Title of The Paper: Role of Technology And Innovation in Enhancing Customer Experience.

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Abstract: Due to the current advances in technology and innovation, consumers' increasing interest in entertaining and interactive retail environments, the sector of retailing is forced to pursuit innovation to maintain existing consumers and attract new ones. Especially the use of virtual techniques offers tools for supporting the design of innovative systems capable of enhancing this process. The aim of this paper is to integrate the consumers' experience in the development of technology and innovation process for retailing. In particular, our findings highlight how the technologies can be an efficient tool for pushing innovation in retailing.

Keywords: Technology, innovation, virtual merchandise, visual merchandise, retail, customer satisfaction, customer experience.

I. Introduction

The world of retailing continues to change rapidly as interaction between the physical and the digital world opens up new business opportunities and challenges that were hard to imagine just decade ago. The idea of extending retail operations to the digital world into shopping experience for the customers may not have been approached with great enthusiasm (Chaffey, 2009; Rigby, 2011). The retail industry is being driven by a new, dynamic, global transformation that further adds to the general competitive nature of the retail industry. This transformation has been set in motion by greater adoption of the technology by the general public on a global scale which has forced retailers to develop strategies (Geyskens et al., 2002). The rapid speed of technology development and rising adoption of digital devices on a global scale, have a profound transforming impact on consumer behaviour and customer experience in retail businesses at large (Bain, 2012; Nielsen, 2013). Accenture Report (2013) says that technology is part and parcel of every aspect of business today and "serves as a primary source of market differentiation, business growth, and profitability." Nowadays, keeping pace with technological developments and innovations, and putting technology successfully to use play a decisive role for businesses, retailers included digital technologies help to create and provide targeted ads, new on-the-go services, and engage the customer. Relationships between customers and retailers are thus extended beyond the physical store into the digital sphere. Some other technological innovations introduced in the retail industry include Quick Response (QR) codes, digital advertising displays, self-checkout systems, personal selling assistants, smart kiosks, and an overall interconnection of all of these innovations with social media platforms and retailers' customized platforms and applications (Krafft & Mantrala, 2010). The store experience continues to play an important role as some customers still, and most likely always will, savour the feel of the physical product and personal interaction with shop assistants (Wolf et al. 2008). Besides, the traditional shopping experience of physically going to a store is a source of relaxation, entertainment, and presents an opportunity to socialize for many customers in terms of convenience (Kaufman-Scarborough & Lindquist, 2002). The customer experience must, however, remain in the forefront for every retailer as customer expectations grow each year and, more crucially, the customer experience may also hold the key to maintaining the competitive advantage derived from a business innovation.

II. Need For The Study

A new era where customers have an upper hand over retailers as they can quickly search the Internet for product and service related information and price-compare retailer's offerings. Customers are changing the rules of doing business and retailers must adapt accordingly. Retailers, therefore, need to meet shifting customer demands in the physical stores through the introduction of relevant innovative solutions, and the integration of off-line shopping experiences. They need to maximize share gain, keep customers happy, and at the same time look to get profits. The drastic increasing of the Internet and rising adoption of digital devices are global trends with consequential implications for retailers in each market and country. Retailers need new strategies, structures, processes and tools to deliver customer experiences across all channels. Retailers can gained by "understanding" of customers who are frequent customers. Ultimately, it is all about listening to ever-changing customers, being present where they are, translating their needs via technology. Customers seek time efficiency,

avoidance of crowds and queues, convenience and flexibility when searching for products that would satisfy their needs and wishes while striking the best possible deal i.e. gaining the best possible value from every purchase through the use of modern technologies. So compare from previous shopping experience how technology helps customers to experience more and better to get clear information about which impacts customers the more.

Objectives
➢ To know how technology has impact on customer experience and ease.
➢ To identify the status of information technology implementation in various retail companies.
➢ To understand the customer's expectation from the retail service provider how changing shopper attitudes and technology are reshaping retail.

III.   Review Of Literature
The Retail Business shows the positive impact that adoption of information and communication technology has creating advantages, as well as the favourable effects on new technologies on productivity and efficiency. Technological innovations in retail trade enable r the behaviour of consumer, assessing the level of customer satisfaction and obtaining updated information concerning their needs and expectations. Based on this information, different measures can be designed and introduced to improve production and management of retail trade business, making the customer shopping experience better, reducing certain managerial problems and predicting trends in market, virtual dressing rooms, RFID etc.

Technology and innovation
All these technological innovations, platforms and applications present a tremendous potential in the form of access to previously untapped sources of data. Data that now can be collected, e.g. at the point of sale (POS), and analyzed to obtain a more complete view of the customer on the one hand and to improve and enrich the overall customer experience on the other hand. They blog and chat about products with their friends, colleagues, followers while spreading word-of-mouth on-line. They check and contribute to product review websites, as well as to retailers own websites and social media sites by expressing their likes, dislikes and recommendations.

