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## RESEARCH ARTICLE

# CUSTOMER BASED BRAND EQUITY AND BRAND MANAGEMENT: A STUDY OF PRIVATE MOBILE TELECOMMUNICATION OPERATORS IN NORTHERN BANGLADESH

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### ABSTRACT

Rapid technological advancement, convergence of the high-tech technologies, liberalization has turned the mobile telecom industry in Bangladesh into a dynamic industry with a strong base of subscribers. The study aims to measure brand equity of three private mobile operators; Grameenphone Limited (GP), Robi Axiata Limited (Robi), and Banglalink Digital Communications Limited (Banglalink) in Bangladesh using Keller's Customer Based Brand Equity (CBBE) Model. The research study is descriptive in nature and quantitative in approach. Hajee Danesh University of Science and Technology, Dinajpur and Begum Rokeya University, Rangpur from the northern part of Bangladesh has been selected purposively. To measure CBBE, a survey has been conducted through convenient sampling technique with 384 students of those who are subscribers of these three mobile telecom operators and uses their SIM as prime. The study shows, in all the constructs e.g. brand salience, performance, image, judgment, feelings, and resonance of CBBE brand pyramid model, GP ranks top, Robi second and Banglalink in the bottom. The study also reveals, GP stands the top followed by Robi and Banglalink in every construct of the brand pyramid. Furthermore, as all the companies are very close to each other in every constructs of the CBBE brand pyramid, they should work on it more to gain sustainable competitive advantage. It also shows, every company has the chance to develop in all the constructs as indicated in measurement (point) scales. Therefore, to gain competitive advantage and continue in a sustainable manner, CBBE is a key to success in brand management.

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## INTRODUCTION

Brand equity is the additional value added to a product. It is an intangible asset that facilitates a more predictable income stream (Yoo and Donthu, 2001). It increases the cash flow through increasing market share, less promotional costs, and letting premium pricing. Moreover, it can be sold or leased. These benefits permit companies to measure Brand equity as a branding strategy in brand management. In this context, the study focused on the companies of mobile telecom in Bangladesh. Scholars measure brand equity with two basic approaches: customer-based approach and financial-based approach Lassar et al. (1995). Researchers following the consumer approach in measuring brand equity remain primarily concerned with brand building and seek to directly affect brand image, brand loyalty, and customer loyalty Keller (1993).

On the other hand, researchers following the financial approach measure return on investment and profitability through marketing investment to determine a brand's financial value (Yoo and Donthu, 2001). Rather than financial approach dealing with premium price, consumer approach helps a brand manager in developing a brand for company through consumer perception or mindset and also brand associations in the consumers' mind. CBBE consists of brand loyalty, brand awareness, perceived quality, brand associations, and other proprietary assets (Aaker, 1996). Mahajan, Rao, and Srivastava (1994) claim CBBE to measure by customers' perception level. Lassar et al. (1995) defines CBBE as an enhancement of the perceived utility and desirability that a brand name confers on a product. Keller (1993) developed a CBBE model widely known as brand pyramid. The model claims that customers go through a process which starts from knowing the brand to

building a strong bond with the brand. Therefore, it is desirable for incremental financial gains to a firm.

**Context of the Study:** In recent years, mobile telecom industry contributes to the economy of Bangladesh through various services other than telecommunications namely money transfer, education, collaboration in internet banking, social welfare services etc. Besides these, it is now one of the foremost taxpayers in Bangladesh (Alam and Hossain, 2012). Moreover, it attracted the highest amount of Foreign Direct Investment (FDI) to Bangladesh and created significant direct and indirect employment ([www.gsma.com](http://www.gsma.com), 2020). Mobile telecom industry in Bangladesh started with a first step in 1989 with the issuance of a license to a private operator Citycell to provide cell phone services, to compete with the former monopoly provider of services; Bangladesh Telegraph and Telephone Board (BTTB)). Significant changes took place in the number of fixed and mobile services deployed in Bangladesh in the late 1990s, and the number of mobile operators thereafter has increased dramatically over the past five years (<http://www.btrc.gov.bd/about-us>). Government and public sector incentives have helped the industry to develop and become one of the largest sectors in Bangladesh. As a densely populated country, its huge subscribers have attracted many foreign investors to invest in this sector. Therefore, the industry moves forward with its high potential till now.

