Mobile Internet Service Preferences of Young Customers: Evidence from Bangladesh

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Research Article

Abstract

Purpose: *With the global wireless communication growth, the launching of commercial fourth-generation (4G) services in Bangladesh, including high transmission speed, the number of mobile internet subscribers has grown considerably during the last five years. During the same time, business models have become increasingly complex in the cellular industry because internet subscribers perceive value differently. This situation originates challenges among the mobile service operators in Bangladesh to create internet subscribers and retain the existing ones, especially the young mobile data users with more switching trends. Therefore, the objective of the study is to identify the determining factors that influence young customers to choose mobile internet services.*

Methods: *This study is based on primary data collected from 440 young mobile internet users below 30 years old in Bangladesh. The study investigated ten factors of customer preferences for mobile internet, comparing male and female customers using the statistical tools: mean, standard deviation, and two-tailed t-test.*

Results: *The study results indicate significant differences between female and male customers in mobile internet preference factors, including maximum coverage area, network quality and speed, security and privacy, and customer care. The female customers choose internet packages for security and privacy and a variety of packages, while the male customers choose mobile internet for maximum area of coverage and company image.*

Implications: *The study findings have critical managerial implications for mobile internet providers to tailor their network and services to create new customers and gain customer retention resulting in significant growth and substantial earnings.*

Keywords: Mobile internet, customer preference, service quality, customer care, internet service providers.

1. Introduction

The world has witnessed the advent and growth of wireless communications through mobile phones and the internet during the last two decades. Wireless communication growth has had a significant economic impact on the telecommunication industry and other related industries, such as mobile phones and related equipment manufacturers (Ahn, Lee, Lee, & Kim, 2006). Telecommunication service providers offer data communication services based on mobile networks known as mobile internet. Mobile internet transfers data through a communication network (Ahn et al., 2006). Mobile internet includes short and multimedia messaging services, data transmission and reception services, emails, and multimedia communications. The mobile communication network provides the base for mobile internet services to a wide range of individual customers and many related industries.

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In the age of analog technology, telecommunication operators provided only voice calls. Then with the introduction of the second-generation (2G) network, Bangladeshi mobile service operators started to offer basic data communication services such as short messages and emails. Since 2008, they have started to offer third-generation (3G) services. In 2018, they launched commercial fourth-generation (4G) services for high transmission speed. As a result, with the global trends, mobile internet subscribers have grown considerably during the last five years (Rahman & Sultana, 2022). Also, mobile marketing has improved dramatically with the development of smartphone use and mobile technologies (Ström, Vendel, & Bredican, 2014), increasing mobile internet usage. At the end of December 2021, cellular phone subscribers reached 181.02 million, and mobile internet subscribers reached 123.82 million under four operators in Bangladesh (BTRC, 2022). Bangladesh's active mobile subscriber penetration reached 93.4% in 2018 from a meager 30.6% in 2008, and the unique subscriber penetration in Bangladesh rose to almost 55% by 2018 from only 1% in 2003 (BTRC, 2021). As a result, the business models become increasingly complex in the cellular industry because internet subscribers perceive value differently (Huang, Mou, See-To, & Kim, 2019). This situation originates challenges among the mobile service operators in Bangladesh to create internet subscribers and retain the existing ones, especially the young mobile data users with more switching trends (Rahman & Chowdhury, 2022). Therefore, mobile operators are induced to work hard to attract and retain mobile internet users in a competitive situation, creating more value for them. Therefore, it is essential to investigate the preferences of young customers in using the mobile internet to tailor mobile operators' services and strategic priorities for maximizing customer retention, loyalty, and satisfaction to gain market growth and high returns.

