Strategic orientations and technology policy: An empirical test of relationship in developing countries

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Abstract

There is a growing awareness of the pivotal role of technology in securing and maximizing competitive positions. This study based on primary data from two banks in Nigeria examines the relationship between technology policy and strategy dimensions. Differentiation and futurity strategy dimensions were found to be marginally dominant in the managerial practices of these firms. In addition, the study found new evidence of relationship between the strategy dimensions; and the pattern of relationship between technology policy and strategic orientations indicate the use technology to foster defensive behaviours rather than securing competitive edge. Futurity orientation was also found not to be significantly related with most of the technology policy dimensions investigated. These results are expected to provide management and management theorists with valuable practical insight into the relationship between pattern of strategic orientation and technology policy.

Keywords: Strategy, Strategy dimensions, Strategic Orientation, Technology Policy, Competition

1. Introduction

The uncertainty, massive changes and the complexity of the web of interactions of environmental forces that characterise the business environment of most developing economies often create serious strategic concern for managers. The demand on firms is to utilize innovative strategic management practices to develop their capacities to survive the environment and the escalating competitive pressures. To do this, however, there is a growing awareness of the pivotal role of technology in securing and maximizing competitive position. Consequently, most organisations devote tangible efforts and resources to the acquisition and adoption of state-of-art technologies in their operations. The assumption seems to be that possession of superior technology confers superior competitive advantage. This thought can be particularly relevant in developing economies where businesses are mostly dependent on imported technologies and home grown technologies development are quite slow. However, it does appear intuitively compelling to reason that the development of patterns in the streams of organisational decisions that are synthesized with appropriate technology could be more competitively advantageous. It is evident, for competitive reasons, that as firms in most developing countries have become technologically active both in terms of acquisition, use and introduction of technologically sophisticated products the need to mesh technology with corporate strategic sails or orientation assumes additional dimension of importance. Strategic orientation provides the business directions and objectives that top management of a firm desires to pursue. It determines the ability of firms to concentrate on a strategic direction and build proper strategic fit for competitive edge (Gatignon & Xuereb, 1997). Strategic
orientation reflects an outward looking view of the fit between strategic choices and the environment (Zhou & Li, 2010). Indeed, Zhou, et.al (2007) posits that strategic orientation is a significant driver of superior performance in emerging economies. Consequently, there is a need to develop technology policies that are consistent with or fit corporate strategic orientations (Clark & Hayes, 1985; Collier, 1985). This fit seems to have potentials to guide successful deployment of firms' technological capabilities and resources in the effective pursuit of firms' strategic leaning and achievement of competitive advantage (Zahra & Covin, 1993). According to Noble (2002) strategic orientations are the guiding principles that influence a firm’s marketing and strategy crafting activities.

However, the danger of framing technology policies and adopting technologies that are inconsistent with corporate needs and strategic sail is real. Possible technology-strategy miss-match is often the results of being represented in the waves rather than being need propelled. A misalignment between strategic orientation and technology can endanger corporate continuing existence. For example, Porter (1985) reasoned that deployment of technological resource is an instrument to build sustainable competitive advantage which suggests that poor technology orientation is disadvantageous in competition. In addition, technology acquisition, more so advanced technologies, could financially involve with further investment of resources for state-of-art technologies weigh-in on the resource capabilities of the firm. Firms guided by their strategic orientations can invest in research and development, quick acquisition of new technologies and up-to-date information that enhances ability to exploit competencies and differentiated products; to refine orientation, and reconfigure resources to capitalise on emerging opportunities (Zhou et al., 2005). It is evident that the effectiveness of firms' orientation and performance outcome will depend on the fit between strategic choice that dictates the orientation and the technology that drive such orientation.

Accordingly, the impact of strategic orientation may be contingent on the dynamics of the technology employed. However, research efforts investigating such contingencies, to our knowledge; have been limited in developing countries of Africa. Consequently, little statistical evidences exist on how technology policy relates to corporate strategic orientations. Therefore to address these gaps in literature we seek to unearth strategy-technology interface in the Nigerian banking industry, and shed light on how specific strategic orientations relate to particular technology policy dimensions. Further this research effort seeks to proffer answers to the question: what strategic orientations can be considered as dominant in the Nigerian banking industry? How related are technology policy dimensions and corporate strategic orientations? The benefits accruing from this research are both managerial and theoretical.

