# RURAL EVOLUTION TOWARDS DIGITALIZATION: A SYSTEMATIC REVIEW ON ADOPTION OF DIGITAL RESOURCES AND USE IN RURAL AREAS OF JAMMU REGION

Suhail Gupta, Shri Mata Vaishno Devi University Syeda Shazia Bukhari, Shri Mata Vaishno Devi University

#### **ABSTRACT**

The digital divide refers to significant disparities in the allocation of information and communication resources among two or more people. Despite the fact that access to communications resources has improved since the early 1990s, the gap between countries and localities is widening, and discrepancies in communication resource use are widening. Even if improved access to communications for rural areas has benefited to some extent, the geographical divide in emerging countries is wider. Different facets of the digital divide exist in different places. The factors that contribute to the digital divide in Jammu and Kashmir were identified through pilot research. The pilot study's findings are summarized here. Floating surveys and interviews with rural and urban populations were used in the study. Questions about web access, how to use it, worries about usage, and so on. Other data analysis discoveries were discovered in addition to the digital factors of division. Despite the fact that the government provides Internet access, the poll indicated that knowledge of these activities is still limited. This article is the result of a pilot study that looked into and offered guidance on the factors that influence the regional digital division.

**Keywords:** ICT, Digital Divide, Internet, Community Information Centers, Common Service Centers.

#### INTRODUCTION

The reality we live in is rapidly changing as a result of the emergence of the entire society, providing enormous benefits and opportunities as well as new challenges. On the other hand, the challenge of a wide digital divide between industrializing and developing countries has spurred ICT expansion. The industrial sector has swiftly shifted to an information economy centered on IT as a result of the digital divide, resulting in increased economic disparities and wealth diversification (Anderson, 1999). Many poor countries are affected by the digital divide. This term refers to a person's inability to communicate in French, as well as a lack of cash, computers, or Internet access, all of which limit the spread and use of digital information (Brooks et al., 2015). The remainder of the paper is structured as follows: The study includes a brief explanation of the digital divide, the creation of a hypothesis, data collection techniques, a brief explanation of the questionnaire, data analysis, and a conclusion.

In the context of increased organisational, social, and economic transformation that involves the use of digital technologies, the term "digital technology" refers to a variety of social phenomena and adoption and usage processes. Since its inception, it has gone through a number

1528-2678-26-6-283

of evolutionary stages, including a traditional business and relationship era, which has been dubbed the "digital era." Who is in charge of transferring power from one social group to the next? Digital India is an initiative to digitally empower Indian society and the knowledge economy. Digital India is a game-changer in terms of providing citizens with government services over the internet. The notion is divided into three parts: With technological advancements, consumer awareness and information are at an all-time high. The preceding principles are no longer valid.

# **Consumer Behaviour in Digital Age**

Consumer behaviour is complex and diverse, involving a number of contextual elements that have an impact on the entire process of digitable India initiatives/projects. Economic, psychological, social, and anthropological disciplines are all involved in behavioral explanations. Because psychological and sociological factors influence people's behaviour, consumer behaviour at both the micro and macro levels must be researched. The SWOT analysis approach can be used to investigate the factors that influence its performance, such as demographic, socioeconomic, political, technical, cultural, and natural factors, among others.

# **Digitalization Challenges In Rural Areas**

Rural areas continue to be underrepresented in ICT infrastructure and capacity creation. As a result, ICTs will not be able to fulfil their potential in rural development. Some of the challenges include: Rural communities, particularly at the village level, are limited in their ability to fully utilize ICT applications due to a lack of electricity.

#### **Electricity delivery is Never Interrupted**

- 1. Low digital literacy: The literacy rate in rural areas is much lower than in urban ones. It is much more disappointing when we discuss digital literacy.
- 2. ICT shortage: At the village level, there are few digitally educated professionals.
- 3. Telecoms and internet services are in short supply: ICT-based applications necessitate constant telecommunications and internet connections. In some rural locations, cell telephony and the Internet are yet to be introduced and operational.
- 4. Acceptance in rural areas: It is commonly considered that any transfer of technology to rural areas is permissible, but we must take into account their established cultural and traditional ways of doing things.
- 5. Unethical use of ICTs: Personal data protection, copyright infringements, computer crimes, cybercrime, and other issues plague the digital world.

The potential of digitalization in rural areas is enormous. ICTs should be given policies, programmes, and other resources that enable them to exploit advanced technology. To build Digital India for rural areas, we need a comprehensive e-Plan or e-Political policy to guide government objectives for ICTs in rural development. It necessitates a thorough understanding of rural social and development challenges. This necessitates political will, vision, and leadership at the highest levels of government. Any ICT goal must be streamlined in terms of both government bodies' functions and ongoing financial assistance. Through the integration of a cashless economy, social networking, and other communication technology, businesses become information firms. Capacity-building measures should equip rural communities in light of current needs for the promotion of ICT applications and a cashless economy. The National Institute for Rural Development and Planning (NIRD&PR) and other State Research Institutes should pay

special attention to rural people's needs when developing capabilities. The importance of the ICT revolution, on the other hand, stems from the fact that the country needs to provide critical technical innovation services in rural areas in order to improve the quality of life in those areas. Furthermore, ICTs are making good progress in terms of implementation.

# **Digital Divide**

Both a uniting and a separating force, information and communication technology (ICT) has the ability to do both. The difference between people who have access to the internet and those who do not is known as the "digital gap" by the general public. The term "digital breakdown" refers to discrepancies in access to and usage of information and communication technology by individuals, households, businesses, and geographical areas of various socioeconomic classes for a variety of purposes (ICTs). As the internet quickly expanded as the backbone of practically every sector of the global economy, the phrase "digital division" was coined (Canazza, 2009). Differences affect, strengthen, and threaten to exacerbate fundamental economic and social imbalances across and within countries. Those who are linked have a competitive advantage over their global competitors in terms of market share, knowledge, productivity, and growth. People who are illiterate, have a low GDP, are more likely to be unemployed, and are marginalised will be condemned. Anyone and everyone: illiteracy, poverty, low levels of education, exorbitant access fees, and even a lack of English proficiency make it difficult for developing countries and underprivileged populations to 'connect' and use IT effectively (Sukkar, 2004).

# **Digital Divide notions**

The digital divide is a complicated issue. (2) A comparison is drawn between (1) a technical consideration that deals with the accessibility of infrastructure, ICT hardware, and software, and (2) a social consideration that deals with the abilities needed to control technology. The overall divide, which exhibits varied capacities, is (1) the overall divide; (2) the social divide, which relates to demographic disparities; and (3) the democratic divide, which allows for varying levels of citizen engagement through ITCs. This division also allows for a division within the population. According to Keniston (2003), there are four social divisions: (1) rich and powerful versus poor; (2) English versus non-English; and (3) technical knowledge versus unfamiliarity (Norris, 2001).

