Environmental Scanning as a Tool for Business Survival: A Study of Dangote Sugar Company, Awe Local Government, Nasarawa State

[1]**Haliru Musa Hussaini,** [2]**Habiba Alhaji Ahmad &**
[3]**Hussaina Abdullahi Yarima**

[1]*Department of Business Administration and Management,*
Nasarawa State Polytechnic, Lafia,
[2]*Department of Social Development, Nasarawa State Polytechnic, Lafia*
[3]*Department of General Studies, Nasarawa State Polytechnic, Lafia*

A b s t r a c t

There is no doubt that the business environment of the 21st Century has been more volatile and challenging than those of centuries before it. This volatility is largely the consequence of globalization that has turned the world into a global village where event in one region transmits to others almost immediately. In spite of this environmental turbulence, organizations must effectively depend on its environment for operations and survival. This paper sought to assess the place of environmental scanning as a means of business survival and competitiveness in Nigeria. This study used primary and secondary data which it analytically adapted to suit its unique objectives. Findings generally reveal that environmental scanning is critical to business survival not only in Nigeria, but in other parts of the world. Nigerian specific data reveal that educational level of managers significantly impacts on their tendency to scan the business environment. It also found out that informal sources are more used to gather data from the environment than formal sources and that customers and competitors are the most unpredictable and yet, the most attended factors of the environment.

Keywords: *Environment Scanning, Business Growth, Competitiveness, Survival*

Corresponding Author: Haliru Musa Hussaini

Background to the Study

The symbiotic relationship, which exists between business entities and their environment, is no more a subject of controversy. It is axiomatic. Consequently, there is need for managers across the various business organizations to continually scan the environment so as to keep tab of development thereof as a means of survival. This issue of environmental scanning or audit has assumed a heightened dimension lately. This is as a result of increased spate of environmental changes which has become so frequent that it is so fatal to ignore. This has exacerbated the need and demand for updated information for decision making (Popoola, 2000). The increased complexity of business milieu has exposed firms to hypercompetitive or high-velocity environment (D'Aveni, 1994; Brown and Eisenhardt, 1997:1-34). Globalization is one of the factors that have altered tremendously the texture of global business environment. In particular, it has sharpened competition and factors driving it. These factors are falling trade barriers, fast paced technological advances, declining communications and transport costs, international migration and highly mobile investment (Badrinath and Wignaraja, 2004). The implication is that the world has turned into a global village and nations are now benchmarked in the light of international standard and global indices. Multinational corporations and venture capitalists move investment to the regions where resource inputs are cheaper and where the business environment is more genial. The business environment of Nigeria is generally seen as harsh and uncomplimentary (Doing Business, 2010).

The costs of production have been relatively high, making firms not to be competitive in Nigeria. The resultant effect is that the mortality rate of business organizations in Nigeria is so high. This has made studies on how to effectively contend with challenges from the environment as a means of survival very imperative. It is this challenge that this paper seeks to address. This paper is divided into six sections. Following this introduction is the theoretical and conceptual issues in environmental scanning. The third section explores the various models for scanning the environment. The fourth section deals with the reasons why it is necessary to scan the environment. The fifth section presents evidence to establish relationship between environmental scanning and business survival and last section concludes the paper.

Objective of the Study

The main objective of this paper is to access the impact of Environmental Scanning on Business Survival in an organization. The specific objectives are:

i. To examine the nature of environment on business survival in Awe Local Government.
ii. To determine the relevance of environmental scanning on business survival in Awe Local Government.
iii. To ascertain how environmental scanning can ensure the survival of business in Awe Local Government.

Statement of Hypotheses

The study will be geared towards the following hypotheses.

H_O: There is no significant relationship between Environmental Scanning and Business Survival in an organization.

H_{O1}: There is significant relationship between Environmental Scanning and Business Survival in an organization.

Literature Review

Definition and Process of Environmental Scanning

In the field of environmental scanning, the first notable study was carried out by Aguilar (1967). Aguilar defines environmental scanning as acquiring information about events and relationships in a company's outside environment, the knowledge of which would assist top management in its task of charting the company's future course of action. Based on this definition, organizations scan the environment in order to get a strategic understanding of external influences so that they may be able to develop effective response that secures or adjusts their position in the future.

