

ANALYSING THE RELATION BETWEEN TECHNOLOGICAL ADVANCEMENT AND CONSUMER RETAIL EXPERIENCE: A SYSTEMATIC REVIEW

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Received: 16 March 2020 Revised and Accepted: 17 June 2020

ABSTRACT: Technological progressions are to a great extent in charge of the increased competitiveness inside the business and customers move in shopping and purchasing practices. Worldwide patterns, for example, cell phones and web-based life, have prompted a progressive change, which has led to an extraordinary decrease in customary 'block and cement' levels, which have led to the devastating disappointment of long-lasting retailers. Inspires that once overwhelmed our high passages. Despite surviving to this day, current retail companies remain with high stress to change the process to connect with today's computerized locals. The mix of the web and the physical universe should focus on advancing the experiential benefits that the store positions by coordinating growing advances throughout the retail process. The accompanying paper lends knowledge to current mechanical advances that are changing customer participation in a multitude of ways. At that time, proposals from experts regarding the critical use of future augmented reality (AR) and virtual reality (VR) technologies are displayed, which are driven by the outline of future changes in the said progress.

KEYWORDS: Augmented reality, Retail Experience, Technological progressions virtual reality, Innovation, Customer Involvement.

I. INTRODUCTION

Technological inventions have the potential to rapidly modify retail land-scape (Hopping, 2000; Pentano, 2016). The Mobile Rebellion changed the way customers find goods and services, and the retail division is now being invented by inventing ways to enhance customer experience and customer fulfilment through technology integration throughout the retail process has been classified. (Pantano et al, 2017). However, some technology phases present testing for retailers when technology becomes the dominant focus of the experience, suggesting that misleading conflicts with advances could potentially affect retailers' performance efforts.

Along these lines, the accompanying examination researches the key chances and difficulties of mongrel lease mechanical advancements as far as purchaser reaction, including versatile, in-store, and rising innovations. Pursued by an investigation of the survival in difficulties and such information reached out to deliberately actualize the upcoming advancements of Augmented Reality (AR) and Virtual Reality (VR) to additionally improve the consumer experience in retail. The investigation combines extensive research in related fields, and gives a review to experts regarding clients' reaction on existing mechanical developments and showcasing endeavours; further featuring how future AR and VR advancements can be deliberately executed to make human drove, socially captivating and engaging encounters, as requested by the digitalised population. At long last, various estimates and suggestions are introduced with respect to AR and VR advancements, trailed by proposals for the scholarly world in regards to upcoming user explore.

II. TRANSFORMING THE CONSUMER RETAIL EXPERIENCE THROUGH INNOVATION IN TECHNOLOGY

Mobile Technologies

Mobile extremism has inspired a shift from multi-channel to Omni channel retailing. This made a remarkable movement from the physical division and web based division of retail, to the complimentary development among on the web, portable and the physical retail store inside the solitary operational procedure (Piotrowicz and Cuthbertson, 2016). Hardly any of the cell phones advantages comprise of both the conveying ability and pervasiveness (Pantano et al., 2013). Customers movements are no longer restricted to the fixed working hours of store, because of the across the board appropriation of cell phones, moving traditional reality limits

(Bourkalis et al., 2009). This could be achieved by enabling procurement through expanded adaptability as well as authority over the customer decision making about their way of selecting goods and enterprises (Niemeier et al., 2013; Piotrowicz and Cuthbertson, 2016).

These days, an amazing 80% of web clients overall utilize their cell phone to peruse on the web (Chaffey, 2016). Clearly, customers need to utilize their own, own gadgets to scan for value correlation, look for offers and item data, execute instalments flawlessly, and gain from past customer surveys (Yarrow, 2014). With respect to last mentioned, internet based life and online retail sites that are effectively available on cell phones give the perfect stage to social association, in this manner, giving a center where purchaser item and administration surveys are shared and effectively enhanced to a more extensive group of onlookers (Niemeier et al., 2013).

Mainstream internet based life destinations, for example, Facebook, Instagram, Snapchat and Twitter enable customers to articulate and share their considerations as well as feelings about items and the administrations anytime all through the retailing process (Niemeier et al., 2013). The ability to implement fulfillment otherwise progressively frustrating for the brand presents difficulties for in-store retailers who regularly need power over informal community impact to shoppers (Piotrowicz and Cuthbertson, 2016); and pessimistic surveys in an online network radically influences mark credibility, mark observation, client devotion, deals and offer value (Niemeier et al., 2013). Taking into consideration of Facebook to some degree around one and a half billion month to month dynamic clients (Statista, 2016b), it is essential for the businesses to construct virtual associations among shoppers for supporting optimistic advancement as well as for item evaluation (Piotrowicz and Cuthbertson, 2016). This is on the grounds that the client "fills in as a medium between herself or himself and the more extensive internet based life organize, which is kept up even in-store condition by means of cell phones" (Piotrowicz and Cuthbertson, 2016, p. 9).