#### Digital divide: Indian preview

After China, which is a confederation of states, India is Asia's second largest country. The proliferation of information and communication technologies has resulted in significant change. The benefits of information technology are becoming obvious in India, and the ramifications are rapidly altering (Dickson, 2000). Aside from improving people's lives, the widespread use of digital technology has divided the world into sectors that are both inventive and insufficient. Uneven access to information and communication technology has emerged from digital divisions. While India was one of the world's leading IT development countries, progress in rural and isolated areas was glacial. Aside from socioeconomic issues, the government faced hurdles in implementing IT programmes due to geography, education, and attitude. Despite the fact that Indian communities are underserved, political uncertainty, infrastructure challenges,

alphabetism, skill barriers, fiscal constraints, content barriers, and language diversity limit their usefulness (Chanias, 2016). Language is a significant barrier to ICT adoption. ICT is linked to cultural dominance (Keniston, 2002). In the year 2000, the bulk of the world's Internet pages were written in English, Japanese. Because of the language barrier, computers at these settings are of little use to most people. The language required by the industry for driving software has no constraints on computers (Bharat Bhagtani, 2016).

## **Digital Role in Rural Development**

The government and relevant institutions have taken several initiatives to ensure digital integration in India's rural areas. "The essence of our country's rural pertinence," Mahatma Gandhi observed, "is located in villages." India is a predominantly rural country. Many characteristics of Digital Kranti are used to address the rural population in various programmes and projects.

- 1. GYANDOOT: On January 1, 2000, Gyandoot, a rural people's project, began in Dhar, Madhya Pradesh. In the beginning, 21 soochnalayas were created with computers to cover a population of 20,000 to 30,000 people.
- 2. BHOOMI: A project to constantly update land records online. Karnataka was the first state to start this programme, with 6.7 million farmers registered and 20 million cases computerised across the state. The Revenue Department and the NCI have teamed up to keep land records up to date (NIC). The previous manual record-keeping technique resulted in heaps of records that were difficult to manage. As a result, digitalization has become a viable choice. Using the gathered data, the record kiosks now generate the necessary documents for farmers. This is a fantastic initiative that actually encourages transparency and eliminates corruption.
- 3. E-POST: The Post Office began offering this service on January 30, 2004 (Mahatma Gandhi's Martyrdom Day). A person with a message goes to the nearest post office, where an official scans the communication document and sends it through e-mail to the destination's post offices.
- 4. E-PANCHAYAT: The panchayat is the basic governing unit of a village. Panchayati Raj Institutions were given more power thanks to e-Panchayats (PRIs). Hyderabad's first e-Panchayat has been established by NIC (Andhra Pradesh). This e-Panchayat contains 30 modules and 150 sub-modules. These modules supplied locals with information on a variety of topics, including farming, fishing, poultry, and other issues related to industry, housing, and water. Property tax, birth and death certificate registration and certifications, old age payment, widow's and disability pensions, and other services are covered as well.
- 5. RURAL ACCESS TO SERVICES THRU INTERNET (RASI): RASI, SARI, the first sustainable connection to the villages of Tamil Nadu's Madurai district, now includes Internet and voice service. The initiative involves more than 100 villages. The site is linked to every kiosk and offers information about income, registrars, rural development, education, health, agriculture, and animal husbandry. This is critical for improving digital literacy in children.
- 6. KISHAN CALL CENTER (KCC): KCC is a project to respond to problems raised by farmers in the vernacular language.

## Digital Transformation Trends InCovid -19 Pandemic

The coronavirus Hawes & Lumpkin (1984) outbreak has altered our manner of working, living, communicating, and buying. In fact, it hasn't touched on any aspect of life. COVID-19 initiates or accelerates a number of digital transformation trends. Rather than coffee catch-ups, we now have (Google) Hangouts. Rather than exchanging business cards at a convention, we're interacting at a virtual summit. And instead of wearing head-to-toe business attire, we simply dress up the pieces that are visible on the net meeting. Digital sceptics in the corporate sector are

unlikely to survive till 2021. Currently, the global pandemic in 2020 has ushered in six major digital transformation themes.

- 1. Working from Home, e- learning
- 2. 5G Services for the fast internet for social connectivity and IOT
- 3. Everything-as-a-Service, moving from traditional business to modern era
- 4. E-commerce Rebirth to boost digital sales from traditional bricks and mortar retailers
- 5. Contactless delivery and contactless digital payment
- 6. Adoption of AI in business of all shapes and size for the Survival

#### LITERATURE REVIEW

With expanded mobile communication capabilities, rapid technological advancements in rural areas have become critical. Although current mobile applications are widely used in India, governmental officials are concerned about the growing gap between rural and urban communications. Roger examines the extension of the concept of innovation in order to assess the fundamental truths of the rural poor mobile service. While complexity has a negative impact on mobile phone adoption, relative benefits, consistency, observation, capacity testing, trust, time, and social system perception all have positive impacts (Jain & Hundal, 2013).

According to the survey, the use and compatibility of mobile services saves time and money. However, difficulties in providing mobile phone services have highlighted the importance of paying special attention to rural areas. They trust their relationship with service providers and rely on system management for assistance. According to research, persons who have direct contact with rural subscribers are cautious while approaching them. This means that the service provider's public relations and advertising efforts, as well as advice from dealers, family and friends, and other factors, have a stronger impact. Although people's opinions cannot always be changed, population can aid in the identification of early adopters. The majority of rural mobile users, according to our data, are young, educated, and do not earn much money from agriculture. When mobile Reinartz, et al. (2019) telecommunications services are offered, it has a significant impact on education and employment. The coefficients of their unfavorable relationships could be explained by low education and agriculture. What's going on in this diverse rural market should be known to service providers. Policymakers, service providers, and rural marketers will profit from the study's findings. Service providers must collaborate with mobile manufacturers to tailor mobile services to the specific needs of each region. When using mobile services, the rural populace pays more attention to people in their close area. To increase adoption rates, rural residents should educate their sales teams on the features and benefits of mobile services. You believe that a stronger bond has been developed. Publicity and public relations initiatives can span a wide range of topics. Attending city choupals, other rituals, festivals, melas, and other events might help service providers take advantage of this information. Service providers must understand the thoughts of rural clients in order to respond appropriately. We discovered that policies and strategies are being implemented and adapted successfully and efficiently to improve rural television capacity and meet the needs of rural India.

Customer value can be created at any point along the consumer decision-making process. In other words, the pre-buy phase (identification of needs, information gathering, examination or evaluation of alternative methods) and the buy phase (consumption and use, commitment, and service applications) are both five value sources active during the purchase phase (choosing, ordering, and payment). As a result, we believe that customer value is a broad concept.

