Factors Affecting Customer Retention in Telecom Sector: A systematic review in Indian perspective

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Abstract

Indian mobile industry is the most rapidly expanding businesses in the world. Presently, India is one of the second world’s largest telecommunication market and is still mounting. The main aim of this review paper is to explore the factors affecting towards the customer retention from the customers prospective in line with the experience of mobile connections to our country. The present study conducts a systematic review of 50 research papers published across reference peer reviewed journals during 2001-2019 in telecom sector. During the analysis of the literature review, various categories are adopted such as publication year, journals, research design, methodology, related research area, findings, limitations and challenges to the telecom industries. The study is useful for academic researchers, managers and practitioners in the telecom field. The authors critically reviewed the papers and develop a framework to study the significant factors influencing retention in telecom domain. The recommendations also have been made to this review paper on factors influencing customer retention and the directions for future researches are indicated. The authors have found 64 sub factors affecting retention in telecom sector and then categorized these factors into significant factors such as service, support, brand, network coverage, pricing, and customer relation and regulation impact.

Keywords: Customer retention, Telecom Company, Customer relationship management, Mobile telephony, Subscriber, Loyalty.

I. INTRODUCTION

The Indian telecom industry is a high growth industry as of today with a customer base of 130 crores. India has now become the world’s most competitive as well as fastest growing telecom markets. Due to the addition of more than five million users in January, the subscriber base increased from 1151.44 million at the end of December’19 to 1156.44 million at end of January’20, thereby registering a monthly increase rate of 0.43%. Wireless subscription in urban areas increased from 643.97 million at end of December ’19 to 644.54 million at the end of Jan’20 and wireless subscription in rural areas increased from 507.46 million at end of Dec’19 to 511.90 million at end of Jan’20. Monthly growth rates of urban and rural wireless subscription were 0.09% and 0.87% respectively. But the gross revenue of telecom sector has been declined from Rs.62198 crore at end of March’18 to Rs.58414 crore at end of March’19. The annual and quarterly growth of Indian telecom’s revenue were declined by 6.08% and 0.98% respectively. This year on year revenue decline is one of the key challenges being faced by Indian telecom industries. However, India is one of the largest equity market (3.5 trillion equity market) globally after china. In addition, India has the largest number of listed companies in the world. The country offers the robust growth opportunities to domestic and international companies for investment prospective driven by the Indian government’s Make in India initiative for digital technology movement. This has also given rising opportunities for rural and urban areas to increase the per capita household income. The most of customers likely to come from rural or urban areas with inadequate basic infrastructure and limited but no connectivity is demanding lower tariff, unlimited voice calls & data with additional value-added services. The digital movement enabled the country towards artificial intelligence, machine learning, deep learning, chat box, online shopping, online education, online games and many more. These all digital technologies are running over telecom backbone. Therefore, the telecom is playing a very pivotal role to develop country’s economic growth. The urban, city and metro customer demands high speed internet for audio-video streaming, navigation, music downloads, gaming, m-commerce, mailing solutions, video-chat box and social networking. That’s why people are demanding 4G/5G technology to run these applications. With compare to urban areas, people in rural areas need low cost technology to run these applications. The Government has done various initiatives to enable digital technology across the country for rural and urban both areas. This has also helped to improve the health of the telecom sectors through various programs like digital technology, 100% FDI policy, introduction to VNO license, mobile number portability, special number service 112, Aadhar based e KYC, GPS enabled handset, spectrum sharing, spectrum management and spectrum auction. Recent initiative of Bharat net to connect 2.5Lacs villages over optical fiber connectivity to boost more internet penetration. Private telecoms also shown interest to connect the Villages. Airtel shown interest to connect 10000 villages, Reliance JIO interested to connected 30000 Villages and Vodafone idea shown interest to connect 3000, 1000 villages respectively. Reliance JIO’s freebee services for unlimited voice and data lead to an intense competition between Indian telecom player. Airtel, Vodafone Idea and BSNL are also forced to reduce lower the prices for acquisition
and retention of new and existing customers. This has given a breadth at least to Airtel, Vodafone idea and BSNL to sustain in such highly intense market after Reliance JIO’s entry into telecom business.

**Key Development to improve the telecom infrastructure:**
Merger and acquisition is a popular governance structure that strategically combines the resources from one organization to other organization. Merger between the telecom companies is to help industries to improve the network in rural and urban areas, resilient service, low call drops, POP capacity, cost effective plan, increase market share and improve service quality. The merger also helps telecom industries to reduce the competition and streamline the smooth operation process to acquire new customers. Though there are various initiative has been done by government to improve the service quality of mobility, wireline voice and data services. Here in this review paper, the authors have restricted to study in mobility only.

**II. LITERATURE REVIEW:**
Customer acquisition is the process of bringing new customers to your brand. It involves lot of costs to attract people to brands before customer acquisition. The cost of bringing in customers to brands is known as customer acquisition cost. These costs are nothing but line like marketing cost, advertising cost, billboards, television, radio spots, poster, prints etc. Now the goal for any business to maintain consistent influx of new customers and then retaining the existing customer is also very critical for any industry to survive. Customer retention has direct impact on profitability to any business. The more the customer retention the more the profitability in organization. Retaining customers is always has very less cost than acquisition of new customer. According to Oliver (1981), customer satisfaction is the major outcome of the customer ’s attitude to switch service provider to other, repeat purchase and customer loyal. Customer retention refers to the ability of an industry or business to retain its customers over some specific period to gain profitability and long-term sustainability in the market.

**II.a Customer acquisition and customer retention in telecom sector:**
Jacquelyn S. Thomas (2001) explore that customer acquisition and retention are two independent process. The author also explains that there is a linkage between customer acquisition and retention. They find out that the focus of the study is not to address how firms should acquire customers. Moreover, due to the data limitation of customer base, the retention and strategy on churn analysis might be biased. They represent a model to correct those biases in customer analysis process as customer acquisitions and retentions. Werner Reinartz ,Jacquelyn S. Thomas & V. Kumar (2005) explore that there is a modellling framework for balancing resources between customer acquisition efforts and customer retention efforts .They focus on right resource allocation model that addresses the questions of how much to invest in customer relationships and how to invest at different points of customer-firm relationship. Dr. S. M. Yamuna and R. Shiji (2011) find that most users are using 4G services from Vodafone Airtel and JIO. They also reveal that the customer level of awareness towards 4G services offered by various telecom service operators depends on gender, age, education, qualification, occupation and marital status.

