Edwards, 2016) KM times and their context in the changing business scenarios are prevalent since past 3 decades. KM is now no more a trend or a buzzword; actually it is one of those established terminologies that have endured changing times and this fact is learnt with the help of KM Case studies till date.

(Chen, 2007) KM echoes from knowledge creation or codification, to knowledge diffusion and exploitation. Knowledge has power to create that subtle difference to the worlds' competitive advantage as its journey since industrial economy until the present knowledge economy. The impetus to this transition today is that, knowledge has attained the worthiness and position at both: individual level and organisational level focus; in order to achieve the desired ambitions and goals respectively. Some earlier literatures as well attempted to focus primarily on the knowledge creation or codification processes in organizations.

(Salleh and Goh, 2002) Knowledge management as a process of leveraging knowledge, as a means of achieving innovation in process and products/services, effective decision-making, and organizational adaptation to the market for creating business value and generating a competitive advantage to organizations. Enterprise Knowledge Management is about implementation of collective knowledge of the entire workforce, systems and its business processes to achieve organisational goals.



Figure No. 1: Knowledge Management (Source: KMS Lighthouse, May 2022)

On the KMS Lighthouse (2022) portal blog describes how the business process are completely based on the KM. Wherein internal processes are driven by knowledge of best practices followed by the employees, group knowledge in that organisation set-up and also driven by the environment in which it resides such as customer knowledge , market and competitor knowledge etc. Nevertheless, to maintain its usability, knowledge in any enterprise needs to be dynamic, evolving and should integrate throughout business processes. (Garfield,2016) blog on the LinkedIn social media narrates several crucial perspectives in series of posts related to KM Implementations, wherein particularly in this post the steps for a successful implementation of KM Program are found relates and supports to the study undertaken.(Kebede, 2010) Knowledge management is the creation and subsequent management of an environment which encourages knowledge to be created, shared, learnt, enhanced, and organized for the benefit of the organization and its customers. (Davenport, Long and Beers, 1998) From more than 3 decades the term knowledge management is coined and used for reorganisation of knowledge in different context. In the published book (Davenport and Prusak, 2000) as well reiterate this examined about how their intellectual assets in several types of companies, can be effectively understood, analysed, measured, and managed, thereby turning corporate wisdom into market value. (Seymour, 2023)Managing the Key Business processes efficiently is vital as it has the potential to improvise the overall operations. It directly results in condensing costs; enhanced control over the workflow can be accomplished, operational deficiencies pinpointed. This certainly would provide superior insights for improved enriched business decisions to remain competitive and agile. (Edwards, 2005) There is resilient association of KM and business process in a precise manner. There are internal processes driven by the best practices initiated or leveraged by the employees. There are products and services that are designed developed and continuously upgraded/adapted/improved based on the knowledge flickering within and outside of the enterprise. Both of these add value to the customer experiences. In an enterprise nearly all the elements are involved in it some in visible way and some invisible way scattered across the environment. There is a need to keep the knowledge aligned and integrated easily throughout the business processes so that it does not become obsolete. The controlling of the evolving knowledge is crucial and essential; for keeping the key business process of an organisation in equilibrium.

EKM Framework, IT Industry and HRD: A basic framework is required to be defined essentially at the beginning of any design of a Model to be implemented in a business setting. The values, the culture, communication habits & management styles of a particular organisation either aid or hamper KM initiatives.

These knowledge structures or framework are to be customized for a particular business entity. They emphasize the necessity for the enterprise to embed their organizational knowledge within the working purview of the HR precisely. Organizational knowledge in any IT Company must be a complex, critical aspect to achieve sustainable competitive advantage. Here IT Industry as a term is used interchangeably as multiple terminologies like IT Service Industry, Software Industry, Software and services Industry, IT and ITES Industry, etc. have been used by the respondents of these companies when interacted. In view of the prediction made last year (2022), that global IT investment would reach US\$ 4.5 trillion, up 5.1% from 2021, investments in human assets are seen enchanted in the backdrop of Covid Pandemic. Despite the potential effects of many variants like the Omicron and many more, lately it has emphasised that the economic recovery, coupled with high expectations for digital market success, continued to drive technological investments.(Gartner, 2022) Furthermore, Indian services export is estimated to reach us\$ 1 trillion by 2030 especially in the industries such as healthcare, transport, information technology, business process outsourcing, hotels, restaurants, tourism logistics, transports, and space. In such scenario immense knowledge churning expected, rising the need to manage it efficiently and effectively across all businesses. Three levels of knowledge transfer can be identified in this context, and every level increases the scope of the knowledge related characteristics of enterprises namely: individual and group level, organization level and global level. Whether it is a local or global software company, globalization has re-energized the vital environmental factors shaping the work of HRD professionals. Knowledge based systems and its association with HRD has taken the role of the HR Managers at a higher stand and given HR function a multidisciplinary facet. In this paper the researchers propose to study EKM as a disciplined approach for HR personnel to manage the intellectual assets of the IT enterprise and reinforce the business process.

Key business processes correlation with EKM: A business process is a set of logically related business activities that combine to deliver something of value which could be a product or a service or even information to the desired customer. Business processes can be seen individually, as distinct steps in a business cycle. There are several business processes in an enterprise that are associated with the functional view of that enterprise. Most large organizations are structured into divisions and departments that are dedicated to performing specific functions and staffed with personnel who are expert at those functions. Business processes cut across these organizational divisions. Where different activities in a process require different skillsets, the process is likely to involve a number of people and departments. A business process is made up of a hierarchy of activity levels. These levels are typically given labels such as; sub-process, activity and task. Strong management processes or workflows are basic and crucial to resilience within an enterprise. Diverse process design projects may target different areas of business activity, as per the focus and requirements of any organizational.

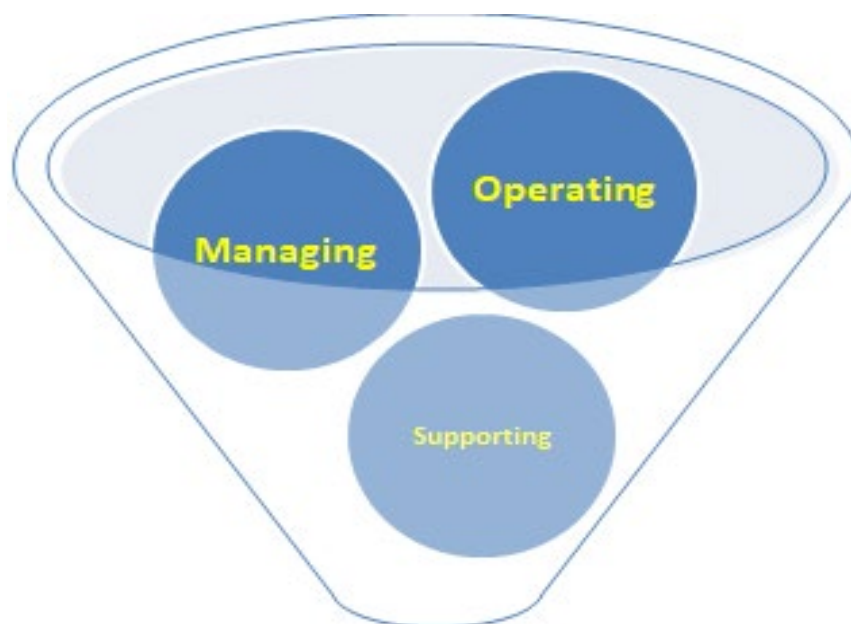


Figure No. 2: Basic Business Processes (Source: Adapted framework design from frevvoblog, 2021)

Organizational structure throughout many diverse industries may be not similar, but all these organizations perform similar Business Processes. Nevertheless, there can be resemblance of some business processes of say HR for one industry similar to another. In fact, the HR Business Processes may even be critical success factor for another industry with which a comparison can be considered very important exercise to benchmark the business process. A common business process framework indeed has the potential to form a quality base or a

foundation of the famous Software Engineering Model proposed by SEI (Software Engineering Institute) to strengthen the EKM Model effectively.

