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Editor-in-chief Message

Dear Reader,

I am pleased to present another issue of Ninth volume of bi-annual journal 'JSSGIW Journal of Management'. I express thanks to the authors who have contributed research papers for this volume along with the review panel for their patronage.

A variety of topics related to management has been explored in this issue. The current issue highlights various areas of management like virtual reality, green marketing, Fintech, OTT and menstrual hygiene.

I look forward to receive the same support from academicians and researchers for upcoming volume. Research papers, case studies and book reviews are invited. Guidelines for Authors are mentioned at the last page of the journal. All papers pass through blind review process by the expert panel.

We would always appreciate feedback for improving the quality of our journal. Soft copy of journal is available on our website www.shim.co.in

Regards,

Dr. Ashish Thakur
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Contents

Women's Consumption Pattern towards Feminine Hygiene Products in Bhopal Region of Madhya Pradesh

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Abstract:

The study of consumption patterns examines the reasons behind people's purchases as well as their methods, timing, locations, and frequency. Women utilize feminine hygiene products for personal care. Menstrual cups, tampons, panty liners, feminine hygiene wash, and sanitary napkins/pads are some of these items. In order to analyze women's consumption pattern towards feminine hygiene products, this study was carried out in the Bhopal region of Madhya Pradesh. The goal of this study is to discover the various factors influencing women's consumption pattern. In order to gather primary data for achieving the goals of this research, a structured questionnaire was developed, and a survey of students, working professionals, and homemakers in the age range of 16 to 40 years was undertaken. This study will suggest strategies to promote the purchase of feminine hygiene products.

Keywords: Consumption pattern, Feminine Hygiene Products (FHP), Purchase Decision, Bhopal Region.

Introduction:

Consumption analysis aims to understand the consumers involved, the purpose behind their consumption, and the associated costs of resources used. On the other

hand, purchase decision refers to the cognitive process individuals go through to identify their needs, explore different options, and ultimately choose a specific product or service. Consumption patterns towards feminine hygiene products can vary depending on cultural, social, and individual factors. Feminine hygiene products are specifically designed to assist women in managing their menstrual cycle. These products, such as tampons, sanitary pads, menstrual cups, and others, are intended to provide comfort, absorbency, and convenience during menstruation. Women typically choose these products based on personal preferences, comfort, convenience, and their specific menstrual needs.

Review of Literature:

Maria Rybaczewska (2020) tried to create a relationship between the purchase decisions of consumers and the image of a company as an employer, wherein it was found that the brand equity with a new perspective gives a base to formulate strategies and can be considered as a component of marketing activities. Nivekha (2019) conducted a study in Coimbatore, a city in the state of Tamil Nadu in India, to identify the factors affecting the buying behaviour of consumers towards selected personal hygiene products. Alex (2019) the study focused on the major factors that affect consumers' preferences. These factors were product features, brand knowledge, advertising execution, loyalty, personal and social factors. Chaudhury (2017) focused on the rights and responsibilities of consumers. He said there is a need to create awareness among all age groups regarding their rights, responsibilities and grievance handling machinery. Khanna (2014) has studied the dynamics of the buying behaviour of young consumers such as their shopping habits, brand awareness and brand preferences, to find out the difference in the shopping orientations with respect to gender perspective.

Research Questions:

Q.1 What are the various factors that affect the purchase decision of women consumers while purchasing feminine hygiene products?
Q.2 Is there any influence of demographic factors on the consumption pattern of females of Bhopal region?

Research Objectives:

1. To analyze the women's consumption pattern towards different feminine hygiene products.

2. To study the influence of demographic factors on the consumption pattern of females of Bhopal region.
3. To identify the various factors affecting purchase decision of women consumers while purchasing feminine hygiene products.

Research Hypotheses:

- **$H0_1$:** There is no significant influence of demographic factors (age, educational qualification and occupation) on the consumption pattern of females of Bhopal region.
- **$H0_2$:** There is no significant difference among factors affecting purchase decision of women consumers while purchasing feminine hygiene products.

Research Methodology:

This study has been conducted by developing a structured questionnaire, following which a survey was conducted among students, working professionals and homemakers within the age bracket of 16-45 years. The sample was selected on the basis of random sampling and the questionnaire was circulated among 200 respondents of the Bhopal region. The researchers received 169complete responses, which were considered for this study.

Data Analysis:

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.948	0.931	25

Source: SPSS output

Cronbach's Alpha helps in measuring the reliability and consistency of data. Here value is 0.948 which shows that the data used in this research is 94% reliable.

Table 2: Descriptive Statistics

Demographics	Variables	Frequency	Percent
Age	Below 18 years	19	11.24
	18-25 years	102	60.36
	26-35 years	28	16.57
	above 36 years	20	11.83
	Total	**169**	**100**

Qualification	10th Pass	10	5.92
	12th Pass	18	10.65
	Graduate	51	30.18
	Postgraduate	75	44.38
	PhD	15	8.88
	Total	**169**	**100**
Occupation	Student	96	56.80
	Working Professional	50	29.59
	Home-Maker	23	13.61
	Total	**169**	**100**

Source: SPSS output

Above table shows that, most of the respondents are from 18-25 years (60.36%) who are students (56.80%) and pursuing their post-graduation (44.38).

Hypotheses Testing:

$H0_1$: There is no significant influence of demographic factors (age, educational qualification and occupation) on the consumption pattern of females of Bhopal region

$H0_{1a}$: There is no significant influence of age on the consumption pattern of females of Bhopal region.

Table 4: ANOVA Analysis

	SS	**df**	**MS**	**F**	**Sig.**
Between Groups	6.31	3	2.10	4.91	.000
Within Groups	14.04	166	1.69		
Total	16.36	169			

Source: SPSS output

From the above analysis, it is noted that the F-value is 4.91 and the p value is 0.000 at 5 per cent level of significance which is less than 0.05 that is, the results are significant. Hence, the null hypothesis is rejected.

$H0_{1b}$: There is no significant influence of educational qualification on the consumption pattern of females of Bhopal region.

Table 5: ANOVA Analysis

	SS	df	MS	F	Sig.
Between Groups	2.389	4	0.347	5.22	0.02
Within Groups	14.246	165	0.108		
Total	15.635	169			

Source: SPSS output

From the above analysis, it is noted that F-value is 5.22 and the p value is 0.02 at 5 per cent level of significance which is less than 0.05 that is, the results are significant. Hence, the null hypothesis is rejected.

$H0_{1c}$: There is no significant influence of occupation on the consumption pattern of females of Bhopal region.

Table 6: ANOVA Analysis

	SS	df	MS	F	Sig.
Between Groups	1.36	2	0.18	3.48	0.01
Within Groups	13.29	167	0.14		
Total	14.65	169			

Source: SPSS output

From the above analysis, it is found that F-value is 3.48 and the p value is 0.01 at 5 per cent level of significance which is less than 0.05 that is the results are significant. Hence, the null hypothesis is rejected.

$H0_2$: There is no significant difference among factors affecting purchase decision of women consumers while purchasing feminine hygiene products.

Table 7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.930
Bartlett's Test of Sphericity	**Approx. Chi-Square**	123.28
	df	23
	Sig.	.000

Source: SPSS output

Table 8: Communalities

Factors	Initial	Extraction
Brand Familiarity	1.000	.762
Price	1.000	.663
Celebrity Endorsement	1.000	.559
Availability of Product	1.000	.470
Reviews of Product	1.000	.448
Consistency and Convenience	1.000	.482
Extraction Method: Principal Component Analysis.		

Source: SPSS output

Table 9: Total Variance Explained

	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Component	**Total**	**per cent of Variance**	**Cumulative per cent**	**Total**	**per cent of Variance**	**Cumulative per cent**	**Total**
1	2.298	38.305	38.305	2.298	38.305	38.305	2.173
2	1.086	18.108	56.412	1.086	18.108	56.412	1.431
3	.767	12.782	69.194				
4	.732	12.194	81.388				
5	.642	10.695	92.083				
6	.475	7.917	100.000				

Extraction Method: Principal Component Analysis
Source: SPSS output

The above analysis shows the factor loadings for all the factors using the principle component analysis. The first two factors have variances (eigen values) that are greater than 1. These factors are Brand Familiarity and Price, which affects the purchase decision of women consumers while purchasing feminine hygiene products. Therefore, null hypothesis is rejected.

Results and Discussions:

Consumption pattern of female consumers of Bhopal region is influenced by their age. Younger people, particularly kids and teenagers, frequently purchase products and services to meet their fundamental requirements, including clothing, food, and shelter. People's purchasing habits may change towards greater discretionary spending as they get older and more financially independent. The qualification of all the respondents is different therefore their decision varies according to their understanding level and qualification is an important aspect when it comes to purchase of feminine hygiene products. The type of work an individual does might have a huge impact on their purchasing habits. The amount of money that people spend can vary depending on their career, work environment, and other job-related requirements. It was discovered that two factors influence women's purchase decisions for feminine hygiene products, notably highlighting price and brand familiarity as key influences. Businesses and marketers can more effectively target female consumers by modifying their strategies with an understanding of these aspects.

Limitations and suggestions for future research:

Despite the beauty of its design, no study is perfect, and this one has certain flaws as well. Conducting the study in various geographical areas can provide a more comprehensive understanding of women's purchasing decisions regarding feminine hygiene products. Future research can explore additional variables such as product availability, product packaging, marketing strategies, social influences, and personal beliefs or attitudes towards hygiene and health. Comparative studies can provide valuable insights by comparing different groups or contexts. By addressing these considerations and conducting future research that incorporates a broader range of variables and diverse samples, researchers can enhance the understanding of women's purchasing decisions and provide more concrete and comprehensive results.

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Impact of Green Marketing Strategies on Consumer Buying Behaviour

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Abstract:

Green marketing will be a proactive issue as it enters the consumer world, where customers are not only aware of different brands and their perceived quality, but they have also begun to pay more attention to the environment, resulting in them being more eco-friendly. As a result, businesses are looking at different ways to communicate with consumers in order to keep them loyal for a long time by using green management. Consumers were compelled to become more conscious of environmental and green concerns, and only a small number of businesses participated in this green marketing technique. As a result, the goal of this study was to see how much of a role green marketing has in influencing customer purchasing behaviour when it comes to environmentally friendly items.