Prior literature on mobile internet preferences shows that several factors influence mobile internet users to perceive different offerings by mobile internet providers. For example, previous studies identified the factors that mobile internet users consider include maximum network coverage (Ali, Hossain, & Hassan, 2014; Al Jamil, Sunny, & Hasan, 2015; Tarannum & Rasul, 2015); internet speed and service quality (Thaichon, 2013; Ali et al., 2014; Rani & Radhakrishnan, 2012), customer support (Wang & Wu, 2012; Thaichon, Lobo, Prentice, & Quach, 2014), security and privacy (Ladhari, 2010; Ha & Stoel, 2012; Chang & Chen, 2009), affordable price (Lee, 2009; Ali et al., 2014), and advertisement and promotion (Al Jamil et al., 2015). In addition, the studies on the factors affecting mobile internet preferences were conducted in different countries or regions perspectives such as in China (Huang et al., 2019), Greece (Vlachos & Vrechopoulos, 2008), South Korea (Lee, 2009; Ahn et al., 2006; Kim & Hwang, 2006), Thailand (Thaichon, 2013), and USA (Jiang, 2009). However, in these studies, only Lee (2009) examined the factors influencing young customers to prefer mobile data packages. Moreover, from a Bangladesh perspective, Hossain, Sultana, and Maximum (2016) and Ali et al. (2014) investigated the determinants of customer satisfaction with 3G mobile internet services. However, to the author's best knowledge, no study has been done on factors influencing the mobile internet preference of young Bangladeshi mobile data users. Therefore, the paper aims to investigate the determinants of young customers' choice of mobile internet in Bangladesh.

The remainder of the paper is organized as follows. Section two presents some previous literature regarding mobile internet preferences. Section three proposes research methods by discussing the sample, data collection, validity and reliability of data, and data analysis. The fourth section provides the results of the data analysis. The fifth section presents a discussion of the findings. The final section provides the conclusion and future research direction.

2. Literature Review

Most studies on mobile internet consumer behavior provide literature on the importance of customer satisfaction. Customer Satisfaction is the customer's attitude and mood toward a prospect and performance

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evaluation in which their actual realization matches or exceeds the prospect (Rahman & Chowdhury, 2022). There is no substitute for customer satisfaction to stay ahead of the competition for a long time (Ojo, 2010) because dissatisfaction makes customers inclined to buy competing products and services (Bayraktar, Tatoglu, Turkyilmaz, Delen, & Zaim, 2011). In the telecommunication industry, which provides relatively better service in the competitive market, customers tend to be more loyal to the present service organization with maximum satisfaction (Rahman & Sultana, 2022; Alshare et al., 2020; Thaichon, 2013). The previous literature shows that customers prefer the mobile internet service from a company for various characteristics, including maximum network coverage (Ali, Hossain, & Hassan, 2014; Al Jamil, Sunny, & Hasan, 2015; Tarannum & Rasul, 2015); internet speed and service quality (Thaichon, 2013; Ali et al., 2014; Rani & Radhakrishnan, 2012), customer support (Wang & Wu, 2012; Thaichon, Lobo, Prentice, & Quach, 2014), security and privacy (Ladhari, 2010; Ha & Stoel, 2012; Chang & Chen, 2009), affordable price (Lee, 2009; Ali et al., 2014), and advertisement and promotion (Al Jamil et al., 2015). The following literature review focused on these factors determining mobile internet choice.

2.1. Maximum area of network coverage

How many locations a mobile data network can be accessed depends on the internet service provider's network coverage. In a study on Bangladeshi mobile telecommunications, Al Jamil et al. (2015) argued that if the customer's expectations are not met by the existing operator's network coverage range, service quality, connection speed, and audio quality, it will result in the customer dissatisfaction and brand switching. In addition, Tarannum and Rasul (2015) discovered that network coverage is a critical determinant influencing mobile data users.

2.2. Quality of Connection and Speed

Network quality in the internet service refers to the network's caliber or even the internet connection's amplitude (Wang, Lo & Yang, 2004). Also, the frequency of errors, download and upload speeds, and system processing speed contributes to the network quality (Vlachos & Vrechopoulos, 2008; Thaichon, Lobo, & Mitsis, 2012). Internet customers are driven mainly by overall service quality derived from reliable and efficient internet connection speeds, a fast response system and readily available customer care service, and strong support of privacy and security that consumers appreciate (Vlachos & Vrehopoulos, 2008). To keep a competitive edge, service providers must offer a competitive service quality standard in their crucial service drivers, improving customers' perceived value (Parasuraman, Zeithaml, & Berry, 1998). In the cellular industry, network connectivity, uninterrupted connections, and speed are essential factors in determining customer choice (Ali et al., 2014; Lai, Griffin, & Babin, 2009; Vlachos & Vrechopoulos, 2008; Grigoroudis et al., 2007; Ahn, Han, & Lee, 2006; Saliba et al., 2005). Palen and Salzman (2002) claimed that customized network services that provide wireless internet data services could be used to improve client loyalty. On the other hand, an unstable Internet connection results in poor customer perception of the service operators' network quality (Thaichon, 2013). Therefore, several studies suggest that to enhance service quality, ISPs must concentrate simultaneously on technical quality (i.e., internet connection speed, connection reliability) and functional quality (i.e., fast customer support and services on technical difficulties and staff behavior) (Ali et al., 2014; Deng, Lu, Wei, & Zhang, 2010; Grigoroudis et al., 2007; Woo & Fock, 1999). Today's consumers, particularly the young educated population, want faster data connection speeds when browsing the internet (Al Jamil et al., 2015). Likewise, Rani and Radhakrishnan (2012) found that the majority of mobile internet users (46%) favored high-speed download access, while 39% of users ranked "comparatively low price" as the second reason they chose to use mobile data.