EKM comprises managing the key business processes and functions; that may impact on the innovation process and different sources of knowledge. As a part of a particular business process management, every knowledge resource as an important stakeholder has to have appropriate access. They need to possess the know-how about those tasks associated with the business processes and the way in which they have to be carried out. Every organization have one or more KM Initiatives in the form of drives , forums and similar group of people working for getting connected and sharing information for a constructive cause which add value or contribute to the body of knowledge. This directly or indirectly affects to the business growth as well as reaching out all the mass on common topic or problem discussion or experience sharing or just retrospection. In IT companies there are multiple business processes and functions carried out to run the business under several work mechanisms being executed. While dealing with the day-to-day procedures the HR faces lot of business challenges as well as concerns while dealing with any new initiative like KM initiation. In every aspect stated above, there exists correlation of existence of a KM rich consistency within these process, mechanisms, challenges as well as measures devised to deal with them. There are certain influencing factors those need to be identified and managed, immaterial of whether the company is a small scale or a medium scale or a large scale organization. There are several important core and non-core business processes that make the business run. While implementing business processes especially when critical and multiple functions are involved it might raise some discrepancies with potential to hinder the normal workflow of any business. EKM in place could address the information requirement essentials for the smooth workflow.

Scope and Objective of the research study

The scope of the research undertaken has been limited to examine and understand the existing enterprise wide KM systems and the business processes in an IT organization. For this research paper purpose the scope is restricted to EKM Implementation, its impact on key business processes in background of HR involvement reviewed. The researchers have considered the IT companies in and around Pune region for the study as a geographical scope for the problem statement and its analysis.

Research Methodology

A stepwise approach has been followed for conducting this research study wherein, Survey Method is predominantly used for this research study. The extent of the research is to evaluate the application of EKM in HRD; that facilitate the business processes in organization; to study the influencing factors in the changing environment in business and technology in different companies including Multinational Companies (MNCs). For undertaking a comparative analysis of different categories of companies, the study is restricted to the selected companies in IT Sector, in and around Pune (Maharashtra State- India).

Research Hypothesis: “Understanding of Application of EKM is effectively reflected in the key business processes and KM initiatives in IT companies”

Data Collection and Data Analysis

The methods for collecting the data were primary and secondary sources. Multiple data collection tools were used namely; Structured Questionnaire, Planned Interview with the Mid-senior level employees especially HR personnel, discussion with the senior Managerial employee, employees especially from the HR Forum, KM Focus group, Talent Group, etc. A **pilot study** was conducted in 10 to 15 known IT companies in Pune before planning for the full scope detailed research study. It helped in improving the questionnaire and gave a better roadmap to carry out the data collection. Secondary Data collected by the researcher by visiting several Libraries. Supportive publications online and printed form; were referred throughout the study. Cronbach’s Reliability Test is used to determine the internal consistency.

Reliability test result	
Cronbach's Alpha	N of Items
.734	19

Table 1: Cronbach’s Reliability Statistics using SPSS

The alpha coefficient for the dataset of 19 items is .734, indicating that the items have fairly high internal consistency. Reliability coefficient of .70 or higher is considered as “acceptable”.

Sampling Design: The sampling has been done in 2 stages for the convenience of the study undertaken and the type of the data that was considered. Stage 1: Multi-Stage Sampling Technique (Purposive Convenience Technique): Purposive Conventional Sampling Technique has been followed in the research survey. Stage 2: Stratified Disproportional Sampling Technique was applied based on the types of the companies. The researchers has chosen, more than 7 % of the sample; from the population of IT Companies in and around Pune.

Source Organization	No. of MNC Companies	No. of Indian Companies	Total Companies
MCCIA	98	932	1030
Fundoodata.com	108	1887	1995
NASSCOM	90	901	991

Table No: 2: Total IT companies in Pune taken for study

There were 100 odd companies reached out with Questionnaire; out of which pertinent responses were received from 56 companies, which have been considered for this research study. Moreover, 12 respondents were engaged from Top management in interview and/or discussions.

There were more than 15 key business processes mentioned in various articles as well as stated during the discussions during the pilot study undertaken. After normalizing the most appropriate, common and having similar interpretation around 13 Key business processes were recognized. These were ; E-commerce processes, Business Communications(written, verbal/published, unpublished), Strategic and business planning activities, Premises /Administrative (Head Office and branches), Research and development activities, Finance and Accounting, Human resources management , Production line and processes, Quality assurance and Quality control mechanisms, Information technology services, Maintenance and support services, Customer services, Marketing and public relations.

In the detailed research study the association of these 13 key business processes was thoroughly studied; which showed that these business processes have close association with the application of EKM. This was seen as reflected percentage of KMS system actively implemented in the IT organization scored over and above 90 % in both the type of IT companies: IndianIT&Indian MNCs and Foreign MNCs, in all the given aspects of achievements. Furthermore, other business processes namely HRM, Quality Control, Quality assurance and IT Services scored 100 % which is noteworthy observation. It indicated that EKM reveals its existence in most of the key business processes with a Highly Significant score. The business process that scored the least significant point was identified as Premises /Administrative (Head Office and branches) in both IndianIT&IndianMNCs and Foreign MNCs with 50 % and 61.71 % respectively. Majority of the responses reflected the need to start the KM in both IndianIT&IndianMNCs and the Foreign MNCs was to bring transparency in process and boost productivity; thereby manage information and enrich the systems in an innovative and qualitative way.

Other responses projected needs and considerations based on the maturity of the application EKM in the IT Company. Organizations where EKM is recent initiative were more concerned about the consistency in understanding the whole business cycle. Whereas, the organizations where EKM has been in a matured phase had profound points to ponder like creating technological diversified team with competency building and sharing, providing more client-centric solutions in cost effective manner, predicting the prospects to become pioneer in specific domain, better reach-out within employees, with the partners and likewise with the consumers too. This aided in aligning with the pace in today's competitive highly data driven business market.

Results and Inference

Research Hypothesis: "Understanding of Application of EKM is effectively reflected in the key business processes and KM initiatives in IT companies". Tested and accepted.

To validate this hypothesis understanding attributes were defined with respect to;

- Key business processes and
- KM initiatives

Findings

Efficiency percentages of training that are being organized in order to Increase in creativity and innovation in both Indian IT & Indian IT MNCs (92.85 %) and Foreign MNCs (89.28 %).

