

# The Effect of Managerial Competence on Value-Based Financial Performance of Banks: The Mediating Role of Sustainable Competitive Advantage

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## Abstract

By identifying key mediators and moderators in the relationship between managerial competence (MC) and value-based financial performance (VBFP) proxied by economic value added (EVA), market value added (MVA) and cash value added (CVA) in the banking sector, this study extrapolates the literature and provides an enriched understanding of the MC and VBFP literature. By conceptualizing sustainable competitive advantage (SCA) construct proxied by intellectual capital (IC), innovation (IN), business intelligence (BIN) and brand image (BIM), and clarifying the relationship with MC and VBFP, this study has a significant role in weakening the unknown side of SCA and its overlap with other similar concepts. Regarding the challenging nature of the ways to gain and maintain competitive advantage through intangibles, this study fills the gap. The multi-phase survey was conducted using nine (9) fully licensed banks in Ghana. In addition, the bootstrap method was used to assess the mediation effect of BIN, BIM, IN and IC. The authors examined a moderate mediation model to determine whether the effect of MC on EVA, MVA and CVA was as a consequence of BIN, BIM, IN and IC using SPSS v21. The findings underscore the importance of the MC in the VBFP of commercial banks. First, BIN, BIM, IN and IC enhance the MC of firms. Second, MC has an indirect effect on VBFP with BIN, BIM, IN and IC. Among the things that mediate the relationship between MC and VBFP are IC (proxied by structural, human and relational capital), IN (proxied by incremental and radical innovation), BIN and BIM. Overall, MC and SCA (BIN, BIM, IN and IC) are strong predictors of VBFP of banks in Ghana. The study employed only a single research methodological approach, therefore future research could be undertaken using a mixed approach and triangulate to compare findings.

**Keywords:** Value-Based Financial Performance, Managerial Competence, Sustainable Competitive Advantage, Innovation, Intellectual Capital, Business Intelligence, Brand Image, Economic Value Added, Market Value Added and Cash Value Added

**Introduction**

This study deepens our understanding of the mediating role of sustainable competitive advantage (hereafter SCA) on the relationship between managerial competence (hereafter MC) and value-based financial performance (EVA, MVA and CVA) of banks in Ghana, a developing economy where literature is currently scarce. There is no gainsaying that commercial bank provides the pivot around which the economy turns (Matama, 2008; Turyahebwa, 2013; Mugume, 2010). This reinforces the efficient allocation of capital stock, provision of essential transaction and intermediation services and funds the development of new businesses and technologies in the wider economy (Harper and Chan, 2003). Since the financial crisis of 2008, the banking industry has been experiencing a weak financial performance that has seen many investors lose lumps of money (Chabrak and Davidj, 2007). Statistics show that in the USA alone, more than 500 banks have collapsed since 2008 to date. This has provoked much controversy around the world (Şener and Karaye, 2014; World Bank Annual Report, 2013).

In Ghana, the banking sector has recently undergone a major overhaul with the transformation of electronic and online based banks, with the aim of improving banking performance (Ghana Banking Survey, 2020). However, the financial performance of banks continues to decline as shown by the increase in non-performing loans (NPLs) from 6.2 per cent in 2012 to 8.12 per cent by the end of 2020 (Ghana Banking Survey, 2021). Available information suggests that the Ghanaian Banking Sector is still facing financial regulations' challenges. Licensing of new banks and other financial institutions has been suspended in an effort to strengthen the oversight of existing financial institutions and to ensure the efficiency of the banking system (Ghana Banking Survey, 2021). An increase in the minimum capital requirement of existing banks and new entrants from GHS120 million to GHS400 million to develop, strengthen and modernise the financial sector (Ghana Banking Survey, 2018). The licenses of the following banks were revoked due to their inability to improve their financial viability and to deal with financial challenges: UT Bank Ghana Limited, Capital Bank Limited, UniBank Ghana Limited, The Royal Bank Limited, Beige Bank Limited, Sovereign Bank Limited, and Banking Limited (Ghana Bank Bank Survey, 2018). The Ghanaian financial market is experiencing bearish conditions and banks have struggled to raise funds needed to meet regulator needs and turn to business combinations (mergers and acquisitions) as they are unable to inject new money or make money on deposits (Ghana Banking Survey, 2018). Fraud cases recorded in the banking sector were 2,311 and 2,670 and the reported value of fraud were GHS 15.51 million and GHS 1.0 billion in 2019 and 2020 respectively (Banks and SDI Fraud Report (2020)). Losses incurred as a result of fraud for 2020 stands at GHS 25.40 million, relative to a loss of GHS 33.44 million in 2019 (Banks and SDI Fraud Report (2020)). It is widely accepted that the survival of commercial banks depends largely on their financial performance (Cull et al., 2009). This current trend, if not addressed, could lead to the collapse of several other banks.

The above phenomenon has opened the floodgate for most stakeholders to question the managerial competence of the heads of these defunct banks. Should the poor performance of these banks be blamed on the incompetence of the managers? Is it fair to say that these five (5) defunct banks lacked the managerial competence to turn the wheel of fortune of these banks to their owners' admiration? If these banks' heads were competent, would it have reflected positively on their respective banks' value-based financial performance?

Frey (2010) notes that competent management can increase the financial performance of business entities. In Frey's definition, competent executives develop sound credit policies that can increase loan repayment, hence, it also increases financial performance and corporate stability. Martina et al (2012) noted that a dynamic business environment requires management competencies to achieve organizational strategic objectives. These skills (knowledge and skills) highlight the company and generate generate inimitable advantage and unparalleled profits. Magala (2010) also notes that the available resources and capabilities of a company can translate into competitive advantages that improve business efficiency. Consistent with this, Hitt et al (2001) added that intangible resources (as opposed to tangible resources) are more likely to generate a competitive advantage for a company, which translates into higher financial performance. It is argued that in order for firms to continue to strive for the SCA, they need to rely heavily on their outstanding internal strengths to provide additional customer value, strong diversification and expansion and other key skills (Narvanjas, 2009). In another study conducted by Newbert (2008), it was concluded that there is a positive correlation between competitive edge and organizational success and that field of competition is able to significantly predict variability in organizational financial performance.

As a result of advances in financial theory in recent years, value maximization is considered eventual objective of companies. With a growing view of value creation as an important goal for all stakeholders, corporate performance standards have been changed and value-based performance measures such as economic value added (EVA), market value added (MVA) and cash value added (CVA) have been developed. Performance estimates based on accounting do not take into account the cost of investment in terms of risk level and risk premium. Therefore, raising wages or returns does not mean that it also contributes to increasing the number of shareholders. Value-based performance measures are intended to eliminate distortion of accounting data in order to provide comparisons over time, firms and industries. After eliminating the distortion of accounting data, an assessment of whether companies are creating or destroying shareholder wealth is also possible and a more rational estimate can be provided (Venanzi, 2010). Value-based performance measures can also be used to evaluate the efficiency and effectiveness of management.

The shareholders wealth maximization is the principal goal of financial managers in every business enterprise (Kaczmarek, 2014). To achieve this objective, SCA is pivotal in determining financial performance Cao, et al (2014); Chahal & Bakshi (2014); Grant (1991); Porter (1985) and higher corporate values (Connelly et al., 2011; Ghosh and Ghosh, 2008; Standfield, 2005). Many businesses have access to valuable intangible resources while they have not accurately realized their role in creating SCA (Torres et al., 2018). Among these resources, which are not utilized in the best way possible, is intellectual capital (IC) (Kar, 2017). The role of IC in creating SCA has been understood more and more in recent years (Liu, 2017; Liu and Atuahene-Gima, 2018). Furthermore, many businesses are seeking to discover the ways in which they can achieve a better brand image (BIM) in the market using their IC resources Vorhies and Morgan (2005) and other organizational capabilities to reach a more sustainable CA. By analyzing the information about customers, competitors and other key elements in the market, businesses can identify opportunities and threats, improve communication with customers and other stakeholders, and consequently improve BIM of the organization. It seems that this process

needs a well-defined and systematic mechanism to achieve organizational goals. As a systematic and organized process, through which organizations are able to analyze market information in order to decide upon business activities, business intelligence (BIN) has a vital role in this regard (Muntean et al., 2014). The knowledge obtained by the human capital of the organization is analyzed and stored through structural capital. Relational capital gives rise to good communication (Obeidat et al., 2017). The results can facilitate decision-making and cause an improvement in the organization's activities by making use of BIN (Fink et al., 2017; Richards et al., 2017). It is thus expected that IC together with IN, BIM and BIN contribute greatly to the creation of a SCA for the organization.

Utilizing the mechanisms of BIN and IC leads to a better orientation toward creating value for customers, improving BIM, and thus a knowledge-based SCA (Kim and Atuahene-Gima, 2010; Volberda, 2005). With the eventual support of the above process, the organization can enhance its brand position in the minds of customers, and by strengthening BIM, it helps create SCA (Klein et al., 2019). Therefore, in this research, we consider these variables for the success of organizations in creating and maintaining SCA. The main problem confronting most firms today is lack mechanisms to actualize their potential intangibles that will lead them to a SCA albeit they have IC. More interestingly, there may be firms that have such mechanisms but lack having enough IC. Actually, many scholars and executives have vague concepts about how to gain CA based on nurturing IC. The present study thus aims to address this research gap, which need to be bridged up.

The use of BIN and IC methods leads to better understanding of customer value creation, enhanced BIM, and knowledge-based SCA (Kim and Atuahene-Gima, 2010; Volberda, 2005). Finally, with the help of the above process, an organization can move forward to improve its brand position in the minds of customers, and by strengthening BIM, it helps to build a SCA (Klein et al., 2019). Thus, this study considers these variables for successful organizations in creating and maintaining a SCA. The herculean problem of most firms is that even though they have IC, they do not have the practical means to do real things that will lead them to SCA. Even more interesting, there may be firms that have such processes but do not have enough IC. In fact, many experts, as well as managers, have vague ideas about how to get a CA based on growing IC. The current study therefore aims to address this research gap, which need to be bridged up.

Although some studies have been conducted on CA, a few studies have investigated the effect of SCA on EVA, MVA and CVA. In addition, the firm's internal resources, skills and competencies are a major source of SCA relative to physical resources (Hitt et al., 2001). Similarly, Wang and Changa (2005) contended that skills are key factors in a company's current and future competitiveness and the growth of a firm's value. On the other hand, previous studies show that competition is the core of a company's success and determines the suitability of a company's operations that can affect its performance (Porter, 1985). SCAs lead to higher performance and better benefits (Peteraf and Barney, 2003). Thus, it is expected that the performance of firms SCA will be better that those firms who lack SCA (Newbert, 2008). Owing to this background, it is arguably patent that MC boosts a firm's SCA and so does SCA improve financial performance. However, there is no literature regarding the mediating effect of SCA in the relationship between MC and VBFP of commercial banks. Even then, while there are considerable efforts to understand this financial performance challenge

as predicted by MC in commercial banks, most strands of this research have concentrated mainly in developing economies and traditional performance measures such as return on capital employed (ROCE), return on equity (ROE), liquidity ratios, asset efficiency and investment ratios. This study therefore undertakes to explain this phenomenon by highlighting holistic and contextual aspects in a developing economy perspective by underscoring the relevance of MC and SCA in improving the EVA, MVA and CVA in the Ghanaian context. Consequently, scholars and practitioners will get a thorough understanding of the importance of improving their managers' skills and abilities which will give them an edge over their competitors and foster better returns to shareholders.

## Literature Review and Hypotheses Development

### Value-Based Financial Performance

Since the use of EVA, MVA and CVA brings all interest groups and the corporation together around the goal of creating shareholder value, theoretically these measures are expected to move in parallel with corporate governance practices. In a study investigating the relationship between corporate governance implementation and firm performance, we believe that value-based measures can reflect the performance of a corporation better than accounting-based measures. Therefore, value-based measures are used in this study. EVA, MVA and CVA are used as three different value-based performance measures.

### Economic Value Added (EVA)

EVA is a measure that is based on residual incomes of corporations (Grant, 2003). According to Brewer et al (1999), EVA considers financial performance on the basis of after-tax net operating income, investments in assets required to generate this income and the cost of investments. Described in simpler terms, EVA is based on a corporation's case of generating an income at least as much as the cost of capital. Since EVA considers both the cost of debt (which is a direct cost item) and the cost of equity (which is an indirect cost item), analytically it differs widely from traditional accounting measures (Grant, 2003). EVA for a certain duration can be expressed as a formula

$EVA = NOPAT - (WACC \times CE)$ , Where

NOPAT: *Net Operating Profit After Taxes but before financing costs*

WACC: *Weighted Average Cost of Capital*

CE: *Capital Employed (Total of the balance sheet – non-interest-bearing current liabilities at the beginning of the year).*

WACC is expressed as  $[(r_E \times E/V)] + [(r_D \times D/V)(1 - T_c)]$

$r_D$  = *cost of debt*,  $D$  = *total debt*,  $T_c$  = *corporate tax rate*,  $r_E$  = *cost of equity*,  $E$  = *total equity*,  $V = D + E$ .