2. Literature review

Economic performance is a main objective for most organisations. However, economic performance demands that organisation secure a reasonable match with its dynamic environment using appropriate managerial practices (Abiodun, 2009). Managerial practices are considered strategic if competitive advantage is achieved through such managerial actions. Indeed, extant literature posits that strategic management aims to integrate key functions towards adopting a general management perspective (Schendel & Hofer, 1979). Consequently, the thrust of strategic management is to ensure that an organisation secure wider and larger improvement or success within the relevant business environment of its operations (Roberts & Wood, 2002). Strategic management fosters the development of consistent patterns in the streams of organisational decisions that predispose organisations to superior or improved performance. The general theme of competitive strategy and the attainment of competitive advantage is an important issue in business strategy (Porter, 1980, 1985). Strategy defines the long-term plan of action a corporation seeks to pursue to achieve defined goals defined (Zahra, et.al, 1993). According to Grant (1995) strategy is the unifying theme that provide coherence and direction to the individual decisions of an organisation. Strategy and strategy process involves choice. Consequently, it is acknowledged that firms in the same environment may utilise different competitive strategies in response to their environment (Dess & David, 1984; Lado et al., 1992). Competitive strategy is synonymous with the term strategic orientation (Morgan & Strong, 1998). In essence, strategic orientation is a deliberate plan of action that will develop a business competitive advantage and compound it.

Strategic orientations being a strategic choice drives the way corporations acquire, allocate and utilise resources to create dynamic capabilities for competitive advantage. In other words, strategic orientation refers to how organisations employ strategy to adapt, change its environment and improves the organisation chances of success (Miller & Camp, 1985; Manu & Sriram, 1996). Strategic orientation, therefore, imposes consistencies in the competitive behaviour of organisations (Mintzberg & Waters, 1982). However, given the complexity of strategy construct management theorists posit that strategic orientation is a multidimensional construct (Venkatraman, 1989). He proposed three approaches for measuring strategy construct: narrative,
classificatory and comparative approaches. The comparative approach, which is relevant to this study, is aimed at identifying and measuring key traits or dimensions of the strategy construct. The approach identified six traits: aggressive, defensive, futurity, proactiveness, analysis and riskiness dimensions.

2.1 Aggressive
This dimension captures resource deployment posture focussed at securing market position faster than competitors. The central theme is to secure and improve market positions and out-perform competitors. Organisations with aggressive traits may exhibit preferences for product innovation and, or market development (Miles & Cameron, 1982); low price and differentiation (Lumpkin & Dess, 1996), and market share expansion via multiplications (Vesper, 1979).

2.2 Defensive
Defensive traits are evidenced by firms’ defensive behaviours (Miles & Snow, 1978). These defensive posture emphasis strategies focussed on efficiency, cost reduction (Snow & Hrebiniak, 1980); preservation of market, technology and products (Venkatraman, 1989).

2.3 Futurity
Strategies are designed to secure a desirable future performance, therefore, futurity dimension relates to the time depth or orientations of main strategic decisions, that is, temporal considerations reflected in important strategic decisions. For example firms engagement in long-term relationship with strategic partners for competitive advantage (Ganesan, 1994).

2.4 Proactiveness
This trait describes firms’ strategic behaviour to opportunities within and outside the scope of current activities and conducts with respect to weak businesses. Firms inclined to this strategic traits search for market opportunities and experiment with potential responses to changing environmental trends (Miles, et.al, 1978). Indeed, proactive firms seek to be the first to act rather than react (Miller & Friesen, 1983).

2.5 Analysis
This relates to problem solving posture of firms and a firm with this orientation make concerted efforts to search for roots and solutions to problems, and analytically evaluates alternatives. The depth of consistency in resource allocation and firms’ use of competitive intelligence systems are embodied in these traits.

2.6 Riskiness
According to Venkatraman (1989) this dimension captures the extent of riskiness reflected in main decisions of firms rather than individual managers decisions. Concerns in this dimension hovers around issues as resource allocations, products, and markets among others. Risks and their impact on firms and economic performance represent critical issues in strategic management (Bromiley, 1991).

2.7 Technology policy
Technology can serve as competition drivers and enhance firms’ ability to adapt to the competitive environment. Indeed radical technology advances have capability to alter the landscape of competition in an industry and create overwhelming competitive advantages (Tushman & Anderson, 1986). Consequently, for most firms technology policy requires careful development. It describes firms’ technology posture including product development (Zahra et.al, 1993); and firms propensity to employ technology proactively to adapt actively to competition are termed aggressive technology posture (Oster, 1990). Aggressive technology posture involves possession of superior technology sensing capabilities that directs organisational resource assortment for continuous product innovation. Consequently, firms with aggressive technology posture can effectively adapt to the environment by reconfiguring their resources to breakdown institutionalized processes (Gilbert, 2005). Porter (1985) posits that aggressive technology posture can indicate specific competitive initiatives and firms resource commitment.