Keywords: Consumer, Marketing Strategy, Environment, Price, Promotion

Introduction:

Green marketing refers to selling products and/or services based on environmental benefits. The apparent assumption in green marketing is that potential customers would see "greenness" as an advantage and base their purchasing decisions on it. Green marketing's not-so-obvious premise is that customers will pay more for green items than for a less-green similar alternative product - an assumption that, in my opinion, has yet to be demonstrated decisively. Green marketing is becoming more popular as more people are prepared to put their money where their mouth is when it comes to the environment. However, it may be harmful. The public is dubious of green claims to begin with, and if a green claim is revealed to be incorrect or contradicted by a company's other goods or activities, it may substantially harm a company's reputation and sales. Greenwashing is the practise of portraying a product

or service as green when it is not. Simply put, green cleaning entails utilising solutions that are both safe and good for you and the environment, as well as eco-friendly cleaning techniques such as water conservation. It's also about buying items from firms who are environmentally conscious and follow ethical business methods. "Green" is an umbrella phrase that refers to organic, sustainable, and/or generally environmentally friendly products and behaviours.

While green marketing is becoming increasingly popular as more people are prepared to back their environmental concerns with their dollars, it may be risky. The public is dubious of green claims to begin with, and if a green claim is revealed to be incorrect or contradicted by a company's other goods or activities, it may substantially harm a company's reputation and sales.

Green marketing includes wide range of actions, including product adjustments and changes to manufacturing process and promotional activity innovations. Such a product can be classified as a green product if it is environmentally friendly in and of itself or if it is manufactured in an environmentally friendly manner. Green marketing, often known as "environmental marketing" or "sustainable marketing," refers to an organization's efforts in creating, selling, distributing, and promoting ecologically friendly items.

Adoption of green marketing:

The majority of businesses are pursuing green marketing for the following reasons:

- **Opportunities**

In India, over 25% of customers favour environmentally friendly items, while approximately 28% may be called health aware. As a result, green marketers have a diversified and sizable market to serve. Green marketing examples include the water-saving Surf Excel detergent (advertised with the slogan "do bucket paani roz bachana") and the energy-saving LG consumer durables. We also have green buildings, which are energy, water, and construction material efficient and have a lower impact on human health and the environment due to improved design, construction, operation, maintenance, and waste disposal.

- **Social Responsibility**

Many businesses have begun to recognise the need of acting in an environmentally sustainable manner. They are committed to attaining both environmental and profit-related objectives. Last year, HSBC became the world's first carbon-neutral bank. Coca-Cola, for example, has engaged in a variety of recycling initiatives. Walt

Disney World in Florida, United States, has a well-developed waste management programme and infrastructure.

- **Governmental Influence**

The government has enacted a number of rules to safeguard consumers and society as a whole. The Indian government has also created a legislative framework to decrease the generation of hazardous goods and byproducts. These regulations minimise the manufacture of hazardous items and their use by customers, particularly those that are damaging to the environment; for example, the ban on plastic bags in Mumbai and the banning of smoking in public places.

- **The Threat of Competition**

Green marketing is used by many businesses to keep their competitive edge. Many mainline rivals have followed the lead of specialised brands like Body Shop and Green & Black in adopting green marketing strategies.

- **Cost-cutting**

The reduction of hazardous waste might result in significant cost savings. Many businesses can have a symbiotic connection in which one company's trash is used as a cost-effective raw resource by another. Fly ash from thermal power plants, for example, is utilised to make fly ash bricks for building, which would otherwise contribute to a massive amount of solid waste.

Green marketing mix-based strategy:

The word "green" is used by a company to advertise itself in order to get a competitive advantage. In marketing, the 4Ps, like green marketing, play an important part in client happiness. For a successful and standard marketing, every firm has a marketing mix. Marketing is affected not just by its marketing mix, but also by a variety of other internal and external elements. A successful marketing mix is critical to a company's future success, and it may be achieved via thorough research and analysis. In green viewpoints, the four Ps of marketing may be clearly identified.

1. Green Product

The first P product is the most crucial priority for every organisation is to manufacture items that do not hurt the environment. Green marketing items are chosen with the goal of minimising negative environmental consequences, reducing resource consumption and pollution, and so ensuring environmental safety. It is possible to design a product that can be mended, recycled, reduced, and reused. The

majority of consumer decisions have a direct influence on the product's green labelling. When the buying choice was impacted by the hazardous elements of the goods, businesses began to develop environmentally friendly or green products and push green policies.

2. Green Price

The amount a customer pays for a product is referred to as the price. Green items are generally more expensive than non-green products. This might be because the cost of producing environmentally friendly items is higher than the cost of producing conventional products. The traditional CRT television, for example, would be less expensive than the most recent LED televisions. Similarly, all new and hybrid items will undoubtedly be more expensive for the user. Even if it is initially costly, green marketing will prove to be cost effective in the long term. The cost of a green product should never be a deterrent to a consumer's decision to buy it.

3. Green Place

Place is the channel or network of distribution. A green venue can be described as something that makes it easier for customers to go to a green product by reducing their effort. The green location should be able to persuade customers of the benefits of the green product. These products can be licenced for local manufacturing to minimise the cost of imported goods and reduce transportation emissions. People are less likely to go a considerable distance to purchase a green product, preferring instead to purchase a non-green product. The firm must verify on a regular basis to see if its suppliers and distributors are environmentally friendly, such as by utilising environmentally friendly cars.

4. Green Promotion

Green marketing efforts should be transparent; in order to familiarise clients with a product, the firm should focus on its promotional activities, including commercials and a portion of it devoted to corporate social responsibility, in order to attract loyal customers. The selection of promotional partners, promotional materials, and advertising message all require careful consideration and awareness.

Methodology:

This was an explanatory research project that looked at the impact of green marketing strategy on consumer purchasing patterns in terms of social class, notably education levels, as well as the ideas, techniques, and principles utilised by organisations to

influence consumer purchase decisions. The researcher used a survey to examine consumer purchasing behaviour on green branding, eco labelling, and environmental awareness by randomly selecting 150 respondents and delivering 150 questionnaires to them. The purpose of selecting responders from a random place was to guarantee that the whole study region was covered.

Analysis of data:

This poll included a total of 134 university or college educated respondents out of 150 total respondents. Meanwhile, 16 respondents said they had never attended a university or college. Sixty-four percent of local university/college students and twenty-four percent of private university/college students participated in the survey, with the remainder respondents having had no higher education from either university or college. The university responder diversity is seen in the graph below.

Table 1: Socio-economic characteristics of the respondents

Measurement	%
local university/college student	65.4%
private university/college student	24%
did not receive higher education from either university or college	10.6%

Respondents to a questionnaire survey were asked to complete a series of Likert scale questions ranging from 1 to 5 (1=least important, 2=less important, 3=neutral, 4=important, 5=most important) to assess the independent and dependent variables. The more important/influence the elements are, the higher the mean score.

Table 2 shows that limiting environmental effect received the highest mean score of (4.50), while the influence of eco-labelling on consumers purchasing eco-friendly products had the lowest score of (3.71). This may be explained by the fact that consumers were concerned about the impact of their products on the environment, which influenced them to buy eco-friendly items. While the reason for the lowest score for green branding influence was due to the consumer's lack of awareness of the context and aims of the company's and product's green branding. Other metrics got favourable comments as well, with the average score exceeding 3 and almost reaching 4 (Important).

Table 2: Mean Score of Green Branding

Measurement	Mean
Eco-Friendly Technology	4.03
Eco-Friendly Packaging	3.98
Eco label on product	3.80
Minimize impact toward Environmental	4.50
Influence of Eco-labelling	3.71

Table 3: Mean Score of Eco-Labelling

Measurement	Mean
Technology Development	4.02
Energy Saving	4.37
Promoting Green Branding in product line	3.81
Implementation of green label in product line	3.89
Green Advertisement	3.92
Influence of Eco-Labelling	3.61

Table 3 shows that energy conservation had the greatest mean score of all the Eco-labelling assessments, with a value of (4.37), while impacted by eco-labelling had the lowest mean score of (3.61). This may be characterised as customers prioritising the purchase of an eco-friendly product because of its potential to save energy or conserve the environment, allowing them to save more money in the future while also preserving the environment. The impact of eco-labelling had a slightly higher score of 3.61, indicating that consumers did not completely comprehend the purpose of eco-labelling on items and its significance for environmentally friendly products. Other measures received good feedback in the range of 3.81 to 4.02.

Table 4 shows that knowledge of the product's level of pollution reduction had the greatest mean score of (4.28) among the measurements of this variable, while information from the official website had the lowest mean score of (3.85). This may be explained by the introduction of new eco-friendly products from time to time, which allowed consumers to learn about the product's pollution reduction through news obtained in a variety of methods. While the official website had the lowest mean score, this was owing to the fact that it was not one of the primary sources of

information for consumers looking for information about environmentally friendly items. Aside from that, additional measurements had positive results, ranging from 3.68 to 4.11.

Table 4: Mean Score of Environmental Awareness

Measurement	Mean
Information from Official Website	3.85
Recommendation from friends and family	3.87
Eco-friendly product advertisement	3.89
Eco-friendly product promotion material	3.86
Information from reading materials	3.93
Product shop	3.87
Knowledge of level of pollution reduction from product	4.28
Technology development of product	3.99
Substance used in product	4.11

Table 5: Mean Score of Consumer Purchasing Behaviour on Eco-Friendly Products

Measurement	Mean
Importance of environmental protection	4.2015
Enhance quality of lifestyle	4.0267
Getting satisfaction	3.7200
High Product Value	4.0667
Eco-friendly features on product	3.8533
Education background	4.0733
Financial capability	4.0533

Awareness of environmental issues	4.4900
Self-esteem	3.6833
Education issues	3.7512

Table 5 shows that knowledge of environmental concerns had the greatest mean score of (4.49) among other variables, while self-esteem had the lowest score in this category with a score of (3.68). This might be explained by the fact that environmental concerns were one of the primary causes driving consumers to purchase environmentally friendly products in order to protect the environment for future generations. Self-esteem had the lowest score since few people would buy eco-friendly products for the sake of self-satisfaction. Furthermore, additional measures yielded favourable results, with mean scores ranging from 3.75 to 4.20.

