Study of User Growth in Cellular Network Service Industry on Lombok Island Indonesia

Ananta Pratama Chrisna Putra

Postgraduate Student School of Economics and Business, Telkom University Bandung, Indonesia <u>anantapc@student.telkomuniversity.ac.id</u>

Rina Djunita Pasaribu

Strategic Management Lecturer School of Economy & Business, Telkom University Bandung, Indonesia <u>rinadjunita@telkomuniversity.ac.id</u>

Abstract

Lombok Island is one of the islands which is prepared by the Indonesian Government to become a major tourist attraction after Bali Island. Coupled with the existence of a new destination in Mandalika, which has an international class circuit that is used for major international racing MotoGP and WSBK events. However, the basis of this research is the mobile network service users anomaly in Lombok Island. It was found that the number of users based on BPS data for Lombok Island is still at an average of 63% of the total population of Lombok Island. This is a unique phenomenon, because the average user is far below of Bali Island which has reached at 94%, even the national average which is already at 91%. In this research, there are variables of price, network quality, service quality, and corporate image as independent variables which serve as a measure for user growth as dependent variable in Lombok Island. The objective of this research is to know how the preposition of independent and dependent variables are, and also to know how the effects of each variable relation are. This research used quantitative method with 100 respondents as users and operator representatives, fitting the limitation of operator employees number on unit level in Lombok Island. Then from 100 respondents, divided based on the Lombok Island mobile network service operators market share. The research indicated a positive and significant effect to each of independent variables to user growth in Lombok Island mobile network service industry.

Keywords

User Growth, Price, Network Quality, Service Quality, Corporate Image

1. Introduction

In Indonesia, mobile network service plays important role as internet access and the users always growing year by year. The internet users in Indonesia prefer using mobile network service because of its simplicity due to being able to access the internet using smartphone in their hands. In fact, the mobile network service operators on competing grabbing users to obtain more revenues, not only maintaining existing users but also new potency users. On other side, the cheapest with the most stable mobile network service will be the first choice for the users.

Talking about users, this research focuses on Lombok Island that still has low mobile network service users compared to Bali Island that has the same demographic and history as tourist attraction island. Lombok Island mobile network service users are about 63% and under national average users are about 91%, moreover so far from Bali Island with mobile network service users about 94% on 2021. It would be as an issue, Lombok Island projected will be as one of prestige international race organizers for next 10 years for MotoGP and WSBK Event that will be held in Pertamina Mandalika International Street Circuit.

In detail to mobile network service operators, there are 4 operators in Lombok Island, the most dominating is XL Axiata, with the runner up is Telkomsel, and the new entrant IOH (Indosat Ooredoo Hutchison) with Smartfren. XL

Axiata is dominating in Lombok Island with market share about 70% with followed by Telkomsel about 28% and the rest sharing user between IOH and Smartfren about 2%. Before the research started, the researchers interviewed randomly Lombok Island mobile network service users, for more understanding the user's perspectives about mobile network service industry condition in Lombok Island. The researchers found that Lombok Island mobile network service users are price sensitive, expected stable network quality, friendly and supportive after-sales service, and aware about corporate image.

4 Factors were found by researchers, will be the supporting variables of user growth variables as focus on this research. Previous studies by Phokeer et al. (2016) concluded that price, network quality, and service quality have positively effect to user growth. Another previous study by Duncan (2013), strengthen previous study, concluded that price and network quality has positively effect to user growth in south Africa. Then previous study specifically about service quality by (Ng et al., 2020) concluded that service quality have positively effects to user growth in Hong Kong. And finally previous study specifically about corporate image by (Haro et al., 2020) concluded that corporate image have positively effect to user growth in Samsung study case. Based on theory from previous studies above, this research expected be solution or reference for low mobile network service user problems for mobile network service operators in Lombok Island. Later, mobile network service operators can make a right strategy for their future work program.

1.1. Objectives

This research aims to:

1. To determine the respondent's perspective level of product prices are in accordance with user capabilities, network quality is in accordance with user needs, service quality has met user desires, corporate image is good according to the user's point of view, and user growth is good in the mobile network service industry in Lombok Island, which will be described to continuum line.

2. To determine the effect of price, network quality, service quality, corporate image have a positive and significant relationship (partially and simultaneously) on user growth in the mobile network service industry in Lombok Island.