2.3. Customer support or Customer Service

Customer service is the degree of attention and value that a service provider delivers to each customer; the service provider is ready to provide customized services immediately to their subscribers (Ali et al., 2014;

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Gorry & Westbrook, 2011; Aydin & Ozer, 2005). Furthermore, technical assistance and customer care create interaction points between the company and its clients that are considered crucial aspects of service quality for cellular companies (Leelakulthanit & Hongcharu, 2011; Aydin & Zer, 2005). Additionally, the staff members of ISPs and the atmosphere in which they operate can give clients hints about the nature of the service (Zeithaml, Bitner & Gremler, 2010). As a result, it is expected that staff members would be courteous with pleasant voices and pay close attention to the requirements and concerns of customers (Carraher, Welsh, & Cash, 2010).

Excellent customer service has quite a favorable impact on word-of-mouth, which enhances consumer trust (Cook, 2011; Sabiote & Roma, 2009; Frow & Payne, 2007; Gremler, Gwinner, & Brown, 2001) and boosts customers' confidence level dealing with present service operators (Thaichon et al., 2014). Díaz (2017) and Abdolvand, Charkari, and Mohammadi (2006) argue that firms should focus on network quality and customer assistance to improve overall service quality perception. Furthermore, the quality and efficiency of service delivery to the customers impact brand switching, where customers expect to get proper and swift support when they call to customer assistance helplines of the service operators (Al Jamil et al., 2015). Therefore, another crucial feature in selecting an ISP is the responsiveness of the technical and functional service teams of a mobile data service provider (Lee, 2011; Leelakulthanit & Hongcharu, 2011; Santouridis & Trivells, 2010) because customers tend to sustain their relationship with a service provider that values their opinions, feelings, and worries (Eisingerich & Bell, 2008). Therefore, ISPs need to provide extra service features (Wang & Wu, 2012) to improve the reliability of their products and services (Tam, 2012), including excellent customer care and post-purchase assistance (Thaichon et al., 2014). Besides, to outperform against rivals, ISPs must deliberately raise the quality of their service delivery (Asaari & Karia, 2003; Leelakulthanit & Hongcharu, 2011). In this case, ISPs should specify staff policies, including administrative actions, when unfavorable behaviors or activities occur (Carraher et al., 2010).

2.4. Security and privacy

Security and Privacy are vital components of high-quality internet service (Thaichon et al., 2014; Ladhari, 2010; White & Nteli, 2004). Security and Privacy in internet use are frequently mentioned in literature as consumers' worries about utilizing their personal information resulted from collecting personal data (Castaeda & Montoro, 2007; Chang & Chen, 2009). Privacy concerns the confidentiality of information transmission and a sense of security when utilizing the service (Parasuraman, Zeithaml, and Malhotra, 2005). For example, Ha and Stoel (2012) found that service quality correlated favorably with payment security and data privacy. In addition, customers' perceptions of safety and confidence during their usage are influenced by security and Privacy provided by ISPs (Vlachos & Vrechopoulos, 2008). In other words, customers are more likely to have positive impressions of the overall service quality of an ISP if it maintains a fair and trustworthy privacy and security policy (Roca, García & Vega 2009). From Bangladesh's perspective, ISPs (e.g., Link-3, Carnival) provide unique and shared internet connections. These shared connections may be the sources of cyber and information security risks (Rahman, Karim, & Chowdhury, 2021; Ogut, Raghunathan, & Menon, 2011). However, cellular companies provide only a unique internet connection at an affordable price where customers are more secure using mobile data. According to Chang and Chen (2009), the level of security is determined by how confidently a customer feels about transaction completeness, including financial transactions and systems for storing personal data.