Table 6: Significant value from Multiple Regression Analysis

Model	Sig.
Green Branding (GB)	0.211
Eco-Labelling (EL)	0.081
Environmental Awareness (EA)	0.000

Green branding had a significant value of 0.211, ecolabelling had a significant value of 0.081, and environmental awareness had a significant value of 0.000, according to Table 6. As a result, it can be concluded that green branding had no significant or minor relationship with consumer purchasing behaviour on eco-friendly products; eco-labelling had no significant or moderate relationship with consumer purchasing behaviour on eco-friendly products; and environmental awareness had a significant relationship with consumer purchasing behaviour on eco-friendly products.

Conclusion:

When it’s about green marketing, the financial side of marketing should not be ignored. Consequences of green marketing should be known to all. Think again if you think people aren't worried about environmental concerns or won't pay a premium for environmentally friendly items. You must discover a way to improve the performance of your product, reinforce your customer's loyalty, and fetch a higher price. Green

marketing is still in its early life, and more research is needed to understand its potential.

Despite its importance in today's world of finite resources, the environment is regrettably not given the attention it deserves. Only a small percentage of firms are aware of the problem. Despite the fact that environmental issues have existed for a long time, research on the subject is still insufficient. Similarly, research on "Green Marketing," which has lately gained popularity, are insufficient. As a result, in the context of fast evolving technology and a quickly changing world, businesses bear significant responsibility for environmental protection and the production of environmentally friendly green products. The company that meets that responsibility will be able to thrive in the future.

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Impact of access factor on consumer behaviour towards adoption of OTT streaming services in Bhopal division

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Abstract:

OTT stands for 'Over The Top' which refers to the Internet streaming service through which video along with audio and other media contents reach to the audience by subscription but without the use of cable system. When it comes to the most happening mode of entertainment, which is available through the most convenient package and mode, OTT is the obvious answer. OTT is entirely different from satellite TV and broadcast TV. The concept of stay-at-home based entertainment trend has been the buzzword. It is beyond the gamut of entertainment. The current study explores the impact of access factor on consumer behaviour towards adoption of Over-The-Top streaming services in Bhopal division.

Keywords: OTT, access, factor, entertainment, media

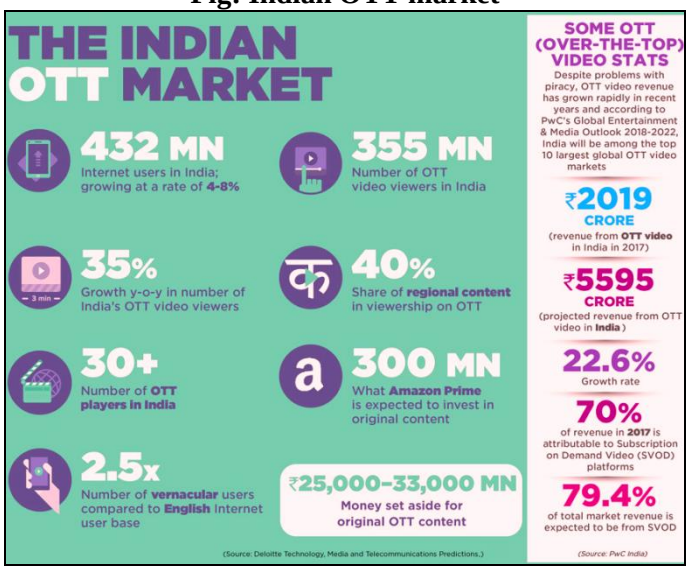
Introduction:

OTT stands for 'Over The Top' which refers to the Internet streaming service through which video along with audio and other media contents reach to the audience by subscription but without the use of cable system. The user does not need

wires, towers, rooftop dishes and set top boxes. OTT refers to distribution of the contents in the form of video to wide range of Internet enabled devices (Bohlin et al., 2015).

The OTT user is able to see his/her choice of contents as per the wish. Net neutrality has come up as the supporter of OTT freedom. The users can pick up his/her piece of content and use it anywhere, anytime. Video streaming offers bright opportunity for content based networks for the purpose of scalability of their channels (Mushtaq and Abdelhamid, 2017). All it needs is a Smartphone/ TV, Internet and subscription plan. People were reluctant to pay for subscription, but when they got best deal in terms of choice of contents, they went for it. Now, people are so addicted that they finish the contents at once in the form of binge watching. As per KPMG and Eros Now report 2022, people on an average spend more than an hour per day on OTT in India. This is the real disruptive change for the conventional media sector.

Fig: Indian OTT market



[Source: Deloitte and PwC data, 2022]

The OTT channels are so famous in India that everyone wants to sail on their ship. India is considered as the fastest growing entertainment market in the world (Gracey, 2021). Telecom companies like Jio, Vodafone and Airtel have started offering free subscription of selected OTT channels with their postpaid plan owing to the digital flow. Jio offers annual plan with free subscription of selected channels. To retain the customer base and increase more, every channel is offering discounts and free initial

subscription. There are more than 35 OTT players in India, out of which 10 are most famous and top three are global brands. Various package deals are offered to lure the customers in terms of family pack/ multiple device logins/ add-on features/ high quality experience etc. Needless to say, almost all the channels have the youth as most favourite target audience since these people have comparative more time to watch their favourite contents. Since teenagers and youth are able to find the contents of their interest, they are more acceptable to OTT channels (Kumar et al., 2022).

OTT: Indian scene

- ✓ As per Deloitte report 2022, the number of subscribers will witness a growth of 17% and would scale up from 101 million to nearly 225 million, which is a great progression.
- ✓ FICCI report 2022 says, in the beginning of 2022, there were nearly 447 million viewers of OTT in India. This shows that India is second OTT market in the world just after China.
- ✓ Finally, as per BCG (Boston Consulting Group) report, there are nearly 5 lakh jobs which are going to be created in multiple arenas due to OTT. Further, there are numerous artists who, were unorganized are now becoming the heroes on OTT platform.
- ✓ OTT revenue in India has risen up from Rs. 2019 crore in 2017 to Rs. 5595 by 2022.

OTT has been there in India since few years, but since 2020 when pandemic first wave was there, it has been into limelight; it has been into our Smartphone; it has been the best source of entertainment and it has been the buzzword everywhere. It was pandemic which started in 2020, due to which cinema halls were closed down. There was full lockdown throughout the nation; the life became standstill. Spending months at home without entertainment source was a hard nut to crack.

SWOT analysis of OTT sector

Strengths:

- Content supremacy: Due to best contents, people have been following OTT specially during Covid. The notion of 'content is the king' has become true.
- Cost effective package: While a typical multiplex going experience would cause heavy; OTT is either free or starts as low as Rs. 99.
- Ample flexibility: One can watch any content at any time, pause it, and resume it.
- Privacy: With sufficient privacy given, the user can now watch any content without restrictions.

Weaknesses:

- Censorship issues: There are many people who believe that due to excessive violence, foul language and inappropriate visuals, censorship is a question. It has been the notion that most of the OTT contents can not be seen with family.
- Privacy issues: Sometimes there are security threats in terms of saving the log-in details of the users which leads to breach of privacy issues.
- Mental & physical health: It has been said that OTT contents promote binge watching and addiction due to high flexibility. Due to which people are watching contents for long time leading to adverse impact on sleeping habits, routine life, stress,

Opportunities:

- The penetration of 5G Internet services in all corners of the nation is providing immense opportunities for OTT. The edutainment sector also has much scope in this regard.
- With more players waiting to enter in this area, there will be more options for the customers.

Threats:

- Costing: Freebies may not be the right strategy in the long run. OTT companies have to incur cost in creating library of contents. Once the viewers are used to free service; it becomes difficult to get paid subscription from them.
- Piracy issue: Due to piracy, nearly one-third of the revenue of OTT gets lost as the content goes free of cost through illegal sources.

Major OTT players in India

Though there are nearly 40 OTT service providers are India, the major players are discussed as follows:

1. Amazon Prime Video:

In India, Amazon Prime is the popular OTT platform which has ample contents in global as well as regional contents in the form of TV shows, movies, web series etc. As on mid of 2022, there are more than 200 million subscribers in the world. The fame of Amazon as the global brand has come to the growing acceptance of Amazon prime video in India.

2. Disney+ Hotstar:
A very popular OTT channel in India is Disney+ Hotstar, which offers variety of contents in international as well as regional languages in the form of movies, web series, sports, news etc. A wide range of subscription plans are available with this. Based at India, it was launched as Hotstar in 2015; later as Disney+ Hotstar in 2020.

3. Netflix:
Based at California, Netflix is an international brand which is known for its gigantic collection of movies, TV shows, web series, documentaries, mobile games and more. Being favourite of the users due to vast collection, it was founded in 1997 in USA, Netflix entered in India in 2016. It is a leading brand in India, which offers so much of contents in almost all genres.

4. Zee5:
Owned by Zee Essel Group, this is a media group which is first private TV channel of India. Zee TV has been there since a long time ruling the TV audience. Due to growing popularity of OTT media, it entered as Zee5 as video-on-demand channel in 2018. With a wide mixture of 12 major regional and national language shows, it has got its own features.

5. SonyLiv:
The famous media giant Sony is also into OTT warfare with the avatar name SonyLiv. Established in 2013, this is an Indian origin OTT channel, which offers a blend of television serials, movies, sports live etc. Their most favorite serials include Indian Idol, Shark Tank, Tarak Mehta, KBC, Kapil Sharma Show, Crime Patrol to name a few.

Selected Review of Literature:

Moochhala (2018) in the context of India, the Future of Online OTT Entertainment Service has been reflected, the research viewed that with a changing world, India is also changing at a greater speed towards viewing entertainment through online streaming services.

Fitzgerald, (2019) Media Imperialism after Globalization in India on the ground of Over-the-Top Video Services, with the help of this paper, the researcher attempted to draw the modification taking place due to the evolving segment of OTT video in India and placing the same in the perspective of the dominant trends and business models proposed at the international level.

Farooq (2019) Impact on Telecom Companies due to Over-the-Top (OTT) Services in the Era of Transformative Marketing, this paper has raise the issues related to telecommunication industry, which played a vital role in bringing the whole world as a global village.