2. Literature Review

Mobile Network Service

Mobile network service is GSM (Global System for Mobile Communications) based technology that provides internet access and dedicated voice for users. Specifically in Indonesia, mobile network service has been developed up to 5G technology, which is supports for high-speed internet with low latency that can make internet user experience better than other technologies before. The internet is the center of information and opportunities for all users around the world. Maicas & Sese (2011) referenced to Greenspan (2000) stated, IT (Information Technologies) be main source of economic growth on modern economic today that providing knowledge-centric world need. From here, mobile network service plays an important role in providing technology according to the users need. Mobile network service operators are challenged how to develop high-cost newest cellular technologies and sell the mobile network service product with cheapest price for the users. In other side, mobile network service operators must fulfill corporation profit target. So, the mobile network service operators should have strategies for balancing price and network quality for grabbing new potency users and supported by service quality and corporate image for maintaining existing users.

Mobile Network Service User

Mobile network service users are the main key of this business. They demand stable internet connection and clear dedicated voice at a cheap price. This research defined mobile network service user as the people that use mobile network service (subscribed and integrated to at least one operator SIM Card) and at minimum has been twice recharge operator deposit or buy operator internet package for their SIM Card. At the simple concept, industry needs users to sell their products, at the end for keep corporation long term sustainability. Naeruz (2018) stated, customers or users are the goal of corporation, which is corporation competing for grabbing as many as can customers to increase corporation profit. Then operators will need strategic management for fulfilling their mobile network service users and maintaining their business sustainability.

Strategic Management

Corporate need a concrete strategy as guidance for running the business and mitigation scenarios for fluctuating market conditions and market demands with the main goal to keep corporation business long term sustainability. With the precise strategy and execution for market conditions, it will affect corporate performance and vice versa. Corporate performance will affect the user's attention and interest in corporate products. Sutjipto et al. (2019) stated, competitive

strategy significantly affects to business performance. It means that every corporate must show their product as their superiority and minimize their weaknesses with good value for their users. This research uses 3 strategic management theories based on previous studies in corresponding mobile network service issue in Lombok Island, SCP (Structure, Conduct, Performance) Paradigm, Strategic Management Model, and Three Level of Strategic.

SCP Paradigm in first time stated by Mason in 1939. Frastika et al. (2020) stated, structure of the industry determines how industry actors behave (conduct), and at the end, it will determine the industry performances. Structure is the method to measure the level of corporate competition in an industry (Frastika et al., 2020). Structure is the main fundamental of this paradigm that affects other aspects. Futhermore, conduct is the responds of the corporates of an industry to achieve their goal and win the competition (Frastika et al., 2020). From the industry perspective, the actors of the industry will determine direction of this industry. And finally, performance is the performance result of the industry that determined by actors' strategies and action to survive and dominate the industry (Frastika et al., 2020). Output of SCP Paradigm measured from operational layer of industry how positively or negatively value given by the actors.

Strategic Management Model used to measure how effective strategic model that implemented by corporate management layer. Wheelen et al. (1984) stated, there are 4 sequential strategic phases, environmental scanning, strategy formulation, strategy implementation, and evaluation and control. Environmental scanning phase is the phase to measure corporate weakness and strengths as the first step of corporate make a strategy. This phase focuses on external and internal condition of the industry to find corporate preposition in the industry. Next to the strategy formulation phase is the phase to design strategies for the corporation. David (2007) stated, strategy formulation as like strategy planning, involves the step of developing vision and mission of the corporation, internal and external environmental audits, making short term and long term goal, evaluating, and selecting strategies. This phase is most critical phase, because of will affect to next phase of strategic management (Shujahat et al., 2016). Then, the strategy implementation phase is the phase to execute strategies that have been designed. David (2007) stated, the strategy implementation as like strategy management process, involves activity to state yearly goal, making policy for each business functional, and allocating resources to achieve goal of corporation. This phase is how corporations execute strategies that have been designed as a vision and mission of corporation. Finally, evaluation and control phase is the phase to evaluate and control as corrective of implementation phase. David (2007) stated, the evaluation and control aims to change and take corrective action of designed strategy, measure and evaluate implementation phase performance.

Three Level of Strategic used to measure how effective strategies that implemented by each layer of corporate. Johnson et al. (2008) stated, there are 3 strategic levels of the corporation, corporate strategy level, business strategy level, and functional strategy level. The objective to be divided to 3 layers, to split business strategic level in a corporation. Johnson et al. (2008) stated, corporate strategy determines business range of corporation and organization direction related to managerial and product to obtain competitive advantages from the competitors. Corporate strategy made by top management and significantly become the drive direction of corporation long term performance (Saidia et al., 2021). Then, Business strategy is the middle strategy level in a corporation that focuses on implementing corporate strategy and functional strategy for resource utilization and business process. And finally, functional strategy is the lowest strategic level in a corporation that focuses on business operations. Rahman et al. (2018) stated, functional strategy for utilization and business strategy implementation. David (2011) stated, functional integration to support the successful of business strategy implementation. David (2011) stated, functional management, they are marketing management, operation management, information system management, research, and development management (innovation management), human capital management, and financial management.

