Impact of Integrated Marketing on the Business Growth of Mobile Telecom Industry: An Empirical Study from Bangladesh Perspectives

Surajit Sarbabidya*

Bangladesh is one of the fastest growing nations in the perspective of mobile telecommunications support area. It went through a large modification of legal and economic issues to make a level playing field for this industry player(s). The result of which is exhibited from the increased number of competitors among the mobile telecommunication service providers. This has been demonstrated from the increasing difficulties and possibilities in the marketplace. To make sure constant development of the mobile telecommunications business in such situation, integrated marketing practice has been found significant for the providers from the findings of the past research studies and the results of factor analysis based on a recent survey from the month of January to March, 2017 on 577 participants through judgment sampling. The study, in this perspective, exhibits two (2) major components as findings namely functionally integrated core marketing mix and integrated value chain to make sure a constant development of this industry.

Field of Research: Marketing and Telecom

Keywords: Integrated marketing, mobile telecommunications, functional integration, marketing mix, value chain, growth of the Mobile Telecom Business

1. Introduction

The development of mobile telecommunications industry of Bangladesh is amazing. With the beginning of its journey in a controlled atmosphere, the industry went through a long way to liberalized industry regime and witnessed many joint projects, products, takeover, measures of enacting telecommunication laws, rules, regulations and policy for excellent corporate governance and lawfully helpful customer support with the state-of-the-art mobile telecommunications technologies, etc. In this development phase of the industry, five (5) private and one (1) Government owned mobile telecom service providers appeared in the marketplace to approach the customers with their distinctive features, aggressive advantages and innovative items and solutions. As a result, an increasingly aggressive atmosphere with multifarious challenges has been created among the existing industry players and the newcomers as well. Against the high waves of competition one (1) private mobile telecom operator named City Cell has been compelled to stop its operation and the other named Airtel got merged with Robi. On the contrary, the availability of the fastest 3G or 4G technologies compliant cell phone set, internet device, accessories, etc., together with the services like m-commerce, m-banking, mobile shopping, etc., have also been tremendously increased as opportunities. In such a situation, both

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*Professor, Department of Business Administration, School of Business, Britannia University, Cumilla, Bangladesh. Email: surajitsarbabidya@gmail.com

acute competition and innovation of technologies, which have increased challenges and opportunities for the industry, acted as principal reasons or motivation behind this study to adopt an integrated approach of marketing for further business growth. From the light of the previous research findings and the current scenario analysis, the present study is an endeavor to examine the impact of integrated marketing on the mobile telecom industry in Bangladesh so that proper growth and development can be ensured by mitigating the prevailing challenges and utilizing the respective potential opportunities.

From the perspectives of high level competition among the market players various types of challenges and opportunities have emerged. But availing such opportunities by mitigating the identified challenges is difficult unless an integrated approach of its marketing mix elements, forward, backward and horizontal integration is ensured. In this connection, integrated marketing may be an effective marketing approach to adopt by the operators to ensure stable growth of their business. However, it is a matter of limitation of this study that the previous studies were solely not related to the impact of integrated marketing on the business growth of Mobile Telecom Industry of Bangladesh. Moreover, these studies focused either one or some factors other than all the variables included in the current study for analysis. For example, the findings of the previous studies on the variables like v1 namely technological competency, v3 namely students' characteristics and v11 namely ease of use and access. But there is paucity of research findings in this regard. So, it is clearly evident that there is a research gap and to mitigate this gap a rigorous research is yet to be systematically attempted. With this end in view, the present study investigates the research question: "Does Integrated Marketing have positive impact on the business growth of Mobile Telecom Industry of Bangladesh?" Here, with relation to the appropriate answer to the set research question, the current paper is found as unique and different from the previous studies because by using the reliability, validity, correlation and principal component analysis on the identified variables this study has been endeavored to assess the impact of integrated marketing on the business growth of Mobile Telecom Industry of Bangladesh.

