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Approved by AICTE, DTE, An ISO 9001:2015 Certified
Gate No.5, Mount Poinsur, S.V.P. Road, Borivali West, Mumbai 400103.
Tel: 022 - 2891 7096 / 2891 7089, Ext. No. 147,168, 145. Mob. : +91 74000 71626
• Email: srjournal@sfimar.org • Website : sfimarresearchreview.org

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# SFIMAR RESEARCH REVIEW (SRR)

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# Editorial...

We are pleased to announce the publication of *Volume 18, Issue 2* of the **SFIMAR Research Review**. This biannual journal, registered under ISSN **0975-895X**, is dedicated to disseminating knowledge with practical applications across various segments of management. It serves as a platform for management practitioners, researchers, and academicians—both nationally and internationally—to share ideas, perspectives, and experiences. Our commitment to fostering indigenous management research remains steadfast, and we hope this publication continues to inspire meaningful discourse in the field.

The current issue features five insightful research papers:

**Ms. S. M. Divya Bharathi and Dr. T. Sreerekha** explore the framework, benefits, limitations, and future potential of e-HRM. Their study highlights how electronic human resource management facilitates global workforce management, enhances service delivery, reduces costs, and improves workforce efficiency.

**Ms. Ekta Singh and Dr. Varsha Ganatra** examine the evolving landscape of digital content consumption, with a focus on the growing role of artificial intelligence (AI) in shaping user experiences and content discoverability.

**Ms. Sanchayita Banerjee and Ms. Shreya Agarwal** analyze the factors driving the shift from traditional cable TV services to OTT platforms, while also evaluating the impact of the COVID-19 pandemic on OTT consumption patterns.

**Mr. Jatin Haswani, Mr. Darsh Shah, and Dr. Jyoti Dixit** emphasize the importance of strategic resource allocation and prudent risk management in fostering sustainable growth within the Indian insurance sector. Their study offers valuable insights for policymakers, regulators, and industry stakeholders.

**Dr. Sandeep Kudtarkar** explores the potential benefits of installing charging stations for electric vehicles within the hospitality industry. His study investigates how such initiatives can enhance business value while contributing to environmental sustainability.

We hope our readers find this issue insightful and valuable. I extend my sincere gratitude to all the scholars, reviewers, and support personnel who contributed to this publication. Your dedication ensures the continued success of the **SFIMAR Research Review**. We look forward to your continued support in maintaining the journal's standard of excellence.

**Prof. Dr. Sulbha S. Raorane**
***Chief Editor***

# EMERGING TRENDS IN ELECTRONIC HUMAN RESOURCES MANAGEMENT (E-HRM) PRACTICES

***Ms. S. M. Divya Bharathi, ** Dr. T. Sreerekha**

## ABSTRACT

*Human Resources is a bunch of unique skills associated with intended needs. Capabilities. The HR function is expected to do value addition to organizational strategic goals and their implementation. The businesses understand the significance of Information Technologies in HR activities in the form of e-HR. The e-HRM is available on the website, and intranets of organizations to expedite HR functions. The e-CRM helps in managing global workforce, services delivery, cost reduction, and handling the workforce effectively E-HRM is an efficient tool in the hands of HR managers to manage HR social systems effectively. The study focuses on the framework, benefits and limitations, future needs and efficacy of HR function using e-HRM.*

***Key words:*** *Human Resources, Electronic Human Resource Management, e-HRM, Human Resource Information System, HRIS, Information Technology*

The advanced age causes massive changes in the business climate. As one of the main parts of the cutting-edge business climate, innovative climate, and data innovation (IT) impacted the advancement of numerous areas of business. The most striking changes are occurring in the development of equipment and programming, and modern creation.

Inside the administration, IT gets an exceptional job in human assets the board. Electronic Human Asset The board (e-HRM) is an idea which includes the utilization of Online advancements for offering the types of assistance in regard to the human asset the executives in the association, and to which access have a more extensive scope of association's partners - beginning from the HRM division.

The objective of this research is to feature the significance of the idea of e-HRM, its most significant highlights, benefits, possible disadvantages, also to show the level of utilization of e-HRM in Serbia. The procedure of the paper incorporates hypothetical investigation of the accessible writing and information on e-HRM and observational examination of information on the utilization of e-HRM in associations in Serbia. The examination was directed on the data set of Cranet research in 2015/2016 by utilizing the SPSS programming. The creators bring up that e-HRM is a sort of development that advances, creates, and works with the act of HRM, both for the branch of HR and for chiefs and representatives.

## Introduction

The most recent couple of many years have seen the extraordinary and dynamic improvement of IT that arrangements with its effects in different human asset occupations, beginning with the way data and correspondence, and numerous day to day exercises. The effect of IT advancement didn't sidestep the greater part of business elements that, on account of the utilization of this innovation and its imaginative arrangements, always altered the approach to performing different business exercises.

* Ph.D. Research Scholar

** Assistant Professor, Department of Management Nift-Tea College of Knitwear Fashion, East of TEKIC, Mudalipalayam, Tirupur – 641606

One of the areas that likewise didn't remain "saved" better approaches for performing exercises and undertakings is the HRM capability in associations. On account of the utilization of IT today, there is basically no single fragment of the extent of activity of this capability in which IT didn't find its application and irreversibly impacted the manner by which numerous exercises had been completed by then, at that point. The exercises that for the most part "went through" changes are the assortment, keeping and refreshing of workers' information, then exercises in the field of enlistment and choice of up-and-comers, the way of representative preparation, execution the executives, and so on.

Albeit the essential thought process in the execution of IT inside the HRM capability was to upgrade systems in completing the above exercises, other constructive outcomes, for example, cost decrease, better nature of administrations gave, efficiency increment, and so forth, likewise arose. It is hence not amazing that a rising number of associations use IT arrangements inside this capability, as well as expanding the intricacy of utilizations themselves in this field. It is essential to stress that the essential errand of this capability has not changed. It continues as before, which is "to empower associations to have a sufficient number and construction of representatives that will be accessible brilliantly and perfectly positioned at reasonable expenses and which will be spurred to accomplish the association's current and vital objectives" (Mama and Ye, 2015, p. 76). In any case, what has changed with its utilization is the way this capability achieves this assignment. By digitizing and robotizing managerial and value-based exercises, it can do as such in a more proficient manner. Simultaneously, the use of IT inside the HRM capability empowers workers to dedicate additional opportunity to those exercises that make more noteworthy incentive for associations, or at least, the plan of additional viable approaches in the HRM field that add to the improvement of hierarchical execution by which it (HRM) turns into the genuine vital accomplice in business (Repel and Tyson, 2011). Fundamentally, one might say that the utilization of IT inside the HRN is double.

Above all else, this innovation is utilized to interface spatially isolated substances by empowering them to communicate intelligently with the exhibition of different HRM exercises, regardless of whether they are in similar room or on various landmasses. Moreover, IT empowers the fractional or complete replacement of human work in performing different errands in the field of HRM, which basically turns into a method for their execution (Slavic and Berber, 2013, p. 238).

The far-reaching utilization of IT in the acknowledgment of HRM exercises has impacted the development of another HRM idea. An idea is referred to in scholarly writing as e-HRM, while by and by it is more considered normal called e-HR (Cultivate, 2009). Regardless, this is an idea that suggests the utilization of IT to offer different types of assistance from the human asset the executive's space in an association, and which approach has a large number of partners, beginning with HRM division, through supervisors, representatives, possible workers, and different partners.

The investigation was done on the information base of the Cranet Exploration from 2015/2016, by utilizing the SPPS programming. The actual work is organized such that the starting contemplations, is trailed by a survey of the writing alluding to e-HRM, while in the second piece of the paper the clarification of the examination strategy, the introduction of the exploration results, their conversation and it are determined to close contemplations.

## 1. The audit of the writing

To more readily comprehend the e-HRM idea, we will initially give an outline of the significance of distinct expression generally utilized, whatever is the Individual Asset Data Framework (HRIS). With regards to the HR Data Framework, it suggests orderly methodology for gathering, putting away, keeping up with, refreshing and dispersing information about HR association (Tannenbaum, 1990), However the fundamental client of this framework is from HRM capability (Ruel, Bondarouk and Looise, 2004). Actual objective of utilizing this data framework is to work on the HRM capability representation that whatever a roundabout way applies a positive impression on the whole effort of the association. Then again, with regards of e-HRM, particular idea alludes to the utility of techniques, arrangements and practices connected with HR in associations with help or full dependence on internet by which this innovation can be utilized by representatives of HRM division, along with different representatives in the association, expected workers, also the administration of the association Summing up the contrast in the mid of e-HRM and HRIS, Ruel and

partners showed of the HRIS incorporates frameworks that are just utilized away the HRM division, while the point where e-HRM is fundamentally to present to different clients, as well. As to term e-HRM itself, its starting point has been connected to 1990s, beside the possibility of every rise about e - business (Lengnick-Corridor and Moritz, 2003). In this manner, as per the standing of online business, the affix "e" do utilized now in HRM, whatever brought about the brand of the e-HRM idea (Ha, 2011, p. 20). At any rate, with regards to considerate the quintessence about every e-HRM idea, it is perceptible a certain capable is still no sole picture.

This is made sense of by the way that various creators put accentuation on various parts of e-HRM. Subsequently, while making sense of the quintessence of e-HRM, a few creators put one accentuation about value-based lateral of e-HRM, as it where to say, the way that HRM exercises are all the more handily regulated, different creators, put accentuation on innovation that gives admittance to HR information, while the third gathering of creators puts accentuation on the essential part of e-HRM. With regards into the main gathering of creators, a few of them bring up certain e-HRM is such an idea anywhere it empowers enhancements the institution of human asset exercises and exchanges.

Likewise, Voermans and Van Veldhoven bring up that e-HRM addresses managerial help as HRM away utilizing web innovation with regards to every alternative gathering of discernments, where the attention is on innovation, it is expressed that e-HRM suggests the utilization about IT as systems administration or backing between no less than binary individual or aggregate substances now acknowledgment of HRM exercises. Likewise, in this gathering of perspectives, the conviction that e-HRM addresses the utilization of various kinds of advancements that empower supervisors and representatives to have an immediate admittance to HR information along with different managerial applications.

They likewise notice Bondarouk and Brewster (2016) certain demonstrate that e-HRM centres around entire joining components also all the substance of HR the board that is sent over IT, which plans into generate the HRM action more steady, more proficient, amidst exceptional quality, also whatever ought to set out long term open doors for the partners of the association. At long last, with regards through every triennial gathering of creators, it is demonstrated a particular e-HRM is, as a matter of evidence, a far-reaching label which encloses generally potential components and connections among HRM as well as IT pointed toward making an incentive for representatives and chiefs in the association, as well concerning substances beyond them (Bondarouk and Ruel 2009, p. 507). It was important to give the most straightforward meaning of e-HRM, e-HRM addresses cross-cutting with reciprocal among HRM along with IT, else with utilization of web advancements for the decapitation of approaches, practices, and strategies of HRM. E-HRM, as a matter of fact, configuration of electronic networks, software, and computer hardware to facilitate HRM activities. Simultaneously, the level of actual presence of equipment and programming and how much they are utilized to arrange individual and gathering exchanges in HRM region, regardless of the geological imperatives and hierarchical flat and vertical separation of clients, decides the amount of advancement about e-HRM in associations (Marler, & Repel, 2016). Since there are contrasts in grasping the job of e-HRM in associations (yet in addition in the extent of applied equipment together with programming improvement), it is normal a well-known capable abide contrasts in e-HRM height.

According to Lepak together with Snell (1998), we have three degrees of e-HRM in this regard: transformational, operational, and relational with respect of the previously mentioned creators, the functional e-HRM alludes to the organization of information connected with profit of workers, and their own information. Because of the utilization of IT over this space, representatives can refresh themselves all alone, elsewhere might be finished with HR staff.

Utilizing IT to meet these requirements aims to either decrease value along with enhancing the HRM function's efficiency to complete potential transactions in each amount of time, particularly when measuring revenue. Practice genuinely affirms that evidence of empowers the expansion in the productivity about HRM capability through decrease of faculty onto HR administration, speeding up the acknowledgment, diminishing expenses and easing staff from managerial errands (Ru e l, Bondarouk and Looise, 2004; 2007 Strohmeier; Bondarouk, Repel and Furtmueller, 2017; Micu, Capatina, Micu and Schin, 2017). With regards to social e-HRM Lepak and Snell (1998), highlight the IT backing whereas business processes through its

operation thru the field of representative preparation, enrolment of competitors, worker execution the board, and so on. Subsequently, for instance, its utilization in enrolling of up-and-comers empowers this action into accomplished by publicizing about the right to fill a task position by means of an association's location or over specific locales. Furthermore, intrigued up-and-comers can likewise exercise by the IT furthermore the Web. Table 1 provides a summary of the more HRM activities for which IT is utilized.

**Table 1 The Utilization of IT in the fulfilment of necessary human resource management tasks.**

| HRM INITIATIVES | HRM STEPS | INCORPORATED IT ASSIST |
|---|---|---|
| **ADMINISTRATIVE SUPPORT** | Common details of employee records (attendance, salary, etc.). | Governance of Database, or Monitoring system for presence / absence tracking, admission. |
| **HR PLANNING** | Metrics inspection of variance, manpower planning | Current methods inspection, replication samples, etc. |
| **JOB ANALYSIS** | Administration of organization report and criteria data, Inspection of company framework | Report of output of work inspection, Picturing of current and future company structure |
| **RECRUITMENT** | Procedure structuring, report hiring execution | Modelling, admitting and governing data from marketing, request forms, aid for traditional and web hiring, utilization of public networks. |
| **DEVELOPMENT PROGRAMS** | Investigation on the studies and growth requirement of employees, blueprint of training topics, coordination of training, record of training artifacts. | Web questionnaires, research of growth fashion, data governance, application of e-learning projects. |
| **INDIVIDUAL PERFORMANCE MANAGEMENT** | Operation metrics. | Record, inspection, feedback, current analysis. |
| **COMPENSATION** | Creation of compensation structure, salary modelling, level of salary scrutiny analysis external information | Inspection, valuation depends on interior and |

At long last, with regards to the triennial degree of eHRM, the Lepak and Snell (1998) assign as the groundbreaking e-HRM, actually, as they would see it, connected with the acknowledgment of exercises in the HRM region that have an essential significance for the association which are information the executives, worker improvement as per the essential objectives of the association, backing to virtual groups, data trade, and so forth. In any case, about which degree to these exercises will truly affect the detailing and execution of the association's technique, there are various perspectives. Tansley, Newell, & Williams (2001) finger to elsewhere e-HRM is have not utilized its possibility to elevate the HRM function's strategic importance within the organization. E-HRM, on the different side, has facilitated a good collaboration of the HRM process with the company strategy, according to empirical research (Ruel, Bondarouk, & Looise, 2004).

Finally, studies have displayed that e-HRM is particularly purposed for governance methods apart from strategic decisions. However, Burbach & Dundon (2005) found that some organizations found that e-HRM provided higher-quality knowledge on human resources

compare to institution which do not use e-HRM. The main goals of starting this method is also obtained from the different stated methods of eHRM implementation.

These are: expanding the productivity of HR methods also techniques (Obeidat, 2016), expanding functional effectiveness, working on the ground of administrations produced and expanding of essential significance of HRM capability (Lepak and Snell, 1998). Repel and Tyson valued two more objectives: skilling managers to take away a variety of HRM-related activities and standardizing HRM-related procedures In any case, Armstrong had a considerably more point by point proposal, expresses the execution about e-HRM idea empowers the enhancement of exercises and cycles derived from HRM space by accomplishing the accompanying objectives:

- improvise the value of the information that is available,
- lessen the governance pressure on the HR area,
- gear up the presence of information,
- make it more flexible to engage business structuring,
- provide better practices to employees, develop HR statistics,
- help with human investment auditing, increase productivity,
- cut operational costs, and better manage people's working hours.

In any case, regardless of the unquestionable benefits of carrying out the e-HRM idea, certain likely deficiencies and difficulties are also available. A couple of us took apart as primary are Information misuse and access that is not legal: The highlight of the primary drawbacks of e-HRM is which the data in the storage also be utilized for a variety of purposes and are accessible to individuals having legal or illegal access to them. As such, it is "hacked", erased, and so on.

A deficient of qualified personnel: Despite the reality that execution about e-HRM idea may be spurred due to decrease in the quantity of representatives, there might be an absence of staff inside the HRM capability that has the proper specialized KSAs vital for the execution and overhauling of the eHRM framework, so there might also a requirement for their enrolment as well as related costs.

