

Strategic management accounting and decision making: A survey of the Nigerian Banks

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Abstract

This paper attempts an empirical examination of the practicality of strategic management accounting (SMA) adoption in banks in Nigeria, a developing country. It investigates the extent of practice and contributions of SMA to strategic decision making. Survey data were obtained from 71 bank managers across 20 registered banks in Nigeria. Simple regression estimation technique and Pearson Chi-square test were used for data analysis. The results suggest that SMA is distinct in its features and orientation towards the practice of management accounting. The study found out that banks in Nigeria practice SMA; not as a concept, but as a principle of operation, and that SMA contributes significantly to strategic decision making in the area of competitive advantage and increased market share. The study offers value for banks in other developing economies in that it supports the argument that they can benefit from SMA adoption as part of banking strategies.

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1. Introduction

Over two decades ago, the ideology of strategic management accounting (SMA) was introduced into the literature as a seminal development with Simmonds and Bromwich as lead academics. During this period, SMA came to prominence among other innovative techniques designed to restore the declining relevance of management accounting practices (AlMaryani & Sadik, 2012; Cinquini & Tenucci, 2007; Drury, 2002; Juras, 2014; Moores, 1992; Roslender & Hart, 2003; Roslender, 1995; Simmonds, 1981; Tillmann, 2003). At first, the term SMA was used by Simmonds in the 1980s to identify an externally oriented approach to the practice of management accounting (Roslender & Hart, 2010). Along this thought, Bromwich (1990) described SMA as positing a sophisticated & more involving order of management accounting practices, of which Roslender and Hart (2003), Cadez and Guiding (2007) and Juras (2014) noted to be an important departure from the traditional management accounting practice to a dynamic and strategic positioning.

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In the literature, SMA is thought to be both an extension and a distinct orientation that provides a complete external approach towards management accounting practice from its archaic tradition towards a strategic innovation outside the norms (Drury, 2002; Juras, 2014). In itself, SMA incorporates a broader emphasis and longer-term outlook than the greater part of management accounting. An approach that lies at the interface between strategic management and accounting (Juras, 2014; Roslender & Hart, 2003, 2010).

At present, the 'external' orientation of Simmonds' description of SMA has been widely established in the literature. It has also attracted mixed viewpoints among academics and practitioners. In Cinquini and Tenucci (2007), the term 'external' refers to 'competitors.' Simmonds (1981) idea of relating external with competitors was based on the expectation that to understand competitors' information organizations develop and monitor new business strategies. The term 'external' also speaks of suppliers and customers in a sense that demonstrates expediency of external information that helps companies explore fruitful linkages with suppliers and customers (Shank & Govindarajan, 1993; Simmonds, 1981). Similarly and more specifically, the term 'external' speaks of the market, of which apt attention is given to products offered to satisfy customers' needs with a careful recognition of the product attribute costs (Bromwich, 1990; Roslender & Hart, 2003; Simmonds, 1981).

SMA as a thriving concept both in literature and in empirical studies is open to a number of interpretations and diversities of persuasions depending on a researcher's scientific background, underlying assumptions and starting points (Juras, 2014; Fu, 2007). However, Roslender and Hart (2003, 2010) described SMA as a generic approach to accounting for strategic positioning, defined by an attempt to integrating insights from management accounting and marketing management within a strategic management framework. Hitherto, despite its novel introduction scholars still hold that there is little or no consensus on what constitutes the term strategic management accounting (Drury, 2002; Juras, 2014; Roslender & Hart, 2010). Although, it is well accepted that SMA describes a generic approach to accounting for strategic positioning (Roslender & Hart, 2010), this only leaves unsolved the problem of defining what is intended with the term SMA. Thus, there is yet to be a well-defined framework for SMA (Drury, 2002; Cinquini & Tenucci, 2007; Juras, 2014; Roslender & Hart, 2010; Tomkins & Carr, 1996).

Since its introduction in the literature, academics and practitioners have expressed doubts on the practicality of SMA adoption and implementation as part of management accounting practices (Dixon, 1998; Juras, 2014; Roslender & Hart, 2010). Besides, only little research effort has been committed to examining the possibilities of SMA practices in organizations (Cadez & Guilding, 2007; Juras, 2014; Tillmann, 2003). Moreover, among the little available empirical researches on SMA, only few evidence points to its adoption in leading edge companies in the United Kingdom, a developed nation (Roslender & Hart, 2003). Most research efforts focused on SMA practices in the developed nations, while evidence from developing nations remains obscure. Even with this, there is still no persuasive conclusion of what SMA entails and how it replaces traditional management accounting practices (Drury, 2002; Roslender & Hart, 2003, 2010). Some scholars still believe that the practice of SMA is mere academic figments yet to gain a convincing practicality across the globe (Alnawaiseh, 2013; Juras, 2014).

This study attempts to investigate the practicality of SMA adoption in banks in Nigeria, a developing country. More specifically, it examines whether banks in Nigeria practice SMA and the benefits SMA offers the industry. Historically, the Nigerian banking industry is known for instability, majorly due to poor management and fraudulent activities. It is largely regulated and most times, governmental policies and political manoeuvres abruptly interfere with its managerial oversight and operations, causing a paradoxical shift and disintegration from the conventional banking norms (Adeyemi, 2011; Okpara, 2009; Ogunleye, 2010; Sanusi, 2010). These in most cases leave the banks pressured for survival and sustainability. Likewise, the dwindling oil prices, persistent devaluation of the Nigerian naira and economic recession make it imperative for banks in Nigeria and other African nations to re-strategize for sustainable growth. SMA adoption and practice therefore, will not only expedite stability and growth in the industry, it will also ensure strategic positioning for sustainability.

2. Literature review

2.1. Historical development of SMA

Ever before Simmonds and Bromwich introduced SMA in the literature, the traditional management accounting techniques were fundamentally in use (Drury, 2002). It was the late 1980s diagnoses of an enfeebling and dissatisfying significance within management accounting and much criticism of its traditional practices that aroused

the development of new techniques that are more in tune with today's competitive and business environment (AlMaryani & Sadik, 2012; Ajibolade, 2010; Drury, 2002; Roslender, 1995; Tillmann, 2003). During this period, some of the new techniques developed appeared promising, not only for management accounting but accounting in general. This incitement was what brought SMA to prominence (Roslender, 1995; Roslender & Hart, 2003). Some of the techniques introduced then include, life cycle costing, attribute costing, target costing, benchmarking, activity based costing, strategic cost analysis, value chain costing, etc. (Ajibolade, 2010; Drury, 2002; Roslender & Hart, 2003, 2010). Whereas management accountants apply and use these techniques independently, some scholars believed they collectively constitute SMA technique as a concept (Cravens & Guilding, 2001; Roslender & Hart, 2010). This therefore presents two conflicting positions on SMA: the Simmonds's position as a unique concept with a complete external orientation relating to customers, competitors and the market, and the Cravens & Guilding's position as a combination of other traditional and contemporary management accounting techniques.

