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Moderation Effect of Organizational Culture on the Relationship Between Strategic Inputs of Competitive Intelligence and Competitive Advantage among Commercial Banks, in Kenya





# Moderation Effect of Organizational Culture on the Relationship Between Strategic Inputs of Competitive Intelligence and Competitive Advantage among Commercial Banks, in Kenya

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#### Abstract

**Purpose:** The purpose of this paper is to determine moderating effect of organizational culture on the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya.

**Methodology:** A descriptive and explanatory research design was used in this study and primary data was collected at the head offices of each bank which are all found in Nairobi city. Primary data was collected using a semi-structured questionnaire. Data was analyzed using both descriptive and inferential statistics. Analysis was done with the assistance of SPSS computer packages.

**Findings:** Strategic inputs of competitive intelligence were found to explain 46.6 % of competitive advantage. When organizational culture was introduced this variation changed to 53.7%. Therefore, organizational culture was found to have a moderating effect on the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya

Unique contribution to theory, practice and policy: While incorporating strategic inputs of competitive intelligence among commercial banks, attention should be paid on prevailing culture within the organization in terms of shared values, norms, assumptions and belief systems that encourage the collection, analysis, utilization and sharing of competitive intelligence to enable banks gain competitive advantage

**Keywords:** *Strategic inputs, competitive intelligence, Competitive advantage, organizational culture* 



## Background of the Study

Moderation is a way of checking whether a third variable influences the strength or direction of the relationship between an independent and a dependent variable (Baron & Kenny, 1986). In statistics and regression analysis, moderation occurs when the relationship between two variables depends on a third variable (Cohen, Cohen, West & Aiken, 2003). Moderation is essential to understand the mechanisms in social science theories (Haye, 2018). Identifying a moderation of an independent variable's effect on the dependent variable helps to understand better the mechanism underlying the effect under different circumstances. This may subsequently lead to a better understanding of the baseline relationship and advancement of existing theoretical knowledge. This study sought to determine the moderating effect of organizational culture on the relationship between strategic inputs of competitive intelligence and competitive advantage of commercial banks.

Competitive intelligence has become a very important tool in the organization strategic planning and management processes (Safarnia, Akban & Abbasi, 2011). Nanzhelele (2012) noted that there was an increase in the number of organizations carrying out competitive intelligence activities either formally or informally due to its benefits. Knowledge and information have become vital elements in wealth creation by organizations. Through utilizing information systems, the abundance of available information would enable organizations to generate competitive advantage and constant innovations to survive and prosper in the long term (Laudon & Laudon, 2007). Wright (2010) state that there are many reasons that motivates business enterprises to use competitive intelligence stating that it provides: "an objective view of the market place; a reduction in decision making time, minimizing risk and avoiding surprises; identification of opportunities before the competition does; identification of early warning signals of competitor moves; time to consider counter moves; input to idea generation; challenges to, and/or verification of, assumptions; challenges to, and/or verification of intuition; a proactive decision making attitude; support for prioritization of decisions; stimulation for pursuing improvement rather than mediocrity; a reduction in uncertainty.

The need to enhance competitiveness has forced companies to consider competitive intelligence not only as protective tool to guard against perceived threats and changes but also as a mechanism for discovering new opportunities and trends (Pirttimaki, 2007). Garelli (2003) states that since companies actually compete in the global economy, many authors are of the opinion that when studying competitiveness, the focus should be on companies as they are the main engines of a country's competitiveness. Murphy (2005) noted that gathering raw data and converting it into intelligence through human judgment is a fundamental aspect of every business. The author further explains that competitive intelligence goes beyond bench marking against competitors and includes monitoring the social, technological, economic and political environments, embracing all factors that could endanger or enhance an organization's competitive position.



