

Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh: An Internal Marketing Approach

Surajit Sarbabidya*

Customer is considered as the king or queen of the market. Hence, the survival and success of an organization as well as industry in general depends on the satisfaction of such customers. This again depends on the active role and caring service of the customer oriented employees. However, the performance excellence of the latter greatly depends on the satisfaction of the target market. This is where the earlier research studies found that internal marketing can be feasible solution to hire, train, motivate and retain the resourceful employees. But very few of such studies focused on the application of internal marketing in the mobile phone telecommunication industry which has experienced tremendous growth from its inception. So, this indicates to the research problem because there is a research gap. In such context, internal marketing approach may be adopted for sustainable development of this industry by ensuring profitability, satisfaction of the internal people (i.e., employees) to satisfy the external people (i.e., customers) in such a way so that stakeholder and environment friendly telecom business can be developed. With this end in view, the present study aims to examine the relationship between internal marketing and sustainable development of the mobile phone telecommunication industry of Bangladesh. It has been found from a study conducted between October 10 to November 15, 2015 on 123 employees that internal marketing plays important role in the sustainable development of the mobile phone telecommunication industry of Bangladesh through the fruitful contribution of the motivated resourceful employees. The study also found that various motivational measures for the employees including welfare, training, performance based pay, recognition and appreciation, promotion, good workplace, work/life balance, recreation facilities, equal employment opportunity, logistic support, etc., have contributed behind such development. Finally, it can be stated that the study will enable the mobile telecommunication operators to acquire, develop and retain the resourceful employees through various incentives to utilize them to work for the sustainable development of the industry.

Field of Research: Marketing and Management

Keywords: Internal Marketing, Employee Motivation, Sustainable Development, Mobile Phone Telecom Industry, etc.

1. Introduction

Mobile phone telecommunication is one of the dynamic industries of this millennium with many challenges and opportunities for all of its stakeholders. Throughout such situation the development and success of this industry greatly relies on the satisfaction of its customers, which is again dependent on the satisfaction of the employees. It is because the satisfied employees can play proactive role in the satisfaction of customers, which

*Dr. Surajit Sarbabidya, Associate Professor, Department of Business Administration, School of Business, Britannia University, Comilla, Bangladesh, **Email:** surajitsarbabidya@gmail.com

Sarbabidya

encourage the latter to make repeat purchase or use and refer new clients. Thus, satisfaction of the concerned stakeholders and profitability of the respective mobile operators can be ensured once satisfied employees give their fullest efforts for the business development. Indeed, such significance of employee satisfaction and welfare behind business success acted as the principal reasons or motivation behind this study to examine the relationship between internal marketing and sustainable development of the mobile phone telecommunication industry of Bangladesh.

Some of the previous papers adopted various qualitative frameworks or models while others focused on individual variables as factors of internal marketing. From that perspective, the current paper is unique because by using the Principal Component Analysis (PCA) on the individual variables this study found three important components of internal marketing which have direct influence on the mobile telecom industry of Bangladesh. The significance of the identified components on the internal marketing of the mobile telecom industry was verified and proved through reliability, validity, factor analysis, correlation and multiple regression analysis.

But the current study is not free from limitations since there is paucity of research findings in this regard. For example, the competitiveness in the mobile phone telecommunication industry of Bangladesh is very acute where each of the market players is trying to secure its position in the market in the long run. But the success of their efforts mostly depends on the excellent performance of their employees. However, in the present time of acquisition, merger, diversification, etc., it has been very challenging to hire, train and retain the best performers with motivation. In this connection, internal marketing may be an effective marketing approach to adopt by the operators to ensure stable growth of their business. However, from the intensive effort during the collection of secondary data, it has been seen that there is acute scarcity of research works on the role of internal marketing on the sustainable development of the mobile telecom industry of Bangladesh. Some of the past studies have not come into a conclusion with the concrete and exhaustive list of necessary factors which may positively affect and ensure sustainable development of the respective industry. In fact, some of the previous studies focused on one or, some specific factors other than the maximum factors. 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. This motivates the current research to be pursued to identify the relevant factors that may enable the concerned mobile operators to take necessary policy measures and actions in order to ensure sustainable development of them in particular and for the industry in general. Furthermore, the present study may contribute to further research for innovative, academically enriched and employee centric marketing program for customer oriented business growth and stability. Therefore, to fill out such knowledge gap left out by the previous research works, the findings of the same similar to the subject matter may be cited and on the basis of the same, an empirical study may be endeavored to depict Bangladesh scenario. With this end in view, the present study investigates the research question: "Does Internal Marketing have any role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh?" However, from the context of the current research question, the following hypotheses have been developed to exhibit the appropriate answer:

H₀: Internal marketing does not have any role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh.

H_a: Internal marketing has role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh.

Sarbabidya

From the light of the above hypotheses, the principal objective of this study is to examine the relationship between internal marketing and sustainable development of the mobile phone telecommunication industry of Bangladesh.

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 exhibits the analysis and findings of the study, and Section 6 draws a constructive conclusion.