**II.b Service quality on customer retention in Indian telecom companies:**
Lei Yu, Wu Kuan, Yang Chen, Po Yuan, Chen Shu & Ling Cheng (2012) explore that the consumer ’s perceived value and each cost component of information searching cost, moral hazard cost and specific asset investment cost are positively related to repurchase intention. The study suggests that providing with enough cues to reduce consumer’s information searching is core element of repurchase intention formation. Sumangala Damodaran (2013) explore that the outsourcing strategy of airtel on network & IT management to third-party has resulted with cost saving and increased profits. The paper reveals that with the network outsourced, the telecoms can offer lower cost tariff plan to customer. The author finds out the factors that affect customer acquisitions and retentions are brand Image, service delivery experience, network experience, customer care experience, store and gallery experience, billing experience and web experience. Abhijit Chirputkar and Yatin Jog (2015) finds out the brand oriented behavioral factors and brand oriented attitudinal factors are very important to influence the customers to remain loyal to their brand. The study is limited to prepaid mobile connections. Monalisha Patnaik, Abhispa Ray, Biswa Bhusan Mall, Rosemary Kujur, Silpa Jena and Somu Jena (2015) finds out that the critical factors for customer satisfaction to increase the acquisition & retention. The paper also reveals that brand preference, customer perception, distributor perception, marketing strategy, service quality & delivery are the factors affecting the customer satisfaction. Suraj Kush Shekhar (2015) reveals that the perceptions of Indian customers and retails towards cellular operators in India are the visibility to customer, customer support, customer response and complaint resolution.

**II.c Lower pricing offered by JIO disrupted Indian telecom sector**
Pawan Kalyani (2016) explore that the effect and awareness of JIO offer and then its competitive strategy adopted by Airtel, Vodafone and BSNL. Bhosale Veena, P. Jain, Ashwin Nirmal (2016) explore that the most influencing factor about the JIO scheme launched in Jaigaon city. The study also explores that the factors that influence the customer to become loyal with JIO are free data, unlimited voice calls and considering customer's feedback or concern. These factors are responsible for JIO to control monopoly market in mobility space. D. Satyanarayana, Dr. K. Sambasiva Rao and Dr. S. Kishnamurthy Naidu (2017) explore that the JIO’s free tsunami creates a lot of radical and unexpected changes in consumer’s behaviors and competitor’s strategies. The entry of Reliance JIO affects equilibrium in the mobile industry and forced competitors like Airtel, Vodafone
and Idea to merger their operation to improve the customer experience. Dr.S.M. Yamuna and R. Shiji (2011) explore that there are various factors including socio geographical factors developing the brand awareness among smart phone users about 4G mobile phone services. Most users in Indian now are using 4G services from Vodafone, Airtel and JIO. The authors find out that the factors like gender, age, educational qualification, occupation and marital status are also creating brand awareness among users about the 4G services. Noorul Haq (2017) finds out that launching JIO disrupts the Indian telecom market and forced many telecoms to shut down their operations due to lower prices and freebee services. It also has changed market dynamics the way competitors are adopting the aggressive pricing strategy to churn each other’s customer base and then completely disrupted the Indian telecom market. Rajbinder Singh (2017) explore research in Impact of Reliance JIO on Indian Telecom Industry and the study finds out that Reliance JIO’s freebee services like free internet and free voice calling pushed other telecom operators towards merger and consolidation to reduce operation cost and increase the profitability and EBITDA.

II. Customer satisfaction impact on customer retention Indian telecom companies:

Kotler (2011) defined satisfaction as “A person’s feeling of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations”. Sandra M and James H Drew (2003) finds out that there are four different types of risks attributed during online shopping put buyers on risk and these are the risks are financial risk, product performance risk, psychological risk and time risk. The authors also study the relationship between consumer demographics (gender, age, income and online experience), types of risk perceived by internet users (shopper and buyers) and selected online patronage behaviors (total amount spent, frequency of searching with intent to buy, and frequency of buying online). Mohammed. M. Almossawi (2012) finds out that the importance and consequences of customer satisfaction in the competitive telecom industry in Bahrain has been affected by a positive relationship between satisfaction and retention. The author also explores that there is a poor association found between customer satisfaction, customer retention and loyalty. Dr.B. Kishore Babu (2018) explore to know about the customer loyalty of JIO customers towards JIO after free services time was over. The study further analysis’s that the majority of JIO customers are satisfied with the performance of Reliance JIO when compare to other operators. Anders Gustaffison, Michael D. Johnson and Inger Roos (2006) explore that customer satisfaction, affective commitment and calculative commitment are the most important dimension towards the customer retention in telecommunication sector. The study further finds out that the situational and relational trigger conditions to moderate the satisfaction cum customer retention relationship. Roma Mitra Debnath (2008) finds out that the prime focus of the telecom service provider is that to create loyal customer that being provided with benchmarking performance of services and customer retention of existing customer. The paper also explores that customer will get the benefit of additional services proposed with the tariff plan to become loyal customers for longer periods with telecom service providers.