Errors made during data entry: To effectively work the e-HRM framework, it is important to keep away from blunders while programming this framework, yet in addition while utilizing various applications. But those are not completely excluded when it comes to human error.

Relational connects are decreased: however, the execution about the e-HRM idea primarily includes person work, also the quantity of representatives' relational contacts is diminished while performing work undertakings, that in few of which can prompt the sensations of disengagement.

Inadequate utilization of e-HRM capabilities as an output of employees' rigid thinking: To really take values of advantages given about the e-HRM idea, workers inside of HRM capability impact the way they think, most of us have shown to be sure of the utilization of present-day innovation accordingly, yet additionally its prospects. Nonetheless, if changes in the innovation of doing work undertakings are not joined by a change of the perspective and hierarchical culture, the presentation of the e-HRM idea can be changed into a "monetary disaster".

The drawback to HRM's function. The fundamental steps on which the importance of this program is based, namely, the human resource is on top, are dependent on the reality that the implementation about the-HRM design may result in an excess of employees performing this function. A significant person of a company which makes it possible for it to enhance its objectives and mission will be destroyed. Eventually, it ought to be stressed that the simple display of the e-HRM idea isn't regardless of challenge, change as any, particularly revolutionary, which it can bring pretty much opposition. Since this idea was around for a while, it is possible to make some corrections that can be helpful to keep in mind when putting it into action.

Specifically, it is mandatory to make sure that employees as well as different stakeholders approve the change of new processes for putting HRM activities into action are compatible of the complete HRM system prior to considering the introduction of a concrete aspect of e-HRM. Moreover, it is significant to prepare employees on how to play out the past exercises in another manner utilizing IT and fitting applications. All of this necessitates the commitment and support of upper management for all parties involved in putting these methods into reality. The editors of the thesis

looked at empirical data with to explore how much e-HRM is utilized for organizations in Serbia. The Cranet project's methodology and analysis's findings are discussed in below section.

Methodology The data is picked from the global network of administrative colleges known as Cranet research. With the help of a standard questionnaire, this worldwide network, led of Cranfield School Management, schedules comparative research on human resource methods and practice. The exploration is done like clockwork in north of 40 nations of the world.

The fact of the exploration is to give high quality information to the scholar, public and confidential areas, as well with respect to human asset the executives understudies, and to make new information about human asset the board practice in various nations of globe. The poll is converted into the country lingual wherein the review is led, by this accomplishing nearby change and a better comprehension of the problem.

The analysis team divided the certified questionnaire into six sections: HRM exercises in an association, staffing practice, representative turn of events, remuneration and advantages, associations with workers and correspondences, also hierarchical subtleties. In Serbia, the main individual from the worldwide logical organization, in 2008, interestingly, the Workforce of Financial matters in Subotica, College of Novi Miserable, took part in a global concentrate on HR the board exercises with 50 examined associations. 160 Serbian organizations were investigated during the first half of 2015. Replies to polls were given by chief administrators or HR supervisors in associations within excess of 50 representatives.

**TABLE 2 LAYOUT OF COMPANY MEASURED BY A TOTAL COUNT OF EMPLOYEES (N = 160)**

| COMPANY SIZE (BY COUNT OF EMPLOYEES) | FREQUENCY | % |
|---|---|---|
| 1-249 | 97 | 60.6 |
| 250-1000 | 42 | 26.3 |
| 1000+ | 21 | 13.1 |
| **TOTAL** | **160** | **100** |

The information in above Table 2 predicts the biggest portion about examined associations in 2015 in Serbia actually was in the gathering of little and medium undertakings (60.6% of associations), as per the quantity of representatives, about 1 to 250 specialists. Enormous organizations had close to 27% (more than 250 laborers in the association). Extremely enormous ventures, more than 1000 specialists, took 13% of the all-out example.

**TABLE 3 PROPRIETARY LAYOUT OF COMPANY MEASURED (Number = 160)**

| PROPRIETARY | FREQUENCY | % |
|---|---|---|
| Private | 105 | 66 |
| Public | 54 | 34 |
| Mixed | 0 | 0 |
| Other | 0 | 0 |
| Total | 159 | 99.4 |
| Missing | 1 | 0.6 |
| **TOTAL** | **160** | **100** |

The information in above Table 3 demonstrates which the biggest portion of dissected associations was in Serbia in the confidential area, sixty-six percentage. However, people in general there are 34% associations. Production accounts for approximately 45 percent of businesses, while 55 percent of organizations are involved in providing services. In 2015, the food, trade, telecommunications, and IT industries made up most of the organizations analysed in Serbia. The below items have been examined

- e-HRM Utilization in an association.
- Utilization of oneself assistance framework for administrators.
- Self-service system uses by the employee.

With the end goal of a lot of definite examination, the referenced factors were put corresponding of the factors like the size, area, as well as industry of the venture to decide the levels of purpose and portrayal of these frameworks in associations in Republic of Serbia. Investigation Information is completed using the SPSS measurable program, by utilizing engaging measurements and the Spearman's Chi-Square test.

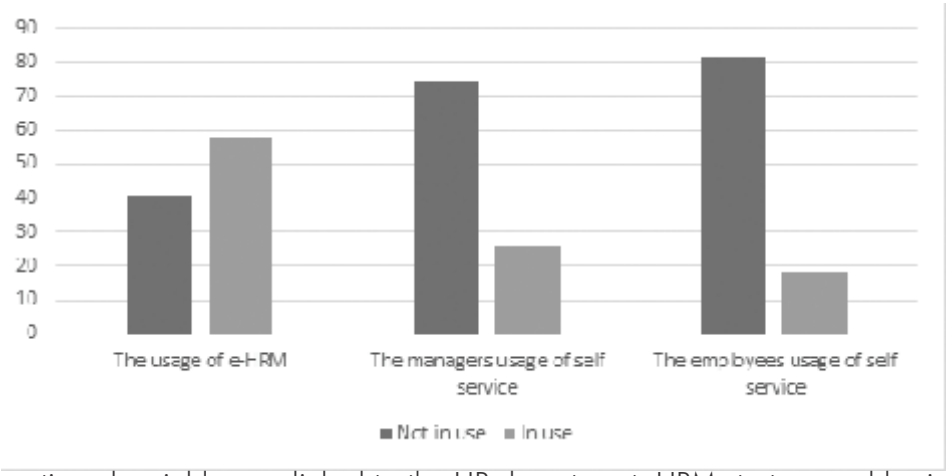
## Results

The frequency with which HRM tasks are implemented using e-HRM is depicted in figure 1. With respect to the data, out of a example of 160 businesses in Serbia, 58% employees utilize this particular system to give HR initiatives to employees. Forty-two percentage of associations don't utilize eHRM. Only one-four of the company that were surveyed make use of the segment for self-service users to take away a variety of HRM initiatives. Most businesses still do not provide their managers with this opportunity.

This system makes it possible for managers to check employee's data about their collaboration, making it possible for them to take away specific HR tasks like holiday approvals, keeping track of employees' absences, building, and recording the accomplishment of employee targets, cost approvals, suggesting promotion for employees, analysing data about issues and organizations abandonment, and so on. The representative self-administration module empowers human asset experts and workers to oversee worker-based information.

They can, assuming it is anticipated by the degree of admittance to the framework, have knowledge of every one of their information, and a less information might change. Permission to data can be granted higher, yet additionally through the web, the accessibility of information is more noteworthy. Figure 1 depicts that this module is utilized by approximately 1/5 of analysed organizations, or 18.4%. The majority of Serbian businesses do not provide employees with the option of having independent access to employee data. through the intra network, also the system's security can be enhanced in accordance to the specific enterprise solution.

**Figure 1 Picturization of e-MLP in Serbia (%)**
**Source: Analysis of the authors in Serbia located organizations.**




Data on a forementioned variables are linked to the HR department, HRM strategy and business strategy in the below section of the data as a factor of the tactical proceed towards the HRM with respect of the frequency of e-HRM usage as well as the self-access system for HR details for employees and managers.

**TABLE.4 UTILIZATION OF SELF-SERVICE FOR EMPLOYEES, MANAGERS AND E-HRM IN CORRESPONDING TO THE PRESENCE OF HRM DEPARTMENT**

| | | e-HRM usage (%) | | Total | Chi-square | Sig |
|---|---|---|---|---|---|---|
| | | No | Yes | | | |
| **Presence of HR department (%)** | No | 68.2 | 31.8 | 100 | $x^2$=17.256 | Phi=0.328 |
| | Yes | 31.9 | 68.1 | 100 | p=0.000 | p=0.000 |
| **Total** | | **41.9** | **58.1** | **100** | | |
| | | **Self-service usage for managers (%)** | | **Total** | **Chi-square** | **Sin** |
| | | **No** | **Yes** | | | |
| **Presence of HR department (%)** | No | 93.2 | 6.8 | 100 | $x^2$=11.263 | hi=0.265 |
| | Yes | 67.2 | 32.8 | 100 | p=0.001 | p=0.001 |
| **Total** | | **74.4** | **25.6** | **100** | | |
| | | **Self-service usage for employees (%)** | | **Total** | **Chi-square** | **Sig** |
| | | **No** | **Yes** | | | |
| **Presence of HR department (%)** | No | 97.7 | 2.3 | 100 | $x^2$=10.129 | Phi=0.253 |
| | Yes | 75.7 | 24.3 | 100 | p=0.001 | p=0.001 |
| **Total** | | **81.7** | **18.4** | **100** | | |

It is crystal clear from the information in Table No. four that e-HRM and managers for self-service and employee's section to present in a greater proportion in organizations that have HR departments. Because of e-HRM, that's what information demonstrate on the off chance as presence of HR unit in the association, 68% of associations will utilize e-HRM. The power of the relationship is communicated by the coefficient Phi is equal to 0.328 (p equals 0.000), that shows which is a feeble, genuinely critical connection between the noticed double factors. Because of involving free access for administrators, that's what the information demonstrates assuming on hand is a HR division to the association, around 33% of associations (¬2 is 11,263; p = 0.001). The coefficient Phi is 0.265 (p is 0.001) indicates that there is a weak but statistically significant connection between the observed binary variables, indicating the robustness of this relationship. When data on the purpose of single permission to employee systems is looked at, 24.3% of businesses with a HRM department will utilize an independent advance towards employee data (2 equals 10.129; p is 0.001). The power of this collaboration is communicated by the coefficient Phi equals 0.253 (p equals 0.001), that shows this is a frail, measurably huge connection between the noticed two-fold factors.

**TABLE. 5 MANAGERS, EMPLOYEES AND E-HRM, IN COLLABORATION TO WITH HR STRATEGY IN A COMPANY.**

| | | e-HRM usage (%) | | Total | Chi-square | Sig |
|---|---|---|---|---|---|---|
| | | No | Yes | | | |
| **Presence of HR strategy (%)** | No | 62.7 | 37.3 | 100 | $x^2$=20,512 | Phi=0.358 |
| | Yes | 26.9 | 73.1 | 100 | p=0.000 | p=0.000 |
| **Total** | | **41.9** | **58.1** | **100** | | |
| | | **Self-service usage for managers (%)** | | **Total** | **Chi-square** | **Sin** |
| | | **No** | **Yes** | | | |
| **Presence of HR strategy (%)** | No | 89.6 | 10.4 | 100 | $x^2$=13,923 | phi=0.295 |
| | Yes | 63.4 | 36.6 | 100 | p=0.000 | p=0.000 |
| **Total** | | **74.4** | **25.6** | **100** | | |
| | | **Self-service usage for employees (%)** | | **Total** | **Chi-square** | **Sig** |
| | | **No** | **Yes** | | | |
| **Presence of HR strategy (%)** | No | 93.8 | 6.2 | 100 | $x^2$=10,969 | Phi=0.263 |
| | Yes | 73.1 | 26.9 | 100 | p=0.001 | p=0.001 |
| **Total** | | **81.7** | **18.4** | **100** | | |

As per the information in Table 5, it very well may be presumed that assuming that associations have a person asset the board technique, e-HRM, free access for supervisors and representatives to the information on workers will be remembered for a bigger portion of associations. Because of e-HRM use, that's what information demonstrate if associations have a particular HRM procedure, seventy-three percentage of associations will utilize e-HR. The coefficient Phi is 0.358 (p is 0.000) indicates that there is a weak but statistically significant connection between the observed binary variables, indicating the stability of this relationship. When it arrives to manager self-service, the information display that approximately 37% of businesses with an HR tactical (X2 is 13,923; p is 0,000). The robustness of this relationship is communicated with the coefficient Phi is 0.295 (p is 0.000), that shows this is a feeble, genuinely critical connection between the noticed twofold factors. When looking at the text on how employees use self-service, it becomes clear that twenty-seven percentage of organizations do utilize an autonomous method for an employee to utilize staff data if the organization has a HRM strategy (X2 equals 10,969; p is 0.001). The power of this relationship is communicated with the coefficient Phi is 0.263 (p is 0.001), that demonstrates which is a frail, genuinely critical connection between the noticed twofold factors.

**TABLE. 6 USES OF SELF-SERVICE FOR MANAGERS, EMPLOYEES AND E-HRM IN COLLABORATION TO THE PRESENCE OF BUSINESS TACTICAL IN AN ORGANIZATION.**

| | | e-HRM usage (%) | | Total | Chi-square | Sig |
|---|---|---|---|---|---|---|
| | | No | Yes | | | |
| **Presence of Business strategy (%)** | No | 80 | 20 | 100 | $x^2$=13,451 | Phi=0.291 |
| | Yes | 36.7 | 63.3 | 100 | p=0.000 | p=0.000 |
| **Total** | | **41.9** | **57.9** | **100** | | |
| | | **Self-service usage for managers (%)** | | **Total** | **Chi-square** | **Sin** |
| | | **No** | **Yes** | | | |
| **Presence of Corporate strategy (%)** | No | 95 | 5 | 100 | $x^2$=4,937 | phi=0.175 |
| | Yes | 71.9 | 28.1 | 100 | p=0.025 | p=0.025 |
| **Total** | | **74.4** | **25.6** | **100** | | |
| | | **Self-service usage for employees (%)** | | **Total** | **Chi-square** | **Sig** |
| | | **No** | **Yes** | | | |
| **Presence of Business strategy (%)** | No | 100 | 0 | 100 | $x^2$=4,897 | Phi=0.177 |
| | Yes | 79 | 21 | 100 | p=0.027 | p=0.027 |
| **Total** | | **81.7** | **18.5** | **100** | | |

Because of using e-HRM, that's what the information demonstrates on the off chance where there is a trade methodology in the association, 63.3% of associations will utilize e-HRM (X2 equals 13.541; p is 0.000). The coefficient Phi is 0,291 (p is 0,000) indicates that there is a weak but statistically significant connection between the observed binary variables, indicating the power of relationship.

Because of the utilization of self-administration for chiefs, that's what the information shows has a business methodology for the association, around 28% about the associations that utilize the referenced module (X2 is 4,937; p is 0.026). The power of relationship is communicated by the coefficient Phi is 0.176 (p is 0.026), that demonstrates this is a frail, measurably huge connection between the noticed twofold factors. When looking at the message on how employees use the self-service application, it has been clear that twenty-one percent of businesses as well as use an autonomous approach to individual data if they have a business tactical (2 is 4.897; p is 0.027). The coefficient Phi equals 0.177 (p is 0.027) indicates that there is a weak but statistically significant connection between the observed binary variables, indicating the robustness of this relationship.

## Conclusion

Since it every time gives a structure for framing business steps and activities, the HR function's duties and responsibilities have changed over time in a path that not only changed attitudes toward human capital however, also the way technological advancements occurred. In recent times, IT and electronic systems have provided this feature with a very potent ally for its development. Specifically, as a output of the transactional, day-to-day HR activities carried out by IT as well as digital systems, such as keeping track of attendance reports, no shows, wellness leave, yearly leave, compensation payments, welfare, encouragement, tutoring, measuring accomplishment of targets, employment duration, and finish of work agreement of representatives, the preparation of fundamental labourers with respect to the elements of crafted by the association, and so on., are completed quicker, more precisely, and simpler than previously. The new HRM concept, which was given the name "e HRM," was developed simultaneously as a output of relation between IT and HRM.

The paper discussed the fundamental nature of this idea, and its benefits and potential obstacles, considering its rapidly broad spread systems also significance to both the organization's tactical administration of human investment and daily HR transaction activities. As per the paper, the main benefits of corresponding system include cost savings, faster, more accurate, and simpler processing of employee information, the removal of HR person from management duties, spike access to HR data, normalization of HR processes throughout the organisation, and more standard and recent employee and performance data, among other benefits.