A mobile telecom operator is known as a provider of wireless communication services such as mobile telephony and mobile broadband internet. They generally own and control necessary network elements to provide services to the subscribers namely radio spectrum allocation, wireless and fixed network infrastructure, sales and marketing, billing, network repair and maintenance, customer service etc. There are four mobile telecom operators in Bangladesh named as Grameenphone Limited, Robi Axiata Limited (Airtel Bangladesh merged with Robi Axiata Limited), Teletalk Bangladesh Limited and Banglalink Digital Communication Limited. Here is a review of the different mobile operators in Bangladesh:

**Grameenphone:** Grameenphone Limited, the leading telecom operator in Bangladesh, is a part of the Telenor group with a presence in 13 markets in Europe and Asia. Prior to the existence of Grameenphone in Bangladesh, the telephone was intended for a small group of urban areas and the cell phone was a real luxury for the elite while the masses could not have thought of using it. Grameenphone began its journey with Village Phone, a pioneering initiative for the empowerment of rural women in Bangladesh. Grameenphone started their operation on March 26, 1997, and became the first operator to introduce GSM technology in Bangladesh. They were also the first operator to introduce prepaid service in Bangladesh in September 1999. It also established the first 24 hour call center, value added services such as VMS, SMS, data services and fax, international roaming, WAP, EDGE, SMS-based push and pull services, customized ring tones, and many other services (<https://www.grameenphone.net/en>).

**Banglalink:** Banglalink Digital Communications Limited then the Sheba Telecom (Pvt.) Ltd. was granted license in 1989 to operate in the rural areas of 199 upazilas. Later it obtained nationwide GSM license in November 1996 to extend its business to cellular mobile, radio telephone services. It launched operation in the last quarter of 1997 as a Bangladesh-Malaysia joint venture.

In September 2004, Orascom Telecom Holdings acquired Sheba Telecom (Pvt.) Limited and it became changed its name as Orascom Telecom Bangladesh Limited in March 2008. Following the equity restructuring in 2011, the company name changed to Banglalink Digital Communications Ltd. in July 2013 (<https://www.banglalink.net/en>). Immediately after the launch of Banglalink, impact was huge in the industry in the context of the competition and services.

**Robi:** Robi Axiata Limited started its operation in 1997 under the Telekom Malaysia International (Bangladesh) with the brand name 'Aktel'. In 2010, the brand name became 'Robi' following the change of the company to Robi Axiata Limited. It is a joint venture company between Axiata Group Berhad of Malaysia and NTT DoCoMo Inc. of Japan. Robi relies on the international expertise of Axiata and NTT DoCoMo Inc. and its GSM services are based on a robust network infrastructure and state-of-the-art technology. The company has the widest roaming coverage in Bangladesh, connecting 600 operators in more than 200 countries. The merger of Robi and Airtel in 2017, created a new competitive arena in the industry. The new Robi-Airtel (Robi) is owned by Axiata (68.7%), Bharti Airtel (25.0%) and the Japanese NTT DOCOMO (6.3%) (<https://www.robi.com.bd/en/corporate>).

**Airtel:** Airtel Bangladesh Limited was the sixth mobile telecom company to enter into Bangladesh market under Warid Telecom with the brand name 'Warid' on May 10, 2007. In 2010, Warid Telecom has sold its 70% stake to Indian Bharti Airtel Limited who took the administrative control and renamed the services under its own brand 'Airtel' as of December 20, 2010. Airtel Bangladesh Limited is one of the fastest growing mobile service providers in Bangladesh and the favorite brand of young people. In 2017, Robi and Airtel merged together and are now operated under Robi Axiata Limited with the brand name 'Robi'. Airtel's operational activities are gradually being compiled by Robi (<https://www.bd.airtel.com/en>).