Snapshots of successful use are currently distinguished from snapshots of procurement due to administration, for example, snap and assemble (Pentano et al., 2016). Buyers can collect on their cell phones via a portable application or Internet browser, later in-store or at an accumulation point, therefore, restricting open doors for human connections and correspondence (Pentano et al., 2016). A universal system that consumers can access from any location empowers an unusual state of availability and simplicity of purchase, which is helpful for both buyer and retailer (Pantano et al., 2016). In any case, Piotrowicz and Cuthbertson, (2016) express that web and portable solutions should be used to bring buyers into physical stores and empower human associations. When done in this way, the retailer has a sense of power over experience, and can resolve any issues that may arise before posting negative surveys, which can be seen by the majority.

In-store Technologies

Retail outlets contain strikingly incorporated innovations in their stores as a strategy to draw in potential as well as current markets furthermore to make a productive administration procedure. The joining of self-benefit advancements in the retail procedure are example of self-filtering and self-checkout (SCO) which enables the customers to examine items as well as to construct instalments themselves (Nathalie et al., 2016). Researchers have developed a technique to help the retail procedure (Lai and Chuah, 2010), by means of diminishing lining period, along with maintaining a strategic distance from shoppers getting to be increasingly aggravated and disturbed (Yarrow, 2014). Retailers are consistently reassuring customers to embrace new advancements (Pantano et al., 2016), in order to enhance the user encounter and at last, raise the shoppers picture of the store (Yarrow, 2014). Moreover, increasingly present day instalment arrangements for example Amazon Pay, PayPal and Google Pay, with computerized case giving consistent connection among cell phones as well as instalment cards, acts as conjecture in support of standard appropriation (Taylor, 2016); by means of the quantity in worldwide portable instalment clients gauge to add up to 664 mn up to the year 2021 (Statista, 2016c). In any case, while customers appreciate the advantages that advancements, for example, SST's give, they regularly encounter a feeling of inconvenience and disturbance while it neglects to execute or when issues are being experienced (Johnson et al., 2008). It infers incomprehensible familiarity through advancements might conceivably affect buyer satisfaction, disabling the viability of firms showcasing systems and customer dependability (Johnson et al., 2008). Therefore, there is increasing concern and investigating the feasibility of innovations on the buyer retail encounter; Along these lines, some US-retailers have relocated the SCO to pursue human connections and take into account rapidly improving, individual customer encounters (Nathalie et al., 2016).

In spite of such endeavours to pull in and hold customers, number of customers visiting retail stores has gone down considerably; this phenomenon has forced the major retailers head like American Apparel to battle for their continued existence in this tremendously aggressive commercial centre (Retail Research, 2016). Retail heads quickly require emerging techniques in order to tempt customers back in their retail store, through

drawing the shoppers in the formation of intelligent and novel, customized encounters which incorporates and orchestrates all the things required in physical retail setup with portable chances (Pantano et al., 2016). Thinking about the digital population, it is inevitable that retailers are looking at the increasing progress of buyers in stores. The latest innovations picking up acknowledgment by retail shops are Augmented Reality (AR) and Virtual Reality (VR). AR is another intelligent innovation which interlaces the physical retail environment as well as the advanced condition by superimposing augmented explanations, for example, data, pictures with sound continuously (Javornik, 2014); while VR completely drenches clients in a computerized world (McKone et al., 2016).

Marked like a 'troublesome' innovation, like the interruption made by the cell phone and the web, VR takes into consideration another type of overall correspondence from Head Mounted Displays (HMD), for example, VR Gear of Samsung, HTC Vive and Oculus Rift (Rosedale, 2017). While the shopper advertises requests expanded eminence, for example, big goals shows, low weight, minimized, just as decreased expense (Rosedale, 2017); VR has numerous obstructions as customers are not yet acquainted by means of trying HMD (McKone et al., 2016). In addition to it, VR is being considered valuable in a broad scope of ventures which includes games, retailing, commerce and training (Rosedale, 2017); and in the travel industry, VR is considered valuable to connect with voyagers as well as to urge the customers to visit destinations (Jung et al., 2017). At long last, the amount of income generated from VR items is being anticipated has reached \$5.2 billion in 2018 (Statista, 2016d).