Mobile digital technologies enable this and much more anywhere, anytime. The option to instantaneously post experiences on social media sites and let others comment on those posts alters consumer behaviour with respect to staying informed, collaboration, interaction, entertainment, and maintaining overall awareness. It also changes how consumers perceive of and react to ads. By maintaining integrated communications across both physical and virtual channels, retailers can use insight from digital channels to improve service in the store. Customers' lifestyles, preferences, and ways of shopping change rapidly. They are adopting different approaches to their purchase decisions. Moreover, customers today have little time to spare. They want instant gratification, e.g. in the form of digital loyalty points, digital coupons or other rewards that can be immediately redeemed. Customers are multitasking. Customer's purchase behaviour both in the traditional, "old-fashioned" off-line world of retail and in the more "modern" on-line retail world of the 21st century. Both of these worlds are being connected by multi-channel retailing that presents a tremendous upside potential in mature and developing markets.

The Indian Retail Scene
India is the country having the most unorganized retail market. Traditionally it is a family's livelihood, with their shop in the front and house at the back, while they run the retail business. More than 99% retailers function in less than 500 square feet of shopping space.The Indian retail sector is estimated at around Rs 900,000 crore, of which the organized sector accounts for a mere 2 per cent indicating a huge potential market opportunity in retail.

Purchasing power of Indian urban consumer is growing and branded merchandise in categories like Apparels, Cosmetics, Shoes, Watches, Beverages, Food and even Jewellery, are slowly becoming lifestyle products that are widely accepted by the urban Indian consumer. Indian retailers need to advantage of this growth and aiming to grow, diversify and introduce new formats have to pay more attention to the brand building process. The emphasis here is on retail as a brand rather than retailers selling brands. The focus should be on branding the retail business itself. In their preparation to face fierce competitive pressure, Indian retailers must come to recognize the value of building their own stores as brands to reinforce their marketing positioning, to communicate quality as well as value for money. Sustainable competitive advantage will be dependent on translating core values combining products, image and reputation into a coherent retail brand strategy.

There is no doubt that the Indian retail scene is booming. A number of large corporate houses Tata's, Raheja's, Piramal's, Goenka's have already made their foray into this arena, with beauty and health stores,

supermarkets, self-service music stores, new age book stores, every-day-low-price stores, computers and peripherals stores, office equipment stores and home/building construction stores. Today the organized players have attacked every retail category. The Indian retail scene has witnessed too many players in too short a time, crowding several categories without looking at their core competencies, having a branding strategies.

The researchers are making efforts to understand the expectations of customers from the retail outlets, and the levels of satisfaction among the shoppers. The new stream of research, analyses consumers from the perspective of 'Experience' they have from the shopping. 'Experiences' are private events that occur in response to some stimulation

(Schmitt, 1999). Experiences involve the entire living being. They often result from direct observation and or participation in events – whether they are real, dreamlike or virtual. Experiences are usually not self–generated, but induced. Philosophers and Psychologists in the phenomenological tradition have called it, experiences are "of" or "about" something;
they have reference and intentionality.

Review of Earlier Studies-Experience has been increasingly discussed since the beginning of 2000 (Caru' and Cova 2007), but it is rarely defined. Sundbo and Hagedorn-Rasmussens (2008) defined Customer Experience as the customer's direct and indirect experience of the service process, the organisation, and the facilities and how the customer interacts with the service firm's representatives and other customers. Customer Experience originates from the interactions between a customer and a product, a company or a part of the organisation, which provokes a reaction. This experience is strictly personal and implies the customer's involvement at different levels like rational, emotional, sensorial, physical and spiritual. Customer actively involves in some way and takes memory aspects into account and such related aspects show that Customer Experience is "a mental journey that leaves the customer with memories of having performed something special, having learned something or just having fun". It should be added that the result of the mental journey could be both favourable and unfavourable. This will in turn create the customer's cognitive, emotional and behavioural responses and leave the customer with memories about the experience (Gentile, Spiller and Noci,2007). Customer Experience is not a uni dimensional construct. It encompasses facets like atmospherics, facilities, information, website, sounds, lighting, and music and so on. Within service research, Customer Experience has been treated as embedded in service quality and is measured by comparing expectations before and after the experience, or perceptions only. Details about customers' emotional processes of service experiences, described as "an interactive relativistic preference experience" by Holbrook (2006) includes customers' interactions with employees and in that the physical environment was not considered. Kotler (1973) through his research study suggested that there might be more to customers' experiences than the product or service, citing atmosphere or physical setting as possible influences in the buying decision. The perceived value of quality of service has been acknowledged as an essential source for satisfying customers'experiences (Hartline et al., 2000). Several researches have highlighted the importance of Customers' Experience prevalent in the ambiance in service settings (Heide and Grønhaug, 2006; McGoldrick and Pieros, 1998;Pine and Gilmore, 1998; Schmitt, 1999). Ambience relates to customers' perceptions and experiences of the background conditions in the environment (Milliman, 1986). Heide and Grønhaug (2006) propose that there is a genuine need for further research on how Virtual reality techniques, Customer relationship management, innovative store layout, interactive interfaces, visual merchandising, tend to prevail upon customers' experiences in different services provided by the Store