"Relativism describes how a consumer engages with a product in a pleasant and participative way." The narrator states, "There was a mistake, it may be anything or nothing". Because it allows long-term consumer expectations to be realised on an ever-present basis, digital transformation encourages and supports new kinds of value creation. Customers are more ready to participate in the core notion when stakeholders give value to these areas. We also look for ways to add value to our clients' requirements outside of transactions. (We'll be departing in 2009) All acts and operations carried out automatically without active human input or control are referred to as automation. At the customer interface, automation has two effects on value development. Customer information and responses to marketing automation, such as recruitment boxes, are delivered in real time via in-store notifications and chatbots. Second, by automating consumer interactions such as (re-)buying, customers can simplify or eliminate common behaviour. If the delivery is tiny, smart home equipment with or without Amazon DiehIoT linked washing machines, refrigerators, and printers can be immediately recharged. In addition to the procurement and monitoring of client habitats such as thermostat systems, ampers, and wet plants, automation can increase the optimization of smart applications (e.g. home time or temperature) Automation certainly contributes to the creation of value through convenience, based on an awareness of effort and timing. Marketing and consumer procedures that are automated. Rintamäki, Kanto, Kuusela, and Spence define "all of them who improve body or mind comfort (increase comfort) as well as consumer pleasures (saves work) for functional or instrumental purposes" as "all of them who improve body or mind comfort (increase comfort) as well as consumer pleasures (saves work) for functional or instrumental purposes" (2006). This holds true for all three stages of decision-making: easy search (i.e. speed and ease of gathering information on items), ease of buying (i.e. efficiency and ease of purchase), ease of use (i.e. products that are readily available and operated), and ease of disposal (i.e. products that are readily available and operated) (i.e. product disposal) There are a number of benefits to this. By maximising product utilisation, automation also saves money and helps the environment (e.g., intelligent energy management). Personality is a marketing strategy that caters to a person's specific desires and interests. Client information, such as skilled marketing activities, can be obtained using sophisticated databases thanks to digital technology. The utilisation of large amounts of digital media data (e.g., online reviews, social networks, smart devices, etc.) might set the stage for changes in consumer behaviour such as employment mobility. Personalization of marketing strategies is feasible thanks to this capability. Instead of modifying people's identities through marketing e-mails, customer organisations can connect with them in real time (Rogers, et al., 2014). Personalization and the utilisation of a variety of consumer choices increase the value of our customers. (2003) L'Oreal keeps track of its customers' health and provides individualised hair care treatments, for example (Goyal, 2017). These recommendations have a limited impact on customer decisions when they lead to product purchases.

Environment integration is incorporating operations, products, and communication into the daily routines of customers in order to be visible and meaningful in the local environment. Digital technology, in particular, can improve the seamless integration of customer data across several platforms, channels, and devices in consumer lives. Digital assistants like Amazon's Alexa, for example, enable for speech-based purchasing and interaction. Geographic targeting makes it easy to deliver push notifications in a specific geographical place. Depending on the location, environmental integration offers for increased value through comfort, experience, and significance. It enables the organisation to easily meet new requirements and interact with any channel. Environmental inclusion improves user experience by combining numerous services on

a few interfaces. Finally, whether the most essential thing is information from enterprises, people, or even devices, the goal can be met by effortlessly integrating it into customers' lives. Because it encompasses all aspects of consumer, company, and/or contact communication, as well as all virtual, physical, and interpersonal interactions, it is concerned with the substance rather than the means through which it occurs. It's all about interacting. Digital technology can be used to provide value that extends beyond product transactions in order to improve existing or recent consumer connections. This might include everything from advanced technical pre-buying conversations to digital product user commitments and consumer social media connections. IKEA, for example, has released the "Place" app, which allows customers to see how certain pieces of equipment would look before purchasing them, providing immersive value and enhancing the buying experience. Interaction allows value to be created, which is mostly based on experience, relevance, and comfort.

Digital content marketing (DCM) is becoming more popular as a way to increase brand engagement and customer confidence. Despite the great degree of interest among practitioners, however, academic DCM research has failed, creating a significant knowledge gap. We seek to design and distribute relevant brand-related material for current and future customs on digital platforms, based on a thorough evaluation, in order to strengthen their preferred brand loyalty, confidence, and relationships with DCM (vs. directly persuading consumers to purchase). A conceptual framework that emphasises the importance of DCM experience for consumers, such as U&G issues for functional, hedonic, and authentic DCM, is also present. Customers' cognitive, emotional, and behavioural involvement in DCM's primary intra-interaction promotes brand awareness, identification, and citizen compliance. This leads to the second stage of DCM's brand trust: extra-interaction implications, which help DCM achieve value-based results, as well as customer and brand equity in the third stage. We summarise our findings in a number of key DCM concepts before concluding with our research's substantial impact.

Today's digital world, digital technology adaptation is beneficial. Digital technology companies construct these principles in order to establish critical capabilities for themselves and their customers. New consumer experiences and customer interactions are created through digital technology processes, which provide value. Marketing, institutions, processes, and customers are all examples of digital touchpoints that enable for digital marketing. Because more offline customers are converting to digital technologies and 'young digital customers,' the number of encounters climbs by 20% every year (Bughin, 2015).

# **Relevant Literature and Hypothesis**

Development Although Rogers, et al. (1995) shows that prior practise and policy unit characteristics influence knowledge and trust at the persuading stage, the linkages (if any) between prior practise and policy unit characteristics in his decision-making model are less evident (DMP). As a result, it follows that there are links. It is rare for a consumer to be able to use a computer or the Internet without having completed some form of education. As a result, it's reasonable to assume that education is linked to earlier behaviour, such as online shopping ahead of time. Education, for example, encourages people to use the Internet (DuttaBergman, 2002; Hoffman et al., 1996). Furthermore, without a specific amount of cash, the consumer will be unable to purchase a computer or afford Internet access. Several studies have discovered that the use of the Internet increases revenue (Dutta-Bergman, 2002; Hoffman et al., 1996). As a result, education and sales can be linked in advance with the purchase of online clothing. As a result, two possibilities were proposed.

- H1: Profitability is linked to previous practise.
- *H2:* Education provides a strong connection to earlier practises.

Education and revenue have an impact on innovation. According to Rogers, "managing huge financial resources is a need for becoming an inventor" (1983). (See p. 248). Innovative clients have access to new technologies, but they must also have a source of money. In a study of several consumer products, Summers (1972) discovered that income was favourable for innovation. Peermans, Verleye, and Van Capellen looked at the use of new technology and forecasted a favourable revenue stream from innovation (1996). The same authors discovered education's ingenuity. Swinyard & Smith (2003) discovered that recent online consumers were better educated than non-shoppers. In a review of the contents of empirical research, establish that education has a positive relationship with innovation. As a result, the following hypotheses have been established.

