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Impact Study of Environmental Factors on Sales Productivity in IDS Bangladesh

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Abstract:

The purpose of this research is to investigate the relationship between the sales productivity of an organization and the environmental factors: the number of product and services, coverage of areas, competitors, advertisement budget, number of customers and system monitoring and so on. Using the IDS Bangladesh as a primary research target, this paper used hypotheses that are tested using linear regression analysis by taking data from 2003 to 2008. And the result shows that the firm's sales performance was indeed impacted by the size of the areas, number of competitors, advertisement budget and the number of clients and so on.

Keywords: Environment factors, sales productivity, regression analysis, test of hypothesis.

I. Introduction

Environment has great influence in organization's success though they may have skilled manpower, computerized technology, sufficient capital and good marketing strategy. As the effects of financial crisis started to impact economies, consumer confidence slipped and consumer spending in many sectors collapsed. And while china has not been immune to these changes, their economy has held up better than most and their consumers are among the top ten most confident in the world (Morley, 2009). According to Salahuddin, 2009, "The Latest Technology + The Best People + The Best Processes = The Beautiful Factory". If the company has most up to date machineries, preeminent human resources and superlative procedure for setting advertisement budget and pricing, then it will contribute to achieving organizational goals.

The Industrial Revolution brought about major organizational changes to businesses. Industries were now producing mass quantities of millions of different products (Stills,1976). It has since become imperative in the modern sales environment to gain the trust of prospects and customers by delivering on the expectations set by the sales representative. Guy Oaks observed that "trust rests on the expectation that technically competent service will be rendered" (Oaks, 1990). Today, sales representatives must compete for prospects and customers through providing service as well as quality products. In addition, "another important job of the sales manager relates to organizing

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the sales effort, both within and outside the organization" (Stills, 1976). The performance of an organization depends on the manager's efforts to monitor and supervise the subordinate employees. Martin and Bush (2003) said that through its corporate culture and environment, the organization's expectations and requirements are transmitted to its employees, who then implement the organization's policies and carry out organizational strategies. Therefore, it is apparent that both individual internal environment perceptions and managerial leadership styles could possibly have a significant impact on the level of customer-oriented selling behavior exhibited by salespeople. In a complex adaptive environment, leaders must create an environment in which employees feel trusted and empowered to make decisions. Interconnectivity results in information that is easier to get, and customers can make competitive comparisons more easily (Smith and Rupp, 2003).The organizational sales volume depends on the number of products and services offered to the target customers, i.e. the product mix has an influence on sales productivity. Greater product variety leads to higher inventory and that is critical to retailing success (Dubelaar et al., 2001).

The capital size is also a critical factor in determining the company's success. If a company enlarges its funds over its previous time, then it can stretch the product line and ultimately has an impact on the sales performance. Dev Strischek (2003) describes how to use a popular shareholder valuation tool to quantify the impact of working capital management for use in both credit decisioning and in the financial advisory role. The sales productivity of a company depends on various environmental factors. The objective of this paper is to examine the impact of environmental variables that affect sales of IDS Bangladesh. The specific objectives are: i) To observe the relationship between sales and number of offered services; ii) To identify the affiliation between sales and coverage area; iii) To examine the relationship between sales and advertisement; iv)To examine the relationship between sales and manpower. v)To find out the relationship between sales and capital size; vi)To identify the relationship between sales and number of clients.

II. Literature Review

Environmental forces can constrain the organizational ability to pursuit certain marketing strategies or activities. Environmental variables, and changes in those variables over time, help in determining the ultimate success or failure of marketing strategies. Changes in the environment can create new marketing opportunities for an organization. Environmental variables are affected and changed by marketing activities, as when new products & promotional programs help to change lifestyle & social values (Cherchil et al.,1997). Pelham (1999) states that Industry characteristics have a minimal impact on small firm performance and minimal moderating impact on the relationship between strategy and performance. Moving the firm towards a new set of values involves changes in the role of leadership, the use of market intelligence, and organizational learning styles. To refreeze these values, supportive policies are needed that form closer relationships between the organization and the marketplace (Beverland and Lindgreen, 2007). Employing factor analysis and the Linear Structural Relations method for verification, the results indicate that the marketing departments still possess influence, and that strategy and market orientation affect performance through "customization" and "marketing influence"(Wu,2004).

