# DIGITAL TECHNOLOGIES FOR ONLINE RETAILING

Vikas Vats, Scholar Ph.D. (Management)., Sunrise University, Alwar, Rajasthan Dr. Anshuman Sharma, Guide, Dept. of Management, Sunrise University, Alwar, Rajasthan 3 Shalini Rahul, Co-Guide

Abstract-There has been a significant increase in the E-banking industry as consumers increasingly prefer conducting transactions online and paying bills simply by scanning QR codes. So, in this Digital Transformation era, E-banking has grown tremendously. These retail development patterns have benefited a cashless economy that relies on digital versions of goods rather than the traditional method. Globally, digitalization has advanced. Physical boundaries are being removed in order to establish a global environment. Amazon, Alibaba, Flipkart, eBay, Paytm Mall, and others are online department stores. They will suffer as merchants and brands fight back with more customer-focused partnerships. A retailer or a brand may serve as a gatekeeper for different online shopping platform choices. However, it is not always roses. In order to make a transaction, a genuine relationship with the client is required. However, internet platforms make it harder to establish such relationships and gain loyalty. The infinite requirements increase with digitalization. The demand for change is so great that vendors must constantly satisfy changing expectations, which may be tough to fulfil. In the age of digitization, merchants must cope with cybercrime and even avoid it. The US was the first to utilise cell phones for retail and pharmaceutical purposes. Consequently, sales increased substantially. They started to provide a range of features that quickly became popular. Their strategies made all these companies very profitable. Many consumers who cannot select between products just read reviews and decide appropriately, or collect all necessary information and opt not to purchase until the prices are revealed. All smartphone applications now have success in attracting all polarising market segments, Digitalization will cause a significant change in the conventional monetary paradigm. Money positions unbundled create intense competition. However, significant network-related digital currencies may help re-bundle money when payment networks combine with diverse data services. The development of systemically important networks leads to areas of digital money beyond national boundaries, which may destabilize the international monetary system. Digital assistants help improve workflow, customer, and financial experiences. Consumers benefit from modern financial innovation.

**Keywords:** - E banking industry, transactions online, cashless economy, online shopping platform, Digitalization

## INTRODUCTION

Online Retailing refers to the process that allows the customers to search, select and buy the products, services, and information remotely over the Internet, and it is a form of Electronic Commerce that enables different customers to shop from anywhere around the globe using the Web based Apps.

Online shopping sites appear to be the big winners in the retail world as they are growing along with digital transformation all over the globe as customers prefer shopping online rather than visiting physical shops. They, on the other hand, are confronted with difficulties that present new research opportunities. As evidenced by Amazon or Alibaba, Flipkart, eBay, Paytm Mall, and others, these sites also serve as department stores. As retailers and brands battle this trend with more customer-focused relationships, the networks will struggle. Retailers and brands can provide solutions, expertise, and tailored customer experiences and thus act as gatekeepers for various online shopping platform decisions.

#### PROBLEMS ASSOCIATED

There are various problems in Digital Technology in Retailing, like customer data and privacy issues like credit card information and phone numbers, which violate their right to privacy. Retailers can give customers the ability to specify who and what can access their data, when and for how long by employing a digital identity management platform.

There are various problems associated with using the online mechanism for various purposes depending upon the uses ranging from whether it is having lesser loyalty or the greater expectation of the customer. The problems associated are as follows:

- The relationship with the consumer to frame a loyal customer base is the want for every business. However, the online platforms make it quite challenging to build the same relation?
- Cyberattacks can compromise the security of customers' eCommerce websites by infecting them with viruses, and, what is even worse, they may compromise the security of registered customers' data. Thus the problem of cybersecurity is pertinent Avoiding online frauds: moving in the era of digitalization, it has become a task for retailers to deal with cybercrimes, and even circumventing them is need of the hour.
- Managing the return and refund of customer's is a Big Problem.

#### SOLUTIONS TO CURB ABOVE MENTIONED ISSUES

With increase in issues pertaining to cybercrimes and frauds it is extremely important to enforce rules and laws that can be helpful in protecting the interest of the consumers and even retailers. Moreover, with increase in competition and expectations of the consumers it has become a challenge to cope up with it, by analyzing the need of consumers this challenge can be balanced out. Following are the solution to it:

- 1. Keeping in touch with the latest pattern and providing incentives like gifts, brownie points, and reliable aftersale service can help create a loyal consumer base.
- 2. Creation of a safe interface to limit the breach of security so that more and more people can be protected from
- 3. Creation of a strong customer service can solve the problem of replace and refund even in remote localities.

It is pertinent to note that there are various problems concerning digital technologies and even online retailing problems. Some of them are:

- Maintaining relationships with customers: It is pretty easy to get loyal customers for offline retailing. However, the online platforms make it quite challenging to build the same relation.
- High expectations of consumers: With increased digitalization, it has become extremely difficult to cope with the competition. and expectations
- Avoiding online frauds: moving in the era of digitalization, it has become a task for retailers to deal with cybercrimes, and even circumventing them is the need of the hour.