Since banks borrow from the Bank of Ghana at the Monetary Policy Rate, this study adopted the Monetary Policy Rate from 2008 to 2020 to represent Cost of debt for the banks selected for this study. Cost of equity was calculated by the use of the Capital Asset Pricing Model (CAPM) approach. The CAPM makes use of a risk-free rate ( $rf$ ) because the Governments' Treasury Bill Rate are normally characterised by non-default risk. Therefore, this study adopted Ghana's Treasury bill rates from 2008 to 2020 to represent the risk-free rate.

$r_E = rf + \beta(r_m - rf)$

$r_E$  = *cost of equity for each bank*



$r_f$  = risk-free rate, is Ghana's Treasury bill rates for the years (2008 to 2020) acquired from the Bank of Ghana website.

$r_m$  = Annual Market Returns acquired from the Ghana Stock Exchange website from 2008 to 2020.

$\beta$  = beta, indicates the sensitivity of a stock's return to market returns.

Beta was calculated using Data Regression method. Annual Percentage changes of the Ghana Stock Exchange composite index were calculated from 2008 to 2020. Annual percentage changes of the firms' stock returns were also calculated. These percentage changes of the stocks were then regressed on the percentage changes of the Ghana Stock Exchange composite index. The results of the betas were then inserted into equation:  $r_E = r_f + \beta(r_m - r_f)$  to arrive at cost of equity for each bank for the thirteen (13) year period of this study.

### **Market Value Added (MVA)**

Another measure used in performance measurement within the framework of the value-based management approach is MVA. Shawn (1994) suggests that MVA is the best measure for assessing value creation – the primary objective of a corporation. Many value-based management practitioners regard MVA as one of the most prominent measurement methods of value-based management (John et al., 2000).

$$\begin{aligned} \text{MVA} &= \text{Total Market Value} - \text{Total Capital} \\ &= (\text{MV of Stock} + \text{MV of Debt}) - \text{Total Capital} \end{aligned}$$

Where MV of Stock = Market Capitalization = Shares Outstanding x Stock Price

MV of Debt = Book Value of Debt (as an estimate to the MV)

Total Capital = Total Book Value of Debt and Equity

Gross cash investment was obtained by adding depreciable assets to non-depreciable assets. Economic depreciation was calculated as follows (where  $n$  stands for the economic life): Economic depreciation =  $[WACC / (1 + WACC)^n - 1] \cdot \text{depreciable assets}$ . On the other hand, capital load was calculated as the multiplication of WACC by Gross Cash Investment.

### **Cash Value Added (CVA)**

Another dependent variable used in our study is CVA. A new method that has recently emerged in the measurement of financial performance, CVA is a value-based measure developed by American advisory institutions (Knight, 1998). The basic rationale behind developing CVA as a financial performance measure is the opinion that cash flows are to be benefited at every stage of corporate performance measurement. CVA does not take into account returns, but emphasizes cash flow as the major factor in decision-making processes (Heidari, 2003).

$$\begin{aligned} \text{CVA}_t &= \text{Operating cash flow} - \text{gross capital charge} \\ &= (\text{NOPAT}_t + \text{CVAAdj}_{op}) - [c^* \times (\text{IC}_{t-1} + \text{AccDepr})] \end{aligned}$$

$\text{CVAAdj}_{op}$  = Depreciation, amortization and changes in other long-term liabilities

$\text{AccDepr}$  = Accumulated depreciation

### **Managerial Competency and Financial Performance**

MCs are a cluster of correlated skills, attitudes and knowledge that affect one's job, which links to performance on the job (Mitchelmore and Rowley, 2010; Nieman and Nieuwenhuizen, 2009). According to Machirori (2012), MCs refer to a set of individual behaviours that must

be adopted for the position that the tasks arising from this position competently mastered. It also connotes a set of behaviours that empower employees to exhibit effectiveness over a given performance task in their line of work (Darrol, 2013).

In the holistic domain model of MCs, Hogan and Warrenfetz (2003) posited that all MCs could be categorized into four primary skills: intrapersonal; interpersonal skill; leadership; and business skills. However, two essential skills; career and mentoring, that are important for managerial performance and effectiveness, were ignored in the model. This leaves a competency gap which the extended domain model sought to address by including career success and mentoring skills as competencies for effective managerial performance.

Moreover, the extended holistic-domain model is bereft of two relevant managerial skills (*Customer Value Management Skills and Fraud Risk Management Skills*) that are more akin to maximizing shareholder's wealth. In sum, in addition to their traditional managerial role and leadership responsibilities, managers must see *customer value management skills* and *fraud risk management skills* as part of their responsibility.

Fraud risk management refers to activities designed to identify and enhance business practices to reduce the risks arising from real and potential corporate fraud cases, including anti-fraud policies, prevention, detection and response. Fraud risk management refers to any planned activities and measures taken to reduce the risk in potential and actual corporate fraud cases. Fraud risk management comes from the Corporate Support Committee (COSO). The COSO framework recognizes that all organizations need a systematic internal control system and recommends adequate measures to evaluate the achievement of objectives.

Organizations strive to have an effective strategy for achieving high levels of business integrity through transparency, sound business governance, effective and efficient internal control (KPMG, 2014b). Previous literature has shown that effective fraud control measures include controls and methods of prevention, investigation and response (ACFE, 2015; Alavi, 2016; Boateng & Acquah, 2014; KPMG, 2016). The current study of fraud and fraud control is very much focused on detection and prevention. These effective measures are aimed at preventing and detecting fraud early and in line with the firm's strategic objectives of dealing with fraud before they occur. However, the response measures no doubt require equal focus in order to control the remaining fraud risk. Therefore, an effective business-controlled fraud management approach focuses on four aspects: anti-fraud policies, fraud detection, fraud prevention, and fraud response (Boateng and Acquah 2014; KPMG, 2016). According to COSO (2017), a comprehensive fraud risk management process includes fraud risk management, fraud risk assessment, fraud management function, fraud investigation and remedial measures and activities to monitor fraud control.

Sheth et al (1991) supplemented customer value typology while describing its five types: *functional value, social value, emotional value, epistemic value and conditional value*. On the contrary, Sweeney & Soutar (2001) include some factors to the functional value dimension (price or value-for-money, adaptability and perceived quality of the product) and argue that epistemic value and conditional value should be excluded in customer value construct. Roig et al (2009) put forward a perceived value construct in the banking sector with six dimensions (functional value of the installations of the establishment (bank entity); functional value of

the contact personnel; functional value of the service (quality); functional value price; social value; emotional value) and state that functional value of the service is the most important while creating customers' loyalty when emotional value is the second factor in the order of importance.

Based on the above literature reviewed, many researchers agree on three significant customer value dimensions: functional, emotional, and social. The *functional value* is tangibles related to price, service quality, contact personnel, and value of the bank entity's installations. *Social values* as personal beliefs, social integration, and opinion and references of relatives and friends. *Emotional value* is viewed as the proposition of the non-physical features and may include good psychological climate; relaxation and certainty for financial operations security; comfort; reliability and satisfaction; positive emotions and experiences.

Review of extant literature indicates that firm financial performance depends on managerial decisions about resources (Amit and Schoemaker, 1993; Chye et al., 2010; Turyahebwa, 2013). Opler and Titman (2004) assert that the efficient use of resources depends on the decisions of the management team. Pablo (1994) also contends that firm performance is not about having better resources but rather the ability to make better use of the available resources. Similarly, Enders (2004) added that firm differences are therefore outcome of superior management. Dittmar and Mahrt-Smith (2007) also noted that better managed firms generate almost double returns than poorly managed ones. Furthermore, Kyereboah-Coleman and Biekpe (2006) observed that poorly managed firms have more sustainability issues than better managed ones. In other words, the quality of management is an important driver of firm performance. On the other hand, Stokes and Oiry (2012) noted that MC is important to any institution irrespective of the industry. They highlighted that whenever the institution is performing well, it directly implies that it has competent staff that make wise decisions to see the institution moving. Nevertheless, Turyahebwa (2013) suggested that firms have recognized today that formal education alone is not enough to ensure competence. Now days, companies have resorted to human resource development, that is competence development as well as the formal education to achieve better performance for the firm. In a survey that was conducted by Chye et al. (2010), it was concluded that most financial institutions that collapsed operations resulted from incompetence of managers. Findings are also consistent with Brown et al (2004), who found that better governed firms are more profitable, more valuable than poorly governed firms and offer better returns to their shareholders. Jay (2010) also brings out the impact of management efficiency on financial performance and contends that management usually has greater control over operating expenses than they do over revenues therefore can keep a low operating expense ratio which implies greater profit for the firm. In addition, managers are required to maintain a clean portfolio by defining how much is appropriate for clients and that those who have borrowed pay on time to reduce rate of arrears and recovery costs to increase the operating efficiency ratio of firms. For this to be possible, a firm should have well experienced and skilled managers that create a robust competitive edge. Drawing from the aforementioned, this study hypothesized that:

**H<sub>01</sub>:** Managerial competence positively and significantly affects value-based financial performance (EVA, MVA and CVA)

### **Sustainable Competitive Advantage and Financial Performance**



Sudrajat (2015) argues that competitive advantage (CA) involves the design and implementation of a strategy to increase value that can not be used by competitors. Le and Dang (2018) posited that CA is a possession of specific values, which allows the capturing of business opportunities for profit. In a recent work, Yaseen et al (2016) introduced CA as a set of unique, low-cost and innovative services with the highest perceived quality. The literature suggests that a variety of items and sizes are presented in CA, such as profit, sales growth, market share Kaleka and Morgan (2017); Peters et al (2016), inimitability, scarcity and being irreplaceable by competitors (Henkel et al., 2014). From a resource-based perspective (RBV), sustainable competitive advantage (SCA) is based on important, unfamiliar, poorly imitable, and non-replaceable features in the organization (Barney, 1991). Related to RBV is a knowledge-based theory, focusing on the ability to create knowledge and use it as a key CA decision (Shafiee, 2021). The organization will benefit the CA if it has the resources that are rare, essential, and fully emulated (Johnson et al., 2016). An organization shall achieve CA when it possesses resources that are rare, valuable, and imperfectly imitable (Johnson et al., 2016). Regarding all the previous items and dimensions in the literature (Henkel et al., 2014; Kaleka and Morgan, 2017; Peters et al., 2016; Shafiee, 2021; Vorhies and Morgan, 2005), we considered scarcity and uniqueness, inimitability or non-substitutability, being valuable, durability, steadiness and sustainability, market share, and sales desirability as SCA.

A firm's BIN, BIM, IN and IC result in SCA if only they are scarce and unique, inimitable or non-substitutable, valuable, durable, steady and sustainable, generates and increase market share, and sales desirability. The achievement of SCA of an organization could be traced to the distinctiveness of its capabilities which refers to the abilities of the organization to improve its SCA on the long-term (Winter, 2014). Wheelen et al (2015) indicated the two main components of strategic capabilities are competence and resources. Resources refer to the organizational assets, while competence is the effective utilization of the resources of the organization. Distinctive competences enable organizations to improve their financial performance relative to their competitors (Brady and Capell, 2004). Competences are considered valuable if it affords organizations the ability to develop products or services that offer additional value to customers relative to competitors. Valuable competences enable organization to generate higher revenues or save costs (Johnson et al., 2016). Thus, valuable competences enable organizations to utilize opportunities and avoid risks, generate higher revenues and reduce the costs (Hesterly and Barney, 2010). It behoves organizations explore how valuable their competences are it enable the organization to achieve SCA and offer distinctive additional value to customers (Abuhashesh et al., 2019b).

It is improbable for an organisation's competences to result in SCA unless such competencies are rare (Johnson et al., 2016). Szymaniec-Mlicka (2014) opines those rare competences are competences owned by one organization or few ones only. Customers place premium on competence owned by few organizations (Barney, 1991). Albeit valuable and rare competence enable firms to achieve SCA, yet, it does not suffice. In other words, an organization must desire the acquisition of competences that are inimitable. Inimitable competences refer to the competences which substitution, imitation or acquisition is considered costly and impossible to be replicated by competitors (Newbert, 2008). Hesterly and Barney (2010) added that the barriers to such imitation are traced to the distinctive relationships between actions, skills and employees making it difficult for competitors to imitate the organizational competences (Johnson et al., 2016). Organizations must strive to

explore and confirm whether their competences are deemed costly to imitate by competitors (Wheelen et al., 2015).

Providing customers with a value and acquiring competences that are rare and difficult to imitate shall improve competitive position of an organisation according to Johnson et al., (2016). Nevertheless, organizations should saddle themselves with achieving SCA by seeking to develop their strategic competencies. Teece, et al. (2016) define the organizational support as a set of formal and informal processes and functions carried out by the organization for supporting its strategic competences to achieve SCA. The organization's formal and informal functions are pivotal in protecting its strategic assets; hence, organization should exploit effectively competences (Wheelen et al., 2015).