Concerning the information, with least a half of the 160 companies in Serbia that were surveyed utilize such application. Because of the utilization of the framework/module for self-service for directors and representatives, this level of associations is significantly more modest, just ¼ associations regarding administrators, and 1/5 with regards to different representatives. While considering the utilization of e-HRM corresponding to the existence of HR division, HR systems and trading techniques in the association, in almost all natures, associations use eHRM as well as modules for free information admittance undeniably while having referenced components. This lets us know that the improvision of the HRM cycle, saw from an essential point, adds to the grasping, execution and the utilization of present-day mechanical accomplishments in this area.

The highest significant e-HRM suggestions are presented, highlighting both the benefits and the blocks that supervisors need to be aware of and analyse if they conclude to implement e-HRM. This reflects the paper's practical implications. Additionally, it is essential to be aware of all the indication of the e-HRM system because the HR procedure is an essential component about the overall business procedure. The initiation of organizations with eHRM capabilities makes it possible to implement such a application more confidently and successfully, which can result in several welfare which has already been mentioned multiple iterations in the task. E-HRM is particularly important for Serbian businesses because a fifty percent of them use it. HR team and other business activities may see cost accruals and increased efficiency as an output of the deploy of such a system.

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# A STUDY ON THE EFFECTIVENESS OF 'AI-GENERATED RECOMMENDATIONS' AMONG GEN Z

***Ms. Ekta Singh, **Dr. Varsha Ganatra**


## ABSTRACT

***Research Background:*** *In a time when digital content consumption is omnipresent AI- powered content recommendations have become a significant factor in user experience, engagement, and satisfaction. All areas of consumer services are seeing an increase in the use of suggestion engines. AI can now provide references that are more distinctive and individual than before, as it is becoming more tangible than before. This study investigates the efficacy of AI-powered content recommendations among Gen Z, a demographic that shares the trait of being highly digitally literate and having active taste in content.*

***Aims:*** *This study looks into how personalized content recommendations affect discoverability, interaction levels, and the variety of content consumed to shed light on the implications of AI- driven recommendations for users and digital platforms.*

***Methodology:*** *This study employed a survey questionnaire approach and included information gathered from more than 100 Gen-Z respondents.*

***Results/Findings:*** *The current study understands the trust towards the recommendation system as well as the impact of limitations on the level of satisfaction and viewing experience by AI- generated recommendations.*

***Implications:*** *The study will not only contribute to the academic discourse on AI and Generation Z also provides valuable insights to marketers and companies looking to better tailor their recommendation systems to this generation of digital natives.*


***Key Words:*** *AI, Gen Z, Content recommendations.*

## Introduction

We live in a world where content is king, and it's all around us - from articles and videos to music and podcasts.

With so much content available, it can be overwhelming to decide what to consume next. Consumers enjoy the process of searching for optimal alternatives by exploring and comparing various content available through channels. Consumers have a plethora of options available to them. The shift of consumers towards digital options has added an extra challenge of navigating the vast ocean of content and effectively discovering the one that resonates the most with their individual preferences. Among the generations aligned to the digital empire, Gen Z, in particular, stands as a

*Research Scholar, Department of Financial Markets, V.E.S College of Arts, Science and Commerce, Sindhi Society, Mumbai, India.
**Associate Professor, Department of Commerce, V.E.S College of Arts, Science and Commerce, Sindhi Society, Mumbai, India

group that has grown up amongst the rapid evolution of technology and owns distinct behaviors and expectations when it comes to digital content consumption. This is where 'recommendation' comes into the picture. The content recommendation makes it less tedious for readers, viewers, or listeners to locate their desired content. Due to the pool of data required to make precise suggestions, AI comes in handy. By tapping into the power of recommendation systems, one can personalize each customer's journey and reduce bounce rates. The AI-based recommendation system constantly learns and evolves as it processes more data. It can make better recommendations over time by understanding the customer's preferences and interests.

### 1. Artificial Intelligence :

Artificial intelligence (AI), is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. AI is a technology that is transforming every walk of life. It is a wide-ranging tool that enables people to rethink how we integrate information, analyze data, and use the resulting insights to improve decision-making. Today's age is rightly called the 'era of abundance' with plenty of options available on the internet, making it difficult to make a choice. In any sector where content is offered to users in one form or another, recommending new material is an essential element of the system.

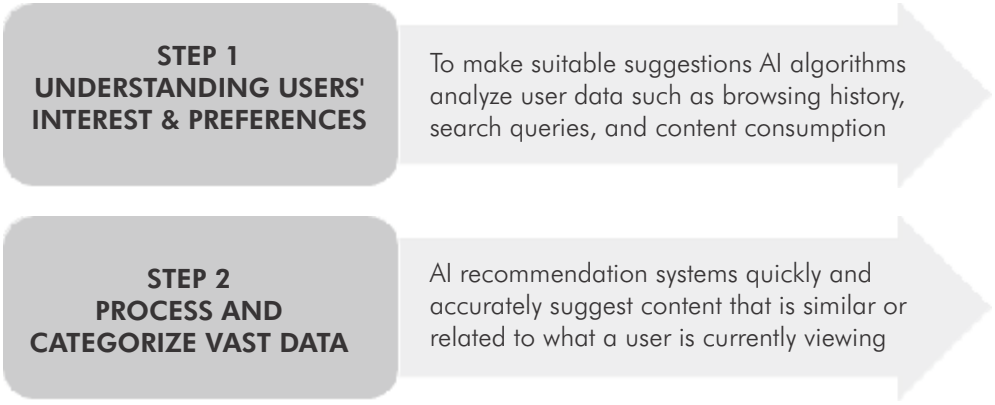
### 2. AI Recommendations:

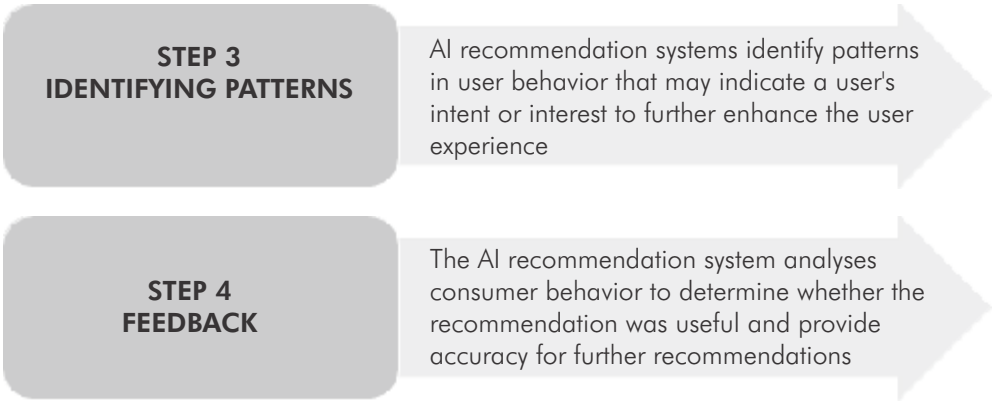
An artificial intelligence recommendation system (or recommendation engine) is a class of machine learning algorithms used by developers to predict the users' choices and offer relevant suggestions to users. It is very similar to an experienced shop assistant during offline shopping who very well understands the needs and preferences of the customers to help them make their choice. The recommendation system offers benefits to both customers as well as the service providers. Mentioned below are a few of such advantages:

| Benefits to Consumers | Benefits to Service Providers |
|---|---|
| Reduces the time spent on searching for the required content | Provides user loyalty and leads to a high purchase rate |
| Aids in the selection process for undecided customers | Encourages users to interact with more content, this leads to increased consumption and increased profits |
| Improves the relevance of search results | Shows users newly-released content based on each user's preference. |

### 3. AI Content Recommendation System

The AI recommendation system analyzes and understands a large amount of data to provide accurate and personalized recommendations in various ways. One of such is as mentioned below:






## 4. Types of Content Recommendation System

There are different content recommendation systems depending on the needs and requirements. Some of the common recommendation systems are as follows

| | |
|---|---|
| **Collaborative filtering** | The data from multiple users is fused to generate recommendations. Ex. Netflix |
| **Content-based filtering** | The system itself analyses the data from users' history to generate recommendations. Ex. Gaana |
| **Hybrid recommendation** | This system is a combination of both collaborative and content-based filtering for be more accurate in their recommendations. Ex. Spotify |
| **Contextual recommendation** | These systems take into account contextual factors such as time, location, and cevice to generate. Ex. News App recommendations |
| **Knowledge-based recommendation** | Knowledge graphs and other data sources are used to generate recommendations. Ex. E-commerce sites |
| **Reinforcement learning recommendation** | These systems use machine learning algorithms to optimize content recommendations based on user behaviour. |

Different recommendation system is applicable to different industry depending on their needs and requirements. The current study tries to highlight the impact of these AI recommendation systems on audio and video streaming services while offering content to users.

## 5. AI and Media Industry

Artificial intelligence is speedily moving as one of the major forces in media and entertainment. Artificial intelligence (AI) is changing the media industry profoundly, from personalized content recommendations to automated film and television production. As per the data collected by Practus, a consulting firm the global market for AI in the media and entertainment sector will increase to $ 8.4 billion in 2023. By 2024, the worldwide media and entertainment industry is expected to have generated almost $2.6 trillion in revenue thus suggesting the important role to be played by AI in the near future.

Artificial intelligence (AI) is revolutionizing the media

and entertainment sector by streamlining and improving every facet, from creating original content to analyzing audience data to optimizing ad placement.

### 6. Generation Z (gen Z)

Compared to prior generations, Gen Zers are more inclined to watch streaming services they are more persuaded to fast-forward through and only watch their favorite scenes or the most well-liked episodes, and with so much content available online it becomes very difficult and tiring for them to make a choice and this is where the recommendation system acts as a cupid in offering and highlighting content that would be mostly preferred by them.

### 7. Role of Content Recommendation System Among Gen Z

It is believed that Gen Z is a generation born with the availability of information at their fingertips. They spend the majority of their time viewing various content online. With so much of options available to them, it becomes really difficult for them to make a suitable choice. The AI-generated content recommendation system is one of the most important aspects of streaming media businesses. It offers an easy and reliable method to personalize users' experience by suggesting content based on their interests. The recommendation system aids the user in the following ways:

- Personalized recommendations
- New content discovery
- Better content analysis
- Time-saving

And all of these outcomes lead to customer satisfaction, which in turn boosts revenue. AI- powered content recommendation has a significant impact on media consumption, leading to increased engagement and revenue, and changing the way Gen Z consume media.

## Objective of the Study

i. To assess the awareness and impact of AI-powered content recommendations on Gen Z users.

ii. To study the impact AI powered content recommendations for media streaming services.

## Hypothesis

1) H0: All the factors equally suggest that AI-generated content better understands preferences and interests compared to human-generated content.

   H1: Some factors suggest that AI-generated content better understands preferences and interests compared to human-generated content.

2) H0: All the limitations are equally perceived in AI-generated content.

   H2: Some of the limitations are more perceived in AI-generated content than others.

3) H0: There is no correlation between different limitation factors with satisfaction and concern

   H3: There is a correlation between some of the limitation factors with satisfaction and concern

## Review of Literature

Artificial intelligence may utilize deep learning or machine learning techniques to study and analyze user's preferences and choices in order to provide appropriate recommendations. The popularity of recommendation system is increasingly rising because it provides the user with a personalized experience.

As per the paper titled "Ethical and Legal Implications of Using AI-powered Recommendation Systems in Streaming Services" (Sorbán. K, 2021), the impact of AI recommendation systems is such that the users sometimes feel that service providers are not less than any mind readers who successfully manage to know what the users exactly want. It could also be seen that the market for AI recommendation engines is gearing speed in the entertainment industry as it helps to keep the users glued in front of their screens.

In the article titled "A Review of Artificial Intelligence Adoptions in the Media Industry" (Chan-Olmsted, S. M. 2019) the author tries to explain that AI has played a significant role in the media industry in eight major areas of augmented audience experience, content management, operational automation, audience engagement, message optimization, audience insights, content creation and audience content recommendations/discovery.

According to the research titled "User Perceptions of Algorithmic Decisions in the Personalized AI System: Perceptual Evaluation of Fairness, Accountability,

Transparency, and Explainability" (Donghee Shin 2020) the author indicates that with the mounting existence of algorithms and their across-the-board effects, artificial intelligence (AI) will be a mainstream trend any time soon. When the users observe the use of algorithmic recommendations by digital platforms as accountable, transparent, and interpretable they perceive that the algorithm is fairer, more liable, clear, and understandable they see it as more trustworthy and useful.

## Objectives of the Study

1. To study the concepts of AI recommendation systems and Gen Z.
2. To understand and analyze the awareness and familiarity concerning AI-driven content.
3. To comprehend and interpret the AI-generated recommendations for media streaming services.

## Research Methodology

The current study makes use of both primary and secondary data. Published materials like literature studies, periodicals, websites, and other sources were the foundation for secondary sources whereas the primary data was collected through a questionnaire where the method of data collection would be through snowball sampling.

## Findings

### Statistical Analysis

**Gender:**

| | Count | Column N % |
|---|---|---|
| Female | 48 | 48.0% |
| Male | 52 | 52.0% |

**Age Group (in years):**

| | Count | Column N % |
|---|---|---|
| 16-20 years | 55 | 74.0% |
| 21-25 years | 25 | 25.0% |
| 26-30 years | 20 | 1.0% |

**Location:**

| | Count | Column N % |
|---|---|---|
| Rural | 2 | 2.0% |
| Suburban | 40 | 40.0% |
| Urban | 58 | 58.0% |

Have you heard of AI-generated content?

| | Count | Column N % |
|---|---|---|
| No | 5 | 5.0% |
| Yes | 95 | 95.0% |

In which of the following contexts have you commonly encountered AI-generated content? (Select all that apply)

| Apps | No. of respondents |
|---|---|
| Amazon | 43 |
| Chatbots or virtual assistants | 61 |
| eBay | 39 |
| E-commerce websites | 50 |
| Educational platforms | 51 |
| Gaming and entertainment applications | 30 |
| Netflix | 50 |
| News websites | 33 |
| Social media platforms | 71 |
| Spotify | 40 |
| Streaming services | 42 |

In your opinion, does AI-generated content better understand your preferences and interests compared to human-generated content?

| | Count | Column N % |
|---|---|---|
| No, AI-generated content does not better understand my preferences and interests because it lacks human creativity and intuition. | 22 | 22.0% |
| No, AI-generated content does not better understand my preferences and interests because it sometimes makes inaccurate assumptions based on limited data. | | 6.0% |
| Yes, AI-generated content better understands my preferences and interests because it analyses a larger volume of data and can identify patterns that humans might miss. | 47 | 47.0% |
| Yes, AI-generated content better understands my preferences and interests because it tailors' recommendations based on my past interactions and behavior. | 25 | 25.0% |

What factors suggest that AI-generated content better understands your preferences and interests compared to human-generated content?

H0: All the factors equally suggest that AI-generated content better understands preferences and interests compared to human-generated content.

H1: Some factors suggest that AI-generated content better understands preferences and interests compared to human-generated content.