2.1.1. *Simmonds (1981) and Bromwich's (1990) submissions on SMA*

As proposed by Simmonds (1981) and reiterated by Bromwich (1990), SMA is branded as an externally oriented approach and a more involving order of management accounting practices. It entails the gathering of information of a company and its competitors on market shares, cash flows and resource utilisation. According to Tillmann (2003), SMA has a broad external focus, not only on competitors, but also on the competitive environment. It significantly departs from the traditional practice of management accounting towards a strategic innovation outside the norms, combining management, accounting and marketing within a strategic management framework (Drury, 2002; Roslender & Hart, 2003, 2010).

According to Roslender and Hart (2010), combining strategy, management and accounting as a single concept makes it possible to identify a new and quite different conception of SMA, one that is arguably insightful and provides accounting information in support of the strategic management process. SMA also involves the provision and analysis of financial information on the firm's product markets, competitors' cost and cost structures, the monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods (ICAN, 2010b). This was Simmonds' submissions on SMA when he called for an alternative practice of management accounting. The one that goes beyond the traditional internal practice of costs control towards a strategic structure within the market and amongst competitors.

Tillmann (2003) described SMA as being about the use of management accounting systems in supporting strategic decision-making. This he elucidated, noting that the survival of companies in highly competitive global markets may depend partly on a management accounting function that allows for the successful assessment of strategic situations. Actually, this was what Simmonds envisioned before calling for a more sophisticated management accounting technique to guide firms into innovations and competitive advantage. Whereas diverse persuasions on the external orientation of SMA exist, the Chartered Institute of Management Accountants (CIMA), a foremost management accounting body assumed Simmonds and Bromwich's positions on SMA. The body described SMA as a form of management accounting in which emphasis is placed on information that relates to factors external to the firm, as well as non-financial information and internally generated information (ICAN, 2010b; Okoye & Akenbor, 2008).

In the literature, studies on SMA continue to provide a myriad of challenges for all who are associated with the practice of accounting. Originally, they were challenged by Simmonds to think beyond the traditional mind-set into the twin fields of marketing and strategy. That is, to view SMA as being concerned with integrating key aspects of managerial accounting and marketing management. This ultimately requires management accountants to put aside jurisdictional differences with colleagues in the marketing function in the pursuit of inter-functional cooperation (Roslender & Hart, 2010).

2.1.2. *Cravens and Guilding (2001) submission on SMA*

In the study of Cravens and Guilding (2001), several extant management accounting techniques were combined to model SMA. They believed that SMA is not a different concept or technique entirely, but a combination of existing techniques that is rebranded. The first aspect in the consideration of Cravens and Guilding's (2001) submission is that life cycle costing falls under the constituent of SMA. According to Drury (2002), life cycle costing estimates and accumulates costs over a product's entire life cycle. Identifying these costs during different stages of a product's life cycle provides an insight into understanding and managing the total costs incurred throughout its life cycle from the design to the decline, through introduction, growth and maturity. In particular, life cycle costing helps management

to understand the cost consequences of developing and making a product and to identify areas in which cost reduction efforts are likely to be most effective. Cravens and Guilding (2001) assumed that life cycle costing is a clear long term accounting perspective and market orientation, which is in tune with the market orientation of SMA in Simmonds (1981) and Bromwich (1990) propositions.

Attribute costing on the other hand considers products or services as a bundle of features that differentiate the products which costs are determined. This technique at times is interpreted as externally oriented in consonance with Simmonds' view on SMA because attributes of services are determined according to customers' requirements (Cravens & Guilding, 2001; Cinquini & Tenucci, 2007; Juras, 2014). According to Shank (1989) and Shank and Govindarajan (1992), attribute costing usually constitutes an additional approach to cost management, but one distinct from either activity-based costing or strategic cost management. Bromwich (1990) accentuates this distinction by identifying two dominant approaches to strategic management accounting, of which the first seeks to cost the product attributes provided by a firm's products and the other to cost the functions in the value chain that provide value to customers.

Drury (2002) further noted that target costing is a customer-oriented technique widely used by Japanese companies and adopted by companies in Europe and the United States. He observed that target costing entails determining customers' perceived value of the company's product based on its functions and attributes. This technique also represents the external orientation of SMA as proposed by Simmonds and Bromwich (Bromwich, 1990; Cravens & Guilding, 2001; Juras, 2014; Roslender & Hart, 2003; Simmonds, 1981). Bromwich's SMA approach consists majorly of the attribute costing technique which is based on a strategic cost analysis matrix (Roslender & Hart, 2003 citing Bromwich, 1991). Target costing like SMA is believed to exhibit strong external emphasis, not simply on competitors but also on customers and the marketplace (Drury, 2002; Roslender & Hart, 2003).

According to Cravens and Guilding (2001), SMA techniques also include benchmarking which involves identifying the best practices and comparing the organization's performance to those practices by competitors with the goal of improvement. This technique underlines the external strategic orientation toward competitors. A term used by Simmonds (1981) based on the expectation that to understand competitors' information organizations develop and monitor new business strategies. Drury (2002) argued that this technique attempts to identify activities such as customers order processing that requires improvement and ensures that the improvements are implemented.

Cravens and Guilding (2001) further identified activity based costing (ABC) as a constituent of SMA technique, which consists in the management of activities through which it is possible to define actions aiming at achieving a competitive advantage. According to Drury (2002), Johnson made a suggestion over two decades ago that knowing costs by activities is a catalyst that eventually triggers the action necessary to become competitive. The goal of this technique is to enable customers' needs and demands to be satisfied while making fewer demands on the company's resources; a proposition Simmonds (1981) so alluded in his study on SMA. Similarly, both strategic costing analysis and value chain costing were identified as constituents of SMA technique in Cravens and Guilding (2001). Whereas the former is a costing technique that emphasizes that costing systems must explicitly consider strategy and the pursuit of long-term competitive advantage, the latter proposes an approach to accounting that considers all the activities performed from the design to the distribution of the product. The strategic implications here regard the exploiting of the economies and efficiencies deriving from the external linkages (Hutaibat, 2011). As in Simmonds' SMA proposition, these linkages can be within the firm or between the firm, its suppliers and customers (Drury, 2002).