As online is becoming more prominent, general networks' popularity may be compromised and impacted. Manufacturers and retailers use branded product platforms and specialization/solution selling to disrupt their traditional "department store" business model; how can retail platforms improve their value propositions?

Manufacturers' and advertisers' ambivalence about their relationships is another stumbling block for networks. Purchase commissions are typical, and some platforms prefer to sell their copies of such products before realizing the potential for sales. As a result, some businesses will no longer advertise on those channels, while others will abandon the platform following a bad experience. Brands, particularly those with enough clout to stand on their own, frequently look for ways to break free from those platforms. How can networks build a long-term, sustainable eco-system that is not hostile to different product suppliers?

Traditional retailers' business models may be imperilled, although retailing as a function does not go away. According to our predictions, both established constituents (brand manufacturers) and new constituents (retail platforms) will take over key customer interface roles. These interfacing functions are enabled by the development of unique value types through digitization, resulting in new and improved benefits for customers. Consequently, the consumer experience has become more competitive than ever before, even though the customer remains the clear winner as a result of these changes.

All these strategies are center on the client of diverse companies. In recent years, online shopping has become much more accessible. Business success hinges on the retailer's perception of the industry, brand consistency, and customer understanding, as well as their ultimate loyalty (Batey, 2008) [1]. Similarly, each customer's arrival and success has been aided and maintained by store and company approaches and communication techniques. In the modern era, every organization that uses a range of platforms and communication strategies needs to maintain healthy consumer relationships. Much shopping nowadays is done on the internet. As a result, digital retailers are employing a variety of innovative strategies to improve the seller-buyer relationship so that they can earn more profits along with satisfying the needs of customers, as in fig.1

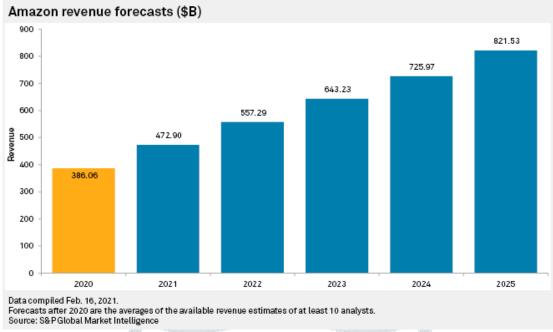


Fig. 1: Growth of Amazon

Amazon is an International E-Commerce Company that offers various products and services such as Electronic Goods, daily deals, and groceries. Amazon is the leading E-Retailer in the United States of America, with almost 386 billion US \$ in net sales of 2020. Most of the Company's revenue is generated through E Retail sales of various products and services. It is considered as one of the most valuable brands worldwide, as seen in fig. 1

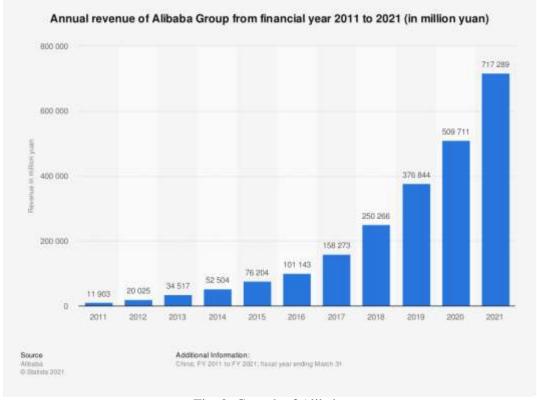


Fig. 2: Growth of Alibaba

The Revenue of Alibaba group extended to 717.2 billion Yuan approx. One hundred nine billion US \$ in the financial year 2020. In the fiscal year on 31st March 2020, Alibaba Group recorded a revenue of 473.68 Billion Yuan (approximately 72.3 Billion Us \$) in online sales of China.

#### **DIGITAL TECHNOLOGIES FOR E-COMMERCE**

Mobile apps and other developing apps are evolving at a breakneck speed. On a global basis, these are becoming increasingly important and effective marketing tools. Customers come from all over the world to shop with them. Customers need internet and storage facilities, and they can easily shop for various products worldwide without going anywhere, as mentioned in fig. 3.

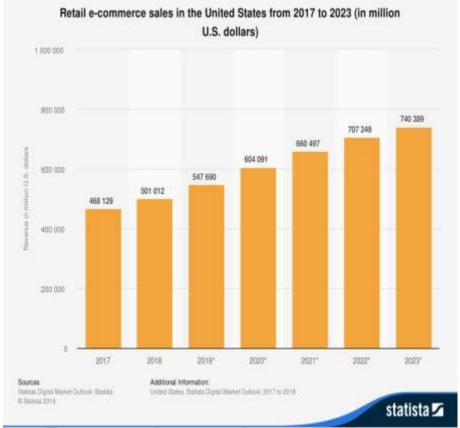


Fig. 3: Growth of E-Commerce Sales in the USA

These smartphone apps have been highly influential in attracting online shoppers and retailers as they are cost-effective. The Coming of Age Mobile apps have been a significant benefit driver for all retail chains and their marketing campaigns to attract consumers in recent years, as mentioned in fig. 4.