The challenge for organization's management today in their quest to improve performance is how to deal with this changing competitive landscape. Performance measurement is considered as the process of quantifying the effectiveness and efficiency of actions (Alaa & James, 1996). Ma (2000) observed that competitive advantage and firm performance are two constructs with an apparently complex relationship, while Ray, Barney and Muhanna (2004) found a significant relationship between competitive advantage and performance. Though much empirical works has centred on competitive advantage, the generalization of its relationship to competitive intelligence is under researched (Safarnia et al., 2011). Competitive intelligence is the value adding, continuous, and systematic process of knowledge and information flow for the purpose of monitoring both the internal and external environment of an organization collected legally and analyzed and finally used to improve decision making ((Roitner, 2008). The main purpose of competitive information analysis is to gain a better understanding of an industry and its competitors, make better decisions, develop superior strategies and achieve more efficient results that position the organization at a higher level of achievement compared to its rivals (Rakimane, 2009).

## **Strategic Inputs of Competitive Intelligence**

The topic of intelligence is vast and has its roots in military science. One of the earliest sophisticated references is the art of war by Sun Tsu (Griffith, 1971) written about 500 BC and has been the basis for development in military intelligence. Intelligence has been a significant factor in military success for thousands of years (McCandles, 2003). The genesis of intelligence activities in the context of commerce and business, is however, a more recent development (Fleisher, 2001). Since the end of the cold war, competitive intelligence once used in the military environment rapidly infiltrated into the business environment (Deng & Luo, 2010). When the cold war came to an end in 1990, downsizing occurred in the United States of America armed forces and related intelligence activities, which resulted in many qualified intelligence officers seeking to apply their skills in other arenas. One arena where they found a home was in business organizations (Prescott, 1999). Hence the widespread use of competitive intelligence in business organizations today.

The work of Porter (1980) in strategic management and competitive analysis which focused on tracking specific competitor's behaviour and linking competitive analysis to competitive strategy created the background for the development of competitive intelligence as a discipline (Viviers, Saayman & Muller, 2005). These writers believed that the true purpose of intelligence was to enable an organization gain competitive advantage. Fahey (2007) identified and described five strategic inputs or domains of competitive intelligence that researchers in competitive intelligence needed to focus on. These are: marketplace opportunities; competitor threats; competitive risks; key vulnerabilities and core assumptions. These strategic inputs are the variables adopted for this study.

A marketplace opportunity is a strategic input which is concerned with creating and realizing new opportunities. The strategy may define new ways of creating value for customers by coming up with new products or solutions, extending product market line or reconfiguring existing solutions.



By discovering new opportunities and threats, competitive intelligence acts as a radar that enables the firm to discern the environment carefully and promptly (Rezaeian & Bolooki 2010). Seizing a good business opportunity also often depends on timing. Although some might call it luck, identifying and exploiting the window of opportunity can be critical to new product development and market introduction. Adom, Nyarko and Som (2016) state that in large complex markets, general competitors' information is important to avoid surprises in the market place. Waithaka (2020) found that marketplace opportunities have significant effect on the competitive advantage of commercial banks. According to Fahey (2007) there are various methods of spotting marketplace opportunities; such as following regulatory developments; tracking research and development in specific industries; conducting patents analysis; the use of projections to identify potential product and emerging customer needs and technological advances to identify new products or solutions.

Competitor threats are the ways a rival inhibits a company's strategy from succeeding in the market place. When a threat is detected too late, the resources devoted to this strategy would go to waste. If detected early, strategies could be developed to neutralize, eliminate, ameliorate the threat or avoid the strategy. Competitive threats could lead to competitor's rivalry, which when escalated could significantly harm a firm's performance. The resulting moves and countermoves could have potential negative effects. Nwakah and Onduku (2009) state that the executive team must be alert and assess current and potential competitor changes for their implications and threats on the firm's strategy.