Ensuing from the fact that these techniques were developed and function individually, Cravens and Guilding (2001) have compressed them to model a single SMA technique. This merged position significantly deviates from Simmonds' original conception of the term SMA. Simmonds (1981) envisaged a dynamic practice of management accounting that is completely externally oriented towards a strategic facet that relates with both financial and non-financial information on competitors, customers and the market environment. Simmonds (1981) believed that SMA stands on its own feat to operate as a unique and complete technique that should be embraced by management accountants. It stands as a foundation for making business decisions that would improve or positively affect the performance of firms through a better competitive advantage over competitors (Aziz, 2012).

2.2. Features of SMA

Towards understanding the concept of SMA, Simmonds' original thoughts focused on the fact that management accounting techniques should go beyond internal orientation that is only concern about the firm and its cost elements. He was more concerned about an external dynamism of the practice of management accounting from its old-fashioned tradition; a technique which will help firms to strategically gather information from its competitors on market shares, cash flows and resource utilisation. It was this concern that made Simmonds to blend strategy with management accounting to arrive at a new concept known as strategic management accounting (Cinquini & Tenucci, 2007; Drury, 2002; ICAN, 2010b; Juras, 2014; Okoye & Akenbor, 2008; Roslender & Hart, 2010; Simmonds, 1981).

In Cinquini and Tenucci (2007), Juras (2014), Roslender and Hart (2003, 2010), and Shank and Govindarajan (1993), Simmonds' idea on SMA as an external approach to management accounting practice refers to competitors, customers and the market environment. These, Simmonds (1981) noted that to understand competitors' information, organizations develop and monitor new business strategies, and a firm can explore fruitful linkages with suppliers and customers when it is well equipped with such external information. It was this submission that Bromwich (1990) extended, relating SMA to the market and customers' satisfaction with a careful recognition of the product attribute costs, making it distinguished by its focus on providing information relevant to evaluating a firm's competitive position in an industry (Juras, 2014; Roslender & Hart, 2010).

After Simmonds (1981) and Bromwich (1990) submissions on SMA, scholars and practitioners have tried to understand and to provide explanations on what SMA means as a concept and as an alternative management accounting technique (Drury, 2002; Juras, 2014; Roslender & Hart, 2010). In the literature and in empirical research, scholars have extensively expanded the scope of SMA by distinguishing its conceptual orientation from traditional and other management accounting techniques. However, some scholars still believe that SMA is a mere combination of existing management accounting techniques. This combined position according to Roslender and Hart (2010) and Juras (2014) is erroneous with the benefit of hindsight, because it significantly deviates from the promoters' submissions, as a generic approach to accounting for strategic positioning, defined by an attempt to integrate insights from management accounting and marketing management within a strategic management framework. To further illuminate on this discuss, Fig. 1 presents a conceptual model on the feature of SMA technique as it differs from traditional management techniques.

From Fig. 1, it could be seen that, whereas other management accounting techniques lay more emphasis on cost reduction, management and control, performance evaluation and product management, SMA emphasizes majorly on strategic positioning. SMA combines information on customers, competitors and the market, which enables a firm to gain competitive advantage and increase its market share. As illustrated in the Figure other management accounting techniques are oriented towards internal practices of management accounting, but SMA differs from this orientation towards external practice (Bromwich, 1990; Cinquini & Tenucci, 2007; Juras, 2014; Roslender, 1995; Roslender & Hart, 2010; Simmonds, 1981). According to CIMA (cited in ICAN, 2010b and Okoye & Akenbor, 2008) SMA is a form of management accounting in which emphasis is placed on information that relates to factors external to the firm as well as non-financial information and internally generated information.

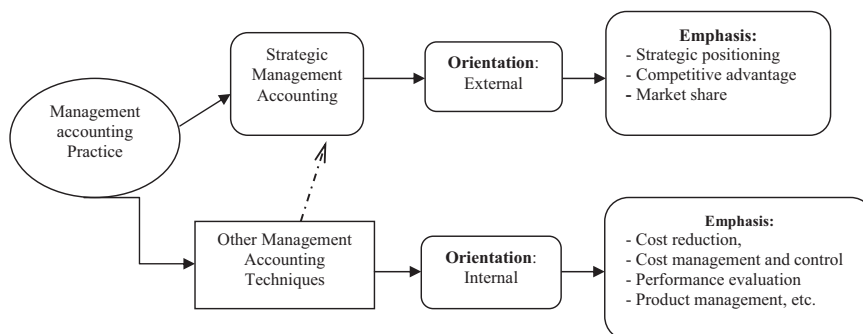


Fig. 1. Feature of strategic management accounting. Authors' model 2015

2.3. Theoretical framework

In the history of management accounting research, scholars have applied a variety of theories and paradigms as a basis for generalization (Ajibolade, Arowomole, & Ojikutu, 2010; Al-Htaybat & Alberti-Alhtaybat, 2013; Scapens & Bromwich, 2001; Scapens & Bromwich, 2010). In Malmi (2010) and Lukka (2010), paradigms are sets of assumptions, concepts, values, and practices that constitute ways of viewing reality. They provide focus, orchestrate effort and assist the research community to accumulate knowledge about the issues of interest. This study therefore is supported by the contingency theory and the theory of change valence. According to Haldma and Laats (2002) and Ajibolade (2013), Hofstede's classic fieldwork in 1967 and Khandwalla's study in 1972 were considered foremost studies that promoted the use of contingency theory in management accounting research. The theory is derived from organizational studies. It assumes that no single type of organizational structure is equally applicable to all organizations. Rather, organizational effectiveness is dependent on a fit between the type of technology, environmental volatility, the size and features of the organizational structure and its information system (Ajibolade, 2013; Al-Htaybat & Alberti-Alhtaybat, 2013; Drury, 2002; Haldma & Laats, 2002; Islam & Hu, 2012; Otley, 1980).

The contingency theory implies that the successful implementation and use of management accounting techniques depend upon particular contingent factors, which include the environment, technology, size and structure of an organization, as well as its competitive strategy, strategic mission and national culture (Ajibolade, 2013; Drury, 2002; Islam & Hu 2012). This theory is typically used in positivistic studies where pre-determined hypotheses are explained and then tested (Al-Htaybat & Alberti-Alhtaybat, 2013). Others that have supported this theory in management accounting research include Ajibolade et al. (2010), Chenhall (2003), Hartmann and Moers (2003) and Martin, Hiebl, Duller, Feldbauer-Durstmüller and Ulrich (2015).