Purchases through smartphones and tablets

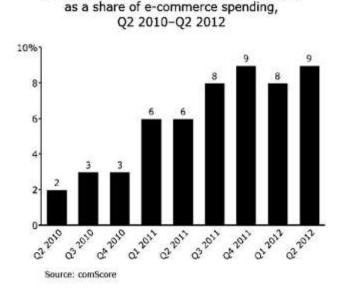


Fig. 4: Trends of Purchase of Smartphone and Tablets

In the United States, retail and pharmacy chains are among the most strong in the world. These were the first companies to sell their products through mobile applications. Sales grew and improved significantly as a result of these. As these apps grew in popularity, they began to offer various features that became immediately popular. Digital recommendations that fill in the blanks, online payment options, on-time delivery options, and a slew of other features were all included (Thompson, 2013). As a result of their tactics, all of these brands became highly successful. Small retailers and startups are now using these online marketing tactics and other benefits of digital facilities (Hopkins and Turner, 2012). All types of retailers are increasingly relying on mobile app technologies to execute their marketing strategies for the success and growth of their business and increasing sales of retail business, as mentioned in fig. 5

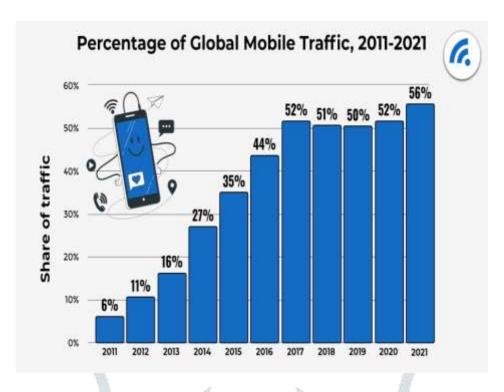


Fig. 5: Percentage of Mobile Traffic

#### II. LITERATURE REVIEW

Retailing generally refers to a set of activities or steps used to sell products or services to consumers for their private use or other use. It is generally responsible for matching the individual needs of customers with supplies of all the manufacturers.

Retailing plays a vital role in any economy globally because it connects consumers' diverse needs to manufacturers' specialized products. After the Policy of Liberalization, Privatization, and Globalization, the total market has turned into a global village. The manufacturing of assortments, physical product logistics, legal transactions with customers, information and communication in general, and the provision of ancillary services are all core functions of retail. Brick-and-mortar stores have traditionally done the majority of these activities. Other types of retailing, such as mail order and door-to-door operations, have existed, but fixed physical retailers have remained the most significant (Coughlan, Anderson, Stern, & El-Ansary, 2006) [2].

The value chain includes the store location. This value chain comprises three types of agents: (brand) suppliers, institutional retailers, and customers1, with institutional retailing referring to agents that rely on retailing as their primary source of income. Since fixed retailing is by far the largest group of players in the institutional retail market, our discussion focuses on the impact on traditional retail (i.e., brick and mortar stores) (which also includes formats such as mail order or door-to-door selling and other selling techniques which sellers are using to increase their sales).

As retail commerce evolves further from store-based formats to Internet-based formats, such as plays, online retail operations, and platforms, the dominance of stationary retail within the retail value chain faces structural and organizational challenges. Traditional brands are participating in the transition through multi-channel initiatives, but new companies, especially Amazon, account for a significant industry (Keyes, 2018). In 2017, Amazon accounted for about 4% of all online purchases in the United States. (2017, The Holocaust). "Since the Internet had not yet been invented, there were only shops," said Oliver Samwer, CEO of Rocket Internet. Foot traffic in many physical stores is declining as more customers shop for digital goods and send mail (Kapner, 2016)[3].

The rapid growth of online shopping can be attributed to a variety of factors. More and better product specifications and sizes are possible, as well as increased consumer transparency among suppliers and the possibility of lower prices due to lower fixed-cost operations. As a result, simply recognizing stationary retailers' declining dominance is inadequate (Grewal, Roggeveen, & Nordfält, 2017)[4]. We will have to think about how and why this trend will continue. Although retailer functions (logistics, selection, procurement, information, and service) generate consumer value and must be performed independently of the individual (retail) player (Coughlan et al., 2006)[2], it is unclear how the digital revolution will affect this process. The end-user has traditionally been provided with prior information and a transaction interface by the stationary retailer. New players, such as providers or online platforms, are increasingly entering the retail market, posing a challenge to the interface and causing physical retailing to decline.

To put it another way, who will be the central figure in potential user interactions? The integration of Internet of Things (IoT) technology into everyday life, for example, would enable many financial transactions to be automated, removing the merchant as the first "address" for a retail transaction. As a result, brands (producers) are attempting to engage directly with end-users. They build powerful ecosystems for brands that communicate with customers through IoT applications, direct sales, interaction and experience services, and personalized communication, resulting in entirely new value propositions and brand experiences. Furthermore, strong digital shopping networks have emerged, allowing many sellers and buyers to interact quickly and efficiently (such as Alibaba, Amazon Marketplace, and JD). By exploiting inefficiencies in emerging markets and avoiding inventory, they benefit from any transaction.