This research tries to describe variable prepositions on strategic management. Based on Three Level of Strategic, price, corporate image, and service quality on marketing management. And network quality on operation management. And based on SCP Paradigm, user growth on performance management.



Figure 1. Strategic Management Concept

Source: (Frastika et al., 2020), (Wheelen et al., 1984), (Johnson et al., 2008)

Price

Price is the main element to measure how market share of corporate in an industry. Price is the only marketing element that impact to corporate income (Tjiptono & Diana, 2016). The definition of price is the amount of money charged for a product or service as exchange rate of benefits that user use or owned from the seller (Kotler & Armstrong, 2012). Dharmmesta (2011) stated, the sum of value product or service that exchanged between buyer and seller and the value obtained by bargaining or has been determined by the seller. Specifically in Indonesia case, prepaid service has bigger portions than postpaid service (Amani et al., 2015). Price has 4 dimensions that stated by Nugroho & Yuniarinto (2021) reference to Kotler & Armstrong (2012) divided to:

1. Price Affordability

How affordable is the price given by the seller to the users. The more affordable the price, the more possibility the user will buy the product or service.

2. Competitive Price

Users always compare price between products. User expect can consume product or service with as rational price as possible for fulfill their need.

3. Price and Product Quality Match

In user perspective, price is the most important parameter to decide product or service to buy. Users always expect with high price they have paid, the product or service should has high quality too.

4. Price and Value Matching

Users always buy products or services with a price that has been determined by the seller. If the seller has been given a high price, but the value of the product or service is below the expectations of the users, it will decrease the possibility of the user to buy the product or service.

Network Quality

Network quality is the main product of the mobile network service. Because the product is intangible, the operator measures the quality of service that users have been received using the term named user experience. The definition of user experience is an emotion, intuition, and the connection that users feel when using the product or service (Wairooy, 2020). Mobile network service operators also must be sensitive about user experience in the field, because though based on user's smartphone indicated has good signal, it still not guarantees that users will receive good user experience. Soriano et al. (2020) stated, Radio signal strength and quality do not guarantee that a mobile user will actually be able to employ the service. Network quality has 2 dimensions that stated by Soriano et al. (2020) to measure mobile user experience, divided to:

1. Coverage

Coverage defined how wide geography covered by signal of mobile network service in an area of a BTS (Base Transceiver Station) that owned by operator.

2. Quality of Service

Quality of service defined how excellence cellular mobile service is received by the users. Quality of service focusing on network technical, for example how fast internet connection, how clear and stable dedicated voice service etc.

Service Quality

Service quality (SERVQUAL) is the corporate method to maintaining existing user and measure how satisfaction users use the product or service. Service quality in this research represents as after-sales service. The definition of service quality is the benchmark of how excellence the product or service can fulfill user's expectations (Tjiptono & Diana, 2016). From the benchmark, corporations can measure business performance by comparing user's expectations to corporation's achievements. Service quality has 5 dimensions that stated by Parasuraman et al. (1998), divided to: 1. Tangible

Sabran (2012) reference to (Kotler & Armstrong, 2012) stated, tangible is the physical environment where product or service delivered to the user, which is the corporate interact with the user.

2. Empathy

Sabran (2012) reference to (Kotler & Armstrong, 2012) stated, empathy is the corporation's ability, that represented by corporation's employees, to give attention to the users.

3. Reliability

For mobile network service industry, the users expect continuity without interruption of service anytime and anywhere. (Belwal & Amireh, 2018) stated, reliability has big effect on mobile network service industry.

4. Responsiveness

Responsiveness is the corporation's ability to give fast and responsive service to minimize negative perspective of the users. Negative perspective of the users can caused bad service quality for the corporations.

5. Assurance

Sabran (2012) reference to (Kotler & Armstrong, 2012) stated, corporate build user's trust and loyalty through their employees that interact directly with the users.

Corporate Image

Corporate image is the branding of the corporation that has been known by the users or their competitors. A good corporation must has a positive corporate image to convince the corporation's user that the corporation has good value products or services. The definition of corporate image is user's perspective to a corporation (Barich & Kotler, 1991). A user's perspective will determine the value of corporation's product or service value. Corporate image has 5 dimensions that stated by Mat'ová et al. (2015) for this research, divided to:

1. Agreeableness

Agreeableness is the corporation's empathy to external and users. Agreeableness show social responsibility and trust of the company (Zameer et al., 2015).