The theory of change valence on the other hand stated that change commitment is largely a function of change valence (Weiner, 2009). This refers to the value organizational members assign to a specific, impending organizational change. That is, do organizational members value the specific impending change? Do they think that it is needed, important, beneficial, or worthwhile? According to this theory, the more organizational members value the change, the more they will want to implement the change, or, the more resolve they will feel to engage in the courses of action involved in change implementation. According to Shea, Jacobs, Esserman, Bruce and Weiner (2014), an aspect of change valence includes the perceived benefit the organization anticipates. Here, Weiner (2009) noted that organizational members might value a planned organizational change because they believe some sort of change is needed urgently and that the change is effective and will solve an important organizational problem. Hence, the anticipated benefits motivate the move for the change.

In this study, it is believed that the adoption and implementation of SMA technique depend upon certain contingent factors that may be intrinsic to the Nigerian banks such as their drive for innovation in gaining competitive advantage over competitors, the need to increase their customer base, and to expand their market share. Drury (2002), in applying contingency theory noted that a firm could gain competitive and strategic advantage in its industry and relative to its competitors, a position that appeal significantly to Simmonds (1981) external orientation of SMA. This study therefore proposes that the level of access to information on customers, competitors and the industry will facilitate strategic decision making in the Nigerian banks. This proposition is premised on the ground that, for management accountants to forgo traditional management accounting techniques for new techniques would be due to the anticipated benefits they hope to derive. Hence, the hypotheses tested in the study are stated as follows:

H1: the adoption of strategic management accounting technique has no significant effect on strategic decision making in banks in Nigeria.

H2: access to information on competitors, customers and the industry does not significantly contribute to strategic decision making in banks in Nigeria.

2.4. Prior empirical evidence of SMA adoption and practice

The term SMA has a longer history which was introduced into management accounting some years earlier by Simmonds (1981). Simmonds used SMA to identify an externally oriented approach that entailed collecting and analyzing data on costs, market shares and resource utilization for both a business and its competitors (Roslender &

Hart, 2003). Likewise, Bromwich (1990) described SMA as the provision and analysis of financial information on the firm's product markets and competitors' costs, cost structures and the monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods. However, despite the interest it had attracted in recent years, scholars still believe that SMA is a figment of academic consideration and lacks practical applicability as a concept (Alnawaiseh, 2013; Dixon, 1998; Drury, 2002; Juras, 2014; Roslender & Hart, 2003; Tillmann, 2003).

According to Cinquini and Tenucci (2007), the development and adoption of SMA circles round the necessity for external information to defy environmental uncertainties and to support strategic decisions. The emergence of research in SMA thrives on the basic consideration of the increasing relevance of information outside the precincts of the firm (Bromwich, 1990; Cinquini & Tenucci, 2007; Simmonds, 1981). In Bromwich (1990), two economic theories were reviewed and utilized to provide theoretical underpinning for the greater possible involvement by accountants in what is known as strategic management accounting (SMA). One of these theories is concerned with the underlying characteristics of enterprise products. Here, he suggested that there is a need for accountants to consider the cost structure of not only their own firm but of all enterprises in the relevant market and of potential entrants, and that costs cannot be considered in isolation from demand factors. In his second review, he was concerned with whether or not a firm's cost structure permits its market strategy to be sustained in the face of potential entry.

The study of Lachmann, Knauer and Trapp (2013) on SMA adoption in hospitals suggests that SMA technique is not in widespread use in hospitals, but varies among hospitals based on their structural characteristics. In the study of Cadez and Guilding (2008), factors such as company size and strategy have significant bearings on the successful application of SMA technique in Slovenian companies in line with the contingency theory. For Tillmann and Goddard (2008), the principal discovery of SMA relates to the core phenomenon of sense making. Two sets of consequences of sense making were examined in their study; consequences for making strategy and consequences for management accountants. In Roslender and Hart (2003), the practice of SMA technique has a limited impact on firms in the UK. Perhaps, because despite its introduction into the literature as a potentially exciting development over 20 years ago, there is still little or no agreement about what constitutes SMA (Drury, 2002; Juras, 2014). However, it is best understood as a generic approach to accounting for strategic positioning, which attempts to integrate insights from management accounting and marketing management within a strategic management framework (Roslender & Hart, 2003).

Dixon (1998) on the other hand investigated the practical application of SMA within a dynamic business environment using case study evidence. His findings suggest that SMA as a concept is acceptable but carries practical limitations. He further argued that whereas the theory surrounding SMA suggests that a company must strive to acquire a bank of strategic information weapons, the information demands placed on a company by strategic management accounting outweigh the benefits it provides in sustaining a competitive advantage. According to Guilding, Cravens and Tayles (2000), in a survey of large companies in New Zealand, United Kingdom and United States on what accounting practices may comprise SMA observed a wide range of application rates for a 12 SMA practices appraisal scale of which competitor accounting and strategic pricing are the most widely used. According to them, based on the perceived benefits adopting such practices offer, the potentiality for greater use of SMA technique exists in all countries examined. On cross-country comparisons, they highlight similar levels of SMA usage; however, when controlled for company size, they observed that some practices are used relatively more in New Zealand and less in the United Kingdom and United States of America. Their findings also suggest a negligible use of the term 'strategic management accounting' in organizations and practicing accountants have a limited appreciation of what the term means.

In a survey of twenty individuals from four multiple Romanian companies in Bucharest, AlMaryani and Sadik (2012) reported three basic discoveries of the application and use of SMA technique in Romanian companies. First, they found out that SMA played an important role in achieving the strategic goals and objectives of contemporary management. Secondly, they noted that many benefits could be achieved from the application and use of SMA technique. Finally, they observed that there are many constraints and difficulties facing the Romanian companies in the application and use of the technique of SMA. For Nixon and Burns (2012), the evidence that SMA technique has not been adopted widely and that development in the SMA literature seem to have languished may be consistent with the relatively short lifecycle of most strategic management (SM) tools and many concepts. They observed an inherent contradiction between the apparent decline of SMA and the sustained growth in the number of concepts, models, tools, theoretical perspectives, disciplines, academic and professional journals and consultancy practices that populate

the SM domain. They however concluded that SMA practices are developing in line with strategy formulation and organisational processes.