Fahey (2007) explained that competitive risks include any marketplace change that could negatively impact on the firm's current or potential strategy. These marketplace forces are a source not only of opportunities and competitive threats but also of competitive risks. Waithaka (2020) states that tactics oriented competitive intelligence could inform the sales force, where the next generation of products could be heading. Gilad (2005) stated that competitive intelligence allows for advanced identification of risks and opportunities in the competitive arena. These include changes in customer preferences, distribution channels, suppliers, government agencies and political parties.

Assessing key vulnerabilities requires the identification of that which could most critically affect the organization's strategy and to which management has least control. This compels managers to go beyond listing those entities to analyze and rank current and potential threats and risks to enable identification of those that could most severely impede strategy success. Pirttimaki and Hannula (2003) stated that one of the objectives of competitive intelligence is to enable managers understand where the organization is vulnerable so that it could be hedged against attack by rivals. Pearce and Robinson (2009) stated that core assumptions are the premises that strategic managers have assessed and found to be relevant and valid before and during strategy formulation. The authors further stated that due to the dynamic nature of the business environment, that keeps changing, then managers should constantly monitor and verify the validity of those core



assumptions. Waithaka (2022) found that strategic inputs of competitive intelligence have significant effect on the competitive advantage of commercial banks in Kenya

#### **Competitive Advantage**

The pursuit of competitive advantage is an idea at the very heart of strategic management literature (Liao & Hu, 2007). However, Ma (2000) states that competitive advantage is perhaps the most widely used term in strategic management yet remains poorly defined and operationalized. Levy and Weitz (2001) described sustainable competitive advantage as an edge over competition that could be maintained over a long time. In order for the organizations to create sustainable competitive advantage, they need to develop a value propositioning that meets the needs of customers in a way that rivals cannot match or easily imitate (Kotler & Keller, 2006). It is essentially a position of superiority on the part of the firm in relation to its competition in any of the multitude of functions/activities performed by the firm.

As noted by Porter (1996), at the most basic level, firms create competitive advantage by perceiving or discovering new and better ways to compete in an industry and bringing them to the market, which is ultimately an act of innovation. This shifts competitive advantage when rivals fail to perceive the new way of competing or are unwilling or unable to respond. When implementing strategy, competitive advantage results out of the way firms perform discrete activities such as conceiving ways to conduct activities, employing new procedures, new technology or different inputs. Safarnia et al., (2011) stated that competitive advantage is born when a firm discovers a new and more efficient way to enter an industry and put that invention in concrete form, than its rivals. This could allow the firm to produce quality products at lower costs and deliver the right product/service in the right place, at the right price and time through the most convenient channel.

Musran (2013) explained competitive advantage in terms of delivery, dependability, price, speed to the market and product innovation. This agrees with the revisionist view that managerial presentation of competitive advantage vary in content and structure from person to person since managers have different ways of seeking and processing information. Hill and Jones (2009) summarized many of these views when they stated that the main dimensions of competitive advantage are; efficiency, quality, innovation and responsiveness to customers. Efficiency in most companies is measured through employee productivity that helps the firm achieve competitive advantage through cost savings. This study has used customer value, unique products or services and innovation as indicators of competitive advantage.

## **Organizational Culture**

A moderating variable refers to a variable that can strengthen, diminish, negate, or otherwise alter the association between independent and dependent variables (Iriyadi, Tartilla & Gusdiani, 2020). It can change the direction of the relationship between the independent and dependent variables (Aldholay, Isaac, Abdullah, Alrajawy & Nusari, 2018). Organizational culture has been selected



as the moderating variable in this study since expectations and strategy are rooted in 'collective experience' (group and organizational) and become reflected in organizational routines that accumulated over time. Over time, there tends to develop a consensus amongst managers and members in an organization about strategies that would be successful-so strategies themselves become legitimized.