Afshan Azam, Fu Qiang and Muhammad Ibrahim Abdullah (2012) explore that the consumer satisfaction is not only a critical performance outcome in internet retail shopping but also a primary predictor of customer online shopping and purchase intention. The factors that authors find out that influencing customers towards online shopping’s are system satisfaction, service interfaces, security, currency relevancy, consistency, understandability, navigability and telepresence. Premkumar G and J. Rajan (2012) finds out that main factors in customer retention in Indian mobile telecom market and to check mobile number portability is a blow to mobile telecom service provider. The study explores that the customer satisfaction plays a very important role in customer retention. The more the level of customer satisfaction the more the quantum of customer retention in Indian mobile telecom...
market. However, the customer satisfaction is affected by various factors are trust and service quality. Muhammad Aishuridhe Ra’ed (Moh’d Taisir), Mas’deh Barween Alkurdı (2012) reveals that the customer satisfaction does affect customer retention. The study also found that there is a direct relationship between customer-supplier relationship duration and customer satisfaction and then the mobile services provided by the call centers also affect the customer satisfaction and customer retention. Ratnesh Kumar and Dr. Amit Kansal(2013) finds out that there is a high competition among telecom players in India and all the players are giving special offers and schemes to maximize the subscriber base depend upon market condition. The author also suggest that the telecom players to align with new dynamic business environment due to competition. Balwant Singh Mehta (2013) explores that the socio-economic impact of mobile phone usage on the telecom players to align with new dynamic business environment due to competition. Balwant Singh Mehta (2013) explores that the socio-economic impact of mobile phone usage in rural India. The survey also reveals that mobile phone helped user to gather information for their agricultural and non-agricultural purposes and enable them to get in touch with their family members and migrant workers. The demographic factors of mobile phone user (ownership access), usage (social and economic), activity (education entertainment & innovative use) and impact (satisfaction, safety, skills, Income) plays an important role of mobile phones in rural India. Md. Hasebur Rahman , Md. Redwanuzzaman , Md. Masud-Ul-Hasan & Md. Asfaqur Rahman (2014) reveals that service innovativeness, service reliability, service competitiveness, customer demand fulfillment to be found significant factors and service consistency, network signal, coverage, pricing policy, quality of offering, value added services, contribution to society and brand value to be found insignificant factors in affecting customer satisfaction. On the basis of findings the study concluded that customer satisfaction is a dynamic phenomenon of customer retention. Menachem Domb, Joshi Sujata, Bhatia Sanjay, Roy Arindam and Saini Jypti (2015) reveals that brand image, service delivery experience, network experience, customer care experience, store and gallery experience, billing experience and web experience are significantly affecting the customer experience in telecom industry. Dr. Meera Arora (2015) explore that the importance of impact of customer satisfaction through the constant quality service delivery to customer enable the telecom industry for long term sustainability. The paper also revealed that customer centric strategy for telecom company is not only helping to increase market share but also helping service provider for long run business. Asercza Eva and Neslin Scott A (2016) finds out that the variety of metrics to measure and monitor the customer retention. The author also presented an integrated framework to manage retention that leverages emerging opportunities offered by new data sources and new methodologies. The study also has provided a broader prospective of customer retention. M. Sankara Rao Prof. P. Srinivas Subbarao (2017) explore that the mobile number portability is an option for customer to change existing network to a new network based on the quality of services and offerings made by telecom service provider. Dr. S.P. Maithiraj (2018) reveals that customer buying behavior has been affected due to lacking service quality, value added service, promotional offers and customer care services pushing the customers to switch over existing service provider to new one. Abani Mohanty and Dr. Sabyasachi Das (2018) explore that the retaining the existing customers than finding a new customers is easier for the companies. Customers are enjoying the benefit of retention strategies like keeping them updated, trying to find their changing needs, various trial offers of VAS, waiving of late payment fees, solving the complaints, not disconnecting the service, giving gifts and freebies. The study finds out the customer retention strategies to keep the customers with the telecoms service providers for longer periods.

II.f Customer churn management on retention:

M. Satish, K. Santosh Kumar, K. J. Naveen, V. Jeevanantham (2011) find out in their study that the factors responsible for influencing the consumer in switching the service provider. The study further explores the call rate plays the most important role to switch the service provider followed by network coverage, value added services, customer care and advertisement. Jamwal Sanjay (2011) finds out that the churn prediction and management have become a serious concern to Indian mobile operators to retain customer due to severe competition. Telecom operators must predict the possible churners and then utilize the limited resources to retain those customers as well. Arthur. Yarhands. Dissou., Ahenkrah. Kwaku., Asamoah. David., (2012) find out in their study that the causes of customer churn from one operator to other. The study also explore the factors of likeliness of switching services from existing service operators to new depends on various factors like gender, education occupation, income, age network issue, high tariff, hidden charges, service disruptions, unreliable helpline, incomplete information and inadequate features. Kiran Daiiya and Surbhi Bhatia (2015) explore that customer churn plays a very significant role in telecom industry for survival and expansion of subscriber base. The study has also explored that the CRM tool through data mining technique will help the industry to acquire and retain customers for longer periods. Gunjan Malhotra and Surinder Kumar Batra (2019) find out that the frequent switching of customers between service provider happen due to low switching cost provided by the service providers. Based on the factor analysis, there are six factors being identified as switching reason of existing services to new one and these factors innovative offers, publicity, convenience, price, trust building and service quality. Moreover value added services and effective pricing strategies adopted by the service provider can also control the consumer’s brand switching behavior that can help to retain customers for longer periods. Sukanta Saha and Yogesh C Joshi (2019) explore that the telecom operators may plan some innovative measures like tariff plan, improved quality of services to increase the perceived satisfaction level among the customers for retention.
II.g Merger effect on customer retention in Indian telecom companies:

Bedi, Surbhi (2017) explore that there are severe challenges, uncertainty and lot of issue during pre-merger and post-merger between the organization. The merger and acquisition have created doubts among the customers to opt new service from merged entity thus by helping the competitor’s competitor to increase the customer base. Mishra Arjyolopa, Pradhan Amruta, Bisht Oasis (2018) explore that the dynamic of trusts post-merger and acquisition, integration planning in the Indian telecom sector are identified as the factors being responsible for successful merger and its positive impact to customers, market and business. These factors are also responsible for the consequences of failed merger between the organization.

II.h Impact of OTT (Over the Top) players to Indian telecom sector in retention analysis:

Esselaar Stephen; Stork Christoph (2018) explore that the impact of over the top Applications on mobile operator revenue. The authors find out that the data revenues has been increased with the help of OTT players but the revenue on Voice and SMS is decreased. The author identified the factors over the impact of OTT on mobility revenue and these factors are usage pattern, regulatory interventions and the choice of business models.

II.i Challenges of customer retention in Indian telecom service provider:

The TRAI report (2015 & 2019) shows that there are various factors affecting telecom industry’s performance and require to develop proper framework to improve the telecom sector’s performance. The factors that affecting telecom industry’s performance are technology readiness, cost incentive to telecom companies, social propensity to adopt OTT, strength of OTT platforms, scalability of telecom services. Jonathan Donner (2007) explore that that face to face interaction was dominant in urban India than the customer interaction with various ICT access through landline, mobile, email, SMS etc. The author also explores that the importance of use of information and communication technologies of customer acquisition and retention in urban area. Parsheera Smriti (2018) reveals that the Indian telecom industries are going through a new phase of development. The telecom sector’s priorities shift from traditional telecom services to high quality internet access the policy and regulatory framework must also respond accordingly. The study highlights some key challenges are faced by the telecom sector like reliance on wireless network, high cost of spectrum and the continuing digital infrastructure development. The author also recommended to regulator should adopt and design some mechanisms to avoid such challenges and uncertainties in the market to achieve better customer satisfaction. Sigit Haryadi (2018) explore that the telecom regulatory body controls the tariff of mobile connections and therefore, it is creating obstacles to acquire customers for telecom service providers. The customer is the key to success mantra to any sector of business and this is especially a universal true to Indian telecom industries also where profit margins are very less and such intense competition among players on the rise, enable the customer to give a chance to move from one service provider to other. In a result of that Industry is not only losing customer, losing revenue market share, profitability and sometimes losing stakeholder’s confidence. As the industry has undergone from monopoly to competitive market, telecom service industries are facing a very tough time due to higher license fees, lowering tariffs, default payments and increasing cost induced by the customer. So, companies are attempting to find out the ways to improve the strategy of customer retention. However, a thorough study of literature review of various journals, it is yet to be find out the factors relating to customer acquisition and retention of Indian telecom companies.