**Data Distribution exhibit:**

| | | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| Tailor's recommendations based on my behavior. | Count | 1 | 8 | 33 | 41 | 17 |
| | percentage | 1.0% | 8.0% | 33.0% | 41.0% | 17.0% |
| Analyze more data for patterns. | Count | 1 | 4 | 21 | 55 | 19 |
| | percentage | 1.0% | 4.0% | 21.0% | 55.0% | 19.0% |
| Efficient in delivering personalized content. | Count | 2 | 6 | 35 | 36 | 21 |
| | percentage | 2.0% | 6.0% | 35.0% | 36.0% | 21.0% |
| Adapts to my changing preferences. | Count | 2 | 17 | 24 | 37 | 20 |
| | percentage | 2.0% | 17.0% | 24.0% | 37.0% | 20.0% |
| Considers a wide range of content sources. | Count | 7 | 2 | 20 | 37 | 34 |
| | percentage | 7.0% | 2.0% | 20.0% | 37.0% | 34.0% |
| Eliminates human bias. | Count | 6 | 14 | 28 | 33 | 19 |
| | percentage | 6.0% | 14.0% | 28.0% | 33.0% | 19.0% |
| Provides diverse suggestions. | Count | 1 | 9 | 33 | 35 | 22 |
| | percentage | 1.0% | 9.0% | 33.0% | 35.0% | 22.0% |

**Descriptive Statistics:**

| | Median | Mean | SD |
|---|---|---|---|
| Tailors recommendations based on my behavior. | 4.00 | 3.65 | .89 |
| Analyzes more data for patterns. | 4.00 | 3.87 | .80 |
| Efficient in delivering personalized content. | 4.00 | 3.68 | .94 |
| Adapts to my changing preferences. | 4.00 | 3.56 | 1.06 |
| Considers a wide range of content sources. | 4.00 | 3.89 | 1.12 |
| Eliminates human bias. | 4.00 | 3.45 | 1.13 |
| Provides diverse suggestions. | 4.00 | 3.68 | .95 |

**Kruskal-Wallis test result:**

**Mean Rank Table:**

| Index1 | Mean Rank |
|---|---|
| Tailor's recommendations based on my behavior. | 337.60 |
| Analyze more data for patterns. | 384.38 |
| Efficient in delivering personalized content. | 344.65 |
| Adapts to my changing preferences. | 328.55 |
| Considers a wide range of content sources. | 401.83 |
| Eliminates human bias. | 311.85 |
| Provides diverse suggestions. | 344.64 |

**Kruskal-Wallis test result:**

| | Value |
|---|---|
| Chi-Square | 16.144 |
| d.f. | 6 |
| p-value | .013 |

**Interpretations:** The p-value for the Kruskal-Wallis test is less than that of 0.05 indicates, that one should reject the null hypothesis and conclude that Some factors suggest that AI-generated content better understands preferences and interests compared to human-generated content. The higher mean rank indicates more important factor.

H0: All the limitations are equally perceived in AI-generated content.

H2: Some of the limitations are more perceived in AI-generated content than others.

**Basic Data Distribution:**

| | | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| Lack of creativity and human touch in content. | Count | 2 | 11 | 6 | 8 | 33 |
| | % | 2.0% | 11.0% | 6.0% | 38.0% | 33.0% |
| Potential for generating . misleading or false information | Count | 3 | 20 | 30 | 34 | 13 |
| | % | 3.0% | 20.0% | 30.0% | 34.0% | 13.0% |
| Difficulty in understanding nuanced or context-dependent content. | Count | 1 | 20 | 43 | 25 | 11 |
| | % | 1.0% | 20.0% | 43.0% | 25.0% | 11.0% |
| Overreliance on past preferences, leading to content "filter bubbles." | Count | 2 | 13 | 34 | 40 | 11 |
| | % | 2.0% | 13.0% | 34.0% | 40.0% | 11.0% |
| Inability to fully understand emotions and sentiment in content. | Count | 5 | 12 | 20 | 35 | 28 |
| | % | 5.0% | 12.0% | 20.0% | 35.0% | 28.0% |
| Limited ability to handle complex or abstract topics. | Count | 5 | 20 | 28 | 36 | 11 |
| | % | 5.0% | 20.0% | 28.0% | 36.0% | 11.0% |
| Potential for perpetuating biases present in training data. | Count | 3 | 10 | 39 | 36 | 12 |
| | % | 3.0% | 10.0% | 39.0% | 36.0% | 12.0% |
| Vulnerability to hacking or malicious manipulation. | Count | 5 | 12 | 32 | 26 | 25 |
| | % | 5.0% | 12.0% | 32.0% | 26.0% | 25.0% |
| Difficulty in generating content that requires human empathy or emotional understanding | Count | 5 | 15 | 11 | 38 | 31 |
| | % | 5.0% | 15.0% | 11.0% | 38.0% | 31.0% |

**Descriptive Statistics:**

| | Median | Mean | SD |
|---|---|---|---|
| Lack of creativity and human touch in content. | 4.00 | 3.89 | 1.05 |
| Potential for generating misleading or false information. | 3.00 | 3.34 | 1.04 |
| Difficulty in understanding nuanced or context-dependent content. | 3.00 | 3.25 | .94 |
| Overreliance on past preferences, leading to content "filter bubbles." | 4.00 | 3.45 | .93 |
| Inability to fully understand emotions and sentiment in content. | 4.00 | 3.69 | 1.15 |
| Limited ability to handle complex or abstract topics. | 3.00 | 3.28 | 1.06 |
| Potential for perpetuating biases present in training data. | 3.00 | 3.44 | .94 |
| Vulnerability to hacking or malicious manipulation. | 4.00 | 3.54 | 1.14 |
| Difficulty in generating content that requires human empathy or emotional understanding | 4.00 | 3.75 | 1.19 |

**Kruskal-Wallis test result:**

**Mean Rank Table:**

| Index1 | Mean Rank |
|---|---|
| Lack of creativity and human touch in content. | 543.12 |
| Potential for generating misleading or false information. | 407.38 |
| Difficulty in understanding nuanced or context-dependent content. | 377.20 |
| Overreliance on past preferences, leading to content "filter bubbles." | 430.03 |
| Inability to fully understand emotions and sentiment in content. | 498.43 |
| Limited ability to handle complex or abstract topics. | 397.05 |
| Potential for perpetuating biases present in training data. | 427.07 |
| Vulnerability to hacking or malicious manipulation. | 457.52 |
| Difficulty in generating content that requires human empathy or emotional understanding | 516.71 |

**Kruskal-Wallis test result:**

| | Value |
|---|---|
| Chi-Square | 42.086 |
| d.f. | 8 |
| p-value | .000 |

**Interpretations:**

The p-value for the Kruskal-Wallis test is less than that of 0.05 indicates, that one should reject the null hypothesis and conclude that some of the limitations are more perceived in AI-generated content than others. The higher mean rank indicates, a more important limitation.

**Correlation Analysis:**

H0: There is no correlation between different limitation factors with satisfaction and concern

H3: There is a correlation between some of the limitation factors with satisfaction and concern

| Limitations | | Satisfaction | Concern |
|---|---|---|---|
| Lack of creativity and human touch in content. | Correlation Coefficient | -.247** | 0.027 |
| | p-value | 0.005 | 0.753 |
| Potential for generating misleading or false information | Correlation Coefficient | 0.005 | .301** |
| | p-value | 0.954 | 0.000 |
| Difficulty in understanding nuanced or context-dependent content. | Correlation Coefficient | -0.029 | 0.098 |
| | p-value | 0.74 | 0.254 |
| Overreliance on past preferences, leading to content "filter bubbles." | Correlation Coefficient | 0.056 | .192* |
| | p-value | 0.528 | 0.027 |
| Inability to fully understand emotions and sentiment in content. | Correlation Coefficient | -0.001 | .262** |
| | p-value | 0.992 | 0.002 |
| Limited ability to handle complex or abstract topics. | Correlation Coefficient | 0.009 | 0.124 |
| | p-value | 0.914 | 0.145 |
| Potential for perpetuating biases present in training data. | Correlation Coefficient | 0.072 | .191* |
| | p-value | 0.416 | 0.027 |
| Vulnerability to hacking or malicious manipulation. | Correlation Coefficient | -0.034 | .260** |
| | p-value | 0.692 | 0.002 |
| Difficulty in generating content that requires human empathy or emotional understanding | Correlation Coefficient | -0.094 | .197* |
| | p-value | 0.284 | 0.022 |

## Interpretations

1. As the p-value for the correlation of "Lack of creativity and human touch in content" and Satisfaction is less than 0.05 with negative Kendall's tau -b correlation value indicates more that the limitation as "Lack of creativity and human touch in content" lesser will be satisfaction.
2. As the p-value for the correlation of and positive correlation value for 'Potential for generating misleading or false information', 'Overreliance on past preferences, leading to content "filter bubbles"', 'Inability to fully understand emotions and sentiment in content', 'Potential for perpetuating biases present in training data', 'Vulnerability to hacking or malicious manipulation' and 'Difficulty in generating content that requires human empathy or emotional understanding' with 'concern' shows that more the limitation on these factors more will be concern.

## Conclusion

Across social media, e-commerce, and entertainment services, Gen Z is highly engaged with AI-driven recommendations. Their desire for efficiency and relevance in their digital experiences is fulfilled by the curated and personalized nature of the content, which is largely responsible for this engagement. The study also indicates that Gen Z places a high value on the time- and convenience-saving features of AI recommendations, frequently using these systems to make decisions about shopping, consuming content, and even educational resources. It appears that their general ease with technology and familiarity with digital environments influence their trust in AI's ability to provide relevant suggestions. People are aware of the advantages of tailored recommendations, but they are skeptical of the methods used to gather data by these artificial intelligence systems. This ambiguity emphasizes the necessity of openness and morality when implementing AI technology. To sum up, Gen Z finds AI- generated recommendations to be very effective in improving their digital interactions and aiding in their decision-making. In order to retain and grow trust with this tech-savvy generation, developers and businesses must address privacy concerns and ensure ethical practices as this technology continues to evolve. The long-term effects of AI dependency and how it affects Generation Z's independence in making decisions should be the subject of future studies.

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# THE SHIFT FROM CABLE TELEVISION VIEWING TO OTT PLATFORMS: FACTORS INFLUENCING CONSUMER'S PERSPECTIVE POST COVID-19 LOCKDOWN

***Ms. Sanchayita Banerjee, **Ms. Shreya Agarwal**

## ABSTRACT

The transition from traditional cable television to over-the-top (OTT) platforms has accelerated, particularly in the post-COVID-19 era. This study examines the key factors influencing consumer preferences for OTT services over cable TV, emphasizing shifts in viewing behavior, affordability, and content accessibility. Using an online survey conducted from January to April 2023, data was collected from 221 valid responses in Mumbai, analyzed through factor analysis and reliability tests. The findings highlight four primary factors driving the shift: *Sentiments* (convenience, accessibility, and content variety), *Fixation* (increased screen time and content consumption), *Binge-Watching* (addictive viewing habits), and *Value for Money* (cost-effectiveness and flexible subscription models). The study also reveals that the pandemic-induced digital adaptation has led to lasting changes in entertainment consumption patterns, with a significant portion of respondents showing continued preference for OTT services. While the results suggest a moderate-to-high likelihood of consumers permanently shifting to OTT platforms, variations exist across demographics. The study offers managerial insights for OTT providers on personalized content strategies and targeted marketing to sustain consumer engagement. Future research should explore the long-term implications of these shifts and assess the impact of psychological and demographic factors on continued OTT adoption.

## Introduction

For humans to survive, communication and entertainment are essential. Entertainment plays a significant role in our daily life. In the past, television was a rare luxury that was only accessible to a select few in India. The audience in India, which was uneducated and struggling economically, was aided by color television. Television came to India on September 15, 1959 with experimental transmission from Delhi. Television stations started to operate in Calcutta, Chennai, Srinagar, Amritsar, and Lucknow by 1975. 15 august 1982 was the Turning point in Indian Television history when first-time Doordardhan channel was broadcasted in color, using satellite INSAT 1 A, as a new revolution in the Indian television industry. India has the second-largest TV market in the world. STAR TELEVISON was introduced in 1992 by a collection of businesses based in Hong Kong. Star Plus, Prime Sports, the BBC, and MTV continuously broadcast their signal. Zee TV, a Hindi station, also used a transponder rented from Star TV to broadcast its content. For cable operators, the introduction of satellite television proved beneficial. Apart from integrating satellite channels, cable companies also aired their programs in their local channel. Cable companies started experimenting video services that could alter how people watch TV in the early 2000s. These included smart TV, video on demand, and premium on-demand video. Due to the high expense of replacing customer-premise technology, the industry was moving slowly in these areas. In FY2020, the broadcasting and cable TV markets in India were valued at USD 11.61 billion (TechsciResearch pvt ltd. (n.d.)). According to data from the Broadcast Audience Research Council, 210 million Indian households had televisions in 2020. In

*Assistant Professor - Marketing, St. Francis Institute of Management and Research, Mumbai
**Digital Marketing Executive Company: Affinco

comparison to 2018, when there were 197 million TV homes, this represents a rise of 6.9%.

However, there are now 100 million fewer cable homes in India than there were 115 million. This happened as a result of the cable providers' struggles with roll-out and integration issues. Cable operators are seeking for new strategies to expand as customers turn to more options including phone, OTT platforms, and Free Dish.

Different individuals have various ways to pass the time. Globally, the way people will watch entertainment in the future is evolving quickly. Digitization has completely changed the manner of how we access and consume content. The growth of new OTT media, which provides services to viewers directly via the internet, is a result of better networks, more internet connections, technological advancements, and the accessibility of smart gadgets. According to the annual M&E report by the Boston Consulting Group (BCG) and the Confederation of Indian Industry, the country saw a 60% increase in paid OTT streaming services during the pandemic, with more than half of these new users likely to continue using the service (CII). Numerous reasons have contributed to this quick rise. OTT gamers have benefited from the awful COVID19 pandemic. Rising household wealth, increasing exposure to worldwide trends, an increase in mainstream media, and material that has evolved through time to accommodate modern sensibilities are among other factors that have fueled this growth. With the advent of free-to-all OTT content on the internet, which was once highly regulated in TV and film censorship, new-era media have given the customer more freedom to make decisions.

## Literature Review

There have been numerous technological advancements in the television industry (Sowbarnika S. & Jayanthi M., 2021). The way people watch TV has significantly changed during the past ten years (Chu, S. L. et.al., 2020).

To deliver dozens to hundreds of videos and audio programme channels, cable television systems are delimited and franchised wired businesses that use coaxial and fiber optic cable. acceptability of digital Infrastructure has changed from being a barrier to the widespread adoption of digital technology (Sowbarnika S. & Jayanthi M., 2021). Viewers may now choose when and where to watch TV, and a vast selection of high-quality TV programmes are always available at reasonable prices thanks to the advent of on-demand viewing and online streaming services (Chu, S. L. et.al., 2020).

OTT is a platform that allows customers to access services from any location at any time by delivering video content over the internet to connected devices. According to the survey, Netflix has been recognised as a significant business model innovation in a young industry like digital television (Sowbarnika S. & Jayanthi M., 2021). With intricate storylines and dramatic devices designed to keep viewers "hooked," TV shows have advanced to a very high level of sophistication. As a result, watching multiple episodes of a single series in a row has become a common viewing habit (Chu, S. L. et.al., 2020). Generation X's behaviour changed to be more OTT at Covid'19 in India. This may indicate that the pandemic has made this group of consumers more accustomed to consuming content online. Consequently, the OTT industry is observing a shift in their viewing audiences as older generations use digital services more frequently, with the material provided playing a crucial influence in their retention (Sridhar, S., & Phadtare, P., 2022).

Lee M. et.al. (2016) argued that most of the OTT users believe that their daily usage has grown by one to three hours. The report also revealed that an astounding number of users have subscriptions to three or more OTT streaming services, following the pandemic's impact on the nation. The decision to subscribe to a streaming service is influenced by three factors: content, affordability, and availability, with the last influencing the majority of consumers. The television has traditionally served as the centre of attention for members of the same home. Families would frequently own one or two sets, with all members having access to them in the same place. As SVOD services have grown, media consumers have turned to their own devices. Everyone can watch on their own, in solitude, if they choose, and is no longer dependent on a centrally positioned television (McNally J. & Diederich B., 2019). The Telecommunications Act of 1996 aims to liberalize the market by deregulating all telecommunications markets. Only in cases where there is no viable competition does the FCC regulate basic cable rates. Local commercial television stations have the choice of must-carry or retransmission permission for each cable system serving the same area as the commercial television station under the 1992 Cable Act. The rules for cable TV and other MVPDs do

not, however, apply to OTT providers (Liu & Yu-Li., 2015).

Television content was primarily consumed according to broadcast schedules until the introduction of VOD services. The invention of VHS, which allowed media consumers to record broadcasts and view them at their leisure, as well as the subsequent invention of DVD, both disturbed this.