A firm can an enviable competitive position by effectively utilizing the firm's tangible and intangible resources. Having valuable intellectual capital enables organization to achieve SCA (Chahal & Bakshi, 2015). Intellectual capital has a positive influence on the achievement of SCA in companies (Chen, 2008). Chahal and Bakshi (2015) found that a significant positive relationship exists between intellectual capital and the achievement of SCA. Yaseen et al (2016) aimed to explore the influence of intellectual capital on the achievement of SCA in the telecommunication Jordanian sector (Abuhashesh, 2019a, b). It was found that relational and structural capital positively influence the achievement of SCA. Aziz and Samad (2016) explored the relationship between innovation and achievement of SCA. It was found that innovation significantly and positively influences the achievement of SCA. Nanath and Pillai (2017) investigated the mediating effect of innovation on the relationship between information system and the achievement of SCA. The findings revealed that innovation has a mediating impact on the relationship between information system and the achievement of SCA. Achieving a SCA enable firms to improve their financial performance (Hwang et al., 2020). Drawing from the aforementioned, this study hypothesized that:

**H<sub>02</sub>:** Sustainable competitive advantage positively and significantly affects value-based financial performance (EVA, MVA and CVA)

### *Intellectual Capital*

Intellectual capital (hereafter IC) of employees consists of employees' knowledge, experience, and skills. IC of organization consists of databases, culture, philosophy and system. In general, IC involves knowledge assets that can generate profits (Sullivan, 2000) and improve competitiveness (Marr, 2004). Furthermore, it consists of technological capabilities, skills and professional knowledge (Liu et al., 2020). In addition, IC adds value to the firm and plays a role in achieving SCA. IC is the most effective competitive weapon impacting the performance of innovation in an organization (Alrowwad et al., 2020). The financial crisis of 2007 and the shortened product life cycle caused organizations to resort to the effective utilization of IC to meet market demands. IC involves human capital (skills, experience, competencies, and knowledge), structural capital (organizational processes, business processes, software, & databases), and relational capital (customers, suppliers, creditors, investors, and other stakeholders) and results in organisational value addition (Rodrigues et al., 2017) and improvement in organizational performance (Ode and Ayavoo, 2020). IC allows businesses to stay competitive at the leading edge of their industry (Garg and Zhao, 2018). IC is capable of improving financial performance and enable firms to achieve SCA (Kamukama et al., 2011).

The IC of entrepreneurs could be traced to their level of education, knowledge of how to start a business, and any prior entrepreneurial experience (Montañés and Medina-Garrido, 2020). Likewise, human capital (HC) is the organizational knowledge owned by employees which affects the achievement of SCA (Mehralian et al., 2013). It involves the knowledge, experience, and capabilities that employees bring to the organization. HC is connected to employee factors such as motivation, commitment, and skill (Lo and Chen, 2020). Structural capital (SC) involves the organization's mechanisms and structures that enhance the innovative abilities of the organization. It remains in the organisation even if the employees' services were terminated (Edvinsson & Malone, 1997). It relates to non-human warehouse such as databases, organizational structure, work manuals, strategies, and procedures. SC also involves culture, policies, databases, information systems, patents, copyrights, and etc. (Sharabati et al., 2013).

Relational capital (RC) is the knowledge generated through communication between employees and external stakeholders (Al-Khalil et al., 2014; Al Kurdi et al., 2020; AlShehhi et al., 2020; Kurdi et al., 2020). It involves a set of social resources (relationships, values and norms) and adds value to an organization (Alshurideh, 2019; Almazrouei et al., 2020; Alshurideh et al., 2020). Drawing from the aforementioned, this study hypothesized that:

**H<sub>02a</sub>:** Intellectual capital positively and significantly affect value-based financial performance

### *Innovation*

Innovation (hereafter IN) refers to the ability to present new product, or service, or develop a new organizational structure or administrative system (Damanpour, 1991). It refers to carrying out new processes and providing new products to provide stakeholders with a distinguished value which significantly affects the organizational agility level. IN refers to the generation of new ideas which provide the organization and stakeholders an additional value. Moreover, IN performance is evident in 'R&D inputs, improve work methods, patent counts, new product announcements', and patent citations (Patky and Pandey, 2020; Boh et al., 2020).

The purpose of IN is to effect radical changes in the organization to produce better goods and services, and develop the existing processes (O'Sullivan and Dooley, 2008). IN tends to adopt new ideas, programs, or policies or carrying out new behaviours or processes in an organization (Mothe & Uyen, 2010). IN can significantly affect business success, productivity and the number of available job opportunities and drives the economic success and growth of an organisation (Abuhashesh et al., 2019a).

With reference to Lee (2011), incremental innovation results in the improvement of the organizational performance and the minor developments or changes of the existent products, services, technologies, or approaches. It emphasises minor modifications made to existing products, services, or technologies. Nevertheless, radical innovation enables organizations to enjoy superior performance at the expense of their competitors (Johnson et al., 2016).

Survival in a competitive environment requires discovering new technologies, products, or services and carrying out new processes. That requires embracing radical innovations and adapting quickly to the changes in the business environment (Stanley, 2012). The radical one involves the entity's capacity to offer products or services which are new and completely

different from the existing ones and add value to them. From the customers' perspective, the radical innovation involves major amendments which provide customers with more benefits. From the organizations' perspective, the radical innovation involves major changes made to services or technologies for enhancing competitiveness.

**H<sub>02b</sub>:** Innovation positively and significantly affect value-based financial performance

#### *Brand Image*

BIM relates to the way the market perceives a brand (Labrecque et al., 2011); brand perceptions resulting from brand associations in the customers' mind (Chan et al., 2018); and its unique aspects with relation to other brands (Faircloth, 2005). Djatmiko and Pradana (2016) held that reputation and brand personality form BIM which positively affects a firm's financial performance. Michaelidou et al (2015) asserted that BIM dimensions consist of memorable, influential, valuable, associative, efficient, lovely, new, appealing, beautiful, ethical and pleasant which can engender customer loyalty with the resultant effect of high financial performance. In addition, brand credibility, general attitude toward the brand, brand personality, and emotions toward a brand, are the dimensions proposed by (Sääksjärvi and Samiee, 2011). Persson (2010) is of the view that communication, product features, services, distribution, organization, and familiarity, constitute brand image dimensions which positively influence the financial performance of a firm. The company image a consumer has in mind has a keen influence on the company's success (Hart, 1995). Jensen and Beckmann (2009) argue that integrating creativity into all company decisions will improve its BIM and consequently reinforce its SCA which subsequently leads to improved financial performance of the firm. Zameer et al (2020) found that building green BIM enhances the firm's CA which has a direct effect on financial performance. Zehir et al (2015) emphasized that a strong BIM is a result of a firm's differentiation strategy, gained through a firm's resources that create value for customers and shareholders. This helps companies to differentiate their products from the competitors to enjoy market opportunities and create value for customers and increase shareholder value. Drawing from the aforementioned, this study hypothesized that:

**H<sub>02c</sub>:** Brand image positively and significantly affect value-based financial performance

#### *Business Intelligence*

BIN involves a set of methods with the aim of developing business decisions through reality-based support systems Cohen (2009); a series of tools and approaches that help managers understand more about the current business position Rouhani et al (2012); and systems which extensively analyze and measure data (Elbashir et al., 2013). BIM refers to different activities, technologies, systems and processes for collecting and analyzing critical business information, and transforming this information into relevant knowledge to help an enterprise better understand its business and market, in an effort to improve business decisions (Božič and Dimovski, 2019; Ramakrishnan et al., 2012; Wanda and Stian, 2015). Nonaka and Takeuchi (2007) argued that the knowledge transformation from tacit to tacit and tacit to explicit constitutes the foundation of BIN, which makes it a different concept from IC. BIN is dynamic capabilities that firms can leverage to create leading-edge knowledge in a dynamic setting (Wamba et al., 2017). It is based on the integration of organizational resources and business analysis (Fink et al., 2017). Peters et al (2016) indicated that the dimensions of BIN include integrated planning and reporting infrastructure, and planning and reporting capability. Fink

et al (2017) considered the operational and strategic capabilities as dimensions of BIN. Moreover, Rouhani et al (2012) believed that groupware, sorting methods, flexible models, optimizing methods, learning methods, simulation models, financial analysis tools and modelling situation awareness, constitute BIN which increases a firm's chances of improving financial performance. According to Negash (2004), by virtue of supporting strategic goals, BIN exerts influence on business transformation, company performance management, customer relationship optimization, business activity monitoring and supporting decision-making which influence a firm's financial performance in the long run. There is no gainsaying that increased financial performance of firms could translate into value creation for shareholders. In terms of value creation for both customers and shareholders, BIN is among the most promising capabilities in recent years (Fink et al., 2017). BIN capabilities provide value only when deployed with IC and BIM (Wamba et al., 2017). SCA involves successful bundling of organizational resources and capabilities that are likely to provide companies with greater value and make it difficult for competitors to imitate (Teece, 2007). According to Wamba et al., (2017), business intelligence has a significant positive effect on company performance. Božič and Dimovski (2019) and Korte et al. (2013) affirm that business intelligence can act as a driver to maintain a SCA with the object of improving financial performance. Drawing from the aforementioned, this study hypothesized that:

**H<sub>02d</sub>:** Business intelligence positively and significantly affect value-based financial performance

### **Sustainable Competitive Advantage and Managerial Competence**

Carmeli (2004) views SCA as the aspect of the company which is hardly imitable, maintained in the future, that positions it above its competitors and leads to better business performance. Much of the research on SCA focused on competences as a major source of that advantage, for example, highly skilled people are able to perform more efficiently their job and consequently they can reduce their unitary cost. Grant (1996) noted that knowledge is the significant competitive asset that a firm possesses. Fiol (2001) added that competencies include the particular set of skills and resources a firm possesses as well as the way those resources are used to produce outcomes. A competence of an individual or organization is a source of SCA if it is able to answer questions, related to value, rareness, inimitability and non-substitutability (Barney, 1991; Wright et al., 2001). MC is unique because people cannot be separated from their knowledge, skills or values in the way they can be separated from their physical assets.

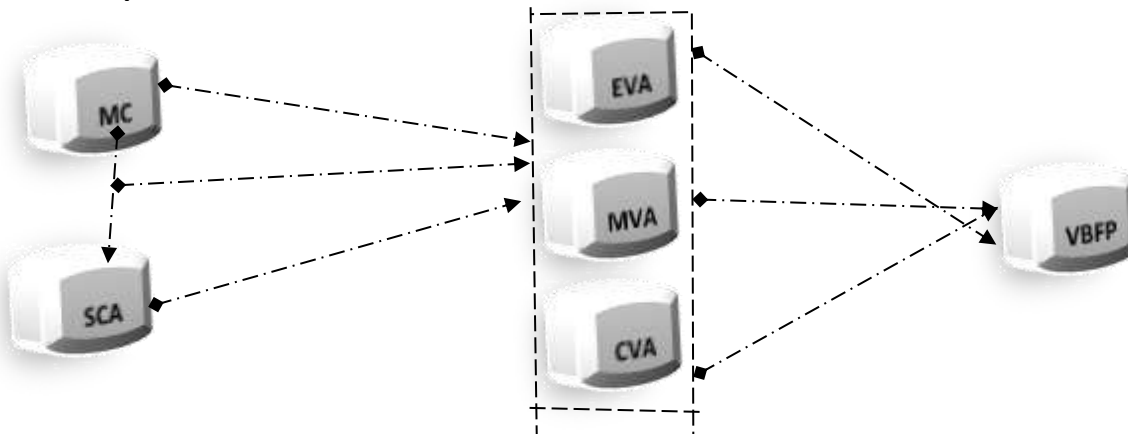
Martina et al (2012) explain that outstanding performance is a reflection of the competence that an executive has, and these competences lead to SCA. According to Boyatzis (2006), and Lucia and Lepsinger (1999), competencies are characteristics that result in effective and outstanding performance. Competences are the skills that empower a firm to provide a fundamental value and customer benefit which leads to customer loyalty. Customer loyalty and customer retention are the most important challenges faced by most of the CEOs across the world. Therefore, MC contributes toward cultivating loyal customers which can lead to increased sales and customer share, lower costs and higher prices (Alrubaiee and Al-Nazer, 2010). In fact, Wang and Changa (2005) acknowledged that competences are fundamental determinant of firm current and future competitiveness as well as shareholder value. Drawing from the aforementioned, this study hypothesized that:



**H<sub>03</sub>:** Managerial competence positively and significantly affect sustainable competitive advantage

**H<sub>04</sub>:** Sustainable competitive advantage mediates the relationship between managerial competence and value-based financial performance

### Conceptual Framework



**MC** = Managerial Competence

**SCA** = Sustainable Competitive Advantage

**EVA** = Economic Value Added

**MVA** = Market Value Added

**CVA** = Cash Value Added

**VBFP** = Value-Based Financial Performance

### Research Design and Methodology

#### Research Design

This study utilized a cross-sectional and quantitative research design. The study population encompasses listed banks in Ghana Stock Exchange (GSE) for the study period spanning thirteen years (2008 to 2020) owing to data availability. The study used a judgemental sampling technique to select nine (9) banks out of thirty-five (35) fully licensed and operational commercial banks in Ghana. Audited annual reports of the nine (9) selected banks were obtained from the Ghana Stock Exchange website. Three hundred and nine (309) respondents were purposively selected for this study which comprised of executives, senior managers and junior staff.