Organizational culture is simply 'the way of doing things' in an organization or how we 'do it here' (Drucker, 2004). Dodek (2010) remarked that "culture is to an organization what personality is to the individual-a hidden, yet unifying theme that provides meaning, direction and mobilization". Cultures can be categorized in a spectrum of weak to strong cultures. Organizational culture has been noted to influence many outcomes in an organization including the implementation of strategies. Indeed, scholars and researchers in strategic management have vouched appropriate organizational culture as a key enabler of effective strategy implementation (Johnson, Scholes & Whittington 2008; Kotler, 2011). Organization's cultures are the policies, practices, traditions, philosophical beliefs, and ways of doing things (Thomson & Strickland, 2009). Organizational culture works as a social glue to bond the employees together and make them feel a strong part of corporate experience. An organization's culture and associated values dictate the way decisions are made, the objectives of the organization, the type of competitive advantage sought, the organizational structure and systems of management, strategies and policies, attitudes towards managing people and information sharing systems.

The contemporary management thinking has accorded organizational culture a privileged position as enablers of strategy implementation and a critical influencer and pillar of organizational success. In a tacit support of the role of organizational culture on strategy implementation Thompson and Strickland (2009), argued that strategy implementation is primarily an administrative task that involves figuring out workable approaches to executing the strategy and then, during the day-to-day operations, getting people to accomplish their jobs in a strategy supportive and results achieving fashion.

The call for organizations to align culture to strategy is a loud one. Lopez (2004) opined that organizations making the effort to introduce a culture which encourages communication among their members and motivates employees to question fundamental beliefs would achieve a favorable working atmosphere. Additionally, there has been suggestions that those in management positions to recognize underlying dimensions of their corporate culture and its impact on employee-related variables such as satisfaction, commitment, cohesion, strategy implementation, performance, among others (Lund, 2003). Noble (1999) introduces a chain which leads to implementation of the strategy. This sequence is comprised of communication, interpretation, adoption and enactment of respective performance management and motivation strategies.

Denison and Mishra (1995) identified four traits of organizational culture: involvement, consistency, adaptability and mission. According to these authors, involvement creates a sense of ownership and responsibility. Consistency is an internal control system that facilitates integration



and coordination. Adaptability refers to norms and beliefs that support the ability to receive and interpret signals from the environment. Mission includes economic and non-economic objectives. This study tested the moderating effect of organizational culture on the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya.

## **Commercial Banks in Kenya**

The banking industry comprises of 43 commercial banks, 2 mortgage finance companies and 123 foreign exchange bureaus (CBK, 2018). Three of the commercial banks have however been placed under statutory management by the regulator after experiencing some financial challenges. The study therefore considered forty (40) banks that are managed independently under the direct control of Central Bank of Kenya. The banking industry in Kenya has experienced increasing competition over the years whereby commercial banks have been competing amongst themselves and also other financial institutions (Kungu, Desta & Ngui, 2014). At the same time, the Central Bank of Kenya (2017) indicate that there has been high fluctuation in the level of competitive advantage achieved by individual banks in the last five years (2016-2020) with several banks being ranked in different positions over the same period.

The banking industry entered the year 2020 on a strong footing poised to rebound after the interest rate capping was repealed (CBK, 2020). This was however short-lived since the coronavirus (COVID-19) pandemic that was to define the year 2020, did not feature in the global discourse. When the pandemic struck the banking sector and other players instituted measures to mitigate against the adverse impact. These measures were intended to facilitate the use of digital banking services to reduce the infection risk and ensure continued operation of the industry while safeguarding the health and safety of bank staff, customers and the public. The industry remained stable and agile, demonstrating resilience in 2020 despite the COVID-19 pandemic. The gross loans and advances grew by 7.2% by the end of the year. The banking industry is competitive and thus requires a lot of creativity and innovation both in terms of new product development. As competition among the commercial banks continues to rise, the management of each bank must come up with novel ways of beating the competition, hence the adoption of competitive intelligence. For organizations in the banking industry to become competitive they need to have access to high quality, future oriented information that is necessary for good long-term decisions (Hughes & White, 2005).