- *H3:* The beneficial relationship between revenue and innovation.
- *H4:* There is a positive relationship between education and innovation.

Decision makers' characteristics, according to Rogers, influence the belief generated during phase 2 of the diffusion process (1995). However, research findings haven't always backed up this theory (Lohse, et al., 2000; Goldsmith, 2001). Bellman et al. found no link between innovation and the Internet in their study. On the other hand, Goldsmith (2001) discovered that online wear and tear is associated to innovation. Young people's opinions are similarly influenced by novelty, according to researchers (Hartman, et al., 2006). There are two interpretations because Rogers' Theory predicted these interactions.

- H5: Internet principles and innovation are inextricably linked.
- *H6:* Online shopping is associated with ignorance.

Rogers, et al. (2014) goes on to say that in Phase 2 of the broadcasting process, prior experience shapes beliefs. Indirect correlations between previous practises and opinions on internet purchases have been discovered in several studies. Bellman et al's online buying assumptions are linked to years of Internet use, sending and receiving e-mails, internet work, and searching for product information (1999). (attitudes). Sim, Eastlicks, Lotz, and Warrington analyse general perceptions (attitudes) on online purchasing based on previous Internet shopping experience (2001). In research concentrating on online apparel purchasing, Yoh, Damhorst, Sapp, and Lazniak discovered that having a direct impact on views of clothing online before purchasing had a direct impact on views of clothing online before purchasing (2003). As a result, the following hypotheses have been established.

- *H7:* There is a strong link between previous practice and the Internet.
- *H8:* Positive sentiments of online buying are linked to prior experience.

Online shopping is a new method that uses a single user interface (the Internet). Individuals must learn how to use the Internet in order for the new strategy to operate (i.e., for the consumer to be able to shop). Their trust in online commerce and the Internet has a

significant impact on their customer behaviour. The relationship between faith and behaviour is also well supported in theory. Theory of reasoned action and the planned behaviour of the two models are examples of prior activity or behaviour. This URL is DMP-compatible as well. According to Rogers, knowledge of stage 1 invention has changed Stage 2 beliefs (1995). The consumer will next utilise those beliefs and attitudes to decide whether to accept or reject innovation, to make that decision, and to put that decision into action. These factors led to the following hypotheses.

**H9:** Internet attitudes are linked to adoptions (a) in 2000 and (b) in 2003. Dress shopping over the internet.

**H10:** Online shopping beliefs are linked by the use of (a) online clothing in 2000 and (b) online clothing in 2003.

Many researchers have discovered that prior internet experience is crucial in determining whether or not consumers shop online (Bellman et al., 1999; Citrin, Sprott, Silverman, & Stem, 2000; Goldsmith, 2002; Lohse, et al., 2000; Miyazaki & Fernandez, 2001). Researchers discovered that previous behaviour has an impact on whether or not people accept or want to shop on the internet. The desire to obtain Internet access was motivated by previous experiences seeking information on the internet (Hartman et al., 2001). Only 13.3 percent of consumers who have purchased something online for one year or more do so, compared to 55.6 percent of Internet users who have been online for seven years or more ("Digital Future Survey," 2004). The buyer also searches the Internet for product information on a regular basis (Bellman et al., 1999). Lohse and his colleagues (Lohse and his colleagues, 2000). Online shopping behaviour and intentions are also predicted by the online shopping experience. Prior experience with various home shopping channels, for example, was linked to the intention to buy via the Internet (Kaufman-Scarborough & Lindquist, 2002; Lohse et al., 2000; Yoh & Damhorst, 1998). Discovered, for example, that people would prefer to order things from catalogues online. The next theory arose as a result of this.

H11: Previous practise is beneficial, as evidenced by the adoption of apparel for online purchase in (a) 2000.

In addition, because online clothing purchases in 2000 are a type of earlier behaviour, the following hypothesis has emerged.

H12: In 2000, the adoption of online clothes had a positive impact on the adoption of online clothing purchase in 2003.

Various studies have found that the desire to buy, the frequency of online purchases, and the intent to buy are all linked to innovation. Park & Jun (2003) discovered that internet purchase is associated with innovation in a sample of US and Korean consumers. Innovative people shop online, according to Donthu & Garcia (1999). Goldsmith and Hofacker found a positive correlation between innovation and increased online sales (1991). According to Blake, the frequency of online buying is linked to both new products and the quantity of online shoppers. In other studies, Hartman et al. (2006) discovered that adolescent internet consumption behaviour is linked to innovation. In some studies, however, innovation was not associated to online shopping. Ha & Stoel (2004) observed that innovation is linked to online information searches as well as online purchasing. Their research was cross-sectional, thus today's innovation may

predict future purchases rather than present purchases. It's possible that a link between innovation and online buying will be discovered in longitudinal study, even if it wasn't identified in cross-sectional research. As a result, the following hypothesis was investigated.

H13: The acceptance of online garment purchase in 2000 (H13a) and 2003 (H13b) is linked to innovation.

# **Impact on Consumer Buying-Decision Process**

One of the primary actors in the procurement process was digital marketing communication. The goal of this research was to have an impact on critical business and decision aspects throughout the procurement process. Communication in digital marketing a statistically significant value was detected in association with each phase that was larger than the average. All statements depicting the consumer purchasing process have an average price for the interviewees, according to the findings (Table 6). (3). (With the exception of item SP7), you can book a vehicle online. Given that respondents have recognised their automobile needs as part of digital marketing communications, digital marketing has a significant impact on the stage of need identification. When it came to buying a car, the majority of those who took part said they preferred to use digital channels over traditional methods. When buying a car, digital channels are preferable over traditional ones (significant results obtained with a Chi-Square test statistic value of 204.775 with .000 sig.). Customers prefer digital information to traditional automobile information channels, according to the H3 hypothesis.

The poll also revealed why consumers use online platforms to acquire cars. Because digital material was interesting, instructive, and direct, it was increasingly employed while purchasing a vehicle. The argument was that by decreasing trips to showrooms and using internet media, you can save time and money when buying a car. Customers could make more educated buying decisions by comparing automakers online, according to the majority of those polled (75%). Participants also indicated that evaluating cars on the internet was simple because previous customers and experts had left feedback. Respondents to the survey stated that they believed they had the best thoughts about automobile brands. They trusted consensus thinking more than manufacturer appraisals of car brands.

