

The Reluctance of Top Management: A Major Obstacle to Sales Training in the Biotech Companies in Nigeria

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Abstract

Sales training program is a vital link in the process of converting the recruit into a productive salesperson. The money which is spent on recruiting and selecting salespeople may be wasted if their selection is not followed up with the proper training programs. Additionally, experienced sales people may not improve or even maintain the productivity if they are not provided with an adequate amount of continual training. However, this study was undertaken to know the top management commitment to sales training in the Biotech companies in Nigeria. Both primary and secondary source were used to garner data for the study. Questionnaire was the principal source of the primary data, while interview was complementary. Taro Yamane formula was used to determine the sample size of 244 salespeople out of the 624 population from the top ten Biotech companies in Nigeria. Hypothesis was tested using ANOVA. The result shows an ANOVA (F) value of 0.961 which is less than the critical F-value of 1.880, suggesting that the top management in the Biotech companies in Nigeria is not dedicated to sales training. Hence, the top management in this industry is falling short of the guided theory of Chester Barnard which suggests that the role of executive managers was to define the purpose of the organization; to establish a communication system; and to develop an appropriate system of incentive to recruit and train, retain and motivate employees of the organization.

Keywords

Sales training, Top Management, Biotech Companies, Training Assessment, Training Content, Program Design

Introduction

One of the conflicts in marketing management which presents difficulties for both academics and practitioners is the problem of resolving the conceptual nature of strategic decisions with the reality of day-to-day operations. Nowhere is this conflict more apparent than the issues in personal selling and sales management. While it is necessary to focus on what the business is and where it should be, vital to target markets and match resources to fulfil customers' expectations and essential to be customer oriented, businesses must sell today's output to survive. The frontline of revenue generation is the salesforce. Sales management is the management process of directing strategy, organizing tactics and implementing policies which fulfil the firm's sales, marketing and corporate objectives. This is achieved by means of influencing subordinates to be more efficient and effective. The job of the sales manager is not to sell but to achieve sales through subordinates. Managing a salesforce is different to selling. Put simply, sales managers need to establish the role salespeople can be expected to perform, the tasks to be accomplished and the means to achieve their sales objective. And having decided on the role salespeople will play, management must select and organize individuals into an effective salesforce by deciding first on the type and structure of organization; second, on how best to recruit and train salespeople and; third, how to lead and motivate their sales team.

Traditionally, salespeople have been trained in simplified sales processes usually seen as a series of sequential steps beginning with making the initial contact, arousing interest, creating preference, presenting a specific proposal, closing the sale and retaining business. It is seldom the case that this form of stylized process operates in reality and, while useful as a pedagogical tool, the process does not relate to the reality of most exchange situations. Further, salespeople rarely conform to the popular stereotype. Today salespeople are better trained and qualified, professional sales teams are used and there is increasing use of technology. There are fewer, larger customers, more tasks to be performed such as merchandising and service support, improved purchasing and supply management and increasing



levels of competition across industries, especially internationally. To respond to these changes requires enlightened sales management. Increased sales, reduced costs and achieving a more profitable product and customer mix could be the major ways to improve salesforce performance.

At the individual salesperson level, performance can be improved by first increasing the number of calls. While such improvement, by definition, is finite, previous studies in the developed economies show that higher call rates equate with higher performance. Again, most salespeople are also aware of the importance of controlling costs and try to improve on this dimension but again the improvement is limited and finite. Also, the allocation of effort between products and customers can be changed. Training can contribute to all three of these areas but it is in the third area that the main differences in performance can be found. It is interesting to note that sale managers estimate that on average the difference between an average and the top salesperson is about 20 percent – so quality matters (Ingram, Schwepker and Hutson, 1992). Training can be aimed to get salespeople to work smarter, not just harder. Basically, quality improvement in sales performance can be achieved in one of these ways. These could be by training in message content, by training for effective communication and by training for better interpersonal relationships.