Theoretical Framework

To bridge the gap between the channels, different technologies such as augmented Reality and 3D virtual models have been used to improve the shopping experience,(Drapers,2012) there is a gap in understanding the extent to which online experiences influence consumers' expectations for their shopping experiences. The innovation store experience is key in generating value perceptions in retailing (Kerin, R.A.; Jain, A.; and Howard,1992), which necessitates creating a superior experience for the consumer. This experience cannot be understood without an appreciation of the role of atmospherics, defined as the designing of space to create certain effects in buyers(Kotler,1972). Atmospherics have a direct effect on the customer experience, influencing various psychological and behavioural shopping outcomes, such as an increase in willingness to buy and in customer share as well as the influence on the value perceived by consumers in their shopping experience (Babin, B.J.; Darden, and et al.1994). Since technology is part of the in-store experience (Rosenblum, P., and Rowen, S. The 2012), it must be used to improve this experience and meet customer expectations. In addition, technology can create an attractive environment, making the shopping experience engaging and memorable(Drapers,2012). Technologies such as store-ordering hubs, iPads, and display screens create a new merchandise layout and make products more accessible and convenient to buy in-store. Furthermore, technology is the key to creating an integrated experience. Technology redefines the store experience and store layouts through click-and-collect services or more advanced technologies such as interactive fitting rooms that connect with social networks. However, it is important to note that retailers must focus on the technology that is relevant for consumers and really provides value for them (Drapers,2012).

There is a increasing interest in developing new tools for making the points of sale more attractive, in terms of store appealing, product displaying, facilities for consumers and so on (Pantano and Naccarato, 2010; Laria and Pantano, 2011; Soderlund and Julander, 2009), as well as there is a increasing interest of consumers' towards the introduction of innovations in the traditional stores (Pantano and Viassone, in press), by representing an influencing factor for innovation process (Lubeck, R.M., Wittmann, M.L., Battistella, L.F., 2012), which is strictly linked to customers' preference (Olsen and Velo, 2011). Although developing new products and services is a compulsory element for business profitability (Jugend and da Silva, 2012; Sanchez, et al., 2011), these tools are mainly used for the development of new products, whereas there is still a lack on the consumers' successful involvement for improving processes such as retailing or points of sale. Therefore, with the support of literature from the previous studies the below framework is developed to study the relation between the identified variables that impact the customer experience in the organized retailing.
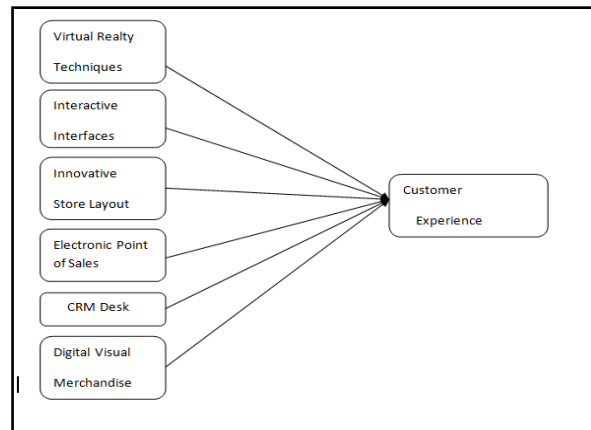

Fig 1: Theoretical Framework

Virtual reality techniques (VRT)

In recent years, there is a increasing interest in developing new tools for making the points of sale more attractive, in terms of store appealing, product displaying, facilities for consumers and so on (Pantano and Naccarato, 2010; Laria and Pantano, 2011; Soderlund and Julander, 2009), as well as there is a increasing interest of consumers' towards the introduction of innovations in the traditional stores (Pantano and Viassone, in press), by representing an influencing factor for innovation process (Lubeck, R.M., Wittmann, M.L., Battistella, L.F., 2012), which is strictly linked to customers' preference (Olsen and Velo, 2011).

This study aims to integrate the consumers' experience in the development of innovation process for retailing, through the exploitation of the most advanced 3D virtual reality tools, by providing a useful framework for its design.As anticipated by Smith and Heim in 1999, store environments might benefits from the exploitation of virtual reality tools in order to provide a wider set of efficient information for supporting the decision-making process. In particular, virtual reality techniques allow creating innovative web-based stores,several contents (such as audio, video, texts), provide novel modalities for supporting the human-computer interaction (Lee and Chung, 2008; Algharabat and Dennis, 2010).