III. PROBLEM STATEMENT:

- To understand customer’s switching behavior.
- To increase customer retention.
- To build trust and loyalty for efficient customer relationship management.

IV. OBJECTIVE:

- To identify the main factors involved in customer retention of Indian telecom market.
- To recommend a suitable model to mobile telecom service provider for customer retention.

Figure 1 shows the seven main factors identified from the research papers.
Figure 2 shows the seven variables categorized into sub factors.

| Service                  | Brand              | Support            | Network            | Pricing       | Customer relation | Regulatory Impact                |
|--------------------------|--------------------|--------------------|--------------------|--------------|-------------------|----------------------------------|
| Quality of Service       | Brand Image        | Value              | Network Problem    | Usage cost   | Direct mailing    | Regulatory interventions         |
| Customer's expectation   | Brand Awareness    | Commitment         | Network outage     | Call rates   | Telephonic discussion | Telecom regulatory policy        |
| Actual Performance       | Brand Preference   | Customer care      | Network experience | Offers       | Face to Face interaction | Merger and Acquisition           |
| Tangibility              | Brand Value        | Customer friendly experience | Activation experience | Schemes | What'sApp | Pre-merger performance |
| Customer Service experience | Brand Program | Channel partner | Network coverage | Promotional offers | Chat Bot | Telecom regulation impact |
| Value Added Service      | Brand Loyalty      | Agency             | POI experience     | Discounts    | Communication     | Risk factors                    |
| MNP Experience           |                   | Visibility         | Excess radiation from Mobile towers | Low cost of service | Body Language | Uncertainty                  |
| Reliability              | Response           | Network quality    | Free offers        | Data mining technique |
| Scalability              | Assurance          |                    |                    |              |
| Demo experience          | Commitment         |                    |                    |              |
| Service innovativeness   | Social factors     |                    |                    |              |
| Customer delight         | Demographic factors |                    |                    |              |
|                         | CRM                |                    |                    |              |
|                         | Store experience   |                    |                    |              |
|                         | Billing experience |                    |                    |              |

Customer retention is the most significant judgment towards the choice to continue the existing service, loyalty, good value and building trust to service provider and customer. Based on the various studies, the authors understood that there are various factors (64 factors as mentioned above) directly related to the customer retention of Indian telecom companies. This review paper is based on the study of various journals in Indian market. The purpose of this study is to finding factors impacting to customer retention in Indian telecom sector. To fulfil this purpose, the research papers were selected from 2001 and 2019 containing customer retention and acquisition ,CRM impact in retention , churn impact, challenges and merger effect in telecom sector .We have categorized sixty three factors in to seven factors ( Service , Support, Brand, Network ,Pricing , Customer Relation and Regulatory impact to telecom companies).The literature review is considered to be the main part of any study as it helps in investigating the recent developments on factors affecting the customer retention in Indian telecom sector .The study follows the structured literature review approach initially to filter the studies to be included in the literature review and later these studies are analyzed through various classification.

V. RESEARCH METHODOLOGY:
The purpose of this study is to finding factors impacting to customer retention in Indian telecom sector. To fulfil this purpose, the research papers were selected from 2001 and 2019 containing customer retention and acquisition ,CRM impact in retention , churn impact, challenges and merger effect in telecom sector .We have categorized sixty three factors in to seven factors ( Service , Support, Brand, Network ,Pricing , Customer Relation and Regulatory impact to telecom companies).The literature review is considered to be the main part of any study as it helps in investigating the recent developments on factors affecting the customer retention in Indian telecom sector .The study follows the structured literature review approach initially to filter the studies to be included in the literature review and later these studies are analyzed through various classification.