Consequently, we attempt to determine the structural effects of the digital transformation's primary point of interaction with the end consumer. When will it move from traditional brick-and-mortar stores to brand-focused or new players? We look at these subjects to address the following questions:

- 1. How does digital transformation affect the value generation in the retail value chain?
- 2. When will customer interest shift from traditional brick-and-mortar stores to branding providers or online outlets, and when will it return to traditional brick-and-mortar stores?
- What new research methods are these advancements opening up for marketing research? In a variety of ways, this intellectual work contributes to the literature.

At first, we use the terms rivalry and competition to refer to a broad idea that includes the primary consumer interface. In other words, we examine the relative dominance of traditional disjointed actors at different points of touch (brand producers, online distribution sites, and brick and mortar stores). The traditional literature focused on demonstrating channel and multi-channel retailing choices (e.g., Bilgicer, Jedidi, Lehmann, & Neslin, 2015 [5]; Valentini, Mondayuti, & Neslin, 2011) [6] or evaluating the consumer purchasing process through a variety of touchpoints (e.g., Bilgicer, Jedidi, Lehmann, & Neslin, 2015; Valentini, Montaguti, 2015 (e.g., Lemon & Verhoef, 2016). He also looked at how different formats influence different sites, such as how online affects offline and vice versa (e.g., Avery, Steenburgh, Deighton, & Caravella, 2012[7]; Pauwels & Neslin, 2015). The study focuses on the competition between specific players (for example, online vs. offline retailers) or different contact points with a single player (i.e., journey analysis). Second, we propose five new value sources that will all be fueled by digital technologies and will shape the primary customer experience competition. We will look at how these channels can raise customer awareness of benefits and, as a result, offer a competitive advantage. We draw on these sources and integrate them into a single system rather than depending on single sources such as automation and individualization (e.g., Leeflang, Verhoef, Dahlström, & Freund, 2014[8]; Ng and Wakenshaw, 2017)[9]. Finally, we put the proposed cause-effect mechanism in a large and powerful retail market. We examine the five sources' impacts at the point of purchase, rather than focusing on the market benefits of related goods, which we track, handle, and maximize (e.g., Porter & Heppelmann, 2014)[10]. Finally, we use the five sources to define specific situations under which this format could become a significant retail interface and explain how branded product networks spread through an evolving user interface. The remainder of the paper is organized as follows. Then we will look at how new technologies are eroding conventional retail positions.

The framework for investigating new value growth sources is then discussed and the consequences for retail competition. We then present these sources and discuss possible contingencies that may impact the competition's layout and participants. Then we illustrate and show how digital disruption impacts critical players in the retail value chain, such as brands, outlets, and retailers, etc. Finally, we are talking about potential directions for science.

Some companies hold a significant share in the market, and they are the most valuable companies in the world; for example, Amazon, Alibaba, etc., they are considered a sizeable threat to existing retailers of the market. (Ramaswamy & Ozcan, 2018 [11]

#### RETAILING FUNCTIONS AND THE STRUCTURE OF CHANNEL

It assists in the search for end-users, wait times, storage, and other costs that enable retail channels (and networks in general) to stay afloat and continue to build their businesses. (Bucklin, 1966)[12]. These are all the areas of responsibility for assortment production, product physical logistics, legal transactions with customers, the provision of information and general communication as well as the provision of auxiliary services. Consumer demand has led to a broad range of retail formats that meet their requirements in a variety of physical, geographical, purchasing, and need scenarios.

The division of labor between consumer goods producers and distributors has remained relatively steady over time since the majority of these retail models are physical stationery stores (wholesalers and retailers). On the other hand, the role of the customer was reduced to that of the commodity, price, and details. The overall distribution mechanism has resulted in institutional stores becoming the dominant supplier of consumer goods in virtually all economies. As a consequence of its dominance, it adds value to the entire distribution chain and has regulated the connection and maintenance of relationships with the end consumer. This once-dominant paradigm seems to erode due to the numerous forces of technological development, digital disruption, changing consumer needs, and demographic changes (Grewal et al., 2017)[4].