2.5. Affordable price

Users will be hesitant to take a service when they believe the cost would outweigh the potential benefits (Lichtenstein, Ridgway, & Netemeyer, 1993, as cited in Ali et al., 2014). Yang (2007) argued that consumer acceptance of services would be highly influenced by the price and data rate given by the wireless network,

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network coverage, and perceived service quality (Lee, 2009). However, for some strategic reasons, sometimes, some operators charge a high price for their internet services than rivals (Ali et al., 2014).

2.6. Advertisement and promotion

Scholars suggested paying attention to marketing efforts, notably advertising and sales promotional activities, because it impacts new customer creation, and sales promotions favorably impact consumers' brand-switching behavior (Al Jamil et al., 2015). Therefore, advertisement and promotion are also the influencing factors in choosing internet services by customers (Hossain et al., 2016; Ali et al., 2014; Yang, 2007)

3. Methodology

3.1 Sample and data collection

The primary purpose of the research is to investigate the preferences of young customers regarding mobile internet services in Bangladesh. The population for the study consists of young university students less than 30 years old. This age group was selected as the population for the study since the proportion of people switching operators is more significant in this age group (BTRC, 2021). Bangladesh has 159 universities with about a million students (UGC: http://www.ugc-universities.gov.bd). The study employed a non-probability sampling technique based on the researchers' accessibility (Roberts-Lombard, 2002, p. 109). The non-probability sampling method was also employed in studies by Mokhlis, Mat, & Salleh (2008), Rahman and Chowdhury (2022), and Rahman and Sultana (2022). In the case of a large or unknown population like the young university students in Bangladesh, the sample size must be sufficient to lessen the likelihood of errors and enhance the precision of the data. The following statistically recognized formula (Saunders, Lewis, & Thornhill, 2003; Malhotra & Dash, 2016, p. 279) was utilized to determine the appropriate sample size to use:

Sample Size $=\frac{Z^2 \times p \times (1-p)}{d^2}$

Where;

Z^2 = 95% of confidence level and equals 1.96

P = expected prevalence which equals 50%

d^2 = is the level of precision or sampling error and equals 5% (0.05)

Sample Size = $\frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = 384.16 \approx 385$

Therefore, the study's sample of 385 young mobile data users is sufficient.

As a study instrument, a structured questionnaire was developed to collect the requisite data from respondents. The questionnaire was divided into two parts. The first part contains seven sections, including questions about the factors influencing mobile internet service preferences. The investigated factors were the area of coverage, quality and speed, security and privacy, price, variety of packages, offers and discounts, company reputation, advertisement, customer care, and reference. The second part comprised demographic information such as gender, age, education level, purposes of mobile data use, monthly data requirements, and monthly budget for mobile data.

For better communication with the respondents, the questionnaires were prepared in two versions of languages: Bengali and English. The questionnaire was carefully screened before it was surveyed. Then, a pilot test was conducted to assess the appropriateness and flexibility by sending the questionnaire to five university students and five authors' colleagues. Finally, the questionnaire was scrutinized and rearranged, omitting the irrelevant issues and adding new factors considering the feedback from the pilot survey. According to the feedback from the pilot survey, four new factors were added to the questionnaire: a variety of packages, special offers and discounts, company image and reputation, and references and recommendations, which were not much supported by the previous literature. The revised questionnaires were sent to 500 university students below 30 years old. Finally, 440 questionnaires were received within

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one month and considered for data analysis. The response rate was 88%, which was above the average response rate.

3.2 Measurement
In the first section of the questionnaire, respondents were asked to score their preferences for every single factor using a Likert scale, from 1 for strongly disagree to 5 for strongly agree. During the data analysis process, the statistical tools of mean and standard deviation were utilized to infer each element's degree of influence. The mean value was also used to determine the relevance of the elements that had an influence while the standard deviation was utilized to determine the degree to which the data deviated from the mean. Finally, the mean scores indicate that the higher mean is the higher significance of the factor. The demographic information of young Bangladeshi mobile data users was collected to investigate how their demographic characteristics influence their preferences for using mobile data. The demographic characteristics of mobile data users were presented by measuring the frequency, percentage, and cumulative values.