2. Background of the Study

The mobile phone telecommunication industry of Bangladesh first started its journey in the year 1989 when the telecom sector was liberalized and private sector participation was allowed by issuing nationwide operating licenses to Hutchison Bangladesh Telecom Limited [HBTL] for 20 years. Subsequently, the Pacific Bangladesh Telephone Limited (PBTL) and the Bangladesh Telecom Limited (BTL) were also awarded license to operate cellular, paging, and other wireless communication networks. In 1990 HBTL was incorporated in Bangladesh as a joint venture between BTL and HBTL. In 1991 PBTL acquired HBTL while in 1992 agreement with BTTB was made regarding PSTN links to start the first cellular operation in the South Asian sub-continent 1993 by introducing Advanced Mobile Phone System (AMPS). Later on, HBTL began commercial operation in Dhaka using the AMPS mobile technology. In 1995 the regulatory power of BTTB (Bangladesh Telegraph and Telephone Board) was transferred to Ministry (MoPT). In 1996 Government awarded three GSM licenses to PBTL, Grameen Phone and Telecom Malaysia International Bangladesh (TMIB). Then, HBTL was renamed as PBTL and launched the brand name "CityCell Digital" to market its cellular products. In 1997 Grameen Phone and TMIB [Aktel] launched its GSM services. In 1998 Sheba Telecom launched its GSM services. The 3 GSM operators signed a revenue sharing agreement with BTTB in April 1998. In the same year, the National Telecommunication Policy of 1998 came into force. In 1999, CDMA technology was first introduced by CityCell. In 2001, the Bangladesh Telecommunication Act, 2001 was enacted to establish Bangladesh Telecommunication Regulatory Commission (BTRC). In 2002, BTRC was established to takeover the regulatory functions from MoPT. In the same year, the Information & Communications Technology (ICT) Policy also came into force. In 2004 Teletalk mobile telecom service was launched. In 2005, Egypt based Orascom acquired Sheba Telecom and established the brand name 'Banglalink'. In 2006, Next Generation Network (NGN) was introduced in BTTB. In 2007, International Long Distance Telecommunications Services (ILDTS) Policy 2007 came into force. In 2008-2010, Japanese NTT DoCoMO bought 30 percent stake in Aktel and rebranded as 'Robi'. In 2009, Grameenphone was listed in the capital market. In 2010, Bharti Airtel acquired 70% stake in Warid Telecom in January 2010 and rebranded as 'Airtel'. In 2012, 3G mobile service is introduced by state owned Teletalk in October 2012. In 2013-2015, the three Private mobile operators were awarded 3G license and they subsequently launched 3G based mobile telecom service. At present, after merger between Robi and Airtel this industry has four market players in Bangladesh with the 135.982 million active subscribers till November 2017. The following **Table 1** exhibits the comparative exhibition of the active subscribers of the mobile telecom industry in Bangladesh.

Sarbabidya

Table 1: Mobile Phone Industry in Bangladesh

Rank /Sequence	Operators	November 2014	November 2015	November 2016	November 2017
01	GP	51.112	56.477	56.785	64.959
02	Banglalink	30.681	32.956	30.431	32.330
03	Robi	25.251	28.296	25.261	41.397
04	Airtel	7.468	10.345	7.729	Merged with Robi
05	Citycell	1.306	1.034	0.000	0.000
06	Teletalk	3.805	4.057	3.081	4.419
Total		119.623	133.163	123.287	143.106

Source: BTRC Web Site

* Market size indicates subscribers in millions

** Market share represents % of subscribers

3. Literature Review

According to IISD (1996), sustainable development involves the simultaneous improvement of the economy, the environment, and the wellbeing of people. Székele and Knirsch (2005) asserts that for sustainability a business aims to reduce risks, avoid waste, increase energy efficiency and being driven to create new innovative products and services. By adopting sustainability principles, an organization can become more profitable and for this internal marketing may be a justified option to develop and retain customer conscious motivated employees. Collins, Payne (1991) advocates internal marketing as a marketing oriented human resource management by applying marketing internally in the organization.

Equal employment opportunities lead to higher employees' satisfaction. David (2006) suggested that when the workplace environment demonstrates discrimination, the satisfaction of the workers will be influenced negatively. This will also negatively influence the productivity of the organization through poorer performance by the workers. David (2006) also mentioned that dissatisfaction of the employees due to unequal opportunities cause dissatisfaction amongst customers, which would frustrate the employer and cause a vicious circle of dissatisfaction and lack of productivity (David, 2006). A study by the Equal Opportunity Commission states, jobs are devalued when perceived as traditionally female, because to undertake the same job as men, women are paid less, which on average amounts to around 17% less than men (CEDAW, 2008). The CEDAW (Convention on the Elimination of all forms of Discrimination Against Women) Report 2008 for the UK argues that the equal pay audit tool has to be put in place to identify any gender pay gaps and develop a plan of action to remove any barrier and obstacle to the gender pay gap (CEDAW, 2008). In order to achieve equal pay there needs to be a legal requirement for the publication of all employees' salaries on a gender basis by all organisations each year (Fawcett Closing the inequality gap Women, 2009).