**Teletalk:** Teletalk Bangladesh Limited, with its brand name 'Teletalk' is the only state-run mobile operator in Bangladesh which started its operations in 2004. Teletalk continues to expand its network to reach remote areas of Bangladesh where its motto is to reach the masses with mobile telecom services. (<https://www.teletalk.com.bd/en/>).

**Problem Statement and Justification:** According to Bangladesh Telecommunication Regulatory Commission (BTRC), mobile telecom is one of the fastest growing service sectors in Bangladesh. Due to privatization and liberalization of policy, Bangladesh mobile telecom sector experienced a phenomenal growth in terms of subscriber and mobile internet penetration during the last decade or so (<http://www.btrc.gov.bd>, june-2019). Mobile phone penetration in terms of growth is decreasing year on year though unique subscribers' rate increased a bit (The Daily Star, April, 2019). In the upcoming years it is going to be matured in terms of unique SIM penetration. So, operators should be innovative in revenue streaming other than basic voice calls in different dimensions that support basic human needs around employment, education, health etc. to gain sustainable competitive advantage and implement the dream of 'Digital Bangladesh' in real sense with digital revolution. The entry of number of operators in the mobile phone service in Bangladesh has extended the markets to all economic hierarchies in both urban and rural areas. It

created a competitive environment, provided subscribers with a beneficial environment for choosing mobile operator conveniently. Again, despite being ranked as a low income country, the combination of limited disposable income and more mature usage means the customers of Bangladesh are more perceptive. This pressure of independent customer choice increased the importance of service brand management as well. This indicator leads mobile operators to pay more attention towards gaining brand equity specifically CBBE for brand management strategies in a sustainable manner.

### Objectives of the Study

- To measure brand salience, brand performance, brand image, brand judgments, brand feelings, and brand resonance for developing CBBE brand pyramid of GP, Robi and Banglalink.
- To compare CBBE among GP, Robi and Banglalink.

## METHODS AND MATERIALS

The research study is descriptive in nature and quantitative in approach as the tenacity of this research is to measure the brand equity of the private mobile operators in Bangladesh on Consumer Perception. Hajee Danesh University of Science and Technology, Dinajpur (HDUST) and Begum Rokeya University, Rangpur (BRUR) from the northern part of Bangladesh has been selected purposively for the convenience of data collection and making it more reliable as these areas are very much familiar to the researcher. Moreover, the usage characteristics, consumption pattern of using mobile telecom services of the study area comparing to other parts of the country is homogeneous in nature. So, there would be no problem in generalizing and replicating the study. The target population was not known as mass people or any researcher is not allowed to collect lists of subscribers from concerned authority or mobile operators in Bangladesh. So, convenient sampling technique has proved to be suitable for the study. For determining sample size, the following statistical formula of Kothari (2004) has been used:

$SS = [Z^2 p (1 - p)] / C^2$  where, SS = sample size, Z = 1.96 (at 95% confidence level), p = estimated population proportion (0.5, this maximizes the sample size), q = (1 - p), C = error limit of 5% (0.05). Therefore, absolute sample size resulted in a total of 385 university students who uses the SIM of the three private mobile operators as their prime mobile service operator. The study is the embodiment of the collection of both primary and secondary data.

The study employed a single cross-sectional survey design for primary data collection from the recipients. Data collection from BRUR and HDUST samples has been done equally. A structured self-administered questionnaire comprising of close (strongly disagreed...strongly agreed) ended statements and non-comparative itemized (Likert scale with 1 to 5 point) rating scale of measurement used for the survey. The assimilated data of the study have been processed and analyzed using the SPSS version 22. Secondary data have been collected through extensive literature review from relevant books, research papers published in the referred journals BTRC reports, annual reports of the mobile telecom operators, web sites, newspapers etc.