2. Enterprise

Enterprise is how the corporation innovating and growing up. Enterprise reveals the meaning of innovation and excitement (Zameer et al., 2015).

3. Competence

Competence is how the corporation maintains business performance. Competence refers its capabilities and its efficiency (Zameer et al., 2015).

4. Chic

Chic is how the corporation maintains quality of their business sector. Chic refers to sophistication (Zameer et al., 2015).

5. Ruthlessness

Ruthlessness is how the corporation manages the negative side of their business sector. Ruthlessness is the single element of the corporate image that shows the negative meaning in sense of autocracy of the company (Zameer et al., 2015).

User Growth

User growth is the overview of increase or decrease user of the industry per year. More users use mobile network service, it will affect corporation profit. User growth has 2 dimensions that stated by (Lubis & Ashari, 2016), divided to:

1. External User

External user is defined as the user that has not been using mobile network service yet and they can be a new potency user.

2. Internal User

Internal user is defined as the user that has been using mobile network service and usually they are existing user.

3. Method

The method used in this research is the quantitative method, with measurement scale used to measure the variable operational is using Likert Scale. Likert Scale determines how strongly respondents agree or disagree with the statement based on a four-choice scale, to ensure respondents' agreement or disagreement to the statements. To analysis method used in this research is PLS-SEM (Partial Least Square-Structural Equation Modeling) that can be used to analyze a weak theory and used Smart PLS 3 tools that can be used to analyze a minimum data sample. And the detail of thinking framework in this research as follows:



Figure 2. Framework Source: (Phokeer et al., 2016), (Duncan, 2013), (Ng et al., 2020), (Haro et al., 2020)

Based on the framework above, the hypothesis are as follows:

H₁: Product prices are in accordance with user capabilities, network quality is in accordance with user needs, service quality has met user desires, corporate image is good according to the user's point of view, and user growth is good in the mobile network service industry in Lombok Island

H₂: Price, network quality, service quality, corporate image have a positive and significant effect (partially and simultaneously) on user growth in the mobile network service industry in Lombok Island

4. Data Collection

This research was conducted to users and operator representatives in Lombok Island mobile network service industry. The data source used in this research divided to primary data and secondary data. Sugiyono (2016) stated, primary data is the data that provided directly by the source of the research object and secondary data is the that provided indirectly by the source of the research object, for example from article, website etc. To meet number of samples of this research, fitting the limitation of operator employees number on unit level in Lombok Island. Specifically in this research, the sample used multi respondents, users and operator representatives in Lombok Island mobile network service industry. Each respondents number is 100 respondent and divided by celluler mobile service market share in Lombok Island. In fact, based on previous research by Pasaribu (2016) stated that the dominant operator if has market share at least 85% of the population, so still there is no dominating operator in Lombok Island. The user respondents

focus on price, network quality, service quality, and corporate image. And the operator representative respondents focus on user growth variable. For the illustration of sampling proportion scenario as follows (Table 1):

User Despendents		Variable			Operator Representative	Variable	
User Respondents	X ₁	X ₂	X ₃	X4	Respondents	Y ₁	
U1 (XL Axiata)					OR1 (XL Axiata)		
U2 (XL Axiata)					OR2 (XL Axiata)	_	
U3 (XL Axiata)	1				OR3 (XL Axiata)	n	
	2	×٩				;et	
		2				V.	
		0				1	
U70 (XL Axiata)			V		OR70 (XL Axiata)	D	
U71 (Telkomsel)			2	3	OR71 (Telkomsel)	ati	
U72 (Telkomsel)				•	OR72 (Telkomsel)	A	
U98 (Telkomsel)					OR98 (Telkomsel)		
U99 (Indosat					OR99 (Indosat Ooredoo		
Ooredoo Hutchison)					Hutchison)		
U100 (Smartfren)					OR100 (Smartfren)		
U : User					OR : Operator Representa	ntive	

Table 1. Sampling Proportion Scenario

And in this research, there were in total 267 respondents, 116 user respondents and 151 operator representative respondents. Then from all of samples, taken 100 user respondents and 100 operator representatives that meet the criteria during the screening question as the scenario above.