In the retail architecture, AR's point is to confront the merchandise encounter, intelligent promoting efforts, and creative item encounters for shoppers (Scholz et al., 2016). One of the prominent strategy pertaining to AR is cell phones, due to which retailers got the opportunity to associate with customers. It also provides the platform for retailers in developing ubiquity of cell phones. As of now, customers use cell phones in-store to perform cost and item correlation with locate a less expensive option while shopping in-store, by means of scanner tag checking or web look (Piotrowicz and Cuthbertson, 2016). In any case, after executing versatile AR in the retail store, the knowledge pertaining to shopping is radically improved, since customers are able to undoubtedly get to enhanced item data contrasted in both the cases without AR, be it physical retail store and the web (Poushneh et al., 2017). Furthermore, buy assurance in wrinkles because of the capacity to see virtual item exhibitions in-store, which is evidently the one of a kind estimation about the AR as seen through customers (Dacko, 2016). For instance, Retail stores of Lego are utilizing AR to extend an enlivened form of finished Lego set present within the crate before buying on the way to build mark commitment and buy assurance (Kipper and Rampolla, 2013). Generally speaking, a compelling atmosphere is created for buyers to make use of the applications of AR in order to upgrade their experience of shopping encounters as well as to get to advancements; thusly, retailers profit by expanded benefits and intensity in such an ever changing business of retail (Poush-neh et al., 2017).

In the past retail sector, AR is accessible to buyers in a large number of routes, for example, versatile routing applications, travel guides (Javornik et al., 2016), as well as dialect interpretation (Kipper and Rampolla, 2013), just like a creative learning instrument in social legacy the travel industry (Moorhouse et al., 2017). Obviously, the estimated income on AR advertises has increased exponentially and is expected to generate \$90 billion by the end of 2020 (Statista, 2016e).

Applying AR and VR in Industry

Retail stores of furniture, such as Wayfair and IKEA have received different appliances of AR, in order to quantify the physical conditions of its capacity and then choose the realistic cover consequently (Young, 2016). After improving Item coordination and basic leadership process representing buyers furniture coordination is essentially advanced (Oh et al., 2008). What's more, the client encounters of AR advanced builds shopper fulfilment and readiness to buy (Poushneh, 2017). Similarly, virtual attempt, for instance, to superimpose virtual comments capturing strategy of the 'Enchantment Mirror' which centres around another type of AR that uses movements. In another example, instead of an actual picture of customers, make-up or frills are used; in order to create a proper vision a superimposed computerized image is preferred over the actually seeing (Javornik et al., 2016).

Such examinations depict how innovation is quickly advancing and features the intensity of latest improvements in clarifying, arranging and prescribing items (Rese et al., 2016). Past shopper commitment, some of the organizations are trying to find the effect of advertisement promotion and battles with the help of AR innovation by following client conduct, area, and association designs progressively (Liao, 2015). By breaking down shopper program and shopping conduct, experts increase important data for new advancement and showcasing techniques (Oh et al., 2008).

III. OPPORTUNITIES AND THREATS IN ASSIMILATION OF INNOVATIONS IN TECHNOLOGICAL

With the rapid advancement of innovation in Technology, specifically the unpredicted developments in cell phones technology have evidently changed the retail business from multiple points of view. The move in purchaser shopping and purchaser conduct has displayed new difficulties and inconsequentially opened the doors in favour of retailers for their association and integration with new digitalised population. In a retail encounter, a number of requirements have emerged for effectively utilizing the future of AR and VR advancement which includes re-seeing of the achievement and purchaser reaction of existing innovative stages.

Connectivity and Social Engagement

To begin with, the exponential growth in the usage of cell phone as well as the multiplication in the user base of social networking websites steps has led to the withdrawal of control and promotion of firms' power and performance, and shoppers are forced to conduct previous customer surveys on the firm. Yarrow (2014) recognized that web based program and internet based life conduct as the major factor in perceiving people's sentiments and convictions.

In this manner, firms must expand on their online networking nearness and connect with customers through portable and social stages, and various merchants already convinced about the utilization of AR as such. Subsequently, with the new AR advancements this became crucial to present portability as well as amiability, just like giving guide linkage to online life applications, so as to build up an optimistic association and connection among the digitalized populace. In order to achieve the said, merchants would deliberately use buyers like a typical showcasing as well as promoting, while keeping up a solid web based life existence and network to the more extensive populace, in this manner drawing in potential marketplaces.

Besides, Dacko (2016) discovered that vendor assessment generously uses additional portable AR interface because in store use is due to the formation of practical shopping advantages. We can take the example of portable AR used in the store urges purchasers towards a flash offer customized encounters to the online network, is seen as 'perky' and 'credible', and can possibly act as the driver intended for upcoming conduct (Javornik, 2016). The partaking in the captivating encounters on web elevates affirmative brand image in the web network, also it will pull in emerging marketplaces in-store on the road to make attempt on creative innovation. Ultimately, the extra data as well as the online item exhibition would add to expanded deals along with buying assurance (Dacko, 2016).