## FINDINGS AND DISCUSSION

**Demographics of the Respondents:** In the study, 384 respondents were interviewed. The information collected from the respondents randomly e.g. no categories been made among students. After data collection and analysis, the researcher found that, out of 384 samples, 56% respondents are the user of GP, 27% of Robi, and 17% of Banglalink, 81% are male and 19% are female students who are undergraduate or graduate.

**CBBE using Keller's Model:** The following table represents the scores of the three mobile telecommunication service operators for the six different constructs of the brand pyramid. Each of the constructs has been measured with at least two variables on a seven point likert scale. Measured variables for each construct, their corresponding mean values and the mean values of the constructs (averaging corresponding mean values of the constructs) are presented in the following table. Data on the above table shows, in all the constructs (salience, performance, image, judgment, feelings, and resonance) of brand pyramid, GP ranked top, Robi second and Banglalink in the bottom. In the context of Gp, brand salience scored top (4.49 point) followed by brand performance (4.23), brand resonance (4.11), brand judgment (4.10), brand image (4.04), and brand feelings (3.78). For Robi, brand salience scored top (4.29) followed by brand performance (4.03), brand resonance (3.97), brand image (3.94), brand judgment (3.85), and brand feelings (3.63). Again, for Banglalink, brand salience scored top (4.19) followed by brand performance (3.87), brand image (3.86), brand resonance (3.77), brand judgment (3.59), and brand feelings (3.54). Data also shows, no company is far away from each other in any construct or in overall brand pyramid model. It means, the market is very competitive from the sense of perceived value of the subscribers. Therefore, CBBE measurement is crucial for brand management strategies to be set in mobile telecom industry in Bangladesh for the three private mobile operators exists.

**Brand Pyramid of the Three Private Mobile Operators:** Brand Pyramid e. g. CBBE model of Keller has been generated for Grameenphone, Robi, and Banglalink through the respondents' perceived data presented in the above table of the study. The CBBE model for the three operators contain brand salience, imagery, performance, feelings, judgment, and resonance components to complete it with its value generated by individual mobile subscribers in this study.

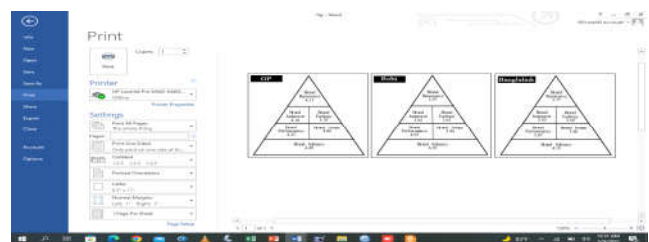


Figure 1. Brand Pyramid of GP, Robi and Banglalink

Brand pyramids or CBBE models show, GP in the top followed by Robi and Banglalink in every construct of the brand pyramid. It also shows, every company has the chance to develop in all the constructs as indicated in measurement (point) scales.