Jirakasem & Mitomo, (2019) have worked on Over-the-top (OTT) Communications and Traditional Telecommunications Services in the prospective of Thailand" The paper was addressing two objectives, one to know the relationship of OTT and traditional telecommunication services and second to know factors affecting the adoption of OTT services.

Marc Bourreauy, (2019) elaborate Platforms for Streaming service and Bias Recommendation as a strategy. The large variety of content served by the multiple providers is accessed by the customer using various streaming platforms.

Sundaravel E., (2020) has put an effort to analyze the rise and future of Over-the-top (OTT) video services in India. The study covers the importance and reasons for rise of OTT services, major players of OTT in India, preferred content by different age group users, audience characteristics, problems and future of OTT in India.

Yinan Yu, (2020) experienced the Causal Effect on DVD Sales due to Subscription Video Streaming services. This paper talked about the home entertainment industry, which was dominated by the physical media in terms of revenue generation but with the emergence of streaming services the scenario has changed, still both physical sales & streaming platforms services together contributes 70% of total revenue in the Home Entertainment Industry.

Madnani et al. (2020) in their study analyzed the impact of Covid pandemic on OTT platforms with respect to India. Authors went for primary study by survey and group discussion. The study emphasized on influence of content, time convenience and satisfaction on OTT channels during Covid. It was found that lockdown had great role in enhancing the OTT viewership at all levels as staying home created no other options. Further, viewer satisfaction also depended on content and convenience of OTT channels.

Prasad (2022) studied the impact of OTT on individual, family and society. Also, author studied the impact on education and career along with health. Through questionnaire, primary data was collected. It was found that OTT has serious impact over health, education and career. Though it had provided the best entertainment

medium, but it also had impact on performance of people after pandemic since the addiction was difficult to go.

Sharma and Lulandala (2023) in their study studied the impact of Covid on OTT growth in India. by using multiple case studies, authors conducted extensive research and used survey format for data collection. It was found that simplicity of accessibility and convenience were the reasons why people preferred OTT than any other mode of entertainment specially during pandemic in India.

Objective:

To study the impact of access factor on consumer behaviour towards adoption of Over-The-Top streaming services in Bhopal division

Hypotheses of the study:

H_{01}: There is no significant impact of access factors on consumer behaviour towards adoption of Over-The-Top (OTT) streaming services.

Research Methodology:

The researcher has endeavoured to bridge the gap with respect to the above viewpoints. The study has been undertaken from the standpoint of consumers of OTT in Bhopal division of Madhya Pradesh. Universe included regular consumers of OTT in Bhopal division. Secondary data were collected from Internet, books, newspapers, periodicals, brochures etc. Questionnaire was used to collect primary data.

There were 1500 respondents finally selected from Bhopal division. The sample size was classified as per their population ratio (i.e. Bhopal being big city; sample was large accordingly).City-wise composition of respondents is as follows:

Table 1: Respondents' composition

S. No.	City	Respondents
1	Bhopal	900
2	Raisen	150
3	Rajgarh	150
4	Sehore	150
5	Vidisha	150
	Total	1500

The data was analyzed using ANOVA (Analysis of Variance). ANOVA is used to test the differences between various data groups for its homogeneity. The ANOVA table shows the value of regression and the residual. When difference between regression and residual is higher, it shows that a single factor may not able to explain the variations found in another factor. ANOVA determines whether there are

Data Analysis:

The hypothesis states the factors for adoption of OTT platforms. The access factors taken into consideration are the reference through which respondents watch OTT, the time period since they are watching, the average hours they spend and the time at which they watch OTT. The results are presented in two tables as descriptive statistics & ANOVA.

Table 2: Descriptive Statistics for Access Factors

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
I watch OTT through the reference of	No expenses	58	1.690	.9216	.1210	1.447	1.932	1.0	5.0
	Less Than 1000	555	1.867	.9501	.0403	1.787	1.946	1.0	5.0
	1000-2000	836	1.836	.9405	.0325	1.772	1.900	1.0	5.0
	More than 2000	51	2.039	1.1482	.1608	1.716	2.362	1.0	5.0
	Total	**1500**	**1.849**	**.9510**	**.0245**	**1.801**	**1.897**	**1.0**	**5.0**
Preferred Time	No expenses	58	1.759	.4317	.0567	1.645	1.872	1.0	2.0
	Less Than 1000	555	1.732	.4436	.0188	1.695	1.769	1.0	2.0
	1000-2000	836	1.701	.4581	.0158	1.670	1.732	1.0	2.0

	More than 2000	51	1.804	.4010	.0561	1.691	1.917	1.0	2.0
	Total	**1500**	**1.718**	**.4500**	**.0116**	**1.695**	**1.741**	**1.0**	**2.0**
Watching OTT services since	No expenses	58	2.759	1.0972	.1441	2.470	3.047	1.0	5.0
	Less Than 1000	555	2.805	1.1627	.0494	2.708	2.902	1.0	5.0
	1000-2000	836	2.805	1.0617	.0367	2.733	2.877	1.0	5.0
	More than 2000	51	2.725	1.0785	.1510	2.422	3.029	1.0	5.0
	Total	**1500**	**2.799**	**1.1031**	**.0285**	**2.743**	**2.855**	**.0**	**5.0**
Average Hours Spent	No expenses	58	1.483	.5041	.0662	1.350	1.615	1.0	2.0
	Less Than 1000	555	1.577	.4945	.0210	1.535	1.618	1.0	2.0
	1000-2000	836	1.566	.4959	.0172	1.532	1.599	1.0	2.0
	More than 2000	51	1.510	.5049	.0707	1.368	1.652	1.0	2.0
	Total	**1500**	**1.565**	**.4958**	**.0128**	**1.540**	**1.590**	**1.0**	**2.0**

The above table depicts the values of descriptives of different access factors of OTT. Four access factors are taken into consideration here. The reference due to which they started watching OTT, the time since they are watching it, the timings on which they watch and the hours in a day they spent. As per the responses people watch OTT due to reference of their family, friends & colleagues and spent more than 2000 Rs. per month. Maximum respondents pay between Rs. 1000 to 2000 per month. Average hours spent is near to 2 to 3 hrs and the preferred time is evening. The respondents are watching OTT for more than 2 years.

Table 3: ANOVA Table showing Effect of Access Factors on adoption of OTT

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
I watch OTT through the reference of	Between Groups	3.630	4	.907	1.003	.405
	Within Groups	1353.018	1496	.904		
	Total	1356.647	1500			
Preferred Time	Between Groups	.817	4	.204	1.008	.402
	Within Groups	302.897	1496	.202		
	Total	303.714	1500			
Watching OTT services since	Between Groups	8.258	4	2.064	1.700	.148
	Within Groups	1816.980	1496	1.215		
	Total	1825.238	1500			
Average Hours Spent	Between Groups	.622	4	.156	.632	.639
	Within Groups	368.105	1496	.246		
	Total	368.727	1500			

The above table shows the values of access factors towards adoption of OTT. The significance value of all the four factors is greater than .05 which concludes that null hypothesis should not be rejected. The $H_0$1 stands accepted. The four access factors are significantly affecting the adoption of OTT Platforms. Number of hours spent is more significantly different and affecting the adoption of OTT platforms amongst the respondents.

Results and Discussions:

The result shows that though OTT has been on the boom in Madhya Pradesh, the access factors are still not having highly remarkable features. The impact of access is not highly significant. There are people who have access to OTT, but the subscription is limited to few people. Further, when Covid was there, people resorted to OTT as it was the best medium for entertainment. After Covid, though people are used to it, but the paid users are lesser. Now, when the pandemic is over, there are many users, who have resorted back to other channels of entertainment. This however, does not undermine the power of the OTT. The scope of OTT is much more brighter than ever. Data analysis also showed that people tend to prefer OTT more because if offers flexibility since there is no fixed time slot. With regular TV, one has to stick to the fixed timing and once you miss it, that's gone. OTT has provided convenience of

play, pause and resume at any time and any place. Further, when compared with DTH (Direct to Home) or cable TV, OTT always gives more options as per the customized choice. One does not have to pay for the entire package which includes unwanted channels as well. For OTT, it is a highly personal set up where the user sets up his/her own preference. This is why most of the respondents prefer OTT over DTH and cable TV. Further, it has been widely acknowledged that content is the most significant reason why people from every category (i.e. teens, youth, working people, housewives, senior citizens) have migrated to OTT. Cord cutting has become normal practice which has posed serious threat to DTH and cable TV operators.

When respondents compare cost of OTT with DTH and cable TV, they always found OTT as the best deal in all respects. While there are multiple payment options; free trial for limited period; package benefits allied with multiple partners and shared subscription, other TV options do not offer much. For instance, Amazon Prime offers free trial for one month; people try it multiple times with different mobile numbers.

Limitation of the study:

The research study was conducted with reference to consumer behaviour for OTT in Bhopal division only. The cities selected were from Bhopal division, which may not represent the entire state in some aspects. The final sample selected for primary data collection may seem to be smaller looking upon the universe.

Scope for Further Research:

Further research work can be done on large sample size. Studies can be conducted in more cities of the state and also the country. Comparison of Madhya Pradesh Vs other states can be conducted in terms of consumer behaviour towards OTT.

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Investigating the role of Emotions on the learning effectiveness in VR enabled teaching interventions in schools

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Abstract:

Technology advancements are known to frequently have direct and significant effects on the educational sector. There is an increasing trend in the academic use of Virtual Reality to demonstrates usability, utility, and amusement of the learner. The use of technological tools like virtual reality (VR) helps people develop the digital-age literacy, creative thinking, communication, teamwork, and problem-solving abilities that are required to transform information rather than merely consume it. VR improves standard courses to accommodate students' various learning demands. Applications for skill mastery and training are now possible because to recent advancements in digital reality generation. The learning is made more enjoyable and productive for the user by using real like photos, videos, animations etc., which provide augmented knowledge about the surroundings. Learners commitment is a significant predictor of attainment, retention and diligence for enhanced learning. The research papers findings reported that the VR environment increases the learning outcomes and offer many benefits for devoting time and money to them in higher and tertiary educational settings. For current research 347 students had been assigned to VR technology for learning. The outcome of this research supports the objective that the emotions affect learning using the VR technologies. The results revealed that the positive emotions affect the Ergonomic, Learning, Hedonic and overall learning. Emotions influence students' desire to study, based on their eagerness, inquisitiveness and willingness to accomplishing their goals of positive outcomes. Emotions make the implementation of learning approaches easier. Additionally, emotions can influence self-control techniques.