Communication Human and Interaction

Besides, having the need of human association, the association is unquestionably required while coordinating rising advancements, because newness to the assumed advances often makes consumers anxious on the subject of attempting for the reason of fear on lack of ability and utilization complexity. Attracting on customer reaction to past advances utilized to help the retail procedure, advertisers, innovation engineers and retailers can get familiar with a tremendous sum as far as upcoming VR and AR improvements. Neuhofer et al., (2015) contends about it staying basic meant for organizations towards misuse along with coordinate rising innovations into the whole procedure, in spite of the fact that, substituting human experiences with advancements ought to be maintained a strategic distance from. For instance, well disposed salespersons ought to stay accessible to help the new or less skilled customers with the utilization on SST's; in order to expand the buyer encounter instead of go about like any boundary (Piotrowicz and Cuthbertson, 2016; Nathalie et al., 2016). Additionally, upcoming VR and AR advances have to cease being a secluded monitor around any dim area; instead, these advancements ought to completely collaborate customers and workers (Piotrowicz and Cuthbertson, 2016).

Furthermore, apparent directions, visuals showings as well as installing similarity are essential features to make a good customers impression about the capacity along with readiness towards utilization of the SST (Nathalie et al., 2016), this can be additionally connected with VR and AR, like relatively novel category in innovation, purchasers are still lacking acquaintance when it comes to utilization of the impropriety, that could forgo shoppers appropriation as recently referenced. In like manner, Javornik (2016) studied and established about the accomplishment in novel AR advances relies upon buyers agreeableness with attempting the gadget, moreover the workers have to learn the art of enticing buyers with the help of novel technology and recommend it's utility to them (Javornik, 2016). All the arrangement in this regard must deliberately execute advances by means of furnishing workers with VR and AR advances which has the potential to upgrade people driven administration along with the experience formation forms (Neuhofer et al., 2015).

IV. CONCLUSION AND DISCUSSION

Numerous vendors sit around idly with money related an incentive on their promoting division because of absence of customer understanding. This examination makes bits of knowledge into the essentials of new innovation improvement by recognizing the requirement for social commitment and human cooperation and correspondence by means of versatile and in-store advances; further featuring the significance of omnipresent availability when creating and integrating future advances. The components have been dictated by exploring current technologies that keep on changing the retail business, and have given various proposals to experts planning to coordinate AR and VR. At last, an audit of insightful forecasts of AR and VR use have been proposed, trailed by recommendations for the scholarly community as far as future customer inquire about.

This exam makes knowledge become the building blocks of new advancement and enhancement by recognizing the obligation meant for public commitment along with people collaboration as well as communication through flexible plus in-store advancements; In addition, it highlights the importance of ubiquitous availability while producing as well as integrating upcoming advancements. This mechanism has been dictated through exploration of existing technologies which continues to change in the retailing sector, and has submitted a variety of suggestions to experts who plan to synchronize VR and AR. Finally, an audit about insightful prediction on the use of VR along with AR is being projected, following the recommendations of the academic commune regarding future customer inquiries.

Possibly VR and AR together are able to create an increasingly unconnected as well as personalized customers' encounter of retailing (McKone et al., 2016). A large part among web clients across the world is required to utilize VR headsets every day inside the following 7 to 10 years time duration (Rosedale, 2017). Its capacity towards cooperating among each other within the online universe can possibly open up loads of business opportunities among vendors towards the association among consumers, even while remaining at comfort in their residences (Rosedale, 2017). Upcoming era may possibly observe retailing. We can take the instance of customer gain, by providing an extraordinary element in customer care in addition to helping them by using customized VR interactions, where the retailers would be in a position to settle the rising concerns through fresh approaches, limiting the risk related to negative abuse towards the majority by means of web or internet based life. Thus, firms could recover an element of authority on the customer interaction. This was initially displaced with the exponential growth of mobile phones also the reinforcement about buyers amplified compliance along with control (Piotrowicz and Cuthbertson, 2016; Niemeier et al., 2013).

Clearly, VR and AR are ideal for their usage in in-store. This becomes apparent with the reception of driving companies like Micra, BMW, Nissan, IKEA and Lego (Kipper and Rampolla, 2013; Young, 2016). It is because of its capacity towards integrating individual cell phones in the midst of current retailing (Pantano et al., 2016). Evidently, the promotion significance of AR has relied upon the exponential development as advertisers arrange creative approaches to send the innovation (Liao, 2015). In order to endorse AR comprehensively, fresh improvements are required to connect to the shopper along with the employee in order to synergize as well as customize.

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