Key Business Process ↓	Indian IT & Indian IT MNC		Foreign IT MNCs	
	No.	Percentage	No.	Percentage
a) E-commerce processes	23(5)	82.14	25 (3)	89.29
b) Communications (written, verbal/published, unpublished)]	26(3)	92.86	28 (1)	100.00
c) Strategic and business planning activities	27(2)	96.43	27(2)	96.43
d) Premises /Administrative (Head Office and branches)	14(8)	50.00	17(5)	60.71
e) Research and development activities	27(2)	96.43	27(2)	96.43
f) Finance and Accounting	18(7)	64.29	24(4)	85.71
g) Human resources management	28 (1)	100.00	27(2)	96.43
h) Production line and processes	20(6)	71.43	24(4)	85.71
i) Quality assurance and Quality control mechanisms	28(1)	100.00	27(2)	96.43
j) Information technology services	28(1)	100.00	28 (1)	100.00
k) Maintenance and support services	23(5)	82.14	27 (2)	96.43
l) Customer services	25(4)	89.29	27(2)	96.43
m) Marketing and public relations	23(5)	82.14	27(2)	96.43

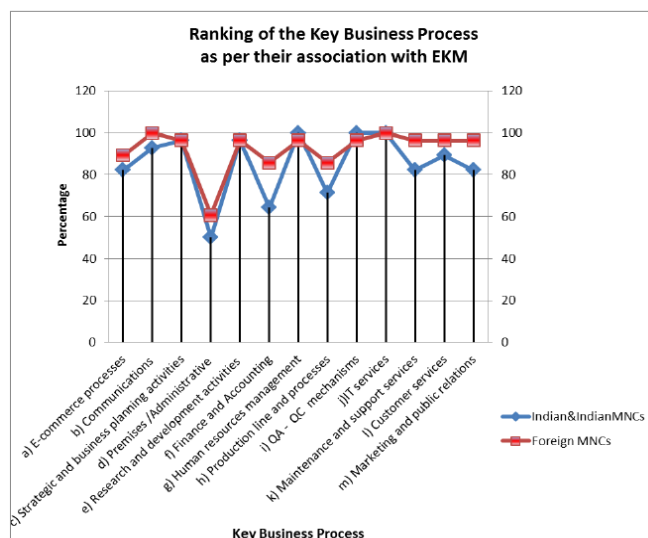
Table No.3: Ranking of Association of Key Business Process that EKM should focus for successful Implementation (Figures in brackets indicates ranking the Key Business process parameters)

To decide the usefulness of employee engagements to consider the desired parameters, and available sample; “One sample T – Test” used to compare Means at 6 level of degree of freedom.

In order of this the observed 95 % confidence interval of the lower and upper difference (232 and 250) at 2-tailed significance. Therefore considered ranking for observed parameters.

Inference: Based on the data and statistical tests the given Hypothesis₁

“Application of Enterprise Knowledge Management (EKM) is significantly understood in the key business processes and KM Initiatives in IT companies” is accepted. The secondary data also supported this hypothesis.



Graph No: 1: Ranking of Association of Key Business Process that EKM should focus for successful Implementation

There are ample of enterprise-wise KM activities, drives and initiatives visible or invisible, consciously or unconsciously being implemented wherein, few are success and few fail. These knowledge base environments influence the business systems and functions significantly in both; Indian IT & Indian ITMNCs and Foreign MNCs, in all the given aspects of the accomplishments. The study further indicated that almost all the key business process in both the type of IT companies showed close association of EKM. The analysis study revealed that; EKM has an active role in major business process of an organization. The existence of EKM initiatives has favourable impact on these business processes.

In majority of organization where HR is separate entity, the HR personnel are constructively involved in EKM Initiation and Implementation. Moreover, technology has positive and strong hold on EKM Application; as it is the support system for systematic Implementation of EKM.

There exist positive trends in knowledge based systems, wherein HRD plays a vital role. There is a need of upgrading the skill set of HR Managers to utilize the KMS; as they remain under-utilized. The fundamental components of HRD processes and its association with EKM facilitate the organization to addresses such prime concerns like; to comprehend skilled labour requirement innovatively or retain resource or its knowledge perspectives in a live repository form. This crucial fact was supported in the Focus group interaction conducted with few HR Heads from MNCs in Pune. KM initiatives across the IT organizations are undergoing changes constantly. The top management of the organizations can reflect seriously over these KM initiatives considering it as effective methodology in the long run. These drives enrich and strongly support business process which are profoundly dependent on information and allied services in the knowledge intensive economy. EKM is gradually getting acceptance as it has advanced to have the capability to become an integral part of a business function in the organisations. Some of the HR Heads spoke on gearing up for newer challenges and up-skilling to the artificial Intelligence based knowledge systems for HR implementation which would be the building blocks for further study. Some HR Leaders gave suggestive input for coming up with a model based on Agile Methodology. A common business process framework can form a quality base or a foundation as depicted in the famous Software Engineering Model proposed by SEI (Software Engineering Institute). Such a framework would strengthen the EKM Model effectively is one of the significant outcome observed during the deliberations with the key personnel in the IT companies.

Concluding Remarks

The survey research concludes that for application of successful EKM, systematised efforts are essential followed by identification of the prioritised areas. It was observed that all the considered Key Business Processes showed close connotation with EKM; specifically Human resource, Quality assurance & Quality control mechanisms and IT Services in particular had significantly high score indicating strong association. For effective implementation of EKM, the HR department need to gear up in action. They need to invest in skilling as per the need of the technological advancements and explore innovative approach to facilitate the execution qualitatively. Although there are massive enterprise-wise KM activities being implemented in enterprises wherein, few are successful and few fail. These knowledge base environments influence the business systems,

processes and functions significantly creating turbulence in the business eco-system. EKM is certainly not tied up with the Business processes; rather it is undergoing dynamic changes with the changing transformations in Business scenarios across the globe. With newer and better Enterprise Knowledge Management initiatives being refurbished and weaved within advance environments; change is inevitable and gearing up with this new outlook needs meticulous efforts.

Scope for Further Research

Design Thinking, SEI- CMM and Agile Methodology can be explored for further deliberations that may add value to the research excursion ahead, in this area; precisely in the IT sector. As a final line of thought, the researchers propose that; Enterprise KM has an active multidimensional context: with technology and Human Resource being the important support system to implement across all the key business processes.

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SIGNIFICANCE OF CORPORATE COMMUNICATION AT WORKPLACE AND ITS IMPACT ON EMPLOYEE ENGAGEMENT

Gopa Das Assistant Professor,
DES's Institute Of Management Development and Research,
gopa.das10@gmail.com

Shubhangee Ramaswamy Associate Professor,
Director, Institute of Management Education Research and Training, shubha.ramaswami@gmail.com

ABSTRACT

Success of any organization can be significantly impacted by communication, which is an effective instrument. Employee engagement, workplace productivity, and corporate growth can all be enhanced by effective communication. A productive workforce is built on effective communication. The most important investment a company makes is in its employees, who ultimately make the difference between the firm succeeding or failing. Engaged employees are more devoted and loyal, which is necessary for the success of goals and the success of the company. The purpose of this study is to investigate the relationship between employee engagement and communication.

Keywords: Corporate communication, Employee engagement,

Introduction

One of the concepts that is increasingly used to describe how corporations attempt to cooperate with stakeholders is engagement. Researchers have found that there are currently more disengaged workers than engaged staff, which is alarming. Only 13% of employees surveyed for Gallup's State of the Global Workplace report say they feel engaged at their place of employment (Gallup, 2016) Employee engagement is the level of commitment to the company, enthusiasm for one's work, and extra effort put forth by employees. Employee engagement is a professional method that fosters an environment where each employee is motivated and empowered to provide their all throughout the day, committed to the aspirations and values of an organization, eager to participate in its success, and getting positive concerning their own well-being.

Any information provided within a corporation for professional objectives is often referred to as internal communication. The phrase is most frequently used to describe a person or division in charge of employee communications. Employees are updated on the goals and strategies of the organisation, and they are informed and involved. While a specialised appropriate communication department is clearly needed in large enterprises, managers or HR frequently handle this function in smaller businesses. TCS in their integrated report of 2021-2022 mention that "After the outbreak erupted, the requirement for participative management became imperative. In these unsettling times, we increased work engagement."