Box sets that contained complete seasons of television programming. Users of media had complete choice over how they watched television programming thanks to both VHS and box sets, which allowed them to share it with anyone and watch it whenever they wanted (Johnson, D. et al., 2014). Chen Yi-Ning K. (2017) conducted a niche analysis of Taiwan's competition between OTT TV platforms and traditional television. This study explores whether OTT TV is an addition to or a replacement for traditional TV. An online survey was used for this investigation. The poll was disseminated via the main drama-themed forums in Taiwan, Facebook sites like PTTs on the web, fan pages for American and European TV shows, and Japanese drama forums. The rising costs of cable TV subscriptions have motivated consumers to shift towards cost-effective OTT platforms. Research by Shumake, J. and Reece, B.B. (2020) suggests that consumers perceive OTT services as offering better value for money due to the availability of affordable subscription options and the ability to pay only for desired content. The cost savings associated with OTT platforms have been a significant driver for consumers (Shumake J. & Reece B. B., 2020)

OTT platforms provide a vast library of content, including original series, movies, and documentaries, catering to diverse consumer interests. Research by Shuo, Kwan and Lee (2019) highlights that the availability of a wide range of content and the ability to personalize recommendations based on individual preferences have significantly influenced consumer adoption of OTT platforms (Shuo L. et.al., 2019). Consumer perceptions and recommendations from peers play a significant role in driving the shift to OTT platforms. Research by Hong, Thong, and Tam (2018) suggests that positive word-of-mouth recommendations and social influence significantly impact consumers' intention to adopt OTT services, as consumers tend to trust recommendations from friends and family (Hong Y. et.al., 2018)

Advancements in technology and internet infrastructure have played a crucial role in the rise of OTT platforms. Goyanes et al. (2020) emphasizes that improved internet connectivity, along with the proliferation of smart devices, has made it easier for consumers to access and stream content through OTT platforms. The seamless streaming experience and the ability to watch content on multiple devices have contributed to the shift from cable TV, as pointed out by Goyanes, M. et.al. (2020). OTT platforms employ sophisticated content discovery and recommendation algorithms to enhance the user experience. These algorithms analyze user behavior, viewing patterns, and preferences to provide personalized content recommendations. Another research by Pereira and Dr goi (2021) suggests that the availability of tailored content suggestions and the ease of content discovery on OTT platforms have positively influenced consumer adoption (Pereira S. C. & Dr goi M. C., 2021)

Sridhar S. & Phadtare P. (2022) found that India is a price- and culture-sensitive nation, and the price difference between OTT and cable TV is substantial, which is why television viewing will continue to increase in tandem. The cost-effectiveness of OTT platforms compared to cable TV services has been a significant factor influencing consumer behavior. Studies by Khatri and Sharma (2021) emphasize that consumers perceive OTT platforms as offering better value for money due to their affordable subscription options and the ability to pay only for the content they desire. The cost savings associated with OTT platforms have motivated consumers to switch from cable TV services (Khatri N. & Sharma N., 2021). On the other hand, Sowbarnika S. & Jayanthi M. (2021) drew the conclusion that while TV and OTT are both quite comparable in terms of amusement and ease of use, cable operators should prioritize fun when making investments to keep up with OTT in the long run.

## Literature Gap

Post-COVID-19 lockout, the move from cable to OTT platforms has increased, although customer opinions and continuing intention research is scarce. Studies on technological adoption disregard the complex factors behind continuous use. COVID-19's impact on media consumption, particularly how forced lockdown habits may become long-term habits, is understudied. Demographic differences, psychological issues, and content diversity's impact on customer choices need

further study. Addressing these gaps will help OTT and traditional media companies understand the changing media ecosystem and inform their strategy.

Based on the above gap in the literature the following objectives were framed for the study—

## Objectives

1. To evaluate the factors leading to the shift from cable TV services to OTT consumption
2. To analyze the impact of the COVID-19 Pandemic on the consumption pattern of OTT

## Research Methodology & Data Analysis

We addressed our objectives by collecting primary data using online survey questionnaire administered from January 2023 to April 2023. The survey was made upto 22 questions on a 5 point likert scale to capture users' motivation factors to shift from cable TV services to OTT platforms and to study if the pandemic time impacted the consumption pattern of OTT. Residents of Mumbai who watches television and/or OTT were viewed as suitable participants. Total 282 respondents were approached to collect the data out of which 221 valid responses were obtained after data cleaning. Non-probability snowball sampling technique was used to collect the data. The descriptive statistics of the respondents are given on the table 1. A factor analysis using SPSS was conducted to find out the most important factors from the ones listed in the table. Reliability of the data is checked using total Cronbach Alpha value and item wise Cronbach Alpha value. In both the cases it was observed that the values are more than 0.9 (table 2) and the ideal Cronbach's Alpha value should be more than 0.7 (Taber, 2018). Hence it shows that there was internal consistency of the scales. This established the reliability of the instrument, that is the questionnaire. Bartlett's test of sphericity and the Kaiser-Meyer-Oklin measure of sampling adequacy are used to determine the factorability of the matrix (table 3).

**Table 1: Descriptive Statistics**

| Item Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| SSVOD is better than normal television | 2.03 | .871 | 221 |
| spend more time | 2.16 | .962 | 221 |
| watching the content together | 2.33 | .918 | 221 |
| consume more content | 2.33 | .980 | 221 |
| watch an unplanned episode | 2.29 | .999 | 221 |
| highly dependent | 2.22 | .952 | 221 |
| highly addictive | 2.12 | .979 | 221 |
| allows to manage time | 2.43 | .935 | 221 |
| entertaining | 2.10 | .897 | 221 |
| save time | 2.05 | .923 | 221 |
| highly convenient | 1.94 | .900 | 221 |
| highly interactive | 2.16 | .913 | 221 |
| easily accessible | 2.02 | .922 | 221 |
| greater sense of control | 2.19 | .942 | 221 |
| wide range of local, regional and international content] | 2.04 | .909 | 221 |
| More choices related | 2.00 | .941 | 221 |
| unique video content | 2.04 | .881 | 221 |
| affordable subscription fee | 2.28 | .960 | 221 |
| value for money | 2.25 | .923 | 221 |
| peer influence | 2.39 | .901 | 221 |
| Content impact | 2.09 | .940 | 221 |

**Table 2: Total Cronbach's Alpha Value**

| Reliability Statistics | | |
|---|---|---|
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .932 | .932 | 21 |

**Table 3: Item-wise Cronbach's Alpha Value**

| Item-Total Statistics | | | | | |
|---|---|---|---|---|---|
| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected item Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
| SSVOD is better than normal television | 43.43 | 151.774 | .442 | .358 | .932 |
| spend more time | 43.31 | 150.214 | .461 | .550 | .931 |
| watching the content together | 43.13 | 155.287 | .257 | .195 | .935 |
| consume more content | 43.13 | 148.405 | .530 | .555 | .930 |
| watch an unplanned episode | 43.18 | 148.237 | .525 | .425 | .930 |
| highly dependent | 43.25 | 146.551 | .631 | .633 | .928 |
| highly addictive | 43.35 | 146.728 | .604 | .608 | .929 |
| allows to manage time | 43.04 | 148.599 | .550 | .378 | .930 |
| entertaining | 43.37 | 145.916 | .706 | .590 | .927 |
| save time | 43.41 | 145.525 | .702 | .615 | .927 |
| highly convenient | 43.52 | 144.969 | .749 | .670 | .926 |
| highly interactive | 43.31 | 146.796 | .650 | .527 | .928 |
| easily accessible | 43.44 | 146.084 | .677 | .566 | .928 |
| greater sense of control | 43.28 | 145.512 | .687 | .574 | .927 |
| wide range of local, regional and international content | 43.43 | 144.883 | .745 | .674 | .926 |
| More choices related | 43.46 | 143.486 | .782 | .719 | .926 |
| unique video content | 43.43 | 146.191 | .707 | .622 | .927 |
| affordable subscription fee | 43.19 | 149.197 | .507 | .488 | .931 |
| value for money | 43.22 | 147.198 | .624 | .576 | .928 |
| peer influence | 43.07 | 149.186 | .546 | .399 | .930 |
| Content impact | 43.38 | 145.736 | .679 | .595 | .927 |

### KMO and Bartlett's test of sample adequecy

The Kaiser-Meyer-Olkin (KMO) Test assesses the sampling adequacy for the entire model as well as for individual variable. The statistic is a representation of how much of the variance among the variables may be common variance. The KMO values around 1.0 are excellent, whereas those below 0.5 are deemed unacceptable. In this case, as in the table 5 below the KMO value is 0.925, which is greater than .05 and close to 1.0. Also the significant statistical test level is 0.00, which is less than 0.05 which shows that the correlation matrix is indeed not an identity matrix. Hence it is plausible to conduct factor analysis.

**Table 5: KMO and Bartlett's test of Sphericity**

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .925 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2702.558 |
| | df | 231 |
| | Sig. | .000 |

The eigenvalues associated with each factor before extraction, after extraction, and after rotation are listed in Table 6 under the heading Total Variance Explained.

**Table 6:**

| Total Variance Explained | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 9.668 | 43.945 | 43.945 | 9.668 | 43.945 | 43.945 | 7.020 | 31.910 | 31.910 |
| 2 | 1.517 | 6.896 | 50.841 | 1.517 | 6.896 | 50.841 | 2.508 | 11.399 | 43.309 |
| 3 | 1.358 | 6.173 | 57.014 | 1.358 | 6.173 | 57.014 | 2.302 | 10.464 | 53.774 |
| 4 | 1.130 | 5.135 | 62.149 | 1.130 | 5.135 | 62.149 | 1.843 | 8.375 | 62.149 |
| 5 | .883 | 4.012 | 66.161 | | | | | | |
| 6 | .796 | 3.620 | 69.781 | | | | | | |
| 7 | .774 | 3.519 | 73.300 | | | | | | |
| 8 | .728 | 3.307 | 76.607 | | | | | | |
| 9 | .598 | 2.718 | 79.325 | | | | | | |
| 10 | .543 | 2.466 | 81.791 | | | | | | |
| 11 | .523 | 2.379 | 84.171 | | | | | | |
| 12 | .495 | 2.249 | 86.420 | | | | | | |
| 13 | .437 | 1.988 | 88.408 | | | | | | |
| 14 | .402 | 1.825 | 90.233 | | | | | | |
| 15 | .401 | 1.823 | 92.056 | | | | | | |
| 16 | .317 | 1.442 | 93.498 | | | | | | |
| 17 | .282 | 1.282 | 94.780 | | | | | | |
| 18 | .273 | 1.242 | 96.022 | | | | | | |
| 19 | .251 | 1.141 | 97.163 | | | | | | |
| 20 | .234 | 1.064 | 98.228 | | | | | | |
| 21 | .199 | .905 | 99.133 | | | | | | |
| 22 | .191 | .867 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

Because of their eigenvalues being bigger than 1, four factors were retrieved. 62.149% of the variance would be explained if four components were selected.

**Table 7:**

| Rotated Component Matrixa | | | | |
|---|---|---|---|---|
| | Component | | | |
| | 1 | 2 | 3 | 4 |
| SSVOD is better than normal television | | | | |
| spend more time | | .860 | | |
| watching the content together | | | | .745 |
| consume more content | | .749 | | |
| watch an unplanned episode | | | .605 | |
| highly dependent | | | .716 | |
| highly addictive | | | .731 | |
| allows to manage time | | | | |
| entertaining | .680 | | | |
| save time | .722 | | | |
| highly convenient | .794 | | | |
| highly interactive | .714 | | | |
| easily accessible | .691 | | | |
| greater sense of control | .643 | | | |
| wide range of local, regional and international content] | .739 | | | |
| More choices related | .747 | | | |
| unique video content | .686 | | | |
| affordable subscription fee | | | | .527 |
| value for money | .614 | | | |
| peer influence | .586 | | | |
| Content impact | .766 | | | |
| SVOD services in the future?] | .564 | .503 | | |
| Extraction Method: Principal Component Analysis.<br>Rotation Method: Varimax with Kaiser Normalization. | | | | |
| a. Rotation converged in 7 iterations. | | | | |

After performing Varimax Rotation Method with Kaiser Normalization, Factor 1 comprised of thirteen items with factor loadings 0.680, 0.722, 0.794, 0.714, 691, 0.643, 0.739,0.747, 0.686, 0.614, 0.586, 0.766, and 0.564. The items in factor 1 are entertainment, time saving, convenience, interactive, accessible, ease of control, uniqueness with more choices, affordability etc. This factor could be termed as ***Sentiments***.

Factor 2 comprised of two items with factor loadings 0.860, and 0.749. The items on factor three are spend more time, consume more content, willingness to continue in future. This factor could be termed as ***Fixation***.

Factor 3 comprised of three items with factor loadings 0.6.5, 0.716, 0.731 The items in factor 3 are watching an unplanned episode, high dependency and high in addictiveness. This factor could be termed as ***Binge Watching***.

Factor 4 comprised of two items with factor loadings 0.745 and 0.527. The items in factor 4 are watching the content together and affordable subscription fee. This factor could be termed as ***Value for Money***.

To study the second objective respondents were asked about their likelihood to shift totally to OTT platforms with continuation intention in a scale of 1 to 10. The mean response of the 221 respondents was 6.90, with a standard deviation of 2.290.

Analyzing the possibility of consumers switching to OTT platforms with continuation intention on a scale of 1 to 10, with a mean value of 6.90 and a standard deviation of 2.29, yields certain insights:

The mean score of 6.90 indicates modest motivation to switch to OTT platforms and want to continue. This value is higher than the mid value reflecting a positive view towards OTT platforms. A 2.29 standard deviation shows substantial response spread around the mean. The average reaction is 6.90, although individual responses vary by 2.29 units. About 68% of responses fall within one standard deviation of the mean, i.e., between 4.61 and 9.19 (6.90 2.29), assuming a normal distribution. This gives the indication for Moderate Likelihood with Diverse viewpoints. The mean score suggests a positive attitude towards OTT platforms, while the standard deviation shows diverse viewpoints among the surveyed sample. A reasonably high likelihood of shifting and continuing use of OTT platforms is observed, but responses vary significantly. This shows the necessity for customised and diversified ways to address different demographic segments' requirements and concerns to increase OTT platform adoption and retention.

## Discussion and Managerial Implications

The surge in over-the-top (OTT) services, in contrast to cable TV, may mostly be attributed to shifts in consumer preferences and technological progress. The research team employed factor analysis to precisely identify the four primary elements that are causing this shift. Emotions, feeling trapped, excessive TV watching, and cost-efficiency.

Emotions in the form of Sentiments play a crucial role in transitioning to OTT platforms. A significant number of users form intense emotional attachments to the content and general experience of the sites. Users can customise their viewing experiences on over-the-top (OTT) services by using user-friendly interfaces, customised suggestions, and creating profiles. The emotional connection formed with customers leads to increased satisfaction and loyalty, hence reducing their inclination to utilise conventional cable TV suppliers.

Users' strong preoccupation with over-the-top (OTT) platforms can be seen as a clear indication of their deep engagement and dependence on these platforms which is termed as Fixation. These platforms offer a plethora of documentaries, films, and original programmes, enticing viewers to immerse themselves in their material for extended durations. The ubiquity of internet connectivity and portable electronic devices exacerbates this addiction by providing constant access to content at any time. The limited content options and inflexible programming schedule of cable TV become less appealing in this situation. The respondents expressed a preference for the autonomy provided by over-the-top (OTT) options in comparison to cable TV.

The emergence of over-the-top (OTT) services has resulted in a substantial increase in the phenomenon of binge watching. The ability to watch many episodes, or even full seasons, of a TV series in one sitting satisfies the need for instant gratification among modern consumers. OTT consumption has been strongly linked to this strategy, as it is less convenient with cable TV because of the availability of planned shows. Binge-watching not only satisfies customers' craving for content, but also improves the whole viewing

experience, hence increasing the attractiveness of over-the-top (OTT) platforms. This supports the famous Freudian personality theory of Id, Ego, Super Ego, where the Id instinct dominates the behaviour.

The study revealed the fourth most important factor as Value for Money which Purchasers regard as a pivotal factor. Over-the-top (OTT) providers frequently offer a broader selection of material at a considerably reduced cost compared to cable television, making them a more economical option. Customers are able to tailor subscription plans based on their own requirements and financial constraints. The perceived value is further enhanced by the lack of long-term contractual commitments and the availability of free tiers that include advertising. OTT platforms are favoured in cost-conscious markets because of their economic benefits.

Hence the primary elements driving the shift in TV viewing patterns from cable to over-the-top (OTT) platforms are emotional involvement, focused content consumption, the popularity of binge-watching, and the need for greater value for money. These factors all lead to the increasing preference for over-the-top (OTT) platforms, indicating a substantial shift in people's habits of consuming information. OTT service providers should consider targeted strategies as a major section of the population may continue to use OTT platforms, but there may be sectors with less assurance or motivation. These less certain groups' concerns and preferences could be addressed in marketing and retention initiatives. A major reason behind response diversity may reveal population subgroups. Further segmentation analysis may reveal clusters with specific traits, preferences, or impediments to acceptance and continuation.