From the light of the above research question, the principal objective of this study is to investigate whether integrated marketing has any positive impact on the business growth of Mobile Telecom Industry of Bangladesh or not. This paper is organized with the various sections. Section 1 deals with introduction, Section 2 focuses on the background of the study, Section 3 portrays the literature review, Section 4 goes with the methodology of the study, Section 5 deals with the analysis and findings, and Section 6 draws a constructive conclusion including uniqueness of the study, new findings, significance, limitations and contribution.

2. Background of the Study

The commencement of the mobile telecom industry was marked in the year 1989. In the earlier days the industry went through various shortcomings due to the lack of policy support and absence of necessary legislations. However, in course of time, the industry was liberalized and private sector participation was permitted, the result of which is the existence of six mobile telecom companies of today. **Table 1** exhibits active mobile phone subscribers in Bangladesh.

Table 1: Active Mobile Phone Subscribers in Bangladesh

Rank	Operators	Active Subscribers in June 2018
01	Grameen Phone Ltd. (GP)	69.170
02	Robi Axiata Limited (Robi)	44.729
03	Banglalink Digital Communications Limited (Banglalink)	33.282
04	Teletalk Bangladesh Ltd. (Teletalk)	3.764
Total		**150.945**

Source: BTRC Web Site
[http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-june-2018]
* Subscribers in Millions
** The above subscribers' numbers are declared by the mobile operators

3. Literature Review

Integrated marketing deals with the strategic issues of product, price, place and the tactical issue of promotion; these issues also are described as customer, cost, convenience, and communication (Schultz, Tannenbaum, & Lauterbom, 1994). A glaring illustration of integrated marketing in the mobile phone telecommunication industry is that after integrating the four areas, telephone, mass media, consumer electronics and computing, a new industry has developed, called the multimedia information industry (Fransman, 1997; Chan-Olmsted & Jamison, 2001). The eminent researchers have found that various factors of integrated marketing influence the growth and development of mobile telecom industry. The review of their research findings have been exhibited in the following.

Ellinger et al. (2000) mentioned cross-functional integration as important tools to incentivize positive results within organizations. It is also essential to avoid competition amongst team members and conflicts due to unbalanced power division (Pimenta et al., 2014). Grant et al. (2007) found that improvements in mobile technology, and integration of data, video and audio context in one mobile device absolutely increased the usage of mobile devices. Flexibility in communication and information sharing became possible with improvements in mobile technology and integration of internet and computing into mobile medium (Siau et al., 2005). The possibility of reaching the information anytime and anywhere triggered the improvements of mobile devices lately (Deans, 2005).

A number of research studies (ITU, 2005; Rouvinen, 2006) found that because of the variety of mobile services, mobile operators often adopt such prices which together include multiple benefits including mobile telephony, short message services (SMS), mobile handset, etc., in one package. Yavas (2003) emphasized that the service centre should engage in integrated communications campaigns including advertisements in the local media, publicity featuring testimonials from visitors and news stories in the local newspapers and TV stations to countervail the negative perceptions. Advertising through common media e.g. local press, TV, radio, posters, mail shots and cinema can directly pass the messages to the customers.

Ghosh and McLafferty (1987) as quoted by Kirkup and Rafiq (1999) found that the business or service centers located at near to customers can enhance potential sales. Martínez & Martínez (2010) found that integrated teamwork through all

"participants" with whom the customers come into contact during service delivery include customer service staffs, operational staffs, cleaners, security officers, branch or service centre staffs and other customers, who can affect the customer perception of the service. Results from many studies on mobile telecom operators showed that using performance scores alone rather than expectations minus perceptions, resulted in better reliability and validity (Martínez & Martínez, 2010).

A number of research studies emphasized on the adoption of integrated process for the various aspects of the service delivery process which act as the central tenets of the service related criterion., such as ease of handling queries, delivering on services as promised, and the length of waiting time (Aregbeyen, 2011; Beckett & Hewer, 2000). Lovelock, Patterson & Walker (2001) found that in the absence of a tangible good, the physical surroundings and other visible and ambient cues can have a vital effect on customer's perceptions and perceived risk of the service quality.