According to Katerattanakul and Siau (2003), the image of these stores is mainly based on the system facilities (i.e. fast system response and secure transactions), product variety and related information, convenience (in terms of navigability efficiency and location indicator), as well as on a pleasant and attractive graphic design.The visual aesthetic influences consumer' perception, by providing a symbolic function which affects the store evaluation and store judgments of store brand quality (Vieira, 2010), thus, the virtual reality techniques become key factors for designing an effective virtual store. The virtual store design is related to the consumer evaluation of the atmosphere aesthetic, with benefits on loyalty towards the store/brand, satisfaction and total expenditure (Vieira, 2010). Although the great deal of research in developing new tools for making the traditional stores more attractive (Pantanoand Naccarato, 2010; Pantano and Corvello, 2010), the research on the integration of 3D virtual techniques in the point of sales is still in progress. To achieve this goal, the virtual store would exploit several communication channels, which support consumers to experience the product as in the real context, to make comparisons among products, and to increase the trust in the technologies.
H1:Virtual reality techniques positively impacts on customer experience.

Innovative store layout (ISL)

Innovative Store layout is an important factor affecting consumer behaviour and a critical determinant towards the creation of store image. Well designed layouts are extremely important because they strongly

influence in-store traffic patterns, shopping atmosphere, shopping behaviour, and operational efficiency (Vrechopoulos et al., 2004:13). Taking a more strategic approach to store layout can reap big rewards by boosting sales, increasing customer loyalty and ultimately increasing turnover (Clark, 2003: 42). Store layout is ease of user movement through the store to provide maximum exposure of goods and attractive display (Marketing Glossary, 2007). This includes doors, merchandise placement, shelf orientation, signages, stock keeping units music, check-out counters, interior decorating, staff attitude, lighting and location of the loading facilities (Levy *et al.*, 1995:6). Most important for customer satisfaction is the store as a brand. Retailers must be good at retailing. Customers are satisfied when the store is neat and pleasant and when they feel that the store understands their needs. Only certain customer segments are interested in store brands. Satisfied and experienced customers are loyal. Several studies demonstrate that store appearance affects consumer product judgments and responses. Strong store appearance offers recognition, familiarity, confidence, and other associations that make it easier for consumers to make shopping decisions (Martenson, 2007: 544).

The determinants of a innovative store layout are scare because they mainly rely on delivering of services and the quality of services being provided. (Siu and Cheung, 2001: 88).The virtual shelves avoid the problems concerning the shelf-based scarcity (Parker and Lehmann, 2011), by displaying a larger amount of goods if Despite this increasing attention to the importance of visual appearance, as well as to the development of more effective virtual stores, and how consumer are willing to accept these one for living new shopping experiences capable of supporting and influencing their decision-making process. The immersive store proposed in the current study reproduces a customizable two-floor environment with the basic features usually available in any store, such as shelves and pavilions.
H2: Innovative store layout positively impacts on customer experience.

E-pos (EPOS)

Point-of-Sale (POS) is the physical location where goods are sold to customers. Traditionally, this was a counter where a cash register was located. Customers would line up in front of the counter and wait for their turn. Sales counters are a fixed size, however, and can support a fixed number of people. Increasing the size of the sales counter is not possible, so customers are forced to endure long lines during congested periods such as holidays. Studies show that as many as one in ten customers will abandon the line while waiting, leaving the store without making a purchase. Long lines also engender ill will from customers, making them less likely to return to a store in the future.

Use of computers for a fast and accurate billing system brings efficiency at the retail checkout. Moreover, computers help create the database of sales and customer data, on which future actions and decisions of the company would be based. Retail point of sales is the first place where automation should be initiated. The creation of huge data bases, efficient information systems, and customer satisfaction begins with automatic point of sales in retail. Automating the point of sales operations serves two important purposes:
i. Efficiency in service delivery
ii. Collection of primary sales and customer data

As Aruba,2012 said that Electronic-Point of sale (e-POS),however opens also other opportunities for creating customer value .An extension to traditional fixed POS that has been around for decades and that customers are more than familiar (NCR, 2011; Rudolph et al., 2012). Krafft & Mantrala,2010 suggested that Electronic POS, enables retailers the collection of sales data at the point of sale, i.e. on the shop floor where store assistants communicate with customers instead of at the traditional cash register where payments are processed. This gives the assistants not only a sense of mobility, but also the opportunity to sway the customer to buy even if a product is currently not on the shelf. If the assistant can check inventory levels at some other stores while engaging with the customer. Other crucial benefit associated with this technology relates to the time that customers spend waiting in lines and then at the cash register before the payment process is finalized.

Mirabella, 2011 said that the time that customers "waste" queuing presents another opportunity for retailers. Implementing Electronic POS inside stores is a matter of promoting concern about customer experience because customers tend to get anxious and even irritated if compelled to spend an unreasonable amount of time in the line (e.g. during peak hours) waiting for their turn at the cash register.