## Limitation and Future Scope

Understanding factors that affect likelihood scores might provide significant information. Surveys or focus groups could examine ratings factors such content quality, platform usability, subscription costs, and alternatives. Repeated measurements can track mean and standard deviation changes, revealing public sentiment towards OTT platforms. This could assist evaluate adoption and retention activities. The study couldn't analyze the level of impact of the variables found on the Continuance Intention for the OTT, which could be further studied.

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# PROFITABILITY PERFORMANCE IN THE LIFE INSURANCE COMPANIES FROM 2010 TO 2020

***Mr. Jatin Haswani, **Mr. Darsh Shah, ***Dr. Jyoti Dixit**

## ABSTRACT

*This study delves into the financial performance of 13 life insurance companies in India spanning the period 2010 to 2020. Our inquiry primarily revolves around two core aspects: firstly, the efficacy of asset utilization in generating income, denoted as Return on Assets (ROA), and secondly, the overall profitability post-taxation, known as Profit After Tax (PAT). Additionally, we explore the influence of two factors – net premium income and financial stability – on their profitability (solvency ratio).*

*The analysis reveals that while there exists no robust correlation between premiums, stability, and investment returns, a noteworthy impact on post-tax profits is observed. It is ascertained that roughly 55.3% of the fluctuations in post-tax profits can be traced back to variations in premiums and stability. In essence, our findings underscore the pivotal importance of adept premium management and the sustenance of financial stability for these insurance entities to attain resilient profitability. (The study advocate for strategic resource allocation and judicious risk management practices to foster sustained growth and mitigate potential risks. This research offers pertinent insights for policymakers, regulators, and industry stakeholders aiming to foster sustainable growth and stability in the Indian insurance landscape.*

***Keywords-*** *Profitability, India, Insurance companies, financial performance.*

## Introduction

Financial institutions are one of the most important components of any country's financial system. Specifically, insurance companies are extremely important to the economy because they distribute risk among many individuals who have insurance coverage against it, share in the losses of every member of society based on the likelihood that they will suffer a loss from their risk, and offer security to the insured against losses. Organizations that offer life, fire, accident, liability, and many other types of insurance are known as insurance firms. According to Ngoyen (2006), Hailu (2007), and Mingizem (2017), the primary objective of financial management is to maximize the wealth of the owner, and profitability is a key factor in determining performance, therefore all insurance businesses seek to increase their profit. The life insurance sector in India has undergone significant transformation over the past decade, by dynamic economic shifts, regulatory reforms and by customer preference. The principal aim of this paper is to perform a comprehensive analysis of the life insurance industry in India, with a particular emphasis on its profitability dynamics. The analysis's goals are to comprehend the major variables affecting life insurance companies' financial performance and to examine how the industry has changed since it was privatized in 2000. To obtain insights into the mechanisms driving profitability in the Indian life insurance industry, the aim is to examine the regulatory framework, market competition, and strategic initiatives undertaken by insurers.

In 2000, when the insurance industry in India first opened for business, there was no competition. LIC (Life Insurance Company) was the only publicly traded

*PGDM, Vivekanand Education Society Business School (VESBS).
**PGDM, Vivekanand Education Society Business School (VESBS).
***Assistant Professor, Vivekanand Education Society Business School.

company that was leading the way. Subsequently, in 1999, the Indian government established the Insurance Regulatory Development Authority of India (IRDA) to facilitate the insurance industry's privatization. The insurance industry has expanded quickly since private players entered the life insurance market, and the IRDA grants licenses to insurance companies operating in this private sector.

Starting in 2000, the insurance market expanded. In general, it grows in terms of employment opportunities, policies, and premium income. There are currently 24 insurance companies operating in India, comprising 1 public and 23 private companies. According to 2023 reports, India currently holds a 1.9% market share worldwide. Before 2020, the profitability landscape of the life insurance industry in India was characterized by a myriad of factors unique to the nation's socio-economic context. The industry witnessed steady growth driven by rising awareness about financial security, increased disposable income, and a growing middle-class population. One of the distinguishing features was the dominance of traditional life insurance products such as endowment plans and whole life policies, which catered to the risk-averse nature of Indian consumers.

Furthermore, the regulatory framework, led by the Insurance Regulatory and Development Authority of India (IRDAI), played a pivotal role in shaping the profitability dynamics. Stringent regulations ensured a balance between consumer protection and industry sustainability, fostering a competitive yet stable environment. Insurers navigated through challenges such as stringent solvency requirements and product approval processes, which contributed to a cautious yet resilient approach towards profitability. The distribution landscape was marked by a mix of traditional agency networks, bancassurance tie-ups, and emerging digital channels. Insurers leveraged technological advancements to enhance customer engagement, streamline operations, and optimize distribution channels, thereby driving efficiency and enhancing profitability. However, the industry also faced challenges related to persistency rates, fraudulent claims, and increasing competition, necessitating continuous innovation and adaptation to maintain profitability amidst evolving market dynamics. Overall, the profitability of the life insurance industry in India before 2020 was characterized by a blend of traditional values, regulatory stewardship, and technological innovation, setting the stage for sustained growth and development in the years to come.

**Context And Significance-** The life insurance market is a key component of the large financial system, supporting both general as well as provision of financial security. During this period, India had tremendous economic expansion and urbanization, which made life insurance industry a hot topic for investors. The profitability dynamics and contexts in this industry is crucial for investors, industry participants, regulators, etc.

There had been number of events came together in the time period of 2010 to 2020, which had an impact on life insurance companies. The competitive landscape was because of the changes in the economy, population and technology, inflation and several other factors. In light of this, a thorough examination of profitability performance of life insurance firms, which becomes necessary for strategic planning and well-informed decision making.

Insurance firms' pricing policies reflect the risks they assume, charging high-risk customer large rates and low-risk customers cheap prices to reflect they risk bring to the insurance pool. The market effect the insurers' capacity to classify customers. An empirical study on industry focused on the market structure on pricing behaviour. The analysis seeks to provide insightful information about how Indian life insurers deal with regulatory requirements, customer expectations, and competitive pressures in order to produce stable and sustainable financial results. Beyond cursory evaluations, the paper will analyse market penetration rates, key performance indicators, and international comparisons to offer a thorough grasp of the variables affecting the profitability of the Indian life insurance sector. The ultimate goal is to provide useful information to market players, legislators, and industry stakeholders so they can support the expansion and stability of the life insurance business in India.

In order to create regulations for stable industry, insurance regulator must get a deeper understanding of dynamics of pricing behaviour. Essentially, this study tries to identify underlying cause which support the profitability of life insurance companies in India, instead of summarizing patterns in profitability. While several studies have examined insurance markets in Europe and America, which mainly focuses on the efficiency and the profitability of insurance sector as a whole. This study enhances the understanding of financial stability

and operational efficiency, which is valuable for different purpose in India. The uniqueness lies in inclusion of variables, such as solvency ratio and net premium earned, which focuses on this study.

The Indian life insurance sector anticipates different segments of customers with different needs by raising the importance of competitive dynamics. Life insurance products enjoy high popularity and demand.

## Objective of the study

This paper's goal is to present a comprehensive picture of the profitability situation in the Indian life insurance market. It examines how net premium and solvency ratio affect profitability, alongside the interplay of premiums, stability and returns. This study also reviews industry changes post 2000 privatization, offering insight for sustainable and risk management. Additionally, it benchmarks against global standards to identify adoptable best practices. Ultimately, it aims to enhance strategic planning and policy development in India's life insurance sector.

The study aims to provide actionable insights for stakeholders and policymakers to foster sustainable growth and stability in the Indian life insurance sector, contributing empirical evidence to enrich the existing literature on insurance industry performance.

## Literature Review

Given the competitive and dynamic nature of the insurance market, an important area of research is the profitability performance of life insurance companies in India. The fact that net premium was chosen as the independent variable highlights how important it is in determining how these companies' financial results turn out. Several studies emphasize the critical role that net premium plays in determining the overall financial health of insurance firms, and a thorough review of the literature reveals a multitude of factors influencing the profitability of life insurance companies globally.

Academics have studied pricing strategies, underwriting procedures, and market dynamics as well as the relationship between net premium and profitability. According to research by Agiobenebo and Ezirim (2002), the authors conducted a study to explore the relationship between profitability and financial intermediation within the context of the Nigerian insurance industry. Specifically, they focused on the connection between two keys variables: the level of premium and return total assets of insurance companies.

Whereas another research was conducted by Dr. Sonal Nena in 2012, the study aimed to provide a nuanced understanding of LIC's overall performance by discetting its financial dynamics, assessing the interplay between income and expenses, and ultimately offering valuable insight into the insurer's financial sustainability and operational efficiency during the specified timeframe.

Adam Worku, Zenebe Tafere, in their recent study finds that there was negative relationship between loss ratio, solvency ratio, inflation rate and the return on assets (ROA), this conclude that paying attention to these key factors can enhance the overall performance of the insurance sector in Ethiopia.

Smith (2018) and Chen et al. (2020), a well-calibrated pricing strategy can have a direct impact on the net premium and, in turn, have an impact on financial performance. These studies highlight the significance of optimal premium pricing in maximizing profitability.

In examining profitability determinants of life insurers in India, the findings of Charumathi, 2012 about the Indian life insurance sector, the purpose of her study was to investigate the solvency position of the life insurance companies in India, against the backdrop of the insurance sector reforms. This show contradictions with that of Adams et al., 2003 and Adams, 1996. Charumathi claims that the profitability of the life insurers is positively and significantly influenced by the size (as measured by the logarithm of net premiums) and liquidity.

As we move our attention to the dependent variables, return on assets (ROA) becomes apparent as a critical metric for assessing how well life insurance companies use their resources. The determinants of return on assets (ROA) in the insurance industry have been studied by academics such as Gupta and Singh (2019), who have focused on elements like operational efficiency, risk management procedures, and investment portfolio management. By examining the complex relationship between net premium and return on assets (ROA), the proposed regression analysis aims to shed light on how variations in ROA may be correlated with changes in net premium.

Moreover, the addition of profit after tax (PAT) as a dependent variable invite investigation into the life insurance companies' overall financial performance. A large body of research, such as studies by Li and Lee (2021) and Kumar et al. (2018), highlights the various factors that affect profitability in the insurance industry, from investment income to operational effectiveness. The purpose of the planned ANOVA analysis on profit after tax is to determine how net premium variations affect the landscape of overall profitability and to provide insight into how well insurance companies convert premium income into long- term profits.

## Factors affecting profitability

The *solvency ratio* is a financial metric that measures a company's ability to meet its long-term and other financial obligations. While the solvency ratio primarily focuses on company's ability to meet long-term obligations, it is not a direct measure of profitability. A profitable company has the potential to enhance its solvency position.

The *Net premium income* is a key financial metric for insurance companies, including life insurance companies. It represents the total revenue generated from insurance premiums after deducting reinsurance and commission expenses. Net premium income is a key indicator of revenue from insurance operations, profit after tax provides a comprehensive measure of the overall profitability of a life insurance company.

**H0:** There is no significant difference of net premium income and solvency rate on PAT

**H1:** There is significant difference of net premium income and solvency rate on PAT

The solvency ratio and return on assets (ROA) in life insurance companies are closely linked indicators. A positive correlation suggests that as the solvency ratio increases, the ROA also tends to rise, reflecting a well-capitalized and financially stable company capable of generating higher returns on assets. Conversely, a negative correlation may indicate that companies with lower solvency ratios are taking on more risk in pursuit of higher returns

Net Premium Income contributes to the profitability of an insurance company, as it represents the revenue from core insurance operations. A positive relationship between Net Premium Income and ROA suggests that the company is efficiently converting its premium income into profits relative to its asset base. It's crucial for companies to balance premium growth with underwriting discipline to ensure sustainable profitability.

**H0:** There is no significant difference of net premium income and solvency rate on ROA.

**H1:** There is significant difference of net premium income and solvency rate on ROA.

**Measurement of variables:**

| VARIABLE | MEASURED BY |
|---|---|
| Profitability (ROA) | Net profit before tax to total assets |
| Profit after tax (PAT) | Profit after tax |
| Solvency Ratio | EBIT by total Liabilities |
| Net Premium Income | Total Premiums Earned- Reinsurance Costs |

## Methodology:

In this research paper secondary data was used, which is obtained from individual insurance companies from 2010 to 2020. The secondary data include clear image as compared to primary data collected by researches themselves Stewart and Kamins (1993).

In order to identify the extent and nature of cause-and-effect relationship of the variables, this study used both descriptive and casual research design. The study population was 24 insurance companies established and serving with in the specified period of time from 2010 to 2020. Among these all 24 companies only 13 companies were selected using purposive sampling method. This study took only 13 insurance companies based on the establishment and adequate financial statement in the report of IRDAI (the regulatory of the insurance industry) from 2010 to 2020. So, the sample sizes of the 13 insurance companies were including: LIC (Life Insurance Corporation of India), Aviva Life Insurance, Bajaj Allianz Life Insurance, Birla Sunlife Insurance, Exide Life Insurance, HDFC Life Insurance, ICICI Prudential Life Insurance, IDBI Life Insurance, Kotak Life Insurance, Max Life Insurance, PNB Metlife India Insurance, Reliance Nippon Life Insurance, SBI Life Insurance.

This section describes the strategy employed to examine the relationship between income premium and the profitability of the Indian insurance companies. This study employs a data set which covers 13 out of 24 companies including public and private companies in India covering the period 2010 to 2020. The relevant and required data has been collected from the annual reports of individual insurance companies and the IRDAI database.

- **Data**

Data has been collected from the secondary source using the descriptive analysis, correlation, regression with the help of ANOVA and statistical decision was made at 5% level of significance. Both descriptive and inferential statistics were used for this study. Net premium is found to be a strong and statistically significant factor influencing total profitability. The significant influence and positive association between net premium and profit after tax (PAT) highlight the critical role that net premium plays in enabling increased profits for the insurers. On the other hand, the solvency ratio only slightly improves the overall model fir, although showing a moderate and statistically significant association with return on assets (ROA). Although there is a positive association. The model's weak fit indicates that factors other than the solvency ratio and net premium have a greater impact on ROA for these organizations.

This result highlights the importance of net premium as a critical factor influencing the profitability of Indian life insurance businesses with the samples. More precise with the certain large amount of observation could provide these findings and investigate other variables affecting return on assets and profitability.

- **Study Design & Sampling**

The mean value of Profit after tax (PAT) considered as common indicator of profitability performance for all insurance companies. The considerable standard deviation in PAT highlights the necessity for companies to address factors contributing to diverse profit performances, such as investment strategies, underwriting practices, or economic influences.

While the average solvency ratio indicates robust financial health, the standard deviation suggests the importance of closely monitoring and managing solvency to account for potential fluctuations in financial stability. The substantial standard deviation in net premium emphasizes the varied success of companies in generating income from premiums. Analysing factors influencing premium income, such as product competitiveness and distribution channels, is essential to enhance overall financial performance.

In the context of life insurance companies, profitability is crucial for sustainability which provides returns to the stakeholders. The solvency ratio reflects financial growth and strength. The ability of life insurance companies is to full fill long-term obligations, which is crucial in the insurance industry.

**Variable in the study-** dependent variable: Profitability of insurance companies measured by Return on assets (ROA) and Profit after tax (PAT). Net premium income and solvency ratio were considered as independent variable in the study.

## Analysis

ROA as a dependent variable

**Descriptive Statistics**

| | Mean | Std. Deviation | N |
|---|---|---|---|
| ROA | 0.772 | 1.7814 | 136 |
| Solvency ratio | 3.1171 | 1.63478 | 136 |
| Net Premium | 28460.558 | 71964.771 | 136 |

The data reveals important insights into the profit performance of Indian life insurance companies. The average return on assets (ROA) stands at 0.772, indicating that, on average, these companies generate a profit of approximately 77.2% for every unit of asset they hold. This suggests a reasonable level of profitability, but the high standard deviation of 1.781 implies significant variability across companies, reflecting differences in efficiency and operational effectiveness. In terms of solvency, the average solvency ratio is 3.1171, indicating that these companies have sufficient assets to cover three times their liabilities. However, the standard deviation of 1.63478 suggests variations in risk management practices and capital adequacy levels.

Moreover, the mean net premium of $28,460.56 highlights the average premium income generated by these companies. However, the high standard deviation of $71,964.77 indicates considerable variability in

premium income, reflecting differences in market penetration and distribution channels. These findings underscore the importance of efficiency, risk management, and market strategies in determining the profitability and financial health of Indian life insurance companies. Understanding these metrics and their interrelation is crucial for assessing performance, identifying areas for improvement, and ensuring sustainable growth in the industry.

