

# **MANAGERIAL CAPABILITIES AND COMPETITIVE ADVANTAGE OF NUMERICAL MACHINING COMPLEX COMPANY LTD NAIROBI**

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## **ABSTRACT**

In fast-moving corporate environments open to global competition and characterized by dispersion in the geographical and industrial firms sources of innovation. High cost of inputs, as a result of poor infrastructure and high cost of doing business, prices of locally manufactured products are relatively high. This limits their competitiveness in regional markets and also negatively impacts on capacity utilization. NMC Company is facing a slowdown in production, leading to cancellation of orders by key clients. These needs have been changing as witnessed in the global market. The main objective of this study was to evaluate the managerial capabilities and competitive advantage of manufacturing Numerical Machining Complex Company Ltd Nairobi. The specific objectives were to determine the effect of knowledge management, organizational transformation, coordination of managerial processes and discontinuous innovation on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi. The study adopted a descriptive research designed to aim at evaluating the managerial capabilities on competitive advantage in the manufacturing industry. The target population of this study was the 167-management staff and subordinate staff in Numerical Machining Complex (NMC) Ltd from which 50 respondents were picked using stratified random sampling which is 30 per cent of the target population which composed top level management, middle level management and subordinates. Primary data was obtained using self-administered open and closed ended questionnaires. Quantitative

data was analyzed using descriptive statistics such as frequencies, percentages, mean score and standard deviation. The study used multiple regressions analysis to analyze the collected data to measure the managerial capabilities on competitive advantage in the manufacturing industry. The information was presented in form of tables and graphs. In practice, this research would be beneficial to the Numerical Machining Complex Ltd top management and strategic planning managers, as it would help them apply managerial capabilities for value addition, business growth and enhancing competitive advantage. The study would also help Government policy makers, for instance, the National Treasury, among others, to utilize the findings to regulate the manufacturing industry by coming up with customized regulatory policies that promote growth of the manufacturing companies and set up fair competition in the market. The study found that knowledge management affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly, that organizational transformation affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly, that coordination of managerial processes affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly and that discontinuous innovation affects the competitive advantage in the Numerical Machining Complex Company Ltd Nairobi to a moderate extent. The study concluded that organizational transformation had the greatest effect on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi followed by knowledge management then

discontinuous innovation while coordination of managerial processes had the least effect on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi. The study recommends that management in firms in Kenya should engage with emerging markets more closely, that management practices needs continuous and sustained supervision, improvement and adequate funding in view of it importance's and that organizations should endeavor to improve their employees' skills and competences

through training and good working environment to help keep the employees who are experienced and attract other competent ones and therefore help companies to achieve sustainable competitive advantage.

**Key Words:** *managerial capabilities, competitive advantage, corporate environments, innovation, knowledge management, organizational transformation, coordination of managerial, discontinuous innovation*

## **INTRODUCTION**

In the global world of competition, sustainable competitive advantage has been found to be of great importance and need in both marketing and strategic management of business. Alternative systems are being focused in the current researches conducted on marketing and management of organizations that tend to prove the worth of managerial capabilities within organizations (Tripsas & Gavetti, 2015). Propositions in regard to the use of managerial capabilities in organizations with respect to product innovation, environmental dynamism and firm competitive advantage are being continuously developed for achievement of organizational goals.

Today, many institutions struggle to envision how they would apply management capabilities in order to offer the best to the market and remain competitive. This struggle is understandable, given that increased proper resource utilization is key to the companies' survival (Sapienza & Teece, 2014). The management capabilities view of sustained competitive advantage has focused on the capabilities that give industrial firms the competence of adapting to change in their environment and competitive position (Teece, 2007).

Since the industrial firms' environment has become very competitive, the managerial competences need to change constantly. With the capabilities concept, the value of industrial firms may hold is the ability to alter its resource base (Makadok, 2011). Thus, its competitive advantage can be increased by the creation, integration, recombination and realization of resources. A reflection of the view on resources and capabilities, brings to the fore the importance of industrial firms being able to learn with each relationship (internal and external, with different stakeholders). A common topic in contemporary managerial capabilities, result to persistent competitive advantage differences among firms (Aryeetey, 2012).

Competitive advantage is defined as contrasting the normal outcomes and the genuine ones, researching deviations from plans, surveying individual upper hand and analyzing progress made towards meeting the focused goals (Nghah & Ibrahim, 2010). For viable administration, it is central to quantify the effect of administration activities. Without legitimate and dependable estimation of the effect of administration, it turns out to be exceptionally hard to build up an exhaustive hypothesis of learning or information resource (Ahn & Chang, 2012).