Promotion and career growth are related to the satisfaction of employees. Heywood and Xiangdong (2006) found promotion as an imperative factor for job satisfaction. McCausland, Pouliakas, and Theodossiou (2005) gave their opinion that job satisfaction is strongly correlated with promotion opportunities and there is a direct and positive association between promotional opportunities and job satisfaction. Paarsch, Harry and

Sarbabidya

Shearer (2000) found that managers who have been promoted feel more satisfaction with opportunities regarding promotion and have more expectations for future promotion.

Boshoff and Allen (2000) suggest that while putting the right people in the jobs and empowering them is important for a consistently high level of service, they must be trained to deal with situations that arise. Kang (2001) said that welfare and communication, recognition of systematic importance, and the consistency of payment have correlated with welfare satisfaction. The higher welfare satisfaction is, the higher the correlation with the work satisfaction and turnover. Lawler (2003) identified that rewarding employees based on their performance enhances firm's performance. Internal communication is used to promote service mindset towards employees, enhance internal relationships, and support effective communication and feedback within the company. Internal marketing is also used to promote new products and services to employees before the commercial launch (Palmer, 2005; Gronroos, 2007; Kotler et al., 2009). Researchers advocated effective internal communication for the improved productivity, reduced absenteeism, increased levels of innovation, higher quality of services and products and reduced costs (Argenti, 2007). Employees' satisfaction with internal communication is an important factor in their performance and ultimately organizational success (Erasmus-Kritzinger, 2002). Two-way symmetrical communication presents the benefits of building a participative culture that increases employees' motivation and job satisfaction (Grunig et al., 2002); fosters their loyalty to and identification with the organization they work for (Grunig et al., 2002). Internal promotion relies on affirming communication and positive reinforcement (Keller et al., 2006). Managers can utilize this communication approach to create a fair and non-threatening work environment, enhance feelings of ownership, belongingness, camaraderie and bonding among employees (Kale, 2006) and ultimately increase job satisfaction (Lee & Chen, 2005).

Previous research on the topic (Md et al., 2013; Danisha and Usman, 2010; Manjunath and Rajesh, 2012; Harrison, 2005) concluded that the most shared problem in organizations today is that they miss the important component of recognition of employee performance, which is the low-cost, high-return ingredient to a well-balanced reward system. DeCenzo/Robbins emphasized on creating a healthy working environment by evaluating the current situation of the organizational environment, creating awareness about the safety requirements and keeping the places clean. According to Kirchmeyer's research study (Kirchmeyer, 2000), a 'positively balanced life' is achieved through two components namely i) personal resources (i.e., inputs) that are applied to each role — work and family — with an equally high level of attention, time, involvement, or commitment and ii) equally high level of satisfaction with work and family roles (i.e., outcomes). In addition, Kirchmeyer further associated balanced satisfaction across work and family roles with a high quality of life. Hermansson (2003) advised recreational events to motivate employees, form a binding spirit between new employees, find new arenas for all employees in which they can validate themselves, present a new boss or manager, or simply to have great fun. Dalton & Croft (2003) found the defined duties and responsibilities of employees for their effective contribution.

Scott-Ladd and Marshall (2004) emphasized that participative decision making contributes to performance effectiveness and led to greater gains in the workplace whereas as reflected by researcher Ballout (2008) the Individual- specific variables will be more likely to predict family – to - work conflict and perceived career success, while work-specific variables will be more likely to predict work- to - family conflict and career success. Many scholars argue (e.g. Scott-Ladd et al., 2006; Bhatti & Qureshi, 2007) that employee participation is likely to increase job satisfaction and performance. Leblebici (2012) argues

Sarbabidya

that, the modern work physical environment enhances employee performance with the support of technology; computers and machines as well as general furniture and furnishings. As part of positive interpersonal relationship, senior managers, middle managers and employees' expert peers all influence employee behaviour (Lam, et al., 2010; Wieseke, et al., 2009).

The findings of the aforementioned research studies were not solely on the mobile telecom industry and this is why a research question in the present study has been raised to know whether Internal marketing can play any role in the sustainable development of the mobile phone telecommunication industry of Bangladesh or not. To resolve this question a research hypothesis like 'Internal marketing has role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh' can be developed. Now, if the hypothesis is accepted through statistical analysis, the current research will positively contribute into a new direction.

4. Methodology of the Study

This study is the embodiment of the collection of primary and secondary data collection and their analyses. For the purpose of collecting primary data, random sampling method has been adopted on a sample size of 123 employees of six mobile phone telecom service providing companies in Bangladesh through an extensive survey. The study has been conducted between October 10, 2015 to November 15, 2015. A structured self-administered questionnaire using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) has been used for the survey. On the other hand, the secondary data have been collected through extensive literature review on the articles and research papers published in the referred journals. 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, correlations and multiple regression analysis, etc., has/have been utilized to identify the relationship of the internal marketing components and their role in the sustainable development of the concerned industry.

5. Analysis and Findings of the Study

To conduct factor analysis, the independent variables have been identified and exhibited in the **Table 2** from the literature review.