3.3 Validity and Reliability
Five hundred questionnaires were distributed to the university students using the Google Form survey application, and respondents filled the questionnaires with due diligence. The Google Form was prepared to ensure the highest validity and reliability of the data with four basic settings: (a) the form was anonymous, (b) respondents' answers were strictly private, (c) the response could not be resubmitted once submitted, and (d) all questions were mandatory to obtain a complete data set in every submission.
Moreover, the study investigated ten factors influencing the preferences for mobile internet by young customers collected data through a valid questionnaire. Then the validity and reliability of the measurement scale (Five-point Likert Scale) were tested. Finally, the validity and reliability of the measurement scale were tested by calculating Cronbach's Alpha with the following formula:

$$Cronbach's\ \alpha\ = \frac{K}{K-1}\left(1-\frac{\Sigma\, Vi}{Vt}\right)$$

Where,
K = Number of items
V_i = Variance of each item
V_t = Total variance
The Cronbach's α of the survey results was >0.7908, which indicates that the questionnaire and the measurement scale had certain credibility in the study.

4. Results
4.1 Demographic Characteristics of Respondents
The demographic characteristics of Bangladesh's young customers who use mobile internet services are depicted in Table 1. In this survey, the proportion of male and female respondents was evenly split, with 51% male and 49% female. Most respondents (87%) were in the age range of 21 to 25, 10% were under 20, and the remaining 3% were between the age range of 26 to 30. In addition, 86% of respondents who use mobile internet have at least a bachelor's degree and 14% have a master's degree as their highest level of education. Also, Table 1 exhibits that university students in Bangladesh use mobile data for four critical purposes: educational purposes (85.45%), personal communication (84.55%), using social media (82.27%), and entertainment (65.68%). Regarding mobile data usage, 26% of respondents used 1 to 5GBs, 19% used 6 to 10GBs, 17% required between 11 and 15GBs, 10% required between 16 and 20GBs, and 24% used

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more than 20GBs in a month. Table-1 further shows that most customers' (91.59%) monthly mobile data costs were within the range of Tk.600, while just 8.41% of consumers spent more than Tk.600.

Table 1: Demographic Characteristics of Population Surveyed

Demographics	Frequency	Percentage	Valid %	Cumulative %
Gender				
Female	215	48.86	48.86	48.86
Male	225	51.14	51.14	100
Total	440	100	100	
Age				
Below 20 years	43	9.77	9.77	9.77
21-25 years	384	87.28	87.28	97.05
26-30 years	13	2.95	2.95	100
Total	440	100	100	
Education Level				
Bachelor	379	86.13	86.13	86.13
Masters	61	13.87	13.87	100
Total	440	100	100	
Purposes of Mobile Data Use				
Educational Purposes	376	85.45	85.45	
Social media	362	82.27	82.27	
Entertainment	289	65.68	65.68	
Personal communication/Email/WhatsApp etc.	372	84.55	84.55	
Business/E-commerce	45	10.23	10.23	
Mobile banking/bill pay	142	32.27	32.27	
Monthly Data Requirement				
Less than 1 GB	23	5.23	5.23	5.23
1 – 5 GB	116	26.36	26.36	31.59
6 – 10 GB	83	18.86	18.86	50.45
11 – 15 GB	67	17.23	15.23	65.68
16 – 20 GB	44	10.00	10.00	75.68
More than 20 GB	107	24.32	24.32	100
Total	440	100	100	
Monthly Budget for Mobile Data				
Less than Tk.200	157	35.68	35.68	35.68
Tk.200 – Tk400	192	43.64	43.64	76.32
Tk.400 – Tk.600	54	12.27	12.27	91.59
More than Tk.600	37	8.41	8.41	100
Total	440	100	100	
Current Mobile Operator				
Grameenphone Ltd.	121	27.50	27.50	
Robi Axiata Ltd.	217	49.32	49.32	
Banglalink Digital Communications Ltd.	42	9.55	9.55	
Tele Talk Bangladesh Ltd.	76	17.27	17.27	
Others	39	8.86	8.86	
Duration of Using Mobile Data				
0 - 2 years	74	16.82	16.82	16.82
2 – 4 years	149	33.86	33.86	50.68
4 – 6 years	137	31.14	31.14	81.82
More than six years	80	18.18	18.18	100
Total	440	100	100	