There is no unique way to measure competitive advantage related to managerial capabilities. Competitive advantage can arise from making products of the highest-quality, providing the customers with superior services, achieving costs levels that are lower than rivals or just having the most convenient geographic location. Competitive advantage can also arise from designing products whose performance is better than competing brands. A successful competitive advantage position arises when the firm provides superior value for the customers' money.

Competitive advantage is arrived at through competitive strategy. This refers to all the moves a firm takes to attract buyers while fending off competition. Competitive strategy is what a firm does or is doing to gain competitive advantage over them. Competitive strategy can be offensive, defensive or shifting from one market to another in response to market conditions. Since managers of companies fit strategy to the needs of their company, competitive strategies vary from company to another. However, the strategies are grouped into low-cost leadership, differentiation and focus (Porter, 1996). Hislop (2013) and balanced score card (Lee & Fink, 2013).

As indicated by Olatokun and Nwafor (2012), conventional estimation methods that underline exclusively on money related upper hand can deceive and counter-profitable in an advancement domain. Coordination must be done ceaselessly amid the administration procedure. For sure many firms confronting a broken situation are not ready to conquer their own authoritative dormancy and have bombed, as they have not changed inside themselves. Consequently, it is fundamental to receive an estimation approach that can comprehensively assess the results of administration. Carneiro (2011) proposed that other than utilizing money related markers, associations can receive non-budgetary ones to quantify the results of administration.

Abilities have been characterized as the ability to recharge capabilities in order to accomplish compatibility with the changing business condition by adjusting, incorporating, and reconfiguring inner and outside authoritative aptitudes, assets, and utilitarian skills (Teece, Pisano & Shuen, 1997). All the more as of late, Helfat and Peteraf (2009) have characterized ability as the limit of an association to intentionally make, expand or change its asset base.

They are organizational processes in the most general sense or routines (Zollo & Winter, 2012) which may have become embedded in the firm over time, and are employed to reconfigure the firm's resource base by deleting decaying resources or recombining old resources in new ways (Simon & Hitt, 2013). This means that managerial capabilities are viewed to be essentially path dependent, as they are shaped by the decisions the firm has

made throughout its history, and the stock of assets that it holds (Eisenhardt & Martin, 2010). The concept of managerial capability can be discussed in three phases. First, Barney (2013) defines this concept as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. According to Eisenhardt and Martin (2010), managerial capabilities are seen as specific organizational and strategic processes such as product innovation, strategic decision making by which managers alter their resource base. The authors believe that "the firm's processes use resource to match and even create market change.

The idea of administrative capacity as talked about by Barney (2010), is the company's capacity to incorporate, form, and reconfigure inward and outside capabilities to address quickly evolving situations. As indicated by Eisenhardt and Martin (2010), administrative capacities are viewed as particular hierarchical and vital procedures, for example, item development, key basic leadership by which chiefs change their asset base. As indicated by Baldoni (2016), additionally contend that upper hand is worked anytime and could be formed by the advantages the firm has (inside and showcase) and the developmental way it has received/acquired. The previous is identified with RBV: for this situation organizations acquire a decent return since they have separated asset in connection to their rivals. The last mentioned, capacity building is connected to Capability. Along these lines organizations acquire leeway in connection to their opponents through asset and capacity improvement (Deford, 2013).

As Sapienza and Teece (2014) clarify, the idea of abilities accentuates on the improvement of administration capacities, and it depends on the trouble of mimicking mixes of hierarchical, utilitarian and innovative aptitudes. Administrative capacities draw from both the asset based perspective of the firm and developmental financial matters. From an asset based point of view, capacities were initially conceptualized to change a hole in the capacity of the asset based view to clarify manageable upper hand in, Schumpeterian conditions. These are conditions in which existing skills are crushed, requiring the improvement and elaboration of new capabilities. Researchers embracing the asset-based view accentuate that capacities are a basic part of a company's capacity to recharge its upper hand over opponents, frequently through discount change and sensational changes (Tripsas & Gavetti, 2015).

Associations trying to adjust amid turbulent circumstances can't drive change through simply specialized methodologies, for example, rebuilding and reengineering. They require another sort of initiative capacity to reframe quandaries, reinterpret alternatives, and change operations and to do as such persistently (Lawson & Price, 2011). Great communication must be available between all offices, inside workers themselves and even amongst chiefs and their subordinates. All communication obstructions and holes must be maintained a strategic distance from and settled. Great communication maintains a strategic distance from false impressions in the association. This general aides in coordination (Robbins, 2010). Spasmodic advancement is set apart by high specialized and market vulnerability. Distinctive parts of specialized vulnerabilities, for example, the breadth and precision of the fundamental

logical information, how much the specialized details of the item can be executed, the consistency of the assembling procedures, practicality, et cetera (Rice et al., 2012).