The growing interest of manufacturers, third parties, and customers is in retail functions, contributing to demand being fuelled by institutional retail. Although institutional (physical) retailing will struggle to maintain its intermediary status, it will erode over time, mainly as manufacturers use dual distribution and vertical integration to reach the final consumers directly (Wang, Bell, & Padmanabhan, 2009)[13]. For example, by 2020, Adidas plans to dominate 60% of the global retail market by expanding its outlets, flagship stores, and stores model (Kell, 2016)[3]. Apple, the world's largest retailer, has the highest sales per square foot in the world (Eadicicco, 2016). Manufacturers of different products can increasingly connect with their consumers via the Internet of Things (IoT) technologies during their product lifecycle as the internet connects all under one place. White goods manufacturers like Samsung and Miele now compete in the consumables industry by enabling their washing machines to order detergent automatically after a certain number of washing cycles. Manufacturers assume retail for many reasons: improved brand management and enhanced customer awareness of the entire brand portfolio, retail tactics learning, consumer tastes learning, and likely higher margins (Osegowitsch & Madhok, 2003[14]; Teece, 2010)[15]. Apart from these more traditional strategic considerations, it appears that it is essential to engage with consumers outside the insular transaction, particularly when using the product. Due to the digital product networks of IoT technologies, brands can participate in high added value and dynamic interactions with individual consumers (Ramaswamy & Ozcan, 2018)[11]. Specialized third-party service providers have also expanded or expanded their current services. Retailers prefer DHL and UPS, which provide highly efficient and extensive logistics services. By visiting websites like Kayak, Idealo, and Shopzilla, which have statistics and price parallels, consumers can see how much it costs. Payment functions offered by retailers are replaced by payment systems such as PayPal and Alipay. Any of those third-party providers have been highly successful in mediating the conventional relationship between retailers and consumers, with so-called portals that have the most significant influence. Platforms are digital intermediaries that put external producers/sellers and consumers together to promote value. Its goal is to facilitate trade in products, services, and social currency (Parker, Van Alstyne, & Choudary, 2016)[16]. Just a few examples of the online marketplaces are Alibaba, Wish, eBay, and Amazon Marketplace.

As platform-based companies are currently among the most profitable companies in the world (Ernst & Young, 2018) and a significant threat to traditional retailers, we focus on their impact on the retail value chain (Ramaswamy & Ozcan, 2018)[11]. As a result of these combined advances, the struggle for regulating user experience has been more revived than ever. The supply chain moves from a conventional linear structure (producer, retailer, customer) to one where each group in question communicates directly with the end consumer. This pattern affects the actual business transaction and the immediate process that leads to it but eventually affects the ongoing customer engagement used with the product or service. Given the digital transition, the critical question is the leading managers in the legitimate and reliable ownership of the main user interface (manufacturers, new entrants such as networks, or retailers). Our results are also consistent with previous research on how importance shifts as a result of technological progress. Early work on internet technology, for example, explores how the latest online medium impacts existing offline formats (Alba et al., 1997[17]; Peterson, Balasubramanian, & Bronnenberg, 1997). The study reports that customers would benefit from modern electronic shopping formats if they had valuable features like search efficiency (Alba et al., 1997)[17]. These studies have stressed the importance of considering aspects of the broader procurement situations such as product form or decision characteristics to draw fair conclusions (Peterson et al., 1997)[18]. New digital channels (for example, mobile, social media, and apps) required expanding the channel's vision of history to reflect non-interactive or indirect touchpoints and the dispersion of value-added functions, including the provision of information (Verhoef, Kannan, & Inman, 2015)[19]. Van Bruggen, Antia, Jap, Reinartz, and Pallas(2010) [20]. The growth of social media encouraged not only client-tocustomer, sondern even customer-to-customer interactions (Lamberton & Stephen, 2016)[21]. Customers may engage actively in value creation by supporting social media brands or creating content, which can increase sales; for instance, as sales increase, their profits will increase. (Leeflang et al., 2014)[22].

There has been recent research that suggests that the general use of mobile and wearable devices combined with the launch of the Internet of Things enables consumers to communicate with and between objects through intelligent products rather than only with other people or their physical environment (e.g., via location/geo-based applications) (POP framework; Verhoef et al., 2017)[102]. This incomparable level of accessibility enables new contact points and experiences like customer-based interactions through IoT in an open networked environment that results in higher value for customers (Verhoef et al., 2017)[23]. The boundaries between digital and physical networks would become blurred with increasing technical and digital development and the lines between retailers and manufacturers (Brynjolfsson, Hu, & Rahman, 2013)[24].

Developing an all-around retail environment requires rethinking consumption value growth in the supply chain (Brynjolfsson et al., 2013), an awareness of the importance of new customer contact points, and emphasizing customer-retail channel-brand interactions (Brynjolfsson et al., 2013)[24]. Verhoef and his friends (Verhoef et al., 2015)[19]. This article concentrates on the whole value chain and expands on previous research into how retailers can create value through improved business models by increasing market productivity, efficiency, and commitment (Sorescu, Frambach, Singh, Rangaswamy, & Bridges, 2011)[11]. Our approach provides a comprehensive and systematic view of how digitization converts new value sources into consumer benefits. Like previous multi-channel retail studies, our study examines value development at various stages of the decision-making process (Neslin et al., 2006). (Everyone needs recognition, searching, purchasing, and after-sales). We assume customers would prefer to work with companies that can offer them the benefits they need in a specific purchasing situation which can enhance their experience of shopping (Alba et al., 1997; Peterson et al., 1997; VanBruggen et al., 2010)[17].