5. Result and Discussion

5.1. Descriptive Analysis

Based on the results of questionnaire characteristic analysis, 100 user respondents and 100 operator representative respondents met the criteria. The sex distribution for user respondents are 73 male respondents with 27 female respondents, and for operator representative respondents are 72 male respondents with 28 female respondents. Then, the age distribution for user respondents in the range 18 - 55 years old dominated by 30 - 45 years old at 44% of the user samples total and the age distribution for operator representative respondents in the range 18 - 55 years old dominated by 23 - 30 years old at 46% of the operator representative samples total. And finally, the education distribution for user and operator representative respondents dominated by bachelor level, that in user respondents at 52% of the user samples total and in operator representative respondents in total 38% of the operator representative samples total.

Based on the results of descriptive analysis calculations among all of variables, the corporate image variable has highest value at 74,09%, followed by the user growth variable at 73,58%, the price at 73,38%, the network quality variable at 70,94%, and finally the service quality at 68,11%.

5.2. Model Analysis

Outer Model

Convergent Validity

The first validity test is convergent validity testing. Ghozali (2014) stated, to have high validity if the factor loading value of the variables is greater than 0,7 and the AVE (Average Variance Extraction) value of the variables is greater than 0,5. Then all of variables calculated and analysed used Smart PLS applications and the research model result as follows:



Figure 3. Interconstruct Value of the Research Model

Table 2. Outer Factor Loading Value of the Research Model

Variable	Indicator Code	Outer Loading Value	Remark	Variable	Indicator Code	Outer Loading Value	Remark	Variable	Indicator Code	Outer Loading Value	Remark	Variable	Indicator Code	Outer Loading Value	Remark
	PR1	0,940	Valid	1/2	NQ1	0,959	Valid		SQ1	0,916	Valid		CII	0,949	Valid
	PR2	0,928	Valid	A2 Natawark	NQ2	0,946	Valid		SQ2	0,957	Valid		CI2	0,969	Valid
	PR3	0,883	Valid	Quality	NQ3	0,951	Valid		SQ3	0,936	Valid	Valid X4 Valid Commente	CI3	0,956	Valid
VI Dalas	PR4	0,909	Valid		NQ4	0,957	Valid		SQ4	0,937	Valid		CI4	0,927	Valid
лите	PR5	0,930	Valid					X3	SQ5	0,916	Valid	Imaga	CI5	0,942	Valid
	PR6	0,909	Valid					Service	SQ6	0,868	Valid	image	CI6	0,958	Valid
	PR7	0,927	Valid					Quality	SQ7	0,951	Valid		CI7	0,952	Valid
	PR8	0,920	Valid						SQ8	0,936	Valid		CI8	0,950	Valid
									SQ9	0,942	Valid				
									SQ10	0,952	Valid				
									SO11	0.945	Valid				

Variable	Indicator Code	Outer Loading Value	Remark
	UG1	0,831	Valid
	UG2	0,832	Valid
Y User	UG3	0,928	Valid
Growth	UG4	0,925	Valid
	UG5	0,909	Valid
	UG6	0,916	Valid

Table 3. Average Variance Extraction Value of the Research Model

Variable	AVE Value	Remark
X1 Price	0,844	Valid
X2 Network Quality	0,909	Valid
X3 Service Quality	0,870	Valid
X4 Corporate Image	0,904	Valid
Y User Growth	0,794	Valid

Based on table 2 above factor loading values each variables values above 0,7 and Table 3 above AVE value each variable above 0,5, it can be concluded the model used in this research model valid and can continue to next stage of testing.

Discriminant Validity

The next stage of validity testing is discriminant validity testing. In this testing, this research used Fornell-Lacker value to measure the validity of the research as follows:

	X1 Price	X2 Network Quality	X3 Service Quality	X4 Corporate Image	Y User Growth
X1 Price	0,918				
X2 Network Quality	0,828	0,953			
X3 Service Quality	0,728	0,771	0,933		
X4 Corporate Image	0,704	0,727	0,751	0,951	
Y User Growth	0,825	0,839	0,809	0,807	0,891

Table 4. Fornell-Lacker Value of the Research Model

Based on Table 4 above, the correlation value of the variables measuring the association constructs is higher than the other constructs, it can be concluded that the model used in this research model has good discriminant validity.

Reliability

The rule of thumbs reliability measurement if Cronbach's Alpha value is greater than 0,6 and Composite Reliability value is greater than 0,7. The calculation result as follows:

Table 5.	Cronbach'	s Alpha	and Com	posite R	eliability	Value

	Cronbach's	Minimum	Composite	Minimum	Domort
	Alpha	Value	Reliability	Value	кешатк
X1 Price	0,973	0,6	0,977	> 0,7	Reliable
X2 Network Quality	0,967	0,6	0,976	> 0,7	Reliable
X3 Service Quality	0,985	0,6	0,987	> 0,7	Reliable
X4 Corporate Image	0,985	0,6	0,987	> 0,7	Reliable
Y User Growth	0,948	0,6	0,959	> 0,7	Reliable

Based on Table 5 above, each variable has Cronbach's Alpha value above 0,6 and Composite Reliability above 0,6, it can be concluded that the research model meets the reliability criteria.