The majority of participants believed that using Internet marketing strategies made it easier to find car dealers and brands. The vast majority (80%) expressed an interest in participating in vehicle forums, blogs, and social media sites. The majority of people wanted to take part. The respondents also expressed a desire to participate in online vehicle discussions and get automobile newsletters. Respondents believe that digital media money is accessible to help car buyers finance their purchases. The respondents Maguire (2005) also agreed that after conducting some online research, they might change their minds about a particular brand. The majority of participants Martinez & Polo (1996) claimed the car was purchased online, indicating that car buyers are comfortable with online transactions. Respondents specifically stated that they plan to use digital marketing communications to prepare for their purchase choice. However, only 36% of those polled said they would rent a car online. Participants wanted to discuss whether or not they were satisfied with their digital channels after purchasing the car. The majority of respondents said they wanted to share the innovative digital items with their coworkers. The majority of respondents thought that using digital communication during the decision-making process was a good idea.

In order to get statistics Vias (2004) for inferential analysis, normality tests were performed. Between Kolmogorov-Smirnov and Shapiro-Wilk, significant normality evaluation

tests were found, indicating that the study data were not normal. As a result, a Wilcoxon 1 sample ranking test was performed using a key test with a 5% significance level. Aside from the significant p-value test of 0.000 (excluding SP7), digital marketing communication has a major impact on the consumer's entire purchasing/sale process. The findings are not mentioned in the conclusion, which argues that digital commercialization has no effect on the desire to acquire a car. According to the findings of a study, discovered that the buy-in process for high-impact commodities can be facilitated by digital channels such as mobile phones, social networking sites, and websites. The respondents indicated that they were able to purchase a new car as a result of the digital marketing campaign. These findings can be related to digital marketing since digital channels present goods in such an informative and engaging manner that a buyer feels compelled to purchase a new car. In an auto-based study, Nielsen discovered that digital technology, particularly the Internet, raises awareness and influences decision-making (2012). Munich (Switzerland) is a city in Switzerland (2012). A separate KPMG study found that employing display advertising, content, and mobile marketing, and sellers may effectively and successfully drive client requirements (2013). Other assumptions of the inquiry were accepted as a result of the findings.

The research assumptions H3, H4, H5, H7, and H9 are accepted based on significant findings. Since the critical level, the figures for the online automobile reservation test have not been considered significant. The number 059 has been added to the declaration. As a result, it is possible to conclude that digital marketing communication does not result in online vehicle bookings. As a result, H8 has admitted that clients would not be able to book a car online. These are particularly noteworthy findings in a developing country like India, where digital markets are usually a hot topic and many deny media significance in financial transactions. Furthermore, while purchasing a high-priced premium printed product, a consumer must inspect the items in person before making a final decision. Furthermore, after a physical examination, automobile manufacturers' final purchases were made offline through an online consumer inquiry. According to the Saxena poll, just 15% of consumers in wealthy countries such as Germany booked a high-priced vehicle for things like vehicles, and only 6% paid for their new car online. This tendency may change in the future, since many younger Indian car buyers prefer to do business online.

# THE MOST-AFFECTED STAGE: EVALUATION

The average score for each step was obtained in order to determine how the digital communication channel was most influenced. The information phases had an average score of 3.80, with the most important phase having a median score of 3.79. The lowest level was a 3.18 median score. Using Wilcoxon's rank test, the statistical significance of the data was established at 5% on a single sample. In all stages of customer decision-making, the value was discovered to be 2000. As evidenced by crucial test results at every stage of the acquisition process, digital marketing communications have a significant impact on all phases of consumer decisions during the purchase and evaluation process, as well as on information search. As a result of the digital marketing communications, we agreed with the H6 hypothesis that the most crucial step in the consumer buying process was the evaluation. In his assessment phase research discovered that digital marketing communication has the biggest impact.

# A Mature User's Internet Journey (So Far)

The penetration and use of the internet in rural India vary by place. Two southern states, Kerala and Tamil Nadu, and four northern states, Himachal Pradesh, Haryana, Punjab, and Jammu and Kashmir, have the greatest penetration rates. Kerala has a 37 percent population, Himachal Pradesh has a 28 percent population, and Punjab has a 27 percent population. Many eastern countries, such as Bihar (9%), Odisha (10%), Western Bengal (11%) and Assam (11%) are on the lower end of the range (12 percent). The usage habits differ significantly. Many family, many of whom live outside India, use online videos and voice calls from the North and South to keep in touch. With higher literacy rates, the South has more online job portals and educational search activity.

Source: BCG CCI digital influence study, 2020.

# **Key Differences between Urban and Rural Users**

Marketers must Lennon & Kim (1999).take into account significant differences between rural and urban Internet users.b To provide affordability and network availability, nearly two-thirds of rural consumers use 2G or 3G online low-cost internet phones. Consumers in rural areas Mobile phones are used by a quarter of the population, whereas 10% rely solely on desktops or laptops. In metropolitan regions, 2/3 of customers own cell phones, with another 20% owning PCs and laptops. Rural usage, on the other hand, evolves over time as prices fall and networks expand. Rural consumers' experiences, on the other hand, would differ significantly in the near term from those of their municipal counterparts - customers who benefit from digital marketing methods and public campaigns.

Due to device and network differences, city and rural users use different apps for similar functions. If rural clients utilise UC web browsers to print data, they may be able to load web content considerably faster and save the information while surfing. when compared to other developing countries Due to the breakdown of 2G connections, you can access free music by using programmes like SongsPK. Because of the inadequacies of 2G connectivity. Many rural people Leistritz, et al. (1992) use Whatsapp for communication, which is one of the earliest apps. High-data applications, such as hi and line, as well as increasingly popular movies and file sharing, are considered alternatives. Dailyhunt and DainikJagran, for example, are more popular in India than English-language programmes like The Times.

Even when consumers in rural and urban areas Mick & Fournier (1998) use the same software, it is used for different objectives. Take, for example, Facebook, which has over one million users. In cities and cities, Facebook is about maintaining contact with social functions such as image and video sharing. In rural places, Facebook is often the only way to get news or videos over the phone. Customers in rural areas are significantly less engaged in social media than customers in urban areas who post a range of stuff.

# **Digital's Expanding Influence on Rural Commerce**

The Internet Pepermans, et al. (1996) has played a significant role in the rural purchasing process. In comparison to 30% of urban customers, nearly 15% of rural customers utilise the Internet to find, buy, and convey product satisfaction or dissatisfaction. Furthermore, Internet users in rural areas have the same digital influence as those in urban areas as show in Figure 1. The impact of digital technology has resulted in the acquisition of Internet access in rural areas by four out of five rural internet users. In rural India, there is still some online business, but it is improving. Between 2015 and 2016, the proportion of online transactions in these businesses

climbed from 4% to 8%. Comfort and discounts account for 63% of rural purchases and 62% of Internet purchases. Approximately 40% of the overall inventory is available.