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square change | F Change | df1 | df2 | Sig. F change |
| 1 | .209[a] | 0.044 | 0.029 | 1.7551547 | 0.044 | 3.034 | 2 | 133 | 0.051 |

a. Predictors: (Constant), Net Premium, solvency ratio

b. Dependent Variable: ROA

The adjusted R square is 0.029, which means that approximately 2.9% of the variability in the return on assets (ROA) of Indian life insurance companies can be explained by the variation in their net premium and solvency ratio.

While the R square value (0.044) suggests that 4.4% of the variability in ROA is explained by the independent variables, the adjusted R square (0.029) is lower. This adjustment accounts for the number of predictors and the sample size, providing a more accurate estimate of how well the model fits the data.

Overall, the adjusted R square value indicates a relatively weak relationship between the independent variables (Net Premium and Solvency Ratio) and the dependent variable (ROA), suggesting that other factors not included in the model may also influence the profitability (ROA) of Indian life insurance companies.

**ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 18.692 | 2 | 9.346 | 3.034 | .051[b] |
| | Residual | 409.716 | 133 | 3.081 | | |
| | Total | 428.407 | 135 | | | |

a. Dependent Variable: ROA

b. Predictors: (Constant), Net Premium, solvency ratio

The regression analysis examines whether the predictors (Net Premium and Solvency Ratio) collectively have a significant effect on the profitability performance (ROA) of Indian life insurance companies. The F-value of 3.034 suggests that there is some evidence to indicate that the predictors collectively explain a portion of the variance in ROA.

However, the significance level (Sig.) of .051 (p-value) is slightly above the conventional threshold of .05, indicating marginal significance. This suggests that while there may be some relationship between the predictors and ROA, it is not statistically significant at the conventional level.

| Coefficients | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** | **95.0% Confidence Interval for B** | |
| | | **B** | **Std. Error** | **Beta** | | | **Lower Bound** | **Upper Bound** |
| 1 | (Constant) | 0.135 | 0.36 | | 0.374 | 0.709 | -0.578 | 0.847 |
| | solvency ratio | 0.213 | 0.097 | 0.195 | 2.191 | 0.03 | 0.021 | 0.405 |
| | Net Premium | -8.85E-07 | 0 | -0.036 | -0.401 | 0.689 | 0 | 0 |
| a. Dependent Variable: ROA | | | | | | | | |

These findings suggest that while the solvency ratio has a significant positive impact on the return on assets (ROA) for life insurance companies in India, the net premium income does not have a significant direct impact on ROA within the examined period.

PAT as a dependent variable

| Descriptive Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| pat | 47692.510 | 64311.809 | 142 |
| solvency ratio | 3.085 | 1.608 | 142 |
| Net Premium | 27349.522 | 70616.931 | 142 |

The data reveals key insights into the profit performance of the analyzed companies. On average, these companies have a profit after tax (pat) of 47,692.51, indicating substantial profitability. However, the high standard deviation of 64,311.81 reflects significant variability in profits, highlighting differences in company performance and market conditions. This suggests that while some companies are highly profitable, others may be struggling or experiencing losses. In terms of solvency, the average solvency ratio is 3.085, indicating that these companies generally have sufficient assets to cover their liabilities by approximately three times. The standard deviation of 1.608 suggests considerable variation in solvency ratios, pointing to differences in risk management practices and capital adequacy. This variability may result from differing levels of risk exposure and the effectiveness of capital management strategies.

Additionally, the mean net premium is 27,349.52, indicating the average premium income generated by these companies. However, the high standard deviation of 70,616.93 indicates significant variability in premium income, reflecting differences in market penetration, product offerings, and distribution strategies. The large standard deviation suggests that while some companies are successfully capturing significant market share, others may have limited reach or face challenges in premium collection. These findings underscore the importance of effective financial management, risk assessment, and strategic planning in determining the profitability and financial stability of these companies. Understanding these metrics and their interrelation is crucial for assessing performance, identifying areas for improvement, and ensuring sustainable growth in the industry.

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square change | F Change | df1 | df2 | Sig. F change |
| 1 | .748[a] | 0.559 | 0553 | 43007.312 | 0.559 | 88.147 | 2 | 139 | 0 |

a. Predictors: (Constant), Net Premium, solvency ratio

b. Dependent Variable: PAT

Adjusted R-square is a measure that indicates how well the independent variables explain the variability of the dependent variable in a regression model, adjusted for the number of predictors in the model. In the research, an Adjusted R-square of 0.553 suggests that approximately 55.3% of the variance in the profitability (PAT) of Indian life insurance companies can be explained by the independent variables included in your model (Net Premium and Solvency Ratio), while accounting for the degrees of freedom and the number of predictors.

**ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.261E+11 | 2 | 1.63E+11 | 88.147 | .000[b] |
| | Residual | 2.571E+11 | 139 | 1.85E+09 | | |
| | Total | 5.832E+11 | 141 | | | |

a. Dependent Variable: PAT

b. Predictors: (Constant), Net Premium, solvency ratio

The F statistic is 88.147 with a corresponding p-value of .000. This p-value suggests that the overall regression model is statistically significant at conventional levels (usually $p < .05$). It means that there is strong evidence to reject the null hypothesis that all the regression coefficients are zero, indicating that at least one of the independent variables (Net Premium and/or Solvency Ratio) has a significant linear relationship with the dependent variable (PAT).

Therefore, based on the provided data and analysis, we can conclude that there is a significant relationship between the profitability of Indian life insurance companies (PAT) and the independent variables (Net Premium and Solvency Ratio).

| Coefficients | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0 % Confidence Interval for B | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 24566.04 | 8628.08 | | 2.847 | 0.005 | -0.578 | 0.847 |
| | solvency ratio | 1382.23 | 2357.982 | 0.035 | 0.586 | 0.559 | 0.021 | 0.405 |
| | Net Premium | 0.69 | 0.054 | 0.757 | 12.842 | 0 | 0.583 | 0.796 |
| a. Dependent Variable: PAT | | | | | | | | |

These findings suggests that while net premium income is a crucial determinant of profitability for life insurance companies in India, the solvency ratio does not have a significant direct impact on profitability within the examined period.

## Result

The profitability performance of Indian life insurance companies from 2010 to 2020, it is evident that there exists a nuanced relationship between various factors and the profitability metrics, particularly return on assets (ROA) and profit after tax (PAT). The adjusted R-square values shed light on the extent to which the variability in ROA and PAT can be explained by the variation in net premium and solvency ratio, accounting for the number of predictors and sample size. For ROA, the adjusted R-square value of 0.029 indicates a relatively weak relationship, suggesting that only approximately 2.9% of the variability in ROA can be explained by the independent variables included in the model. This suggests that factors beyond net premium and solvency ratio likely influence ROA. However, for PAT, the adjusted R-square value of 0.553 signifies a stronger relationship, indicating that around 55.3% of the variance in profitability can be attributed to net premium and solvency ratio, after adjusting for the model's complexity. The statistical significance of the regression model for PAT further supports this conclusion, with a low p-value indicating a robust relationship between the independent variables and profitability. Therefore, while the relationship between net premium, solvency ratio, and ROA appears relatively weak, there is a significant and meaningful association between these variables and PAT, suggesting that they play a crucial role in determining the profitability performance of Indian life insurance companies during the specified period.

## Conclusion

Based on the investigation result of the study shows that net premium income, solvency ratio are statistically significant and have an impact on the return on assets (ROA) of insurance companies in India.

It also shows that the independent variable as net premium income and solvency ratio significant impact of net premium income and solvency rate on Profit After Tax (PAT) of the life insurance companies in India.

It is evident that both net premium income and solvency ratio play a crucial role in determining the profitability performance of insurance companies in India. Our analysis reveals that these two factors have a statistically significant impact on the return on assets (ROA) and Profit After Tax (PAT) of life insurance companies.

The results highlight the importance of effectively managing net premium income, which represents the total revenue from premiums received, and maintaining a healthy solvency ratio, which reflects an insurer's ability to meet its financial obligations. These factors not only influence the overall financial health of insurance companies but also have direct implications for their profitability.

Our study underscores the need for insurance companies to strategically allocate resources to optimize net premium income while ensuring prudent risk management practices to maintain an adequate solvency ratio. By doing so, insurers can enhance their financial performance and mitigate potential risks associated with underwriting activities and market fluctuations.

Furthermore, our findings contribute to the existing body of knowledge by providing empirical evidence of the significant relationship between these key financial metrics and the profitability of insurance companies in the Indian market. This insight can guide policymakers, regulators, and industry stakeholders in formulating effective strategies to promote sustainable growth and stability within the insurance sector. Our research reinforces the notion that net premium income and solvency ratio are fundamental drivers of profitability in the insurance industry. By acknowledging and addressing the implications of these factors, insurance companies can position themselves for long-term success in a dynamic and competitive market landscape.

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# THE ECONOMICS AND MANAGERIAL IMPLICATIONS OF SETTING UP ELECTRIC VEHICLE CHARGING STATIONS AT MALLS, HOTELS AND CORPORATE PARKS

***Dr. Sandeep Kudtarkar**

## ABSTRACT

*The government of India is encouraging a shift to electric vehicles by 2030. It is required to build a seamless network of electric charging stations for enabling people to adopt EVs in the future. For the hospitality industry adversely affected by the Covid-19 pandemic and Online E-commerce platforms, cutting prices or adding a new benefit may not be enough to create a loyal customer or employee base. As people become more aware of the benefits of owning electric vehicles not only for personal usage but also for the environment sustainability. They will appreciate companies that have similar values and are willing to take action , and the better way for a mall company to exhibit their commitment towards sustainability is installing electric car charging station which may further enhance footfalls in their premises. The business models of either partnering with charging station operators for revenue sharing or renting the space can also add a source of revenue to malls, hotels, and corporate parks.*

***Keywords:*** *hospitality, DC charging station, environment, sustainability, brand value, social responsiveness*

## Introduction

Transportation accounts for almost 70 percent of petroleum consumption globally and tailpipe emissions are a big reason for substandard air quality in the cities. The pressure to reduce carbon emissions is continuously mounting. Vehicle electrification has emerged as a potential solution to this problem. While electric vehicles alone won't keep rising temperatures at bay, they will help reduce transportation emissions drastically. Vehicle electrification has numerous benefits for drivers, utilities, communities, and society.

Electrical vehicle (EVs) and their charging stations have a unique potential to add growth and stability to the energy ecosystem. The continuous increases in efficiency have led to reduced demand for electricity in advanced economies. Automakers including GM, Toyota, Honda, and Volkswagen have all announced dates for the phase-out of vehicles with internal combustion engines, as have such luxury brands as Volvo and Jaguar by 2030.

Building a robust infrastructural network of charging stations has imperative to support the increasing number of electric cars on the road. As the capacity for renewable energy production grows, charging infrastructure offers a conduit for an infinite vehicle fuel supply. This is a paradigm shift from fossil fuels, an exhaustible resource with a continuously rising price.

The current market outlook seems positive for triggering a large-scale roll-out of fast-charging infrastructure. US President Biden has proposed American Jobs Plan dedicating $174 billion to accelerate the shift to EVs. This figure, which encompasses consumer rebates, tax incentives, and purchases of zero-emission transit vehicles and school buses, includes $15 billion to build 500,000 new charging stations.

It has been relatively affordable to "fill up" EVs when plugging in because charging companies currently supply electricity as a loss leader. While establishing their market, these companies must give away the electricity to get people to buy the vehicles and begin

* Assistant Professor, St. Francis Institute of Management and Research, Borivali, Mumbai.

building charging brand loyalty. It is a freemium business model — cheap until you are hooked, invoking the Hamburger Rule, a standard economics principle whereby a product's price usually rises to the level of its closest rival. The price of charging electric vehicles will inevitably go up as EVs become cheaper than gas-fueled cars, hit the mass market, and go mainstream within the next decade. Currently in the US, for a three-year EV driver, the $40/month bump on his electric bill has replaced the $150/month gasoline bill depicting the cost reduction potential of electric cars.

In India, the market size of real estate sector was US$ 200 billion which was 10% of India's GDP. in 2021. 50 million square feet construction was done by India real estate in 2012.

## Literature Review

Technical, Geographical, and economic analysis of DC charging stations for the proliferation of Electric vehicles is done in the literature. The number of electrical vehicles increase by 150% from 2010 to 2015 (Pagany et al.). Peña1 and Céspedes (2016) have discussed built up of solar-based charging stations of Electical vehicles at the mall including the required space and materials required for the setup. They also did the cost-benefit analysis of the charging station and concluded optimum financial returns for the developer and investor. Trin Thananusak Et al. (2021) have analysed development of EV vehicles in Thailand. They studied EV charging stations in Thailand. They suggested the wait - and - see policy in this sector.

Christos Karolemeas, Stefanos Tsigdinos, Panagiotis G. Tzouras, Alexandros Nikitas. and Efthimios Bakogiannis (2018) have done the locational study in Greece. They suggested transport and parking hubs as more suitable locations for setting up EV charging stations. Oda et al. have studied the traffic at fast charging stations and cost-benefit analysis. Csiszár et al. studied the locational aspects of DC charging stations. Namdeo et al. suggested demand-based public charging stations.

India imports around Rs.8 trillion of crude oil and this are going to double in the next four to five years, which will have a huge impact on the economy. It is necessary to look for an efficient and alternative mode of energy for future mobility needs. The exorbitant cost of importing petrol and diesel and uncontrolled CO2 emissions from vehicles is major challenges to the Indian economy. It is imperative for India to encourage the vehicles running on CNG, and biofuels. While switching to EVs looks promising, the hurdles such as dearth of charging infrastructure, high initial cost , and shortage of electricity from renewable sources. Since India is a power surplus nation and e-mobility will be the most effective solution to develop import substitute, cost-effective, indigenous and pollution-free modes of transport. With the cost of developing and operating electric vehicles (EVs) expected to decline substantially with a drop in prices of lithium-ion batteries, India is likely to become a leading hub for manufacturing EVs and EV components. The Indian government wants electric vehicles to form 30% of all private cars, 70% of commercial vehicles, 40% of buses, and 80% of two- and three-wheeler sales by 2030.

E-commerce majors, such as Flipkart and Amazon, have plans to shift their existing vehicle fleets to electric. Jeff Bezos-led Amazon is in the process of deploying 10,000 units of EVs in its Indian goods delivery fleet by 2024. Walmart-owned Flipkart plans to introduce 25,000 units of EVs in its fleet to cut down on vehicular emissions. Other e-commerce players and food delivery startups are also planning to follow suit in the coming years. The EV Industry in India is growing and the governments is encouraging electric mobility in India and developing conducive regulations and standards for the growth of EV industry.

India has prepared the 'National Electric Mobility Mission Plan 2020 in 2012 to address energy security problem in India., pollutions by vehicles running on fossil fuels, and lack of local manufacturing facilities. In its guideline's government suggested to install charging stations at every 20 km on the roads. The government is also in the process of investing for proliferation of the charging station infrastructure.

The Indian auto industry contributes 25% of the manufacturing GDP. With new Manufacturing Policy, the contribution of vehicle manufacturing industry to the overall economy will increase to 28% by the year 2022. The Government of India initiated the Faster Adoption and Manufacturing of Hybrid and Electric vehicles (FAME) scheme which provides incentives for purchasing electric vehicles. Phase I of the scheme conducted in 2015-2019.The second Phase started in 2019 and is expected to be over by 2022. The government is releasing tenders to increase charging infrastructure in the country. The scheme offers incentives for electric and hybrid vehicles ranging from

Rs.1, 800 to Rs.29,000 for scooters and motorcycles and Rs.1.38 Lac for cars.

The Maharashtra State Government is focusing on increasing EV use in the state by proposing to exempt EVs from road tax and providing a 15% subsidy to the first lakh EVs registered in the state. To improve suitable infrastructure, the government proposed to provide a maximum subsidy of Rs. 1 million (~$15,549) per charging station up to the first 250 charging stations that are set up in Maharashtra state in India. Maharashtra has witnessed an increase in the number of electric vehicles (EVs) in 2021. Around 959 electric vehicles were registered in the state in 2017, while 7,711 EVs have been registered this year, till July 13, 2021, according to the regional transport office (RTO) data. The total number of EVs in the state now is 38,293. Mumbai too has seen an increase in people buying electric vehicles. While 85 EVs were registered in the city in 2018, 313 were registered in 2019, and 1,085 in 2020. In 2021, 1,282 EVs have already been registered in the city till July 13. With the increase in electrical vehicles in the city, the demand for charging stations for vehicles has also increased over the last two years. The Brihanmumbai Electric Supply and Transport (BEST) that operates electric buses in the city has set up charging stations at five bus depots in the city. The highest number of charging stations, 22 are at the Dharavi bus depot which is close to Bandra Kurla Complex. The BEST plans to open the stations for private vehicles if demand increases.