Table 2: Identification of Variables

Code	Items	Sources
i1	Employee welfare	Kang, 2001
i2	Employees as Resources	Collins, Payne, 1991
i3	Investment on Training	Boshoff and Allen, 2000
i4	Proactive Interpersonal Communication	Argenti, 2007; Erasmus-Kritzinger, 2002; Grunig et.al., 2002; Kale, 2006; Keller et. al., 2006; Lee & Chen, 2005;
i5	Performance Based Pay	Lawler, 2003
i6	Recognition & Appreciation	Md et al., 2013; Danisha and Usman, 2010; Harrison, 2005; Manjunath and Rajesh, 2012
i7	Promotion & Career Growth	McCausland, Pouliakas, and Theodossiou, 2005; Paarsch, Harry and Shearer, 2000; Xiangdong, 2006
i8	Good Workplace	DeCenzo D., & Robbins, S., 2005
i9	Balanced Work/Life	Kirchmeyer, 2000
i10	Recreation Facilities	Hermansson, 2003
i11	Equal Employment Opportunity	CEDAW, 2008; David, 2006; Fawcett Closing the inequality gap Women, 2009
i12	Well Defined Job Description	Dalton & Croft, 2003
i13	Participative Management	Ballout, 2008; Bhatti & Qureshi, 2007; Scott-Ladd and Marshall, 2004; Scott-Ladd et al. 2006
i14	Physical environmental support	Leblebici, 2012
i15	Positive Interpersonal Relationship	Lam, et al., 2010; Wieseke, et al., 2009

Source: Literature Survey

From the results of the reliability, sampling adequacy, validity and factor analysis based on the extensive review of literature, the following statistics have been found:

5.1 Reliability: The Cronbach's Alpha value of all the 16 items including 15 independent and 1 dependent variables is .910 which is greater than 0.7, indicating an overall higher reliability factors of internal marketing variables used in this study for the sustainable development of the mobile phone telecom industry. Thus, it can safely be stated 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 16 items.

5.2 Sampling Adequacy: The value of Kaiser-Meyer-Olkin (KMO) Measure is .862 which is 'meritorious' suggesting the adequacy of the sample size for the factor analysis.

5.3 Validity: From the results of the Bartlett's Test of Sphericity, it is seen that the approximate chi-square statistics is 1172.804 with 105 degrees of freedom, which is

Sarbabidya

greater than the 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.

5.4 Factor Analysis: The **Table 3** exhibits three components of internal marketing for sustainable development with the eigen values greater than 1.0 using the factor loading of 0.50 as the cut-off point and cumulative proportion of **68.419%** variance.

Table 3: Component Loadings

Name of Components	Variables	Component Loading*	Eigen value* *	Component Interpretation (% of Variance Explained)**
Component 1: Employee Training & Motivation	i1: Employee welfare	.840	6.578	43.854
	i2: Employees as Resources	.844		
	i3: Investment on Training	.838		
	i4: Proactive Interpersonal Communication	.708		
	i5: Performance Based Pay	.776		
	i6: Recognition & Appreciation	.804		
	i7: Promotion & Career Growth	.646		
Component 2: Secured, Enjoyable & Balanced Work/Life for All	i8: Good Workplace	.637	2.294	15.293
	i9: Balanced Work/Life	.801		
	i10: Recreation Facilities	.617		
	i11: Equal Employment Opportunity	.753		
	i12: Well Defined Job Description	.673		
Component 3: Participative Management with supportive environment	i13: Participative Management	.906	1.391	9.272
	i14: Logistic Support	.890		
	i15: Positive Interpersonal Relationship	.845		
Total Variance				68.419
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				

From the above findings of this study it is evident that sustainable development of the mobile phone telecom industry of Bangladesh is ensured through internal marketing for three reasons namely 'Component 1: Employee Training & Motivation', 'Component 2: Secured, Enjoyable & Balanced Work/Life for All' and 'Component 3: Participative Management with supportive environment'.

The Component 1 contains 7 (seven) variables namely i1: Employee welfare, i2: Employees as Resources, i3: Investment on Training, i4: Proactive Interpersonal Communication, i5: Performance Based Pay, i6: Recognition & Appreciation and i7: Promotion & Career Growth with component loading .840, .844, .838, .708, .776, .804 and .646 respectively. All the variables from i1 to i7 are related to Employee Training & Motivation. So, it has been proved through factor analysis that 'Employee Training &

Sarbabidya

Motivation' is a significant component of internal marketing that plays positive role in the sustainable development of the mobile telecom industry of Bangladesh.

The Component 2 contains 5 (five) variables namely i8: Good Workplace, i9: Balanced Work/Life, i10: Recreation Facilities, i11: Equal Employment Opportunity and i12: Well Defined Job Description with component loading .637, .801, .617, .753 and .673 respectively. All the variables from i8 to i12 are related to Secured, Enjoyable & Balanced Work/Life for all employees. So, it has been proved through factor analysis that 'Secured, Enjoyable and Balanced Work/Life for All' is a significant component of internal marketing that plays positive role in the sustainable development of the mobile telecom industry of Bangladesh.

The Component 3 contains 3 (three) variables namely i13: Participative Management, i14: Physical environmental support and i15: Positive Interpersonal Relationship with component loading .906, .890 and .845 respectively. All the variables from i13 to i15 are related to Participative Management with supportive environment to motivate the employees. So, it has been proved through factor analysis that 'Participative Management with supportive environment' is a significant component of internal marketing that plays positive role in the sustainable development of the mobile phone telecommunication industry of Bangladesh.