According to Gima (1995) mission statements and memos, policies, and procedures all highlight the importance of staying in touch with the customer and it is also widely assumed that the relationship between market orientation and new product performance depends on environmental conditions and product characteristics. Drawing on literature from both the marketing and strategic management disciplines, the authors develop and empirically test scales for measuring marketing resources and assess their impact on performance outcomes and the findings indicate that marketing resources impact on financial performance indirectly through creating customer satisfaction and loyalty and building superior market performance (Hooley et al., 2005). Product innovativeness is defined along two dimensions: use of new-to-the-firm and use of new-to-the-market products. Business performance was represented by relative price premium, sales growth, capacity utilization, and profitability. The findings provide support for the positive influence of market orientation on both dimensions of product innovativeness (Sandvik and Sandvik, 2003).

The impact of characteristics of salespeople, activities of sales managers and territory design are investigated as antecedents of sales organization performance among Canadian salesforces. Based on MANOVA analysis of responses from 102 field sales managers, more effective sales organizations have salespeople who are more motivated, employ managers who direct more and are more satisfied with the design of their territories. Sales managers must adopt better people and communication skills to train and direct their salespeople who are expected to provide better service and establish long-term relations with their customers (Barker, 2001). Abed and Haghighi (2009) state that managers' perception of the adoption of strategies on the part of the selling firm is associated with the adoption of some specific classes of behaviors (i.e. customer-oriented selling, adaptive selling, relational strategy) which can contribute to the creation of strong and long-lasting positive relationships with customers. Relationship selling and LMX stimulate salespeople's relational behaviours, which in turn positively affect sales effectiveness. Moreover, the results reveal a positive impact of relationship selling on sales manager-salesperson exchanges (Paparoidamis and Guenzi, 2009). In order to acquire a better view about the relationship between HRM (in terms of the orientation of the function) and firm performance in Greek firms, using the universalistic approach of this much-researched issue, measures for various aspects of firm performance have been used, controlling for external environment, competitive strategy, and organizational size. The research findings show that HRM has a more significant influence on growth/innovation indices, as opposed to financial performance (Panayotopoulou and Papalexandris, 2004). Innovative firms are generally more successful in both industrial and consumer markets. However, factors that make firms innovative are often elusive and complex. Looks at how strategic posture, organization structure, environmental hostility and uncertainty interact and how each factor contributes to an explanation of firm innovativeness, suggest that strategic posture is a major factor determining the innovativeness of firms while organization structure mediates the effects of strategic posture, uncertainty, and hostility. Hence, for managers striving to make their firms more innovative, a prerequisite is to adopt a proactive strategic posture which gradually leads to a flexible organization structure - the two factors that have a direct effect in making firms more innovative (Ozsomer et al., 1997).

III. Methodology

Through exploratory research, it has identified different environmental factors that have impact on the sales productivity of the IDS Bangladesh and formulated hypotheses on the basis of focus group discussion. Then conclusive research has been applied to prove the hypotheses. The information needed was clearly defined after the focus group session and the conclusive research was undertaken so that a proper solution to the problem could be obtained. The sample frame was the environmental factors that affect sales. The sample was census and sample size was six because IDS Bangladesh started their operation from 2003.The samples were gathered from the yearly sales data of the company and the years are 2003, 2004, 2005 2006, 2007, and 2008. The sampling method was non-probability sampling because the sample elements are externally homogeneous and internally heterogeneous and of accessibility, reliability, validity and of course availability of the time period.

The instrument has been designed is close ended questionnaire for collecting data to avoid complexity. SPSS version-10 and Microsoft Excel have been used for analyzing data. As this paper aims to show the relationship between the environmental factors and sales productivity, simple regression analysis model has been used to prove the hypotheses regarding the environmental impacts on sales productivity.

IV. Hypotheses Development

A number of hypotheses came out from the proposition built up after the primary and secondary qualitative research. These are the followings:

H1o: The number of services does not affect sales volume

H2o: The number of areas does not affect sales of IDS

H3o: The budget of advertisement does not affect sales Unit

H4o: The number of support workers do not affect sales unit

H5o: Capital size does not affect sales

H6o: The number of suppliers do not affect sales unit

H7o: The number of clients do not affect sales unit

V. Results and Discussions

This paper aims to investigate the relationship between the sales productivity of an organization and the environmental factors. Through exploratory research, it has been identified different environmental factors that have impact on the sales productivity of the IDS Bangladesh and formulated hypothesis on the basis of focus group discussion. Then conclusive research has been applied to prove the hypothesis. After testing the hypotheses, the following findings came out:

Hypothesis 1

H1o The number of services does not affect sales volume
H1a the number of services affect sales volume

Table 1: Model summary of relationship between sales and number of services

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10360119047619.050	1	10360119047619.050	26.092	.007
	Residual	1588214285714.286	4	397053571428.572		
	Total	11948333333333.330	5			

From Table 1, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 26.09, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, hence the difference is significant and we can infer that the number of services affect sales.