#### Operationalization and Measurement of Variables

Managerial competence was measured in terms of IntraPS, InterPS, LS, TS, FRMS and CVMS

Sustainable competitive advantage was measured using IC, IN, BIN and BIM.

Value-based financial performance was measured by EVA, MVA, and CVA

#### Data Analysis

The multiple regression model showed whether there is a positive or negative relationship between independent and dependent variables. The hypothesized mediation model was estimated using Hayes and Preacher's (2014) indirect SPSS macro, which provides bootstrap

estimates with bias corrected (BC) confidence intervals of the indirect effects of the independent variable on the dependent variable through the proposed mediator. Thus, the bootstrap estimates used in this study are based on 1,000 bootstrap samples, with a 95 percent BC confidence intervals. The method was preferred because of its ability to cater for small samples and the weaknesses cited of the Baron and Kenny (1986) approach in Hayes and Preacher (2014). The study adopted the following model to test whether value-based financial performance is a function of the independent variable (MC and CA).

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where:

Y = value-based financial performance is measured by economic value added, market value added, and cash value added.

$\beta_0$  = Constant variables that affect the value-based financial performance of acquirer banks listed on the Ghana Stock Exchange

$\beta_1$  and  $\beta_2$  are the coefficient of the independent variables

X1 = Managerial Competence (MC)

X2 = Sustainable Competitive Advantage (SCA)

$\epsilon$  = Error term

## Results

### H<sub>0</sub>1: MC positively and significantly affects VBFP

Noticeably the multiple correlation coefficient R is (0.733). Therefore, a positive linkage between MC and value-based financial performance (hereafter VBFP) is established. The coefficient of determination R<sup>2</sup> is (0.671). This value presents the amount of variation that is explained through the combination of IntraPS, InterPS, LS, TS, FRMS and CVMS. The value of adjusted R<sup>2</sup> is (0.669) which supports the model fitness with the entire population where the difference between R<sup>2</sup> and the adjusted R<sup>2</sup> is (0.002).

Table 1.1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733 <sup>a</sup>	.671	.669	8.33887

a. Predictors: (Constant), MC

ANOVA statistics is used to represent the regression model significance. As in Table 1.2, the significance value for the F statistics is 472.723 and the significance ratio of 0.000 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model VBFP =  $\beta_0 + \beta_1(\text{CVMS}) + \beta_2(\text{FRMS}) + \beta_3(\text{LS}) + \beta_4(\text{TS}) + \epsilon$  which is statistically significant.

Table 1.2

ANOVA for MC and VBFP

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35910.657	1	35910.657	472.723	.000 <sup>b</sup>

Residual	4824.717	307	79.637		
Total	39735.574	308			

a. Dependent Variable: VBFP

b. Predictors: (Constant), CVMS, FRMS, LS, TS

The results on the beta coefficient shows that four (4) managerial competencies that create shareholder value include: LS ( $\beta = 1.220$ ,  $p\text{-value} = 0.000 < 0.05$ ). TS ( $\beta = 0.912$ ,  $p\text{-value} = 0.000 < 0.05$ ), FRMS ( $\beta = 0.593$ ,  $p\text{-value} = 0.000 < 0.05$ ) and CVMS ( $\beta = 0.257$ ,  $p\text{-value} = 0.000 < 0.05$ ). Therefore, the study accepts the first hypothesis. Thus, the contribution of MC to VBFP was not by chance. This results in the model:  $\text{VBFP} = 65.501 + 0.257(\text{CVMS}) + 0.539(\text{FRMS}) + 1.220(\text{LS}) + 0.912(\text{TS}) + \epsilon$ . The study found that if MC were constant at zero, VBFP realized was 65.501.

Table 1.3

*Regression coefficient between MC and VBFP*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.501	1.154		56.742	.000
	IntraPS	.031	.075	.173	.414	.679
	InterPS	.181	.103	.188	1.758	.079
	CVMS	.257	.102	.666	2.529	.000
	FRMS	.593	.136	.760	4.349	.000
	LS	1.220	.099	2.139	12.376	.000
	TS	.912	.140	1.165	6.518	.000

a. Dependent Variable: VBFP

### H<sub>0</sub>2: SCA positively and significantly affects VBFP

The results of the linear regression in Table 1.4 indicate that  $R = 0.664$  and  $R^2 = 0.573$ . The R-value of 0.664 indicates a strong linear relationship between SCA and VBFP of banks listed on the Ghana Stock Exchange. This means that SCA has a strong influence on VBFP. The  $R^2$  indicates that about 57.3% of the VBFP variations are explained by the model  $\text{VBFP} = \beta_0 + \beta_1(\text{IC}) + \beta_2(\text{IN}) + \beta_3(\text{BIM}) + \beta_4(\text{BIN})$ , and 42.7% is unexplained by the model.

Table 1.4

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664 <sup>a</sup>	.573	.571	352367.7847262

a. Predictors: (Constant), SCA

ANOVA statistics is used to represent the regression model significance. As in Table 1.5, the significance value for the F statistics is 8.769 and the significance ratio of 0.001 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted

by linear regression model  $VBFP = \beta_0 + \beta_1(IC) + \beta_2(IN) + \beta_1(BIM) + \beta_2(BIN)$   
which is statistically significant.

Table 1.5  
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	966723683810.432	1	869365493810.872	8.769	.001 <sup>b</sup>
Residual	6443216360930.270	307	266483450242.987		
Total	5864977754741.470	308			

a. Dependent Variable: VBFP

The results on the beta coefficient shows that the coefficients  $\beta = 0.679$  and  $0.342$  are significant because their p-values =  $0.000$ ,  $0.004$  and  $0.006$  are less than  $0.05$  significance level. This confirms SCA has a significant positive effect on VBFP of listed banks in Ghana. Therefore, the study accepts the second hypothesis. This results in the model:  $VBFP = 16.531 + 0.679(IC) + 0.342(IN) + 0.592(BIM) + 0.480(BIN) + \epsilon$ . The study found that if SCA were constant at zero, VBFP stands at  $16.531$ . The analyzed data findings also showed that taking other independent variables at zero, a unit increase in IC, IN, BIN and BIM, led to  $0.679$ ,  $0.342$ ,  $0.480$  and  $0.592$  increase in VBFP respectively. The results mean that positive changes in SCA is associated with positive changes in VBFP of banks listed on the Ghana Stock Exchange.

Table 1.6  
*Regression coefficient between SCA and VBFP*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	16.531	3.759		6.851	.000
IC	.679	.052	.864	13.939	.000
IN	.342	.086	.431	11.764	.004
BIN	.480	.029	.395	10.376	.000
BIM	.592	.120	.411	5.518	.000

a. Dependent Variable: VBFP

### H<sub>03</sub>: There is a significant positive relationship between MC and SCA

The results of the linear regression in Table 1.7 indicate that  $R = 0.894$  and  $R^2 = 0.783$ . The R-value of  $0.894$  indicates a strong linear relationship between MC and SCA of listed banks in Ghana. This means that MC has a strong influence on SCA. The  $R^2$  indicates that about  $78.3\%$  of the SCA variations are explained by the model  $CA = \beta_0 + \beta_1 (MC)$ , and  $21.7\%$  is unexplained by the model.

Table 1.7  
*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894 <sup>a</sup>	.783	.744	420167.9827062

a. Predictors: (Constant), MC

ANOVA statistics is used to represent the regression model significance. As in Table 4.8, the significance value for the F statistics is 6.269 and the significance ratio of 0.001 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model  $SCA = \beta_0 + \beta_1(MC)$  which is statistically significant.

Table 1.8  
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	789765493810.432	1	789765493810.432	6.269	.001 <sup>b</sup>
	Residual	4612205260930.370	307	102493450242.897		
	Total	5510977754741.340	308			

a. Dependent Variable: SCA

The results on the beta coefficient shows that the coefficient  $\beta = 0.729$  is significant because its p-value =  $0.000 \leq 0.05$ . This confirms a significant positive effect of MC on SCA of listed banks in Ghana. Therefore, the study accepts the third hypothesis. Thus, the contribution of MC to SCA was not by chance. This results in the model:  $SCA = 24.298 + 0.729 (MC) + \epsilon$ . The study found that if MC were constant at zero, SCA stands at 24.298. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in MC led to 0.729 increase in SCA of banks listed on the Ghana Stock Exchange. The results mean that positive changes in MC is associated with positive changes in SCA of the selected banks under study.

Table 1.9  
Regression coefficient between MC and SCA

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.298	4.459		7.251	.000
	MC	.729	.082	.894	17.439	.000

a. Dependent Variable: SCA

**H<sub>0</sub>4: SCA mediates the relationship between MC and VBFP**

The results of the linear regression in Table 1.10 indicate that  $R = 0.947$  and  $R^2 = 0.898$ . The R-value of 0.947 indicates a strong linear relationship between a collaboration of MC and SCA (hereafter, SCAM) and VBFP of listed banks in Ghana. This means that SCAM have a strong influence on VBFP. The  $R^2$  indicates that about 89.8% of the VBFP variations are explained by the model  $VBFP = \beta_0 + \beta_1(SCAM)$ , and 10.2% is unexplained by the model.

Table 1.10  
Model Summary for SCAM

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947 <sup>a</sup>	.898	.878	8.33887



a. Predictors: (Constant), SCAM

ANOVA statistics is used to represent the regression model significance. As in Table 1.11, the significance value for the F statistics is 786.673 and the significance ratio of 0.000 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model  $VBFP = \beta_0 + \beta_1(SCAM)$ , which is statistically significant.

Table 1.11  
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	46527.957	1	46527.957	786.673	.000 <sup>b</sup>
	Residual	4735.517	307	89.587		
	Total	51262.474	308			

a. Dependent Variable: VBFP

b. Predictors: (Constant), SCAM

The results on the beta coefficient shows that the coefficient  $\beta = 0.925$  is significant because its p-value = 0.000 < 0.05. This confirms a significant positive effect of SCAM on VBFP of listed banks in Ghana. Therefore, the study accepts the fourth hypothesis. Thus, the contribution of SCAM to VBFP was not by chance. This results in the model:  $VBFP = 12.069 + 0.925 (SCAM) + \epsilon$ . The study found that if SCAM were constant at zero, VBFP realized was 12.069. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in SCAM led to 0.925 increases in VBFP of acquirer banks listed on the Ghana Stock Exchange.

Table 1.12  
*Regression coefficient between SCAM and VBFP*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.069	8.401		6.935	.000
	SCAM	.925	.092	.947	25.643	.000

a. Dependent Variable: VBFP

The study also considered the bootstrapping method in performing a mediation test to ascertain whether SCA plays any mediating role in the relationship between MC and VBFP (EVA, MVA and CVA), the results of which are presented in Table 1.13. The bootstrap results indorse that the SCAM (combined effect of SCA and MC) on VBFP is noteworthy ( $\beta = 0.925$ ,  $p < 0.05$ ). However, the effect of MC on VBFP reduced albeit significant ( $\beta = 0.613$ ,  $p < 0.05$ ), upon inclusion of SCA implying a partial mediation effect. This corroborates the earlier indication of the regression results in Table 1.12 above. The bootstrap results further confirm that SCA plays a significant mediating role on the relationship between MC and VBFP of banks

listed on the Ghana Stock Exchange ( $\beta = 0.312$ ,  $p < 0.05$ ,  $z = 5.862$ ); thus, providing evidence that supports  $H_04$ .