Subsequent studies reinforced Aguilar's definition without substantially altering this perspective; however, the process of environmental scanning was gradually extended and has been conceptualized as an integrated information management system. Aaker (1983) pointed out that environmental scanning should focus on target information needs, allocate effort among employees exposed to relevant information, and have an effective system for storing, processing and disseminating information.

According to Daft and Weick (1984), the way an organization deciphers its environment in order to learn from it may be divided into three phases: scanning (information seeking), interpretation (giving meaning to the collected data) and learning (taking action based on the data). Similarly, Lester and Waters (1989) define environmental scanning as a management process of using information from the environment to aid decision-making with three key components: obtaining the information, analyzing the information and using the information. These definitions highlight the consequent steps after information acquisition. Based on the foundation of Aaker (1983), Costa (1995) proposes a strategic information scanning system which consists of six steps, in order to preserve much of the information which is invariably lost in many organizations, and hence enhance the effectiveness of these scanning efforts. Steps one and two of his proposed system specify information needs and sources; steps three and four identify the participants of the system and assign them scanning tasks; and steps five and six deal with the storage, processing and dissemination of the information (Costa, 1995). Albright (2004) raises five integrally linked steps by omitting information organization and storage. Similarly, Hough and White (2004) view environment scanning as a process of identifying, collecting, processing and translating information about external influences into useful plans and decisions.

Environment in the literature is a term used to capture certain factors or forces which are outside the control of an organization, but which such an organization must react and

respond to if it must survive and realize goals, it has set for itself (Koontz et al, 1980; Onodugo, 2000). It generally influences the efficiency with which different firms and industry operate (World Bank, 2005). It is a truism that one cannot appreciate the circumstance surrounding the activities of an organization unless one fully understands the environment wherein such an organization thrives and operates. For simplicity, there are three approaches usually adopted in the literature when it comes to the subject of understanding the concept of environment. We shall briefly look at them below:

First, is the approach of what could be called input -system –output analysis (Werther and Davies, 1989). In this approach, the organization is seen as a system, which imports various kinds of inputs from the environment, such as labour, management, capital, etc, which it transforms to products, which are either goods or services as outputs back to the environment for consumption and satisfaction of the needs and wants, which initiated the production exercise in the first place. This relationship is illustrated in the Figure 1 below:
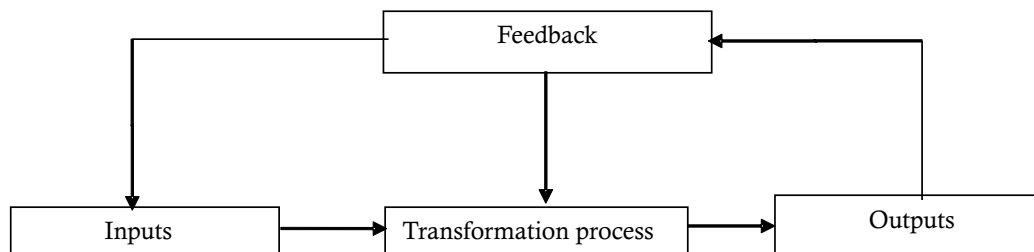
INPUTS	TRANSFORMATION PROCESS	OUTPUTS
● Challenges	● Human resource management activities	●Human resource contribution
● Human Resources	● Recruiting	● Capable workers
● Education	● Selection	● Motivated workers
● Skills	● Others	

Figure 1: Input-Output simplification of the Human Resource Management System
Source: Werther, W.B. and Davies, K. (1989:21) *Human Resources and Personnel Management Third Edition,* Singapore, McGraw-Hill International Editions.

The second approach of capturing the relationship between organisation and its environment is by looking at the mutual demands and expectations between it and its various stakeholders. These stakeholders who sometimes are seen as its wider publics comprise the government, customers, shareholders, management, employees, and the community at large. Again, we can simulate these myriads of mutual demands and expectations below as follows:

Table 1.

Public	Expectations/demands
Government	-Payment of taxes, adherence to government policies, and improvement of the welfare of its citizenry. - To provide enabling environment that is secured and peaceful to operate.
Shareholders	- Dividends arising from increased profitability and survival. - Adequate supply of capital as and when due.
Employees	- Payment of salaries, provision of good working conditions and survival. - Maximum work effort and productivity.
Management	- Good pay, enhanced working conditions, growth and survival. - Good management, full of innovation and creativity.
Customers	- State of the art goods and services that is time compliant.
Community	- operating as a good corporate citizen, and discharging social responsibilities. - Welcome and peaceful relationship.