Little and Little (2009) propose the 'Home Team Approach' of implementing a cross-functional team across human resources, operations and marketing functions. This approach would utilize existing company human resource (i.e., people) and requires support and authority from senior management, including authority for implementing improvements that they think will improve quality for customers (Little & Little, 2009). Further, benefits of sharing of tacit knowledge, network, infrastructure and interconnection as varied forms of horizontal integration in the mobile telecom industry were emphasized by Little and Little (2009) for improving peoples' quality of life.

In order to develop a Collaborative Supply Chain, Celcom (i.e., the mobile telecom company of Axiata in Malaysia) follows a four-pronged approach through i) supplier segmentation, ii) relationship building efforts, iii) rationalization initiatives, and iv) supplier development efforts. Celcom was recognized with the International Institute for Advanced Purchasing and Supply (IIAPS) Asian Supply Chain Excellence Awards 2012 under the Collaborative Supply Chain Special Award (Axiata Sustainability Report, 2012:32).

The findings of the aforementioned research studies came from diverse arenas of ICT, telecom and conventional business and hence they do not exactly answer to the principal research question of the present study to know whether integrated marketing has any positive impact on the business growth of Mobile Telecom Industry of Bangladesh. For authentic answer to this question, the development of research hypothesis such as 'Integrated marketing has positive impact on the business growth of Mobile Telecom Industry of Bangladesh' has been necessitated. Now, this has to be statistically proved on the basis of the primary data.

From the findings of the reviewed literature it is seen that some of the previous studies only focused either on one or some aspects other than the complete subject matter of the current study. So, it is yet to get a concrete idea about the impact of integrated marketing on the business growth of mobile telecom industry of Bangladesh. It is because the findings of the earlier research mostly exhibit the result of impact of integrated marketing on the business growth of the other industries and countries rather than Bangladeshi mobile telecom sector. Despite the proven

success of this in other industries and countries, relatively few studies in Bangladesh have focused on this aspect. Again some studies focused only on the few aspects of the subject matter of the current study. Due to such drawbacks of the previous studies the current paper aims to find a suitable answer to the research question: "Does Integrated Marketing have positive impact on the business growth of mobile telecom industry of Bangladesh?". Accordingly, the null (H_0) and alternative hypothesis (H_a) have been set which are as follows:

H_0: Integrated marketing does not have positive impact on the business growth of Mobile Telecom Industry of Bangladesh.

H_a: Integrated marketing has positive impact on the business growth of Mobile Telecom Industry of Bangladesh.

Assuring business growth is always a matter of prime necessity to sustain in a highly competitive industry like mobile telecom. However, there may be any such factor(s) which may adversely or more proactively impact on the business growth of mobile telecom industry of Bangladesh. Hence, the current study aims to test whether integrated marketing has any positive impact on the business growth of mobile telecom industry of Bangladesh or not so that the respective mobile telecom operators can take appropriate measures to further enhance their business growth.

4. Methodology of the Study

The present study is the result of the collection of both primary and secondary data and their analysis. In order to make the study effective, the primary data have been collected through a recent survey from the month of January to March, 2017 from the sample size of 577 respondents including 454 customers and 123 employees of six mobile phone telecom service operating companies using judgment sampling method through survey on customers and employees (i.e., population) of mobile phone telecom service in Bangladesh. A structured questionnaire comprising of open-ended and non-forced, balanced and odd numbered non-comparative itemized questions using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) based self-administered questionnaire has been used for the survey.