Therefore, accepting customers' payments for products on the shop floor decreases the likelihood they leave the store irritated or, even worse, changing their mind and leaving the store without the product .The question is, taking into account the highly competitive nature of the retail industry and the easiness with which digital word-of-mouth spreads across social media platforms and review websites, whether or not retailers can afford to have customers leaving the store irritated. If customers spend more time standing in the line than the expected waiting time, this may negatively affect their perception of the retailer and the likelihood of a repeat store visit (Zhou & Soman, 2003).

Electronic POS could be an effective cost saving solution to the problem of queues. It is cheaper to equip assistants with Electronic POS rather than to move or build more fixed POS that still need to be manned by people (Rudolph et al., 2012; Accenture, 2012). Likewise, an inexpensive solution is a tablet mounted on a

proper stand and loaded with powerful analytics software and applications that enable not only to monitor inventory in the store, but also across stores and accept orders and payments (Guillot, 2012). The customer's age is a factor since younger customers are more receptive to the use of technology that saves their time in comparison to older customers who have grown up with the cashier processing their payment. In addition, there are also limits to the Electronic POS technology itself. So far, it is inconceivable, for instance, for a store assistant to handle other forms of payment than credit cards and Electronic wallets or other Electronic payment applications (NCR, 2011).Protection of customer data and security features are elements that also influence the number of Electronic POS customers will see in stores. On the other hand, this technology presents an appealing extension to traditional POS in terms of increasing value to customers who cherish innovativeness, time and convenience (Guillot, 2012) and, at the same time, provides the retailer the ability to increase its effectiveness by supplying value-added services to customers that they perceive to be unique to that retailer (Rudolph et al., 2012). H3:e-POS positively impacts on customer experience.

Customer relationship management desk (CRMD)

CRM is used in managing a company's interactions with prospective customers and current customers. It is a strategy designed to help companies increase their productivity and improve customer satisfaction and retention. This strategy is very powerful as it provides a comprehensive view and it helps monitor previous interactions, pending invoice, status of orders and many others.(john bravilo,2012)

Using CRM software, in tracking data of individual clients. Knowing the data of each client is necessary so that the sales team will know the information needed in dealing with their customers. Having the necessary information is useful so that each customer will be given individualized service and alerts.(Borillo,2014)

CRM helps in finding customers and prospects and then engaging with them. There are plenty of strategies used in dealing with them such as online chat and web help.(jofn bravilo,2012) Using social media, driving potential customers to your business. Integrating customer relationship management in social media can boost your business.(Borillo,2014). It is because most of your potential customers are members of different social networks. The industry is using CRM software in tracking the history of your current customers. The software can also help in identifying loyal customers so that you can easily give rewards for their loyalty. This leads to better customer experience. By taking feedbacks and sending personalized alerts, giving information through them leads to better customer experience.
H4: CRM desk positively impacts on customer experience.

Digital visual merchandising (DVM)

According to Schmitt (1999), retail environments can provide consumers with compelling experiences that can positively affect consumer shopping behaviour, reflected by the time and money spent in the store. To enrich the understanding of the processes that mediate the relationship between shoppers' experiences evoked by specific atmospheric design cues, and their in-store behaviour, this study proposes an in-store response model that includes the construct of experience (Brakus, Schmitt, & Zarantonello, 2009). (DS) — can be used as a provider of compelling experiences for shoppers that affect subsequent consumer in-store behaviour. DS is a private screen network in a public place showing video (e.g., in department stores or in shopping malls). Content may include advertisements, community information, entertainment and news. Customer experience has become an important area of study over the last few years (Brakus et al., 2009; Puccinelli et al., 2009; Verhoef et al., 2009). In a shopping context, this study predicts that experiences evoked by DS are – depending on their type – important contributors to shoppers' pleasure or ability for a desired purchase. An inherently pleasurable experience(Dewey, 1934; Hekkert, 2006) may then positively affect shoppers' attitude and approach behaviour. In contrast, an informational message may evoke an intellectual experience that informs consumers' in-store decision making. H5: Digital Visual Merchandising positively impacts on customer experience.

IV.   Methodology

A quantitative survey approach was taken in order to address the objectives of the research. Different demographic channels are considered and respondents were asked to evaluate their experiences whether technology and innovation impacts on customer experiences.

4.2 Research Questions
Academic Area: Technology and Innovation, Customer Experience
 1. Can innovations in retail business lead to a customer experience?
 2. Do new technologies have the potential to influence on customer experience?
 3. To examine retail malls focuses on technology and innovation for providing good shopping experience.

4.3 Formulation Of Hypothesis

H1: Virtual Reality Techniques will positively impacts on customer experience.
H2: Interactive Interfaces will positively impacts on customer experience.
H3: Innovative store layout will positively impacts on customer experience.
H4: e-Point of sales will positively impacts on customer experience.
H5: CRM Desk will positively impacts on customer experience.
H6: Digital Visual Merchandise will positively impacts on customer experience.