The third approach is to view organization as operating in an environment which offers to it opportunities and constraints. These opportunities and constraints are classified into what is generally regarded as the elements of the environment. They are:

Economic Environment: This has to do with the mode of production, distribution, and consumption in an economy. It also includes the state of the economy and the existing government economic policies thriving at the time.

Socio-cultural Environment: This has to do with the totality of the prevailing values, norms, attitudes, mores, beliefs, etc, in a society. These impact heavily on businesses, nay all the organizations that operate in such society.

Political and Legal Environment: This has to do with the existing laws and government policies. These laws and policies change from time to time and must be adhered to by organizations. Again, this offers business organizations a number of opportunities as well as threats.

Technological Environment: The way business is carried out had witnessed a lot of transformations. New techniques come to replace the old ones, and give a new flavour to service delivery. In fact, competitions in most industries develop along the lines of technological advancement and innovation. Any business that is slow to adapt to technological changes is courting problems, not in the least, extinction.

There are other elements of the environment which time and space will not allow us to mention here. One thing that is noteworthy is that these elements in their dynamism present to business organizations vary in opportunities and threats simultaneously. It therefore behooves managers to seek strategies on how to maximize the opportunities, while minimizing threats and constraints.

Scanning, which is the next operative word simply means careful examination of an area with a view to seeking out a person or a thing in that area. (Longman Dictionary of Contemporary English)Put together, environmental scanning simply means a careful examination of the environment with a view to identifying opportunities to maximize and containing and minimizing threats along the lines dictated by missions and goals of a particular business. Wheelen and Hunger (2000) define scanning as the monitoring, evaluating and dissemination of information from the external environment to key people within the corporation. It is important to reiterate that this exercise must be done on continual basis so as to keep track of changes in the environment.

The Concept of Environmental Scanning
Environmental scanning is the monitoring, evaluating, and disseminating of information from the external and internal environment to key people within the corporation or organization.

(Kazmi,2008). Environmental scanning is a process of gathering, analyzing, and dispensing information for tactical or strategic purposes. The environmental scanning process entails obtaining both factual and subjective information on the business environments in which a company is operating or considering entering.

There are *three modes* by which organizations scan their environment:
   a. *ad-hoc scanning* - short term, infrequent examinations usually initiated by a crisis: organizations scan it environment as a result of crisis that is affecting the company at the moment and analyze the situation to know if the problem is internal or external;
   b. *regular scanning* - studies done on a regular schedule (e.g. once a year): most very conscious organizations can see environment scanning as a program that should be done regularly and as such, most of such organizations do it every year;
   c. *continuous scanning* (also called continuous learning) - continuous structured data collection and processing on a broad range of environmental factors. (Kazmi, 2008).

Environmental Scanning and Business Survival: Empirical Evidence
A number of studies in the literature have emerged to support that environmental scanning improves organizational performance and hence survival. Specifically, Wheeler and Hunger (2000) assert that research has identified a positive relationship between environmental scanning and profit. Study by Newgren et al (1984:12-15) compared the economic performance of 28 US organizations that practiced environmental scanning with 22 others that did not. Performance was measured over a-five-year period, using the share price/earning ratio standards by the industry. Findings indicate that firms who scan the environment clearly do better than those that do not. The average annual performance of the scanning firms consistently fared better than those of the non-scanning firms for the period under review.

West's (1988) study looked at the relationship between performance and organizational strategy and environmental scanning in the US foodservice industry. Study data covered 65 firms over a period of four years(1982-1986). Findings indicate a strong positive relationship

between a firm's turnover and return on assets and its strategy and environmental scanning. It was equally clear from the study that firms that engaged in scanning performed significantly better than those that did not.

Another study by Diffenbarch in Wright et al (1996:30) revealed that the "fortune 500 firms that were asked toidentify the major payoffs of their environmental-scanning activities included an increased general awareness of environment changes, better strategic planning and decision making, greater effectiveness in governmental matters, and sound diversification and resource allocation decisions."