5.5 Correlations of Internal Marketing and Sustainable Development: In the present study, a correlation coefficient measured the strength of a linear between the sustainable development and three components (Employee Training & Motivation, Secured, Enjoyable & Balanced Work/Life for All and Participative Management with supportive environment) of internal marketing. The correlation between sustainable development and three components is positive and is significant at the 0.01 level (2-tailed).

The **Table 4** shows the correlation between 'sustainable development' and 'Employee Training & Motivation' (Component 1) is 0.438 (Sig.=0.000); the correlation between 'sustainable development' and 'Secured, Enjoyable & Balanced Work/Life for All' (Component 2) is 0.435 (Sig.=0.000); the correlation between 'sustainable development' and 'Participative Management with supportive environment' (Component 3) is 0.610 (Sig.=0.000). Therefore, the study exhibits that there is moderate correlation between internal marketing and sustainable development of the mobile phone telecommunication industry of Bangladesh.

Sarbabidya

Table 4: Correlations of Internal Marketing and Sustainable Development

	Sustainable Development	Component 1: (Employee Training & Motivation)	Component 2: (Secured, Enjoyable & Balanced Work/Life for All)	Component 3: (Participative Management & Logistic Support)
Sustainable Development	1	.438** .000	.435** .000	.610** .000
Component 1: (Employee Training & Motivation)	.438** .000	1	.000 1.000	.000 1.000
Component 2: (Secured, Enjoyable & Balanced Work/Life for All)	.435** .000	.000 1.000	1	.000 1.000
Component 3: (Participative Management with supportive environment)	.610** .000	.000 1.000	.000 1.000	1

Thus, the result of correlation rejects the null hypothesis (H_0) that “Internal marketing does not have any role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh” and proves or accepts the alternative hypothesis (H_a) that “Internal marketing has role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh”. So, there is a relationship as expected.

5.6 Multiple Regression Analysis: Multiple regression analysis has been used to examine whether internal marketing can ensure sustainable development of the mobile phone telecommunication industry of Bangladesh or not. The dependent variable (sustainable development) has been regressed against each of the component scores (beta coefficients) of the three independent variables (Component 1: Employee Training & Motivation, Component 2: Secured, Enjoyable & Balanced Work/Life for All, Component 3: Participative Management with supportive environment) derived from the factor analysis as orthogonal components. The dependent variable, sustainable development, has been used as a surrogate indicator of respondents’ evaluation of the role of internal marketing in assuring sustainable development of the mobile phone telecommunication industry of Bangladesh.

Table 5 exhibits the results of the regression analysis. To predict the goodness-of-fit of the regression model, the Multiple Correlation Coefficient (R), Coefficient of Determination or, Square Multiple Correlation Coefficients (R^2), Adjusted R^2 , F ratio and t-values with significance have been examined.

Sarbabidya

In **Table5a**: Model Summary of Internal Marketing and Sustainable Development

Table 5: Regression Results (N=123)

Dependent Variable: Sustainable Development

Independent Variables: Three Components of Internal Marketing

Table 5a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 ^a	.754	.748	.41527

a. **Predictors:** (Constant), Component 3: Participative Management with supportive environment, Component 2: Secured, Enjoyable & Balanced Work/Life for All, Component 1: Employee Training & Motivation

Firstly, the multiple correlation coefficients (R) of independent variables (three components, X_1 to X_3) on the dependent variable (Sustainable Development or, SD) of the Mobile Phone Telecommunication Industry of Bangladesh, or Y_{SD}) is 0.868, which showed that Sustainable Development (SD) has positive input from the three components of Internal Marketing. In other words, the R value 0.868 shows 86.8% multiple correlation coefficients which means that there is 86.8% correlation between the predictors or three independent variables (Component 1: Employee Training & Motivation, Component 2: Secured, Enjoyable & Balanced Work/Life for All and Component 3: Participative Management with supportive environment) and the dependent variable (Sustainable Development).

Secondly, the Square multiple correlation coefficients (R^2) is 0.754, suggesting that more than 75.4% of the variation or variance in the dependent variable (Sustainable Development) has been explained by the predictors or independent variables or three components (Component 1: Employee Training & Motivation, Component 2: Secured, Enjoyable & Balanced Work/Life for All and Component 3: Participative Management with supportive environment). This meets the assumption of non-zero variance based on the fact that the R^2 value the variance in the predictor values, which in this case is not equal to zero.

Thirdly, the adjusted R^2 value 0.748 is ideal to generalize the model well because this value is close to R^2 value with a small difference of 0.006 (0.754 - 0.748). This means that if the model were applied to the population, it would account for 0.6% less variance in outcome.

In Table5b ANOVA^a: Firstly, the F ratio is 121.572, which is highly significant ($p < 0.001$) and this means that the model significantly improves the ability to predict the outcome variable. In this table, the p value is shown as 0.000 which is less than 0.05 indicating the model has a significant fit to the overall data.