Cuganesan, Dunford and Palmer (2012) noted that empirical SMA researches have paid insufficient attention to the practices through which strategizing occurs. They also noted that SMA research has overlooked the importance of strategy in the public sector. These they investigated suggesting specific ways in which management accounting is constitutive of strategizing through specific organizational practices. They further noted that particular management accounting techniques being used for strategizing by entities in the public sector provide a useful counter-point to the private sector orientation that has dominated SMA research to date. Their study also suggests to other scholars some particular directions that a rebalanced SMA research agenda might take in the future. Rickwood, Coates and Stacey (1990) considered how management accounting role in a company reacts to a threat posed by a competitor's action to its market position. This they noted that among the features of a company's management accounting approach which adopts a strategic perspective, there is the use of market intelligence, giving recognition to the significance of the external environment and how the competitor might be expected to respond to company market action. They suggested that the role of the management accountant is seen to extend beyond the routine provision of accounting information to include the preparation of special reports that make him a dominant member of the decision-making team. This captures the original idea of Simmonds position on SMA.

Collier and Gregory (1995), basing their view of SMA on Simmonds' proposition examined the use of SMA technique in the hotel sector. They found out that the accounting function in hotel groups is becoming increasingly involved in strategic management accounting, both in planning and in ad-hoc exercises on the market conditions and competitor analysis. They noted that the widespread adoption of strategic management accounting is consistent with the open and relatively homogeneous nature of the industry and the high degree of competitiveness among the hotel groups in the market. Dixon and Smith (1993) outlined new method of providing strategically relevant information under the platform of SMA that is of paramount importance to the formulation and execution of business strategies in an ever increasingly dynamic environment. By examining key concepts of SMA process, they also highlighted a way forward for practitioners and academics to take advantage of SMA potentials to improve information flows into the strategy evaluation process.

3. Research methods

3.1. Research philosophy and design

According to Hassan (1995) and ICAN (2010a), a research design is the scheme used by researchers for specific structure and strategy in making inquiry into phenomena and to obtain logical answers to research questions. It could be qualitative or quantitative depending on the study's assumed philosophy. This study is underpinned by the positivist approach to accounting research. This philosophy according to Musbah (2010) seeks to identify testable hypotheses about the association between two or more variables. It is secured upon structured methodologies to enable generalization and quantifiable observations with the help of statistical methods. With this philosophy, the researcher plays the role of an objective analyst to evaluate the collected data and produces appropriate results to achieve the objectives of the study. Upon the assumed philosophy, a survey design was adopted to examine the extent of adoption and associated benefits of SMA technique towards strategic decision making in the Nigerian banking industry. The choice of this design was influenced by the assumed philosophy. In addition, it helps to elicit data from the study's sample objectively in order to make generalization to the population. It limits the researcher's interference with the study's outcome.

3.2. Population, sample and sampling techniques

This study is a case study of the Nigerian banking industry with a survey design to elicit information for data analysis. Eight (80) respondents were determined as the sample size. In arriving at this figure; first, the Yaro Yamani sample formula: $n = N / (1 + N \hat{e}^2)$ was used to select 20 participating banks from the 21 registered banks in Nigeria. Where 'n' is sample size, 'N' is population size (21) and 'e' is error limit (5%). Four (4) respondents at the managerial cadres were drawn from each of these banks within Lagos state to give a sum of 80 observations using

the simple random sampling technique (see [Appendix A](#) for the list of money deposit banks registered in Nigeria and [Appendix B](#) for the list of sampled banks).

3.3. Research instrument for data collection

The study relied on primary data which were gathered from the respondents through the use of a structured questionnaire. The choice of this instrument was based on the following expedient reasons. First, according to [Green \(2015\)](#), it is cost-effective, time-efficient and easy to evaluate objectively. Second, according to [Milne \(1999\)](#), with the use of questionnaire it is relatively quick to elicit information from a large portion of a group. Third, the questionnaire according to positivists is believed to be one major instrument in gathering quantitative data that can be used to create new theories and/or test existing hypotheses ([Wahyudi, 1999](#)). With this instrument, large amounts of information can be collected from a large number of people in a short period and in a relatively cost effective way.

3.3.1. Administration of data collection instrument

As earlier stated, the primary data used for analysis were obtained with a structured questionnaire. Eighty (80) copies were distributed across 20 banks by the researcher with the help of four assistants directly to the respondents in their offices. 74 (92.5%) copies were completed and returned, while 6 (7.5%) copies were not returned. Of the returned copies, 71(88.75%) copies were valid and usable, while 3 (11.25%) copies were found to be invalid and unusable for analysis (See [Appendix B](#)).

3.3.2. Validity and reliability of research instrument

As part of the procedure for data collection, the research instrument, which contains Likert-type, dichotomous and categorical items, was designed and subjected to validity test with the assistance of management accounting and research methodology experts. The development of the initial draft drew upon the extensive experience of management and contemporary accounting experts, whose constructive suggestions enhanced the final draft of the research instrument. To ensure the consistency of the instrument and the degree to which it is free from random error, Cronbach Alpha (α) was computed based on the number of items on the survey (k) and for each variable, and the ratio of the average inter-item covariance to the average item variance. The outcome of this analysis is displayed in [Appendix C](#). From the results of the reliability tests, the Cronbach Alpha for the combined components relating to SMA adoption and strategic decision-making were displayed as 0.665 and 0.672 respectively. The tests also displayed a Cronbach Alpha of 0.585 for competitors' information, 0.453 for customers' information and 0.458 for information on the market. The psychometric tests based on the combined components to an extent suggest the presence of reasonable level of reliability of the research instrument (66.5% and 67.2% respectively).

3.4. Statistical tools/analysis procedures

For the purpose of analysis, descriptive and inferential statistics were employed. Descriptive statistics was performed to give a summary of the respondents' bio-data and opinions on the constituents of strategic management accounting. Each questionnaire item was summarized using tabular frequency distribution in a five-point Likert scale measurement. Inferential statistics was performed at a 0.05 level of significance to test the study's hypotheses. Hypothesis one was tested using simple regression estimation analysis. The regression model is stated as follows:

$$SDM = \beta_0 + \beta_1 * SMA - ADOPTION + \varepsilon \quad (1)$$

Where SDM represents strategic decision-making, $SMA-ADOPTION$ represents adoption of SMA technique, β_0 is the intercept and ε is the error term. This test combines three major components of SMA technique as identified by [Simmonds \(1981\)](#) and [Bromwich \(1990\)](#) to test the effect of SMA adoption on strategic decision making in the Nigerian banks. These components include competitors' information, customers' information and information on the market. To achieve this, ordinal data gathered from the respondents were converted to scale by computing the mean scores for both variables, which were used in estimating the regression. Hypothesis two was tested using Pearson Chi-square test to either accept or reject the null hypothesis. The choice of this test is based on the facts that the data gathered for this hypothesis were ordinal data of which it is most appropriate to perform a non-parametric test. This

Table 1

Respondents' personal information.