In addition, automations and process innovations are important dimension of technology policy. This derives from the fact that decision on this dimension may suggest process improvement or re-engineering. Automations and process innovations relates to the level of adoption of state-of-art technologies in production and resource allocation for new equipment and machinery (Hayes & Wheelwright, 1984), this dimension extend to include firms product development activities.

3. Research methods
The research horizon for this study was limited to the Nigerian banking industry. The industry was the study focus because it is evident that the industry is approaching its maturity stage. According to Grant (1997) and Porter (1980) industry maturity poses many challenges for organisational survival, therefore, strategic
initiatives and changes are more likely in matured industry. In addition, most banks in the industry have actively developed new products in recent years and adopted new technologies in varying degrees in attempt to keep with competition.

However, on the basis of convenience occasioned by economic, time and geographical constraints only two banks with headquarters in Lagos, the commercial and economic centre of Nigeria, were included in the sample. The fact that Lagos represents substantial proportion of economic and commercial activities in Nigeria may be justification for this apparent limitation. With reference to age, one of the sampled banks could be termed ‘old generations’ bank and the other ‘new generations’. Typically ‘old generation’ banks in the Nigerian banking industry have relatively longer history of existence pre-dating 1990’s. The two sampled banks have showed impressive results over the recent years having survived the capitalisation crisis which withered out banks with weak capital base in the sector.

Subjects for this research consists of top, middle and lower level management executives. Consequently, the sample is made up of 120 respondents; and this sample size is more reflective off the relatively small numbers of executives in this category. The study considered these executives as more capable to discern their banks overall strategies and technological choices. This opinion rests on evidence from literature which indicates that managerial attitudes and perceptions influence company technological investments and choices (Ginsberg & Venkatraman, 1992). Thus, this study, in line of other research efforts, accepted the evaluative impression of these managers as valid evaluations of the strategic directions and technology policy of their organisation (Osuagwu, 2002). This approach, we reckon, is quite helpful in overcoming the limitations of secondary data sources which may not provide detailed information about the various components of organisations’ strategic direction and technology policy.

Potentially, the study utilized a descriptive survey research design which involves describing the nature of each strategy and technology dimensions. Survey research design is justified on the strength of its economic values and feasibility in addressing the research problems in question (Osuagwu, 2003). The research instrument used was a structured questionnaire and the design of the instrument benefited from extant literatures dealing with strategic orientations and technology dimensions. Specifically, some of the questions were adapted from the works of Venkatraman (1989) and Zahra, et.al (1993). Strategic orientation was operationalised along five dimensions: aggressive, differentiation, defensive, futurity and proactiveness using some of Venkatraman STROBE instrument. A multi-item was used for each dimension of the strategic orientation with each question designed so that respondents could react to the intensity of the issue being evaluated. For each item the most intense is ascribed 7-point while the least is 1, described as much lower. Similarly, technology policy was operationalised along the dimensions of automation and innovation, aggressive technology posture, and leadership in technology usage. Each dimension except for leadership was measured with a multi-item and the scales were similar to that adopted for the strategic orientation dimensions. In each case, the mean response to scale items was used as the organisation’s scores on a particular measure. All data analysis procedure was done using the SPSS computer package.

In addition, the first segment of the research instrument required respondents to provide background data such as age, sex, managerial level, education and working experience. Most of the respondents had formal university education and only 7% of the respondents had education level less than a first degree. This group possibly had risen through the ranks with more working experience to have attained managerial level in their organisation. Their working experience ranged from 1 to above 15 years with a significant proportion of the respondents in the articulate group of between 31-40 and 41-50 years. In terms of managerial experience, 31.4% of the respondents were in the top management categories, 50.8% (middle management) and 17.8 % (lower management). Therefore, it is reasonably expected that these subjects were qualified to discern and assess the strategic leanings of their organisation and their technology policy.

4. Results and discussion

A multi-item index was used to measure each strategic orientation and technology policy dimensions.