Internal communication is the process by which company and their staff exchange information, whether it be vocally, in writing, or remotely. Internal communication is the foundation of a successful company, even though outward communication with customers, clients, and the broader public is crucial. To encourage employees to perform their duties efficiently and adequately, information about the organization is disseminated internally. It keeps people alert. Furthermore, it works among employees who are communicating to one another at the workplace. Internal communication that succeeds fosters corporate culture and raises staff morale. Building a cooperative spectrum involves effective communication with staff. It's not as difficult to develop such communication as one may believe. To adopt the proper communication enhancers, all that is needed is an awareness of the nature of the workplace. Communication with employees is vital because it provides your workers a voice and helps them feel appreciated, a sense of belonging, and increased productivity.

Review of Literature

Internal communication benchmarks give us a brief, comprehensible description of the organization's current state and an outlook for where it will be in the not-too-distant future. Internal communication promotes cultural diversity and is employee-centered to enhance and diversify employee engagement. (Ishtiaque and Habib, 2016) Corporate communication now plays a crucial role in an organization's ability to succeed, especially in the service industries where the goal is to gain and maintain a competitive edge while also implementing the needed organisational changes. (Sharma, Neha & Kamalanabhan, 2012) Internal communication's tone and timeliness have a significant impact on the way an organisation conducts itself, but it also has an impact on and engages its workforce. One of the most crucial issues that organisations confront because of the increased dynamic nature of the market is connecting with people physiologically, cognitively, socially, and logically for both individual and corporate success (Vora & Patra, 2017). To affect employee engagement through internal communication,

organisational leaders should take advantage of identification, specifically perceptions of value and pride. In other words, for employees to be engaged, they need to gain awareness of their group membership and attach value and emotional meaning to it (Karanges, 2014). Employee engagement and communication processes typically have a significant positive association (Balakrishnan & Masthan, 2013). It is important for organisations to emphasise their internal communication strategy, particularly to inspire entry-level employees (Chamindi, T.D.K.H. and Welmilla, 2015) Organizations can encourage people by starting with needs, that can develop into goals and actions, that may then lead to motivation, which may eventually result in organisational goals, using professional growth and internal communication (Panjaitan & Septiana, 2020).

Objective of the study

1. To comprehend how corporate communication is used in the workplace.
2. To comprehend how business communication affects employee engagement.

Corporate communication and Employee Engagement

Creating the ideal environment for all company members to offer their best effort each day is part of fostering employee engagement. These factors are necessary to develop employees' commitment to the objectives and values of their organisation, as well as their motivation and sense of well-being, to contribute to organisational success. Thus, a person's physical, intellectual, and psychological aspects are related to their level of employee engagement. As a result, effective internal communication has a significant impact on these factors at work and raises employee engagement.

Organizations that want to hire and keep bright employees should be aware of how internal communications affect employee engagement. This can be accomplished by offering additional channels for communication, more training courses, and behaviours that promote connection, trustworthiness, awareness, and cognitive. The inability to communicate could be the most common problem, whether in big or small organizations. No matter the position they hold within the organisation, most staff will say that interaction is an issue that needs improvement. Effective communication satisfies these requirements by keeping all staff members kept up to date on work functions. The workforce interprets the communication as a representation of their relative significance to the organisation. If they are routinely and directly informed about crucial subjects, they can engage in company activities in an efficient manner. Internal communication helps employees improve their business understanding by giving them better guidance, improves their leadership abilities, and gains employee support for organisational transformation (Ishtiaque and Habib, 2016). Employees that experience a sense of value tend to be more productive, more independent, and frequently more eager to contribute to innovation. From a practical standpoint, organisational leaders and supervisors should direct internal communication away from utilising it to directly influence employee engagement toward enhancing identification with the organisation and perceived organizational support from the supervisor (Karanges, 2014). Fig 1 shows that employee engagement is listed as the top significance of internal communications experts.



Fig. 1 Factors affected by corporate communication with employees. [Source: Yvonne Harris, 2021]

According to Santiago (2020), Employee engagement is fostered via good internal communication, which is essential for business success. The main causes of employee leaving are frequently connected to communication. A lack of clear guidance from management, a general lack of communication throughout the organization, or ongoing change that is poorly conveyed are all examples of poor communication. (Cowie, 2019). According to Karanges (2015), internal organisational communication and internal supervisor communication are crucial for creating and sustaining the highest levels of employee engagement. By

developing a culture of effective internal communication not only at the management and colleague groups, but a business can also increase the organisational loyalty of its employees (Qin & Men, 2022).

Findings & Discussions

The results, which are based on data about corporate communication and employee engagement gathered from secondary sources, are described below.

1. A company can enhance employees' organizational trust by establishing an atmosphere of successful internal communication between the stakeholders.
2. Employees with a sense of value are frequently more productive, independent, and willing to contribute to innovation.
3. Employee engagement is influenced positively by communication.
4. Effective business communication enhances employee engagement, which helps an organisation achieve its objective.
5. The primary reasons why employees leave their jobs are typically related to communication.

Conclusion

Organizations are gradually understanding that their people are their most important assets. As a result, they must be particularly focused and attentive to guarantee that employee communication is strengthened, allowing them to achieve their objectives while fully utilising human resources possible. This study confirms and demonstrates that employee communication significantly influences employee engagement levels and serves as a predictor of employee engagement levels in organisations. Corporate communication is positively affecting and boosting employee engagement in organisations; therefore, it is clear that it is playing a significant role. For upsurge employee engagement, businesses and top management must pay close attention to their strategies and methods and make sure they are enhanced in the near future.

Scope for Future Research

For future research, the researcher contends that a variety of corporate communication-related issues need to be investigated. Research may take into account additional elements that affect worker engagement and employee's well-being. Future research may also examine the causes and effects of corporate communication on employee engagement. This study focused exclusively on corporate communication and how it affects employee engagement; nonetheless, it would be intriguing to investigate the problem in a particular sector.

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RESILIENCE IN CYBERSPACE WITH DATA ANALYTICS FOSTERED KNOWLEDGE MANAGEMENT CAPABILITIES: A DISCOURSE FOR SUSTAINABLE IMPLEMENTATION STRATEGY

Prof. Pradnya Kashikar
Research Scholar – MIT ADT University, Loni-Kalbhor, Pune- India
pradnyakashikar@gmail.com

Dr. Rachana Shikhare
Coach, Consultant and Associate – Samshodhan Trust, Pune-India
rachana.savita@gmail.com

Dr. Vinod Mohite
Assistant Professor, MM's IMERT, Pune-India
vinodbmohite@gmail.com

ABSTRACT

In the Cyber world today managing threats dynamically, is challenging, moreover generation of knowledge and enhancing knowledge management (KM) capabilities is becoming crucial due to the dynamics of technological advancements. In this context a regulatory mechanism is essential; this resilience required is achieved through data analytics which bridges the gaps between the challenges faced in cyber space and implementable realistic solutions.

Along-with the technological advancements it becomes imperative to optimally utilize and align knowledge management capabilities. A need was foreseen to reconsider KM capabilities in the fields of computer security, data management, also legal and risk management. The researchers have attempted to work on the aspect of sustainability, in handling challenges and solutions in implementing effective cyber security and in building better KM infrastructures; through innovative enabler such as Data analytics. In the proposed effort to elaborate this review study, assessment and quantitative analysis is recommended.

Keywords: Knowledge Management Capabilities, Cyber Security, cyber threat management, Data Analytics.