#### **Statement of the Problem**

Gwahula (2013) stated that commercial banks play an important role in the socioeconomic development in both developed and developing countries by ensuring prudent allocation as well as efficient utilization of resources. They are continuously helping to channel funds from depositors to investors as well as providing access to a nation's payment system (Ongore & Kusa, 2013). However, rapid change, hyper competition, changing demographics and customer needs



require banks to build adaptability competency for survival and fostering organizational performance (CBK, 2018).

Serieux (2008) noted that the financial systems in Africa and in Kenya specifically were shallow and fragile and hence unable to effectively contribute to economic development. The shallowness and fragility the author further observed was reflected in low lending levels, high interest spread, high levels of non-performing loans and failing of several banks. Upadhyaya (2011) argues that this has led to poor performance of the commercial banks. While Oloo (2011) noted that several commercial banks were declaring losses in their financial reports. This was further affirmed by Onuonga (2014) who stated that the performance of commercial banks in Kenya was not impressive and profitability was on average erratic. This has necessitated the banking institutions to adopt competitive intelligence strategies in order to remain competitive and maintain their industry positions.

Wright, Bission and Duffy (2012) state that in order to enter, survive and develop in their industry and markets, firms have to gain competitive advantage. Gracanin, Kalac and Jovanovic (2015) state that competitive intelligence can be a source of competitive advantage, enabling a company to develop and implement strategies that improve business efficiency and effectiveness. One of the ways of gaining this competitive advantage in the market is the application of strategic inputs of competitive intelligence strategies in enterprises. Wright (2010) noted that competitive intelligence strategies provide a firm with an objective review of the market place; reduces decision making time; minimizes risks and avoid surprises; helps in identification of opportunities before competition does; identification of early warning signals of competitors moves and reduction of uncertainty.

Business researchers are interested in building theories and models to understand and decipher relationships among variables related to business systems. However, these relationships are not always strait forward. Identification of the effect of the moderating variables has an important implication for business research. Waithaka (2016) found that organizational culture had a significant moderating effect on the relationship between competitive intelligence practices and the performance of firms listed on the Nairobi securities exchange. This study sought to determine the moderating effect of organizational culture on the relationship between strategic inputs of competitive intelligence on sustainable competitive advantage among commercial banks in Kenya.

## **Objective of the Study**

To examine the moderating effect of organizational culture on the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya.

## **Research Hypothesis**

Ho1: Organizational culture has no moderating effect on the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya.



## **Theoretical Review**

This study was anchored on the institutional theory, the dynamics capability theory and the Porter's five forces model. In order for organizations to survive they must conform to some rules and beliefs systems prevailing in the environment. Where there is pressure to conform to certain rules and regulations especially on product and service standards, the institutional theory may impact positively on organizational performance. On the other hand, where conformity leans toward meeting social pressures, the effect on the organizational performance may be negative. Dynamics Capability-Based theory advocates for competing on capabilities or competencies rather than making traditional resources investments as a more appropriate method for achieving competitive advantage. Day and Nedungadi (1994) argue that a company should be viewed as a bundle of competencies or capabilities as well as resources. In a broad sense, capabilities refer to the organizational processes by which available resources are developed, combined, and transformed into values offered in the market. Teece, Pisano and Shuen (1997) conceptualized dynamic capabilities as idiosyncratic factors which give rise to sustainable competitive advantage.

Porter's (1980) work on the analysis of competitive forces affecting firms, which focused on tracking specific contestant behavior and connecting competitor analysis to competitive strategy, created the background for the development of competitive intelligence as a business discipline (Peyrot, Childs, Van Doren, & Allen, 2002). Porter took a view of scanning the external environment to gather intelligence on rivals. Porter then developed the Five Forces Model to elucidate the forces that shape competition in an industry. This well-defined analytical structure helps strategic managers to link remote factors in a firm's operating environment to its performance.