V. Research Design

The sample size is of 242 respondents which are useful out of 278 respondents. Data for this study was collected using a self-administered questionnaire that was distributed to respondents directly through questionnaire and enough time given to respondents to fill the questionnaire to reduce sampling error. Questionnaire is constructed in a communicable language. The sample method for this study is simple random sampling method where the sample subjects were picked randomly. A self-administered questionnaire is carefully designed to meet the requirements of the research. The questions are validated from previous literature on technology and innovation impacts on customer experience with a view to add rigor to the research. The primary data that is collected are statistically analyzed by using SPSS software. Multiple regression was used as the statistical tool to assess the association between the independent and dependent variables and also cross tabulation of few demographics which scholar thought would help different stakeholders are added in the analysis part.

VI. Results And Data Analysis

A sample of 242 respondents of customers in Vijayawada retail malls , out of which 133 are men and 109 are women. From the sample 85 are in 18-28 years age group, 65 are between 29-39 years, 68 are between 40-50 years and 24 are 50 and above years. Academic status of 53 members is under graduate, 104 members are graduate, 69 are post graduates, 16 members comes under others category. Professional status of 42 members is students, 56 members are doing business, 110 members are employees and 34 members comes under others category. In the sampled 242 respondents, 53 members earns less than Rs.10,000, 53 members earns between Rs.10,000-25000, 57 members earns between Rs.25,001-45,000 and 30 members earns between Rs.45,001-65,000,30 members earns between Rs.65,001-85,000, 19 members earns more than Rs.85,001. These statistics are briefed in table no.1.

Table 1: Sample Profile

Gender	No of Respondents	% of Total
Women	133	55%
Men	109	45%
Age		
18-28	85	35.1%
29-39	65	26.9%
40-50	68	28.1%
50 and above	24	9.9%
Education		
Under Graduate	53	21.9%
Graduate	104	43%
Post Graduate	69	28.5%
Others	16	6.6%
Occupation		
Student	42	17.4%
Business	56	23.1%
Employee	110	45.5%
Others	34	14%
Income per month		
<10,000	53	21.9%
10,001-25,000	53	21.9%
25,001-45,000	57	23.6%
45,001-65,000	30	12.4%
65,001-85,000	30	12.4%
>85,001	19	7.9%

Table 2: Regression analysis

Predictor Variables	Model	R	R²	Adj. R²	S.E of the estimate	Regression Model	Sum of squares	Df	Mean Square	F-Value	Sig (p-value)
Predictors: (Constant),VRT Predictors: (Constant),VRT, II	1	0.145	0.021	0.017	1.84127	Regression Residual Total	17.377 813.668 831.04	1 240 241	17.373 3.390	5.126	0.024
Predictors: (Constant),VRT, II,ISL	2	0.152	0.023	0.015	1.84316	Regression Residual Total	19.102 811.939 831.041	2 239 241	9.551 3.397	2.811	0.062
Predictors: (Constant),VRT,II,ISL,EPOS	3	0.186	0.035	0.023	1.83586	Regression Residual Total	28.891 802.151 831.041	3 238 241	9.630 3.370	2.857	0.038
Predictors: (Constant),VRT,II,ISL,EPOS,CRM	4	0.256	0.065	0.050	1.81027	Regression Residual Total	54.372 776.670 831.041	4 237 241	13.59 3.277	4.148	0.003
	5	0.334	0.112	0.093	1.76859	Regression Residual Total	92.855 738.186 831.041	5 236 241	18.573.128	5.937	0.000
Predictors: (Constants),VRT,II,ISL,EPOS, CRM,DVM	6	0.338	0.114	0.092	1.76996	Regression Residual Total	94.842 736.199 831.041	6 235 241	15.803.133	5.046	0.000

a. Predictors: (Constant), VRT
b. Predictors: (Constant), VRT, II
c. Predictors: (Constant), VRT, II, ISL
d. Predictors: (Constant), VRT, II, ISL, EPOS
e. Predictors: (Constant), VRT, II, ISL, EPOS,CRM
f. Predictors: (Constant), VRT, II, ISL, EPOS,CRM,DVM
g. Dependent variable CE

From the Table No: 1, we can see that the value of R equals to 0.145, 0.152, 0.186, 0.256,0.334,0.338 and the value of R square is equivalent to 0.021, 0.023, 0.035, 0.065,0.112,0,114 which means that 14.5%, 15.2%, 18.6% , 25.6% ,33.4%,33.8% of the variance in the dependent variable of customer experience can be known by a variation in the independent variables.

As $F_{(1, 240)} = 18.3$, $F_{(1, 239)} = 8.3$, where these two values $p < 0.05$, this model is significant. In addition, the result of ANOVA, which shows the value $F_{(1, 240)} = 18.35$, $F_{(1, 239)} = 13.39$, it is significant at $p < 0.05$. As a result, overall, the regression model is deemed to accurately predict technology and innovation impacts on customer experience.