Introduction

In today's highly competitive world, IT infrastructures are preferred to be equipped with Cyber security mechanisms to curtail down the cyber threats. Protecting sensitive data, computer systems, networks and software applications from cyber attacks generates a large amount of data which can be analyzed substantially to form information security resources for better knowledge management around cyber security. Such protecting mechanisms are used by individuals and enterprises to deal with the challenges such as tampering and/or unauthorized access to vital resources and other computerized systems. Every organization has these important resources which are called as intellectual assets that include hardware, software, and data. With the continuous increase in the number of cyber threats and its effects on the organization due to the complexity of the cyber attacks; organizations are struggling to protect the information in an upcoming highly dynamic business environment. It has become essential and important to secure the intellectual assets including digital processes, information and IT systems from tampering systems and data stored within, exploitation of resources via attacks. These intellectual assets should be legally protected to achieve security of confidential information of an organization such as source code, solution manual, executable, live databases of clients, passwords and other confidential information stored on servers, financial data, and employee details etc.

The security of organization's data has become inevitable for the effective management and utilization of information generated by an organization as all organizations are driven by technology and technology is evolving very dynamically. The systems that are not aligned in coordination with information security mechanisms and policies may result into challenges such as unauthorized access, user authentication concerns, hacking, virus and worm dissemination, intrusion into company's private network and so on. People and group of people, that is employees and teams; work for an organization using intranet and extranet. Intranet is a type of network in which data and information is shared and is circulated within the organizations confined area. Extranet is nothing but company's private network at different locations where in data transfer and information sharing happens from one location to the other using virtual private networks.

Gap Analysis and Problem Description

With the rapid advancements in the technology and possibility of successful yet undetected cyber-attacks, organizations must adopt innovative methods, to derive dynamic strategies to manage threats effectively. This can be done seamlessly without loss of credibility, value and security of information which is managed by the

organization and used in several ways and formats. Managing upcoming threats dynamically have become extremely challenging, wherein data analytics and algorithms enabled in generating knowledge and enhancing knowledge management capabilities thereby propagating a need of a resilient solution.

Cyber threats are one of the key areas where concerns related to ransomware attacks, crimes related to upcoming technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Robotics, blockchain etc., electronic commerce and mobile commerce related cybercrimes, financial frauds, etc. should be addressed. To improve the privacy and security when the information is in transit or the information is stored on hardware devices is becoming very crucial for the organizations. While analyzing the access mechanism and information during transmission; authorization becomes necessary and important in context to the security breaches, through openly accessible lines and with the help of ever-growing cyber attacking tools. It is seen that corporate networks can become vulnerable to cyber threats at larger extent. There are potential perpetrators at several points of penetration making the data at various levels of confidentiality vulnerable to intruders compromising the integrity of data. Email security and security of information stored on cloud and other networks is becoming more susceptible to attacks and companies need to be geared up with processes in place to address cyber-attacks. The prevalence of ransomware attacks and increased use of internet enabled applications is leading to the risk to networks and information stored at servers.

Literature Review and Objective of the Research Study

(Masike, 2023) Security in all aspects of hardware, software and data are crucial for the management of policies, mechanisms at an enterprise level. (Samtani, Zhao, and Krishnan, 2023) To produce secure environment in the organizations, development in technologies like AI is beneficial for the implementation of secure knowledge management. Furthermore, in context with cyber security related tasks such as anomaly detection, vulnerability detection, bitcoin fraud detection, as well it is valuable.

(Ciasullo, Montera and Douglas, 2022) Big data analytics capabilities are fostering the opportunities for SME to identify tangible and intangible resources and infrastructure and ways and mechanisms to protect them from cyber-attacks.

(Zwilling, Klien, Lesjak, Wiechetek and Sklodowska, 2022) For effective cyber security controls awareness must be incorporated and should increase in the developing countries to avoid data loss and information retrieval challenges.

(Sandor and Tonç, 2021) To deal faster with the information security issues at the business enterprise level, the KM capabilities address the cyber security issues regarding organizational processes. The implementation of cyber security from KM perspective will help better identify risks, threats, and vulnerabilities and to create and maintain secure environment.

(Kapur, 2020) For every individual, it is important to enhance knowledge in terms of augmenting the abilities consciously. Providing right information at the right time securely is nothing but a knowledge management. Cyber security ventures (2020) powered by reviews for business by Finance Online, the computer ransomware i.e., hacking had been causing havoc to businesses and people worldwide. Organizations are considering ransomware as a biggest threat and a challenge to be addressed on highest priority, as it is fast growing, with damages predicted to be 57 times higher by 2021.

(Cyber edge 2020 cyber threat defense report, 2020) the frequency of successful cyber-attacks (at least one successful attack) is increasing year by year giving heads up for designing a framework. this can be implemented for aligning knowledge management capabilities with the help of data analytics as a tool. the technological advancements in attacking strategies have also been impacting continuously which is resulting into successful attacks as shown in the figure below.

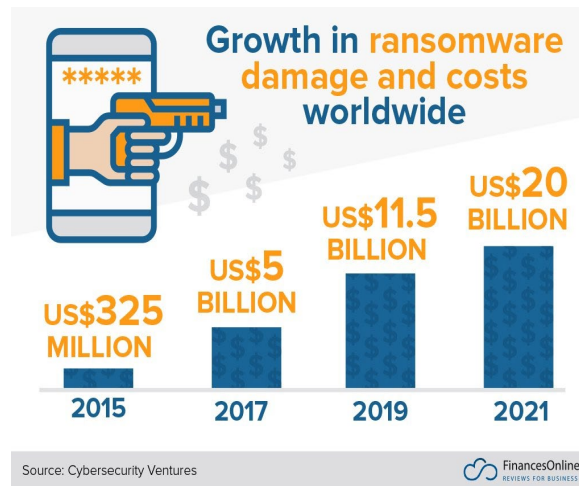


Figure 1: Growth in ransomware damage and costs worldwide (Source: Cybersecurity Ventures; FinanceOnline, 2020)

This initial study aimed in fostering the knowledge management capabilities, in context of cyber threat management through data analytics; thereby bridged the gaps between challenges faced in cyber space and implementable resilient solutions. The strategic level capabilities of every organization are highly based on its domain specific environment.

(Obitade, 2019) The link between the KM capabilities and superior cyber protection is nothing but a data analytics which is important for the success of every organization.

(Jenab and Moslehpour, 2016). The cyber-attacks are growing day by day causing corporate espionage, threats to intellectual assets of every organization as well as it is impacting at an individual level.

Wang and Wang (2016); stated the differences between traditional enterprise information systems and KMS stating the data analytics methods and models that facilitates the knowledge management implementation. From the various studies carried out; it became imperative to address the everchanging cyber security challenges in context of the business environment as well as technological advancements. To optimally utilize and align knowledge management capabilities in these perspectives, there was a need to consider knowledge management and its relevant tools and techniques; in the context of computer security, data management, also legal and risk management.

The researchers have further attempted to explore how data analytics can be an enabler in identifying challenges and solutions in implementing effective cyber security and in building better knowledge management infrastructures. To sustain in this hyper competitive and data sensitive digital era, securing wealth of data gets vital precedence, using KM Capabilities through advanced proven analytics have acknowledged the case. Further assessment and supportive quantitative analysis are recommended in the proposed effort to elaborate this review study to the next level.