#### **Organizational Culture and Competitive Advantage**

Peters and Waterman (1982) noted that organizational culture is one of the most essential characteristics of excellent companies that stimulate innovation (Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2016). Corporate culture plays a critical role in the success or failure of organizations (Flamhaltz & Randle, 2012). According to the resource-based view it is seen as a key resource for achieving operational excellence and crating competitive advantage (Fahy, 2000). Based on this view culture is perceived as a vital resource since it is valuable, rare and imperfectly imitable. It is imitable due to its unique historic conditions or path dependency, social complexity and causal ambiguity (Dierichx & Cool, 1989). The difficulty of describing values, symbols and briefs makes organizational culture inimitable. Barney (2001) observed that organizational culture and workers with specific expertise are intangible assets built over a long time that competitors cannot buy from the market. These characteristics assert organizational culture as a source of sustainable competitive advantage.

Waithaka (2016) found that organizational factors have a moderating effect in the relationship between competitive intelligence practices and the performance of firms listed on the Nairobi



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Securities Exchange. The introduction of the moderating variable has enabled the study to have a greater explanatory power. Tosi, Werner, Katz and Gemez-Mejia (2000) suggested that in order for research design to have greater explanatory power in strategic management field, it is imperative to include relevant moderating variables. As the study introduced and verified the new moderator of the existing relationship, a moderate level of theory building is presented to supplement existing theory

In an empirical study, Hall (1992) found organizational culture to be an important intangible resource in creating sustainable competitive advantage for any company. It plays an important role in shaping behavior and performance of organizational members. Deal and Kennedy (1982) noted that performance improvement was linked to deliberate efforts by management toward developing organizational culture. Bennet, Fadil and Greenwood (1994) argue that organizational success depends on achieving a good fit between strategies, structure and culture while Giberson, Resick, Dickson, Mitchelson, Randall and Clark, (2009) found that a relationship existed between culture and performance. Dietrich (2014) pointed out that culture made up of values that foster teamwork, motivates employees, improves cohesiveness, encourages innovativeness and decrease workplace politics enhances firms' competitive advantage.

From a historical perspective, organizational culture was used to explain the economic successes of Japanese firms over American firms by motivating workers who were committed to a common set of values, beliefs and assumptions (Dension, 1984). One of the most important reasons that explain the interest in organizational cultures is the assumptions that certain organizational cultures lead to increase in organizational performance. Ouchi (1981) found a positive relationship between organizational culture and productivity.

Various aspects of organizational culture have been linked to successful implementation of strategies. From past researches, studies on organizational culture have linked and maintained its relationship with performance and effectiveness of strategy implementation (Fey & Denison, 2003). While Pirayeh (2011) identified leadership commitment and employee job satisfaction to successful strategy implementation. Zain, Ishak, and Ghani (2009) are of the opinion that recent modification strategies on organizational culture like organizational change management and team building have an impact on performance. Valencia (2011) opines that organizational learning, motivational strategies, strategy communication and innovations which are elements of organizational culture influence the sustainability of competitive advantage. Krefting and Frost (1985) state that organizational culture may create competitive advantage if the boundaries of an organization are designed in a manner which facilitates individual interaction and if the scope of the interaction processes is limited to appropriate level.

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## Independent Variables



following steps. First, all the five strategic inputs of competitive intelligence were computed and the resultant aggregate value was taken as strategic inputs of competitive intelligence. The researcher then regressed the resultant competitive intelligence against competitive advantage and the findings of the Model Summary are shown in Table 1.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.662 <sup>a</sup>	.438	.418	3.74119



### a. Predictors: (Constant), Strategic inputs of competitive intelligence

The findings in Table 1 indicate the coefficient of determination as 0.438; this shows that 43.8% change in competitive advantage among commercial banks is explained by the competitive intelligence in place.

The findings of the ANOVA are presented in Table 2.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	315.972	1	315.972	22.575	.000 <sup>b</sup>
Residual	405.898	29	13.996		
Total	721.871	30			

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), strategic input of Competitive Intelligence)

The findings in Table 2 show that the value of F calculated is 22.575; this implies that the overall regression model was significant. The beta coefficients and the p-values showing significance of the study variables are summarized in Table 3.