Theoretical Framework

This study is based on the major works of Chester Irving Barnard (1938 and 1948), which lies in the analysis of the purpose of organization and the role of executive managers in them. The works were set out to counteract the predominantly rationalist and scientific approach to organizations with what was seen as an overemphasis on economic motivation and formal structure. The works gave as much importance to the informal as to the formal system, to the need for organizations to satisfy a range of human and environmental needs, and to the symbiosis between leaders and followers. Very little theorizing of this nature had previously been published, and Barnard (1938) noted that unlike political theory, so little was known of the large formal organization as the concrete social process by which social action is largely accomplished.

According to Perters and Waterman (1982), these works are difficult to read and understand. Nevertheless, many of the ideas have been picked and developed separately by other writers over the past fifty years, particularly those on leadership, decision making and motivation. Barnard (1948) defined an organization as a cooperate system enabling individuals to achieve through interaction that which they would be unable to achieve on their own. The role of executive managers was to define the purpose of the organization; to establish a communication system; and to develop an appropriate system of incentives to recruit and train, retain and motivate employees of the organization. This contribution to ideas on leadership and decision making, and the emphasis on the values and culture of the organization as a whole have had a continuing influence on management thought up to the present time (Uduji and Nnabuko, 2008).

Chester Barnard's theories of organization are intricately constructed, and certain key theme can be extracted which illustrate his seminal influence on management thought. The aim was to provide a comprehensive theory of cooperative behavior in formal organizations and the theme of 'cooperation' is central. It defined an organization as a system of coordinated activities, the purpose of which is to enable individuals to achieve through combined action that which they cannot achieve alone. Barnard (1938) suggests the role of executive management therefore follows from this:

- (1) To define the purpose of the organization, taking into account the changing demands of the external and internal environment (including physical, biological and social factors) and to shape appropriately the values and culture of the organization towards achieving that purpose.
- (2) To establish the system of communication, that is the hierarchy and reporting structure as well as the systems for the flow of information, both up and down, between all the individuals and the units; and
- (3) To develop an appropriate system of incentive for recruiting and training, retaining staff and securing their commitment to the common purpose.

Bernard (1948) remarked that an organization was a dynamic social system combining both formal and informal processes. An organization had to be both effective (if it achieved its cooperative purpose) and efficient (if it satisfied the needs of the individuals joining it); the two aspects were complementary. Bernard was also accurately aware of



the need to achieve at least equilibrium in the effort/reward bargain of the employment relationship. His theory stressed the importance of non-monetary forms of reward as well as more traditional incentives in order to recruit and train, retain and motivate individuals. He defined 'the executive' as all managers, but most particularly as all the senior divisional or unit heads, which thus formed the executive team. He did not regard all the tasks performed by managers as necessarily 'executive' tasks, only those necessary to maintain its key purposes. Barnard put great emphasis on the importance of leadership by training and distinguished between the authority of 'position' and the authority 'personality' in understanding it. The later he largely defined as the ability to inspire followership' through realization of its purpose. That is, it was the acceptance of leadership by the led that was the essential quality of leader. Moreover, 'loyalty' to the organization was the essential condition of cooperative contributions of all its members (Stanton and Spiro, 1999).

Although Barnard's theories were mainly related to the individuals employed in an organization, he consciously developed the wider 'stake-holder' concept, since he included shareholders, customers and even suppliers and the local community as among those involved in achieving its cooperative purpose. His recognition of the importance of the 'informal' organization and its relationship to the 'formal' not only represented a reaction against the 'classical' school and an attempt to incorporate the findings of the Hawthorne experiments, but, more important reflected his own experience of the realistic of organizational life and the dysfunctional effects of overemphasis on either aspect. In his discussions of decision making and its difficulties, he set out many ideas which were subsequently taken up by others. These included recognition of 'incremental' decision making, the importance of 'negative' or 'non-decisions' and the 'opportunist' processes used by managers with limited information. His understanding of the role of 'intuition' as much as 'rational' thought in the processes of decision making is once again becoming more widely appreciated, even in this study. Barnard's interest in the issue of management education and training was also illuminated by his own lecturing experience which showed the extent to which the common understanding found among senior managers from various different backgrounds seemed 'invariably to disappear' when practical concreted problems were expressed in terms of abstract theories (Uduji and Nnabuko, 2008).