Figure -3 shows the research methodology studied from 50 research papers.
| Author name                      | Title                                                                 | Year | Name of Journal                                    | Name of Publisher          | Area of Study                          | Objective                                                                                                                                  | Finding of factors                                                                                     | Locatio n | Research design     |
|---------------------------------|----------------------------------------------------------------------|------|----------------------------------------------------|----------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------|---------------------|
| Jacquelyn S.Thomas              | A Methodology for Linking Customer Acquisition to Customer Retention | 2001 | Journal of Marketing Research                     | Sage Publication           | Acquisition and Retention Analysis    | To study a model for linking customer acquisition to retention.                                                                            | Customer acquisition, retention, Data limitation, biased data, Discount rates, offers etc.        | India      | Data analysis       |
| Sandra M.Forsythe, Bo Shi        | Consumer patronage and risk perceptions in Internet shopping.        | 2002 | Journal Business Research and Auburn University    | Elsevier                   | Customer satisfaction and retention analysis | To study the relationship between consumer demographics (gender, age, income and online experience), types of risk perceived by internet users, (shopper and buyers) and selected online patronage behaviors (total amount spent, frequency of searching with intent to buy, and frequency of buying online). | Perceived risk is a useful context to explain the barriers during online purchase.                  | USA        | Regression analysis |
| M.L. Agrawal                    | Customer relationship management and corporate renaissance.          | 2003 | Journal of Services Research and Institute for International Management and Technology | Institute for International Management and Technology | CRM and Retention analysis | The paper describes the concept and mechanics of customer relationship management and illustrates how CRM helps corporate renaissance in hard times. | Customer relationship management has great impact on customer retention.                              | India      | Theoretical study   |
| Peter C. Verhoeef               | Understanding the effect of customer relationship management efforts on customer retention and customer share development. | 2003 | Journal of Marketing                             | Rotterdam School of Economics, Rotterdam | CRM and Retention analysis | The author investigates the differential effects of customer relationship perceptions and relationship marketing instruments on customer retention and customer share development over time. | Customer relationship management, customer satisfaction, payment equity and affective commitment influence customer retention and customer share development. | Netherla nd | Exploratory factor analysis and confirmatory factor analysis |
| Werner Reinartz, Jacquelyn S.Thomas & V. Kumar | Balancing acquisition and retention resources to maximize customer profitability. | 2005 | Journal of Marketing | Sage Publication | Acquisition and Retention Analysis | The objective of this research paper is to focus on right resource allocation model that addresses the questions of how much to invest in customer relationships and how to invest at different points of customer-firm relationship. | cost of acquisition and retention - contact channel, firmographic etc | India      | Probit two stage least square model |
| Dr. B.Kishore Babu               | Customer perception towards BSNL mobile services in Narsapur, West Godavari, A.P. | 2018 | Journal for Advanced Research in Applied Sciences | Koneru Lakshmaiah Education Foundation | Customer satisfaction and retention analysis | The objective of the study is to know the customer loyalty of Jio customers towards Jio after free services time was over. | Reliance JIO is paying more attention to provide relevant quality service elements (strongest fiber network, pan India presence, cheaper tariffs, advantage of broad spectrum and speed, call clarity) to meet customer's needs. | AndhraPr adesh | Purposive sampling method, onli ne survey questionnaire, data presented on MS excel and chart and tables. |
| Jonathan Donner                 | Customer acquisition among small and informal businesses in urban India: Comparing face to face and mediated channels. | 2007 | EJISDC and Microsoft Research India | Microsoft                      | Challenges of customer retention in Indian telecommunication provider | The objective of the study is to explore the use of information and communication technologies of customer acquisition and retention in urban area. | Face to face interaction was dominant than the customer interaction with various use of ICT access. | Hyderabad | Data analysis, Anova test |
| Anders Gustafsson, Michael D.Johnson and Inger Roos | The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. | 2006 | Journal of Marketing | American Marketing Association | Customer satisfaction and retention analysis | The study examine the effects of customer satisfaction, affective commitment and calculative commitment on retention in telecommunication services. The study further explores the situational and transactional trigger conditions to moderate the satisfaction cum retention relationship. | Customer satisfaction, Affective Commitment, Calculative commitment towards customers about services. | India      | Survey, interview and two tail test |