A study of similar nature by Subramanian, et al (1994:104-115) corroborated the findings above. It involved a survey of over six hundred hospitals who were members of American Hospital Association. Findings show that hospitals which engaged in active scanning performed significantly better than their counterparts who did not scan environment. The information obtained in the process of scanning was used mainly in the strategic planning process. The empirical benefits of environmental scanning transcend performance in strictly economic sphere. In analyzing the survey by Coker and Blong (1991), Meixell (1990), and Pritchet (1990) in Wright et al (1996:6), it was found that a growing number of colleges and tertiary institutions used environmental scanning to boost their planning process and by extension their performance. Most of the institutions found it necessary to embark on active environmental scanning in response to "declines in enrollment and reductions in state appropriations". This supports findings by Murphy (1987) who studied an in-depth case study Georgia Centre for Continuing Education and concluded that environmental scanning was instrumental to the Center's ability to respond to disequilibrium in the external environment.

In Nigeria specifically, studies by Popoola (2000) and the more recent one by Babatunde and Adebisi (2012) all empirically support the claim that environmental scanning is vital to organizational survival. The latter study stumbled on certain interesting findings with respect to environmental scanning in Nigeria. Using data sourced from a total sample size of 550 managers drawn from 124 licensed banks in Nigeria, the study reached the following conclusions:
1. That the educational background of the managers greatly influences managers' tendency for environmental scanning.
2. The market, specifically the active customer segment and the competitors command the greatest objects of attention during environmental scanning. They are also the most volatile factors to be subjected to assessment.
3. Although most Nigerian organizations have formal means of scanning the environmental, the study found out that these organizations rely heavily on informal sources for gathering data than on formal sources.
4. Private files, colleagues, newspapers and magazines are perceived as the most accessible sources of information, while customers, books/journals and private files are the sais to provide information of the greatest value.

Techniques for Effective Environmental Scanning
Environmental scanning is a complex set of business activity which requires care, skill, and expertise. Below are some of the mainline techniques for analyzing the environment:

Opinion Survey: This technique used to be an exclusive preserve of organizations in developing countries but it is increasingly gaining popularity among developing countries. This approach garners feedback information from the public using survey method. Depending on the literacy level of the population, oral interviews or questionnaire could be used. At the end, analysis of these instruments could generate information ranging from opinion on service rendered to expectation of how they could best be attended to.

Forecasting: This is simply the act of predicting, projecting and estimating future variables (Imaga 1999).

According to Wikipedia, the free Encyclopedia, forecasting is the process of estimation in unknown situation. This technique of environmental scanning is of vital importance, particularly in the area of planning and designing strategies for managing change. It helps one forecast the future factors that play in the environment of business and thus, helps in its trouble shooting.

Forecasting is as vital as it is complex. There are various hands on methods of forecasting that can be used in auditing the environment. Some of them are:
1. Leading indicators: These are economic indicators that signal the likely direction of the economy. For instance, the prices of stock are a major indicator of the investors' confidence in the economy which affects its growth or fall. A persistent fall in the prices of stock as is the case with the American economy at present, is a leading indicator of the imminence of depression in the economy
2. Lagging indicators: This is the reserve side of leading indicator. It is the major outcome of a certain economic shock and disequilibrium. For instance a major lagging indicator of arbitrary increase in the income of civil servants in Nigeria is inflation.
3. Historical trend analysis: This is making future projections on the basis of identifiable past trend. Once the forecaster identifies a trend in the past it can use it to predict future activities.
4. Scenario writing: This is a written description of some future state presented in a coherent script-like or narrative fashion. It is multiple scenarios, when alternative descriptions of the future events are formulated (Fahey and Narayanan, 1986; Schoemaker, 1993:195)
5. Quantitative methods: There a number of quantitative tools of analysis for predicting future economic scenario. They include but not limited to regression analysis, econometric models, factor analysis, etc.

Most of these tools are only applicable to quantitative data collected over a period of time.
Critical Analysis of Government Policies: Government policy instruments play major role in determining the shape, pace, and flavour of economic activity in both developing and

developed countries. In Nigeria for instance, the annual budget details an array of fiscal as well as monetary policies aimed at regulating the economy. One way of scanning the environment is to critically analyze these policies to anticipate their likely consequences and impact on the various aspects of the economy and prepare how to respond to them.