Hypothesis 2

H2o: The number of areas does not affect sales of IDS
H2a: The number of areas affect sales of IDS

Table 2: Model summary of relationship between sales and number of areas

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10360946969696.970	1	10360946969696.970	26.108	.007
	Residual	1587386363636.366	4	396846590909.092		
	Total	11948333333333.330	5			

From Table-2, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 26.10, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, hence the difference is significant and it can be inferred that the number of areas affect sales.

Hypothesis 3

H3o: The budget of advertisement does not affect sales Unit
H3a: The budget of advertisement affect sales Unit

Table 3: Model summary of relationship between sales and advertisement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10541931729591.260	1	10541931729591.260	29.983	.005
	Residual	1406401603742.068	4	351600400935.517		
	Total	11948333333333.330	5			

From Table 3, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 29.99, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, hence the difference is significant and we can say that the budget of advertisement can affect sales.

Hypothesis 4

H4o: The number of support workers do not affect sales unit
H4a: The number of support workers affect sales unit

Table 4: Model summary of relationship between sales & support workers

Model		**Sum of Squares**	**df**	**Mean Square**	**F**
1	Regression	11800627319970.310	1	11800627319970.310	319.571
	Residual	147706013363.026	4	36926503340.757	
	Total	11948333333333.34	5		

From Table-4, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 319.56, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, and accept the alternative hypothesis. So we can say that the number of support workers can affect sales.

Hypothesis 5

H5o: Capital size does not affect sales
H5a: Capital size affect sales

Table 5: Model summary of relationship between sales & capital size

Model		Sum of Squares	df	Mean Square	F
1	Regression	11790718506580.720	1	11790718506580.720	299.229
	Residual	157614826752.620	4	39403706688.155	
	Total	11948333333333.34	5		

From Table 5, the table value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 299.22, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, hence the difference is significant and it can infer that capital size can affect sales.

Hypothesis -6

H6o: The number of suppliers do not affect sales unit
H6a: The number of suppliers affect sales unit

Table 6: Model summary of relationship between sales & suppliers

Model		Sum of Squares	df	Mean Square	F
1	Regression	10486666666666.670	1	10486666666666.670	28.698
	Residual	1461666666666.667	4	365416666666.667	
	Total	11948333333333.34	5		

From Table 6, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 28.69, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, hence the difference is significant and we can infer that the number of suppliers can affect sales.

Hypothesis 7

H7o: The number of clients do not affect sales unit
H7a: The number of clients affect sales unit

Table 7: Model summary of relationship between sales &number of clients

Model		Sum of Squares	df	Mean Square	F
1	Regression	11481891322662.180	1	11481891322662.180	98.464
	Residual	466442010671.162	4	116610502667.790	
	Total	11948333333333.34	5		

From Table 7, the value of F for (1, 4) df and at 5% level of significance is 7.71. Since the calculated value of F is 98.46, which is greater than the table value of F= 7.71. Therefore we reject the null hypothesis, and the difference is significant. So we can say that the number of clients can affect sales.

VI. Conclusion

The paper has dealt with a very important part of the IDS Bangladesh which is sales. It is the main target of every company to increase their sales. But for many environmental factors it becomes impossible to achieve the goal. The factors may be small but have deep impacts on sales. Firm's Marketing Plan must be adapted to the influences and constraints imposed by both internal & external environments. So adjustment must be made in marketing strategy (Charchil et al., 1997).In this research, the factors have been identified which affect sales. There are some factors already mentioned which may seem to be important factors but actually they are not related to sales. The paper also attempts to mention some environmental factors which affect sales productivity directly or indirectly. Using the IDS Bangladesh as a primary research target, some hypotheses have been developed from the propositions built up after the primary and secondary qualitative research and that are tested using linear regression analysis by taking data from 2003 to 2008 of the organization, and the result shows that the sales performance is indeed impacted by the size of the areas, number of competitors, advertisement budget and the number of clients of the firm. So the company should think about these factors and need to take necessary action for increasing the overall sales.

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