Adding to Barnard theories, Jones and George (2003) remarked that training and development help to ensure that organizational members have the knowledge and skills needed to perform jobs effectively, take on new responsibilities, and adapt to changing conditions. *Training* primarily focuses on teaching organizational members how to perform their current jobs and helping them acquire the knowledge and skills they needed to be effective performers. *Development* focuses on building the knowledge and skills of organizational members so that they are prepared to take on new responsibilities and challenges. Training tends to be used more frequently at lower levels of an organization; development tends to be used more frequently with professionals and managers. Goldstein (1991) noted that before creating training and development programs, managers should perform a *need assessment* to determine which employees need training or development, and what type of skills or knowledge they need training or development, and why type of skills or knowledge they need to acquire as shown in figure I.

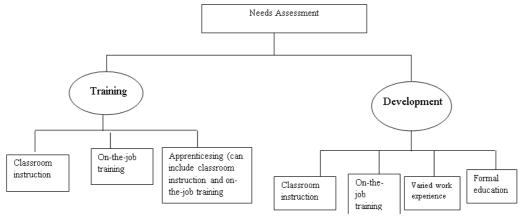


Figure 1: Training and Development

Source: Jones, G. R. and George, J. M. (2003) Contemporary management, New York: McGraw-Hill

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Research Methodology

The study covered the major biotech companies in Nigeria, which products are staple in the Nigeria market and often put the customers at the center of strategic decision making. A descriptive/diagnostic design was adopted for the research work. Both secondary and primary sources were employed to garner data for the study. Questionnaire was the principal source of the primary data; however interview served as complementary. The data collection instruments were pre-tested before they were finally used for the study. A miniature trial survey of the study was carried out in Lagos metropolis of Nigeria to test the validity, reliability and practicality of the research instruments and operations. The target population of the study included the grand total (634), of the salesforce size of the biotech companies in Nigeria. The sample size of 244 was determined using the Taro Yamane formula. Data from the study were analyzed using descriptive and inferential approaches. Simple tables and table of means were used as descriptive tools. For hypothesis testing, ANOVA was used to judge the significance of the result obtained



Data Presentation and Analysis

Research Hypothesis: Top management in the Biotech Companies in Nigeria is not dedicated to sales training

Table 1: Respondents' Perception to Top Management's Dedication to Sales Training in the Biotech Companies in Nigeria

organisation	top management in the Biotech Companies in Nigeria is not dedicated to sales						
	training						
	definitely	generally			definitely		
	disagree	disagree	somewhat agree	generally agree	agree	Total	
Neimeth	0	0	1	13	6	20	
	.0%	.0%	5.0%	65.0%	30.0%	100.0%	
glaxo-Smithkline	0	0	2	13	7	22	
	.0%	.0%	9.1%	59.1%	31.8%	100.0%	
May & Baker	0	0	3	13	7	23	
	.0%	.0%	13.0%	56.5%	30.4%	100.0%	
Evans Medical	0	0	2	11	5	18	
	.0%	.0%	11.1%	61.1%	27.8%	100.0%	
Roche	0	0	1	19	3	23	
	.0%	.0%	4.3%	82.6%	13.0%	100.0%	
SKG-Pharma	0	0	1	14	4	19	
	.0%	.0%	5.3%	73.7%	21.1%	100.0%	
Novartis	0	0	3	16	5	24	
	.0%	.0%	12.5%	66.7%	20.8%	100.0%	
Emzor	1	1	1	19	4	26	
	3.8%	3.8%	3.8%	73.1%	15.4%	100.0%	
Ranbaxy	1	1	3	21	4	30	
	3.3%	3.3%	10.0%	70.0%	13.3%	100.0%	
Fidso Health Care	1	1	2	10	5	19	
	5.3%	5.3%	10.5%	52.6%	26.3%	100.0%	
Total	3	3	19	149	50	224	
	1.3%	1.3%	8.5%	66.5%	22.3%	100.0%	