Table 2: Identification of Variables

Code	Independent Variables	Sources
IGM01	Functional Integration through Cross-Functional Team	Ellinger et al., (2000); Pimenta et al., (2014)
IGM02	Integrated Services/Products	Deans (2005), Grant *et al.* (2007), Siau *et al.* (2005)
IGM03	Integrated Pricing	ITU, (2005); Rouvinen, 2006
IGM04	Integrated Marketing Communication (IMC)	Yavas (2003)
IGM05	Forward Integration	Ghosh and McLafferty (1987) as quoted by Kirkup and Rafiq (1999)
IGM06	Integrated Teamwork (People)	Martínez & Martínez (2010)
IGM07	Integrated Process	Aregbeyen, 2011; Beckett & Hewer, 2000
IGM08	Integrated Physical Evidence	Lovelock, Patterson & Walker (2001)
IGM09	Horizontal Integration	Little and Little (2009)
IGM10	Backward Integration	Axiata Sustainability Report (2012:32); Wang Zhao and Yang Jinwei

Source: Literature Survey

On the other hand, secondary data have been collected from the articles and research papers published in the referred journals and peer reviewed international conference proceedings. The study has been endeavored through quantitative analysis and as a part of this, the popular statistical tools of reliability and validity measurements, factor analysis using Principal Component Analysis (PCA) with orthogonal varimax rotation, etc., have been utilized to conduct necessary assessments using SPSS version 21. To conduct factor analysis, ten (10) independent variables and one (01) dependent variable have been identified which are exhibited in the **Table 2**.

4.1 Reliability Analysis

The Cronbach's Alpha value of all the 11 variables together is .930 which is greater than 0.7, indicating an overall higher reliability factors. Thus, it can safely be concluded that the reliability of this study is substantial in every perspective because the sample size and the data collected are reliable and also the reliability is shown to be good using all the 11 variables.

4.2 Sampling Adequacy to Validate Integrated Marketing Factors for Business Growth

The Bartlett Test of Sphericity and Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy have been used to validate the integrated marketing factors for business growth through factor analysis. **Table 3** exhibits that the value of KMO is .920 which is 'marvelous' (Kaiser, 1974) suggesting the adequacy of the sample size for the factor analysis. While from the results of the Bartlett's Test of Sphericity in the **Table 3**, it is seen that the approximate chi-square statistics is 3603.609 with 45 degrees of freedom, which is significant at the 0.05 level. Calculated value 3603.609 is greater than table value. This means that the null hypothesis that the population correlation matrix is an identity matrix, is rejected by Bartlett's test of sphericity. So, the result of Bartlett"s test of sphericity is significant suggesting that the population was not an identity matrix. Therefore, the Bartlett's Test of Sphericity is significant.

Table 3: KMO and Bartlett's Test to Validate Integrated Marketing Factors for Business Growth

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	3603.609
	Df	45
	Sig.	.000

5. Analysis and Findings

Based on the survey data, the following section exhibits the analysis and findings of this study.

5.1 Correlation of Integrated Marketing Activities for Business Growth

The following correlation matrix, constructed from the data obtained to understand the impact of integrated marketing in the business growth of mobile telecom industry of Bangladesh. This matrix exhibits sufficient coefficients above 0.3 to allow Factor

Analysis. In this Table, all the coefficients (i.e., 45), the correlations of which are greater than 0.30 and they are highlighted in grey. So, the highlighted coefficients in the **Table 4** exhibits that the above variables are correlated with each other. These variables may also be expected to correlate with the same factors.

Table 4: Correlation Matrix of Integrated Marketing for Business Growth

		IGM01	IGM02	IGM03	IGM04	IGM05	IGM06	IGM07	IGM08	IGM09	IGM10
Correlation	IGM01	1.000	.712	.702	.633	.570	.385	.461	.466	.438	.419
	IGM02	.712	1.000	.714	.688	.576	.420	.511	.436	.421	.458
	IGM03	.702	.714	1.000	.661	.623	.469	.452	.424	.415	.406
	IGM04	.633	.688	.661	1.000	.692	.531	.542	.498	.511	.523
	IGM05	.570	.576	.623	.692	1.000	.602	.569	.485	.497	.420
	IGM06	.385	.420	.469	.531	.602	1.000	.589	.492	.484	.430
	IGM07	.461	.511	.452	.542	.569	.589	1.000	.653	.606	.524
	IGM08	.466	.436	.424	.498	.485	.492	.653	1.000	.689	.559
	IGM09	.438	.421	.415	.511	.497	.484	.606	.689	1.000	.598
	IGM10	.419	.458	.406	.523	.420	.430	.524	.559	.598	1.000

Source: Field Survey

5.2 Communalities of Integrated Marketing for Business Growth

The "Initial" column of the **Table 5** exhibits that the communality for each variable, IGM01 to IGM10, is 1.0 as unites which were inserted in the diagonal of the correlation matrix. Moreover, the Table 6 also exhibits that the average communality of the variables after extraction is above 0.50.