Table 3: Anova[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.885	1	58.885	18.302	.000[b]
	Residual	772.156	240	3.217		
	Total	831.041	241			
2	Regression	85.591	2	42.795	13.721	.000[c]
	Residual	745.450	239	3.119		
	Total	831.041	241			

a. Dependent Variable: CE
b. Predictors: (Constant), CRM
c. Predictors: (Constant), CRM, EPOS

From Table No: 3, we can see that only two independent variables are having a significant ($p < 0.05$) relationship with the dependent variable of technology and innovation impacts on customer experience simultaneously, the other independent variables have no significant ($p > 0.05$) relationship with customer experience which is influenced on technology and innovation.

Table 4: Coefficients Summary

Coefficients[a]											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.001	.429		11.656	.000					
	CRM	.293	.068	.266	4.278	.000	.266	.266	.266	1.000	1.000
2	(Constant)	3.547	.652		5.440	.000					
	CRM	.263	.068	.239	3.862	.000	.266	.242	.237	.978	1.023
	EPOS	.242	.083	.181	2.926	.004	.217	.186	.179	.978	1.023

Note: Dependent Variable: CE

The regression equation of this research is as shown below.

$$Y = 5.001 + 0.293X_1 \text{--} 1$$

$$Y = 3.547 + 0.263X_1 + 0.242X_2 \text{--} 2$$

Where, X_1 = CRM, X_2 = EPOS

The regression equation indicates that two independent variables are positively related with customer experience. Moreover, the collinearity statistics reveal that the tolerances of all the independent variables are greater than 0.1 and that the Variance Inflation Factors (VIF) are all less than 10. The tolerance shows the amount of correlation between the predictor and all the other remaining predictors. Variance inflation factors reflect the degree to which the standard error of the predictor was increased due to the predictor's correlation with the other predictors in the model. As the tolerance value < 0.1 or the VIF value > 10 is an indication of collinearity, there is not collinearity in the model of this study as can be seen in the result. The hypothesis were further analyzed based on multiple regression analysis and presented as follows.

Hypothesis 5: It shows that p-value (=0.000) of CRM is less than 0.05, therefore, H5 is accepted that means CRM will positively impacts on customer experience.

Hypothesis 4: It shows that p-value (=0.000) of e-Point of sales is less than 0.05, therefore, H4 is accepted that means e-Point of sales will positively impacts on customer experience.

Table 5: Excluded Variables

Excluded Variables[a]

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	VRT	.109[b]	1.742	.083	.112	.980	1.021	.980
	II	.018[b]	.282	.778	.018	.975	1.026	.975
	ISL	.102[b]	1.605	.110	.103	.960	1.042	.960
	EPOS	.181[b]	2.926	.004	.186	.978	1.023	.978
	DVM	.126[b]	1.976	.049	.127	.941	1.063	.941
2	VRT	.090[c]	1.457	.146	.094	.968	1.033	.963
	II	.014[c]	.228	.820	.015	.975	1.026	.955
	ISL	.053[c]	.814	.416	.053	.880	1.136	.880
	DVM	.078[c]	1.177	.240	.076	.857	1.166	.857

a. Dependent Variable: CE
b. Predictors in the Model: (Constant), CRM
c. Predictors in the Model: (Constant), CRM, EPOS

Hypothesis 1: It shows that p-value (=0.085) of Virtual reality techniques (VRT) is greater than 0.05 (p>0.05), therefore H3 is rejected that means Virtual reality techniques will not positively impacts on customer experience.

Hypothesis 2: It shows that p-value (=0.110) Innovative Store Layout is greater than 0.05 (p>0.05), therefore H4 is rejected meaning interactive interface (II) does not impact on customer experience.

Hypothesis 3: It shows that p-value (=0.416) is greater than 0.05 (p>0.05), therefore H3 is rejected that means innovative store layout (ISL) will not positively impact on customer experience.

Hypothesis 6: It shows that p-value (=0.241) of digital visual merchandise (DVM) is greater than 0.05 (p>0.05), therefore H6 is rejected meaning Digital Visual Merchandise will not positively impacts on customer experience.