Numerical Machining Complex (NMC) Ltd was joined on fourth January 1994 to assume control over the advantages and liabilities of the previous Nyayo Motor Corporation, and further the first goals the Government of Kenya had when it was set up by Nyayo Motor Corporation. Numerical Machining Complex Ltd has enhanced and is currently offers particular mechanical building administrations utilizing Computer Numerically Controlled (CNC) innovation for high accuracy machining and in addition Computer Aided Design (CAD). The organization is at present engaged with the plan and make of fantastic mechanical and car parts using the best accessible innovation and advertising the same to the clients' fulfillment. After some time, NMC has possessed the capacity to assemble a solid notoriety in the generation of an extensive variety of astounding extras and car parts.

NMC is engaged with Commercial creation of steel, building plan and improvement of hardware and parts and additionally retailing and preparing in designing programming (Auto CAD and Inventor). After some time, NMC has possessed the capacity to assemble a solid notoriety in the creation of an extensive variety of top notch extras and car parts. Numerical Machining Complex is overseen by profoundly prepared and experienced staff in their different zones of specialization. With broad involvement in the assembling segment, they can create and fabricate high respectability apparatus and parts that surpass client necessities. Besides, the ISO 9001:2008 affirmation affirms to NMC's clients that the organization has great practices that guarantee reliable conveyance of administration in accordance with all around perceived models. The organization is focused on the conveyance of value items and administrations consistently (Marketing study report, 2013).

## **STATEMENT OF THE PROBLEM**

The Numerical Machining Complex Ltd in Kenya faced with a challenge to maintain a top position in the industry and also to improve their competitive advantage. The customers have been having different tastes and needs. Documents seen by The East African show NMC has been unable to fulfil customer orders for the past few months, forcing some of the traditional customers for its precision mechanical engineering products to look for alternative suppliers. The documents show that while orders received between September 24, 2012 and April 2, 2013 amounted to Ksh16 million (\$188,235) in terms of value, completed orders were worth just Ksh296,511 (\$3,482). NMC Company was facing a slowdown in production, leading to cancellation of orders by key clients. These needs have been changing as witnessed in the global market. There is therefore the need for the industries to formulate and implement competitive strategies. They all want to have the larger share of the market to themselves. Furthermore, only a limited number of NMC Company have sought to adopt and implement managerial capabilities by knowledge management, organizational transformation, training and development coordination of managerial processes and organizational transformation to the employees. Thus, the NMC Company has to adapt to the managerial capabilities in order to boost its organizational competitive advantage (Miano, 2010).

Locally, several studies regarding effects of capabilities have been done. For instance, Omangi (2010) focused on Cooperative Bank of Kenya Limited, in light of the findings the study recommends that since most of the commercial banks in Kenya have been successful in the application of dynamic capability approaches so far, there is need to focus on how their expansion strategy is affecting their competitive advantage, and how globalization is affecting their competitive advantage. Kanake (2011) evaluated strategic capabilities as a strategic tool in Commercial Bank of Africa and recommended that the process of capitalizing on strategic capabilities should be supported by the top management. Similarly, Ngugi (2011) conducted a research on strategic capabilities at BBC and asserted that success of any organization requires alignment of strategic capabilities and resources to the needs of the markets and those needs must be defined in a clear manner. Muhura (2012) evaluated the use of organization capabilities at Airtel as a source of competitive advantage. The study revealed that capabilities can be safeguarded through mechanisms such as; issuing a confidentiality agreement to the staff and partners, establishing strict policies on company assets and using firewalls on information technology infrastructure among others to achieve a sustained competitive advantage. Therefore, while studies on the relationship between strategic capabilities and competitive advantage have been done in different industries in the market. These studies looked at managerial capabilities on different variables and none looked at manufacturing industries in Kenya which is the gap that the study is seeking to fill.

## **GENERAL OBJECTIVE**

The main objective of this study was to evaluate the managerial capabilities and competitive advantage of Numerical Machining Complex Company Ltd Nairobi.

## **SPECIFIC OBJECTIVES**

1. To determine the effect of knowledge management on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi.
2. To assess the effect of organizational transformation on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi.
3. To evaluate the effect training and development coordination of managerial processes on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi.
4. To assess how discontinuous innovation, affect competitive advantage of the Numerical Machining Complex Company Ltd Nairobi.