Table 5: Communalities of Integrated Marketing for Business Growth

	Initial	Extraction
IGM01	1.000	.736
IGM02	1.000	.772
IGM03	1.000	.785
IGM04	1.000	.735
IGM05	1.000	.655
IGM06	1.000	.529
IGM07	1.000	.695
IGM08	1.000	.732
IGM09	1.000	.735
IGM10	1.000	.585

Extraction Method: Principal Component Analysis.

5.3 Total Variance

In the **Table 6**, "Initial Eigenvalues" in column B exhibits the eigenvalues in its sub column entitled "Total". The eigenvalues for the components are exhibited in decreasing order of magnitude from component 1 to component 10. The eigenvalue for a component indicates the total variance attributed to that component. The total variance accounted for by all ten (10) components is 10.00, which is equal to the

number of variables (i.e., 10). Each of the 10 variables has a sample variance in column entitled "**% of Variance**", the sum of which equals the total variance in column entitled "**Cumulative %**". According to the eigenvalues criterion, the exact number of components is 10 which is exhibited in **Table 6**.

Table 6: Total Variance

A	B			C			D		
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative e %
1	5.805	58.051	58.051	5.805	58.051	58.051	3.543	35.426	35.426
2	1.153	11.528	69.579	1.153	11.528	69.579	3.415	34.153	69.579
3	.695	6.954	76.533						
4	.488	4.877	81.410						
5	.398	3.977	85.387						
6	.364	3.637	89.024						
7	.296	2.961	91.985						
8	.288	2.882	94.867						
9	.278	2.778	97.644						
10	.236	2.356	100.000						

Extraction Method: Principal Component Analysis

5.4 Correlation between the Integrated Marketing Activities for Business Growth

In **Table 7: "Component Matrix"**, Component 1 is correlated with all the 10 variables (an absolute value of factor loading greater than 0.3). Likewise, Component 2 is at least somewhat correlated with 7 of the 10 variables namely IGM01, IGM02, IGM03, IGM07, IGM08, IGM09 and IGM10 which are commonly loaded on both the components 1 and 2. So, it is seen that the "Component Matrix" in the **Table 7** is not ideal option to properly interpret the components. Instead, it is difficult to interpret or seldom results in components that can be interpreted.

Table 7: Component Matrix[a] of Integrated Marketing Activities for Business Growth

	Component	
	1	2
IGM01	.765	-.389
IGM02	.785	-.394
IGM03	.776	-.429
IGM04	.831	-.211
IGM05	.797	-.138
IGM06	.705	.180
IGM07	.774	.308
IGM08	.745	.421
IGM09	.738	.436
IGM10	.693	.323

Extraction Method: Principal Component Analysis. (2 components extracted)

5.5 Rotation of Components

Now, by comparing the **Table 8: Rotated Component Matrix** with the **Table 7: Initial or Unrotated Matrix (titled "Component Matrix")**, it is seen that how rotation achieves simplicity and enhances interpretability. From the comparison, it is seen that whereas all variables correlated with Component 1 in the unrotated matrix, only variables IGM01 (Functional Integration), IGM02 (Integrated Service/Product), IGM03 (Integrated Pricing), IGM04 (IMC), and IGM05 (Forward Integration) correlate highly with Component 1. Likewise, the variables IGM06 (Integrated Teamwork), IGM07 (Integrated Process), IGM08 (Integrated Physical Evidence), IGM09 (Horizontal Integration) and IGM10 (Backward Integration) correlate highly with Component 2. Furthermore, no variable commonly correlates highly with both the factors. This can be clearly seen in the "**Table 8**".