Table 2: Oneway Descriptives for Table 1

Top Management in the Biotech Companies in Nigeria is not dedicated to sales training

			Std.		95% Confidence Interval for Mean			
			Deviatio	Std.				
	N	Mean	n	Error	Lower Bound	Upper Bound	Minimum	Maximum
Neimeth	20	4.2500	.55012	.12301	3.9925	4.5075	3.00	5.00
glaxo-Smithklin	22	4.2273	.61193	.13046	3.9560	4.4986	3.00	5.00
e								
May & Baker	23	4.1739	.65033	.13560	3.8927	4.4551	3.00	5.00
Evans Medical	18	4.1667	.61835	.14575	3.8592	4.4742	3.00	5.00
Roche	23	4.0870	.41703	.08696	3.9066	4.2673	3.00	5.00
SKG-Pharma	19	4.1579	.50146	.11504	3.9162	4.3996	3.00	5.00
Novartis	24	4.0833	.58359	.11913	3.8369	4.3298	3.00	5.00
Emzor	26	3.9231	.84489	.16570	3.5818	4.2643	1.00	5.00
Ranbaxy	30	3.8667	.81931	.14958	3.5607	4.1726	1.00	5.00
Fidso Health	19	3.8947	1.04853	.24055	3.3894	4.4001	1.00	5.00
Care								
Total	224	4.0714	.69223	.04625	3.9803	4.1626	1.00	5.00

Table 3: ANOVA Result to Test of Hypothesis One

Top Management in the Biotech Companies in Nigeria is not dedicated to sales training

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.151	9	.461	.961	.473
Within Groups	102.706	214	.480		•
Total	106.857	223			

Result and Discussion

The result presented in table 3 gives an ANOVA (F) value of 0.961. This value is less than the critical F-value of 1.880 (ie $F_{cal} = 0.961 < F_{critical} = 1.880$). Hence, the null hypothesis is accepted. This shows that top management in the Biotech companies in Nigeria is not dedicated to sales training. But they should be commented if the sales management would achieve the sales objectives. This finding suggests something contrarily to the expected functions of the executive in an organization outline in Barnard (1938) theory. The theory defined an organization as a cooperative system enabling individuals to achieve through interaction that which they would be unable to achieve on their own. Therefore, the third role of executive managers (ie top management) was to develop an appropriate system of incentives for recruiting and training, retraining, staff and securing (ie by motivation) their commitment to the common purpose. Looking at Ingram, Schwepker and Hutson (1992), sales executives ranked proper training as



the second most important factor ensuring a salesperson's success. They rated a good/positive attitude as the most important factor. However, the salespeople's attitudes toward their jobs are affected by the amount and quality of training they have received. Several others of the "success" factors, such as knowledge, and identifying customer needs, are also directly related to the amount of training a salesperson has received. Therefore, the impact of training on success is even greater than the number two ranking suggests in table 4.

Table 4: Single Most Important Factor for Ensuring a Salesperson's Success

S/No	Factor	Percent Mentioning	
1	Good/positive attitude	13	
2	Proper training	10	
3	Good work habits/hard work	8	
4	Motivation/self-motivation	7	
5	Knowledge (customer, market, competition production)	5	
6	Dedication/desire to succeed	5	
7	Identifying customer needs	5	
8	Customer oriented sales approach	5	

Source: Ingram, T. N., Schwepker, C. H; and Hutson (1992) "Why Salespeople Fail" Industrial Marketing Management, 21:225-230