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Dev</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation Orientation</td>
<td>4.1359 (4.5278)</td>
<td>1.0024 (.8208)</td>
<td>-.161  (-1.006)</td>
<td>.315   (2.529)</td>
</tr>
<tr>
<td>Aggressive Orientation</td>
<td>4.1793 (4.2315)</td>
<td>.8526   (.6656)</td>
<td>-914   (-.434)</td>
<td>1.066  (1.258)</td>
</tr>
<tr>
<td>Defensive Orientation</td>
<td>4.3565 (4.4852)</td>
<td>.6267   (.62114)</td>
<td>-.293   (-1.267)</td>
<td>-.241  (2.755)</td>
</tr>
<tr>
<td>Proactive Orientation</td>
<td>4.3442 (3.9568)</td>
<td>.8509   (.73842)</td>
<td>-.365   (.159)</td>
<td>-.195  (-.626)</td>
</tr>
<tr>
<td>Futurity Orientation</td>
<td>4.5556 (4.4630)</td>
<td>1.0565  (1.07656)</td>
<td>-.818   (-.560)</td>
<td>1.508  (.560)</td>
</tr>
</tbody>
</table>

( ) figures in brackets relates to First bank while those outside the parenthesis relates to GTB bank
However, for each dimension the multi-item indices corresponding to each dimension was transformed and the mean score taking as the firm’s score on that dimension. The result of the data analysis are presented and discussed in this section. Table 1 shows the descriptive statistics of the operationalized dimensions of strategic orientation of the study.

Table 1 reflects the perception of the extent of the practice of different strategy dimensions in the Nigerian banking sector. It can be seen that each strategy dimensions specified in the study found expression in the operations of these banks. A plausible explanation for this is the banking crisis and complex changes in the Nigerian industry which has deeply affected ownership structures, escalate competitive pressures in the light of prevalent uncertainty in the market environment. Consequently, most of the banks defer to assortment of strategies to develop dynamic capabilities in response to fast changing environment (Teece, et al., 1997).

However, while differentiation behavioural traits could be considered as more pronounced in Firstbank with a mean ratings of 4.53 futurity considerations seem preeminent or to be the main issue that form the spin of strategy considerations in the other bank GTB (mean= 4.56). It can be inferred that differentiation strategy and futurity traits are the most emphasized in the strategic orientation of these banks. This, in a way, tends to imply that management team focus on securing unique operations have time orientations in view; a concern for securing operations that predispose or impact favourably on the bank’s future performance. It seems safe to reason that the dominance of defensive strategic behaviours in one of the banks is within the armpit of maintaining a balance between these strategic behaviour and long-term considerations. From Table 1, proactive strategic traits fall behind other strategy elements in Firstbank, one of the ‘old generations’ bank (mean= 3.96). This, however, might be a reflection of difficulties in changing established business pattern for most public owned corporation.

4.1 Technology policy

Table 2 shows the descriptive statistics of the technology policy dimensions. From the table we can observe that irrespective of the banks strategic leanings a conservative approach suggesting a middle-of-the-road policy with respect to technology issues seems to permeate. This moderate attitude to technology possibly explains the lack of innovations in the industry especially in adaptation of technology that are particularly relevant to operation in the unique environment these organisations are situated. Consequently, the banking industry in Nigeria had imposed some changes rather than proactively initiating the required changes required to alter their strategic capabilities to fit them to operate in the globalized economy.

Table 2
Descriptive statistics of technology dimensions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Dev</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q24: New methods and technologies</td>
<td>4.4706</td>
<td>1.0956</td>
<td>-.356</td>
<td>-.452</td>
</tr>
<tr>
<td>Q25: Automation of branch network</td>
<td>4.375</td>
<td>1.1081</td>
<td>-.639</td>
<td>.427</td>
</tr>
<tr>
<td>Q26: Latest technology in operation</td>
<td>4.4034</td>
<td>1.0278</td>
<td>-.545</td>
<td>.358</td>
</tr>
<tr>
<td>Q27: Innovation and adaptation in new areas</td>
<td>4.4202</td>
<td>1.0853</td>
<td>-1.187</td>
<td>1.889</td>
</tr>
<tr>
<td>Q28: Regularity of Technology innovation</td>
<td>4.4333</td>
<td>.9503</td>
<td>-.732</td>
<td>1.215</td>
</tr>
<tr>
<td>Q29: Trends in technology</td>
<td>4.475</td>
<td>.9870</td>
<td>-.756</td>
<td>.923</td>
</tr>
<tr>
<td>Q30: Capital investment in technology adaptation</td>
<td>4.4538</td>
<td>.97205</td>
<td>-.572</td>
<td>1.074</td>
</tr>
<tr>
<td>Q31: Investment in technology acquisition</td>
<td>4.3250</td>
<td>1.02213</td>
<td>-.835</td>
<td>1.688</td>
</tr>
<tr>
<td>Q32: Technology use ratings</td>
<td>3.5882</td>
<td>1.4463</td>
<td>-.461</td>
<td>-.539</td>
</tr>
<tr>
<td>Q33: Timing of innovation</td>
<td>3.6134</td>
<td>1.3967</td>
<td>-.342</td>
<td>-.792</td>
</tr>
</tbody>
</table>