Source: Administered questionnaire, 2015

Questionnaire items		Frequency	Percentage
Gender distribution	Male	35	49.3
	Female	36	50.7
	Total	71	100
Age grouping	Below 25 years	1	1.4
	25–30 years	22	31
	31–35 years	22	31
	36–40 years	21	29.6
	41–45 years	5	7
	Total	71	100
Educational qualification	B.Sc./HND	32	45.1
	M.Sc./MBA	39	54.9
	Total	71	100
Work experience	Below 1 year	1	1.4
	1–5 years	22	31
	6–10 years	32	45.1
	11–15 years	16	22.5
	Total	71	100
Professional status	None	12	16.9
	ACA/ACCA	16	22.5
	CIBN/CIPM	11	15.5
	Others	32	45.1
	Total	71	100
Managerial level	Lower	27	38
	Middle	39	54.9
	Senior	5	7.1
	Total	71	100
Function/unit of operation	Operations	32	45.1
	Marketing	20	28.2
	Accounting	8	11.2
	Human resource	9	12.7
	Others	2	2.8
	Total	71	100

test helps to test for the individual contribution of SMA components to strategic decision making in the Nigerian banks.

4. Analysis and results

4.1. Respondents' personal information

This aspect of the survey provides basic information of the respondents. It provides a level of assessment of the respondents' understanding and ability to provide valid responses to the questionnaire items without any form of misperception and bias. The outcome of these analyses is contained in Table 1. From the Table, it is seen that the gender distribution of the respondents is almost at par, with about 50.7% females and 49.3% males. This outcome indicates that

the study is not gender bias, representing the opinions of both male and female genders. Still in the Table, about 91.6% of the respondents fall within the age grouping of 25 to 40 years, 7% within 41 to 45 years, while 1.4% below 25 years of age. This outcome suggests that the respondents are matured, economically active and innovative. In addition, from the Table about 54.9% of the respondents possess a postgraduate degree, while 45.1% possess first degree qualification. About 67.6% have worked for about 6 to 15 years in the banking industry, while 31% have worked for about 1 to 5 years and only 1.4% for less than a year. Furthermore, from the Table, 83.1% of the respondents are certified professionals (that is, 22.5% with ACA/ACCA, 15.5% with CIBN/CIPM and 45.1% with other professional certification not captured in the questionnaire); while 16.9% possess no professional certification. With these outcomes, it is evident that the sampled respondents are a group of learned and exposed individuals who possess the requisite academic, professional and practical knowledge to respond objectively to the questionnaire items.

It could also be seen from Table 1 that 54.9% of the respondents are middle level managers (tactical level), while 38% and 7.1% are lower level managers (operational level) and senior level managers (strategic level) respectively. In addition, from the Table about 73.3% of the respondents function as either operational agents or marketers, 11.2% and 12.7% function as accountants and human resource managers respectively, while about 2.8% function in other units other than those specified in the instrument. The implications of these outcomes are that; first, the respondents are individuals tasked with one managerial responsibility or the other. Second, as managers they would have been exposed to contemporary management techniques and strategies for optimal functioning.

In general, the composition of the respondents' demographic information to a greater extent validates their responses to the questionnaire. That is, responses provided by these respondents are valid and reliable for analysis because they were obtained from individuals qualified to respond to the questionnaire items with encyclopedic knowledge and intelligibility.

4.2. Findings and discussion

To achieve the objectives of the research, the results of the data analysis have been presented chronologically in a manner that would enhance easy comprehension and coherent argument. First, prior literature and empirical studies on SMA were reviewed to distinguish the features of SMA technique from other management accounting techniques. From the review, it was discovered that SMA's core emphasis is on strategic positioning to gaining competitive advantage, which is quite unlike most of the traditional techniques, which emphasize more on cost reduction, control, and performance evaluation, etc. It was also noted that SMA combines external information on customers, competitors and the market in order to facilitate strategic decision-making and it is oriented towards an external approach to the practice of management accounting. These obviously depart from the traditional internal practices of management accounting. The core distinguishing features of SMA technique therefore is that it is externally oriented and focuses on strategic decision making rather than the traditional internal practices of management accounting of cost control, management, and performance evaluation processes.

Table 2
Respondents awareness, understanding and use of SMA technique in their banks.
Source: Administered questionnaire, 2015

Questionnaire items		Frequency	Percentage
I am awareness of the term strategic management accounting	<i>Yes</i>	66	93
	<i>No</i>	5	7
	Total	71	100
I have an understanding of the term strategic management accounting	<i>Yes</i>	64	90.1
	<i>No</i>	7	9.9
	Total	71	100
We apply strategic management accounting technique in our bank	<i>Yes</i>	58	81.7
	<i>No</i>	13	18.3
	Total	71	100

Table 3
Adoption of Simmonds SMA Model by banks in Nigeria.
Source: Administered questionnaire, 2015

Questionnaire items		Frequency	Percentage
Item 3. You make deliberate efforts to know and monitor competitor' operations and strategies	Strongly agreed	25	35.2
	Agreed	35	49.3
	Undecided	10	14.1
	Disagreed	1	1.4
	Total	71	100
Item 11. You deliberately make efforts to understand customers' needs and service preferences	Strongly agreed	45	63.4
	Agreed	24	33.8
	Undecided	2	2.8
	Total	71	100
Item 19. You make deliberate efforts to be abreast of latest banking development to explore viable opportunities	Strongly agreed	37	52.1
	Agreed	28	39.4
	Undecided	6	8.5
	Total	71	100

4.2.1. SMA adoption and application in banks

Having established the fact that SMA comes with distinctive features different from the traditional management accounting techniques, the study further investigated whether banks in Nigeria have adopted this technique as part of banking strategy. Three questionnaire items were put forward to the respondents to assess their awareness, understanding and use of SMA in their banks. The outcome of this analysis is contained in Table 2. From the Table, it is seen that about 66(93%) respondents are aware of the term strategic management accounting, while 5(7%) respondents are not aware of SMA. Of this number, 64 respondents possess an understanding of what the term SMA entails, while 58 respondents out of those with understanding apply SMA principles as part of their banking strategy. Obviously, this outcome suggests that the term SMA is not a new phenomenon to the respondents. Perhaps, they would have been exposed to this concept either through academic or professional conferences or through seminars, or managerial training and update courses since majority of them have a postgraduate degree and belong to one professional body or the other.