#### **Table 3: Regression Coefficients**

	Unstanda Coefficie		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	4.392	8.377		.524	.604
Strategic inputs Competitive Intelligence	of .179	.038	.662	4.751	.000

a. Dependent Variable: competitive advantage

The following equation is formulated from the findings in Table 3;

Thus, it can be summed up from Table 3 that strategic inputs of competitive intelligence (p=0.000<0.05,  $\beta$ =0.179) has positive and significant effect on competitive advantage. This agrees



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with Gracanin et al., (2015) who found that competitive intelligence could be a source of competitive advantage, enabling a company to develop and implement strategies that improve business efficiency and effectiveness. Further, the findings concur with Waithaka (2016) who found that competitive intelligence practices significantly affected the performance of firms listed on the Nairobi securities exchange.

The next step in testing for moderation involved the introduction of organizational culture as the moderating variable into the model besides strategic input of competitive intelligence. The findings of the model summary are shown in Table 4.

Table 4: M	odel Summary
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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.683ª	.466	.428	3.71025

a. Predictors: (Constant), organizational culture, Competitive Intelligence

From Table 4, the value of the coefficient of determination R square was 0.466; this implies that 46.6% change in competitive advantage is explained by organizational culture and strategic input of competitive Intelligence. The findings of the Analysis of Variance are shown in Table 5.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	336.423	2	168.212	12.219	.000 <sup>b</sup>
Residual	385.447	28	13.766		
Total	721.871	30			

#### **Table 5: Analysis of Variance**

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), organizational culture, strategic input of competitive intelligence

From Table 5, the value of F calculated is 12.219; this has an implication that the overall regression model of the study was significant. Table 6 gives the findings of the regression beta coefficients.

## **Table 6: Regression Coefficients**

Coefficients		Standardized Coefficients		
В	Std. Error	Beta	t	Sig.

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(Constant)	6.791	8.538		.795	.433
Strategic inputs of competitive intelligence	.208	.044	.770	4.691	.000
Organizational Culture	.335	.275	.200	1.219	.001

a. Dependent Variable: competitive advantage

The following regression equation presents the results in Table 6.

## 

Where,

Y= Competitive advantage among commercial banks

SICI= Strategic inputs of competitive intelligence

ORGCULT=Organizational culture

Therefore, at 5% level of significance, strategic inputs of competitive intelligence ( $\beta$ =0.208, p<0.05) was found to have a positive and significant effect on competitive advantage among commercial banks. The findings agree with Ngugi, Gakure and Mugo (2012) who in an empirical study found the existence of a high correlation between competitive intelligence practices and profitability of firms in the banking industry in Kenya. On the other hand, organizational culture (p<0.05,  $\beta$ =0.335) was also found to have a significant effect on competitive advantage among commercial banks.

The last step in testing for moderation involved getting the product of organizational culture and strategic inputs of competitive intelligence which in addition to organizational culture were regressed against competitive advantage. Table 7, shows the findings of the Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712 <sup>a</sup>	.537	.452	3.63081

**Table 7: Model Summary** 

a. Predictors: (Constant), Organizational Culture\*Competitive intelligence, Competitive Intelligence, Organizational culture

The findings in Table 7 indicate that the coefficient of determination  $R^2$  is 0.537. This implies that 53.7% change in competitive advantage among commercial banks is explained by the product of organizational culture and strategic inputs of competitive intelligence.

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Table 7 presents the findings of the Analysis of Variance (ANOVA). Next, the interaction effect between strategic inputs of competitive intelligence and organizational factors was added to the regression model. The value  $R^2$  was found to change from what it was before the introduction of the interaction effect. The  $R^2$ =0.466 change to  $R^2$ = 0.537 which indicated a variation of 0.071 in the competitive advantage of commercial banks in Kenya. This means that strategic inputs of competitive intelligence explained 46.6% of the competitive advantage of commercial banks before the introduction of the interaction term.