Professional Educated Opinion: This technique is used to scan the environment by seeking the advice and inputs of experts and pundits in the particular area(s) of interest. There a number of international and national publications that can improve ones understanding of its environment. For instance, these professional inputs could be obtained from World Bank publications, various professional associations' newsletters, United Nations research reports and findings, national bureau of statistics outputs, central bank reports of various nations, etc. Further, useful information could be got from consultants and researchers in the particular field of interest in network method called Delphi Technique.

Methods of Environmental Scanning
This aspect of environmental scanning has caused much debate among the scholars in the field of Management. However, the following are therefore suggested:
  i.   Secondary data collection approach such as articles, textbooks, magazines and ready-made information etc.
  ii. Primary data collection approach, using research instruments such as questionnaire, personal interview, personal observation etc.
  iii. Establish a unit within the organization which will be responsible for scanning wide range of environmental factors and makes forecast about specific variables through qualitative and quantitative means.

Methodology
The methodology used in this paper as well as its research design, procedure, technique and validity of instrument are spelt out.

Research Design
The research design employs in this study is the survey research design. This is anchored on the fact that the data for this study will be collected from both primary and secondary source. In order for the design to be effective, and the procedure to be well defined, the instrument was subjected to validity and reliability test using Cronbachs validity and reliability test instruments and Yemane (1967).

Sampling Design and Procedure
The sample size for the this study however, are 80 management staff of Dangote Sugar Plc.55 respondents were chosen as sample size in the organizations.

Data Collection Instrument
Well structured questionnaires (80) were used for the collection of data in this study. This was employed by the researcher in order to minimize the problems associated with the collection of data.

Validity and Reliability Test of the Instrument

Validity test implies ascertaining whether the research or the research instrument used in conducting the test of the research work is used in another place has the same or similar variables with the earlier data used, the result of the test will be very similar. Hence, reliability of a measurement can be said to be the extent to which a measurement is free from viable errors. This implies that a research methodology can be said to be reliable only when it produces the same result after repeated use. However, the reason for testing reliability of research work is to ensure that variability of the generalization of the conclusion.

Procedure for Data Analysis and Model Specification

The data that was collected in this study will be analyzed using mean statistic for the analysis while the hypothesis of the study will be tested using regression analysis because the emphasis is on the relationship.

$$\text{Mean (M)} = \frac{\sum x}{N}$$

M = Mean

N = Number of personality attributes under study

$\sum x$ = Sum of total number of observations in different personality traits.

Method of Data Analysis

In analyzing and assessing strategic environmental scanning on organization performance, the study shall employ a simple tabular method of presentation. The data for this paper work were collected by means of questionnaire administered on the respondents (management staff) of Dangote Nigeria Plc. 60 questionnaires were distributed to the respondent.

Test of Hypotheses

$H_{O1:}$ There is no significant relationship between Environmental Scanning and Business Survival in an organization.

$H_{o2:}$ There is significant relationship between Environmental Scanning and Business Survival in an organization.

Table 2.

Respondents	Statement		Total	Percentage (%)
	Is there any relationship between environmental scanning and business survival in Dangote Sugar?	Does Dangote Sugar take into cognizance both the internal and external factors of environment affecting the business success?		
Yes	35	30	65	59
No	20	25	45	41
Total	**55**	**55**	**110**	**100**

Table 2: Contingency Table

O	E	O – E	O - E²	O - Σ²/€
35	17	18	324	6.2
20	9	11	121	4.2
30	17	13	169	3.6
25	9	16	256	7.5
				21.5

$\Sigma = \dfrac{\text{Row Total x Column Total}}{\text{Grand Total}}$

$E = \dfrac{65 \times 55}{100} = 35.75 = 36$

$E = \dfrac{45 \times 55}{100} = 24.75 = 25$

Level of significant = 5% = 0.05

Degree of freedom = (r-1)(c-1)

(2-1)(2-1)

1 x 1 = 1

The calculated chi-square (x^2) of 0.05 at 1° of freedom is 21.5 while the table value is 11.354

Decision Rule

The decision rule state that we accept the null hypothesis (Ho) if the calculated value of chi-square (x^2) is less than (<) the table value otherwise, we reject the null hypothesis and accept the alternative hypothesis (Hi). From the above demonstration, the calculated value is greater than (>) the table value (21.5 >11.354). therefore, we accept the alternative hypothesis (Hi) that there is significant relationship between environmental scanning and the survival of business in an organization.