Fig. 6: Use of Digital Devices

As mentioned in fig. 6, Digital transformation will have various effects on the retail value chain. When it comes to the planning and implementing purchasing decisions, the jurisdiction over important points of interaction with customers is likely to alter in specific scenarios. The physical shop and its digital equivalents can be the leading knowledge and buying source for consumers (e.g., online shop, mobile app, IoT device). The following recent example illustrates this condition: Amazon has the most prominent online store and industry and one of the most significant product search engines in the world (McGee, 2017)[25]. Consumers use Amazon to find unique things to buy, compare prices, and search categories, giving Amazon enormous custody power because the user might not even consider goods not listed on Amazon. In addition to product rating, ratings, and website advice, the buying decision significantly impacts Amazon's fact-checking funnel and 1-click buy-out option (BabiRoario, Sotgiu, Valck, & Bijmolt, 2016; Senecal & Nantel, 2004). Daily interaction with the interface owner enhances user interactions and increases brand awareness (Yaveroglu & Donthu, 2008).

Furthermore, when using products, contact with customers becomes increasingly important. For example, Adidas' Runtastic software program has conducted extensive research into consumer health (and thus fitness equipment use). The sports tracking app combines preparation and networking with product reviews for sporting goods and healthy eating (Reinartz & Imschloss, 2017)[26]. According to our central tenet, the digital transition would fundamentally alter who controls the end-to-end customer relationship – the company, the network, or the retailer.

In another way, the primary customer interface would be structurally more competitive. We approach value creation from a value creation perspective, focusing on ways to generate value through digital transformation, which refers to new digital technology introducing consumer and commercial player behavior (Reddy & Reinartz, 2017). New consumer behaviors, interactions, and experiences are enabled by digital technologies (Lamberton & Stepp, 2017)[21].

Automation, individualization, ambient integration, interaction, openness, and control are five main sources that we address in particular. These corporate value creation sources then produce perceived consumer advantage, which is usually a combination of ease, significance, awareness, empowerment, and monetary and environmental savings. 3 Different purchasing conditions and product attributes affect the extent and relative value of these perceived benefits.

There are two aspects of these inventions. The first is that IoT-based retailing enables the development of branded product platforms, as well as the introduction of entirely new user interfaces. Second, the relative efficacy of the three interfaces will be determined by their ability to deliver perceivable benefits as illustrated in our analysis and to fulfill the benefits that the consumer seeks in a given purchasing situation (brand-customer interface, retailer-customer interface, platform-customer interface). We'll then provide a high-level overview of our architecture's core components, as well as a summary of the new sources of value creation and the perceived benefits they address.

#### III. CONSUMER-BASED SYSTEM SATISFACTION

These online shoppers' numbers surged as a result of all of the smartphone apps that made purchasing easier for them. Customer satisfaction is on the increase as well as according to the concept of marketing. They are continually bombarded with an inexhaustible supply of goods and services. They'll have access to foreign collections as well as the best international labels. Additionally, improved customer loyalty is critical for these retail applications (Moth, 2013). Their key strength is their ability to adapt and evolve with the aid of new and technologically advanced software and get the first-mover advantage by adapting to advanced technologies.

Both of these consumer-focused app-based shopping services have given businesses a cutting-edge and rapidly changing technique of luring customers to their stores, resulting in higher sales.

Customers who are interested in content read product reviews, gather all relevant information and then decide not to purchase the item until the costs are known. All of the smartphone apps have now gained success in terms of attracting all of the polarizing market groups. They can integrate a variety of features, such as contact networks, store price monitoring, item rating, and the ability to streamline a variety of shopping habits. This increases customer loyalty as well as the number of customers. It increases customer loyalty, causing consumers to return to the same store regularly (Keeney, 2013). One of these features also provides retailers with a wealth of information on different marketing strategies.

These mobile apps will help retailers build safe, long-term relationships with their customers cost-effectively and practically. According to recent market research, these new mediums can bring buyers and retailers closer together. To make shopping and buying easier, they are creating a range of highly functional, multi-purpose, and modern smartphone applications. Apps have developed into a flourishing industry of their own (Mobile payments for, 2014). Approximately 80% of all common online mobile applications are developed in the United States of America (Bosomworth, 2013). Many of these free retail-based shopping apps have grown in popularity as a result of their increased accessibility. Both of these shopping patterns will benefit from these applications (Hambleton, 2014) as seen in fig. 7[27].



Fig.7: Process to Increase Customer Satisfaction

#### **Role Of Digitization**

Digital analytics will help sharpen digital database decisions, consumers, and banks. Banks can represent something for facilities non-discriminatory. By Digitalization, we have the following significant advantages.

- Increased market convenience.
- Digitizing prevents error.
- Maintenance, tasks
- From: Rural/Metro.
- Decreased production.

On the other hand, Digitalization has two significant disadvantages:

• Digitizing jobs lowers participation.

Staff vulnerabilities Criminals and hackers strike as banks.