## **THEORETICAL REVIEW**

### **Dynamic Capability Theory**

Dynamic abilities hypothesis analyzes how firms coordinate, form, and reconfigure their interior and outside firm-particular skills into new capabilities that match their turbulent condition (Teece, Pisano & Shuen, 2010). The hypothesis accepts that organizations with more noteworthy capacities will outflank firms with littler abilities. The point of the hypothesis is to see how firms utilize abilities to make and maintain an upper hand over

different firms by reacting to and making natural changes (Teece, 2007). Abilities are an accumulation of abnormal state, scholarly, designed, dreary practices that an association can perform better with respect to its opposition. Hierarchical capacities are called 'zero-level' abilities, as they allude to how an association procures a living by proceeding to offer a similar item, on a similar scale, to similar clients (Winter, 2013)

The idea of capacities emerged from a key inadequacy of the asset based perspective of the firm. The RBV has been censured for disregarding factors encompassing assets, rather accepting that they just "exist". Contemplations, for example, how assets are created, how they are incorporated inside the firm and how they are discharged have been under-investigated in the writing (Teece, 2007). Abilities, for example, great coordination of administrative procedures endeavor to connect these holes by receiving a procedure approach.

With dynamic capacities, supported upper hand originates from the association's administration capacity to use and reconfigure its current skills and resources in ways that are significant to the client however troublesome for different contenders to mirror (Teece, 2007). This capacity puts a premium on senior administration's capacity to finish two basic assignments. A key component of this dynamic capacity see is the coordination and combination to advancement, i.e., the scale to which an association's administrative and specialized abilities, mechanical design, social and subjective structure, culture, and qualities are adjusted to and upheld. As per Pavlou and Sawy (2006), dynamic abilities 'help firms reconfigure existing practical capacities so they can fabricate items that better match rising client needs and exploit innovative leaps forward.

Coordination and reconciliation of authoritative capacities are the hierarchical schedules and work rehearses that, in blend with certain socio-subjective auxiliary properties (for instance favored communication and sense-production approach), give the hierarchical 'paste' that backings the essential hidden action required for dynamic ability arrangement and development. Market situating is crucial to advertising technique, particularly for new and creative items. In new item improvement, advertisers can advance by including novel capacities, or they can develop by modifying the physical type of the item to build stylish or hedonic interest. The trouble is that creative changes in shape are frequently incongruent with purchaser desires (Farjoun, 2010).

### **Resource-Based View Theory**

The asset-based view (RBV) created by Grant (1996) has turned out to be a standout amongst the most persuasive and referred to hypotheses ever. The asset-based perspective of the firm (RBV) is in this way a compelling hypothetical system for seeing how upper hand inside firms is accomplished and how that preferred standpoint may be supported after some time (Teece et al, 1997). This point of view concentrates on the inward association of firms, as is a supplement to the conventional accentuation of methodology on industry structure and vital situating inside that structure as the determinants of upper hand Specifically, RBV accept that organizations can be conceptualized as groups of assets that those assets are heterogeneously

appropriated crosswise over firms, and that asset contrasts continue after some time (Amit & Schoemaker, 2003).

The distinguishing proof of specific procedures as unique abilities has a few ramifications. For one, it opens up RBV thinking to a huge, substantive assemblage of experimental research that has regularly been dismissed inside the worldview. This exploration on abilities, for example, item advancement and partnership development reveals insight on these particular procedures, as well as on the summed up nature of dynamic capacities. Along these lines, as opposed to the feedback that dynamic capacities need observational establishing (Waburi, 2009), dynamic abilities as particular procedures frequently have broad experimental research bases and administration pertinence.

High-speed markets are a limit condition for RBV, a truly necessary expansion to the hypothesis (Priem & Butler, 2013). In such markets, the company's administration must adapt to the outside test of rivalry, as well as with the inward test of conceivably crumbling dynamic capacities. An association must have the capacity to change, through adaptable, inventive, and versatile hierarchical procedures and instruments keeping in mind the end goal to remain an important contender by utilizing its extraordinary inborn assets. This infers associations must create components that guarantee soundness and consistency while likewise empowering flexibility and strength, which may suggest contending destinations.

