

Subscriber Loyalty and Advocacy Measurement Using Structural Equation Modelling: The Sharjah (U.A.E.) Telecommunication Scenario

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Abstract: The United Arab Emirates (UAE) has magically mushroomed into an entity that the world is fascinated about given that it surfaced from a geographical region dominated by deserts and sand dunes. It has now become an important player especially in the political and economic scenario with advanced technology and jaw dropping infrastructure. Countries are liberalising the economy and service providers operate across the globe. Telecom in UAE has witnessed fast-paced changes and the current duopoly structure is perhaps at the verge of change. The current telecom operators, with government having major stake in them, are Etisalat and Du. Etisalat had the upper hand and monopoly until the beginning of 2006. The scenario has changed since then with the entry of Du and more reforms are expected around the corner. Communication is the essence of life and mobile telecommunication is a necessary technological tool for personal and business transactions. The main enabler of a digital era is telecommunication that facilitates the nations to co-exist and makes the world feel smaller. Loyalty and advocacy are critical for telecom operators especially in an era when number portability is a reality. 534 respondents at Sharjah were surveyed and the major antecedents and their impact on telecom subscriber loyalty and advocacy intentions are documented.

Keywords: *Subscribers, Loyalty, Advocacy, Telecommunication, Sharjah .*

I. INTRODUCTION

The Telecom industry remained a monopoly with only one service provider, namely, Emirates Telecommunications Corporation (Etisalat) until February 2006. Subsequently, it became and still continues to be a duopoly with the entry of Emirates Integrated Telecommunications Company (popularly referred to as Du). UAE telecom growth has been mainly attributed to economic growth, investment from abroad as well as other initiatives of the Government especially its focus on ICT. However, the costs associated with telecom are high and manpower also is expensive. The UAE mobile subscriber market share of Etisalat as of September 2018 was 10.7 million (web 1). This accounted for fifty eight percent of the subscriber base. Du comes behind with a subscriber base of 7.7 million. The current research was undertaken given the changing scenario of telecommunication in the UAE. It is not just the policy changes in telecom sector but also the dynamic nature of

technology employed. The provision of mobile number portability has made it easy for subscribers to switch to a competitor. Hence it only apt that telecom service providers are knowledgeable and alert about the various factors that impact loyalty. This study has taken into consideration important factors like brand image, mobile number portability, integrated marketing communication and telecom customer satisfaction. The impact of these factors on loyalty and advocacy intentions have been assessed.

II. RATIONALE FOR THE RESEARCH

The UAE economy is poised for further growth and the telecom industry can possibly have multiple players in the future. The survival of any service provider is based on its competency to provide excellent customer experience and also to retain existing customers besides scouting for new subscribers. Hence the current research attempts to assess the impact of important antecedents with a view to analyse such impacts on customer loyalty and advocacy intentions.

III. PROBLEM STATEMENT

Telecom operators no longer face permanent loyalty due to the facility of mobile number portability. Customer satisfaction is perceived differently by customers. Some are more concerned with connectivity issues. Some look at technology aspects while others consider the type of telecom plans available. Some get swayed by brand image while others are more sensitive to support services. Hence it would be prudent for telecom service providers to continuously track various aspects of their service for sustainability and growth.

IV. SCOPE OF THE RESEARCH

The broad scope of this research concerns the telecom experience in UAE. The independent variables comprise Brand Image (BRAN), Mobile Number Portability (MOBI), Integrated Marketing Efforts (INTE) and Customer Satisfaction (SATI). The dependent variables comprise Customer Loyalty (LOA) and Customer Advocacy (ADVO).

V. REVIEW OF LITERATURE

Brand Image: Hafez and Akther (2017) examined the determinants of customer loyalty in telecom sector. This study identified five determinants of customer loyalty in telecommunication sector such as service quality, customer satisfaction, trust,

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brand image, and switching cost. It was found that the company offering quality service to its customers will increase brand image and trust, decrease switching cost and eventually bring high satisfaction to the customers. Satyadi et al. (2017) analysed the causal relations between service quality, customer satisfaction and brand image. Customer satisfaction and service quality significantly contribute to fostering brand image. Elrayah (2017) highlighted that integrated marketing communication and brand equity enjoy a positive relationship. Brand equity and business performance enjoy a positive correlation.

Mobile Number Portability: Leng (2016) examined the consumer preference and willingness to pay for mobile number portability. It was found that low cost, wide network coverage, high internet access, speed of service, no interruption in service, and grievance handling are the main preference of customers in telecom market. This study emphasised that porting duration, cost, and process are the important drivers to ensure better execution of mobile number portability. Nimako et al. (2014) highlighted that the adoption of mobile number portability could result in switching behaviour based on the cost of switching and consumer's attitude towards switching. It was also pointed out that especially in the case of developing countries, educating the consumers can drive mobile number portability.