In the same of survey Ingram, Schwepler and Hutson (1992), executives also rated the most significant factors contributing to the failure of salespeople. With the exception of sufficient effort, each of the other top reasons for failure is directly related to deficiencies which can be corrected through training. Training may even lead to greater effort. As salespeople in Biotech companies in Nigeria develop greater self-confidence through training, they may be encouraged to put forth more effort. The one way descriptive of table 2 for table I suggests that salespeople themselves agree that training is important in the Biotech companies in the country, as Nigeria's drug market remains subdued due to readily available counterfeit drugs, poor health care infrastructure and the limited spending power of citizens. The Nigeria biotech report provides independent forecasts and competitive intelligence for the industry. The market was estimated to be worth US \$ 278 million in 2007, and have grown at around 5% year-on-year (y-on-y), reaching US\$369 million in 2012. However, the role of biotech companies in the country is still a matter of some debate ranging from those highlighting the aid provided to the country, to those critical of the use of the poorest in human clinical trials, often without adequate protection, particularly due to the lacking of a strong rule of law. Other criticisms include an alleged reluctance of the biotech companies to invest in treatments of diseases, such as malaria, criticism for the price of patented AIDs medication, which could limit the repeutic opinions for patients in the country.

The result presented in table 3 that gives ANOVA (F) value of 0.961 strongly indicates that top management is not dedicated to sales training in the biotech industry in Nigeria. Consequently, the study reveals both the new and old salespeople in the industry reporting that a lack of training was the major cause of dissatisfaction. This also shows that turnover was very high among new and old salespeople in the industry. Even more important, the study equally indicates that most customers, physicians, retailers, distributors and drug stores rated the drug reps of the biotech companies in Nigeria, as only moderately effective to ineffective. And despite the reported relationship between sales training and sales productivity, the finding confirm that top management are not dedicated to sales training and over one third of the biotech companies in Nigeria do no sales training, while many other firms in the industry provide only on-the-job training for the salespeople. However Bernard (1938) theory suggests that companies should be investing much in sales training programs, in order to retain and secure the commitment of the salespeople. Top management in the biotech industry in Nigeria should not continue the reluctance attitudes toward sales training. In



fact the number of hours spent on sales training should exceed the amount spent on executive, senior, and middle management – level training in this industry. The average annual investment in training per salesperson should be increase to motivate their commitment to the common purpose in the organization.

Moreover, as the study indicates that most physicians, customers, retailers and distributors say that the salespeople in the biotech companies who serve them are not very much effective, it is apparent that many sales training programs are not imparting the skills necessary to achieve success in sales of biotech products. The findings of the study suggest reasons why this could be happening in that way. First, it could be that most of the biotech companies in Nigeria, design training programs without a through assessment of training needs in the industry, especially for Nigeria Market. Second, the physicians' preferences for and evaluations of drug reps could be typically ignored in the design of the most sales programs in this industry. Third, managers and trainers could not continually reinforce the behaviours which have been covered in the training programs. And this lack of skill reinforcement leads to minimal behavioural change by the detail men. This indicates that biotech companies in Nigeria could be reluctant to sales training, because they could be spending a lot of money on training, but have not been getting the expected result, as they are not spending the money carefully enough to be effective. It should also be noted that frequently, the biotech companies in Nigeria, could be using training in the past, as the solution to problems that cannot be cured through training in the industry. For example, if the detail men are performing poorly, this could be because the biotech company is selecting the wrong type of person for the job. If sales are low, it could be due to poor marketing strategy of the company, which is often the case in Nigeria. Training is not a panacea, but it can lead to significant improvements in performance in the biotech companies if it is properly designed, implemented and reinforced with full backing of the top management.