Sarbabidya

Table 5b: ANOVA^a of Internal Marketing and Sustainable Development

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	62.894	3	20.965	121.572	.000 ^b
Residual	20.521	119	.172		
Total	83.415	122			

a. **Dependent Variable:** Sustainable Development

b. **Predictors:** (Constant), Component 3: Participative Management with supportive environment, Component 2: Secured, Enjoyable & Balanced Work/Life for All, Component 1: Employee Training & Motivation

So, the regression model achieved a satisfactory level of goodness-of-fit in predicting the variance of Sustainable Development (SD) in relation to the two components, as measured by the above mentioned R , R^2 , Adjusted R^2 and F ratio. In other words, at least one of the three components is important in contributing to Sustainable Development (SD) of the Mobile Phone Telecommunication Industry of Bangladesh.

In **Table 5c Coefficients:** The application of the b-values in the multiple regression model equation ($Y_{SD} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$ **Or,** $= 3.171 + .362 + .360 + .505$) interprets this model to mean that for every increase of one unit in Component 1: Employee Training & Motivation, assuming the effects of Component 2: Secured, Enjoyable & Balanced Work/Life for All, Component 3: Participative Management with supportive environment be held constant, Sustainable Development (SD) of the Mobile Phone Telecommunication Industry of Bangladesh would increase by 0.362. Likewise, should the effects of Component 1: Employee Training & Motivation and Component 3: Participative Management with supportive environment be held constant, a single unit increase in Component 2: Secured, Enjoyable & Balanced Work/Life for All would result in a 0.360 increase in Sustainable Development (SD) of the Mobile Phone Telecommunication Industry of Bangladesh. Similarly, the results showed that a one-unit increase in Sustainable Development (SD) with the Component 3: (Participative Management with supportive environment) assuming Component 1: Employee Training & Motivation, assuming the effects of Component 2: Secured, Enjoyable & Balanced Work/Life for All be held constant would lead to a 0.505 unit increase in Sustainable Development (SD) of the Mobile Phone Telecommunication Industry of Bangladesh, other variables being held constant.

Sarbabidya

Table 5c: Coefficients^a

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.171	.037		84.681	.000
Component 1: Employee Training & Motivation	.362	.038	.438	9.636	.000
Component 2: Secured, Enjoyable & Balanced Work/Life for All	.360	.038	.435	9.575	.000
Component 3: Participative Management with supportive environment	.505	.038	.610	13.423	.000

a. **Dependent Variable:** Sustainable Development

Since the beta values are the standardized versions of the b-values and are directly comparable, these values may be used to infer regarding the relative importance of each predictor or component to the model. In other words, the beta coefficients could be used to explain the relative importance of the three dimensions (independent variables) in contributing to the variance in Sustainable Development (SD) of the Mobile Phone Telecommunication Industry of Bangladesh (dependent variable). As far as the relative importance of the three internal marketing dimensions is concerned, Component 3: (Participative Management with supportive environment, Beta=0.610, Sig.=0.000), followed by Component 1: (Employee Training & Motivation, Beta=0.438, Sig.=0.000) and Component 2: (Secured, Enjoyable & Balanced Work/Life for All, Beta=0.435, Sig.=0.000) are all important in the sustainable development of mobile telecom industry of Bangladesh.

Again, since there are more than one predictors or components (independent variables), the magnitude of the t-value in conjunction with the significance has been considered to assess the overall contribution to the model. Based on the decision rule “the smaller the significance value and the greater the t-value, the greater the contribution of the predictor”, it is seen that Component 3: (Participative Management with supportive environment, t=13.423, Sig.=0.000), followed by Component 1: (Employee Training & Motivation, t=9.636, Sig.=0.000) and Component 2: (Secured, Enjoyable & Balanced Work/Life for All, t=9.575, Sig.=0.000) are all significant predictors or components of internal marketing in the sustainable development of the mobile phone telecommunication industry of Bangladesh. In this regard, from the t-values it can be also concluded that Component 3: (Participative Management with supportive environment) has a greater impact on the outcome (i.e. SD) than Component 1: (Employee Training & Motivation) and Component 2: (Secured, Enjoyable & Balanced Work/Life for All).

In summary, it can be stated that all underlying dimensions are positive and therefore are significant in each test. For example, the three components identified from the PCA exhibit that internal marketing can ensure sustainable development of the mobile phone telecommunication industry of Bangladesh with 68.419% variance. The result of correlation between ‘sustainable development and identified three components is/are also positive which in case of Component 1: ‘Employee Training & Motivation’, Component 2:

Sarbabidya

'Secured, Enjoyable & Balanced Work/Life for All' and Component 3: 'Participative Management with supportive environment' are respectively 0.438, 0.435 and 0.610. Again the higher values of multiple correlations coefficient r is 86.8%, F is 121.572, Beta and t test values all exhibit positive and significant result which all underlying dimensions are positive and therefore are significant. Thus, the result of each of the above analysis rejects the null hypothesis (H_0) that "Internal marketing does not have any role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh" and proves or accepts the alternative hypothesis (H_a) that "Internal marketing has role in the Sustainable Development of the Mobile Phone Telecommunication Industry of Bangladesh". So, there is a relationship as expected.