Inner Model

R-Square (R²)

R-Square has 3 classifications, if $R^2 = 0,67$ means has strong value, then if $R^2 = 0,33$ means has moderate value, and the final if $R^2 = 0,19$ means has weak value. The R-Square calculation in this research as follows:

Table 6. R-Square Valu	ie
R-Square	R-Square Adjusted
Y User Growth 0,826	0,819

Based on Table 6 above, the R-Square value of user growth (Z) variables is 0,826. This indicates that 82,6% of the user growth can be affected by the price (X1), network quality (X2), service quality (X3), and corporate image (X4), while other variables outside above affected remaining 17,4%. So, it can be concluded that the R-Square value in this research in the strong classification.

5.3. Hypotesis Testing

This research tested the relationship between variables to find the truth of hypothesis used T Statistics and P Values. The condition hypothesis is accepted, if T Statistics value is greater than 1,65 and P Values is less than 0,05. The calculation as follows:



Figure 4. Path Coefficient (t-Statistics) Value of the Research Model

Table 7. Path Coefficient Values, t-Statistics Values, and p-Valu

Hypotesis	Relation Between Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
H _{2.1a}	X1 Price -> Y User Growth	0,264	0,272	0,092	2,869	0,00429
H _{2.1b}	X2 Network Quality -> Y User Growth	0,257	0,249	0,100	2,572	0,01041
H _{2.1c}	X3 Service Quality -> Y User Growth	0,212	0,219	0,078	2,727	0,00661
H _{2.1d}	X4 Corporate Image -> Y User Growth	0,275	0,270	0,083	3,303	0,00103

Based on Table 7 above, the value of allistics is greater than 1,65 and P Values is less than 0,05 in all of hypothesis, it can be concluded that all of hypothesis are accepted.

The Effect of Price, Network Quality, Service Quality, and Corporate Image on User Growth

Based on research results, the value of t-Statistics is greater than 1,65 and P Values is less than 0,05, it means that all H_2 accepted. Corporate image is the most significant positive effect on user growth for mobile network service industry in Lombok Island, among other variables. It indicates that corporate image has better value than price, network quality, and service quality to increase user growth. It fits with previous studies by (Haro et al., 2020) that stated corporate image has effect to user growth.

Corporate image as the highest positive effect to user growth, the mobile network users in Lombok Island are aware of the corporate that provided their service. The mobile network service operators must maintain their corporate image to keep their user's preference to choose their product or service. It will be a challenge for the operators, if the user has bad perspectives about them, it will make corporation's possibility to grab users decline. As Prasetyo et al. (2017) stated, the user's perception will be reflected in user's memories, it means that once users have good perception about the corporation, it will be a good memory for them.

6. Conclusion

Based on result of the research, it concluded that price, network quality, service quality, and corporate image have impact on user growth with the following description:

1. Based on questionnaire result, the user perspective about price has been in accordance with user capabilities, network quality has been in accordance with user needs, service quality has been met user desires, corporate image has been in good according to the user's point of view, and user growth has been good in the mobile network service industry in Lombok Island. In detail, the corporate image variable has highest value at 74,09%, followed by the user growth variable at 73,58%, the price at 73,38%, the network quality variable at 70,94%, and finally the service quality at 68,11%. It indicates that corporate image is the best variable for mobile network service industry in Lombok Island. The user assume that the corporate image of mobile network service operator as the key of mobile network business

in Lombok Island. In other side, in this research found that service quality have a lowest value and it should be the room of improvement to improve user growth of mobile networks service industry in Lombok Island, especially in after-sales service.

2. Based on analysis, price, network quality, service quality, corporate image have a positive and significant effect on user growth. In detail, corporate image is the most significant positive effect on user growth for mobile network service industry in Lombok Island with t-Statisctic value 3,303. It indicates that corporate image is the most contributor of user growth for mobile network service industry in Lombok Island with t-Statisctic value 3,303. It indicates that corporate image is the most contributor of user growth for mobile network service industry in Lombok Island compared to other variables. The operators should focus and improve the corporate image rather than price and network quality to improve user growth in mobile network service industry in Lombok Island.