Integrated Marketing Communication: Egwuonwu et al. (2017) examined integrated marketing communication and customer loyalty in the telecom sector. Advertisements and messages are the main elements of integrated marketing communication strategies for increasing customer loyalty in telecom sector. Sales promotion measures are the main elements of integrated marketing communication in increasing customer loyalty in telecom sector. Tools of integrated marketing communication have significant positive effect on customer loyalty. Patrick (2016) endeavoured to analyse the synergy between management of the environment and efforts of integrated marketing communication in Nigeria. Telecom companies view it as the sole responsibility of the government. Protection of the environment and waste management should be a joint effort of government, corporate entities and individual citizens.

Customer Satisfaction: Bala et al. (2018) suggested that customer satisfaction can be fostered by reducing roaming charges, transparency in billing, ensuring wide coverage and quality, investing more resources in corporate social responsibility, and recruiting local nationals for top management posts. Yallapragada (2017) examined the various determinants of customer satisfaction in telecom sector among university students. Results indicated that price fairness and network coverage are the essential factors influencing customer satisfaction. It was found that price fairness has inverse relationship with customer satisfaction; high price charged for services fetch lower satisfaction. Similarly, network coverage is the main problem in customer satisfaction, and which is generally observed in rural areas. Customer satisfaction when maximised would foster loyalty and retention. Customer satisfaction could be increased when mobile service providers endeavour to invest more in equipment that yield higher quality of calls and wider coverage.

Customer Loyalty: Rizomyliotis et al. (2018) highlighted that service providers could garner more loyalty when they upgrade their infrastructure, have a relationship with consumers that is trustworthy, when they establish innovative

thinking, better leadership and productive network operations. Ernest (2017) assessed the influence of service quality on customer loyalty in cellular mobile industry. This study also measured the relationship among customer commitment, service quality and customer loyalty. This study revealed that service quality has significant effect on customer preference towards selecting mobile service provider. Customer commitment has significant impact on customer loyalty.

Customer Advocacy: Ali and Haque (2017) studied customer satisfaction and service quality of telecommunication sector in Saudi Arabia. This study examined the quality of services offered by mobile operators and its influence on customer satisfaction. Customer satisfaction is the significant factor that assists to maintain present customers in business and service quality dimensions play vital role in building brand advocacy among its customers. Customer satisfaction relies on customer care activities, advocacy in service, package worth, coverage of network in all areas, message quality, uninterrupted internet, and value-added services. Odion (2016) emphasised that mobile operators have to provide enough advocacy measures in order to resolve customer complaints. This study disclosed that mobile service providers are not able to meet the expectations of customers in terms of effective service delivery. Poor service quality would hamper consumer advocacy.

VII. METHODOLOGY

The objective was to ascertain the impact of factors like brand image, mobile number portability, integrated marketing efforts and telecom customer satisfaction on customer loyalty as well as customer advocacy intentions. The population was paid subscribers of telecom service providers in the UAE. The frame was paid subscribers of telecom service providers in the city of Sharjah (one of the important states of the seven emirates). Pre-testing of the research instrument (structured questionnaire) ensured that aspects like comprehensibility, relevance, language and flow were assessed and fine-tuned. Pilot study was undertaken wherein 55 respondents were covered.

Table 1: Constructs and Reliability

Construct	Items	Cronbach Alpha
Brand Image	9	0.908
Mobile Number Portability	4	0.839
Integrated Marketing Communication	5	0.918
Customer Experience Satisfaction	6	0.875
Customer Loyalty	6	0.941
Customer Advocacy	4	0.910

Cronbach Alpha value 0.8-0.9 denotes good internal consistency and above 0.9 denotes excellent internal consistency (Nunnally and Berstein, 1994)

Sample Characteristics: 369 subscribers of Telecom operator Etisalat and 165 subscribers of Telecom service provider Du



aggregating 534 Telecom subscribers were surveyed. Out of 369 Etisalat customers, 141 had pre-paid connection, 114 had post-paid connection and 114 had both pre-paid and post-paid connection. There were 96 pre-paid, 36 post-paid and 33 both pre-paid and post-paid among the 165 Du customers.

VII. ANALYSIS AND RESULTS

Structural Equation Modelling was employed. The observed endogenous variables were LOYA (Customer Loyalty), and ADVO (Customer Advocacy). The observed exogenous variables were BRAN (Telecom Service Provider Brand Image), MOBI (Mobile Number Portability), INTE (Integrated Marketing Efforts of the Telecom Service Provider), and SATI (Customer Experience Satisfaction). The unobserved exogenous variables were the error terms, namely, e1 and e2.

H₁: Good fit is observed for the UAE telecom model.
H₀₁: Good fit is not observed for the UAE telecom model.