#### IV. DIGITISATION APPROACHES

The current digital shift will result in a significant departure from the traditional monetary model. Different unbundled money positions cause fiercer rivalry. On the other hand, significant network-related digital currencies can help rebundle money where payment networks mix with various information services, allowing differentiation but restricting data exchange. Digital currencies may also disrupt the international monetary system: economically or technologically tangled neighbouring countries can face digital dollarization, and the proliferation of systemically relevant networks contributes to regions of digital currency throughout national borders. Digital assistants are incorporated mainly to optimize workflow and banking experience. Modern banking innovation offers quality consumer services.

Digital assistants are increasingly required for their Frequently Asked Questions, and due to their busy schedule, bank employees' restricted accountability framework. Including a kiosk, most unfulfilled orders. Thus, when financial issues need to be addressed immediately, banks integrate virtual assistants to represent customers 24/7. Resource technology has many banking locations.

Chatbots provide tools such as account ATM locator, ATM cash status, latest loan applications, online loan ratings, inventory confirmation, expenditure report, etc. Central banking, analytics, credit departments, branch & ATM directory integration leads consumer banking processes. Furthermore, incorporating NLP technology into the IT industry strengthens the mortgage market.

Assistant Customer Support – Consumers need major competitive advantages in connecting automated banks to their websites or social media. They draw clients, not rivals. For quick customer questions, banks use OTP-based authentication to connect their chatbot to backend systems like CRM, ERP, HRMS, Service Delivery, etc. They are using document comprehension and advanced workflows in legacy systems to locate and execute queries.

Turn automation Chatbots help customers balance FAQs. Customers should choose the right menu or question type. Using NLP and ML, BOT recognizes the customer's purpose and context by initiating the requested procedure. It also uses the analyses method to determine what users hear and do.

**Modified credit card** – Bots coordinate new credit card processor operations and offer customer-based credit cards. It also updates clients.

A client-satisfied customer base is the branch manager. Furthermore, banking organizations focus on improving the rival shopping experience by implementing system-integrated digital technology approaches such as chatbots, which provide banks with practical solutions to improve interactions between bank workers and their consumers.

#### V. CONCLUSION AND SUMMARY

There has been massive growth in the E-banking sector as now customers prefer making transactions online and pay bills quickly by scanning QR Codes, so they prefer E-Banking as It has various advantages like speedy mode of payment, wide-coverage, various online services, no need to go to banks, there are 24/7 support chatbots for customer grievances. So in this Digital Transformation World, E-banking has seen remarkable growth in the last few years.

The biggest winners in these trends of the growth of the retail world are the growth of a cashless economy, an economy that depends more upon the digitized version of things than following the conventional approach. All over the world, digitization has taken a step ahead. More and more research is being done to remove the physical barriers and to create a global environment.

As evidenced by Amazon or Alibaba, Flipkart, eBay, Paytm Mall, and others, these sites also serve as department stores. As retailers and brands battle this trend with more customer-focused relationships, the networks will struggle. Retailers and brands can provide solutions, expertise, and tailored customer experiences and thus act as gatekeepers for various online shopping platform decisions. However, it is not always a bed of roses.

The major problems associated are always the real connection with the customers, which seems to be a critical condition while deciding to purchase. However, the online platforms make it quite challenging to build the same relationship and acquire loyalty. The more digitization, the more is the endless needs.

The need for change is so huge that the sellers always have to live up to the constant urge to change, and at times, such expectations are difficult to meet. Moving in the era of digitalization, it has become a task for retailers to deal with cybercrimes, and even circumventing them is the need of the hour.

Starting with the use of smartphones for retail purposes and pharmacy was first done in the US. Sales grew and improved significantly as a result of these. As these apps grew in popularity, they began to offer various features that became immediately popular. As a result of their tactics, all of these brands became highly successful. One of the critical advantages of cashless payment is that it speeds up the payment process and eliminates filling out forms with personal information. There is no need to wait for an ATM withdrawal or a bag pass. Customers can use banking services at any time of the year, including holidays and weekends. There are similar wallets, UPI, and other similar services available. Some payment and wallet systems are free to use and do not require subscriptions or payments, resulting in low operating costs. UPI does not have any customers. Several payment options are open. Customers will get a variety of discounts and rewards by using digital banking and mobile wallets. Cashback is available from most e-banks, But despite all this, security remains a big issue and causes many deterrents in using their interfaces. Many bugs that prevail in the system

have been why many people do not focus and use these interfaces. These are the issues, but what one has to do is always look at things from a cost-benefit analysis and see what is that suits them.