Information: International Journal of Engineering Research and Technology, ISSN 0974-3154, Volume 13, Number 9 (2020), pp. 2137-2152 © International Research Publication House. https://dx.doi.org/10.37624/IJERT/13.9.2020.2137-2152
| Title | Year | Name of Journal | Name of Publisher | Area of Study | Objective | Finding of factors | Location | Research design |
|-------|------|-----------------|-------------------|--------------|-----------|-------------------|----------|-----------------|
| Benchmarking telecommunication service in India: An application of data envelopment analysis. | 2008 | Benchmarking An International Journal | Emerald Group Publishing Limited | Customer satisfaction and retention analysis | The prime focus of service providers is to create a loyal customer base by benchmarking the quality of services and retaining the existing customers in order to benefit from their loyalty. | India | Data Envelopment Analysis (DEA) |
| Application of data mining techniques in customer relationship management. | 2009 | Expert Systems with Applications | Elsevier | CRM and Retention analysis | The author studied that analyzing and understanding the customer behavior and characteristics is the foundation of the development of a competitive CRM strategy to acquire and retain potential customers and maximizing customers value. So, application of data mining technique to CRM strategy is a useful tool to extract and gain the insight information from the customer data base and can be used as a best tool to explore antecedents and consequences of relationship with the customer. | China | Data mining techniques |
| A study on consumer switching behavior in cellular service provider: A study with reference to Chennai. | 2011 | Far East Journal of Psychology and Business | Far East Research Centre | Churn and Retention Analysis | The objectives of the study are to find out the factors that influence customers to switch the services from existing to new operator and to find out the likeliness of switching the service provider. The results revealed that call rate plays the most important role to switch the service provider followed by network coverage, value added. | Chennai | Descriptive research design |
| Principles of Marketing (14th edition). | 2011 | Pearson Education | Pearson Education | Customer satisfaction and retention analysis | | Customer satisfaction | Delhi | |
| Smart phone users brand awareness to 4G mobile phone services (A study with special reference to Coimbatore city). | 2011 | Indian Journal of Research | Paripex | Acquisition and Retention Analysis | To study demographic and socio-economic status of the smart phone users in Coimbatore city. To analysis the smart phone users' level of awareness towards 4G services offered by various telecom operators. | India | Multistage sampling techniques |
| An Approach to Mobile Telecom Churn Handling in India. | 2011 | Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi | Baba Gulam Shah Badshah University | Churn and Retention Analysis | The study explores the model for churn prediction to support telecom churn management. | India | Data analysis |
| E-satisfaction in Business-to-Consumer Electronic Commerce. | 2012 | The Business and Management Review | ITARC | Customer satisfaction and retention analysis | To study to develop a model to explore antecedents and consequences of e-commerce satisfaction. | London | Survey, Questionaire and path analysis |
| Title                                                                 | Year | Name of Journal                                      | Name of Publisher                  | Area of Study                      | Objective                                                                                                                                                                                                 | Finding of factors                                                                 | Location   | Research design               |
|----------------------------------------------------------------------|------|-------------------------------------------------------|------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------|-----------------------------|
| Customer retention in mobile telecom service market in India:         | 2012 | Journal of Business Management                        | Christ University                  | Customer satisfaction and retention analysis | The objective of the study is to identify the main factors which decide the customer retention in mobile telecom market in India and then to check mobile number portability is a blow to mobile telecom service provider. Also suggest a suitable offers, rents, charges, customer service, user friendly websites, customer friendly experiences. | Kerala                                                               | Theoretical study from literature review |
| Opportunities and challenges.                                         |      |                                                       |                                    |                                    |                                                                                                                                                                                                           |                                                                                 |            |                             |
| Customer Satisfaction in the Mobile Telecom Industry in Bahrain: Antecedents and Consequences. | 2012 | International Journal of Marketing Studies           | Published by Canadian Center of Science and Education | Acquisition and Retention Analysis | The objective of this study is to investigate the importance, determinants, and consequences of customer                                                                                                                                                  | Customer care, customer service, variety of services, friendliness, speed, helpful, not wasting time. | Bahrain    | KMO and Bartlett's test      |
| The Effect of Customer Satisfaction upon Customer Retention in the Jordanian Mobile Market: An Empirical Investigation. | 2012 | European Journal of Economies and Administrative Sciences | EuroJournals, Inc.                 | Customer satisfaction and retention analysis | The study focused on how customer satisfaction led to customer retention in mobile market.                                                                                                                                                                  |                                                                                 | Jordan and UK | Chi square test             |
| Determinants Analysis of Customer switching Behavior in Ghanaian Telecommunication Industry. An Exploratory and Inferential study. | 2012 | Journal of Business Research and National Chengchi University, Taiwan | National Chengchi University       | Acquisition and Retention Analysis | This paper deals with the problem of customer switching in Ghanaian telecommunication industry.                                                                                                                                                           | The most important factor that influence customer switching is the high tariffs, service failure such as billing error, service mistakes and service ruins. The level of education, income category of the customers was also found to contribute significantly to customer switching. | Kumasi-Ghana | Descriptive statistics       |
| Perceived value transaction cost and repurchase intention in online shopping: A relational perspective. | 2012 | Journal of Emerging Research in Management and Technology | Mewar University                   | Customer satisfaction and retention analysis | The paper explains about telecommunication issues such as level of satisfaction and how it differs from one mobile phone.                                                                                                                                  | telecommunication issues                                                                                                                                                                           | Taiwan     |                             |
| An Analytical Study of Customer Satisfaction influencing Brand Loyalty and foster recommendation for Mobile Services Providers of Indian Telecom Industry. | 2013 | International Journal of Business Management and Technology | Capturing the Gains, Economic and Social Upgrading Production Networks | Acquisition and Retention Analysis | To find out the consumers’ satisfaction towards the various services provided by telecom service providers. To find out the relationship between consumers’ loyalty, consumers’ foster recommendation and consumers’ satisfaction with various services provided by the MSPs. | Brand, loyalty, Customized VAS, Convenience, Network Coverage and Call tariffs. | India       | Data analysis , chi square test and Anova test |
| New strategies of industrial organization: outsourcing and consolidation in the mobile telecom sector in India. | 2013 | Ambedkar University                                    |命中命                         | Acquisition and Retention Analysis | This paper focuses on the outsourcing model of mobile network and IT management to reduce the operation cost and increase the profitability.                                                                 | The outsourcing strategy for mobile network and IT management adopted by Airtel has resulted the considerably cost saving and increase the profitability. | India       | Airtel outsourcing model     |
| Author name | Title | Year | Name of Journal | Name of Publisher | Area of Study | Objective | Finding of factors | Location | Research design |
|------------|-------|------|-----------------|-------------------|---------------|------------|-------------------|----------|----------------|
| Balwant Singh Mehta | Capabilities costs networks and innovations: impact of mobile phones in rural India. | 2013 | Institute for human development, New Delhi | Capturing the Gains | Customer satisfaction and retention analysis | The objective of the study is to explore the socioeconomic impact of mobile phone usage in rural areas. | Demographic factors, Mobile Phone Ownership access, Usage(social and economic), Activity(Education, entertainment, Innovative use) and Impact (Satisfaction, Safety, skills, Income). | Delhi | Data analysis |
| Md Hasebur Rahman Md Redwanuzzaman Md Masud-Ul-Hasan & Md Asfaqur Rahman | Factors Affecting Customer Satisfaction on Grameenphone users in Bangladesh. | 2014 | Global Journal of Management and Business Research by Global Journals Inc (USA) Marketing | Global Journals Inc | Customer satisfaction and retention analysis | The study focused on factors affecting the customer acquisition in Bangladesh telecom sector. | Network, signal coverage, pricing policy, quality of offering, value added service, contribution to society and brand value. | Bangladesh | Statistical analysis and Multiple Regression |
| Menachem Rosemary Masud-Ul-Monalisha and Yatin Domb Sujata Joshi and Saini Arindam Sanjay Roy Dahiya and Sunita Jyoti | An Empirical Study to Measure Customer Experience for Telecom Operators in Indian Telecom Industry. | 2015 | GSTF Journal of Business Review | | Customer satisfaction and retention analysis | This paper focuses on customer experience in telecom industry and to identify the factors of customer experience for telecom operators in Indian telecom industry. | Brand Image, Service delivery experience, Network experience, customer care experience, store or gallery experience, Billing experience and web experience. | India | Data Analysis and Factor analysis |
| Kiran Dahya and Surbhi Bhalla | Customer churn analysis in telecom industry. | 2015 | IEEE | IEEE | Churn and Retention Analysis | The objective of the paper is to proposes a churn prediction model in telecom industry to improve customer acquisition and retention. | CRM and Data mining technique | Noida | Regression analysis and Decision tree |