Some builders as well as housing societies are also now setting up charging stations in residential buildings. "Electrical vehicle charging points were provided to us on every level of the building. This was one of the things that were advertised to us by the builders. We presently have five electrical four-wheelers and two two-wheelers in the society," said Pinky Parikh, a resident of Veda Cooperative Housing Society in Parel. Many companies are also setting up electric vehicle charging stations in Mumbai and Navi Mumbai. Magenta, an electric vehicle technology solution provider announced the setting up of India's largest electric vehicle charging stations in Navi Mumbai.

The global sales of electric vehicles increased by 160% in the first half of 2021 from a year earlier to 2.6 million units, according to research firm Canalys, the latest sign of transformation afoot in the global auto business. In the first half of FY22, EV sales have more than tripled to 1.18 lakh units while a chip shortage of prodigious dimensions has restricted the sales of ICE (internal combustion engine) cars.

New EV launches led by Tata Motors (Nexon and Tigor) and electric two and three-wheelers have been providing the required impetus. Until September, electric two-wheeler sales stood at 58,264 units and three-wheelers at 59,808 units as per data compiled by the policy body, Centre for Energy Finance at Council on Energy, Environment and Water at Centre for Energy Finance (CEEW-CEF). Both demand and supply-side factors such as Outreach by manufacturers, improved charging infrastructure, price parity with conventional vehicles due to federal incentives and. falling battery prices are driving sales. The financial incentives by the central and state government are attracting new EV buyers whereas rising fuel costs are increasing the operational expenditure for ICE vehicle owners.

## Research Methodology

This exploratory study is an attempt to address the research question "How installing a charging station for electrical vehicles can add value to the hospitality industry and benefit environmental initiatives". The study was conducted from February 2022 to June 2022 in Mumbai city. The primary data was collected through interviews of five mall executives (Palladium Mall, Phoneix mall, Infinity mall, Inorbit mall , and R city mall in Mumbai city), two hotel executives (The Lalit Mumbai & Hotel Lemon Tree) , and two corporate parks executives (Neelkanth corporate park and Solitaire corporate park) along with the EV users using EV models such as Mahindrae20, Nissan Leaf and officials of Tata Power, the company which has installed the EVs in Mumbai city.

## Electrical Vehicles Infrastructure

The development and availability of EV infrastructure is a key requirement for the rapid adoption of electric mobility in India. The EV infrastructure includes three types of charging stations: Level one, two and three, direct current fast chargers (DCFC). A Level One charger is equivalent to charging from a household outlet, and an extension cord comes from a house to a vehicle. A Level 2 charger has a 240-volt power source, equivalent to what is required by an oven, water heater, or AC system. A DCFC charger has a voltage of 480 volts or more. The exact amount of time it takes to fully charge a battery can vary on each of these systems due to several factors, but the more volts, the faster things will go.

**Table 1: Types of EV Chargers**

| Types of EV Chargers | | | |
|---|---|---|---|
| **TYPE** | **VOLTAGE (V)** | **CAPACITY (KW)** | **MINUTES TO SUPPLY 80 MILES OF RANGE** |
| LEVEL 1 | 120 | 1.4–1.9 | 630–860 |
| LEVEL 2 | 240 | 3.4–20 | 60–350 |
| LEVEL3(DCFC) | 480 | 50–400 | 3–24 |

Level 2 EV chargers are cheaper to build and cheaper for utility systems to operate and cheaper for drivers to charge up with them. DCFC chargers are high-speed stations, which are very expensive and should be used for ride-sharing services, travelers on long-distance corridors and citizens in multi-unit dwellings that don't provide charging. DCFC infrastructure is also the backbone of electric transit and school bus fleets. Facilitating ridesharing with sufficient fast charging can play an integral role in improving urban life hence the government is investing in EV charging infrastructure.

### DC Charging Standards

The public DC Charging Standard is DC 001. BIS recommended CCS-2 (Combined Charging System) and CHAdeMO protocols for high-power fast charging.

### EV Cars in India

The electric vehicle (EV) race is on and Indian companies involved in this space are making technological changes. As the Indian EV industry gains widespread attention, its main focus is primarily improving on two fronts. First, by increasing the number of vehicles. At present, there are not many EVs available. Major mainstream offerings include Tata Nexon EV, MG ZS EV, and the Hyundai Kona electric. Presently, there are very few cars in the market like the Mahindra e-Varito, Mahindra e20 , and Tata Motor's e-Tigor, and KONA Electric of Hyundai. In the coming years, there will be many companies that will foray into this space and increase the types of Evs.

Like lithium-ion batteries which are the heart of electric vehicles, charging points are the next important thing.EV manufacturing companies are spending tonnes of capital and energy on charging station infrastructure. As per a report, by the year 2027, the business of EV charging stations can reach an estimated US$29.7 bn, at a CAGR of approximately 40% between 2020-2027.

## Case: Tata Power-EV Charging Solutions

Tata Power, India's largest integrated power company, is rapidly expanding its electric vehicle charging network. Tata Power's charging accessories have presence across all segments of the EV – public charging, captive charging, home charging, and workplace charging. It has also deployed all types of chargers including DC 001, AC, and Type2, Fast DC chargers up to 50kWh. and also, up to 240kWh chargers for e-buses. Tata Power currently has a presence in more than 92 cities in India with over 600 charging points.

They launched Mumbai's first public EV charging station at Vikhroli in August 2017 and Installed captive charging stations at customer premises in Hyderabad. They installed two charging stations installed for 2-wheelers and five stations for 4-wheelers in association with Hero Electric and Mahindra in Delhi. They provided customers with end-to-end EV charging infrastructure solutions and launched a software platform and mobile application to help customers locate EV charging stations, charge EVs, and pay bills online.

Tata Power has tie-ups with EV makers like MG Motor India, Jaguar Land Rover (JLR) India, and Tata Motors for charging infrastructure. They partnered with Tata Power to set up in 300 fast-charging stations over diverse cities across Delhi, Mumbai, Bangalore, Pune, and Hyderabad. These partnerships help the company as whenever the EV makers launch cars in specific

geographies, Tata Power's charging infrastructure is already set up there. Tata Power's tied up with the Central Railway Mumbai in association with the UN Environment Programme (UNEP) for charging facilities at the railway station and is about to launch EV charging points at Mumbai's railway stations

Oil marketing companies (OMCs) are also readying plans for the EV segment. Indian Oil Corp (IOC), the largest refiner and marketer, has installed 257 EV charging stations at its retail outlets and is planning another 1,800 stations this fiscal. Hindustan Petroleum Corporation (HPCL) has tied up with three entities including Tata Power for facilitating the setting up of charging infrastructure at its retail outlets. Tata Power has a memorandum of understanding (MoU) with Indraprastha Gas and the Government of Maharashtra for deploying EV charging infrastructure.

Tata Power Charging Infrastructure solutions have been deployed in 40 cities including Mumbai, Delhi, Bangalore, Hyderabad, Pune, Chennai, Ahmedabad, Chandigarh, Lucknow, Kolkata and Vishakhapatnam. Tata Power plans to become the leading EV charging network provider in India with over 1 lakh chargers installations by fiscal 2026.

Tata power offer smart, safe. and innovative charging solutions, complete End-to-End Services, from Captive Charger Installations to Maintenance of electric vehicles, and building Public Charging Stations for diverse charging standards and specifications and different EV categories, makes, and models. Tata Power EV Charging mobile app provide EV owner the convenience of locating charging stations on an aerial map, getting updates on charging and recommendations on paying charges online. The charging is enabled with the Tata Power EZ charge mobile platform.

## The regulations in terms of setting up charging stations

As per the SOPs of the Maharashtra state government and guidelines issued by the Mumbai fire brigade, EV charging stations are prohibited to install in automated mechanized car parking systems, stacked car parking, and car parking towers. The charging station can be installed in the first basement's parking area having a ramp, and the first podium car parking floor to avoid any risk of fire and ease of fire rescue operation. EV charger places must be kept well ventilated.

## Discussions

### a) Value proposition of setting up EV chargers at Malls, Hotels, and corporate parks

**Hotels**

- Profit from Fee-based charging or offer as a complementary service.
- Attract new eco-tourism and electric car-driving premium guests.
- Increase revenue per available room.
- Get higher ratings and positive reviews on popular travel sites.
- Get your hotel featured in map services and navigation systems.

**Shopping Malls**

- **Attract EV drivers :** Many individuals drive and park for their retail shopping trips-so many that the quantity of vehicles in lots is being utilized to anticipate the market performance for retail organisations. EV drivers need to stop as well and they want to do it where they can charge. As the EV industry continues to develop, EV charging will turn into a key investment for retailers that need to draw in EV drivers
- **Increase customer speed:** Charging not only attracts customers and keeps them around longer but can also increase the amount of time and money they spend in a store. One major retailer found that shoppers spend about a dollar for every minute they were in the store. By adding EV charging, the retailer tripled time in the store and as a result, a tripled customer spending.
- **Put the store on map:** EV charging also puts store on the map.EV drivers depend on EV charging applications like Tata Powers's mobile application to rapidly discover places where they can charge. At the point when driver searches for a spot, to charge in the application, they can easily discover retail locations that offer to charge for their vehicles. Since EV drivers tend to charge their vehicles while they stop, having charging accessible can persuade drivers to pick a store over a competitor's area.

- **Create customer Connections:** With smart EV charging that lets drivers interact with stations online, or in a mobile app, retailers can create virtual connections to drivers who use their stations. This just requires submitting a simple connection request in the app and allows retail organizations to learn more about who is using their stations and when, giving them new insight to customers.
- Offer special deals to EV drivers: Offers such as free charging, free stay at hotels, and even free wine testing are given to EV buyers.

**Corporate Parks**

- **Customers stay for long:** Retail businesses benefit from EV charging stations. They motivate customers to remain and browse for more with straightforward parking facilities that can at the same time give charging benefits. Longer browsing increases the shopping basket.
- **Keeping employees happy:** Employees who feel valued by the business and whose needs are more engaged and productive. Providing essential charging for employees demonstrates a responsive and committed employer.
- **Demonstrating environmental commitment and supporting brand value:** Social responsibility is key for business today and enabling greener vehicles is a significant part of that. EV charging in the work environment sends a reasonable and clear message about where the business stands regarding reducing the ecological impact of operations and personnel.
- **Improving efficiency and cutting cost:** Electric charging points at work make life easier for employees, reducing time spent seeking out where to charge for example. For companies where vehicle fleets are part of the business, there are opportunities to save on fuel and maintenance costs.
- **Providing convenience to clients:** Clients make decisions about which complies to partner with on the basis of a wide range of factors and convenience is one of the most important.EV charging stations on the premises will be attractive as clients can simply be charged while attending a meeting or site visit.

**b) The challenges and risks involved in setting up an EV charger**

- Free charging, which is now available at some workplaces and public facilities, is not likely to be sustainable over the long run.
- Charging at home might be more or less attractive depending on whether utilities offer lower rates for those who charge their vehicles at times when demand for electricity is low.
- The biggest stumbling blocks for new technologies have to do with their adoption, and the challenge for EVs is finding ways to get more people to relate to them.

## Economics of setting up EV charger

EV charging station creates added revenue stream for the mall and hotel owners. The mall and hotel owners can adopt the business model of OPEX where they can partner with a power distribution company installing DC chargers by availing the parking space and electrical infrastructure for 20 to 25 years, in lieu of which they can get a share in the revenue. This business model can be adopted if there is demand is certain and profitable if the numbers of EV users increases. In another business model, the mall owners can earn rental income by partnering up with the operator of the charging stations with an definite number of vehicles to be attended, paying rent to the mall and hotel owners.

## Managerial Implications

For the hospitality industry adversely affected by the Covid-19 pandemic and Online E-commerce platforms, cutting prices or adding a new benefit may not be enough to create a loyal customer or employee base. As people become more aware of the benefits of owning electric vehicles not only for themselves but for the environment, they will be looking for companies that have similar values and are willing to take action and what a better way to show their concern for sustainability by taking action by installing electric car charging station as a way to help prove company's commitment to the environment which may further enhance footfalls in their premises.

## Conclusion

For the hospitality industry, cutting prices or adding new benefits may not be enough to create a loyal customer or employee base. As people become more aware of the benefits of owning electric vehicles not only for themselves but for the environment, they will be looking for companies that have similar values and are willing to take action and what a better way to show that they are taking action by installing electric car charging station as a way to help prove company's commitment to the environment which may further enhance footfalls in their premises.

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# About the Institute

## The Institute

St. Francis Institute of Management and Research (SFIMAR) is an ISO 9001:2015 certified Premier Management Institute affiliated to the University of Mumbai and approved by AICTE. The Institute belongs to the "The Society of congregation of Franciscan Brothers" and the group has celebrated its centenary in year 2008. SFIMAR has received many awards & recognitions, including 'Most upcoming B-School' award in April 2015, by ASSOCHAM.

SFIMAR's remarkable infrastructure, with well equipped computer centre, Wi-Fi enabled campus, updated laboratories and rich library resources facilitates the students in improving and updating their knowledge.

Central to our success is a team of dynamic, skillful and resourceful faculty that creates a deep understanding of business through its research. SFIMAR's Research Centre conducts research in areas of entrepreneurship, business, service & community development to supplement the post graduate education.

SFIMAR is also actively involved in various social activities, corporate social responsibility (CSR) & individual social responsibility (ISR) initiatives through which it contributes in empowering the society.

## Vision

To flourish as a seat of learning of international standards for developing an entrepreneurial class of value based industrial leaders empowered with techno-managerial competence to sustain innovation for building global business of the future.

## Mission

To enter the realm of globally successful B-schools by imparting value based education for creating responsible and thoughtful citizens who would lead the world by example and excel through innovation, an entrepreneurial spirit and a humanitarian attitude.

## Programmes

### Full Time Programme (Master of Management Studies)

Inception: 2002
Affiliation: University of Mumbai & Approved by AICTE
Batch Strength: 120
Specialization : Finance, Marketing, Human Resources, Information Technology, Operations.

### Part Time Programme

Inception: 2009
Affiliation: University of Mumbai
Masters Degree in Financial Management (MFM) – Batch Strength - 30
Masters Degree in Marketing Management (MMM) – Batch Strength - 30

### Post Graduate Diploma in Management(PGDM)

Inception : 2012
Approved by AICTE New Delhi & DTE Government of Maharashtra
Sanction Intake : 120 seats

## Career Management Centre

The Career Management Centre (CMC) is the liaison between our highly diverse talent pool of students, alumni and employers who benefit from their expertise.

SFIMAR has a planned approach towards training its students and getting them ready for the industry. The students are trained in functional, technical, communication and leadership skills with a focus on enhancing their cognitive abilities through various academic and non-academic programmes. Utmost importance is given to imbibe ethical and social values in them. The regular recruiters for our students are Syntel Street, BlackRock, SS&C GlobeOp, Kotak Mahindra Bank, ITC, L&T Infotech, IPSOS, Nomura, Nielsen, HDFC Bank, Transparent Value, CMIE and many more…



*SFIMAR invites papers for...*

# SFIMAR
## RESEARCH REVIEW

Research Journal for Academicians & Researchers
Contact: 96195 51840
E-mail: srjournal@sfimar.org, sulbha@sfimar.org

# PATHH

Research and Thesis Conference for academicians & researchers
Contact: 022 2891 7089, 2895 8403
E-mail: pathh@sfimar.org, sulbha@sfimar.org

# Anveshi

**The Researcher**
Research Conference for Management Students
Contact: 022 2891 7089, 2895 8403
E-mail: anveshi@sfimar.org


***For further details please contact;***

**ST. FRANCIS INSTITUTE OF MANAGEMENT & RESEARCH (SFIMAR)**
**and**
**ST. FRANCIS INSTITUTE OF MANAGEMENT & RESEARCH - PGDM**
**Approved by AICTE, DTE, An ISO 9001:2015 Certified**
Gate No.5, Mount Poinsur, S.V.P. Road, Borivali West, Mumbai - 400103.
Tel: 022 - 2891 7096 / 2891 7089, Ext. No. 147,168, 145. Mob. : +91 74000 71626
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