Table 8: Rotated Component Matrix of Integrated Marketing Activities for Business Growth

	Component	
	1	2
IGM01	.820	.254
IGM02	.837	.266
IGM03	.855	.234
IGM04	.743	.428
IGM05	.667	.457
IGM06	.380	.620
IGM07	.340	.761
IGM08	.240	.821
IGM09	.225	.827
IGM10	.271	.715

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. (Rotation converged in 3 iterations)

5.6 Component Loadings

Table 9: Component Loadings

Name of Components	Variables	Component Loading*	Eigen value**	Component Interpretation (% of Variance Explained)**
Component 1: Functionally Integrated Core Marketing Mix	IGM01: Functional Integration	.820	5.805	58.051
	IGM02: Integrated Service/Product	.837		
	IGM03: Integrated Pricing	.855		
	IGM04: IMC	.743		
	IGM05: Forward Integration	.667		
Component 2: Integrated Value Chain	IGM06: Integrated Teamwork	.620	1.153	11.528
	IGM07: Integrated Process	.761		
	IGM08: Integrated Physical Evidence	.821		
	IGM09: Horizontal Integration	.827		
	IGM10: Backward Integration	.715		
Total Variance				69.579
Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization. a. Rotation converged in 3 iterations				

Source: *Table 8, **Table 6

The following is a brief discussion of each component in the order of its contribution to the total variance.

The rotated factor/component matrix forms the basis for interpretation of the components. In this study, loadings of 0.50 or more are considered practically significant. In the rotated component matrix of **Table 8**.

i) Component 1 has high coefficients for variables: IGM01 (Functional Integration), IGM02 (Integrated Service/Product), IGM03 (Integrated Pricing), IGM04 (IMC), and IGM05 (Forward Integration). Therefore, this component may be labeled or named as 'Functionally Integrated Core Marketing Mix' Component. Thus, integrated marketing can have positive impact on the business growth of the mobile phone telecom industry of Bangladesh by functionally integrating the 4Ps of core marketing mix.

ii) Component 2 is highly related with variables: IGM06 (Integrated Teamwork), IGM07 (Integrated Process), IGM08 (Integrated Physical Evidence), IGM09 (Horizontal Integration) and IGM10 (Backward Integration). Therefore, this component may be labeled or named as 'Integrated Value Chain' Component'. Thus, integrated marketing can have positive impact on the business growth of the mobile phone telecom industry of Bangladesh by integrating the linkages among the suppliers (backward linkages), people, process, physical evidence and distributors (forward linkages).