Suggestion

There are several limitations and lacking in this research, so the suggestion for next research for additional and improvement with the following description:

1. In future research, the research added other variables about product quality to measure how effective products accepted by the users and service accuracy to measure how long outage of the service on a period.

2. Expanding the research object with same case as Lombok Island. Based on Badan Pusat Statistik (2021), the area with mobile network service user growth under national average in Papua and Nusa Tenggara Timur province in Indonesia

3. For mobile network service operators in Lombok, based on data analysis, mobile network service users still at 63% of Lombok Island population, it means still there are market potency about 37% for market improvement and increasing revenue.

References

- Amani, H., Alamanda, D. T., & Anggadwita, G., Identification of Customer Values in Telecommunication Service Industry: A Case of Postpaid Cellular Customers in Indonesia. 3rd International Conference on Information and Communication Technology (ICoICT), 2015. https://www.scopus.com/record/display.uri?eid=2-s2.0-84960494751&origin=resultslist&sort=plf-f
- Badan Pusat Statistik., Persentase Rumah Tangga yang Memiliki/Menguasai Telepon Seluler Menurut Provinsi dan Klasifikasi Daerah, 2021.
- Barich, H., & Kotler, P., A framework for marketing image management (1991st ed.). Pearson College Div., 1991.
- Belwal, R., & Amireh, M., Service Quality and Attitudinal Loyalty: Consumers' Perception of Two Major
- Telecommunication Companies in Oman. Arab Economic and Business Journal, 2018.
- Cokins, G., Strategic Business Management: From Planning to Performance. Wiley, 2017.
- David, F. R., Strategic Management: Concepts and Cases. Pearson Prentice Hall, 2007.
- David, F. R., Strategic management: Concepts and cases. Prentice Hall, 2011.
- Duncan, J., Mobile network society? Affordability and mobile phone usage in Grahamstown East. Communicatio: South African Journal for Communication Theory and Research, 2013.
- Frastika, F. D., Wijayantini, B., & Gunawan, Y., Analisis Structure Conduct Performance (SCP) pada Industri Peternak Telur Bebek di Desa Kencong. *Fakultas Ekonomi Dan Bisnis Universitas Muhammadiyah Jember*, 2020.

Greenspan, A. (2000). The Revolution in Information Technology. Conference on the New Economy., 2000

- Haro, A., Oktaviana, D., Dewi, A. T., Anisa, W., & Suangkupon, A., The Influence of Brand Image and Service Quality towards Purchase Intention and Its Impact on the Purchase Decision of Samsung Smartphone. International Conference on Economics, Business and Economic Education 2019, 2020.
- Johnson, G., Scholes, K., & Whittington, R., *Exploring corporate strategy: Text and cases*. Financial Times Prentice Hall, 2008.
- Kotler, P., & Armstrong, G., Principles of Marketing. Prentice Hall, 2012.
- Lubis, S. L., & Ashari, A. G., Faktor-Faktor Yang Mempengaruhi Tingkat Pertumbuhan Pelanggan terhadap Pelayanan Karyawan di Hotel Mega Permata Kota Padang Sidimpuan. *Wahana Inovasi, 2016*.
- Maicas, J. P., & Sese, F. J., Network Effects in the Mobile Communications Industry: An Overview. *ResearchGate*, 2011.
- Maťová, H., Dzian, M., Triznová, M., Paluš, H., & Parobek, J., Corporate Image Profile. *Procedia Economics and Finance, 2015*.