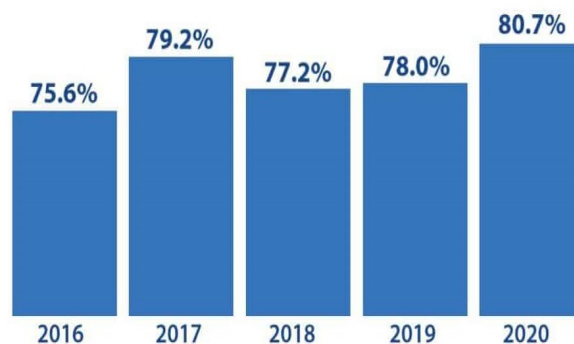


Figure 2: Percentage compromised by at least one successful attack by year. (Source: CyberEdge 2020 Threat Defense Report)

In order to enhance the Knowledge Management [KM] capabilities of an organization, a holistic consideration of technical, structural, social, and cultural aspects of any infrastructure of a business enterprise is inevitable. Cyber threat management leads to a specialized organizational structure to follow best practices across the

interorganizational tiers. To address these concerns from multidisciplinary perspective, a thrust for some strategic model as alternative solutions becomes imperative supplementing it with innovation.

The flow of information in business organizations comprises of various knowledge forms that needs to be modelled to emphasize its relevance and context due to its ever-evolving nature. Thus, the elicitation process that stores, manages, and transforms knowledge in a cyclic manner is understood as Knowledge Management which is central focal point. Moreover, KM for cybersecurity domain should have well defined objectives and measures to assess the effectiveness of KM capabilities. Almost all large organizations invest considerably in digital and IT solutions, and specifically in analyzing challenges and risks that can be faced by any organization. The data analytics can be an enabler of superior performance and act as a facilitator to leverage these capabilities. This study will also help in finding practical solutions in implementing effective cyber security and in building better knowledge management infrastructures.

Considering Significance of Knowledge in a Cyber Space Scenario

The digitized world today, which is established on network of internet-enabled systems, is vulnerable to the risk of losing data integrity in the cyberspace. As a strong protective shield, Cyber threat management demands an integrated cyber risk identification and management approach to address and mitigate the cyber security risks and threats in the cyber space. Configuring an effective threat defense mechanism also deals with data acquisition and leveraging automation. Also, depending on the domain in which organization is working, relevant analytics and cross correlation across the vast domains of Cyber security can be analyzed in context to technological advancements.

Considering illustration in this given diagram (Figure 3); the progressing learning evolution shows transition of raw data into the most critical form of evolved data as wisdom. We realize evidently through this info-graphic representation that wisdom is the knowledge applied in action.

The transformation is resulting in better version of data after iteration of the depicted steps, with context and relevance that can be applied using innovative approaches to manage the knowledge intensive environment.

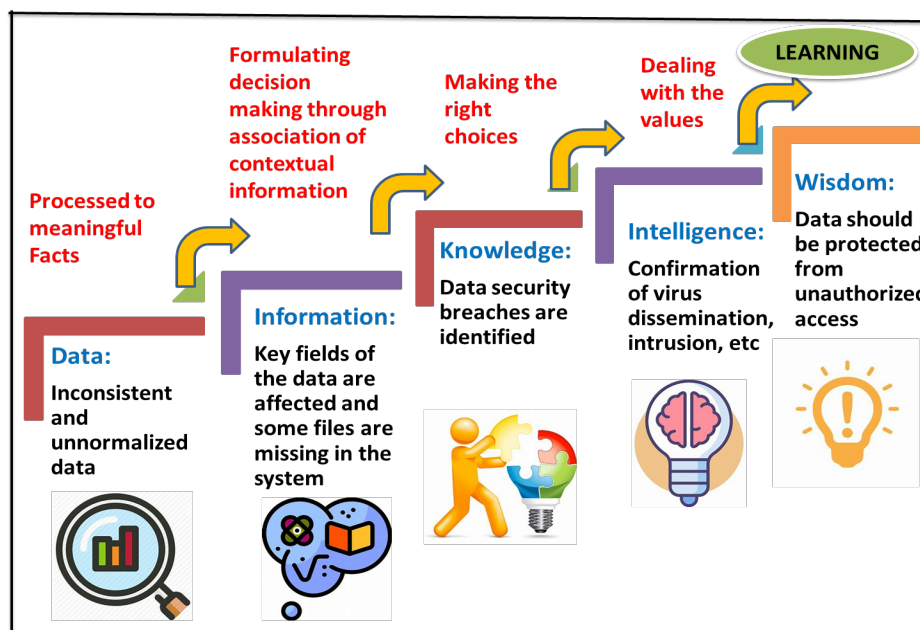


Figure 3: Model of Learning Evolution and Locus of The Knowledge (Figure Template Adapted from Shikhare, 2013)

Data, information, and knowledge are comprehensively used interchangeably, although they differ in their context and nature of usage that gets it a different form rising its relevance and utility. The researchers attempted to comprehend the progressive data with reference to the cyber wisdom which is evolved being depicted in this info-graphic representation with intuitive illustration in the above diagram (Figure 3) Model of learning evolution and Locus of the knowledge.

A framework is often used by cyber security teams in any organization to manage the life cycle of a threat to identify and respond to it with speed and accuracy. A smooth integration between people, process and technology in the cyber threat management is an important aspect to continuously identify the risks beforehand and stay ahead of potential threats. The under researched areas include: faster threat detection with lower risks to intellectual assets and reliable investigations at regular intervals with optimal response time. On one side, ongoing digitization of business processes is giving many benefits, at the same time it is posing cyber threats and challenges in the digital world on the later part. To secure the confidential assets and to maintain the integrity of data, appropriate security policies and mechanisms should be implemented and refined from time to time to address upcoming new types of cyber threats and challenges effectively. An effective Cyber threat management has the potential for continuous improvement. This can be achieved through a built-in strategic plan with innovation and process measurement with the help of data analytics and reporting mechanism in the emphasized KM environment.

Cyber threat management is important to organizations to understand, aggregate and resolve the potential cyber security challenges that need closer attention in context to new emerging data risks. Nevertheless, it demands the collaboration between employees, business process and technological advancements, giving organizations the valid opportunity to detect threats in early stage and respond immediately with the aid of certain analytical tools.

Exploring Data Analytics as a Tool in Enhancing the KM Capabilities

In the fast-paced world today, several organizations desire to use the available and evolving data for gaining strategic advantage and they are geared up for competing by making best use of analytics. Past two decades has witnessed Knowledge Management term being coined and widely used in the highly data-oriented environment, wherein huge data is evolved and disseminated. Moreover, businesses are highly evolved based on knowledge-based economy, which is so dynamically affected by several factors within and outside a business enterprise. As we can see the Covid19 pandemic today has completely ruined the global economies, across all the sectors; cyber threats have emerged as additional challenges that is further hampering the broken systems. The churning of knowledge that is the core of the organization has tremendous potential to either elevate or collapse any system (if not configured and managed); and thereby threaten an empire of business in the context of this competitive realm of business ecosystems.

Recent studies (Moon and Lee, 2014) have concluded that culture and knowledge sharing processes contribute to knowledge management (KM) effectiveness. Business organizations view knowledge as their most valuable and strategic resource for achieving sustainable competitive advantage (Davenport and Prusak, 2000). There have been inhibitions to share knowledge due to the behavioral factors on various levels of knowledge elicitation; causing hindrances in utilizing its fullest potential of KM capabilities for the growth, business development and sustainability.

Understanding Knowledge Management Capabilities

To compete effectively, firms must leverage their existing knowledge and create new knowledge that favorably positions them in their chosen markets. In order to accomplish this, firms must develop an ‘absorptive capacity’—the ability to use prior knowledge to recognize the value of dynamic information, assimilate it, and to apply it to create new knowledge and capabilities.