VII. Discussions

This study shows the increasing interest of consumers in innovation for retailing, in accordance with previous studies (Pantano and Viassone, Olsen and Velo, 2011). This study offers a new tool for exploiting consumers' information for the innovation process in order to develop new systems highly accepted by final users who are actively involved in the design process. The results of the experiment suggest that the immersive store influences consumer' perception of the point of sale and might be a motivating factor for the choice of the store. Thus, consumers considered the store a good place for both purchasing and having fun. In fact, they appreciated the new and amusing experience, by commenting "exploring this store is more exciting than a traditional one", and "I'd prefer this store more for having fun than for purchasing". These findings are consistent with other previous studies that have shown that an entertaining retail context positively affects consumer's shopping behaviour (Soderlund and Julander, 2009; Pantano and Naccarato, 2010). In fact, also users who have no knowledge of virtual reality and no interest in the advanced technologies appreciated this environment for their purchases. As a consequence, also consumers who usually consider boring the shopping activity may be motivate to visit this kind of store. Since the structure of the virtual store is flexible (it can be easily modified and implemented), it might be easily adapted to different product categories. Furthermore, it avoids the problem connected to the shelf-based scarcity (Parker and Lehmann, 2011), by displaying each

products available, organized for colours, sizes, etc.. In fact, the 3D products are reproduced including real colours and flashes that can be easily controlled by consumers in order to live a more realistic experience, as anticipated by Algharabat and Dennis (2010) and Kim, J., Fiore, A. M., Lee, H.-H. (2007).

Since consumers prefer a store with well organized shelves which offer a large amount of available goods and they perceive more positively a store which display a wider range of products, these technologies improve the products' display as well as the organization of the product which make the searching and finding more fast and easy, in accordance with (Bauer, J. C., Kotouc, A. J., Rudolph, T., in press.).

VIII. Key Findings

- Nearly both male and female are both actively visiting retail shopping malls and my survey has a 55% male and 45% female respondent and we can see the both gender are actively visiting retail shopping malls.
- The age groups of 18-28,29-39 years are having better customer experience which are influenced by technology and it was known from my research survey.
- Most of the shoppers are employees and followed with business. The employees occupy a percentage of 45% and Business occupy a percentage of 23.1%. And the percentages are from my research survey.
- Most of the respondents are graduates and the research survey percentage of 43%.
- And from my survey it was clearly know that customers visit shopping malls monthly once to buy the product from the shopping malls of 48.8%
- And from my survey it was clearly know that customers will spend nearly 1000/- to 3,000/- it occupy a percentage of 40%. And then they will shop 3,000-5,000 and it occupy a percentage of 33.5% and it is came to know from my research survey.
- By using SPSS, through multiple regression analysis it is found that the technology and innovation impacts on customer experience.
- The six factors which are influencing the customers experience through technology and innovation are Virtual reality techniques, Interactive interfaces, Innovative store layout,e-POS,CRM desk, Digital visual merchandise. These are the factors that technology and innovation impacts on customer experience.
- And from research analysis it was seen that two independent variables known CRM and e-POS shows impacts on customer experience.
- Remaining independent variables known as Virtual reality techniques, Interactive interfaces, Innovative store layout, Digital Visual merchandise doesn't show impacts on customer experience.
- And it was clear that most of the customers in Vijayawada where my survey is conducted are not aware of technology which is using in retail shopping malls.
- From previous studies, I choose some of the factors which can influence on technology and innovation which could enhance customer experience, but in Vijayawada that technology is not there to get experience by the Customers.

IX. Suggestions

- As customers are keener about the technology and innovation, retailers should focus on technology and innovation to increase the market share of their own organization.
- To retain the consumer the retailers need to update according to the need depending on the changes that are expecting from the customers.
- This research variable says all dependent and independent variables are mainly focused on the customers. And retailers need to look at these elements and need to update the changes to make the customer stay longer in the online store of their sectors.
- As the most of the buyers are educated and uneducated so providing more information through technology also leads to not getting customer experience.

X. Conclusion

This study was accomplished to determine the role of technology and innovation in enhancing customer experience in retailing as compared to other developed countries like USA and UK technology and innovation in retailing was not up to the mark. But, now-a-days even retailers are focussing on technology and innovation for providing better customer experience to the customers. In research, technology and innovation impacts on customer experience and the highlighted the key factors like virtual reality techniques, interactive interfaces, innovative store layout,e-POS,CRM desk, Digital Visual Merchandise that show impact on customer experience and the sales of the retail shopping malls.

This study revealed that shopping is mostly influenced by promotions, offers, discount and for recreation. Consumers are doing shopping in malls is because of convenience and belief in them about quality and value for money. Technology trends must be complemented by delivering on what customers truly want and

value by not only listening to what customers say, but also by analyzing their purchase behaviour and customers experiences. This study has highlighted the impact of technology and innovation and customer experiences of consumers at convenience stores Issues relating to technology and innovation and customer experience were discussed. In today's volatile economy, providing excellent customer experience can be the critical difference in any company's success. With ever-changing technology in the retail industry, retailers face the ongoing challenge of gaining competitive advantage from creating added customer value. In order to accomplish this value, retailers have to constantly review their strategies. The empirical data used during this study were based on questionnaires that were administered amongst customers of convenience stores. The discussions and conclusions discussed in this chapter represent some of the actions that could possibly be taken at retail malls is to improve technology and innovation in retail stores. This study will have an impact on the customer experience which will assist store owners to increase technology and innovation at retail shopping malls.

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