### **Porter Five Forces Model**

Porter's (1985) model identifies the forces that influence competitive advantage in the marketplace. Of more prominent interest to most supervisors is the improvement of a methodology went for setting up a productive and manageable position against these five powers (Kamhawi, 2012). Dynamic abilities 'help firms reconfigure existing practical capacities so they can fabricate items that better match rising client needs and exploit innovative leaps forward. Coordination and reconciliation of authoritative capacities are the hierarchical schedules and work rehearses that, in blend with certain socio-subjective auxiliary properties (for instance favored communication and sense-production approach), give the hierarchical 'paste' that backings the essential hidden action required for dynamic ability arrangement and development.

As indicated by Kamhawi (2012), watchman's model has been utilized to create techniques for organizations to build their focused edge and it likewise exhibits how IT can improve the aggressiveness of companies. It appears that two sorts of upper hand bring down cost and separation, are fundamentally unrelated. As indicated by Porter (2001), instructive assets in the 21st aggressive time are critical and inescapable too in light of the fact that they enable firms to perform exercises that make focal points specifically showcases. The aggressive estimation of assets can be improved or dispensed with by changes in innovation, contender conduct, or purchaser needs which an internal concentrate on assets will neglect. As indicated by Porter 1990), advancement is another method for doing things that is marketed. The new information (Paquette & Desouza, 2011) can be mechanical or showcase related. Mechanical information alludes to parts, procedures, and linkages that add to a yield. Market learning

eludes to the skill of the particular market flow, for example, appropriation channels and client desires.

## **RESEARCH METHODOLOGY**

### **Research design**

The study utilized a descriptive research design which was essential in making the right approach both in data collection analysis. The method was suitable for the study as it allows the researcher to gather accurate data and make the right analysis. Cooper and Schindler (2003) argues that the basics of research design as an activity and time-based plan; The design was utilized to evaluate the managerial capabilities on competitive advantage of descriptive design is used to collect information about people's attitudes, opinions or habits.

### **Population**

According to Mugenda and Mugenda (2003), target population is the members of a real or hypothetical set of people, events or objects the researcher wishes to generalize the results of the research. The study targeted a population of 167 comprising of top level management, middle level management and the subordinates of NMC.

### **Sampling Technique**

Stratified random sampling was used to select respondents to which questionnaires were administered. It was preferred for this study because the population was heterogeneous. Mugenda and Mugenda (2003) observes that 30% of the target population was a good representation thus out of the 167 employees targeted 50 respondents were considered to provide a general view on the study.

### **Data Collection Instrument**

Primary data was obtained using self-administered questionnaires. The questionnaire was made up of both open ended and closed ended questions. The open-ended questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in illuminating of any information and the closed ended questions allowed respondent to respond from limited options that had been stated. According to Saunders (2011), the open ended or unstructured questions allow profound response from the respondents while the closed or structured questions are generally easier to evaluate. The questionnaires were used in an effort to conserve time and money as well as to facilitate an easier analysis as they were in immediate usable form. The surveys were utilized as a part of a push to save time and cash and in addition to encourage a simpler investigation as they are in quick usable shape.

### **Data Collection Procedure**

The researcher obtained an introduction letter from the university which was presented to each respondent so as to be allowed to collect the necessary data from the respondents. The

drop and pick method were preferred for questionnaire administration so as to give respondents enough time to give well responses. Researcher developed rapport, convincing respondents to provide relevant data and seeking clarifications whenever necessary. Researcher booked an appointment with respondents two days before administering questionnaires. The researcher personally administered the research questionnaire to the respondents. This enabled the researcher to establish rapport and explained the purpose of the study and the meaning of items that were not clear as observed by Best and Khan (1987).

### **Data Analysis**

Data was analyzed using Statistical Package for Social Sciences (SPSS Version 21.0). Every one of the surveys that was gotten was referenced and things in the poll were coded to encourage information passage. After information cleaning which involved checking for blunders in passage, spellbinding insights, for example, frequencies, rates, mean score and standard deviation were evaluated for all the quantitative factors and data to be displayed illuminate of tables and charts. Illustrative insights were utilized in light of the fact that they empower the scientist to genuinely depict conveyance of scores or estimations utilizing few files (Mugenda & Mugenda, 2003). The subjective information from the open finished inquiries was examined utilizing applied substance investigation. In view of Saunders et al (2010) proposal on the investigation of subjective information, gathered information was composed, dealt with, coded and specifically broke down, hunting down importance, deciphering and reaching of inferences on the premise of ideas. Inferential information investigation was finished utilizing relapse examination (numerous relapse examinations). The investigation utilized different relapses examination to break down the gathered information to quantify the impact of administrative capacities on upper hand of assembling ventures in Kenya. Numerous relapse endeavors to decide if a gathering of factors together anticipate a given ward variable (Babbie, 2010). Since there were four independent variables in this study the multiple regression models generally assumed the following equation;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where: Y= competitive advantage;  $\beta_0$ =constant;  $\beta_1, \beta_2, \beta_3, \beta_4$  and  $\beta_5$  = Beta coefficients;  $X_1$ = Knowledge management;  $X_2$ = Organizational transformation;  $X_3$ = Coordination of managerial processes;  $X_4$ = Discontinuous innovation;  $\epsilon$  = Error term