Table 1.13

*Total, Direct and Indirect Effects*

Path	Boot Estimate	Product coefficient		Bootstrap BC 95% CL		p-value
		Std Error	Z	Lower Bounds	Upper Bounds	
<i>Total Effect</i>						
SCAM → VBFP	0.925	0.092	10.301	0.847	0.945	0.006
SCA → VBFP	0.479	0.089	12.294	0.357	0.617	0.001
MC → SCA	0.729	0.114	7.172	0.623	0.851	0.002
<i>Direct Effects</i>						
MC → VBFP	0.613	0.172	9.328	0.542	0.684	0.003
SCA → VBFP	0.479	0.089	12.294	0.357	0.617	0.002
MC → SCA	0.729	0.114	7.172	0.623	0.851	0.002
<i>Indirect Effects</i>						
MC → VBFP	0.312	0.098	5.862	0.263	0.361	0.007

**Notes:** MC (managerial competence); SCA (Sustainable competitive advantage); VBFP (value based financial performance); STD error (standard errors); BC (bias corrected); CI (confidence level)

**Discussion of Results***MC and VBFP*

The study confirms that MC has a significant positive effect ( $\beta = 0.613$   $p$ -value = 0.000  $\leq$  0.05) on VBFP of banks listed on the Ghana Stock Exchange. MC in this study was measured in by IntraPS, InterPS, LS, TS, FRMS and CVMS. This indicates that skilful and knowledgeable managers are capable of taking decisions that will improve financial performance. Such decisions may take the form of which credit policy to put in place in order to eliminate bad debts and reduce the non-performing loans. The results obtained are in support of previous researchers such as Stokes and Oiry (2012) who stressed that whenever an institution is performing well, it directly implies that it has competent staff that makes wise decisions to see the institution moving. The findings are also consistent with Brown et al (2004), who found that better governed firms are more profitable, valuable and offer better returns to their shareholders than poorly governed firms. Similarly, Jay (2010) observed that management usually have greater control over operating expenses than they do over revenues therefore can keep a low operating expense ratio which implies greater profit for the firm. Kerr & Werther (2008) who found out that the better the managerial competency of the firm, the better will be its financial performance. The findings contradict those of Cetin

(2010) who found a weak relationship between managerial competency and financial performance.

#### *SCA and VBFP*

The effect of SCA on VBFP of banks listed on the Ghana Stock Exchange was found to be positive and significant ( $\beta = 0.479$   $p$ -value = 0.000  $\leq$  0.05). IC ( $\beta = 0.679$   $p$ -value = 0.000  $\leq$  0.05), IN ( $\beta = 0.342$   $p$ -value = 0.004  $\leq$  0.05), BIN ( $\beta = 0.480$   $p$ -value = 0.000  $\leq$  0.05) and BIM ( $\beta = 0.592$   $p$ -value = 0.000  $\leq$  0.05) measured SCA in this study. The results confirm that IC has strong positive influence on EVA, MVA and CVA of banks in Ghana which is consistent with literature. Krstić, (2014) views IC as an enabler which helps organizations maximize the shareholders' value. Hall (1992) believed that IC represents the value drivers, which transform productive resources into value-added assets resulting in increase in shareholder's value. IC is a knowledge of an organization (Lerro et al., 2014) which mobilizes employees, managerial processes and knowledge (Mouritsen et al., 2003), and coordinates and organizes all available knowledge to create value for shareholders in the future (Rastogi, 2003). Kannan and Aulbur (2004) postulated that IC is a set of information, knowledge, intellectual property and experience, which are exploited to create value for customers and shareholders. Abdolmohammadi (2005) concluded that IC is an organization-based assets, which have the greatest impact on creating a competitive position and summarily leads to the creation of value for shareholders. Roos et al (2005) opined that IC is a non-physical and non-monetary resource which contribute to the creation of shareholder value in the entire organization or part of it. Analyzing IC within the framework of IC can accentuate its significant effect on business performance (Jardon and Martos, 2012). IC allows firms to stay afloat in a highly competitive industry (Garg and Zhao, 2018) which enables firms to control a high market share with the resultant effect of maximising shareholder value. Relational capital involves a set of social resources (e.g. relationships, values and norms) and adds a value to the organization (Alshurideh, 2019; Almazrouei et al., 2020; Alshurideh et al., 2020). IC involves human capital (like: skills, experience, competencies, and knowledge), structural capital (e.g. organizational processes, business processes, software, & databases), & relational capital (e.g. customers, suppliers, creditors, investors, and other stakeholders) and adds value to the organization (Rodrigues et al., 2017), also it improves organizational performance (Ode and Ayavoo, 2020).

The results confirm that IN has strong positive influence on EVA, MVA and CVA of banks in Ghana which is supported by literature. IN significantly affect business success and drives the economic value and growth of an organisation (Abuhashesh et al., 2019a). Incremental innovation leads to improving the organizational performance (Lee, 2011). The results confirm that BIM has strong positive influence on EVA, MVA and CVA of banks in Ghana which is consistent with literature. Djatmiko and Pradana (2016) held that reputation and brand personality form brand image which positively affects a firm's financial performance. Michaelidou et al (2015) asserted that BIM dimensions consist of such items as memorable, influential, valuable, associative, efficient, lovely, new, appealing, beautiful, ethical and pleasant which can engender customer loyalty with the resultant effect of high financial performance. Jensen and Beckmann (2009) argue that integrating creativity into all company decisions will improve its BIM and consequently reinforce its sustainable competitive advantage which subsequently leads to improved financial performance of firms. Zameer et al. (2020) found that building BIM enhances the firm's SCA which has a direct effect on

financial performance. Zehir et al. (2015) emphasized that a strong BIM can be an outcome of a firm's differentiation strategy, which is gained through a firm's resources that create value for customers and shareholders of the firm.

The results confirm that BIN has strong positive influence on EVA, MVA and CVA of banks in Ghana which is consistent with literature. Rouhani et al. (2012) believed that BIN increases a firm's chances of improving financial performance. In terms of value creation for both customers and shareholders, BIN is among the most promising capabilities in recent years (Fink et al., 2017). According to Wamba et al., (2017), BIN has a significant positive effect on company performance. Božič and Dimovski (2019) and Korte et al. (2013) affirm that BIN can act as a driver to maintain a sustained competitive advantage with the object of improving financial performance.

#### *MC and SCA*

The findings indicate that MC has a significant positive effect on CA in the Ghanaian banking sector. This means that management team of banks with unique IntraPS, InterPS, LS, TS, FRMS and CVMS stand a chance of attaining IC, IN, BIN and BIM which in turn maximises shareholder value. Thus, it behoves banks to consider more experienced, skilful and knowledgeable human capital to stand a chance of enjoying market dominance (high market share and market growth) which translates into better financial returns to shareholders. The findings indicate that development of competitive advantage (IC, IN, BIN and BIM) in banks helps to bring about superior performance. In line with this, it must be underscored that CA, which manifests in either new technology, better methods of managing costs or even improved processes, can be realized in an entity if there are competent management. MC therefore clearly influences the existence of CA. The results also indicate that firms obtain SCA only when their MC are considered valuable, rare, inimitable and has organisational support.

This finding links well with existing literature. Valuable MCs enable the firms to achieve SCA and offer customers additional value (Abuhashesh et al., 2019b). MCs that are not possessed by other competitors to provide the organization with SCA, therefore, organizations must own rare competences (Johnson et al., 2016). Organisations must possess inimitable MCs which substitution, imitation or acquisition is considered costly and very hard for competitors (Newbert, 2008). Organization should ensure their MCs are considered costly to imitate by competitors (Wheelen et al., 2015). To achieve SCA, an organization should have a set of formal and informal processes and functions carried out to support its strategic MCs (Teece, et al., 2016). Kamukama et al. (2016), in their study reported that MC enhanced firm's IC, IN, BIN and BIM. MC is an influential factor in business success and in obtaining SCA (Kuznetsova et al., 2017). MC can help discover, develop, and deploy strategic intangibles, which facilitate the firm achieving SCA (Wang et al., 2017). Yiu et al. (2020) maintained that the use of a BIN requires substantial MC which should be integral at all organizational levels. According to Liu et al., (2020), IC consists of MC (employees' experience, technological capabilities, skills and professional knowledge). MCs involves the human capital (the knowledge, experience, commitment, skill and capabilities) that employees bring to the organization (Lo and Chen, 2020).

#### *Mediating Role of SCA in the Relationship between MC and VBFP*

The results show that the combined effect of MC and SCA has a strong positive impact on VBFP of banks in Ghana ( $\beta = 0.925$   $p$ -value = 0.000 < 0.05). The addition of SCA in the model

( $VBFP = \beta_0 + \beta_1X_1 + \beta_2X_2 + \epsilon$ ) reveals an extra 22.7% percent of variability in VBFP ( $r^2$  of 0.898 for SCAM less 0.671 for MC). A unit increase in SCAM (combined effect of managerial competence and sustainable competitive advantage) results in a 0.925 increase in VBFP as opposed to 0.613 resulting from MC alone. The inclusion of SCA in the model ( $VBFP = \beta_0 + \beta_1MC + \beta_2SCA + \epsilon$ ) reveals an extra 0.312 increase in VBFP. The results confirm that SCA has a significant mediation effect on the relationship between MC and VBFP of banks in Ghana. MC and SCA are strong predictors of VBFP of banks in Ghana. The result is in tandem with the findings of Kamukama et al (2016) which indicated that MC and SCA are strong predictors of financial performance.

## Conclusion, Contribution and Recommendations

### Conclusion

The results indicate that all the null hypothesis of the study are accepted, refer to Table 1.14. The significant role of managing intangible resources in creating SCA for banks has received less attention in theory and in practice. This study examined ways to achieve SCA through key intangibles, focusing on the primary ones. To this end, the study introduced four key constructs that play a vital role in creating SCA, such as IC, IN, BIN, and BIM. Moreover, after reviewing the various variables, the study concluded that SCA is a strong mediator in the relationship between MC and VBFP of banks listed on the Ghana Stock Exchange. The results indicated that IC plays a substantial role in gaining SCA by means of reinforcing and influencing IN, BIN, and BIM.

Table 1.14

### Hypotheses Testing Results

Hypotheses	Coefficient (?)	Significant (P < 0.05)	Decision	Interpretation
H1: MC has significant positive effect on VBFP of banks listed on the Ghana Stock Exchange	0.613	0.000 Significant as the p-value is less than 0.05.	Accepted	The beta coefficient of 0.613 indicates that a unit increase in MC led to 0.613 increases in VBFP
H2: SCA has a significant positive effect on the VBFP of banks listed on the Ghana Stock Exchange)	0.479	0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.479 indicates that a unit increase in SCA led to 0.479 increases in VBFP
H3: MC has significant positive effect on SCA of banks listed on the Ghana Stock Exchange	0.729	0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.729 indicates that a unit increase in MC led to 0.729 increases in SCA
H4: SCA mediates the relationship MC and VBFP of banks listed on the Ghana Stock Exchange	0.925	0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.925 indicates that a unit increase in SCAM led to 0.925 increases in VBFP

In today's contemporary competitive environment, most companies base their competitiveness primarily on their intangibles. They try to harmonize their IC resources and BIN capabilities to gain SCA. Contrarywise, IC requires a tunnel to be utilized in the best way. When an organization has a poor BIN, the IC ca not attain its fullest potential to obtain CA. Conversely, BIN requires IC to enhance business activities. Successful firms also improve upon their businesses activities based on BIM, which results from the effective use of their IC. In other words, IC with IN, BIN and BIM operate in a synergetic way to affect SCA which culminates in shareholder value creation. If IC-related initiatives do not lead to a positive BIM



in the market, it is not expected to improve SCA. Equally, if a MC is not tilted towards BIN capabilities effectively, having IC alone does not result in shareholder value creation. Therefore, IC along with IN, BIN and BIM are essential factors identified as strengthening MC in gaining SCA required for the maximisation of shareholders value. It is thus expected that the active simultaneous use of these intangibles can keep a company's position at the leading edge of the industry in the long run.

### **Theoretical Contributions**

By identifying key mediators and moderators in the relationship between MC and VBFP in the banking sector, this study extrapolates the literature and provides an enriched understanding of the MC and VBFP literature. In having a distinct view in conceptualizing the complex and multidimensional SCA construct, and clarifying the relationship with IC, IN, BIN and BIM, this study has a significant role in weakening the unknown side of SCA and its overlap with other similar concepts. Regarding the challenging nature of the ways to gain and maintain competitive advantage through intangibles, this study seems to have an effective role in filling that gap.

The study explains how BIN is associated with IC as SCA constructs of a firm. Cardinal to the findings, it was revealed that SCA is achieved by firms that successfully mobilize their IC with BIN capabilities. Moreover, BIN capabilities enable a firm to effectively leverage IC resources. IC alone is not productive and firms need BIN capabilities to deploy intellectual resources for the desired result. BIN capabilities allow the development and use of IC to improve shareholder value.

By distinguishing between IC, IN, BIN and BIM, the study adopted a more proactive view toward SCA. The study opine that, BIM is not limited as a component of IC, but it could be a result of IC as well as other factors. The SCA model of this study paves the way for the creation of a theory in order to obtain SCA through knowledge by exploiting the IC, IN, BIN and BIM platform. The MC (proxied by IntraPS, InterPS, LS, TS, FRMS and CVMS) and EVA, MVA and CVA relationships can also be moderated to some extent, depending on IC, IN, BIN and BIM. Thus, this study is a moderated mediation in nature, which has received less attention in the field of competition. Scarcely has any study examined the contribution of IC, IN, BIN and BIM in the relationship between MC and EVA, MVA and CVA in banking sector. The study accentuates the active role of managers in supporting the mechanisms meant for gaining SCA through intangibles. Referring to the relevant subject matter of IC management as one of the main duties of today's executives in improving organizational image, this study sees IC management from a marketing standpoint. Few published studies have taken such a viewpoint.