| Sujata Joshi Abhijit Chirpulkar and Yatin Jog | Influence of brand oriented factors on customer loyalty of prepaid mobile services. | 2015 | Indian Journal of Science and Technology | Symbiosis Institute of Telecom Management, Symbiosis International University | Acquisition and Retention Analysis | The paper focuses on the influence of brand-oriented factors to ensure customer retention and loyalty. | It explores the factors that influence customer loyalty towards a specific brand of prepaid service provider. | India | Exploratory Research design and Factor analysis |
| Dr.Meera Arora | Role of customer service quality in customer satisfaction: An empirical study of select telecom service providers in NCR. | 2015 | International Journal of Engineering Technology, Management and Applied Sciences | DAVIM Faridabad | Customer satisfaction and retention analysis | The paper explores the importance of customer satisfaction for telecom service providers through constant service quality delivery with customer centric strategies to customers for long term sustainability and grabbing the market share. | Based on the study, it has been found that reliability, assurance and responsiveness are three most important dimensions of service quality influencing the customer satisfaction. | Delhi | Factor analysis |
| TRAI | Regulatory framework on Over-The-Top (OTT)Services. | 2015 | TRAI | TRAI | Challenges of customer retention in Indian telecom service provider | TRAI Report | Technology readiness, cost incentive to telecom industry, social propensity to adopt OTT, Strength of OTT platforms, scalability of services. | Delhi | NA |
| Monalisha Pattnaik, Abhispa Ray, Biswa Bhusan Mall, Rosemary Kujur, Silpa Jena and Somu Jena | A study on perceived service quality of Idea Cellular Ltd.: A case study on factor analysis. | 2015 | Journal of Business and Management Sciences | Science and Education Publishing | Acquisition and Retention Analysis | The study focuses on perceived service quality offered by Idea Cellular Limited and to identify critical factors which are responsible for customer satisfaction. | Brand preference, customer perception, distributor perception, marketing strategy, service quality delivery. | Delhi | Factor analysis |
| Author Name          | Title                                                                 | Year | Area of Study                  | Objective                                                                                           | Finding of factors                                                                                     | Location        | Research Design                  |
|---------------------|-----------------------------------------------------------------------|------|--------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| Suraj Kushw Shekhari | Indian customers and retailers perception towards cellular service providers with special reference to BSNL. | 2015 | Business Excellence and Management | The study focuses examines the perception of Indian customers and retailers towards cellular service provider. | Accessibility (customer may know how to complain), visibility (Customer may know where to complain) and responsiveness (complaints need to be dealt quickly). | Tamilnadu       | descriptive statistics          |
| Pawan Kalyani       | An Empirical Study on Reliance JIO Effect, Competitor’s Reaction and Customer Perception on the JIO’s Pre-Launch Offer. | 2016 | Journal of Management Engineering and Information Technology (JMEIT) | The paper finds out that effect and awareness of Jio offers. The authors also find out the competitive strategy and offering made by Vodafone, Airtel and BSNL. | Brand awareness, marketing strategy, pre-launch offer. | India           | Survey, Questionnaire and Data analysis |
| Ascarza, Eva, Neslin, Scott A., | In Pursuit of Enhanced Customer Retention Management: Review, Key Issues, and Future Directions. | 2017 | Springer Science & Business Media LLC and University of Alberta | The objective of this study is to draw on previous research and current practice to provide insights on managing retention and identify areas for future research on retention. This study has provided a broader perspective of customer retention. | Retention programs, campaign design and predictive churn. | Alberta         | Statistical methods, probability models, machine learning, test mining, dynamic optimization, decision support systems and field experiment. |
| Veena P. Bhosale and Ashwin Nirmal Jain | Shifting of loyalties: Perception of telecom customers after launching of Jio in Jalgaon city. | 2016 | International Journal of Scientific Development and Research (IJSDR) | To study the perception of customer with changing scenario in Indian telecom industry and the impact of Jio schemes on customer's mentality in Jalgaon city. | Free data, voice calls and limitless monopoly in scheme over other telecom companies. | Jalgaon         | Survey, Questionnaire and Data analysis |
| D Satyanarayana, Dr. K Sambasiva Rao and Dr. S Krishnamurti Naidu | The impact of Reliance Jio on Indian mobile industry: A case study on mergers and acquisitions of Vodafone and Airtel – Telenor. | 2017 | International Journal of Applied Research | To examine the impact of new entrant R-Jio on competitive strategies of rivals in the and analyze the major changes in Indian telecom industry. | Merger and Acquisition | India           | Michael E Porter's Five Force Model |
| Surbh Bedi and Sandeep Vj | Nuances of Merger and Acquisitions. | 2017 | DAVU School of Business & DAVU University | The paper presents a brief discussion about merger and acquisitions, their history, their types, their theories, the deal execution process and their motives. | Growth, hindrances and lot of issues | Jalandhar       | Theoretical study based on various research papers. |
| Dr.S.M. Yamuna and R. Shiji | Smart phone users brand awareness towards 4G Mobile phones services. | 2017 | PSG College of Arts and Science | To study brand awareness of smart phone users towards 4G mobile phone services in India. The author revealed that socio geographical and demographic factors are creating brand awareness of smart phone users towards 4G services for high speed internet and voice services. | Brand awareness and socio/geographic factors | India           | Qualitative research design.     |
| Noorul Haq          | Impact of Reliance JIO on the Indian Telecom Industry. | 2017 | International Journal of Engineering and Management Research (IJEMR) | The objective of the paper is to study and examine the impact of Reliance Jio on the Indian telecom industry. | Unlimited voice call and 4G high speed data is being offered at lower price to customer has helped Reliance Jio to gain massive customer base and forced other telecom service operator for losses of customer base and revenue. | Delhi           |                                  |
| Author name                        | Title                                                                 | Year | Name of Journal                                      | Name of Publisher | Area of Study          | Objective                                                                 | Finding of factors                                                                 | Location | Research design |
|-----------------------------------|----------------------------------------------------------------------|------|------------------------------------------------------|-------------------|------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------|
| Rajinder Singh                    | Impact of Reliance JIO on Indian Telecom Industry: An Empirical Study. | 2017 | International Journal of Scientific Research and Management (JSRM) | G.S.S.D.G.S. Khalsa College, Patiala (Punjab) | Acquisition and Retention Analysis | To examine the impacts of Reliance Jio on Indian telecom industry and to analyze the major strengths, weaknesses, opportunities, and threats to Reliance Jio in Indian telecom industry. | Free Internet, free Calling, 4G Services, Uncertainty and Big service provider talks about merger and acquisition. | India    | SWOT Analysis   |
| M.Sankara Rao                      | A study on relation between customer satisfaction and mobile number portability (MNP) of various sample respondents in vizianagaram telecom district. | 2017 | International Journal of Multidisciplinar Advanced Research Trends. | Rayalaseema University, Kurnool | Customer satisfaction and retention analysis | The study explores the port out of BSNL have increased due to limited back end resources and unavailability of 4G spectrum. | Various factors have been identified for port outs to other operator like dissatisfaction of pre & post purchase service, lack of marketing, frustration of customer care services, less connectivity, frequent call drops to name a few. | Odisha   | Survey and questionnaire |
| Esselaar Stephen Stork, Christoph  | OTT applications driving data revenue growth.                           | 2018 | International Telecommunications Society (ITS)        | Econstor          | Acquisition and Retention Analysis | This paper analyses the impact of over the top applications on mobile operator revenues. The paper analyses three factors impacting revenue trends are changes in usage pattern across voice, SMS and data, the impact of regulatory | There are three factors impact the revenue 1st - changes in usage pattern across voice, SMS and data , 2nd- the impact of regulatory interventions and 3rd- the choice of business models. | Seoul, Korea | Statistical analysis |
| Parsheena Smriti                    | Challenges of Competition and Regulation in the Telecom Sector.       | 2018 | National Institute of Public Finance and Policy,New Delhi | Economic and Political Weekly | Customer satisfaction and retention analysis | This paper discusses the changing role and regulation in the telecom sector and challenges of Competition Commission of India (CCI) and Telecom Regulatory Authority of India (TRAI). | Spectrum management, interconnection policy , diminishing role of tariff interventions, Integration of network and content, Potential areas overlap and Competition from OTT players. | Newdelhi | NA |
| Dr. SP Malhiraj Sheety Deepa, Thangam Geeta, R.Saroja Devi | Customer Behaviour On Mobile Phone Network Portability Services. | 2018 | International Journal of Scientific & Technology Research | Researchgate      | Customer satisfaction and retention analysis | To study the emerging trends in mobile phone network services in India and to explore the factors that influence portage of mobile phone network in India. | Service quality, value added service, promotional offers and customer care services. | Chennai | Analytical and Descriptive statistics |
| Mithra Anjolopa Pradhan Annuza, Bisht, Oasis. | The impact of trust on leadership during mergers.                     | 2018 | International Journal of Social Sciences, Crossmark and Global | Cross Mark and Global Research & Development Services (GRDS) | Merger effect on retention in Indian telecom service | This paper explores the dynamics of trust during post merger and acquisition integration planning in the Indian Telecom Sector | Mode of takeover, cultural disparity, Difference in leadership style, Pre-merger performance differences | Odisha | Theoretical frameworks |
| Das Subhasish, Mishra Mani | The impact of customer relationship management( CRM) practices on customer retention and the mediating effect of customer satisfaction. | 2018 | International Journal of Management Studies and CSTM, Jati, Odisha | Springer          | CRM and Retention analysis | This paper explores that business should create merger and acquisition to retain the relationship. | Customer relationship management. | Odisha | Factor analysis |
| Sigit Haryadi                      | Telecommunication Pricing Regulation Theory and Problem Solution Examples. | 2018 | Institute Teknologi Bandung Mare | IN-A-Rxiv          | Challenges of customer retention in Indian telecom service provider | This paper basically describes the general theory of pricing theory for telecommunication networks and services. | The regulator controls the price charged by the operator rather than the firm’s earning, annual price cap formula, the regulated firm is permitted to alter its average price. | Indonesia | NA |
VI. ARTICLE SELECTION PROCESS