(Gold, Malhotra and Segars, 2001) have developed a model of km based on the capability’s perspective. They referred to knowledge infrastructure capabilities and knowledge process capability to achieve organization excellence. Wherein, further knowledge infrastructure capabilities can be considered from three key infrastructure capabilities—technical, structural, and cultural—that enable the maximization of social capital (intangible capital). The researchers have taken the traces from this model and attempted to put forward adaptive model of km capabilities adding innovation as another strategic capability; based on the strong deliberation of cyber threats and challenges. The km cyclic process model itself is mapped with the second part of the proposal relating to knowledge process capability.

Furthermore, in this paper the researchers have also thought of data analytics as a probable tool to address the challenges stated so far in this paper; as it is observed that huge data is being churned worldwide in this digital era. The classic reference would be the drives in Indian context such as Digital India, Make in India, Atmanirbhar Bharat which is enabled on the pillars of digitization literacy among the citizen. Here we cannot ignore that while being part of these drives, common man has now realized about the inevitable need for; both cognizance as well as usage of digital technologies. Nevertheless, the common man is now recognizing the need and importance of being part of the cyber space with more wisdom and caution in this world of connecting people with internet enabled organizations.

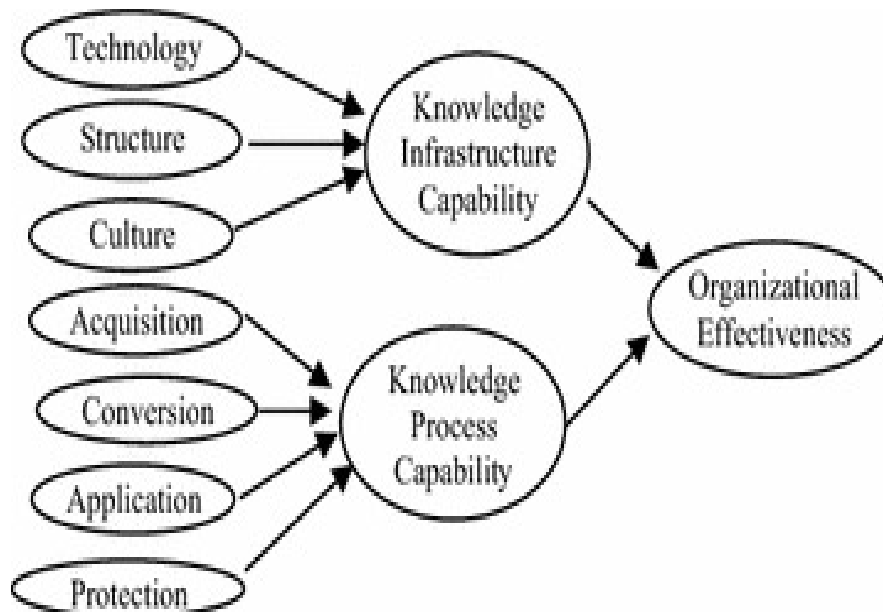


Figure 4: Model of Knowledge Management based on Capability's Perspective

(Source: Knowledge management capabilities and organizational effectiveness; Gold, Malhotra and Segars, 2001)

In context to Indian scenarios, the self-reliant India [Atmanirbhar Bharat], Digital India and Make in India are the drives envisioned to support India innovators and business leaders including startups and big organizations. To make India a global technology superpower, digital literacy has been introduced to a citizen that includes awareness about electronic commerce, electronic governance, mobile commerce, and use of technology for services and business management. If we take a closer look at the progress, current status and challenges of these initiatives, a common man has been benefitted bringing a measure of digitization in every aspect of life; right from education, finance, trading, marketing, managing resources to commerce and governance. These initiatives were meant for reviving the infrastructure for the sustainable self-reliant growth and for identifying the challenges faced by business leaders and organizations.

The need and importance of being a part of a cyberspace gave rise to being more cautious and aware about the cyber threats and challenges while using digital technologies. The number of internet subscribers is increasing day any day worldwide and it is a clearly identifiable and visible indicator of digital transformation happening across the globe. As a result of increased usage of smart phones and internet enabled devices, huge data is at the disposal of cyber offenders, resulting in cyber threats are also emerging at a huge speed. The role of social media platforms, wireless technologies with high bandwidth, internet service providers, and private sector companies like Google, Facebook, Reliance Jio, etc. cannot be ignored in the worldwide digital evolution.

In order to manage the dynamic data and the cyber threats and challenges the new component proposed by researchers as Innovation, can play significant role. It can be noted that this innovation in the form of strategic capabilities of Knowledge management can be used to mitigate the risks of cyber threats and deal effectively with the challenges at all the levels of organization. The analysis of data flowing from and into the organization should be studied in an innovative way, so that a strategy can be built for the sustainable growth of an organization in this highly competitive and fast-growing technology driven cyber space.

With this rapid growth of both Internet and digital world around, traditional Knowledge management systems and its capabilities may fall short to manage the real time highly volatile data churning, as there would be newer lethal cyber attacks that can as well keep on rising. Advancing internet connectivity and competition across market players, high speed network dependencies, mobility of information is happening at rapid pace. In parallel, we see remarkable growth of various social media platforms, data capturing technologies, etc. giving a tenacity to propose improved capabilities of techniques, tools, technologies, and methodologies.

Big data and data analytics these days have come a long way proving effective in managing both data storage utility, security, and the data integrity requirements in the real time. To elevate the business performance among the several factors to seize the upcoming opportunities and curtailing the threats; moreover, deal it strategically in the real world becomes the stepping stone of all the levels of organization. The small and medium size companies

are also using business analytics today as a business decision making tool not only to enhance business operations and managerial efficiencies but also to improve the customer experience in the competitive marketplace (Rajagopal and Ramesh Behl, 2016). May it be micro or small startup or a well-established matured techno giant, flourishing their business on the planet; every enterprise should be built up on a framework strengthened by Knowledge Management capabilities.

In the given current scenarios, we find data in several variants extensively used and progressively transformed within business systems and heterogeneous environment. It becomes need of the hour to cater the customized requirements and transmitting constraints over World Wide Web (WWW); making it a strong case to apply the data analytical abilities strategically. This foundation gives a thrust to basis the decision-making process elevates business performance and thereby achieves business excellence in a long way. It is obviously necessary to be proactive in our approach rather than reactive whenever there is a concern of data security infringement and many such breaches. Better approach that is more agile and preemptive in nature, would at the same time demand better and stronger support systems for back end complimented with better tool kit to fetch it as and when it is used. Massive data usage with emergence of better technological advancement and secured storage demand is seen; and these systems overall would be more prone to the risk of cyber attacks.

We all see today that Internet is anchoring decision making process in core business activities. More mature and strategic decision-making tools would act as a catalyst to leverage the data creation, elicitation, assimilation, and various other processing and managing needs; in the dynamic environment. Not limited to just IT sector but almost every other non-IT sector as well is having data intensive and data critical processes that demands a new framework of enhancing the existing KM capabilities and blending them with innovative strategic moves. This will facilitate in taking policy decisions that are pragmatic and applying them to gain control over the business with such well thought of architecture, supporting the data security aspect as well. These solutions need to be full proof, agile as well as cost effective and easily integrated in the existing systems in every industry which is nowadays technology driven. And technological advancements are continuous and never-ending phenomenon in the cyber world so is their demand and utility. Such proposals have been put forth by many researchers as to how big data addresses these concerns to improve the cyber security in an information technology enabled environment on a greater extent, by supporting the KM capabilities. Business Analytics and Cyber Security Management in organizations compiles innovative research from international professionals discussing the opportunities and challenges of the new era of online business. (Rajagopal and Ramesh Behl). Business analytics techniques, strategies for data storage, and encryption in emerging markets that are identified and highlighted by the professionals and experts needs to be boosted by further more innovative ideas and value adding frameworks that are more technology driven. Above all, the components of such frameworks need to be measured against the effectiveness of the digital world and thereafter the holistic evolved model be validated for further work and research.