Findings

Findings revealed from the two companies that organization management pay more attention to environmental scanning and as such leading to positive organization performance. It revealed that the level of significant in tested hypothesis is greater than 30% (R2) which implied that there is relationship between strategic environmental scanning and organization performance.

That is, strategic environmental scanning is responsible for effective organization performance. Also testing hypothesis 2, which connotes that the external environmental force has positive impact on organization performance at about 30% (R2). And as such, the use of strategic environmental scanning in evaluating the environmental forces (opportunities and threats) has helped in seizing the opportunities and avoiding threats and it leads to organization profitability. It also indicated that 29% of the variation or change in organization market share is also caused by variation in environmental scanning.

Conclusion

This study's main interest is on the place of environmental scanning as a means of business survival. It submits that no business entity can realize its goals, grow and survive without

continually analyzing and responding to the vagaries of the forces from its environment. This is more so, in this dispensation, where change in the environment is so rapid and so complex.

The work identifies situations in the organization that make it imperative to scan the environment. They include: strategic planning, identification and maximization of opportunities, minimization of threats, design and implementation of strategies and fulfilling of social responsibilities. Further, organizational performances are evaluated in the light of constraints from the environment.

The study presents existing models and techniques for effective forecasting and scanning of the environment and highlights empirical evidence form companies outside the country and those from Nigeria to show that organizations that actively embark on environmental scanning do better than those who do not.

References

Aguilar, F. J. (1967). *Scanning the business environment,* New York: Macmillan Coy.

Babatunde, O. B. & Adebisi, A. O. (2012). *Strategic environmental scanning and organization performance in a competitive business environment, economic insights- trends and challenges, LXIV* (1) pp. 24-34).

Badrinath, R. & Wignaraja, G. (2004). *Building business competitiveness UN university institute for New technologie*s, International Trade forms Issue.

Brown, S. L. & Eisenhardt, K. M. (1997). *The art of continuous change: Linking complexity theory and time –placed evolution in relentlessly shifting organizations,* Administrative Science Quarterly, 42.

D'Aveni, R. A. (1994). *Hyper- competition,* New York: The Free Press,

Diffenbach, J. (1983). *Corporate environmental analysis in large U.S. corporations, Long Range Planning, 16* (3).

Draft, R. L. & Weick, K. E. (1984). *Towards a model of organizations as interpretation systems,* Academy of Management Review9 (2).

Fahey, L. & Narayanan, V. K. (1986). *Macro-environment analysis for strategic management,* Minnesota West, St Paul.

Imaga, E.U.L (1980). *Theory and practice of production management,* Enugu: Department of Management, UNEC

K a z mi , A. (2008). *Strategic management and business policy,* 3rd ed, New Delhi: Tata McGraw-Hill Publishing Company Limited.

Koontz, et al. (1980). *Management, 7th Ed,* Japan: McGraw Hill Book Company

Newgren, K. E., Rasher, A. A., & LaRoe, M.E. (1984). *An empirical investigation of the relationship between environment assessment and corporate performance,* Paper read at the 44th Annual Conference of the Academy of Management, August.

Onodugo, V. A. (2000), *Management Fundamentals: Concepts, Principles, and Practices,* Enugu: El' Demark Publishers.

Popoola, S. O. (2000). Scanning the environment for competitive advantage*: A study of Corporate Banking Managers in Nigeria, *Libri* 50 (pp. 210-216)

Schoemaker, P.J.H. (1993). Multiple scenario development: its conceptual and behavioral Foundatio*n, Strategic Management Journal,* March.

Subramanian, R., Kumar, K. & Yauger, C. (1994). The scanning of task environments in hospitals: An empirical study, *Journal of Applied Business Research 10* (4).

Werther, W. B. & Davies, K. (1989). *Human resources and personnel management third edition,* Singapore: McGraw-Hill International Editions.

West, J. J. (1988). *Strategy, environment scanning and their effect upon firm performance: An exploratory study of the food service industry.* PhD Thesis presented for Virginia Polytechnic Institute and State University.

Wheelen, T. L .& Hunger, D.J. (2000). *Strategic management and business policy 7th Edition,* London: Prentice Hall.

World Bank (2005). *Benchmarking business environment*

Wright, P., Mark, J. K. & Pornell, J. (1996). Strategic management concepts, 3rd edition*, London: Prentice Hall.