- Naeruz, M., Analisis Pengaruh Jumlah Pelanggan, Tarif dan Promosi terhadap Pendapatan Industri Telekomunikasi (PT. Indosat OOredoo, PT. Telkomsel, PT.XL Axiata) Di Indonesia. Jurnal Kajian Ekonomi Dan Kebijakan Publik, 2018.
- Nugroho, F. A., & Yuniarinto, A., Pengaruh Kualitas Produk, Harga, dan Citra Merek Terhadap Keputusan Pembelian Kartu Telkomsel. *Jurnal Ilmiah Mahasiswa FEB, 2021*. https://jimfeb.ub.ac.id/index.php/jimfeb/article/viewFile/7808/6727
- Ng, H., Li, T., & Yeung, M., A Pilot Study Of The Hong Kong Smartphone Market: How Service Quality Affects Repurchase Intention Via Customer Satisfaction And Attitudinal Loyalty. International Journal of Business and Management, 2020.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L., SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retaling*, 1998.
- Pasaribu, R. D., Model Rantai Pasok Strategik Broadband dan Skema Pemecahan Masalah Terintegrasi untuk Industri Fixed Broadband Indonesia. *Disertasi, Ilmu Manajemen Universitas Padjajaran, 2017.*
- Prasetyo, A., Yulianeu, & Haryono, A. T., Pengaruh Corporate Image, Harga, dan Kualitas Pelayanan Terhadap Kepercayaan dan Loyalitas Pelanggan (Studi Kasus di Bis Kota Perum Damri Semarang). Journal of Management 2017. http://jurnal.unpand.ac.id/index.php/MS/article/view/863
- Phokeer, A., Densmore, M., Johnson, D., & Feamster, N., A First Look at Mobile Internet Use in Township Communities in South Africa. ACM DEV '16: Proceedings of the 7th Annual Symposium on Computing for Development, 2016.
- Rahman, N., Othman, M., Yajid, M., Rahman, S., Yaakob, A., Masri, R., Ramli, S., & Ibrahim, Z. J. M. S. L., Impact of strategic leadership on organizational performance. Strategic orientation and operational strategy. *Management Science Letters*, 2018.
- Sabran, B., Manajemen Pemasaran. Penerbit Erlangga, 2012.
- Saidia, A. A., Ayodele, M. S., & Maxwellc, W. P., Firm Level Strategy and Value Creation in Small Businesses: The Nigerian Experience. *Gadjah Mada International Journal of Business*, 2021.
- Soriano, S., BILE, D., & Millogo, T. C., Measuring Mobile Network Performance: Coverage, Quality of Service and Maps. Arcep for the French-Speaking Network of Telecommunication Regulation (Fratel), 2020.
- Sugiyono, Metode Penelitian & Pengembangan. Alfabeta, 2016.
- Sutjipto, Moh. R., Sule, E. T., Sucherly, Kaltum, U., & Prasetio, A., The Role of Company Resources and Strength of Industrial Competition on Competitive Strategy in Indonesian Wholesale Network Industry. Academy of Strategic Management Journal, 18(5), 2019. https://www.scopus.com/record/display.uri?eid=2-s2.0-85078887004&origin=resultslist&sort=plf-f
- Tjiptono, F., & Diana, A., Pelanggan Puas? Tak Cukup! Andi, 2016.
- Wairooy, I. K., *Mobile User Experience*. SOCS Binus. <u>https://socs.binus.ac.id/2020/12/01/mobile-user-experience/#:~:text=User%20Experience%20atau%20biasa%20disebut,saat%20menggunakan%20situs%20atau%20produk</u>, 2020.
- Wheelen, T. L., Hunger, J. D., & Hoffman, A. N., Strategic Management and Business Policy: Globalization, Innovation and Sustainability. Pearson Education, 1984.
- Zameer, H., Tara, A., Kausar, U., & Mohsin, A., Impact of Service Quality, Corporate Image and Customer Satisfaction Towards Customers Perceived Value in Banking Sector in Pakistan. *International Journal of Bank Marketing*, 2015.

Biographies

Ananta Pratama Chrisna Putra is a postgraduate student at the Schools of Economics and Business at Telkom University. Before continuing his Master's in management education, he earned a Bachelor's degree in informatics engineering at the Institut Teknologi Sepuluh Nopember Campus in 2014. Apart from being a student at Telkom University, Ananta Pratama Chrisna Putra works at the largest mobile network service company in Indonesia, PT Telkomsel, as engineer network operations and productivity in Lombok Island. In general, he is responsible for the quality of the network customers experience and network operational in Lombok Island.

Rina Djunita Pasaribu is a lecturer of Strategic Management field including Digital Business Strategy Studies at School of Economics and Business at Telkom University. She started her career at PT. Telkom, state-owned information and communications technology and telecommunications network company in Indonesia, culminated in becoming the Senior General Manager of Telkom Corporate University, Vice President of Human Capital Development at Telkom, and Vice-Chancellor II for Resources at Telkom University. Dr. Rina has completed her

doctoral studies at Padjadjaran University in Strategic Management field with a dissertation on Broadband Strategic Supply Chain Models and Integrated Problem Solving Schemes for the Indonesian Fixed Broadband Industry. Previously, Dr. Rina took her Master's degree at the University of Bradford, majoring in Communication & Real-Time Electronic System, and took her Bachelor's degree at the Bandung Institute of Technology, majoring in Telecommunication Engineering. She actively conducts scientific publications related to the Digital Learning Challenge in Indonesia, Supply Chain Management, Business Process Reengineering (BPR), Sustainable Campuses and Waste Management, Competitive Strategy and Business Performance and Corporate Social Responsibility (CSR) for Human Resource Development.