## **RESEARCH FINDINGS**

### **Reliability Analysis**

In this study, construct reliability was determined using Cronbach alpha coefficients that test internal consistency of items on a scale and were thus considered reliable if the as the results showed that the Cronbach Alpha associated with the variables of the study were above 0.70 threshold as recommended by Saunders et al (2010) where it is asserted that Cronbach Alpha's should be in excess of 0.70 for the measurement intervals. The results of the reliability analysis are presented in the Table 1 below.

**Table 1: Reliability of Measurement Scales**

	<b>Cronbach's Alpha</b>	<b>Decision</b>
Knowledge management	.818	Reliable
Organizational transformation	.772	Reliable
Coordination of managerial processes	.802	Reliable
Discontinuous innovation	.862	Reliable

From the table it was found that discontinuous innovation (Cronbach's Alpha =.862) was the most reliable followed by knowledge management (Cronbach's Alpha= .818) then coordination of managerial processes (Cronbach's Alpha =.802) while the organizational transformation (Cronbach's Alpha = .772) was the least.

**Validity Analysis**

Exploratory factor analysis was used to establish the construct validity of the questionnaire. The factors that explain the highest proportion of variance the variables share are expected to represent the underlying constructs.

**Table 2: Component Matrix**

	<b>Component</b>			
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Internal capacities of our firm increases market prominence	0.345	0.323	<b>0.709</b>	0.149
Strategic and personal competences boosts brand recognition	0.011	<b>0.621</b>	0.012	0.213
Points to attract customers promotes customer loyalty	0.483	0.062	<b>0.624</b>	0.27
New performance measures enhances sustained profitability	0.283	0.121	<b>0.574</b>	0.168
Revised compensation and training strengthens customer loyalty	<b>0.848</b>	0.079	0.05	0.095
Continuous improvement determines brand recognition	0.054	0.348	0.27	<b>0.636</b>
New markets innovation in our firm enhances market prominence	0.044	0.403	0.196	<b>0.709</b>
Processes innovation has promoted sustained profitability	0.146	<b>0.586</b>	0.07	0.346
New products innovation maintained customer loyalty	0.308	0.397	0.013	0.299
Technological innovation has enhanced valuable resources	<b>0.955</b>	0.033	0.052	0.087
Coordination in planning stage has promoted our customer reputation	<b>0.761</b>	0.053	0.117	0.133
Direct Contact between managers and their subordinates has established a strong brand recognition	<b>0.897</b>	0.127	0.203	0.03
Interdepartmental consideration before communication channels has promoted sustained profitability	0.156	0.058	0.113	<b>0.409</b>
Market prominence of the firm has greatly expanded	<b>0.616</b>	0.113	0.019	0.272
Our Brand is nationally recognized	0.046	<b>0.694</b>	0.054	0.271
Customer loyalty/ Reputation has greatly increased	0.176	0.075	<b>0.690</b>	0.271
Our organization's profitability has been sustainable	<b>0.706</b>	0.055	0.126	0.271
The level of Valuable Resources has increased	0.136	0.036	0.161	<b>0.871</b>

The above results allowed for the identification of which variables fall under each of the 4 major extracted factors. Each of the 18 parameters were looked at and placed to one of the 4 factors depending on the percentage of variability it explained the total variability of each

factor. From the factor analysis, all the variables indicators high construct validity since all exceeded the prescribed threshold of 0.40 (Babbie, 2010).

**Regression Analysis**

The ANOVA tests whether the model is fit for data. From the ANOVA table, the independent variables were statistically significant predicting the dependent variable since adjusted R square was 0.695 implying that knowledge management, organizational transformation, coordination of managerial processes and discontinuous innovation explains 69.5% variation in Competitive advantage.

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.851	0.725	0.695	1.423

These findings conform to Wanyanga (2009) who undertook a research on the utilization of organization’s capabilities as an operation strategy in the hotel industry in Kenya. Tremblay and Balkin (2012) also agrees with the findings by indicating that learning administration is about how an organization needs its clients to see its item or administration in connection to their impression of their rivals and what showcasing systems they should embrace to achieve this perceptual objective. In any case, an organization can emphatically impact these discernments by creating and actualizing purposeful market situating methodologies.