Key words: virtual reality, learning quality, ergonomic quality, hedonic quality, positive and negative emotions.

Introduction:

With the rapid expansion and explosion of information technologies are being utilised in education, there is a growing desire for educators to adopt technology in order to inspire students to study actively and motivate them to achieve an effective learning process. Technology advancements are known to frequently have direct and significant effects on the educational sector (Guttentag, 2010). Virtual reality (VR) and augmented reality (AR) are two ICTs that are quickly growing in popularity. Virtual reality (VR) has been defined as a computer-generated setting that offers a complete immersion in the online world (Guttentag, 2010). VR technology has the ability to give perceptual representations of actual circumstances while also allowing users to move around a virtual environment. The most thorough and widely used definition of augmented reality (AR) comes from Danado et al. (2005, p. 1), who describe it as: a technology that allows the superimposition of synthetic images over real images, providing augmented knowledge about the environment in the user's vicinity that makes the user's environment more familiar and useful. The activity is made more enjoyable and productive for the user by using genuine photos, which provide augmented knowledge about the surroundings around.

AR technology emphasises the capacity to deliver virtual information that is placed on the real world view without impairing it, as opposed to a completely immersive 3D experience as provided by VR (Han et al., 2013). A mobile application that overlays text, audio, 3D animations, and avatars is an illustration of AR technology. Consequently, VR and AR are not interchangeable in the strictest sense (Yung and Khoo-Lattimore, 2017). Because AR is seen as a form of VR (Guttentag, 2010) said that "AR and VR are connected and it is fairly valid to analyse the two ideas together," this review paper decided to adopt their methodology (2017) and jointly reported the results of the research in these two fields.

Virtual Reality apps have the potential to make learning more active, productive, and engaging for students. Technology has become a part of education and makes use of innovative teaching methods and also affects the outcomes of learning. The usefulness of Virtual Reality (VR) has seen substantial growth in last decade, particularly in the educational sphere. Surprisingly, educational scholars believe that the way VR technologies support and facilitate meaningful learning is more significant than the technology itself.

The learners are engaged in learning by doing and critical thinking rather than memorising concepts. The active learners derive great benefits from the technology and make the learning collaborative and very pleasant. Engagement as per the

researcher Horstmanshof and Zimitat (2007) is the amount of physical and psychological energy and effort individuals devote to their university experience. The dominance of teacher-directed learning environments in educational institutions can be assigned as the reason for the loss of learning motivation and can be linked to poorer learning behavior where the need for self-determination is largely ignored (Harackiewicz and Knogler 2017). Student participation is often limited despite the fact that it is recognized as a significant element. Despite the fact we choose to technology as it is applied, familiar, flexible, convenient and cost-effective. Few people still prefer to books rather than screens.

Educational institutions are now experimenting with self-directed/self-paced learning as a supplement to teacher-directed learning, while the impacts of this type of learning environment have not yet been properly examined. Impartial material such as encyclopedia entries, contain emotive language, photos, other media in online content. According to Mather & Sutherland (2011) content which is emotional tend to draw more attention, enhances online engagement. Emotions have important role in learning as they alter cognitive resources, learning strategies, and motivation.

Mather & Sutherland (2011) in their research reported that the emotional stimuli outperform memory systems involved attention, storage, recall, and cognitive strategies, resulting in winner-take-all situation. (Dolcos et. al., (2017) had found that emotional stimuli influence the storage and retrieval of new knowledge. The positive or neutral statements are not easily recalled as compared to the emotional negative sentences (Pedaste et. al., 2015). When compared to neutral stimuli, emotional stimuli orient and capture attention more quickly, and the effect is stronger for negative stimuli (Estes& Adelman, 2008). Photos of furious faces or words like massacre, draw more response than pictures of pleasant appearances and the phrases like applause (Larsen et al., 2008).

According to Burucuoglu and Erdogan (2016) how people adopt technologies are based on functional, emotional and social dimension of the consumption value. Individuals embrace technologies when they recognize that they can accomplish their requirements. Perceived ease of use, utility and enjoyment are the three primary quality factors that have been found to be requisite for the intent to use.

While using the VR/AR the users usually wear an opaque headset or visor that covers their entire field of vision, and they interact with the virtual environment via controllers, gloves, distance sensors, and other devices. External distractions are blocked by the helmet, which makes it easier to focus on the virtual learning activity. This method immerses students in an interactive environment, giving them a

comprehensive understanding of a concept or skill. Visualization of complicated concepts, items, and locations through vibrant realistic 3D models are incredibly difficult to describe in a classroom or visualize in a textbook. It's a lot easier with VR/AR since it creates a rich, dynamic experience that merges the real and virtual worlds.

People tend to forget memorized things quickly because the existing educational system frequently focuses more on theory than practical approach. VR/AR applications, on the other hand, encourage active learning by allowing students to interact with content and practice in real-time. This type of hands-on experience improves understanding, information recall, retention, motivation, and engagement among learners. In the virtual world, one lesson may successfully replace dozens of traditional ones. The effectiveness of VR/AR may depend on the type of empathy being measured.

Davis (1983) suggested that empathy is cognitive and emotional both. Being multidimensional it has the capability to comprehend how an employee is feeling and reciprocate the same with concern &care, hence displaying both cognitive and emotional empathy. Empathy is a spontaneous and mindful process. Emotional empathy is rapid, automatic, and spontaneous (Neumann & Strack, 2000). According to Sagi & Hoffman (1976) the instinctive emotional response was triggered even in infants when they see another person's pain. Cognitive empathy, is a more conscious process when the children around the age of three-five years old learn and understand that other individuals think and feel differently from them. With age, cognitive empathy matures into a more radical mentalizing skill (Gweon & Saxe, 2013), requiring attention and effort to comprehend another person's thoughts and feelings (Roxßnagel, 2000).

The unprecedented success of VR can be assigned to its great impression on the individual through its exclusive feature of immersion. VR technology with electronic devices offers a wide variety of commercial applications in academics, showbiz, healthcare, buying and selling. VR superimposes information into the real world through a virtual scene, the consumer is immersed into a completely artificial world. According to Hong, Hwang, Liu, Ho, & Chen (2014) variables that affected the intention to use VR-based systems were: usability, effectiveness, attention, engagement, enjoyment, motivation, computer playfulness, state of flow, immersion.
With the comprehensive understanding of the literature quoted, the study is an attempt to understand how emotions affects the VR/AR lead learning. The objective of the study is to identify does the emotions affects the learning effectiveness. Izard's (1977) Differential Emotions Scale (DES) was modified by Fredrickson (2001) to

include wider set of positive emotions. To the eight distinct positive emotions of amusement, awe, contentment, gratitude, hope, love, pride and sexual desire were added two more emotions joy and interest. There were eight negative emotions along with surprise and sympathy. The student respondents had to recall the time since they commenced using the VR device in the schools. They had to record how often they had felt 20 different emotions on a 5-point scale (0 = never, 4 = most of the time). The subscales comprised of 10 positive and 10 negative emotions. The Positive Emotions scale had a coefficient $\alpha = 0.72$ and the Negative Emotions scale had a with coefficient $\alpha = 0.73$.

The conceptual model of Pribeanu, Balog and Iordache (2016) had three dimensions: Perceived Ergonomic Quality, Perceived Learning Quality and Perceived Hedonic Quality, that was used to measure the perceived quality of an VR/AR application. Each dimension has two sub-dimensions. The Perceived Ergonomic Quality is particularly important for applications that use novel technologies and the users face new interaction techniques and might experience usability problems (Bai &Blackwell, 2012). This dimension has two facets: learnability and ease of use. Perceived Learning Quality has two facets: perceived efficiency and perceived usefulness. Perceived efficiency indicates a better and faster understanding, and is a widely recognized outcome of using AR technology (Iordache, Pribeanu, & Balog, 2016). Perceived usefulness is in terms of improvement of knowledge, usefulness for testing of knowledge and support for learning (Lee et al., 2010). Perceived Hedonic Quality has two facets: cognitive absorption and perceived enjoyment. Cognitive absorption is the state of total engagement when the attention is focused on the interaction with the application (Zhang, Li, & Sun, 2006). Perceived enjoyment refers to the enjoyable experience with the application (Heijden, 2004).

This instrument for VR/AR learning effectiveness and modified Differential Emotions Scale (mDES) was administrated on students (March and April 2022) in order to empirically validate the model. Total 348 students in the age group of 12–16 years responded to the survey. Out of which 22% were boys and 78% were girls. All the samples were collected from the School of Kherva Village in the Mehsana District who were using the Katcchuwa VR products. The response of the students was recorded in groups of 10 to 15, accompanied by a teacher after completing their learning through the VR device. The Cronbach Alpha was more than 0.7 for all the constructs studied (Table 1).

The objective of the study is to identify does the emotions affects the learning effectiveness. The emotions for the study are classified as Positive and Negative and the learning effectiveness is defined in terms of Egronomic, Learning Quality.

H_{01} There is a no significant impact of Positive Emotions on Egronomic Quality of Learning. H_{02} There is a no significant impact of Positive Emotions on Learning Quality of Learning. H_{03} There is a no significant impact of Positive Emotions on Hedonic Quality of Learning.

H_{04} There is a no significant impact of Negative Emotions on Egronomic Quality of Learning. H_{05} There is a no significant impact of Negative Emotions on Learning Quality of Learning.

H_{06} There is a no significant impact of Negative Emotions on Hedonic Quality of Learning.

Table 1 Reliability Statistics	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	CR	AVE
Positive Emotions	.763	.767	10	0.711	0.268
Negative Emotions	.789	.795	10	0.785	0.309
Ergonomic Quality	.818	.891	6	0.872	0.776
Learning Quality	.833	.859	5	0.961	0.926
Hedonic Quality	.769	.759	6	0.991	0.983

Assessment of reliability and validity

The reliability values were above .70 indicating acceptable reliability. Table 2 for convergent validity and was found significant for the parameters and in the amount of variance explained by Anderson & Gerbing, 1988. The composite reliability (CR) of each factor is above the minimum level of 0.70, ranging from 0.71 to 0.99. This suggests that the items are sufficiently representative on their respective construct. The average variance extracted (AVE) is above the minimum recommended level of 0.50, for constructs, Learning Quality, Hedonic Quality and Ergonomic Quality.