Component 1: Functionally Integrated Core Marketing Mix

It is the most important component since the eigenvalue and percentage (%) of variation explained by this component are 5.805 and 58.051 respectively. This component contains 5 (five) variables, of which the first variable (IGM01: Functional Integration) with component loading .820 is related to the integration of the cross-functional departments or teams within the organization. While the remaining 4 (four) variables namely IGM02: Integrated Service/Product, IGM03: Integrated Pricing, IGM04: IMC and IGM05: Forward Integration with component loading .837, .855, .743 and .667 respectively are related to 4Ps or the core marketing mix. The examination of the impact of integrated marketing activities on the business growth of the mobile telecom industry reveals that all these five variables are significant [**Table 9**]. Functional integration, for example, by assigning specialists from various departments an organization (e.g., mobile phone telecom operator) can provide the best customer service. In this regard, customer service centers may resolve the technical problems with the active support of the assigned engineers while customer service executives may assist the 'R&D' and 'Product Development' departments by giving necessary customer feedback as input of market research and planning new products or services. Integrated Service/Product, for instance, may provide a balanced package of benefits through various combinations. In this regard, a telecom company may offer a balanced combination of basic telephony, mobile commerce, mobile banking, mobile internet, etc., as part of its varied service packages. Together with this, they may also provide SIM and handset in the package. Thus, a bundle offer of benefits can attract mass customers towards the company offering which actively help in the growth of business through increased sales volume and profitability. Likewise, 'integrated pricing' is becoming a very popular concept among the market oriented organizations in offering convenient and affordable service packages. Through such pricing customers may be offered a number of services (e.g., mobile telephony, mobile internet, etc.) together under a package through integrated and competitive call rates and charges. Thus, customer reliance may be gained leading to maximum customer satisfaction and thereby greater business volume and higher amount of profitability. Integrated Marketing Communication (IMC), for example, is considered as the most effective and important marketing weapon for a pro-modern market driven organization. With the advent of information and communication technologies modern day marketers combine all the media channels including conventional press and electronic media like newspaper, magazines, television, radio, billboard, neon-sign, etc., as well as the online media like email, video conferencing, social media (e.g., facebook, twitter, orkut), blogging, online forum, search engine marketing, online advertising (e.g., google adwords, google adsense, adbrite, facebook advertising, free classified sites, etc.) Thus, a very extensive promotion of organizational products and services may be done which thereby enhance the brand image, sales volume and profitability of the organization resulting into business development. Role of company owned or hired service centers, call centers, franchisees, retailers, independent shops, etc. is very significant in the growth of the business volume and profitability of an organization. Moreover, since they directly interact with the final customers or users, it creates an opportunity for the service providing company to ensure a strong coordination among these service and distribution points. Forward integration, in this regard, can play a very significant role by integrating the conveniently located service centers and channel members.

So, it has been proved through factor analysis that 'Functionally Integrated Core Marketing Mix' is a significant component of integrated marketing that has positive impact on the business growth of mobile telecom Industry of Bangladesh.

Component 2: Integrated Value Chain

It is the second most important component since the eigenvalue and percentage (%) of variation explained by this component are 1.153 and 11.528 respectively. This component contains 5 (five) variables, of which the first three variables IGM06, IGM07, IGM08 with component loading .620, .761 and .821 respectively have relevance to integration of the extended marketing mix (3Ps) while the last 2 (two) variables IGM09 and IGM10 with component loading .827 and .715 are respectively related to horizontal and backward integration. The examination of the impact of integrated marketing activities on the business growth of mobile telecom Industry of Bangladesh reveals that all these 5 (five) variables are significant [**Table 9**]. To be market oriented, an organization needs to be customer service oriented as well and to be so such organization requires integrated teamwork of its people. Thus, by maintaining a pool of service-minded and customer-oriented employees, investors, media and channel partners with shared vision, a market driven organization can move towards the business growth in terms of the number of customers, sales volume and profitability. Every organization goes through a number of processes between its 'service and distribution points' and the 'customers'. In the competitive market scenario, the greater the level of such process integration, the higher the growth rate of business volume, profitability and market share. Thus, an integrated approach enables a mobile telecom service provider company to maintain a well-coordinated, simple, smart and fast service process to provide easy to use/operate, bill pay or, recharge, balance transfer, 24 hours service support, etc. Physical Evidence acts as a very important support as well as value addition in attracting customers towards the organizational distinctiveness. Such evidence may include attractive interior, appealing exteriors, and branding atmosphere at all the points of service and distribution. Thus, a mobile telecom service provider company can appeal to its target group with its distinctiveness and become successful in converting the prospects into final customers leading to the increased business volume, profitability and growth. In rendering services, sometimes good relationship with the rivals or competing organizations may also become essential. Horizontal integration may be an effective approach to develop such relationship. A mobile telecom company may implement this approach by maintaining an integrated network with the local and international operators to serve its customers. Thus, it can extend its network coverage, service range and meet customer requirements resulting into increased sales and business volume. No organization can ensure a stable and lasting growth without sound relationship or linkages with its suppliers. But even then independent suppliers are not a guarantee to business success. Therefore, 'Backward Integration' may be an effective formula to ensure uninterrupted and high quality product distribution and service delivery. Through such relationship with the suppliers of technologies (e.g., CDMA/GSM, 3G, etc.), SIM cards and networking tower, equipments, accessories, etc., a mobile telecom organization can also provide the best quality service. Thus, the growth and success rate of the business is further accelerated. So, it has been proved through factor analysis that 'Integrated Value Chain' is a significant component of integrated

marketing that plays positive role in the business growth of the mobile telecom industry of Bangladesh.