### **REFERENCES**

- [1] Batey, M. (2008). Brand meaning. New York, NY: Routledge, Taylor & Francis Group.
- [2] Coughlan, A., Anderson, E., Stern, L., & El-Ansary, A. I. (2006). Marketing channels. Pearson Prentice Hall.De Keyser, A., & Scheper, J. (2015).
- [3] Kell, J. (2016). How sporting giants Nike and Adidas are pushing the future of retail. Fortune, December 14, 2016, <a href="http://fortune.com/2016/12/14/nike-adidas-retail-future">http://fortune.com/2016/12/14/nike-adidas-retail-future</a>
- [4] Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The future of retailing Journal of Retailing, 93(1), 1–6.
- [5] Bilgicer, T., Jedidi, K., Lehmann, D. R., & Neslin, S. A. (2015). Social contagion and customer adoption of new sales channels. Journal of Retailing, 91(2), 254–271.
- [6] Valentini, S., Montaguti, E., & Neslin, S. A. (2011). Decision process evolution in customer channel choice. Journal of Marketing, 75(6), 72–86.
- [7] Avery, J., Steenburgh, T., Deighton, J., & Caravella, M. (2012). Adding bricks to clicks: Predicting the patterns of cross-channel elasticities over time. Journal of Marketing, 76(3), 96–111.
- [8] Leeflang, P. S. H., Verhoef, P. C., Dahlström, P., & Freund, T. (2014). Challenges and solutions for marketing in a digital era. European Management Journal, 32(1), 1–12.
- [9] Ng, I. C. L., & Wakenshaw, S. Y. L. (2017). The internet-of-things: Review and research directions. International Journal of Research in Marketing, 34(1), 3–21.
- [10] Porter, M. E., & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. Harvard Business Review, 92(11), 64–88.
- [11] Ramaswamy, V., & Ozcan, K. (2018). Offerings as digitalized interactive platforms: A conceptual framework and implications. Journal of Marketing, 82(4), 19–31.
- [12] Bucklin, L. (1966). A theory of distribution channel structure. IBER Special Publications. Capgemini (2011).
- [13] Wang, Y., Bell, D. R., & Padmanabhan, V. (2009). Manufacturer-owned retail stores. Marketing Letters, 20(2), 107–
- 124. Warby Parker (2018). Retail locations in the U.S. Warbyparker.com, https://www.warbyparker.com/retail
- [14] Osegowitsch, T., & Madhok, A. (2003). Vertical integration is dead, or is it? Business Horizons, 46(2), 25–34.
- [15] Teece, D. J. (2010). Forward integration and innovation: Transaction costs and beyond. Journal of Retailing, 86(3), 277–283.
- [16] Parker, G. T., Van Alstyne, M. W., & Choudary, S. P. (2016). Platform revolution—How network markets are transforming the economy and how to make them work for you.
- [17] Alba, J., Ansari, A., & Mela, C. F. (2003). E-customization. Journal of Marketing Research, 40 (2), 131–145.
- [18] Peterson, R. A., Balasubramanian, S., & Bronnenberg, B. J. (1997). Exploring the implications of the internet for consumer marketing, Journal of the Academy of MarketingScience, 25(4), 329–346.
- [19] Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omnichannel retailing—Introduction to the special issue on multi-channel retailing. Journal of Retailing, 91(2), 174–181.
- [20] Van Bruggen, G. H., Antia, K. D., Jap, S. D., Reinartz, W. J., & Pallas, F. (2010). Managing marketing channel multiplicity. Journal of Service Research, 13(3), 331–340.
- [21] Lamberton, C., & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. Journal of Marketing, 80(6), 146–172.

- [22] Leeflang, P. S. H., Verhoef, P. C., Dahlström, P., & Freund, T. (2014). Challenges and solutions for marketing in a digital era. European Management Journal, 32(1), 1–12.
- [23] Verhoef, P. C., Stephen, A. T., Kannan, P. K., Luo, X., Vibhanshu, A., Andrews, M., Zhang, Y. (2017). Consumer connectivity in a complex, technology-enabled, and mobile-oriented world with smart products. Journal of Interactive Marketing, 40(4), 1–8.
- [24] Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of Omni-channel retailing. MIT Sloan Management Review, 54(4), 23–29.
- [25] McGee, C. (2017). Amazon is becoming a more important search engine than Google, says NYU professor. CNBC, April 4https://www.cnbc.com/2017/04/04/nyu-scott-galloway-amazon-becoming-bigger-search-engine-thangoogle.html
- [26] Reinartz, W., & Imschloss, M. (2017). From point of sale to point of need: How digital technology is transforming retailing. Marketing Intelligence Review, 9(1), 42–47.
- [27] Hambleton, N. (2014).Mobile apps increasing retail consumer loyalty. Retrieved from http://hambodigital.com/blog/mobile-apps-increasing-retail-customer-loyalty.

#### About Research Scholar:

Vikas Vats received Diploma and B.Tech. in Computer engineering. He has done MBA specializing IT and Marketing from JNU & completed General Management Program from IIM Ahmedabad.

Vikas is currently pursuing PhD from Sunrise University.

He is working with Apps Associates as a Vice President and Head of Cloud, DevOps, and IT Infrastructure. He has been driving digital transformations through emerging technologies from last 2 decades for various clients/domains/industries based in USA & Canada, UK & other European countries, Australia & New Zealand, and Asia (Singapore, China, Malaysia, India etc)

He has previously worked with IBM, TCS, HCL, Fujitsu, Incedo and Basis Bay.

His current research interests include enhancing customer-retailer relationship through Digital Transformation with emerging technologies (Cloud, Big Data, IOT, AI, ML, Intelligent Automation, etc.)