The digital effect and current Hollebeek & Macky (2019) buying are the two most important factors. In many product categories, such as mobile devices, PCs, and laptops, the Internet's impact in rural areas approaches that of metropolitan areas. Other areas, such as consumer electronics, automobiles, clothing, and entertainment, are still far behind.

# **Implications for Companies**

In 2015, we predicted that India's Internet economy might grow to \$200 billion by 2020 under the right conditions. Rural areas will account for a large portion of this increase, with a total client base of 300 million. Companies must establish comprehensive digital strategies that evaluate and account for the unique characteristics of rural markets. Marketers targeting India's rural consumers should consider the following measures.

- 1. Develop a segmented view of the rural market. In rural places, not everyone is the same—or even similar. As previously stated, five sections are accessible, each with its own digital adoption level. Similarly, the magnitude of the digital effect varies significantly among product categories. Companies interested in tapping into the rural market should first determine which touch points are most affected by digital technology and to what extent throughout their specific client buying excursions.
- 2. Rethink the cost of serving rural markets. Marketers might reassess their company condition in order to attract rural customers thanks to the internet economy. In some rapidly expanding countries, such as China, companies have created entirely new models for rural customers. (See the sidebar "Electronic Commerce Expands Into Countries.")
- 3. Adapt the online experience for rural users. Websites and apps designed for urban users may not be effective in rural areas where device screens are smaller and connections are slower. Content must fit inside working phones and be compatible with low-data applications and connections. Material in the vernacular is also essential.
- 4. Refocus advertising budgets. In rural markets, the internet continues to compete with television as a source of influence. Rural consumers, like urban consumers, spend roughly 40% of their total media time on digital media. They choose digital channels for a variety of reasons, including the capacity to access the most recent media content at affordable prices, receive frequent updates, and access content in a variety of vernaculars and geographies. The amount of time spent on digital media increases experience and maturity for all consumers. We expect more media companies, particularly those serving rural audiences, to launch digital destinations with vernacular content that spans genres (e.g. news, gossip, sports, and Bollywood). (For further information, see the April 2015 BCG Infographic.) (See "Digital Disruption: Who Will Win?" for more information.) Marketers should think about rural consumer advertising in addition to traditional channels.
- 5. Bring down the barriers to online sales. E-Government is the distribution and administration of government products and services utilising IT infrastructure, such as the provision of electronic information via Internet portals, online tax evaluation, and electronic voting. Many websites, including jkpsc.com, jmc.nic.in, and jandk.bsnl.co.in, provide statistics from the J&K government. On their own websites, banks can also provide information and services. CIC and Joint Service Centers have also been established by the government to provide citizens with Internet connection with a variety of services (CSCs).

#### **METHODOLOGY**

The pilot project's objective was to use surveys and interviews to detect the most common internet obstacles. A pleasant sample of pilot data, some from rural areas and some from city Jammu districts were employed for collection. Interviews, questionnaires and extraction procedures have been employed. The survey examines the telephone services and

household revenues and the language people like to read and write, race, age, educational achievements, geographical region and computer ownership. The location of internet access, the reasons for the internet use and the utilisation of information by people have been investigated.

#### **Generation of Scale Items**

The questionnaire was created after a thorough review of the literature. The questions are based on themes discussed in the literature, such as resource availability at home and at work (telephones, computers, internets); school/office Internet access; e-service awareness; access to Internet access points (CICs), e-services; Internet users' concerns; and so on. We used a five-point Likert scale to identify the responses that best responded to each phrase, with 1=Strongly Agree, 2=Agree, 3=Indifferent, 4=DisAgree, and 5=Strongly Disagree. The questionnaire had 35 questions, eleven of which were demographically profiled while the others were asked. The sample size for the pilot study was comfortably increased to 50. The questionnaire can be found in the appendix.

#### **DATA ANALYSIS**

The study looked into the factors that contributed to the digital divide in Jammu and Kashmir. Other observations made throughout the data analysis include gender, education, and age division of ICT use. The details about the various digital divide factors studied in the literature were found to be:

#### **Internet Access**

The workplace has been determined to be the most common location for internet access (office, school, college, etc). The Internet is available in almost all businesses and schools (broadband). Only 22% of respondents do not have access to the Internet at work, indicating that people love using the internet as show in Figure 1.

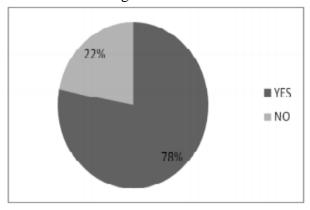


FIGURE 1
AVAILABILITY OF INTERNET CONNECTION AT WORKPLACE

Intimates who didn't have access to the internet at work either used it at home or went to a cyber café were counted. 55 percent of individuals polled had access to the internet at home, 27 percent went to Internet cafés, and 18 percent never used it as show in Figure 2. The lack of use

of the internet was mentioned by interviewees who had never used it. i.e. they were unaware of internet activity in which they could be participating. The mean value for the Access Factor as a digital dividend has arrived at 1.59, indicating it to be another factor responsible for the digital divide (t 1.076, p > .05).

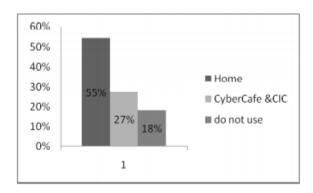


FIGURE 2
INTERNET USAGE OPTIONS FOR THOSE WITHOUT INTERNET ACCESS AT WORK PLACE

#### Awareness of Govt. Initiatives

E-Government Stone (1995) is the distribution and administration of government products and services utilising IT infrastructure, such as the provision of electronic information via Internet portals, online tax evaluation, and electronic voting. Many websites, including jkpsc.com, jmc.nic.in, and jandk.bsnl.co.in, provide statistics from the J&K government. On their own websites, banks can also provide information and services. CIC and Joint Service Centers have also been established by the government to provide citizens with Internet connection with a variety of services (CSCs).

#### **Community Information Centers (CICs)**

The J&K government has opened 135 Community Information Centers (CICs) across the state to provide basic internet connectivity. For the local populace, the CICs provide basic services such as Internet surfing, email, printing, data entry, word processing, and computer core teaching. Some or all of these services are provided by all CICs. A wide range of CICs also provide a variety of G2C services. Services offered by CICs may be classified into five main categories, namely:

- 1. IT education and training.
- 2. E-mail and internet access.
- 3. Information dissemination.
- 4. Citizen-centric applications.
- 5. Entertainment and news.