**Table 4: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	213.121	4	53.280	24.332	0.000
	Residual	81.019	37	2.190		
	Total	294.14	41			

The probability value of 0.000 indicates that the regression relationship was significant in determining how knowledge management, organizational transformation, and coordination of managerial processes and discontinuous innovation influence competitive advantage. The F calculated at 5 percent level of significance was 24.332. Since F calculated is greater than the F critical (value = 2.6060), this shows that the overall model was significant.

**Table 5: Coefficients of Determination**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.235	0.172		7.180	0.000
Knowledge management	0.764	0.216	0.574	3.537	0.001
Organizational transformation	0.787	0.192	0.541	4.099	0.000
Coordination of managerial processes	0.574	0.208	0.552	2.760	0.008
Discontinuous innovation	0.733	0.312	0.582	2.349	0.024

The established model for the study was:

$$Y = 1.235 + 0.764X_1 + 0.787X_2 + 0.574X_3 + 0.733X_4 + \epsilon$$

Where: Y= Competitive advantage;  $\beta_0$ =constant;  $X_1$ = Knowledge management;  $X_2$ = Organizational transformation;  $X_3$ = Coordination of managerial processes;  $X_4$ = Discontinuous innovation

The regression equation above has established that taking (knowledge management, organizational transformation, coordination of managerial processes and discontinuous innovation), Competitive advantage will be 1.235. The findings presented also show that taking all other independent variables at zero, a unit increase in the knowledge management would lead to a 0.764 increase in the score of competitive advantage. Thus, variable was significant since  $.001 < 0.05$ . This concurs to Robbins (2010) argue that a knowledge position will happen whether or not you are proactive, reactive or passive about the on-going process of developing and sustaining a market position. However, a company can positively influence these perceptions by developing and implementing deliberate market positioning strategies.

Further it was found that a unit increase in the scores of organizational transformations would lead to a 0.787 increase in the score of Competitive advantage. Thus, variable was significant since  $.000 < 0.05$ . This is in line with Rugut (2012) who also investigated the Marketing strategies adopted by small and medium enterprises in Nairobi central business district and established that SMEs use the marketing mix strategies which comprise of the product.

Further, the findings show that a unit increases in the scores of coordination of managerial processes would lead to a 0.574 increase in the score of competitive advantage. Thus, variable was significant since  $.008 < 0.05$ . This concurs with Rindova and Kotha (2001) who argue that firms undergo comprehensive, continuous changes in products, services, resources, capabilities and modes of organizing.

The study also found that a unit increases in the score of discontinuous innovation would lead to a 0.733 increase in the score of Competitive advantage. Thus, variable was significant since  $.024 < 0.05$ . This is in line with Zahra et al. (2013) who explain that in volatile environments such as in high-technology industries firms need to repeatedly reconfigure their set of valuable resources and as a corollary they need to be able to have the capacity to modify their current managerial capabilities.

## **DISCUSSION OF THE FINDINGS**

### **Knowledge Management**

The study sought to determine the effect of knowledge management on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi. The study showed that knowledge management affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly. This was in line with Robbins (2010) argue that a knowledge position happens whether or not you are proactive, reactive or passive about the

on-going process of developing and sustaining a market position. However, a company can positively influence these perceptions by developing and implementing deliberate market positioning strategies.

The study revealed that points to attract customers promote customer loyalty and strategic and personal competences boost brand recognition. The study also found that internal capacities of our firm increases market prominence. This correlate with Rugut (2012) who also investigated the Marketing strategies adopted by small and medium enterprises in Nairobi central business district and established that SMEs use the marketing mix strategies which comprise of the product. Also, Tremblay and Balkin (2012) agrees with the findings by indicating that learning administration is about how an organization needs its clients to see its item or administration in connection to their impression of their rivals and what showcasing systems they should embrace to achieve this perceptual objective. In any case, an organization can emphatically impact these discernments by creating and actualizing purposeful market situating methodologies

### **Organizational Transformation**

The study also sought to assess the effect of organizational transformation on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi. The study found that organizational transformation affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly. These findings are in line with Gibson and Brikshaw (2004) who noted that adaptive capability refers to the management ability to encourage people to challenge outmoded traditions, practices and sacred cows, which allow the firm to respond quickly to changes in the market and evolve rapidly in response to shifts in its business priorities.