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4.2 Males and Females Mobile Internet Users' Demographics

The survey's proportion of female and male respondents was almost equally divided, with 48.89% females and 51.14% males (Table 1). 81.86% of female respondents were between 21 and 25 years old, and 16.28% were below 20 years old (Table 2). On the other hand, 92.44% of male respondents were aged between 21 and 25 years old. The high response rate came from the age group 21 to 25, who indicated that they were more interested in mobile internet while graduating with bachelor's and master's degrees. The demographic information indicated that most females and males were studying bachelor's (females 85.12%, males 87.11%) and master's levels (females 14.88%, males 12.89%).

Table 2: Male/Female Mobile Internet Users Demographics

Demographics	Female		Male	
	Percentage	N	Percentage	N
Age				
Below 20 years	16.28	35	3.56	8
21-25 years	81.86	176	92.44	208
26-30 years	1.86	4	4.00	9
Total	100	215	100	225
Education Level				
Bachelor	85.12	183	87.11	196
Masters	14.88	32	12.89	29
Total	100	215	100	225
Purposes of Mobile Data Use				
Education purposes	87.91	189	81.33	183
Social media	83.72	180	80.44	181
Entertainment	64.65	139	66.22	149
Personal communication/Email/WhatsApp etc.	85.12	183	83.11	187
Business/E-commerce	7.91	17	10.22	23
Mobile banking/bill pay	22.79	49	41.33	93
Monthly Data Requirement				
Less than 1 GB	6.98	15	3.56	8
1 – 5 GB	27.44	59	25.33	57
6 – 10 GB	17.21	37	20.00	45
11 – 15 GB	18.14	39	12.44	28
16 – 20 GB	11.16	24	8.89	20
More than 20 GB	19.07	41	29.78	67
Total	100	215	100	225
Monthly Budget for Mobile Data				
Less than Tk.200	35.81	77	35.56	80
Tk.200 – Tk400	42.79	92	44.44	100
Tk.400 – Tk.600	14.42	31	10.22	23
More than Tk.600	6.98	15	9.78	22
Total	100	215	100	225
Current Mobile Operator				
Grameenphone Ltd.	19.53	42	35.11	79
Robi Axiata Ltd.	55.81	120	43.11	97
Banglalink Digital Communications Ltd.	7.91	17	11.11	25
Tele Talk Bangladesh Ltd.	12.56	27	21.78	49
Others	7.91	17	9.78	22

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Duration of Using Mobile Data				
0 - 2 years	20.00	43	13.78	31
2 – 4 years	39.07	84	28.44	64
4 – 6 years	28.84	62	33.78	76
More than six years	12.09	26	24.00	54
Total	100	215	100	225

The majority and an almost similar number of both female and male internet users use mobile data for education (females 87.91%, males 81.33%), social media (females 83.72%, males 80.44%), and personal communication (female 85.12%, male 83.11%).

Regarding mobile data requirements, there was no significant difference between females and males using monthly mobile data (Table 2). However, the highest percentage of male users (29.78%) use mobile data of more than 20 GB monthly. Similarly, most males and females equally spent money on mobile data up to BD Tk.600 per month (Table 2). Also, the highest percentage of males and females were the subscribers of the mobile operator company RobiAxita Ltd. (females 55.81%, males 43.11%). The second highest popular mobile operator was Grammenphone Ltd. (females 19.53%, males 35.11%). Most female users (87.91%) have used mobile data for between one and six years. On the other hand, the majority of the male users (86.22%) have been using mobile data for between two and more than six years (Table 2).

4.3 Factors Affecting the Preferences of Mobile Internet

Factors affecting the mobile internet choice among young mobile subscribers were compared concerning ten common attributes identified in the previous literature and pilot surveys, such as maximum coverage area, connection quality and speed, security and privacy, package variety, affordable price, special offers, and discounts, company image, advertisement, customer support, and reference and recommendations. Table 3 shows the factors with mean scores and standard deviations separately for females and males. Mean values are used to indicate the significance of influences of factors, and standard deviations indicate the measurement of the dispersion of data to the mean. The higher mean scores of the factors indicate the higher degree of influence of factors on mobile internet uses. In addition, the t-tests were conducted on the responses from mobile internet users to detect significant differences in the preferences between females and males.