The findings of factor analysis in **Table 9** clearly exhibit that business growth of the mobile phone telecom industry of Bangladesh is ensured through integrated marketing for two reasons namely 'Functionally Integrated Core Marketing Mix', and 'Integrated Value Chain'. Components loading of the variables i.e., is greater than the cutoff point 0.5 and percentage (%) of variance of the components i.e., 69.579 rejects the null hypothesis (H_0: Integrated marketing does not have positive impact on the business growth of mobile telecom Industry of Bangladesh) and proved the alternative hypothesis (H_a: Integrated marketing has positive impact on the business growth of mobile telecom Industry of Bangladesh). Thus, the model proposed in the earlier section is validated.

6. Conclusion

The findings of the reviewed literature represent the role of integrated marketing on the business growth of mobile telecommunications market of Bangladesh. However, each of the previous studies focuses on their unique findings which are not always directly related to the business growth of mobile telecommunications market of Bangladesh. Since most of the past papers focused on few aspects of the subject matter, the inclusion of multifarious variables from different research findings verified the current study through factor analysis.

From this perspective, the present paper is unique for its compliance with the reliability and validity test criterion. The results of this study emphasized on i) developing functional integration, integrated service/product, integrated pricing, integrated marketing communication (IMC) and forward integration, ii) integrated teamwork, process, physical evidence, horizontal and backward integration. So, the present study revealed that there is necessity of integrated marketing to ensure the business growth of mobile telecommunications market of Bangladesh.

The new findings of this paper are that this study proved that integrated marketing has positive impact on the business growth of mobile telecom Industry of Bangladesh. The findings imply that mobile telecommunications service providers will be in considerably advantageous position by applying the recognized components of integrated marketing in their operation for a consistent and constant development. So, it is clearly exhibited from this research that there is a causal effect of business growth of the mobile telecommunications market of Bangladesh by applying integrated marketing strategy. This paper adds value to the research area by suggesting the identified components of integrated marketing which have positive effect on the growth and development of the mobile telecommunications business in Bangladesh. Such findings will enable the mobile telecommunications providers to follow integrated marketing strategy to ensure their company success, to understand the effect of integrated marketing on their company and thereby develop and apply appropriate client centered marketing strategies to further increase their business growth. Moreover, by integrating the 7Ps extended marketing mix elements, the very requirements of clients as well as constant rate of development of the mobile telecommunications market may be multiplied.

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In summary, it can be stated that the two components namely namely i) 'Functionally Integrated Core Marketing Mix' including Functional Integration, Integrated Service/Product, Integrated Pricing, IMC & Forward Integration and ii) 'Integrated Value Chain' including Integrated Teamwork, Integrated Process, Integrated Physical Evidence, Horizontal Integration & Backward Integration can bring 69.579% variance in the business growth of mobile telecommunications market of Bangladesh. Such big percentage of variance rejects the null hypothesis ($H_{0:}$ Integrated marketing does not have positive impact on the business growth of mobile telecom Industry of Bangladesh) and proved the alternative hypothesis (H_a: Integrated marketing has positive impact on the business growth of mobile telecom Industry of Bangladesh). Thus, the model proposed in the earlier section is validated.

However, the major limitation of the present study is that the secondary data did not exhibit the application of SERVQual model in the context of education quality of private universities in Bangladesh. Even though such limitation, this study may contribute in the research and academic development of business growth of mobile telecom Industry of Bangladesh through a systematic process of extensive literature review followed by the primary survey findings and analysis together with conclusive implications. Thus, the paper will enable the concerned mobile operators, other industry players and policy makers with necessary course of actions and new business models which will enable the academia in developing its theory based on proven practice.

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