The fact that the regularity of technology innovations and adaptation is merely moderate (Q28, mean=4.43 on a 7-point Likert scale) is reflected on the moderate resource deployment in adoption of technologies (Q30, mean=4.45) and investment in equipment (Q31, mean=4.32). From Table 2, the timing of entry with innovation of the surveyed banks provide an interesting suggestions on why technological development is a slow driver of competition in the Nigerian banking industry. Firms in the industry appeared to react to industry leaders initiatives or to innovate in response to the industry leaders initiative (Q32, mean= 3.5882; Q33, mean=3.6134). Therefore, the changing and vast opportunities structure notwithstanding the use of technology to create competitive advantages in the industry is passive.

4.2 Relationship among the strategy dimensions

The pattern of the relationship between the strategies dimensions distilled in this study is discussed in this subsection. From Table 3, aggressiveness dimension, which reflects banks’ market share seeking behaviour, propensity to challenge rivals directly and intensely, significantly and moderately covaries with three of the strategic dimension: defensive orientations (r =0.49, p=0.00), proactiveness (r = 0.31, p =0.00) and
differentiation orientation ($r=0.26, p=0.005$). The relatedness of aggressive dimensions with proactiveness and defensive orientations is at variance with Venkatraman (1989). He had suggested that the non-relatedness of aggressive dimension with defensive, futurity and proactiveness, among others is expected.

**Table 3**

Correlations coefficients of the strategy and technology dimensions

<table>
<thead>
<tr>
<th>Strategic orientations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive</td>
<td>.256**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensive</td>
<td>.496**</td>
<td>.494**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive</td>
<td>.273**</td>
<td>.314**</td>
<td>.462**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futurity</td>
<td>.065</td>
<td>.189*</td>
<td>.074</td>
<td>.142</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automation &amp; innovation</td>
<td>.572**</td>
<td>.387**</td>
<td>.556**</td>
<td>.374**</td>
<td>.12</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive tech. posture</td>
<td>.47**</td>
<td>.315**</td>
<td>.486**</td>
<td>.407**</td>
<td>.153</td>
<td>.579**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Product innovation</td>
<td>.342**</td>
<td>.216*</td>
<td>.262**</td>
<td>.317**</td>
<td>.282**</td>
<td>.331**</td>
<td>.507**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed), ** correlation is significant at the 0.01 level (2-tailed)

The significant associations of aggressive strategy with the banks’ defensive behaviour is consistent with the thought that aggressive firms will, in a measure, at least, seek to protect their enclave (defensive) and employ foresight to anticipate future demand and seek to shape the environment (proactive). Indeed expectations are that aggressive firms will respond to market opportunities and exercise initiatives to react to demand. Consequently, the associations between these strategic traits are consistent with expectation and may, therefore, imply defensive and proactive connotations for aggressive firms.

Furthermore, differentiation is significantly related to most of the strategy dimension except futurity. The traits association with futurity dimension is not only low but also it is not statistically significant ($r=0.065, p>0.05$). If we conceive differentiation in terms of uniqueness of operations and services it is interesting and significant that the relationship with futurity is low and insignificant indicating that long-term considerations and impact future competitive advantage is assumed. Or still, the turbulent and unprecedented environment these banks operate in have shifted management focus on the immediate forces with the assumptions that current advantage achieved will extend to the future.

In addition to emphasis on efficiency, defensive firms seek to focus on a product, market domain and technology (Miles & Cameron, 1982). It is, therefore, not surprising that differentiation is significantly related to firms’ defensive behaviours ($r = 0.496, p =0.00$). For as much as differentiation strategies conveys advantages that can be exploited against competitors’ weaknesses the relatedness with aggressive orientation is expected. In general, the relationship between futurity dimension and other strategic orientations is low and statistically not significant with the exception of its relationship with aggressive strategy orientation ($r =0.189, p =0.004$). Perhaps, firms in most developing countries, like Nigeria, are more concerned with survival rather than taking the future or long-term issues into deep considerations. That is, strategy design and focus are generally short sighted in view with the consequence of possible absence of long-term orientation in resource allocation operations; this may proffer a possible explanation for the short history of most firms in most developing economy.