To crown it all, the results of the study provide a more realistic view of IC, IN, BIN and BIM and their relationship with EVA, MVA and CVA. The impact of MC on EVA, MVA and CVA along with the mediating role of IC, IN, BIN and BIM is explored, which contribute and strengthen the SCA conceptualization in the business literature.

### **Managerial and Practical Implications**

Since IC comprises of two types of knowledge: the individual and the organizational (Nahapiet and Goshal, 1998), firms are encouraged to plan for both levels. At the individual level, it

behaves firm to attract competent and knowledgeable employees into their organizations, and work on promoting employee motivation and retention, which is made possible by proper and constant managerial support. As a central construct that enhances other IC elements, human capital requires extensive training and development (Stewart, 1997). As for the organizational level, rethinking organizational structure, enriching organizational culture, and investing in BIN systems, concurrent with institutionalizing them in everyday business routines, can also play a significant role in business success and SCA.

BIN tools play a key role in this and transform the IC into a landmark decision for the future of the organization. Resistance to employees in data sharing is often a major problem in using the BIN, so managers should also exercise their influence in this regard. Embedding a BIN within the company's daily processes (as emphasized by Yiu et al., 2020), creates an organizational culture that greatly enhances the company SCA. Managers should therefore ensure strong staff commitment and provide the necessary support to enhance BIN success. Organizational IC, especially human capital, plays a key role in this regard. Today, employees play a vital role in the success of organizational activities. Therefore, paying attention to them, attracting them, keeping them, and training them to communicate effectively with participants, and building their team spirit is essential to distinguishing the organization from its competitors. With the help of BIN tools, people can be well-fed and informed, enabling them to fulfill their role with the information provided about the business environment. Over time, and in the long run, this can improve the nature of the organization and enhance its image, which in turn has a significant impact on SCA and shareholders value (EVA, MVA and CVA).

When establishing BIN systems, managers should ensure that these systems are aligned with the activities of their organization. With the help of BIN capabilities, information gained through IC can be used to improve customer awareness, adjust and direct organizational activities to those needs, monitor competitors' activities, and refine business strategies. By collecting data from a variety of sources within the organization and in business settings, BIN enables firms to see how a business is performing and what opportunities and threats exist in the business context (Shollo and Galliers, 2016). Overall, the power of the BIN, when applied to day-to-day business activities, can create IC-SCA relationships. In this sense, the connection between organizational competence and personal knowledge can drive SCA, because this integrated communication protects the company from imitating competitors.

Managers should also play an important role in building information networks within and outside the organization. They should be committed to using methods that encourage employees to contribute to the sharing of information. Improving management style can aid this process and promote a more SCA approach by making better use of resources and capabilities. By applying the IC concept in practice and day-to-day business operations, managers can help businesses integrate their tangible and intangible resources into the SCA in the market. Competency literature also demonstrates that by combining resources and capabilities that contribute to the SCA, key competencies will be developed, helping companies access unique market opportunities (Prahalad and Hamel, 1990; Teece et al., 1997).

Taken together, these efforts will, over time enhance the components mentioned for BIM, including the background and reputation of the firm, its credibility in the target market, as well as brand attractiveness. The study results indicate that, IC (especially the human factor) plays an important role in shaping the image of the organization in the market. It is therefore recommended that management, during the recruitment process, consider the applicant's market-orientation competence and their understanding of the market. Welbourne (2008) also noted the role of human capital in terms of good communication with stakeholders (e.g. customers) for business success. Understanding the mentality of the market toward the firm and its initiatives, as well as enhancing public relation efforts, are some suggestions that improve BIM for a company. In terms of research results, the MC plays a major role in all of these approaches, in the sense that, if this feature disappears, the organisation's efforts to find the SCA will fail. The MC not only creates employee engagement, staff motivation, the development of relationships within and outside the organization, and the improvement of organizational culture, but also fundamentally increases the acceptance of new programs and technologies in the organization.

A firm's resources and capabilities may not be sufficient to trigger SCA. As an alternative, companies should operate by factoring business context in their business models. Since many firms are faced with a competitive and uncertain business environment in the industry, it is imperative they develop a coherent framework to adapt existing knowledge with market/industry instability (Kamukama, 2013). This calls for agility and flexibility on the part of companies. As confirmed by Teece et al (1997), "even highly competent firms may be ineffective in competitive markets that require efficient agility, if their internal processes preclude them to develop new competencies hurriedly and change their behaviour as they learn." D'Aveni (1994) also asserted that to gain a SCA in the hypercompetitive context, firms should be increasingly flexible and agile. In intense competitive conditions, the role of BIM is also more decipherable. By distinguishing a firm's products from those of competitors, BIM has an exceptional role in that firm's success in the market. By quickly adapting organizational resources to changing conditions, it also helps businesses to react intelligently to the competition and maximise the wealth of shareholders.

### **Limitations and Recommendations for Future Research**

This study lacks cross-validation. The extant literature is replete with studies on factors explaining EVA, MVA and CVA of banks in African context. Consequently, the limited literature available, especially in a developing country context, deprived the study of the opportunity to cross-validate the present study findings. Future studies should be conducted to confirm these results. Moreover, a cross-sectional survey design was employed and thus, the study is limited to a particular occasion of measurement (2008-2020). Given that perceptions and beliefs change over time, there is need for a longitudinal study. In addition, the approach did not allow making clear causal attributions for the observed relationships. Therefore, the results must be interpreted with caution. Even though managerial competence is a precursor for gaining competitive advantage by intangibles, the business context and industry condition should also not be ignored. Besides, the model herein explained 92.5 percent of the variance in value-based financial performance. Future studies should explore other probable factors. The study examined only the viewpoint of managers and experts. Analyzing the relationships from other stakeholders' views can add better insights into the literature. We also suggest examination of other intangibles influencing competitive advantage. The role of variables

such as organizational culture, corporate social responsibility, organizational agility, and entrepreneurship-orientation can be examined in future research to determine their mediating or moderating role on the relationship between managerial competence and value-based financial performance (EVA, MVA and CVA).

### Reference

- Abuhashesh, M., Al-Dmour, R., & Masa'deh, R. (2019a). Factors that affect employees job satisfaction and performance to increase customers' satisfactions. *Journal of Human Resources Management Research*, 1-23.
- Abuhashesh, M., Al-Dmour, R., & Masa'deh, R. (2019b). Factors that impact job satisfaction and performance among employees in the Jordanian industrial sector. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018-Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth*, 4285-4305. Al-Khalil et al., 2014;
- ACFE. (2010). *Report to the nations: On occupational fraud and abuse*. The United States of America.
- Akinyomi, O. J. (2012), *Examination of Fraud in the Nigerian Banking Sector and Its Prevention*, *Asian Journal of Management Research* Volume 3 Issue 1
- Al Kurdi, B., Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, 10(15), 3561-3570. Almazrouei et al., 2020;
- Alrowwad, A., Masa'deh, R., & Abualoush, S. H. (2020). Innovation and intellectual capital as intermediary variables among transformational leadership, transactional leadership, and organizational performance. *Journal of Management Development*, 39(2), 196-222.
- Alrubaiee, L., and Al-Nazer, N. (2010), "Investigate the impact of relationship marketing orientation on customer loyalty: the customer's perspective", *International Journal of Marketing Studies*, Vol. 2 No. 1, pp. 155-174.
- Alshurideh, D. M. (2019). Do electronic loyalty programs still drive customer choice and repeat purchase behaviour?. *International Journal of Electronic Customer Relationship Management*, 12(1), 40-57.
- Alshurideh, M., Gasaymeh, A., Ahmed, G., Alzoubi, H., & Kurd, B. (2020). Loyalty program effectiveness: Theoretical reviews and practical proofs. *Uncertain Supply Chain Management*, 8(3), 599-612.
- Amit, R., and Schoemaker, P. J. (1993), "Strategic assets and organizational rent", *Strategic Management Journal*, Vol. 13 No. 3, pp. 33-46.
- Asukwo, P. E. (1999), "Bank Frauds: A Look at the Nigerian Banking Clearing System",
- Aziz, N. N. A., & Samad, S. (2016). Innovation and competitive advantage: Moderating effects of firm age in foods manufacturing SMEs in Malaysia. *Procedia Economics and Finance*, 35, 256-266.
- Bank of Ghana Report. (2021).
- Bank of Uganda. (2013), "Annual supervision report", No. 4, Kampala, December.
- Bank of Uganda. (2014), "BOU closes global trust bank (U) limited", available at: [www.bou.or.ug/bou/media/statements/BoU-Closes-Global-Trust-Bank-U-Limited.html](http://www.bou.or.ug/bou/media/statements/BoU-Closes-Global-Trust-Bank-U-Limited.html) (accessed April 23, 2015)
- Banks and SDI Fraud Report (2020)

- Bantel, K. A., and Jackson, S. E. (1989), "Top management and innovations in banking: does the composition of the top team make a difference?", *Strategic Management Journal*, Vol. 10 No. 1, pp. 107-124.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120
- Biekpe, C. (2006). The concept of University Collegiality. A survey in the Academics. *Academy of management Review*.
- Boateng, A. A., Boateng, G. O., & Acquah, H. (2014). A literature review of fraud risk management in micro finance institutions in Ghana. *Research Journal of Finance and Accounting*, 5(11), 42–52.
- Boh, W. F., Huang, C. J., & Wu, A. (2020). Investor experience and innovation performance: The mediating role of external cooperation. *Strategic Management Journal*, 41(1), 124-151.
- Boyatzis, R. E. (2006). The ideal self as the driver of intentional change. *Journal of Management Development*, 25, 624–642.
- Božič, K., and Dimovski, V. (2019), "Business intelligence and analytics use, innovation ambidexterity, and firm performance: a dynamic capabilities perspective", *The Journal of Strategic Information Systems*, Vol. 28 No. 4, p. 101578
- Brady, D., & Capell, K. (2004). GE breaks the mold to spur innovation; Immelt is merging GE's health unit with Amersham and putting its chief in charge. *Business Week*, 3880, 88-88.
- Brewer, P. C., Chandra, G., and Hock, C. A. (1999), Economic Value Added (EVA): Its uses and limitations, *SAM Advanced Management Journal* Spring 1999, 4–11.
- Bromwich, M. and Walker, M. (1998). Residual Income Past and Future, *Management Accounting Research*, Vol.9, December: 391-419
- Brown, L. D., Robinson, J. M., and Caylor, M. C. (2004), "Corporate governance and firm performance", available at: [www.issproxy.com/pdf/corporate\\_governance](http://www.issproxy.com/pdf/corporate_governance) (accessed November 12, 2014)
- Cao, D., Berkeley, N., & Finlay, D. (2014). Measuring Sustained Competitive Advantage From Resource-based View: Survey of Chinese Clothing Industry. *Journal of Sustainable Development*, 7(2), 89-104. <https://doi.org/10.5539/jsd.v7n2p89>
- Carmeli, A. (2004), "Strategic human capital and the performance of public sector organizations", *Scandinavian Journal of Management*, Vol. 20, pp. 375-392.
- Carpenter, M. A., Geletkanycz, M. A., and Sanders, G. W. (2004), "Upper Echelons research revisited: antecedents, elements, and consequences of top management team composition", *Journal of Management*, Vol. 30 No. 6, pp. 749-778.
- Cetin, A. T. (2010). The effects of human resource, marketing and manufacturing, performance on financial performance, *Journal of Global Strategic Management*
- Chabrak, N., and Daidj, N. (2007), "Enron: widespread Myopia", *Critical Perspectives on Accounting*, Vol. 18, pp. 539-557
- Chahal, H., & Bakshi, P. (2014). Effect of intellectual capital on competitive advantage and business performance: Role of innovation and learning culture. *International Journal of Learning and Intellectual Capital*, 11(1), 52-70.  
<https://doi.org/10.1504/IJLIC.2014.059227>
- Chahal, H., & Bakshi, P. (2015). Examining intellectual capital and competitive advantage relationship: Role of innovation and organizational learning. *International Journal of Bank Marketing*, 33(3), 376-399.