6. Conclusion

The present study revealed that there is necessity to acquire, develop and retain the resourceful employees through various incentives to utilize them to work for the sustainable development of the industry. The findings of the reviewed literature represent the influence of internal marketing factors on the development of varied industries. However, each study focuses on their unique findings which are not always directly related to the internal marketing of the mobile phone telecommunication industry of Bangladesh. Moreover, these studies focused either one or some aspects other than the complete subject matter of the current study. For example, the findings of the previous studies on the variables like i_1 , i_2 , i_3 , i_5 , i_8 , i_9 , i_{10} , i_{12} and i_{14} , were inadequate to properly exhibit the influence of internal marketing on the mobile phone telecommunication industry of Bangladesh. So, the previous papers did not exhibit the factors of internal marketing in such constructive and compact manner. Though some of the past papers adopted factor analysis, the result of such analysis including identified factors were not verified in each case with inferential statistics like correlation and multiple regression analyses. From this perspective, the present paper is unique for its compliance with the reliability and validity test criterion.

The present study has been found very much significant from the results of higher reliability and validity scores, three components with higher value of variance, moderate positive correlation and highly significant correlation of coefficient supported by higher F ratio, unstandardized B , standardized Beta and t values.

The new findings of this paper are that three components of internal marketing namely Component 1: 'Employee Training & Motivation' including employee welfare, resourceful employees, investment on training, proactive interpersonal communication, performance based pay, recognition & appreciation and promotion & career growth, Component 2: 'Secured, Enjoyable & Balanced Work/Life for All' including good workplace, balanced work/life, recreation facilities, equal employment opportunity and well defined job description and Component 3: 'Participative Management' including participative management, physical environmental support and positive interpersonal relationship can strongly enhance the sustainable development of the mobile phone telecommunication industry of Bangladesh through internal marketing.

The current paper will add further value into this very area of research and academic development by enabling the industry with necessary course of actions and new business models which in result will enable the academia in developing its theory based on proven practice by emphasizing on the following implications. Thus, the growth of the industry will be accelerated in one hand and sustainable development will be fostered on the other hand by effectively resolving current limitations of the study.

References

- Anastassova, L, Purcell, K 1995, 'Human resource management in the Bulgarian hotel industry: from command to empowerment?', *International Journal of Hospitality Management*, Volume 14, Number 2, pp. 171–185.
- Argenti, P 2007, *Corporate Communication*. 4th edition, NY: McGraw-Hill.
- Babin, BJ and Boles, JS 1996, 'The effects of perceived co-worker involvement and supervisor support on service provider role stress, performance and job satisfaction', *Journal of Retailing*, Volume 72, Number 1, pp. 57-77
- Ballout, HI 2008, 'Work-family conflict and career success: the effects of domain-specific determinants'. *Journal of Management Development*, Volume 27 Issue 5, pp.437-466, Emerald Group Publishing Limited.
- Bell, SJ, Menguc, B and Stefani, SL 2004, 'When customers disappoint: a model of relational internal marketing and customer complaints'. *Journal of the Academy of Marketing Science*, Volume 32, Number 2, pp. 112-26
- Boshoff, C and Allen, J 2000, 'The influence of selected antecedents on frontline staff's perceptions of service recovery performance', *International Journal of Service Industry Management*, Volume 11, Number 1, pp. 63-90
- Carr, KK and Kazanowski, MS 1994, 'Factors Affecting Job Satisfaction of Nurses who Work in Long Term Care'. *Journal of Advanced Nuts*, Vol. 19, pp. 878-883
- CEDAW 2008, *Equality and Human Rights Commission*, viewed November 25, 2010 <http://www2.ohchr.org/english/bodies/cedaw/docs/ngos/EHRC_UK41.pdf>
- Clampitt, P, & Downs, C 1993, 'Employee Perceptions of the Relationship Between Communication and Productivity: A Field Study', *Journal of Business Communication*, Volume 30, Number 1, pp. 5-28
- Collins, B & Payne, A 1991, 'Internal marketing: a new perspective for HRM', *European Management Journal*, Volume 9, Number 3, pp. 261-270
- Dalton, J, Croft, S 2003, *Managing Corporate Reputation*, Thorogood, London
- Danish, RQ, & Usman A 2010, 'Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical Study from Pakistan', *International Journal of Business Management*, Volume 5, Number 2
- David, C 2006, *Organisational leadership: Employee relationships*, Los Angeles, Smart Business. viewed November 25, 2010 <http://www.sbnonline.com/Local/Article/9927/75/64/Employee_relations.aspx>
- DeCenzo D, & Robbins, S 2005, *Fundamentals of human resource management*. 8th Edition. John Wiley and Sons, 10th edition
- DeSantis, VS and Durst, SL 1996, 'Comparing job satisfaction among public and private sector employees', *American Review of Public Administration*, Volume 26, Number 3, pp. 327-343
- Erasmus-Kritzinger, L 2002, 'The Nature of Communication in Organizations', In: Van Staden, E, Marx, S & Erasmus-Kritzinger, L 2002, 'Corporate Communication: Getting the Message Across in Business', Pretoria: Van Schaik, pp.12-22
- Fawcett Closing the inequality gap Women 2009, *The Equality Bill* viewed November 25, 2010 <<http://www.fawcettsociety.org.uk/index.asp?PageID=973>>
- Gronroos, C 2007, *Service Management and Marketing, Customer Management in Service Competition*, John Wiley & Sons Ltd., England.
- Grunig, LA, Grunig, JE & Dozier, DM 2002, *Excellent Public Relations and Effective Organizations: A Study of Communication Management in Three Countries*, New Jersey: Mahwah
- Harris, MH and Fink, LS 1994, 'Employee Benefit Programs and Attitudinal and Behavioral Outcomes: A Preliminary Model', *Human Resource Management Review*, Volume 4, Number 2, pp. 117-129.