### 4.3 Relationship between strategy dimension and technology policy

A complementary analysis in this study explores the relationship between strategy dimensions and technology policy dimension. The results, however, indicates a general pattern of relationship rather than specific pattern given the specific characteristic of the case organisations. The result of the relationship are summarised in Table 3 and Table 4. The correlations coefficients are generally positive and statistically significant in most cases. For example, differentiation strategy which reflects uniqueness in operations of these organisations is significantly related to the levels of automations and the use of state-of-art process technology, that is, automations and process innovations ($r=0.57, p=0.00$). Similarly, this technology dimensions showed moderate relationship with defensive behaviours of these banks ($\beta= .32, t=0.00$).

The pattern of relationship between technology policy and strategic orientation in Table 4 seems to suggest the emphasis of these firms on defensive actions, which indicates a strong orientation to differentiate their operation and defend their present enclave. Indeed, the preference for and propensity to use technology or lead technology change extend beyond differentiation the overriding goal of defence seem evident.

Futurity dimension had no significant relationship with most of the technology dimension except product innovation ($r=0.28, p=0.002$). The beta score of ($\beta= .357, t=0.005$) with the correlation coefficient ($r=0.28, p=0.002$) between futurity components of strategy and product innovations suggests the need for concern if continued investment in technology is not counterbalanced by product innovations. If we view firms
aggressive technology posture as the propensity to use technology proactively for positioning and automations and process innovation as the level of automation of facilities and state-of-art process technology; it is surprising that such resource intensive posture is vaguely related to futurity strategic orientations. These findings subtly reinforce the submission that professional managers often showed more concern for short-term rather than long-term returns when they might possibly be out of the organisation (Abiodun, 2009).

Table 4

<table>
<thead>
<tr>
<th>Effects of Technology Policy on Strategic Orientations</th>
</tr>
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<tbody>
<tr>
<td>Differentiation</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Constants</td>
</tr>
<tr>
<td>Auto &amp; Process innovation</td>
</tr>
<tr>
<td>Aggressive Posture</td>
</tr>
<tr>
<td>Product innovation</td>
</tr>
<tr>
<td>Technology rating</td>
</tr>
<tr>
<td>Market entry timing</td>
</tr>
</tbody>
</table>

### F 15.226 4.862 13.787 3.063 7.457

| R²  | 0.403 | 0.177 | 0.379 | 0.119 | 0.248 |
| Adj R² | 0.376 | 0.141 | 0.351 | 0.08 | 0.215 |

(***p<0.005) *p<0.01)

Table 4 summarizes the result of the effect of technology policy on strategic orientations. Most of the technology policy dimensions have positive effect on strategic orientation variables. In particular, automation and process innovation dimensions have positive and significant effect on most of the strategic dimension except futurity dimensions.

5. Conclusions

Findings from this study have significant implications for managers and management theorist. The study has provided management practitioners with valuable practical insight into the relationship and interplay between different dimensions of strategy and technology policy. Understanding of the impact of technology policy on strategic orientation will serve to significantly facilitate the framing of technology policy and adoption of technology that are consistent with corporate needs and strategic sail; consequently, an effective deployment of technology resource as a source of strength to build competitive advantage.

The study has shown that both differentiation and futurity strategic dimensions have received more pronounced attention in the managerial practices in the banking industry. Management needs to study the implication of these and ensure that differentiation effort have long term future orientations. However, other strategic orientation dimension equally received reasonable measure of attention in the industry strategic practices. These indicate more that in the fast changing and complex environment of most developing economy and assortment of strategies that promote development of dynamic capabilities rather than a single dominant strategy is often favoured due to the characteristics of the environment. Furthermore, the study confirmed varying relationship between strategic orientations and technological policy overall, firms in the industry are cautions are the developing technological policy that are long term in nature but prefer short and medium term strategy. This study is not however without limitations. It is logical to suspect that some of the findings in the study might hold for other business environment, moreso, in sub-sahara Africa. However, ascertaining this extension might be difficult; consequently, more industries and countries specific research efforts would be required to make informed generalization. It is therefore, suggested that a replication of this study in other industries and geographical location be undertaken to enhance generalization.

References