Table 2: Analysis of UAE Telecom Structural Model

Path	UC	SC	p
LOYA<-BRAN	0.197	0.250	***
LOYA<-MOBI	0.300	0.161	***
LOYA<-INTE	0.223	0.205	***
LOYA<-SATI	0.446	0.388	***
ADVO<- BRAN	0.092	0.160	0.02*
ADVO<-MOBI	0.185	0.136	0.005**
ADVO<-INTE	0.247	0.311	***
ADVO<-SATI	0.261	0.312	***

* - Significant at p < 0.05; ** - Significant at p < 0.01; *** - Significant at p < 0.001.

UC - Unstandardised Coefficient, SC - Standardised Coefficient

Figure 1: Structural Model with Unstandardised Coefficients

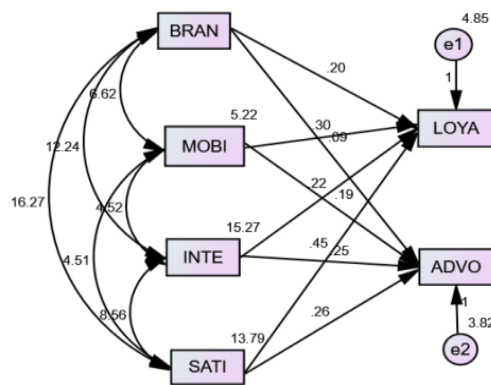


Table 3: Structural Model Fit Indices

Model Fit Indices	Model Vales	Preferred Values
CMIN/df	2.113	<3
GFI	0.997	>0.9
AGFI	0.943	>0.9
NFI	0.998	>0.9
CFI	0.999	>0.9

RMSEA 0.066 <0.06

For all paths p value was found to be significant. All major model fit indices were within acceptable range (Haier et al., 2009; Hooper et al., 2008; Steiger, 2007) and hence the structural model exhibits good fit.

It can be seen from Table 1 that the coefficient of brand image being 0.197 represents the effect of brand image on loyalty, holding other variables as constant. The p value is significant at 0.1%. For every 0.197-unit increase in Brand Image, there will be 1-unit increase in Customer loyalty.

The coefficient of mobile number portability being 0.3 represents the effect of mobile number portability on loyalty, holding other variables as constant. The p value is significant at 0.1%. For every 0.3-unit increase in Mobile number portability, there will be 1-unit increase in Customer loyalty.

The coefficient of integrated marketing efforts being 0.223 represents the effect of integrated marketing effortson loyalty, holding other variables as constant. The p value is significant at 0.1% level. For every 0.223-unit increase in Integrated marketing efforts, there will be 1-unit increase in Customer loyalty.

The coefficient of telecom customer satisfaction being 0.446 represents the effect of telecom customer satisfaction on loyalty, holding other variables as constant. The p value is significant at 0.1%. For every 0.446-unit increase in telecom customer satisfaction, there will be 1-unit increase in Customer loyalty.

The coefficient of brand imagebeing 0.092 represents the effect of brand imageon advocacy, holding other variables as constant. The p value is significant at 5% level. For every 0.092-unit increase in brand image, there will be 1-unit increase in customer advocacy.

The coefficient of mobile number portabilitybeing 0.185 represents the effect of mobile number portabilityon advocacy, holding other variables as constant. The p value is significant at 1%. For every 0.185-unit increase in mobile number portability, there will be 1-unit increase in customer advocacy.

The coefficient of integrated marketing effortsbeing 0.247 represents the effect of integrated marketing effortson advocacy, holding other variables as constant. The p value is significant at 0.1% level. For every 0.247-unit increase in integrated marketing efforts, there will be 1-unit increase in customer advocacy.

The coefficient of telecom customer satisfactionbeing 0.261 represents the effect of telecom customer satisfactionon advocacy, holding other variables as constant. The p value is significant at 0.1%. For every 0.261-unit increase in telecom customer satisfaction, there will be 1-unit increase in customer advocacy.

VIII. CONCLUSION

The current research revealed that as far as customer loyalty is concerned, satisfaction and mobile number portability should be the main concern and focus areas. The case of customer advocacy revealed that satisfaction and marketing efforts are the main concerns and focus areas. Customer satisfaction is a holistic term and encompasses service quality, trust, service design and delivery as well as efficient customer care. Quality of the signals and minimal call disruptions need to be ensured to sustain



the competitive edge. This calls for continuous and heavy investments in infrastructure and updated technologies. The current service providers are both majorly owned by the Government and hence the authority to regulate all operations rests with the concerned departments.

Traditional marketing would not suffice in a digital era. The marketing efforts must be targeted at all media and omni-channel touch points need to be generated to disseminate information and to always assist the subscribers. Pricing concerns need to be addressed and the width and depth of services needs to be examined.

IX. LIMITATIONS

The current research has employed four independent variables only. The survey was restricted to the city of Sharjah. The findings cannot be extrapolated to other emirate states. The telecom environment is changing at a rapid pace and hence customer perceptions keep changing.

X. FUTURE RESEARCH

Future research can be undertaken on technology aspects like 5G, omni-channel service delivery, telecom plans and pricing, data security issues, IoT and traffic explosion.

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