Table 1. CBBE Constructs of GP, Robi and Banglalink for developing Brand Pyramid

Constructs	Variables	GP Mean	GP Constr. mean	Robi Mean	Robi Constr. mean	Banglalink Mean	Banglalink Constr. mean
Salience	Top of the mind brand	3.95	4.49	3.76	4.29	3.42	4.19
	More familiarity of the brand	4.72		4.44		4.58	
	Easy to remember and recognize	4.79		4.68		4.56	
Brand Performance	Quality network of the brand	4.35	4.23	3.94	4.03	4.12	3.87
	Addition of new features and newness of the brand	3.32		3.26		3.32	
	Excellence of value added services of the brand	4.24		4.18		3.94	
	Quality of App and customer care of the brand	4.58		4.42		3.96	
	Competitiveness in service providing of the brand	4.64		4.36		4.02	
Brand Image	Reliability of the brand	4.67	4.04	4.57	3.94	4.48	3.86
	Responsiveness of the brand	3.96		3.73		3.68	
	Keeping customers' interests and value of the brand	3.48		3.53		3.46	
	Feeling special and touchy	4.05		3.94		3.82	
Brand Judgment	Uniqueness of the Brand	3.84	4.10	3.66	3.85	3.34	3.59
	Favorable attitude towards the brand	3.75		3.59		3.34	
	Trust the brand	4.41		4.16		3.89	
	Competitive advantages of the brand over others	4.28		3.74		3.42	
	Recommend the brand to others	4.22		4.08		3.94	
Brand Feelings	Feeling of warmth about the brand	3.58	3.78	3.44	3.63	3.53	3.54
	Feelings of fun about the brand	3.27		3.34		3.14	
	Feelings of excitement about the brand	3.57		3.43		3.23	
	Feeling of confidence about the brand	3.88		3.48		3.34	
	Feelings of social approval of the brand	4.59		4.47		4.46	
Brand Resonance	Bonding with the brand	3.56	4.11	3.36	3.97	3.23	3.77
	Word-of-mouth advertising to others about the brand	4.18		4.02		3.59	
	Visible, attractive and useful website(s) of the brand	4.58		4.47		4.43	
	Always bear the brand in mind	4.13		4.04		3.84	

Therefore, to gain competitive advantage and continue in a sustainable manner, CBBE is a key to success in brand management.

## Conclusion

Through the findings and discussion in this study, it is clear about the path of generating CBBE to gain competitive advantage in the market. As average revenue per user (ARPU) dropped in Bangladesh and it is the lowest among countries of Asia-pacific region, CBBE is a MasterCard to operate brand management according to market and differentiate company from competition in a sustainable manner. This is the result in a market where price itself is no longer a weapon to differentiate one company from others. Furthermore, the market of Bangladesh shows a tremendous potential in terms of digitalizing the country to be compatible with the fourth industrial revolution takes place. Again, it has been found that the subscribers are very much sensitive in brand choice. So, CBBE model could be a crucial one to justify perceived value of subscribers. Moreover, this brand equity also helps this company to add up a remarkable portion in its revenue. In the study, researchers tried to develop the brand pyramid of the three frontline competitors to judge consumers as well as their competitive position in the context of CBBE using Keller's model that would lead to a sustainable competitive advantage.

## REFERENCES

Author name missing (2019, April 19). *Mobile subscription slowing down* (M. Anam, Ed.) [Review of *Mobile*

- subscription slowing down*]. The Daily Star. <https://www.thedailystar.net/online-april20-2019>
- Author name missing (2020). *GSMA Intelligence report for Asia pacific region* [Review of *GSMA Intelligence report for Asia pacific region*]. GSMA. [www.gsma.com](http://www.gsma.com).
- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California management review*, 38(3), 34-47.
- Alam, M. (2012). N. and Hossain, M., A., "Analytical Hierarchy Process (AHP) Approach on Consumers' Preferences for Selecting Telecom Operators in Bangladesh", *Information and Knowledge Management (ISSN 2224-5758 (Paper))*, 2(4), 7-19.
- <http://www.btrc.gov.bd/about-us> [Accessed March 2022]
- <http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-june-2019> [Accessed February 2022]
- <https://www.banglalink.net/en> [Accessed March 2022]
- <https://www.bd.airtel.com/en> [Accessed February 2022]
- <https://www.grameenphone.net/en> [Accessed March 2022]
- <https://www.robi.com.bd/en/corporate> [Accessed February 2022]
- <https://www.teletalk.com.bd/en/> [Accessed February 2022]
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of marketing*, 57(1), 1-22.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring customer-based brand equity. *Journal of consumer marketing*, 12.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*, 140, 15-20.

- Mahajan, V., Rao, V. R., & Srivastava, R. K. (1994). An approach to assess the importance of brand equity in acquisition decisions. *Journal of Product Innovation Management: An International Publication Of The Product Development & Management Association*, 11(3), 221-235.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of business research*, 52(1), 1-14.

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