To affirm further whether banks in Nigeria apply the principles of SMA technique, three (3) other questionnaire items were put forward to the respondents in respect to competitors, customers and market information. The outcome of this analysis is contained in Table 3.

From Table 3, it is seen that 84.5% of the respondents affirmed that their banks make deliberate efforts to know and monitor competitors' operations and strategies. In respect to customers' information, 97.2% of the respondents assented that their banks make deliberate efforts to understand customers' needs and service preferences. Likewise, on market information, 91.5% of the respondents acknowledged that their banks make deliberate efforts to be abreast of latest banking developments to explore viable opportunities. These outcomes therefore suggest that banks in Nigeria are not only aware of SMA, but understand what it means and apply its principles as part of their banking strategies.

4.2.2. Effect of SMA adoption on strategic decision making

Having established that banks in Nigeria apply SMA principles the study examined whether the adoption of SMA affects or contributes to strategic decision making in the banks. The outcome of the descriptive analysis is presented in Table 4. From the Table, it is seen that 93% of the respondents concurred that competitors' information helps to develop and monitor new banking strategies, while 7% did not decided on this position. Still on competitors, 81.7% of the respondents agreed that competitors information helps in cost reduction and management strategy, 8.4% disagreed to the claim, while 9.9% were undecided. This therefore holds that access to competitors' information

Table 4
Benefits SMA adoption offer the Nigerian banks.
Source: Administered questionnaire, 2015

Questionnaire items		Frequency	Percentage
Information on Competitors			
Item 4. Information gathered from competitors helps you to develop and monitor new banking strategies in your bank.	Strongly agreed	35	49.3
	Agreed	31	43.7
	Undecided	5	7.0
	Total	71	100
Item 7. Having information on competitors' running cost helps you in cost reduction and management.	Strongly agreed	20	28.2
	Agreed	38	53.5
	Undecided	7	9.9
	Disagreed	5	7.0
	Strongly disagreed	1	1.4
Total	71	100	
Information on Customers			
Item 9. Complaints from customers usually inspire you into innovations on banking strategies.	Strongly agreed	45	63.4
	Agreed	22	31
	Undecided	3	4.2
	Disagreed	1	1.4
Total	71	100	
Item 14. Customers' idea and suggestions have helped in the management process of your bank.	Strongly agreed	36	50.7
	Agreed	27	38
	Undecided	6	8.5
	Disagreed	2	2.8
Total	71	100	
Information on the market			
Item 16. Information about the banking industry inspires and motivates you into developing new strategies of operation.	Strongly agreed	34	47.9
	Agreed	35	49.3
	Undecided	2	2.8
Total	71	100	
Item 17. News about crisis in the industry helps you strategize to withstand the crisis.	Strongly agreed	42	59.1
	Agreed	22	31
	Undecided	7	9.9
	Total	71	100

Table 5
Regression Analysis.

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	4.133	1	4.133	67.213	.000
	Residual	4.242	69	.061		
	Total	8.375	70			
	Model summary	$R=.702$	$R^2=.493$	$Adj\ R^2=.486$		
	Coefficients	Unstandardized Coeff. $B=.0650$ $S.E=.079$		Standardized Coeff. $B=.702$ $t=8.198$.000

Predictors: (Constant), SMA-ADOPTION, Dependent Variable: Strategic Decision Making. Source: Administered questionnaire, 2015

contributes to strategic decision making. On customers, Table 4 further reveals that 94.4% of the respondents affirmed that information on customers helps the management to innovate new banking strategies. Whereas 1.4% did not agree, 4.2% were undecided. Furthermore, 88.7% of the respondents are of the opinion that information on their customers enhances their managerial function in satisfying their customers' needs. Whereas, 2.8% disagreed to this claim, 8.5% were of no opinion. This therefore holds that information on customers, strategically positions the banks to serve customers needs more efficiently.

Still from Table 4, it is seen that 97.2% of the respondents consented that information on the market (banking industry) helps to develop new strategies of operation, while 2.8% were undecided on the assertion. Likewise, 90.1% of the respondents agreed that with information on the market, management come up with strategies that help withstand crisis, while 9.9% of the respondents were undecided on the claim. This therefore holds that information on the banking industry helps the management to develop strategies to match environmental realities and withstand period of crisis in the industry. With these outcomes, it is evident that individual constituent of SMA contributes to strategic decision making.

4.2.3. Hypotheses testing

In order to establish relationship between the variables and make inferences on the study's proposition, inferential statistics was performed at a 0.05 level of significance using simple regression analysis and Pearson Chi-square test of independence. The regression analysis tests the effect of SMA adoption on strategic decision-making. Table 5 displays the results of the regression analysis.

From the Table, the *F*-test is 67.213, while the *P*-value is $.000 < .05$. The *R*-square and adjusted *R*-square are shown as 49.3% and 48.6% respectively. Based on the result of this test, the null hypothesis for **Hypothesis one** is rejected. Hence, empirically, it is evident that the adoption of SMA has a significant and positive effect on strategic decision making in banks in Nigeria. The strength of this inference is about 48.6% using the adjusted R-square.

To test the second hypothesis, Chi-square test statistics was performed at a 0.05 level of significance. This statistics tests the contributions of the constituents of SMA to strategic decision making. Tables 6 and 7 display the outcomes of this test. As seen in Table 6, the p-values of the Pearson Chi-square test for the constituent of SMA technique and

Table 6
Chi-square test.

SMA Constituents according to Simmonds (1981) and Bromwich (1990)

	Information on competitors			Information on customers			Information on the market		
	Value	df	Asymp. Sig.	Value	df	Asymp. Sig.	Value	df	Asymp. Sig.
Pearson Chi-Square	86.229 ^a	60	.015	120.656 ^b	84	.005	177.110 ^c	96	.000
Likelihood Ratio	80.898	60	.037	97.188	84	.154	106.760	96	.213
Linear-by-Linear Association	22.108	1	.000	12.392	1	.000	26.187	1	.000
No. of Valid Cases	71			71			71		

^a. 78 cells (100.0%) have expected count less than 5. The minimum expected count is .03.