Table 3: Scores of Male/Female Mobile Internet Users on the following Factors

	Female			Sig.	Male		
	N	Mean	Standard Deviation	(2-tailed)	N	Mean	Standard Deviation
1. Maximum area of coverage	215	3.5953	0.9318	6.1462***	225	4.1422	0.9341
2. Quality of connection/speed	215	3.6512	0.8669	-1.9041**	225	3.4844	0.9687
3. Security and Privacy	215	4.3209	0.8227	-9.3659***	225	3.5467	0.9106
4. Variety of packages	215	4.1069	0.9436	-1.5110*	225	3.9644	1.0345
5. Affordable price/Low cost	215	3.3767	1.1367	-0.9930	225	3.2622	1.2809
6. Special offers and discounts	215	3.5395	1.0172	-0.3246	225	3.5067	1.1065
7. Company image/reputation	215	3.9302	0.9618	1.3054	225	4.0533	1.0163
8. Advertisement/promotion	215	3.5721	1.0015	-0.7881	225	3.4933	1.0943
9. Customer support/customer care	215	3.6372	0.8693	-1.9586**	225	3.4578	1.0476
10. Reference/recommendation	215	3.3581	0.9156	-0.3350	225	3.3289	0.9153

*, **, and *** indicate significance at the 10%, 5%, and 1% levels respectively.

Table 3 shows that among the ten factors studied, security and privacy (4.3209), the maximum area of coverage (4.1422), variety of packages (4.1069), and company reputation (4.0533) have very high mean scores indicating the most significant factors. On the other hand, connection quality (3.6512) and customer support (3.6372) have moderate mean scores indicating moderately significant in preferring mobile internet services for young customers whereas affordable prices (3.2622), special offers (3.5067), advertisement

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(3.4933), and references (3.3289) are measured as insignificant factors influencing young mobile internet customer preferences.
Nevertheless, the survey results reveal that in terms of mean scores, female users significantly prefer security and privacy, the maximum area of coverage, variety of packages, company image and reputation, and customer care to choosing mobile internet operators. In contrast, according to the given mean scores most male mobile internet users prefer a maximum coverage area (4.1422), company image (4.0533), and variety of packages (3.9644). Male consumers ranked price (3.2622), and reference or recommendation (3.3289) as the most insignificant variables towards their mobile internet service preferences.
Moreover, the t-statistics indicate significant differences between female and male users in preferring internet services. Regarding t-statistics, there are significant differences between male and female users for the factors: of maximum coverage area, connection quality, security, and privacy, variety of packages, and customer support. In contrast, mobile internet preferences of youth showed no significant difference between male and female users for the factors: affordable price, special offers and discounts, company image, advertisement, and references.

5. Discussion and Managerial Implications

This study attempted to identify the factors influencing young mobile subscribers to choose mobile internet services. The study was carried out by identifying the target customers' demographic characteristics of female and male internet users and comparing their preferences for mobile internet packages offered by mobile operators in Bangladesh. Among the population surveyed, 48.86% were female, and 51.14% were male.
The current target market for mobile internet was found to be relatively large. Most young mobile subscribers who are university students use mobile internet because, in the Covid-19 pandemic, all university students were used to participating in online education through android mobile devices (Rahman & Sultana, 2022). In the new normal situation, 85.45% of mobile internet users still use mobile data for educational purposes. Also, more than 80% of the users use the mobile internet for social media and personal communications. These results suggest that the mobile internet is crucial for the young generation for education, social network, and personal communications in the era of information technology and communication. As a result, about 95% of users spend more than one Giga bite (GB) of mobile data in a month, while more than 50% of users spend above ten GB in a month. Furthermore, the purposes of using mobile internet and the amount of mobile data used per month are almost similar among male and female consumers.
Concerning customer preferences for mobile internet, among the ten factors investigated, security and privacy, the maximum area of coverage, variety of packages, and company reputation are most critical in preferring mobile internet services for young customers. However, the findings showed significant discrepancies between female and male users. The young male customers are significantly influenced by the extensive network and company image, while the female customers are influenced by security and privacy and the variety of data packages.
The study's uniqueness is the investigation of the differences in preferences between female and male users. The t-statistics (Table 3) showed significant differences in factors' influences between female and male customers in preferring mobile internet services. The factors' influences include the maximum coverage area, security and privacy, quality and speedy connection, customer care, and a variety of data packages that are different between males and females. Security and privacy, quality and speedy connection, customer care, and data package variety influence female customers more than male customers in purchasing mobile data. On the other hand, only the maximum coverage area influences male customers more than female ones.