Hedonic Quality had the highest value of 0.983, indicating that 98.3% of the variance in the specified indicators was accounted for by the construct. If AVE is less than 0.5, but composite reliability is higher than 0.6, convergent validity of the construct is acceptable. Hence for the Positive and Negative Emotions, AVE is less than 0.5 but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981).

Table 2	**CR**	**AVE**	**MSV**	**Max R(H)**	**Hedonic Quality**	**Positive Emotions**	**Negative Emotions**	**Egronomi c Quality**	**Learnin g Quality**
Hedonic Quality	0.991	0.983	0.876	1.075	0.991				
Positive	0.711	0.268	0.163	0.972	0.344	0.517			
Emotions									
Negative Emotions	0.785	0.309	0.120	0.823	-0.347	-0.073	0.556		
Egronom ic Quality	0.872	0.776	0.623	0.956	0.654	0.404	-0.138	0.881	
Learning Quality	0.961	0.926	0.876	0.973	0.936	0.391	-0.250	0.789	0.962

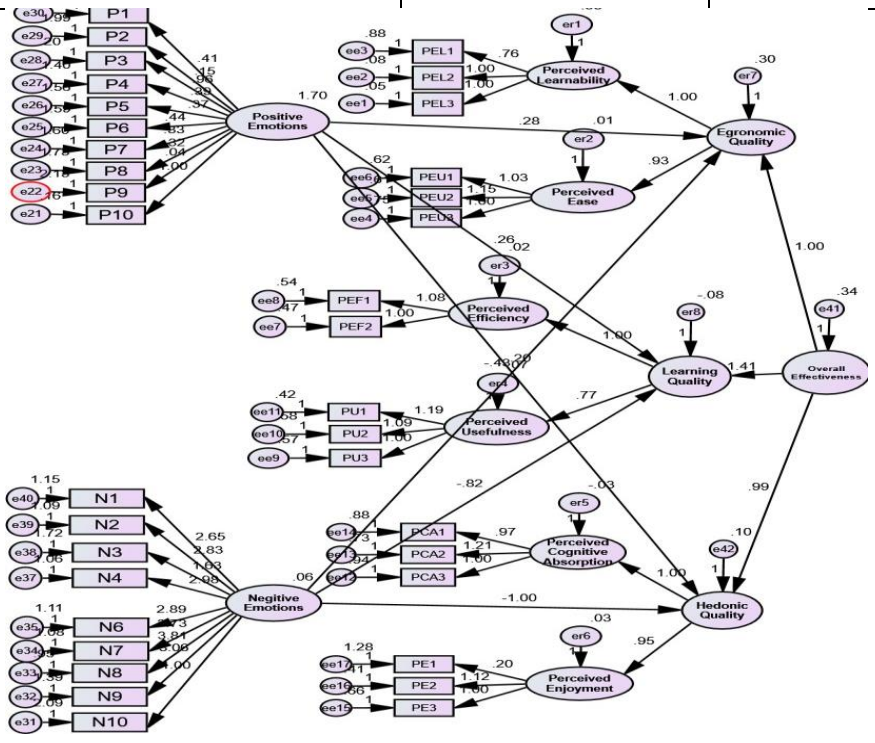
Convergent Validity: the AVE for Positive_Emotions is less than 0.50. Convergent Validity: the AVE for Negitive_Emotions is less than 0.50.

Structural Equation Modelling (SEM) is the technique that is used to analyze structural relationships. This technique is the combination of factor analysis and multiple regression analysis. This method is preferred as it estimates the multiple and interrelated dependence in a single analysis. In this analysis, two types of variables - endogenous and exogenous variables are used. Endogenous variables are equivalent to dependent variables and Exogenous are equal to the independent variable.

The determination of appropriate sample size is a critical issue in SEM. According to Wolf, Harrington, Clarkand Miller (2013) suggested a range of sample size from

thirty to four hundred and sixty. However sample size more is not always better. Kline (2010) suggested a larger sample size, N = 200 for SEM. To validate the conceptual model, AMOS 23.0.0 was used to analyze. The goodness-of-fit (GOF) indices are represented in Table 3. The structural model showed good model fit. The chi-square remained significant (1414.864, df 579). The ratio of $\chi 2$/df was .244 AGFI was .774, GFI was .803, TLI was .842, CFI was .855, RMSEA was .064.

Table 3 : The goodness of fit index	**Cut off values**	**Result**
Cmin/df	<=2	2.44
p-value	>=.05	.000
AGFI	>=.90	.774
GFI	>=.90	.803
CFI	>=.90	.855
TLI	>=.90	.842
RMSEA	<=.08	.064



Regression Weights:

		Estimate	S.E.	C.R.	P	Hypothesis
Egronomic_Quality	Overall_Effectiveness	1.000				
Learning_Quality	Overall_Effectiveness	1.409	.147	9.571	***	
Hedonic_Quality	Overall_Effectiveness	.992	.115	8.596	***	
Egronomic_Quality	Positive_Emotions	.282	.040	7.001	***	H_{01} not accepted
Learning_Quality	Positive_Emotions	.257	.038	6.808	***	H_{02} not accepted
Hedonic_Quality	Positive_Emotions	.200	.034	5.827	***	H_{03} not accepted
Egronomic_Quality	Negitive_Emotions	-.429	.261	-1.645	.100	H_{04} accepted
Learning_Quality	Negitive_Emotions	-.824	.352	-2.339	.019	H_{05} not accepted
Hedonic_Quality	Negitive_Emotions	-.999	.393	-2.540	.011	H_{06} not accepted
Perceived_Learnability	Egronomic_Quality	1.000				
Perceived_Ease	Egronomic_Quality	.934	.082	11.397	***	
Perceived_Efficiency	Learning_Quality	1.000				
Perceived_Usefulness	Learning_Quality	.775	.062	12.437	***	
Perceived_Cognitive_ Absorption	Hedonic_Quality	1.000				
Perceived_Enjoyment	Hedonic_Quality	.953	.095	10.000	***	
PEL3	Perceived_Learnability	1.000				

PEL2	Perceived_Learna bility	1.002	.021	48.883	***	

		Estimate	**S.E.**	**C.R.**	**P**	**Hypothesis**
PEL1	Perceived_Learna bility	.758	.045	16.899	***	
PEU3	Perceived_Ease	1.000				
PEU2	Perceived_Ease	1.150	.090	12.749	***	
PEU1	Perceived_Ease	1.030	.084	12.211	***	
PEF2	Perceived_Efficien cy	1.000				
PEF1	Perceived_Efficien cy	1.077	.068	15.869	***	
PU3	Perceived_Usefuln ess	1.000				
PU2	Perceived_Usefuln ess	1.094	.090	12.136	***	
PU1	Perceived_Usefuln ess	1.186	.090	13.237	***	
PCA3	Perceived_Cogniti ve_Absorption	1.000				
PCA2	Perceived_Cogniti ve_Absorption	1.212	.111	10.911	***	
PCA1	Perceived_Cogniti ve_Absorption	.974	.102	9.593	***	
PE3	Perceived_Enjoym ent	1.000				
PE2	Perceived_Enjoym ent	1.124	.089	12.624	***	
PE1	Perceived_Enjoym ent	.200	.088	2.262	.024	
P7	Positive_Emotions	.328	.053	6.178	***	
P6	Positive_Emotions	.443	.053	8.298	***	
P5	Positive_Emotions	.366	.053	6.963	***	
P4	Positive_Emotions	.386	.050	7.722	***	
P3	Positive_Emotions	.961	.032	29.594	***	

		Estimate	S.E.	C.R.	P	Hypothesis
N8	Negitive_Emotion s	3.806	1.334	2.854	.004	
N7	Negitive_Emotion s	3.726	1.309	2.846	.004	
N6	Negitive_Emotion s	2.886	1.027	2.812	.005	
N4	Negitive_Emotion s	2.976	1.055	2.820	.005	
N3	Negitive_Emotion s	1.630	.643	2.536	.011	
N1	Negitive_Emotion s	2.651	.949	2.793	.005	
N2	Negitive_Emotion s	2.825	1.006	2.809	.005	
N10	Negitive_Emotion s	1.000				
N9	Negitive_Emotion s	3.059	1.092	2.802	.005	
P10	Positive_Emotions	1.000				
P8	Positive_Emotions	.315	.055	5.716	***	
P9	Positive_Emotions	.036	.061	.589	.556	
P1	Positive_Emotions	.411	.056	7.369	***	
P2	Positive_Emotions	.155	.059	2.636	.008	

Discussion and Conclusion:

The results of the study support the objective that the emotions affect learning using the VR technologies. The results revealed that the positive emotions affect the Ergonomic, Learning, Hedonic and overall learning. According to Goetz et al. (2003) emotions influence individuals desire to learn, based on their eagerness and inquisitiveness, as well as motivation, that will result in getting good results. Emotions make use of learning practices easier. Additionally, emotions can influence self-control techniques. Joy, hope, and pride are positive emotions that motivates for flexible learning strategies and self-regulation (Dewaele &Alfawzan 2018). Negative emotions such as hopelessness and boredom, on the other hand, are known to lower

motivation and facilitate information processing, implying a negative impact on performance.

There is inconclusive evidence about the role of positive emotions in students' learning, with some research demonstrating how positive emotions or any well-being dimension relate to longitudinal increases in positive academic outcomes (Denovan et al.,2020). Affective phenomena in psychology can be conceptually approached from three attributes, commonly used interchangeably: affect, mood and emotion (Batson et al., 1992). Positive feelings like joy, hope, and pride are thought to support self-control, encourage the adoption of adaptable learning strategies, and contribute to both internal and external motivation (Tyng et al., 2017). As a result, they have a favourable effect on academic performance circumstances. Researchers discovered that pupils with greater emotional intelligence scores typically achieved better results on achievement tests and received higher marks. Even after adjusting for intelligence and personality traits, this conclusion remained valid.