The study revealed that new performance measures enhance sustained profitability and revised compensation and training strengthens customer loyalty. The study further revealed that continuous improvement determines brand recognition. This is in line with Flint (2005) who suggested that transforming the organization refers to any significant change made to an organization such as, restructuring an organization or reengineering an organization and/or there is a significant change in the way business is done.

### **Coordination of Managerial Processes**

The study further sought to evaluate the effect coordination of managerial processes on competitive advantage in the Numerical Machining Complex Company Ltd Nairobi. The study indicated that coordination of managerial processes affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly. This is in line with Danneels (2012) who argue that the presence of these regenerative managerial capabilities can be inferred, as it may help explain why some firms find success in the face of environmental turbulence, whilst their competitors.

The study findings illustrated that processes innovation has promoted sustained profitability and new markets innovation in our firm enhances market prominence. The findings also

indicated that technological innovation has enhanced valuable resources while new products innovation rarely maintains customer loyalty. This concurs with Leonard-Barton (2011) who argues that firm failure could be attributed to managers using the extant set of managerial capabilities, when these are not appropriate for the new environment.

### **Discontinuous Innovation**

The study also sought to assess how discontinuous innovation affects competitive advantage of the manufacturing firms in Kenya. The study clearly revealed that discontinuous innovation affects the competitive advantage in the Numerical Machining Complex Company Ltd Nairobi to a moderate extent. This concurs to Robbins (2010) who noted that coordination was successful only in the presence of an effective communication and that good communication must be present between all departments, within employees themselves and even between managers and their subordinates.

From the findings, it was revealed that direct contact between managers and their subordinates has established a strong brand recognition and interdepartmental consideration before communication channels has promoted sustained profitability. The findings also showed that coordination in planning stage has fairly promoted our customer reputation. This concurs with Zahra et al. (2013) who explain that in volatile environments such as in high-technology industries firms need to repeatedly reconfigure their set of valuable resources and as a corollary they need to be able to have the capacity to modify their current managerial capabilities.

### **CONCLUSIONS**

The study concluded that knowledge management for affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly. The study deduced that knowledge management affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly and that internal capacities of our firm increases market prominence.

The study also concluded that organizational transformation affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi positively. The study showed that new performance measures enhance sustained profitability and revised compensation and training strengthens customer loyalty. The study further revealed that continuous improvement determines brand recognition.

The study further concluded that coordination of managerial processes affects competitive advantage in the Numerical Machining Complex Company Ltd Nairobi greatly. The study findings illustrated that processes innovation has promoted sustained profitability and new markets innovation in our firm enhances market prominence. The new products innovation-maintained customer loyalty.

The study also finally concluded that discontinuous innovation affects competitive advantage of the manufacturing firms in Kenya greatly. It was revealed that direct Contact between

managers and their subordinates has established a strong brand recognition and interdepartmental consideration before communication channels has promoted sustained profitability. The findings also showed that coordination in planning stage has promoted our customer reputation.

## **RECOMMENDATIONS**

The study recommends that management in firms in Kenya should engage with emerging markets more closely. This can be done through planning and determining the cost advantages as well as the operational costs in order to keep itself competitive. The study recommends that international business participant should have an understanding of economics, finance, marketing and strategy, a social understanding of culture and managing across culture. The Orbit Products Africa Limited should plan and launch next generation line extensions with precision and advice from physicians and patients. The study recommends that the patent protection should have lapsed and the corporation set up a defined strategy.

The study recommends that management practices needs continuous and sustained supervision, improvement and adequate funding in view of it importance's. Thus, organizations should have a well-conceived strategic vision that must be communicated to all employees. It is imperative to emphasize that all employees should be carried along in implementation and implantation of strategic management process that will prepare the company for the future, establish long-term direction and indicate the company's intent to position itself as a market leader in the industry.

The study also recommends that organizations should endeavor to improve their employees' skills and competences through training and good working environment to help keep the employees who are experienced and attract other competent ones and therefore help companies to achieve sustainable competitive advantage.

Similarly, based on the findings of this study, manufacturing firm's managers should utilize much of differentiation strategy as it has been proven to have the highest significant effect on manufacturing firm competitive advantage. Differentiating firms also need to further look deeper into how to make uniqueness less costly in order to make differentiation a significant practice in the sector.

Finally, it is important that the managers of the manufacturing firms in Kenya continuously assess their competitive strategies in terms of appropriateness albeit changing environment. They should be aware that achieving strategic fit between competitive strategy and competitive intensity may lead to higher performance. Therefore, their strategy should match environment for superior performance. A focus on more ways of dealing with the other challenges faced is also imperative for a maximum profitability of the firms other than just use of competitive strategies.

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