- Chan, H. Y., Boksem, M., and Smidts, A. (2018), "Neural profiling of brands: mapping brand image in consumers' brains with visual templates", *Journal of Marketing Research*, Vol. 55 No. 4, pp. 600-615.
- Cheetham, G., & Chivers, G. (1996). Towards a holistic model of professional competence. *Journal of European Industrial Training*, 20(5), 20-30.  
<http://dx.doi.org/10.1108/03090599610119692>
- Cheetham, G., & Chivers, G. (1998). The reflective (and competent) practitioner: a model of professional competence which seeks to harmonise the reflective practitioner and competence based approaches. *Journal of European Industrial Training*, 22(7), 267-276.  
<http://dx.doi.org/10.1108/03090599810230678>
- Chen, S., and Dodd, J. (1997). Economic value added: an empirical examination of a new corporate performance measure. *Journal of Managerial Issues*. Volume 9, Issue No. 3, pp. 318-333.
- Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. *Journal of Business Ethics*, 77(3), 271-286.
- Cravens and Piercy (2009)
- Chye, L. T., Tat, H. H., Osman, M. H. M., and Rasli, A. M. (2010), "Are managerial competencies a blessing to the performance of innovative SMEs in Malaysia?", *International Journal of Economics and Management*, Vol. 4 No. 1, pp. 120-136.
- Cohen, C. (2009), *Business Intelligence: Evaluation and Impact on Performance*, John Wiley & Sons, New York
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39-67.  
<https://doi.org/10.1177/0149206310388419>
- Cull, R., Demirgüç-Kunt, A., and Morduch, J. (2009), "Microfinance meets the market", *Journal of Economic Perspective*, Vol. 23 No. 1, pp. 167-192
- Cronin, J. Jr., Brady, M., & Hult, T. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behaviour intentions in service environments. *Journal of Retailing*, 76 (2), 193-218.
- Darrol. (2013). Red tape stifles small business. Retrieved From:  
<Http://Www.Fmi.Co.Za/?Q=Corporate-News/What-Small-Businesses-See-Their-Main-Obstacles-Business-Growth>. Date Retrieved: 04/06/2019
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555-590.
- Dittmar, D. and Mahrt-Smith, W., (2007). "When IT lifts Productivity. || *The McKinsey Quarterly*. 4(32), 13-15.
- Dixon, J., Trevino, L., Butterfield, K., and Mc Cable, D., (1990). Internal auditing effectiveness; an expansion of present methods. *Managerial Auditing Journal*, 16 (67), 211-216
- Djatmiko, T., and Pradana, R. (2016), "Brand image and product price; its impact for samsung smartphone purchasing decision", *Procedia-Social and Behavioral Sciences*, Vol. 219, pp. 221-227.
- Enders, A. (2004), *Management Competence: Resource-based Management and Plant Performance*, Contribution to Management Science, Physical-Verlag, New York, NY.
- Edvinsson, L. M., & Malone, M. (1997). *MS, Intellectual Capital: Realizing Your Company's True Value By Finding It's Hidden Roots*.
- Elbashir, M. Z., Collier, P. A., Sutton, S. G., Davern, M. J., and Leech, S. A. (2013), "Enhancing the business value of business intelligence: the role of shared knowledge and assimilation", *Journal of Information Systems*, Vol. 27 No. 2, pp. 87-105.

- Faircloth, J. B. (2005), "Factors influencing nonprofit resource provider support decisions: applying the brand equity concept to nonprofits", *Journal of Marketing Theory and Practice*, Vol. 13 No. 3, pp. 1-15.
- Fink, L., Yogev, N., and Even, A. (2017), "Business intelligence and organizational learning: an empirical investigation of value creation processes", *Information and Management*, Vol. 54 No. 1, pp. 38-56.
- Finkelstein, S., Hambrick, D. C., and Cannella, A. (2009), *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*, Oxford University Press, Oxford.
- Fiol, C. M. (2001), "Revisiting an identity-based view of sustainable competitive advantage", *Journal of Management*, Vol. 27 No. 6, pp. 691-699.
- Frey, B. (2010), "Management of teams at work", research paper on team building and management.
- Garg, P., and Zhao, M. (2018), "Knowledge sourcing by multidivisional firms", *Strategic Management Journal*, Vol. 39 No. 13, pp. 3326-3354
- Gates, T., and Jacob, K. (2009), "Payment's fraud: perception versus reality – a conference summary", *Economic Perspectives*, Vol. 33 No. 1, pp. 7-15.
- Ghana Banking Survey, 2018
- Ghosh, S., & Ghosh, A. (2008). Do Leverage, Dividend Policy and Profitability influence the Future Value of Firm? Evidence from India. *Policy*, (July). Retrieved from <http://ssrn.com/abstract=1158251>
- Gounaris, S. P., Tzempelikos, N. A., & Chatzipanagiotou, K. (2007). The relationships of customer-perceived value, satisfaction, loyalty and behavioural intentions. *Journal of Relationship Marketing*, 6(1), 63–87.
- Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behaviour & Personality*, 31(3), 253–264. 10.2224/sbp.2003.31.3.253
- Grant, J. L. (1996). Foundations of EVATM for investment managers. *The Journal of Portfolio Management*, 23, Fall:41-45
- Grant, L. J. (2003), *Foundation of economic value added*, 2nd edn, Frank J. Fabozzi Series, John Wiley & Sons, Inc. Hoboken, New Jersey.
- Grant, R. M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, 33(3 SRC-Google Scholar FG-0) 3-23. <https://doi.org/10.2307/41166664>
- Gunner, J. P. (2007). *One-to-one Laptop Initiatives: Powerful Hubs of a Distributed Student Learning Network?* (Doctoral dissertation, Bowling Green State University).
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E., 2010. *Multivariate Data Analysis*. 7th ed. Prentice Hall.
- Hambrick, D. C., and Mason, P. A. (1984), "Upper Echelons: the organization as a reflection of its top managers", *The Academy of Management Review*, Vol. 9 No. 2, pp. 193-206.
- Harper, I., and Chan, T. (2003), "The future of banking", in Gup, B. (Ed.), *The Future of Banking*, Quorum Books, Westport, CT, pp. 30-37
- Hart, S. L. (1995), "A natural-resource-based view of the firm", *Academy of Management Review*, Vol. 20 No. 4, pp. 986-1014.
- Heidari, M. (2003), *The review of information content of cash value added (CVA) in relation to annual stock return: Comparative analysis with operating profit (OP) and operating cash flow (OCF) in TSE*, Working Paper, Tehran University, Tehran.

- Heracleous, L. (2001), "What is the impact of corporate governance on organizational performance?", National University of Singapore, Faculty of Business Administration, Department of Business Policy, Singapore, p. 24
- Hesterly, W., & Barney, J. (2010). *Strategic Management and Competitive Advantage*. Upper Saddle River, NJ.
- Hitt, M., Harrison, J., and Ireland, R. (2001). *M&A: A guide to creating value for stakeholders*. New York: Oxford University Press.
- Hoffmann, A., & Birnbrich, C. (2012). The impact of fraud prevention on bank-customer relationships: An empirical investigation in retail banking. *International Journal of Bank Marketing*, 30(5), 390–407. doi:10.1108/02652321211247435
- Hogan, R., Warremfeltz, R. (2003). Educating the modern manager. *Acad. Manag. J.* 2:74– 84
- Hoge, M., Tondora, J., & Marrelli, A. (2005). The fundamentals of workforce competency: Implications for behavioural health. *Mental Health Policy and Administration*, 32(5), 509-531
- Jay, X. (2010), *Competent Managers*, Handbook of Management, Evans publishing company, London.
- Jensen, M. B., and Beckmann, S. C. (2009). "Determinants of innovation and creativity in corporate branding: findings from Denmark", *Journal of Brand Management*, Vol. 16 No. 7, pp. 468-479.
- Johnson, G., Scholes, K., & Whittington, R. (2016). *Exploring Corporate Strategy: Text and Cases*. Pearson Education.
- Kaleka, A., and Morgan, N. A. (2017). "Which competitive advantage(s)? Competitive advantage–market performance relationships in international markets", *Journal of International Marketing*, Vol. 25 No. 4, pp. 25-49.
- Kamukama N., Taurigana, N., and Nkundabanyanga. (2016). Quality of financial statements, information asymmetry, perceived risk and access to finance by Ugandan SMEs. 196.43.165.48
- Kar, D. P. (2017). "Development and implementation of an employee empowerment plan for sustainable competitive advantage", *Academica: An International Multidisciplinary Research Journal*, Vol. 7 No. 5, pp. 15-22
- Kerr, J., and Werther, W. (2008). The next frontier in corporate governance: Engaging the board in strategy. *Organizational Dynamics*, 37(2), 112-124.
- Kim, N., and Atuahene-Gima, K. (2010). "Using exploratory and exploitative market learning for new product development", *Journal of Product Innovation Management*, Vol. 27 No. 4, pp. 519-536
- Klein, K., Völckner, F., Bruno, H. A., Sattler, H., and Bruno, P. (2019). "Brand positioning based on brand image–country image fit", *Marketing Science*, Vol. 38 No. 3, pp. 516-538, doi: 10.1287/mksc.2019.1151
- Knight, J. A. (1998). *Value based management: Developing a systematic approach to creating shareholder value* McGraw Hill, New York.
- Korte, D., Ariyachandra, T., and Frolick, M. (2013). "Business intelligence in the hospitality industry", *International Journal of Innovation, Management and Technology*, Vol. 4 No. 4, pp. 429-434.
- KPMG. (2016), *Outline of Financial Modelling Assumption for Local Government Merger Proposals – Technical Paper Prepared for the NSW Department of Premier and Cabinet*, 19 January, 2016

- Kumar, A., & Grisaffe, D. B. (2004). Effects of extrinsic attributes on perceived quality, customer value and behavioural intentions in B2B settings: a comparison across goods and service industries. *Journal of Business-to-Business Marketing*, 11(4), 43–74.
- Kurdi, B., Alshurideh, M., & Al afaishat, T. (2020). Employee retention and organizational performance: Evidence from banking industry. *Management Science Letters*, 10(16), 3981-3990.
- Kyereboah-Coleman, A., and Biekpe, N. (2006), "The link between corporate governance and performance of the non-traditional export sector: evidence from Ghana", *Corporate Governance*, Vol. 6 No. 5, pp. 609-623
- Labrecque, L. I., Markos, E., and Milne, G. R. (2011), "Online personal branding: processes, challenges, and implications", *Journal of Interactive Marketing*, Vol. 25 No. 1, pp. 37-50.
- Le Deist, F. D., Delamare, F., & Winterton, J. (2005). What is competence? *Human Resource Development International*, 8(1), 27-46.  
<http://dx.doi.org/10.1080/1367886042000338227> Date Accessed: 03/10/20018
- Le, D. L., & Dang, V. T. (2018). Factors determining the competitive advantage of an enterprise. *Asia – pacific Economic Review*, 525, 11–13. [Vietnamese].
- Lee, J. Y. (2011). Incremental innovation and radical innovation: The impacts of human, structural, social, and relational capital elements. Michigan State University. *Operations and Sourcing Management*.
- Lehn, K., & Makhija, A. K. (1996). EVA and MVA: As Performance Measures and Signals for Strategic Change. *Strategy and leadership*, vol. 24 May/June, p. 34-38. Retrieved 05/03/2019. From ABI/INFORM Global database.
- Liu, W., and Atuahene-Gima, K. (2018), "Enhancing product innovation performance in a dysfunctional competitive environment: the roles of competitive strategies and market-based assets", *Industrial Marketing Management*, Vol. 73 No. 6, pp. 7-20.
- Liu, C. H., Gan, B., Luo, B. N., & Zhang, Y. (2020). Clarifying the effect of organization learning on service innovation: the mediating role of intellectual capital. *The International Journal of Human Resource Management*, 31(10), 1207-1234
- Lo, C., Wang, C., & Chen, Y. C. (2020). The mediating role of intellectual capital in open innovation in the service industries. *Sustainability*, 12(12), 5220.
- Lokanadha, R. I., Raghunatha R. (2006), "Performance Evaluation, Economic Value Added and Managerial Behaviour" *Social Science Research Network* [online]. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=94445](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=94445) Date Accessed: 11/07/2018
- Lucia, A., and Lepsinger, R. (1999), *The Art and Science of Competency Models*, Jossey-Bass/Pfeiffer, San Francisco, CA
- Machirori, T. L. (2012). The impact of networking on access to finance and performance of SMEs in the Buffalo City Municipality, Eastern Cape, South Africa. Doctoral dissertation.
- Magala, J. (2010), "Relationship lending in a competitive industry", *Journal of Management*, Vol. 2 No. 11, p. 11.
- March, J. G., and Simon, H. A. (1958), *Organizations*, John Wiley, New York, NY
- Marr, B. (2004). Measuring and benchmarking intellectual capital. *Benchmarking: An International Journal*, 11(6), 559-570
- Martin, J. D., and Petty, J. W. (2000). *Value Based Management*. Harvard Business School Press 2000.