Some academicians there is a strong link between emotional state and learning ability, according to this study. Academic emotions, according to Goetz et al. (2003), are feelings that occur in the context of education. He claims that such feelings might arise in five different academic situations: during class, during evaluations, while preparing or doing homework independently, while studying in a group, and in other circumstances. Academic circumstances such as one-on-one tutorials with the teacher to discuss a task or obtain oral feedback can be found in the last group. Other sensations are connected to social interactions or personal feelings.

Despite the fact that VR/AR use high-end technology and sophisticated tools, these technologies are unimportant to educational academics. What's more essential is how technology aids and facilitates meaningful learning. Educators, researchers, and designers would be more productive if they approached VR/AR as a concept rather than a specific type of technology. Employed technology to offer courses in a 3D format, allowing students to virtually manipulate a range of learning items and interact with the data in a novel and dynamic way. VR surroundings help people learn new skills. According to Klopfer (2008), VR mobile games allowed learners to organise, search, and assess data and information, allowing them to improve their skills in traversing primary and secondary material.

VR can provide a natural approach of presenting contextual and location-specific information to the user by integrating the real environment to information browsing and delivery (Alakärppä et al. 2017). It can also give a setting in which youngsters can engage with concepts that are difficult to grasp in real life. By mixing real-time

evidence from the natural world with virtual information, VR allows these difficult concepts to be taught and learners to solve complicated issues (Tobar-Muoz et al. 2017). Recent studies justified that the content learned through VR technologies can improve students' long-term memory, problem-solving skills, enthusiasm, motivation, and collaborative abilities, as well as improve learning performance (Wei et al. 2015), interaction, and learning satisfaction (Huang et al. 2016). The student's learning preparation, attitude, and learning style—used to customise the VR environments—have an impact on how effectively and successfully a virtual learning environments VLE are used (Jena 2016; Kurilovas 2016).

Emotions play a crucial role in learning, which is something that educators and students alike must recognise. Emotions range from pleasant to negative and are an embodied reaction to a stimulus (whether actual or perceived, internal or external). Emotions can significantly influence whether learning and teaching are supported or undermined in a learning environment. The cognitive abilities of attention, memory, executive function, decision-making, critical thinking, problem-solving, and regulation—all of which are crucial to learning—are inextricably related to and influenced by emotions. Interest, wonder, curiosity, passion, inventiveness, engagement and joy are desirable learning emotions. These improve focus and attention by turning on the brain's reward system, making the experience appealing. Positive emotional states can help pupils widen their horizons, consider alternatives, persevere through difficulties, and react skillfully to failure and criticism. The motivation of the learner is influenced by both positive emotions and the learning states they support. It is possible to think of motivation as the drive and vitality behind learning. Both internal learning objectives (mastery goals) and external motivators like grade recognition can help students learn (performance goals).

By increasing a user's perspective of and interaction with the real environment, Virtual Reality can be used for learning, amusement, or edutainment. Like a genuine object, the user can move around the three-dimensional virtual image and observe it from any angle. Users can execute real-world operations with the information provided by virtual items. Innovative computer interfaces that integrate the virtual and real worlds can be created to improve face-to-face and remote communication. The students in a positive emotion states while they are using the VR technology based learning enhances the overall learning is effectiveness. Their prior exposure to the technology can be credited to put them in positive state of emotions.

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Modified Differential Emotions Scale (mDES) to find the Positive and Negative Emotions, where measured as 1 = Not at all, 2 = A little bit, 3 = moderately, 4 = Quite a bit, and 5 = Extremely

	Item Name	**Questions**	**Respon-se**
Positive Emotions	PE1	What is the most amused, fun-loving, or silly you felt?	
	PE2	What is the most awe, wonder, or amazement you felt?	
	PE3	What is the most grateful, appreciative, or thankful you felt?	
	PE4	What is the most hopeful, optimistic, or encouraged you felt?	
	PE5	What is the most inspired, uplifted, or elevated you felt?	
	PE6	What is the most interested, alert, or curious you felt?	
	PE7	What is the most joyful, glad, or happy you felt?	
	PE8	What is the most love, closeness, or trust you felt?	
	PE9	What is the most proud, confident, or self-assured you felt?	
	PE10	What is the most serene, content, or peaceful you felt?	
Negative	E1	What is the most angry, irritated, or annoyed you felt?	
	E2	What is the most ashamed, humiliated, or disgraced you felt?	

Emotions	E3	What is the most contemptuous, scornful, or distainful you felt?	
	E4	What is the most disgust, distaste, or revulsion you felt?	
	E5	What is the most embarrassed, self-conscious, or blushing you felt?	
	E6	What is the most guilty, repentant, or blameworthy you felt?	
	E7	What is the most hate, distrust, or suspicion you felt?	
	E8	What is the most sad, downhearted, or unhappy you felt?	
	E9	What is the most scared, fearful, or afraid you felt?	
	E10	What is the most stressed, nervous, or overwhelmed you felt?	

The VR/AR based teaching platform scale used is 5-point Likert scale (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree).

			Questions	**Respons e**
Ergonomic quality	**Perceived learnability (PEL)**	PEL1	Understanding how to use device is easy	
		PEL2	It would be easy to learn how to use device	
		PEL3	It would be easy to remember how to use device	
	Perceived ease of use (PEU)	PEU1	It would be easy to use device for learning subjects	
		PEU2	Interacting with device was easy for me	
		PEU3	Device is easy to us	
Ergonomic quality	**Perceived efficiency (PEF)**	PEF1	Device would help me to understand the lesson faster	
		PEF2	Device would help me to learn more quickly and understand the lesson	

	Perceived usefulness (PU)	PU1	After using device my subject knowledge will improve	
		PU2	Device exercises are useful to test my knowledge	
		PU3	Device helps learning subjects	
Hedonic quality	**Perceived cognitive absorption (PCA)**	PCA1	Time appeared to go by very quickly when I was using device	
		PCA2	While using device I was able to concentrate on the lesson	
		PCA3	While using device I was absorbed in what I was doing	
	Perceived enjoyment (PE)	PE1	Using device is an enjoyable learning experience	
		PE2	I like learning subjects with device	
		PE3	I enjoyed using device	

A Study of the Fintech Landscape Structure: Key Drivers Promoting Digitalization

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Abstract

Fintech, which is a combination of technology and financial services, has shown a drastic rise in recent years. The technology advances every day leading to Fintech start-ups, e-commerce and technology firms. Fintech is a dynamic and diverse industry which is still evolving day by day ensuring digitalization at a rapid space. Hence, there are multiple definitions of Fintech. This article focuses on the growth of Fintech Start-ups and its functions. The aim is to study and explore the benefits and challenges it is facing in the Indian market.

Keywords: Fintech Start-ups, Financial innovation, Digitalization, Emerging technologies, Fintech industry

Introduction

The ecosystem of the Indian Fintech industry has proved to be a game changer in the field of finance. It is expanding speedily and is considered to be one of the largest FinTech markets of the world. One of the main reason for this growth is the banks and insurers which are acting as an active partner in promoting the adoption of fintech services through digital means. FinTech and the firm offering the financial services in the traditional ways are coordinating through the way of monetization and secured. Indian Fintech Ecosystem is one of the best digital payments systems in the world. There is a phenomenal growth observed in terms of value and volume, consumer and Small and Medium Enterprise getting the access in the digital form, and wealth tech domain resulting to and promoting new investments in stocks.

The Year 2021, saw a great momentum of fintech industry in India. In terms of number the US and the UK, have maximum number of FinTech unicorns, and start-ups, but India secured third position in this number. Besides the COVID-19 lockdowns there are many other factors that have encouraged the digital adoption in financial services. Some of these factors include new immerging technologies on daily basis, powerful and secured devices, faster internet penetration and accessibility, and the initiative taken by the government to make India a digital economy. The FinTech companies are moving away the customers from following the traditional banking, by adopting the digital ways to fulfil their actual needs. By 2025, the FinTech market of India is estimated to touch $84 billion at a CAGR of 22%. The wealth tech domain has observed a sudden surge due to an increase in the usage of smart phones, and awareness and investment literacy.

The WealthTech market of India presently control ~$20 billion in AUM104. This is estimated to grow to $237 billion by the2030. This makes the market size expectations rise $0.2 billion in the year 2021 to $2.3 billion by year 2030.

Review of Literature

Kowalewski, O., & Pisany, P. (2022), "The rise of fintech: a cross-country perspective" Technovation, this research studies the factors and reasons that has led to the formation of fintech companies. A random effect negative binomial model and interpretable machine learning techniques are applied to show the impact of technological progress on the economies, and the strength between academia and business.

Rajeswari, P., & Vijai, C. (2021), "Fintech industry in India: the revolutionized finance sector", Eur. J. Mol. Clin. Med, the rising growth of Fintech market,with the emerging start-ups, face challenges in finding a balance in the advantages of innovation and the risk involved in new methods followed in the financial industry, as stated earlier

Ghahroud, M. L., Jafari, F., & Maghsoodi, J. (2021), "Review of the Fintech categories and the most famous Fintech start-ups", Journal of FinTech and Artificial Intelligence. Worked and explored the domain of global interest, technologies driving finance and innovation. The financial technology area including many activities, from wealth teach, insurance tech, digital payments the aim is to manage one's own finances.

Varga, D. (2017), "Fintech, the new era of financial services", Vezetéstudomány-Budapest Management Review, the study tries to bridge the gap in the existing literature on the emergence of fintech firms. The key enablers such as business models, human-centered design, and new initiatives are mainly outlined in this research. It mainly explains how financial technology companies (fintechs) can enable and render help in opening new avenues for availing financial services in digital mode.

Priya, P. K., & Anusha, K. (2019), "Fintech Issues and Challenges in India" International Journal of Recent Technology and Engineering, the population of1.426 billion, India has become a positive and emerging market for applying technology in the finance sector. Fintech can easily upset existing financial marketplaces.

Ramesh, L. (2019), "Fintech: a new avenue of banks to enhance customer digital experience (DX)", International Journal of Innovative Technology and Exploring Engineering (IJITEE)The abundance of data, fintech companies with strong base have provided consumers with high-quality answers to their problems in a cheap and better way. The conventional and traditional financial institutions are finding it difficult to carry out its operations due to the expansion of fintech companies. Even the global aspirations of the digital giants are playing an active role in bringing this transformation.