After the interacting term was introduced the competitive advantage among commercial banks was found to be 53.7%. This variation of 7.1% in competitive advantage is explained by the moderation variable. The findings were expected because culture in the organizations helps socialize new employees to expected behaviour, enables consistency in behaviour among employees and encourages employee involvement in decision making. The study further revealed that the culture enables management to predict employees' behaviour under different situations. This agrees with what was pointed out by Peters and Waterman (1982) that organizational culture is one of the most essential characteristics of excellent companies that stimulate innovation.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	365.936	3	121.979	9.253	.000 <sup>b</sup>
Residual	355.935	27	13.183		
Total	721.871	30			

## **Table 8: Analysis of Variance**

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), Organizational Culture\* Strategic inputs of Competitive intelligence, Competitive Intelligence, Organizational culture

From Table 8, the value of F calculated is 9.253 with p-value p < 0.05; this implies that the overall regression model was significant.

The findings of the beta coefficients and the p-values showing significance are indicated in Table 9.

## Table 9: Regression Coefficients

Unstandardized Coefficients		Standardized Coefficients		
 В	Std. Error	Beta	t	Sig.

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(Constant)	108.486	77.496		1.400	.173	
Strategic Inputs of C I	.731	.352	2.701	2.077	.007	
Organizational Culture	4.118	2.988	2.460	1.378	.001	
Organizational culture* Strategic Inputs of C I	.020	.013	4.049	1.496	.000	

a. Dependent Variable: competitive advantage

Based on the findings in Table 9, the following regression equation was formulated;

 $Y = \beta_0 + \beta_1 SICI + \beta_2 ORGCULT_2 + \beta_3 SICI * ORGCULT.....3.4$ 

Where,

Y= Competitive advantage among commercial banks

SICI= Strategic Inputs of Competitive Intelligence

ORGCULT=Organizational Culture

CID\*ORGCULT=Interaction effect of strategic inputs of competitive intelligence \*Organizational culture

From Table 9, the variable competitive intelligence (p<0.05,  $\beta=.731$ ) was found to have significant effect on competitive advantage. Organizational culture (p<0.05,  $\beta=4.118$ ) and organizational culture\* competitive intelligence (p<0.05,  $\beta=0.020$ ) all have significant effect on competitive advantage. It can therefore be inferred that organizational culture moderates the relationship between strategic inputs of competitive intelligence and competitive advantage of commercial banks in Kenya. The findings agreed with Waithaka (2016) who found that organizational culture moderated the relationship between competitive intelligence practices and performance of firms listed on the Nairobi securities exchange. This is aligned to Dietrich (2014) who pointed out that culture is made up of values that foster teamwork, motivates employees, improves cohesiveness, encourages innovativeness and decreases workplace politics thus enhancing the firms' competitive advantage

## **Conclusions and Recommendations**

Organizational culture moderates the relationship between strategic inputs of competitive intelligence and competitive advantage among commercial banks in Kenya. Overall, the paper provided support for the hypothesized relationship with a level of consistency regarding construct effect between strategic inputs of competitive intelligence and competitive advantage of commercial banks in Kenya. Culture enables consistency in behaviour among employees and



encourages involvement in decision making. It enables management to predict employees' behaviour under different situations, while important values are continually emphasized in the bank. Culture enables employees to rapidly adapt workplace norms and helps new employees to adapt to job requirements at workplace.

The study therefore recommends that when incorporating the processes of strategic inputs of competitive intelligence among commercial banks, attention should be paid on prevailing culture within the organization in terms of shared values, norms, assumptions and belief systems. The culture cultivates a sense of belonging and commitment towards the corporation, develops a sense of unity in the workplace and encourages employees to stay motivated and loyal to management. Management should reinforce the cultural elements which support the collection, analysis, sharing and utilization of competitive intelligence to enable banks improve their competitive advantage.

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