- Martina, K., Hana, U., and Jiří, J. (2012), "Identification of managerial competencies in knowledge-based organizations", *Journal of Competitiveness*, Vol. 4 No. 1, pp. 129-142, doi: 10.7441/joc.2012.01.10.
- Matama, R. (2008), "Corporate governance and financial performance of selected commercial banks in Uganda", CRR 2008 call for papers, Queen's University, Kingston and Ontario.
- Mathis, R.L., & Jackson, J.H. (1997). *Human resource management* (8<sup>th</sup> ed.). Minneapolis/ St
- Matovu, A., Akisimire, R., and Mirembe, R. D. (2015), "Customer satisfaction in retail banks: does service quality and electronic banking adoption matter? Evidence from a developing country", *Proceeding's 3rd Biennial Conference – Africa Academy of Management*, p. 544
- Mehralian, G., Rasekh, H. R., Akhavan, P., & Ghatari, A. R. (2013). Prioritization of intellectual capital indicators in knowledge-based industries: Evidence from pharmaceutical industry. *International Journal of Information Management*, 33(1), 209-216.
- Michaelidou, N., Micevski, M., and Cadogan, J. W. (2015), "An evaluation of nonprofit brand image: towards a better conceptualization and measurement", *Journal of Business Research*, Vol. 68 No. 8, pp. 1657-1666
- Mitchelmore, S., and Rowley, J. (2010). "Entrepreneurial Competencies: A Literature Review and Development Agenda," *International Journal of Entrepreneurial Behaviour and Research* 16(2), 92–111.
- Montañés-Del-Río, M. Á., & Medina-Garrido, J. A. (2020). Determinants of the propensity for innovation among entrepreneurs in the tourism industry. *Sustainability*, 12(12), 5003.
- Mothe, C., & Uyen, N-T. (2010). The link between non-technological innovations and technological innovation. *European Journal of Innovation Management*, 13(3), 313-332.
- Mugume, A. (2010), *Market Structure and Performance in Uganda's Banking Industry*, unpublished dissertation, Makerere University, Kampala.
- Muntean, M., Cabău, L. G., and Rînciog, V. (2014), "Social business intelligence: a new perspective for decision makers", *Procedia-Social and Behavioural Sciences*, Vol. 124, pp. 562-567.
- Nanath, K., & Pillai, R. R. (2017). The influence of green is practices on competitive advantage: Mediation role of green innovation performance. *Information Systems Management*, 34(1), 3-19.
- Narvanjas, M. (2009), "Banking on customer loyalty in service industries", *Journal of Public Relations*, Vol. 12 No. 11, p. 1.
- Negash, S. (2004), "Business intelligence", *The communications of the Association for Information Systems*, Vol. 13 No. 1, pp. 177-195.
- Newbert, S. L. (2008), "Value, rareness, competitive advantage, and performance: a conceptual-level empirical investigation of the resource-based view of the firm", *Strategic Management Journal*, Vol. 29 No. 7, pp. 745-768
- Nieman, G., & Nieuwenhuizen, C. (2009). *The Nature and Development of Entrepreneurship. Entrepreneurship: A South Africa Perspective* (2nd edn). Van Schaiks, Pretoria.
- Obeidat, B. Y., Tarhini, A., Masa'deh, R. E., and Aqqad, N. O. (2017), "The impact of intellectual capital on innovation via the mediating role of knowledge management: a structural equation modelling approach", *International Journal of Knowledge Management Studies*, Vol. 8 Nos 3-4, pp. 273-298.
- Ode, E., & Ayavoo, R. (2020). The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. *Journal of Innovation & Knowledge*, 5(3), 210-218.



- Opler, T. C., and Titman, S. (2004), "Financial distress and corporate performance", *The Journal of Finance*, Vol. 49 No. 3, pp. 1015-1040
- O'Reilly-Allen, M., Zikmund, P. E. (2013). Whose Responsibility is it to Deter and Detect Fraud? The Role of Management, the Auditor and the Fraud Examiner. *Journal of Global Business Management*; 5:1.
- O'Sullivan, D., & Dooley, L. (2008). Defining innovation. *Applying Innovation*, 3-32.
- Pablo, A. L. (1994). Determinants of acquisition integration level: A decision-making perspective. *Academy of Management Journal*, 37: 803-836.
- Patky, J., & Pandey, S. K. (2020). Does flexibility in human resource practices increase innovation? Mediating role of intellectual capital. *South Asian Journal of Human Resources Management*, <https://doi.org/10.1177/2322093720934243>.
- Persson, N. (2010), "An exploratory investigation of the elements of B2B brand image and its relationship to price premium", *Industrial Marketing Management*, Vol. 39 No. 8, pp. 1269-1277.
- Peteraf, M. A., and Barney, J. B. (2003), "Unravelling the resource based tangle", *Managerial and Decision Economics*, Vol. 24, pp. 309-323, doi: 10.1002/mde.1126
- Peters, M. D., Wieder, B., Sutton, S. G., and Wakefield, J. (2016), "Business intelligence systems use in performance measurement capabilities: implications for enhanced competitive advantage", *International Journal of Accounting Information Systems*, Vol. 21, pp. 1-17.
- Pollick, M. Y. (2006). What is Fraud [Online] Available at <http://www.wisegeek.com/what-is-fraud.htm> Date accessed: 25/02/2019
- Porter, A. L., and Chubin, D. E. (1985). An indicator of cross-disciplinary research. *Scientific metrics* 8, 161-176.
- Ramakrishnan, T., Jones, M. C., and Sidorova, A. (2012), "Factors influencing business intelligence (BI) data collection strategies: an empirical investigation", *Decision Support Systems*, Vol. 52 No. 2, pp. 486-496.
- Richards, G., Yeoh, W., Chong, A. Y. L., and Popovič, A. (2017), "Business intelligence effectiveness and corporate performance management: an empirical analysis", *Journal of Computer Information Systems*, Vol. 52 No. 4, pp. 1-9.
- Reilly, F. K., and Brown, K. C. (2003). *Investment analysis portfolio management*, 7th edition, Thomson-South Western, Cincinnati
- Rodrigues, L. L., Tejedo-Romero, F., & Craig, R. (2017). Corporate governance and intellectual capital reporting in a period of financial crisis: Evidence from Portugal. *International Journal of Disclosure and Governance*, 14(1), 1-29.
- Rouhani, S., Asgari, S., and Mirhosseini, S. V. (2012), "Review study: business intelligence concepts and approaches", *American Journal of Scientific Research*, Vol. 50 No. 1, pp. 62-75.
- Sääksjärvi, M., and Samiee, S. (2011), "Relationships among brand identity, brand image and brand preference: differences between cyber and extension retail brands over time", *Journal of Interactive Marketing*, Vol. 25 No. 3, pp. 169-177.
- Samiloglu, F., and Demirgunes, K. (2008), "The effect of working capital management on firm profitability: evidence from Turkey", *The International Journal of Applied Economics and Finance*, Vol. 2 No. 1, pp. 44-50.
- Sanchez- Garcia, I. M., Prado-Lorenzo, J. M. G., & Allego-Alvarez, I. (2009). Stakeholder engagement and corporate social responsibility reporting: the ownership structure effect. *Corporate Social Responsibility and Environmental Management*, 16(2), 94-107.



- Şener, I., and Karaye, A. B. (2014), "Board composition and gender diversity: comparison of Turkish and Nigerian listed companies", *Social and Behavioral Sciences*, Vol. 150, pp. 1002-1011.
- Seubert, E., Balaji, Y., and Makhija, M. (2001), "The knowledge imperative", *CIO Special Advertising Supplement*, March 15, available at: [www.cio.com/sponsors/031501\\_km.html](http://www.cio.com/sponsors/031501_km.html) (accessed March 15, 2015).
- Shafiee, M. M. (2021), "Knowledge-based marketing and competitive advantage: developing new scales using mixed method approach", *Journal of Modelling in Management*, doi: 10.1108/JM2-05-2020-0134.
- Sharabati, A. A., Nour, A. N., & Shamari, N. S. (2013). The impact of intellectual capital on Jordanian telecommunication companies' business performance. *American Academic & Scholarly Research Journal*, 5(3 special issue), 32.
- Shawn, T. (1994), America's best wealth creators, *Fortuna Magazine* 130, 77–91.
- Shollo, A., and Galliers, R. D. (2016), "Towards an understanding of the role of business intelligence systems in organisational knowing", *Information Systems Journal*, Vol. 26 No. 4, pp. 339-367.
- Standfield, K. (2005). *Intangible Finance Standards: Advances In Fundamental Analysis & Technical Analysis*. *Journal of Chemical Information and Modeling* (Vol. 53). Burlington: Elsevier Inc. <https://doi.org/10.1017/CB09781107415324.004>
- Stanley, D. J. (2012). Clinical leadership and innovation. *Journal of Nursing Education and Practice*, 2(2), 119.
- Stewart, G.B. III (1991). *The quest for value*. New York: Harper-Collins
- Stiles, P., and Kulvisaechana, S. (2004), *Human Capital and Performance in Public Sector*, Judge Institute of Management, University of Cambridge, Cambridge.
- Stokes, P., and Oiry, E. (2012), "An evaluation of the use of competencies in human resource development – a historical and contemporary recontextualisation", *Euro Med Journal of Business*, Vol. 7 No. 1, pp. 4-23.
- Sudrajat, D. (2015). Competitiveness improvement of Indonesian logistics service providers: A conceptual model and future research framework. *Advanced Science Letters*, 21(4), 1049-1052.
- Sullivan, P. H. (2000). *Value driven Intellectual Capital: How to Convert Intangible Corporate Assets into Market Value*. John Wiley & Sons, Inc.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77, 203–220.
- Szymaniec-Mlicka, K. (2014). Resource-based view in strategic management of public organizations—A review of the literature. *Management*, 18(2), 19-30.
- Teas, R. K., and Agarwal, S. (2000) 'The Effects of Extrinsic Product Cues on Consumers' Perceptions of Quality, Sacrifice, and Value', *Journal of the Academy of Marketing Science* 28 (2): 278–90
- Teece, D. J. (2007), "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance", *Strategic Management Journal*, Vol. 28 No. 13, pp. 1319-1350.
- Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 58(4), 13-35.

- Torres, A. I., Ferraz, S. S., and Santos-Rodrigues, H. (2018), "The impact of knowledge management factors in organizational sustainable competitive advantage", *Journal of Intellectual Capital*, Vol. 19 No. 2, pp. 453-472.
- Turyahebwa, A. (2013), "Financial performance in the selected microfinance institutions in Uganda", Kampala International University, West campus, Ishaka
- Volberda, H. W. (2005), "Knowledge and competitive advantage: the coevolution of firms, technology, and national institutions", *Academy of Management Review*, Vol. 30 No. 2, pp. 446-448.
- Vorhies, D. W. and Morgan, N. A. (2005), "Benchmarking marketing capabilities for sustainable competitive advantage", *Journal of Marketing*, Vol. 69 No. 1, pp. 80-94
- Vousinas, G. L. (2016). The critical role of Internal Auditing in addressing bank fraud: A conceptual framework. *Journal of Economics Literature* M42. 2016; 5(3):67 -81.
- Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. F., Dubey, R., and Childe, S. J. (2017), "Big data analytics and firm performance: effects of dynamic capabilities", *Journal of Business Research*, Vol. 70, pp. 356-365.
- Wanda, P., and Stian, S. (2015), "The secret of my success: an exploratory study of business intelligence management in the Norwegian industry", *Procedia Computer Science*, Vol. 64 No. 1877, pp. 240-247.
- Wang, W., and Changa, C. (2005), "Intellectual capital and performance in causal models: evidence from the information technology industry in Taiwan", *Journal of Intellectual Capital*, Vol. 6 No. 2, pp. 222-236.
- Wheelen, T. L., Hunger, J. D., Hoffman, A. N., & Bamford, C. E. (2015). *Strategic Management and Business Policy: Globalization, Innovation, and Sustainability*, Global Edition.
- Winter, S. G. (2014). The future of evolutionary economics: Can we break out of the beachhead?. *Journal of Institutional Economics*, 10(4), 613-644.
- World Bank Annual Report. (2013), "End extreme poverty. Promote shared prosperity. The financial data and organizational information, and the World Bank corporate scorecard", Kampala, available at: <http://go.worldbank.org> (accessed March 14, 2015).
- Wright, P. M., Dunford, B. B., and Snell, S. A. (2001), "Human resources and the resource based view of the firm", *Journal of Management*, Vol. 27, pp. 701-721
- Yaseen, S. G., Dajani, D., and Hasan, Y. (2016), "The impact of intellectual capital on the competitive advantage: applied study in Jordanian telecommunication companies", *Computers in Human Behavior*, Vol. 62, pp. 168-175.
- Yiu, L. D., Yeung, A. C., and Cheng, T. E. (2020), "The impact of business intelligence systems on profitability and risks of firms", *International Journal of Production Research*. doi: 10.1504/IJBIS.2021.112413
- Yukl, G. (1989). *Leadership in organizations*, second edition. Englewood Cliffs, NJ: Prentice-Hall.
- Zameer, H., Wang, Y., and Yasmeeen, H. (2020), "Reinforcing green competitive advantage through green production, creativity, and green brand image: implications for cleaner production in China", *Journal of Cleaner Production*, Vol. 247, doi: 10.1016/j.jclepro.2019.119119.
- Zehir, C., Can, E., and Karaboga, T. (2015), "Linking entrepreneurial orientation to firm performance: the role of differentiation strategy and innovation performance", *Procedia-Social and Behavioral Sciences*, Vol. 210, pp. 358-367.

Zygmunt, C., & Smith, M. R. (2014). Robust factor analysis in the presence of normality violations, missing data, and outliers: Empirical questions and possible solutions. *The Quantitative Methods for Psychology*, 10 (1), 40-55.