The classic example of measuring effectiveness of digital transformation is work culture adopted worldwide by different sectors for their business continuity during lock down period due to pandemic situation of COVID19. Many organizations are opting for work from home, working remotely partially or in a full-fledged manner. Connecting over online business meetings and taking strategic level decisions using a technology mode at an operational level and increasing productivity by working from home is becoming a new normal. But this has also led to uncertainty of jobs and unemployment, leading to inclination towards committing financial frauds and serious cybercrimes like hacking and intrusions into the corporate companies' private and confidential information.

The increasing cyber threats have given an indication to the organization to really focus on protection of their assets by implanting suitable strategies with the help of innovative policies and mechanisms.

Contribution to the Body of Knowledge [CBOK]

To excel knowledge management capabilities, there is a need to acquire knowledge and skills in the fields of cyber security, data management and strategically managed risk management. Knowledge management capability (KMC) is an organizational mechanism to create knowledge continually and intentionally in organizations (Von, Nonaka and Aben, 2001). In addition, (Gold, Malhotra and Segars, 2001) proposed knowledge management (KM) infrastructural capabilities and process capabilities as direct determinants of organizational effectiveness (Figure 4); they argued that an organization must leverage its existing knowledge management capabilities and apply the knowledge in its operations to sustain competitiveness. Taking clue from this basic work done, the researchers are proposing additional vital components of Innovation comprising Strategy and Policy perspectives to the model of Knowledge Management capability; complimenting the Knowledge Management cycle comprising the cyclic processes powered with data analytics; in context to the research scope of this paper. They intend to take it further

validating the model and considering this effort for their empirical studies in the same area of research study. Here apart from Physical infrastructure and organizational hierarchy the other aspect which is the crucial interface is the technological framework that helps to mobilize the social capital in the process of knowledge elicitation. Information technology is often cited in the literature as an important KM infrastructural capability, enabling or supporting core knowledge activities such as knowledge creation, knowledge distribution and knowledge application. (Gold, Malhotra and Segars, 2001). Considering the research focus on management of the cyber challenges and threats it becomes imperative to have its impetus; both with the outcome perspective on the study undertaken and its influence on the overall Knowledge Management environment considered here in the study. Thus, another important aspect as per the researchers along with Culture, Organization structure and Infrastructure is Innovation which forms the newly introduced fourth component as one more pillar shown in the diagram (Figure 5). This innovation has its scope encompassing the policy and strategic perspectives that may be required to apply as per the framework of Cyber space and as per unanticipated threats that may occur in real time. This results in putting the system into more challenging circumstances, directly compromising the security and integrity of intellectual assets of an organization or at individual level.

Outcome of the research study

The researchers have proposed a conceptual framework, in which they have taken efforts to foresee how data analytics can be an enabler in identifying cyber threats and challenges. To overcome these challenges, exploring solutions in implementing effective cyber security and in building better knowledge management infrastructures is another area where the researchers have been working. The Knowledge Management capabilities namely: [organizational structure (comprising people/teams)] as one pillar; other pillars proposed in the model (refer figure 5) are [infrastructure (comprising physical/technological)], [innovation (comprising strategy/policy span of scope)] and [culture (comprising techno-socio aspects)].

As deliberated (2013) in research study; any Knowledge Management enabled Systems (KMS) implemented within an organization it requires a systematized framework to enrich information management; wherein Knowledge Management acts as a multidimensional mechanism that works at all levels of the business pyramid. This includes self-growth and performance elevation at individual level, peer-to-peer knowledge sharing at group level and diffusing best practices at workplace level which promotes better organization at every functional level. In this context cyber security becomes significantly complex and essential for managing challenges such as loss of data, preventing intentional sabotage, hacking, unauthorized access, intrusions, etc.

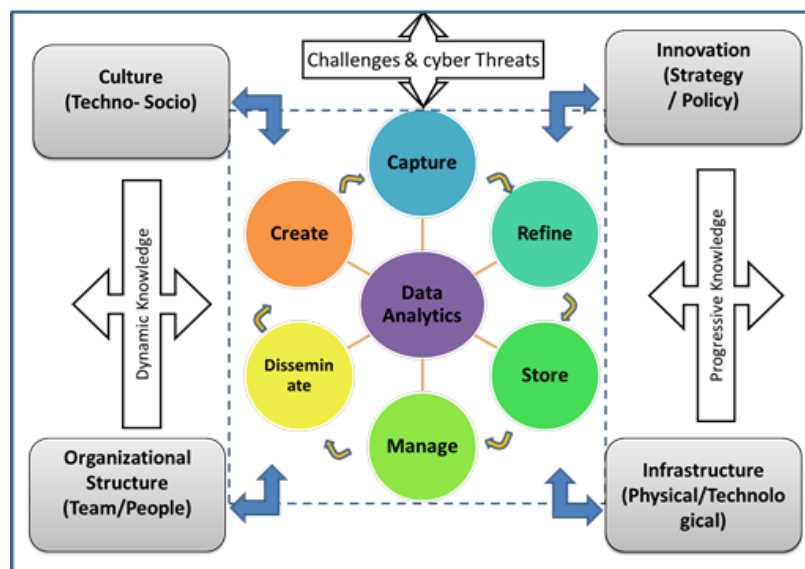


Figure5: Proposed Model: Enhancing KM Capabilities driven by Data Analytics to manage Cyber security challenges and threats (The researchers’ original contribution to the body of knowledge)

Utility of the Research Study

A step-by-step systematized effort with innovative approach in applying certain business strategies and policies is recommended. This may prove to be illustrative model for successful integration of the knowledge forms and processes at different levels within an organization. Data Analytical abilities managing the core KM cycle, under the purview of KM capabilities proposed; can be a model not limited to the elicitation process of progressive and dynamic knowledge. This model as well can be a supportive advanced mechanism in dealing the cyber challenges and protecting from cyber threats as it is empowered by Data analytics. Moreover, to sustain competitive

advantage that is affected due to rapid technological advancements, it is becoming crucial for the organizations to empower KM capabilities with data analytical approach. The very nature of knowledge being vibrant, this proposed model addresses the knowledge elicitation process considering cyber threats and challenges and also to regulate progressive knowledge with disciplined data analytics. The data analytics can as well be an enabler of superior performance and to leverage these capabilities, almost all large organizations are seen investing considerably in IT solutions. This data analytics driven approach has given a thrust in analyzing challenges in regulating effective cyber security and in building better knowledge management infrastructures.

Concluding Reflections

World is going to keep advancing and so are the new challenges that threaten the precious knowledge. Thus, such vulnerable data and networks (including extranet and intranet) would need stringent mechanism to address and resolve not only the anomalies but as well defend the cyber attacks. Traditional model may form a basis of any resilient solution that is being proposed. Newer and better routes need to be evaluated and verified complimenting the legacy systems; to address the invading threats to knowledge in the cyber space. Data analytics fostered KM environment, comprising the major pillars of KM capabilities; having strategic innovative support; will keep the KM Cycle in equilibrium.

Techno-socio culture being vital part of corporate environment along with innovation with respect to KM capabilities proposed in this research paper, has a great influence in the cyber space giving impetus to align systems with proper analytics. This has inspired the researchers for the suggestive model that addresses fostering the KM capabilities there by managing the cyber security challenges and threats effectively by virtue of data analytics. This review study formulates the basic building block as initial step, to instigate elaborative research work. This may include validation of the model proposed here; with quantitative analysis and well-defined scope of the further study.

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