#### **Common Service Centers/ Khidmat Centers (CSCs)**

Jammu & Kashmir banks have opened Common Service Cents to provide all of the basic financial services. The most popular are centres. They assist the bank in providing basic banking services to the public at its doorstep while expanding the number of public spaces within the formal financial channels. These centres also generate jobs at the grassroots level and provide opportunities for young people, particularly in rural areas (De Marez & Verleye, 2004). According to calculations, just 32% of people were aware of these amenities, and only 10% visited them. It is now clear that government programmes are being conducted to provide individuals with internet access, proving that a lack of awareness of government operations is a key barrier to closing the digital divide. In order Walsh & Godfrey (2000) for such initiatives to be successful, the government must adopt policies to enhance awareness of such projects. The underlying issue of providing access to everyone in society and across all geographical locations remains unsolved. To increase the rate of access, more such clinics should be opened.

The mean value for the sensor parameter was 2.86 on a five-point scale, indicating that awareness causes a digital divide as show in Figures 3 & 4. The hypothesis is also supported because the projected value (t 1.206, p>0.05) does not differ from the actual value.

#### Cost

There have been substantial Ward & Lee (2000) changes in India's telecommunications regulations and market in recent years. Favorable policies and reduced government spending have laid the groundwork for rapid growth. The cost of communication has decreased as a result of this increase in the telecoms industry. Although the telephone and the Internet are now available, the average cost value of a digital dividend has risen to 2.70. This hypothesis is reinforced once again by the fact that the expected value (t 559, p>05) remains unchanged.

#### Language

Language is by far the most Vijayasarathy & Jones (2000) important mode of communication. Only about 5% of the population can read and write in English (Census 2001). Only a small, prosperous, successful, and English-speaking minority exists in India. "Computer phobia" has resulted from a lack of English skills. When asked about the use of e-services, the majority of respondents admitted to having linguistic problems. People still seek information from government entities despite the abundance of information available online. In addition, the unavailability of software and instructions in minority languages creates significant impediments to ICT adoption. The average language value of 2.22 has been surpassed by digital dividends. Because the expected and observed values are not different, the hypothesis is also accepted (t 1.532, p > .05).

#### **Descriptive Statistics**

Source: McKinsey India firm digitisation survey, May 2017; McKinsey Global Institute analysis.

Mean Score of Access, Awareness, Cost and Language				
			Std.	
	N	Mean	Deviation	
ACCESS	50	1.5892	.58610	
AWARENESS	50	2.8552	.92766	
COST	50	2.7000	1.26572	
LANGUAGE	50	2.2196	1.01376	

# FIGURE 3 SHOWS THE FACTORS RESPONSIBLE FOR THE DIGITAL DIVIDE

#### OTHER OBSERVATIONS

The following are some other observations made during the pilot study:

- Internet usage is highly influenced by qualifications. The vast majority of e-consultants (e-billing, e-shopping, e-ticketing, and so on) have had formal or professional training. You believe that online activities save time while simultaneously being inconvenient. Other respondents' activities were mostly entertaining, such as conversing, downloading music, surfing, and so on.
- 2. There are no gender differences in computer usage. When the data was analysed, it was discovered that the 50 households interviewed had a total of 227 people, 50 of them had computer expertise, and 50 of the 114 were women, accounting for 48.9% of computer literate people.

Area Wise Preference of Internet Service			
Internet Service	Urban Area	Rural Area	
Email	1	2	
Chat	4	5	
Music/Movie Download	5	3	
Games	6	4	
Shopping	8	8	
Information Seeking	2	1	
Social network	3	6	
Matrimony	7	7	

# FIGURE 4 SHOWS THE RANKING OF INTERNET SERVICES

### **DISCUSSION AND CONCLUSION**

The digital gap is a multi-faceted problem. This report discusses the reasons for the digital divide, according to a pilot study conducted in J&K. Many of the digital divisions were created to expand telecommunications infrastructure and offer clients with terminals. However, illiteracy, a lack of communication, IT skills, and initiatives to expand the physical network are all key components of the digital divide. The factors discovered in the study are equivalent to those found in the study. Although web-free programmes have been developed, the digital divide still exists. To ensure that local technical innovation meets local needs, we need models for collaboration between researchers, social scientists, technologists, and others.

# **Summary**

In order to address changing business and market conditions, digital transformation entails building new and updating corporate processes, culture, and client experience in digital technology. This necessitates the development of new skills and abilities. Digital services mastery and digital innovation are all covered, as are disruptive technology capabilities, platform architecture and business models. People and cultural pillar are included in digital skills, leadership, and culture. In this rapidly changing economy, where organisations must accept new business and management practises, change management is critical. Disruptive facilitators of technologies, platform architectures, business models, and digital mastery services are all foundations of technology and capabilities. In terms of governance and procedures, digital innovation is a critical digital pillar. Improved customer experience and dedication, as well as increased efficiency, innovation, company policies, and business models, have all fueled the digital revolution. For a successful digital transformation, we must focus on six pillars other than technology; however, only if the right ecosystem type is developed. Experience, people, change, innovation, leadership, and culture are the six pillars. The majority of the digital transition was observed in four areas:

- 1. A strategy that focuses on integrating digital transformation with long-term goals.
- 2. A client's commitment to provide a consistent and up-to-date experience for the consumer.
- 3. In a changing society, the user's attitudes and behaviour are critical.
- 4. Data-driven information and analytics, as well as other business processes

India's digital potential can help people improve their social and economic circumstances by promoting non-agricultural business enterprises and improving access to education, medical care, and financial services. However, the fact that ICT cannot guarantee a country's entire development should be acknowledged. Support and expansion can help to foster integration and growth in areas such as literacy, basic infrastructure, business climate, and regulatory environment, among others. It is necessary to comprehend the objective and significance of India's digital program/initiatives. A study of consumer attributes and specific characters may be conducted in order to effectively target customer groups and the digital India strategy in rural areas.

#### CONCLUSION

Research is critical and plays a significant role in enhancing efficiency and obtaining the necessary information for implementing a new social, economic, and technological development strategy. In recent years, the role of research has expanded significantly in a variety of areas of applied economics, including business, industry, trade, commerce, services, and the economy. A conceptual study of important rural Indian aspects has been conducted, with a focus on government policies, national resource distribution, economic structure research, social well-being and progress, business/industry operational and planning problems, the acquisition of new know-how, organisational and social management, global market and development trends, and the rural environment.