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Security and privacy are the most influential factors in choosing mobile internet for young customers in Bangladesh. Customers' security is necessary when they use mobile internet services because they are worried about utilizing their personal information while ISPs collect personal data (Chang & Chen, 2009). On the other hand, privacy concerns the confidentiality of personal information transmission (Parasuraman et al., 2005). The study of Thaichon et al. (2014), Ladhari (2010), and Vlachos and Vrechopoulos (2008) also found security and privacy as the critical components of high-quality internet service. Also, Ha and Stoel (2012) also showed a positive correlation between service quality, payment security, and data privacy. The second most critical factor in determining the choice of mobile internet service is the maximum network area coverage found in this study. Young mobile internet users choose an internet provider with a network accessing many locations in the country. Tarannum and Rasul (2015) also identified the maximum area of the network as the most significant influencing factor using mobile data. Moreover, Al Jamil et al. (2015) argued that the existing operator's network coverage range is the chief cause of customer satisfaction. The third most significant factor is internet package variety, which is inconsistent with the previous literature. ISPs in Bangladesh offer a vast array of internet packages to attract new customers and retain the existing ones. In addition, most young females favor internet package variety. Finally, another significant factor young internet users in Bangladesh consider buying mobile data is company image which contradicts previous literature. Moreover, the study results showed that the factors of affordable price, special offers, and advertisement are insignificant that are inconsistent with the studies of Yang (2007), Ali et al. (2014), and Al Jamil et al. (2015).

The study has several implications providing insights to internet service providers, regulators, policymakers, researchers, and other stakeholders. First, the study's findings offer new empirical evidence to establish a comprehensive knowledge of mobile internet service providers operating in Bangladesh. Moreover, the findings will provide new marketing dynamics to the telecommunication industry to enhance the firm's financial performance. Second, the study findings will guide regulators, policymakers, practitioners, and other stakeholders to ensure the sustainable development of the telecom industry in Bangladesh. Finally, this study's outcomes support academicians and researchers with a good view and understanding, which they can apply in their ongoing and future research.

6. Conclusion, Limitation, and Future Research Direction

By analyzing the previous literature on mobile internet service preferences, six factors influence mobile internet service choice, including maximum area coverage, service quality, customer support, security and privacy, affordable price, and advertisement. Then these identified factors were examined, adding four more factors from the feedback of the pilot survey, such as the variety of packages, special offers and discounts, company image, and references. Young mobile internet users were interviewed, aiming to identify the influencing factors in choosing mobile internet service. The respondents were divided into two major groups: female and male. The study results show significant differences between females and males in mobile internet service preference. For instance, the mobile internet services criteria such as maximum area coverage, quality of connection and speed, security and privacy, variety of packages, and customer support are significantly different between females and males. Female internet users significantly consider security and privacy, variety of packages, quality of connection, and customer support to choose mobile operators. In contrast, male users significantly consider the maximum area of coverage and company image. Therefore, to gain a superior position in the competitive market, mobile internet providers should enhance mobile networks in larger areas, internet speed, privacy and security of users, service variety, and customer support. As young mobile phone users are the largest group of mobile internet users in Bangladesh, it is suggested that mobile operators need to provide particular concentration targeting the young group to create new customers and retain the existing ones. The study's findings offer experimental proof of the factors that young customers take into account when opting to stick with their current service providers, which will help establish a thorough understanding of Bangladesh's mobile internet service market. In addition, this

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study's findings have critical managerial implications for mobile phone operators to tailor their services and strategic marketing covering all market segments to maximize customer satisfaction and retention and gain market growth and substantial returns.

The study methods derive two specific limitations. First, the data was collected from a sample of university students in the two largest cities (Dhaka and Chittagong) in Bangladesh; however, the results represent the population of young internet customers. Second, 87.28% of respondents are 21-25 years old, which may cause an outlier in the analysis. A future study might be sought on the mobile internet choice criteria in all age groups in Bangladesh. Moreover, another study may be conducted on internet preferences comparing mobile internet and LAN internet connection provided in Bangladesh.

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