^b. 104 cells (100.0%) have expected count less than 5. The minimum expected count is .01.

^c. 117 cells (100.0%) have expected count less than 5. The minimum expected count is .01.

Table 7

Directional and symmetric measures.

Source: Administered questionnaire, 2015

			Information on competitors		Information on customers		Information on the market	
			Value	Approx. Sig.	Value	Approx. Sig.	Value	Approx. Sig.
Ordinal by Ordinal	Somers' d	Symmetric	.480	.000	.302	.000	.503	.000
		Kendall's tau-b	.482	.000	.302	.000	.504	.000
		Gamma	.565	.000	.342	.000	.569	.000
No. of valid cases			71		71		71	

their contribution to strategic decision making are as follow: information on competitors; p -value=.015 ($\chi^2=86.229$), information on customers; p -value=.005 ($\chi^2=120.656$) and information on the market; p -value=.000 ($\chi^2=177.110$). These outcomes imply that individual constituents of SMA technique significantly contribute to strategic decision making. This conclusion is based on the p -values for each of the constituents which are less than the specified level of significance (competitors' information: $.015 < .05$; customers' information: $.005 < .05$ and market' information: $.000 < .05$). To test for the direction and strength of the established relationships, the directional and symmetric measures of the Chi-square test were computed. As seen in Table 7, the Somers'd, Kendall's tau-b and Gamma statistics indicate the direction and strength of the established relationship. For information on competitors, the relationship is positive and the strength is reasonable (values; Somers'd=.480; Kendall's tau-b=.482 and Gamma=.565). For information on customers, the relationship is positive and the strength appears weak (values; Somers'd=.302; Kendall's tau-b=.302 and Gamma=.342), while for information on the market, the relationship is positive and the strength is satisfactory (values; Somers'd=.503; Kendall's tau-b=.504 and Gamma=.569). Hence, based on these outcomes the null hypothesis for Hypothesis two is rejected. Hence, the following inferences are made: empirically, information on competitors, customers and banking industry significantly contribute to strategic decision making in banks in Nigeria.

This study extends the works of Bromwich (1990), Roslender and Hart (2003) and Simmonds (1981) by providing empirical evidence in support of the practicality of SMA adoption in firms. From the analysis, the study found out that SMA technique differs significantly from other management accounting techniques, both in principle and as a concept. The findings of the study resonate with the submissions of the proponents of SMA to depart from the conventional internal practices of management accounting unto a complete external approach. Its outlook extends to competitors, customers and the market. Although SMA may not have been widely adopted as a concept, but as a principle of operation and practice it is in used by banks in Nigeria. This finding agrees with the findings of Collier and Gregory (1995) of SMA adoption in the hotel sector both in planning and in ad-hoc exercises on the market conditions and competitor analysis.

5. Conclusion and suggestions for further studies

SMA as a concept was introduced as an alternative technique of management accounting to measure up with today's competitive and business environment. However, despite its novel introduction, not much has been done to expedite its practical application in firms. This study is only a response to the need for empirical evidence of SMA adoption and application in firms. Consequent to its findings, the study concludes that SMA differs in its approach to the practice of management accounting and has been adopted by banks in Nigeria as a principle of operation and not as a concept. Its adoption has also contributed to the banks in the area of wider market share and competitive advantage. It should however be noted that SMA technique is not a complete replacement of traditional management accounting techniques but a complement.

This study, in itself is not conclusive, and so, its findings only form a basis for further research openings in developing countries. A number of constraints limited its scope. First, it was limited by the dearth of scholarly evidence on the adoption and application of SMA in non-manufacturing firms in developing countries. Second, there

are only few theories that have been used in prior studies to support SMA research. Perhaps, this could be one reason why there are many controversies on the term. Third, the study was limited by the indifferent attitudes of the respondents toward responding to the questionnaire. In fact, accessing higher-level managers (strategic managers) was difficult; hence limiting the sample to more of middle (tactical managers) and lower managers (operational managers). The study adopted Simmonds and Bromwich positions on SMA in its investigation; researchers are hereby encouraged to replicate this study adopting Cravens and Guilding' positions as a merger of extant management accounting techniques.

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Appendix A. List of registered banks in Nigeria

S/N	Banks	S/N	
1	Access Bank Plc	12	Main Street Bank
2	Citibank Nigeria Limited	13	Skye Bank Plc
3	Diamond Bank Plc	14	Stanbic IBTC Bank Ltd.
4	Ecobank Nigeria Plc	15	Standard Chartered Bank Nigeria Ltd.
5	Enterprise Bank	16	Sterling Bank Plc
6	Fidelity Bank Plc	17	Union Bank of Nigeria Plc
7	First Bank of Nigeria Plc	18	United Bank For Africa Plc
8	First City Monument Bank Plc	19	Unity Bank Plc
9	Guaranty Trust Bank Plc	20	Wema Bank Plc
10	Heritage Banking Company Ltd.	21	Zenith Bank Plc
11	Keystone Bank		

Source: retrieved from CBN website on the 30th December, 2014 (<http://www.cenbank.org>)

Appendix B. List of banks sampled

S/N	Banks	Copies issued
1	Access Bank Plc	4
2	Citibank Nigeria Limited	4
3	Diamond Bank Plc	4
4	Ecobank Nigeria Plc	4
5	Enterprise Bank	4
6	Fidelity Bank Plc	4
7	First Bank of Nigeria Plc	4
8	First City Monument Bank Plc	4
9	Guaranty Trust Bank Plc	4
10	Heritage Banking Company Ltd.	4
11	Keystone Bank	4
12	Skye Bank Plc	4

13	Stanbic IBTC Bank Ltd.	4
14	Standard Chartered Bank Nigeria Ltd.	4
15	Sterling Bank Plc	4
16	Union Bank of Nigeria Plc	4
17	United Bank For Africa Plc	4
18	Unity Bank Plc	4
19	Wema Bank Plc	4
20	Zenith Bank Plc	4
	Total copies issued	80
	Total copies retrieved	74 (92.5%)
	Copies not retrieved	6 (7.5%)
	Copies used for analysis	71(88.75%)

Appendix C. Reliability statistics

Variables/factors	Cronbach's Alpha	Number of questionnaire items	Number of respondents
Combined components			
SMA adoption	.665	10	71
Strategic decision making	.672	9	71
Individual components			
Competitors' information	.585	2	71
Customers' information	.453	4	71
Market information	.458	4	71

Source: SPSS Output, 2015.

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