#### **REFERENCES**

- Anderson, P. (1999). Perspective: Complexity Theory and Organization Science. *Organization Science*, 10(3), 216-232.
- Bharat Bhagtani, B. B. (2016). Digital India: Green tab knowledge cafe. Developing Indian Economy an engine job creation (pp. 322-333). Ahmedabad: Gujarat Technological University.
- Brooks, S., Donovan, P., & Rumble, C. (2005). Developing nations, the digital divide and research databases. *Serials Review*, 31(4), 270-278.
- Bughin, J. (2014). Brand success in an era of digital Darwinism. Journal of Brand Strategy, 2(4), 355-365.
- Canazza, M.R. (2009, August). Global effort on bridging the digital divide and the role of ICT standardization. In 2009 ITU-T Kaleidoscope: *Innovations for Digital Inclusions* (pp. 1-7). IEEE.
- Chanias, S., & Hess, T. (2016). How digital are we? Maturity models for the assessment of a company's status in the digital transformation. *Management Report/Institut für Wirtschaftsinformatik und Neue Medien*, (2), 1-14.
- De Marez, L., & Verleye, G. (2004). Innovation diffusion: The need for more accurate consumer insight. Illustration of the PSAP scale as a segmentation instrument. *Journal of Targeting, Measurement and Analysis for Marketing*, 13(1), 32-49.
- Dickson, P.R. (2000). Understanding the trade winds: The global evolution of production, consumption, and the Internet. *Journal of Consumer Research*, 27, 115–122.
- DMNews. (2006). Forrester: E-commerce sales in multichannel world surged 22% to \$172 B in 2005.
- Donthu, N., & Garcia, A. (1999). The internet shopper. *Journal of advertising research*, 39(3), 52-52.
- Goyal, L. (2017). Leading digital strategy: driving business growth through effective E-commerce. *Vikalpa*, 42(2), 128-130.
- Goldsmith, R.E. (2001). Using the Domain Specific Innovativeness Scale to identify innovative Internet consumers. *Electronic Networking Applications and Policy*, 11, 149–158.
- Ha, Y., & Stoel, L. (2004). Internet apparel shopping behaviors: the influence of general innovativeness. International *Journal of Retail & Distribution Management*.
- Hartman, J.B., Shim, S., Barber, B., & O'Brien, M. (2006). Adolescents' utilitarian and hedonic Web consumption behavior: Hierarchical influence of personal values and innovativeness. *Psychology & Marketing*, 23(10), 813-839..
- Hawes, J.M., & Lumpkin, J.R. (1984). Understanding the outshopper. *Journal of the Academy of Marketing Science*, 12(4), 200-217.
- Hoffman, D.L., Kalsbeek, W.D., & Novak, T.P. (1996). Internet and Web use in the US. Communications of the ACM, 39(12), 36-46.
- Hollebeek, L. D., & Macky, K. (2019). Digital content marketing's role in fostering consumer engagement, trust, and value: Framework, fundamental propositions, and implications. *Journal of interactive marketing*, 45, 27-41.
- Jain, A., & Hundal, B. S. (2013). An analysis of diffusion process of mobile phone services in rural India. *International Journal of Innovation and Sustainable Development*, 7(2), 126-143.
- Kaufman-Scarborough, C., & Lindquist, J.D. (2002). E-shopping in a multiple channel environment. *Journal of Consumer Marketing*.
- Keniston, K., & Kumar, D. (2003). The four digital divides. *Online erişim*, 21, 2010..
- Lennon, S., & Kim, M. (1999, January). The Effects of Perceived Amount of Information on Perceived Risks and Purchase Intentions in Television Shopping. In International Textile and Apparel Association Annual Conference Proceedings (Vol. 1999, No. 1). Iowa State University Digital Press.
- Leistritz, F.L., Ayres, J.S., & Stone, K.E. (1992). Revitalizing the retail trade sector in rural communities: Lessons from three Midwestern states. *Economic Development Review*, 10(4), 49..
- Lohse, G.L., Bellman, S., & Johnson, E.J. (2000). Consumer buying behavior on the Internet: Findings from panel data. *Journal of interactive Marketing*, 14(1), 15-29.
- Maguire, J. (2005). Seniors and e-commerce: Selling to the older shopper. Retrieved January, 26, 2006
- Martinez, E., & Polo, Y. (1996). Adopter categories in the acceptance process for consumer durables. *Journal of Product & Brand Management*.
- Mick, D.G., & Fournier, S. (1998). Paradoxes of technology: Consumer cognizance, emotions, and coping strategies. *Journal of Consumer research*, 25(2), 123-143.
- Miyazaki, A.D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer affairs*, 35(1), 27-44.
- Norris, P. (2001). Digital divide: Civic engagement, information poverty, and the Internet worldwide. *Cambridge university press*.

- Park, C., & Jun, J.K. (2003). A cross-cultural comparison of Internet buying behavior: Effects of Internet usage, perceived risks, and innovativeness. *International Marketing Review*.
- Pepermans, R., Verleye, G., & Van Cappellen, S. (1996). 'Wallbanking', innovativeness and computer attitudes: 25–40-year-old ATM-users on the spot. *Journal of Economic Psychology*, 17(6), 731-748.
- Phau, I., & Poon, S.M. (2000). Factors influencing the types of products and services purchased over the Internet. *Internet Research*.
- Reinartz, W., Wiegand, N., & Imschloss, M. (2019). The impact of digital transformation on the retailing value chain. *International Journal of Research in Marketing*, *36*(3), 350-366.
- Rogers, E.M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. *In An integrated approach to communication theory and research*, 432-448.
- Stone, K.E. (1995). Rural retailers: Competing with the mass merchandisers. In *Rural Retailing Symposium, Snowbird, UT*.
- Sukkar, N. (2004, April). The digital divide and development. In Proceedings. 2004 International Conference on Information and Communication Technologies: *From Theory to Applications*, 2004. (pp. 27-28). IEEE..
- Summers, J. O. (1972). Media exposure patterns of consumer innovators. *Journal of Marketing*, 36(1), 43-49.
- Swinyard, W. R., & Smith, S. M. (2003). Why people (don't) shop online: A lifestyle study of the internet consumer. *Psychology & marketing*, 20(7), 567-597.
- Vias, A. C. (2004). Bigger stores, more stores, or no stores: paths of retail restructuring in rural America. *Journal of Rural Studies*, 20(3), 303-318.
- Vijayasarathy, L. R., & Jones, J. M. (2000). Print and Internet catalog shopping: assessing attitudes and intentions. *Internet research*.
- Walsh, J., & Godfrey, S. (2000). The Internet: a new era in customer service. *European Management Journal*, 18(1), 85-92.
- Ward, M. R., & Lee, M. J. (2000). Internet shopping, consumer search and product branding. *Journal of product & brand management*.
- Yoh, E., & Damhorst, M. L. (1998). Consumer adoption of the Internet for apparel shopping: Theoretical model development. In *International Textile and Apparel Association Annual Conference Proceedings* 1999(1). Iowa State University Digital Press.

Received: 25-Jul-2022, Manuscript No. AMSJ-22-12381; Editor assigned: 28-Jul-2022, PreQC No. AMSJ-22-12381(PQ); Reviewed: 16-Aug-2022, QC No. AMSJ-22-12381; Revised: 26-Aug-2022, Manuscript No. AMSJ-22-12381(R); Published: 18-Sep-2022