Conclusion and Recommendation

Many aspects of sales training are affected by the company's strategic marketing plan in the biotech industry in Nigeria. The sales training program – when properly coordinated with the firms marketing objectives and strategies can aid in implementing the company's strategic marketing plan. In today's competitive biotech market in Nigeria, physicians, physician assistants, and nurse practitioners (that determine which drugs that would be used by the patients) are demanding more from their company suppliers in terms of quality and services. In response to these pressures, firms in the biotech industry in Nigeria should be placing greater strategic emphasis on developing long-term partnerships with their customers. Rather than just selling product and/or services, the drug reps should be trained to build relationships and provide solutions to their customers' problems. As a result, the selling process would be much more interactive and more situation specific. Drug reps have to know more about the product, and more about the physicians that recommend them, and also more about the drug stores and other healthcare providers that distribute the product. Many biotech firms in Nigeria should be adopting team-selling strategies in order to respond to customers' ever-increasing expectations. In team-selling approaches, the drug reps should work more closely with people from other areas in the firm, such as manufacturing, engineering, and/or research. As a result of these new strategies, sales training can become more broader in scope, covering topics, such as quality management, teamwork, and other interpersonal skill necessary for building relationships.

It is recommended that the firm's marketing strategies and objectives should provide the basis for establishing sales training objectives. The sales training objective should also be consistent with the firm's marketing objectives. For example, a marketing objective of increasing market share by 20 percent by a biotech company in Nigeria, calls for a different training program than the objective of maintaining market share by providing better service to the existing customers in the industry. If a company makes a major change in its sales organizational structure, an intensive training program for experienced drug reps may be needed. Indeed, training program should be a vital link in the process of converting the recruit into a productive sales rep and the money which is spent on recruiting and selecting salespeople would be wasted if their selection is not followed up with the proper training programs. Also, experienced drug reps (detail men) may not improve or even maintain their productivity if they are not provided with an adequate amount of continual training. This is what the top management in the biotech companies in Nigeria should know in order to be competitive in the industry.



Now, when the findings of this study is examined in the light of Barnard (1938 and 1948) theories on the role of top management in large organization, it is concluded that the management in the biotech companies in Nigeria are not yet doing enough to develop an appropriate system of incentives to recruit, train, retain and motivate salespeople in the industry. Chester Barnard's ideas on the role of management in large organizations were in very many respects ahead of his time. It is difficult to envisage how management literature might have developed without the originality and in sights of the functions of the executives and its holistic grasp of organizational purpose and the interrelationships between formal and informal systems. Barnard (1938) was really in large organization and to question what they are there for. Increasingly, top management in the biotech companies in Nigeria is demanding th training programs prove their worth. Hence, a successful training program that can prove the work should consist of three phases: training assessment, program design, reinforcement and evaluation. Training is an important factor contributing to the success of drug reps (detail men). A good sales program should begin by establishing program objectives and then determined who will be trained once it is determined who will be trained, an assessment must be made of the individual's training needs. This is the key to how much training will be needed in the biotech companies in Nigeria, in order to sell it to the top management of the company, just like any other product or service. Well-design sales training programs are often easier to sell to top management than those put together with little or no thought.

References

Barnard, C. I. (1938), *The Functions of the Executive*, Cambridge, M. A: Harvard University Press. Barnard, C. I. (1948), *Organization and Management*, Cambridge, MA: Harvard University Press. Goldstein, I. L. (1991) "Training in Work Organizations" In M. D. Dunnette and L. M. Hough, (eds) *Handbook of Industrial and Organizational Psychology*, vol 2 (Palo Alto, CA: Consulting Psychologists Press): 507-619.

Ingram, T. N., Schwepker, C. H. and Hutson, D. (1992) "Why Salespeople Fail" *Industrial Marketing Management*, 21:225-230.

Jones, G. R. and George J. M. (2003) *Contemporary Management* New York: McGraw-Hill. Peters, T. J. and Waterman, R. H. (1982), *In Search of Excellence*, New York: Harper x Row. Stanton, W. J. and Spiro, R. (1999) *Management of a Salesforce*, Signapore: McGraw-Hill Co.

Uduji J. I. and Nnabuko, J. O. (2008) Salesforce Management, Enugu: New Generation Books.

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