Sarbabidya

- Harrison, K 2005, *Why Employee Recognition is so Important*, viewed February 10, 2013 <www.cuttingedgepr.com>
- Hermansson, A 2003 'Interview', Wettergren & Co, 24th of October
- Heywood, JS and Xiangdong Wei 2006, 'Performance Pay and Job Satisfaction', *Journal of Industrial Relations*, Volume 48, pp. 523 – 540.
- Kale, SH 2006, 'Internal Marketing: An Antidote for Macau's Labor Shortage', *UNLV Gaming Research & Review Journal*, Volume 11, Number 1, pp. 1-11
- Kang, YC 2001, 'A study of internal marketing, behavior-based evaluation, job satisfaction, and customer oriented behaviors -- An example of securities salesmen', Department of Business Management of National Sun Yat-Sen University, thesis, unpublished: Kaohsiung
- Keller, SB, Lynch, DF, Ellinger, AE, Ozment, J & Calantone, R 2006, 'The Impact of Internal Marketing Efforts in Distribution Service Operations', *Journal of Business Logistics*, Volume 27, Number 1, pp. 109-137
- Komal Khalid Bhatti and Tahir Masood Qureshi 2007, 'Impact of Employee Participation On Job Satisfaction, Employee Commitment and Employee e Productivity', *International Review of Business Research Papers*, Volume 3, Number 2, pp. 54 – 68
- Kirchmeyer, C 2000, 'Work-life initiatives: Greed or benevolence regarding workers_ time', In Cooper, CL & Rousseau, DM (Eds.), *Trends in organizational behavior*, Volume 7, pp. 79–93 West Sussex, UK: Wiley
- Kotler & Keller 2009, *Marketing Management*, 13th Edition, New Jersey: Pearson Prentice Hall, pp. 19-20
- Lam, SK, Kraus, F & Ahearne, M 2010, 'The Diffusion of Market Orientation Throughout the Organization: A Social Learning Theory Perspective', *Journal of Marketing*, Volume 74, Number 5, pp. 61-79
- Lawler, EE 2003, *Treat people right*. San Francisco: Jossey-Bass Inc. McGraw-Hill Irwin.
- Leblebici, D 2012, 'Impact of workplace quality on employee's productivity: case study of a bank in Turkey', *Journal of Business, Economics and Finance*, Volume 1, Issue 1, pp. 38- 40
- Lee, C & Chen, WJ 2005, 'The Effects of Internal Marketing and Organizational Culture on Knowledge Management in the Information Technology Industry', *International Journal of Management*, Volume 22, Number 4, pp. 661-672.
- Manjunath, VS & Rajesh, CN 2012, "Competency Based Compensation System- As a Strategic Human Resource Technique", *International Journal of Manpower*, Volume 38, Number 7, pp. 780-810
- McCausland, W, Pouliakas, K and Theodossiou, I 2005, 'Some Are Punished and Some Are Rewarded: A Study of the Impact of Performance Pay on Job Satisfaction', *International Journal of Manpower*, Volume 26, pp. 636 – 59
- Md, SA, Al, SAS, Md., S & Akter, S 2013, 'Relationship between Employee Recognition and Employee Contribution in Service Industry', *International Journal of Business and Marketing Management*, Volume 1, Number 1, pp. 1-8
- Paarsch, HJ and Bruce, S 2000, 'Piece Rates, Fixed Wages, and Incentive Effects: Statistical Evidence from Payroll Records', *International Economic Review*, Volume 41, pp. 59-92.
- Palmer, A 2005 *Principles of Service Marketing*, 4th Edition. McGraw Hill Education. Belkshire, UK.
- Scott-Ladd, B, Travaglione, A, Marshall, V 2006, 'Causal inferences between participation in decision making, task attributes, work effort, rewards, job satisfaction and commitment', *Leadership & Organization Development Journal*, Volume 27, Number 5, pp.399-414

Sarbabidya

- Scott-Ladd, B, & Marshall, V 2004, 'Participation in decision making: a matter of context?', *Leadership & Organization Development Journal*, Volume 25, Issue 8, pp: 646-662, Emerald Group Publishing Limited
- Wieseke, J, Ahearne, M, Lam, SK, & Dick, RV 2009, 'The Role of Leaders in Internal Marketing', *Journal of Marketing*, Volume 73, Number 2, pp. 123-145
- William, M and Dreher, G 1992, 'Compensation System Attributes and Applicant Pool Characteristics', *Academy of Management Journal*, Volume 35, pp. 571-595