The basic of this review is to explore the factors affecting the customer acquisition and retention in Indian telecom market domain. The study of literature review of 50 journals in customer retention of Indian telecom companies within the larger context of customer’s prospective towards mobile connections. To achieve this aim, the Scopus database is reviewed. All the research articles published in peer-reviewed journals containing factors affecting customer retention of Indian telecom companies from customer’s prospective in their title, abstract, introduction, and key words are filtered at the initial stage. During the filter stage, other articles such as conference papers, short notes, book chapters and editorial notes are excluded. The articles published during 2001-2019 along with one article published in year 1991 are considered. Article published in 1991 was considered as reason being in that point of time the telecom just had begun operation in India by VSNL & BSNL. In early 2010, the customer acquisition and retention of Indian telecom companies has gained its existence. Before initiating the analysis of shortlisted factors affecting customer retention articles, it is essential to define the classification of framework based on which the articles will be analyzed. Accordingly, for the present study, the shortlisted articles are analyzed on 10 broad dimensions which will provide a better understanding of this research and will also help researchers to explore future research directions in the factors affecting the customer retention of Indian telecom domain. The classification framework for the study is described as follows:

1. Author name
2. Title
3. Publishing Year.
4. Name of Journal
5. Name of Publisher or Institute or University
6. Area of study
7. Objective
8. Findings
9. Location of study
10. Research Design.

Classification in order to have a broader understanding of the factors affecting the customer retention in Indian telecom industries. Existing literature review studies on factor affecting customer retention in telecom sector has shown from next page onwards and citations are recorded till 2019.

VII. DISCUSSION

The Indian telecom industry has seen the phenomenal growth from last two decades. The overall health of the telecom sector is going through a very tough time with rising competition, customer churn and lower price. This has resulted to shrink our country’s GDP (Gross Domestic Product) and economic growth. The present study helped to explore 64 factors are influencing customers to switch current mobile services from existing service provider to new service provider and also find out the factors of likeliness of switching service provider. By identifying these factors, the future directions will unveil those discriminate between the long run customers are using mobile services and those who are switching services in a shorter period.

VIII. FUTURE SCOPE:

- The present study of review paper can be extended to other geographical areas and can also be extended beyond mobile services with respect to different age groups, gender, education, occupation and other socio-economic factors.
- The study can also be extended the likeliness of switching behavior of customers from existing service provider to new service providers.
- The study can also be extended to the area of merger effect between telecom companies and then the challenges faced by telecom companies from telecom regulation prospective.
- The further study to these areas may explore new factors in telecom sector’s customer acquisition and retention.
- The study further can also extend to the impact of OTT players on telecom sector to explore factors affecting customer retention to telecom industries.

IX. LIMITATIONS:

The study was limited to mobility services only. Although the factors identified were really verified in the telecom industry and it would be helpful to replicate the same study in other industries to gain the customer base, market share and profitability. There are only few journals available on factors affecting customer retention of Indian telecom industry and the study was restricted to Delhi, Noida, Chennai, Odisha, Andhra Pradesh, Gujarat, Kerala, Tamil Nadu very few locations in India but it did not cover remaining locations of our country. The same study was restricted globally to few regions are USA, China, Bahrain, Jordon, UK, Ghana, Taiwan, Bangladesh, Alberta, Seoul, Indonesia and Akbaibom state. The outcome of the future studies will help to explore new factors are not being identified from this study. The study on merger effect between telecom industries due to competition, impact of OTT players to telecom industries and challenges faced by telecom companies are few have been studied in this review paper.

X. CONCLUSION

The review paper has explored 64 factors affecting the customer acquisition and retention in Indian telecom companies and then categorized these 64 sub factors in to seven significant factors. The questionnaires draft based on the seven factors will give deeper understanding of customer’s perceive ness towards the telecom companies for service, support, brand, network coverage, pricing, communication and other factors. Telecom uncertainty is also arising to customers from mergers and acquisition happened between telecom companies i.e. Vodafone & Idea, Airtel & Tata etc. The review paper studied on 50 journals has limitations also as the data’s collected by authors from various sources are outdated and may give bias results. There are very few research’s done on customer retention of Indian telecom companies and hence a very few journals available related to the retention of Indian telecom companies. Based on the review paper and the journals selected from year 2001 to 2019, the future study further can be recommended to explore more factors in line with the customer retention of Indian telecom companies.

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