Objectives of the Study

1) To analyze the snapshot of India's fintech landscape
2) Study and analyze Fintech Players and Fintech Models
3) Study the key drivers enabling fintech services
4) To find the status and record of growth of Fintech industry

Research Methodology

As it is a qualitative research most of the data is taken from the secondary sources. The date is taken from the source published by the industry, market players, government reports and leading newspapers. The main aim of this article is to record the rising trends of fintech startups in India and study the key drivers enabling this growth thus promoting digitalization of financial services. It helps to understand the adaptation and future prospects of fintech industry.

As per the BFSI study, the adoption rate of fintech services was 87%. By year 2023, the worth of digital payments projected to $125 billion. Year 2018, recorded 14.1

billion UPI digital payments and around $10 billion was invested in Fintech companies in a span of 2016 - 2020.
According to the Medici study (2020),the number of fintech start-ups in India was second only to that of the United States. The fast expansion of FinTech services in India is due to the rapid expansion of internet user base (now over 566 million strong), a huge rise of digital transactions, the demonetization factor, and the encouragement and promotion of digital transactions via banks.

As per the INC4Plus State of India Fintech Q1 year 2022:

- The total figure of fintech startups in India are **4827**
- The percentage of internet penetration is **61%**
- The funded fintech startups are **533**
- Estimated Fintech market opportunity by **2025$1.3 tn**
- Fastest growing Fintech subsector in terms of market opportunity:

InsuranceTech

- Total funding raised between **2014 and 2021$20Bn+**

Major Indian Fintech Players

Paytm: It started its operations as prepaid cell phone recharge service founded by One97 Communications Ltd in August of 2010, established by Vijay Shekhar with major shareholders like Softbank, Ant Financial etc.

PhonePe: It was founded in Dec2015 by Sameer Nigam who serves as its Chief Executive Officer. Based in Bangalore, it offers a platform to transfer money, shop online, pay bills and many more. PhonePe possess 46+ crore registered users with 480+crore monthly transaction, and 16+crore daily monthly average transactions as per the latest reports.

MobikWik: Registered in 2019; ranked as the second largest platform for the Merchant payments. It mainly covers wealth management, insurance digital wallets and others. It mainly offers quick disbursal of loans, low customer acquisition cost and scoring model.

PayU: Launched in Year 2012, focussed on offering payment solution to the small and medium merchants. It runs in India, Africa, Latin America. It saw more than 90% rise in revenues recent past.

Razor Pay: It provides a platform that helps businesses to accept, process, and disburse payments

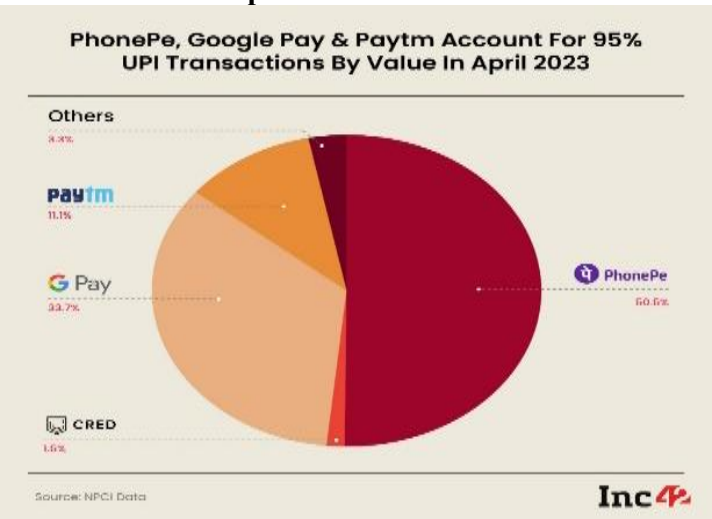
Pine labs: Launched in 1998, it provides financing and retail transaction technology. It works with more than 71,000 retailers like Pantaloons, Shoppers Stop and Westside to name a few.

Groww: Online investment platform promoting investment in mutual funds and stocks.

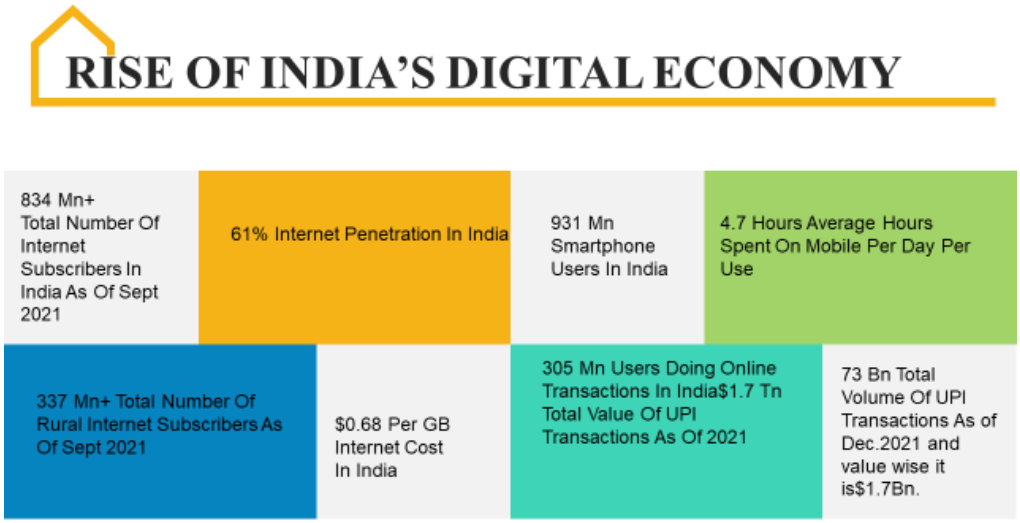
BharatPe: It caters to small merchants; offers range of products like QR code for UPI payments, POS machine and small business financing.

Policybazaar: Policybazaar is the largest insurance aggregator in India. Launched in Year2008, by the Yashish Dahiya and Alok Bansal provides a digital platform – website and app – that render transparent and accurate insurance information and can be used by the consumers to compare financial services form other major insurance companies.

UPI Recorded Transaction in April 2023



Source: NPCI Data



Source: TRAI, Statista, App Annie

Key Sub segments of Fintech Start-ups: The following chart depicts the various business fintech models.

S. No.	Service Sector	Key Sub segments and business model
	Digital Payments	Payment aggregators and gateway, Bill payment and money transfer, Payment infrastructure POS/QR codes, Digital Wallets, and P2P Payments
2	Retail/Alternative Lending	SME financing/invoice, Digital Consumer lending, and P2P Lending, Aggregators
3	Wealth Tech	Personal Finance Management, Investment platforms, Robo-advisor, Digital discount brokers, credit scoring, tax filling and benefited
4	Insurance Tech	Online Insurance, Claim Management, IoT /Telmatics, Bitesize Insurance, Microinsurance, Software/Infrastructure API.

5	Neo-banking/Bank tech	Retail Neo banks, SME Neo banks, Big data, blockchain, customer on boarding platform
6	Enabling tech and Reg tech	B2BSaas, EKYC, AML, Risk Management, Fraud and compliance, Account Aggregation

Source: Inc42Plus

Fintech Models and major players

FINTECH MODEL	**DESCRIPTION**	**PLAYERS**
Payment Gateway	payment; mobile based applications	Cashfree, ATOM technologies
Digital Wallet	bank account and payment processor	Paytm, PhonePe, Ezetap, Freecharge
Digital Insurance Insurtech	business model; digital technology for processes customer-facing operations.	PolicyBazaar, Acko, Coverfox, Turtlemint
Digital Lending	loan disbursement by electronic ways	BankBazaar, Paisabazaar, LenDen Club
Point of Sale	Terminal; debit/credit cards and after the swipe the payment gets executed.	Ezetap, Mswipe, Pine Labs, Innovate, Mosambee, Payswiff
Payment Banks	fintect business model of digital bank conceptualized by the RBI	Airtel Payments Bank, India Post Payment, Fino Payments
Wealthtech	wealth management.	Scripbox, Basis, CubeWealth, ETMONEY

API-based Banking	non-banks; financial products and expand into additional markets	YES Bank, RBL Bank, DCB Bank, Kotak Bank and ICICI Bank

Source: Published reports KPMG, EY

Factors that have led to Fintech Approach are

- Digital Infrastructure: Aadhaar for formalization: Anytime anywhere verification, unique digital biometric identity and authentication that has led to authentication from anywhere.
- Digital banking and license for Payment banks: PMJDY for banking transactions and Ekyc Paperless KYC and transactions performed in a paperless manner through digital locker etc.
- Thirdly, using IMPS, UPI, BBPS; building sources and platforms to move money
- Finally, through fintech revolution allowing banks and FinTechs players to access platforms like UPI, GSTN & Digi Locker.
- RBI Innovation Hub and new Fintech departments.
- Introduction of e-RUPI
- National strategy of Block chain technology and digital lending framework

Conclusion

Through this paper, it is observed that Fintech industry in India is growing at a rapid pace. The main aim is to lower the default risk and with the readily available consumer data, the focus is on customized products. Government's support and increasing interest from FinTech companies, Supply Chain of Finance is gaining significant innovation and digitalization, resulting to an increase in the transparency and enabling MSME's with the access to working capital. The advances in technology, a key factor to economic development; main component in increasing added value for servicing industries; and the new technologies can make new investments profitable. The Fintech Services aims to achieve the ease-of-using, friendly processes of operation, and ease of downloading application program, to build positive customer's attitude toward using Fintech Services.

In conclusion, it is observed that the fintech start-ups in India is very strong and it is continuously growing on a daily basis. As per the Digital India campaign, there is a requirement of having right information and knowledge about fintech software apps and applications. India has become the highest country in the world who is giving great contribution with context to Fintech. There is also a requirement of strong knowledge. The knowledge of this concept should be strong so that people can carry

their financial tasks safely, and easily. Even on regulation front, the regulators and the policy makers need to monitored, evaluate the performance and work of FinTech, and implement their policies accordingly, taking care of the risks of the stakeholders involved, financial stability and integrity.

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