

Analyzing the Impact of Competitive Advantage on Achieving the Target Production on Time: A Socio-economic analysis for the Home Ovens Factory, Ajdabiya – Libya

By

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Abstract

The aim of this study is to find out the impact of competitive advantage on achieving the target production on time in the home ovens factory, Ajdabiya, Libya. Quantitative research is carried out in cases where it is important for a researcher to have statistical conclusions to gather actionable data for the study. This study has found that the hypothesis of the current study was supported. It showed that there is a positive and significant relationship between competitive advantage and organizational performance of the home ovens factory in Libya. The disbursement of incentives must actually be linked to the level of performance so that a distinction is made between employees according to their level of performance, which encourages all employees, regardless of their job title, to make every effort to improve the production to be delivered on time, and thus providing incentives is linked to improving performance as well.

Keywords: Competitive Advantage, Production on Time, Organizational Performance, Home Ovens Factory, and Libya.

I. Introduction

The competitive advantage of a business is not comprehensive. The competitive advantage is given in the various activities that the business develops, so we have; Competitive advantage in production management, marketing, human resources, and business operations (Dutta and Reddy, 2021).

Competitive advantage creates differentiation, and it can be established; In serving customers with a unique treatment, in the product with unparalleled flavor, highly motivating work culture for people. Differential aspects created as a product of management through the processes implemented in companies. Competitive advantage makes a business unique, special, extraordinary, unprecedented or amazing, whether in products, customer services, human resources.

There are several forms of competitive advantage in business: Three types of

competitive advantage. Management by operations allows the two forms of competitive advantage: a) to be the best, i.e., Superior performance, lower costs, efficiency, effectiveness, increased customer satisfaction. b) They are different, in the sense that the organization becomes exclusive, due to the differentiation of operations and managerial style as a product of management through operations.

1.1 Differentiation management

Differentiation is the key to setting yourself apart from your competition, as stated in *Differentiate or Die*. The author of *Difference or Die* argues: In the 1990s, companies focused on quality management. All actions of companies are aimed at improving quality: better games, better customer service, etc. Nowadays, quality is no longer a distinct element in competition in the market (Shagluf et al., 2018). Later the theory of customer satisfaction emerged, companies aim at loyalty; The customer comes first, the customer is the reason companies exist, then this approach also ceases to be a distinguishing element in the markets. Then the concept of market leadership appears, which is a potential tool for brand differentiation. If the brand is built on market leadership, consumers give priority to the leading brand.

Differentiation is the key to competitive advantage in the market, and elements of differentiation must be sought; In products, services, distribution, business communication, business management (Wang et al., 2017).

Customer satisfaction is an attitude, it is the evaluation that customers make after purchasing a product, service experience and a series of interactions between customers and companies. The benefits of customer satisfaction over service quality include a number of business outcomes in customer service management: Customer satisfaction is the priority and business-related goals. The survival of businesses largely depends on the loyalty and loyalty of customers. In the past, focus on customer satisfaction was dominant, i.e., meeting customer expectations in terms of product quality (Chaabane et al., 2021). Then comes the complete customer satisfaction approach which means product quality as well as service quality, and loyalty of customers are more knowledgeable, their demand level is higher than before, competition is intense, changes and innovation in products and services and business management is steady and fast, high technology accelerates change and provides unstable competitive markets.

Product quality is the set of features and characteristics that determine the ability of a product to meet the requirements of a specification of a standard or a customer. It is often defined as the ability to meet customer needs and expectations. It is also sometimes defined as meeting specifications at the lowest possible cost as well as delivering the value that the customer derives from the product (Rocha and Rodrigues, 2017).

It is important for an organization that high quality products are delivered to customers because they are the most important driving factors for organizational success. After all, increased sales make the basis for organizational performance not only to remain consistent but also to make it stronger and more stable. However, in the enterprise, employees make mistakes and break down machines and equipment (Munir et al., 2020). The goal of product quality management is to reduce this so that the customer remains happy with the product's performance and reorders the products. For this purpose, the organization should place heavy emphasis on the quality of the product. Improving product quality saves cost for the organization because it doesn't need to do things to cover up old errors (Assis et al., 2022). Quality improvement also increases employee engagement because they want to be on a high

performing team.

The aim of this study is to find out the impact of competitive advantage on the target production on time in the home ovens factory, Ajdabiya, Libya.

II. Literature Review

2.1 Competitive Strategy

Competitive strategy focuses on the organizational level rather than the company level. A widely accepted definition was made by Porter (1996) in his article *What is Strategy? Where* he defines: "Strategy consists of creating a unique and exclusive position of value" (p. 68), and proposes five essential elements:

1. Operational effectiveness is not strategic.
2. The strategy is based on unique activities.
3. A sustainable strategic position requires resignations.
4. Competitive advantage and sustainability must be modified simultaneously.
5. Rediscovering the strategy is a continuous activity to maintain focus.

For these five elements, according to Porter (1996), operational effectiveness is necessary, but not sufficient by itself; This means developing the same activities as the competition, in a better way. However, it is limited by the productivity barrier, which is a case of known best practice, which results in zero-sum competition, fixed or decreasing prices, and cost control that reduces R&D investment. In contrast, strategic positioning means developing different activities, or developing the same activities but in different ways, and achieving non-imitable states. Unique and valuable activities allow companies to be different. It is the core of strategy, and its search should be the priority at the managerial top of any organization. These activities must be consistent with the needs of the selected customer segment, easily accessible and easily reconfigured, expressed and validated by the customer (Assis et al., 2022).

It is just as important to list the activities the organization chooses as to list the resignations. This completes the structure of the model that allows for sustainable advantage, realizes opportunity costs and avoids unnecessary efforts to waste resources only in the end to show that they are at the same starting point. Strategy requires activities to be combined, and requires a view as a system, where each is modified and reinforced with the others. This adjustment must be maintained above any single activity, including focusing efforts on core competencies, critical resources, and success factors, among others (Jiang et al., 2021). There are three types of mods: simple consistency, reinforcement activities, and effort improvement. These adjustments must be long-term, to ensure that frequent alignments are not made that cause significant costs and disengagement with the organization's vision. Strategy must be constantly reinvented. It is common for managers to get lost in the race for operational effectiveness with their competitors, because it is tangible and allows for the measurement of progress on improvements (Shamayleh et al., 2020); Likewise, they confuse customer focus and serving only their needs with responding to all the requirements of their channels, in a kind of herd behaviour. On the other hand, growth should be consistent with competitive advantage.

Other initiatives can be dealt with separately, in order not to reduce the strategic situation, although it would always be better to deepen this. All of these elements can be consolidated, according to Porter (1996), given: The strategic agenda is the place to define a unique position, clarify resignations, and tighten adjustment. Something relevant to Porter's (1996) article is that in one example of its context he used Southwest Airlines, which pioneered in 1971 the low-cost airline

business model, which was later adopted by Ryan Airlines. Air in 1985 which was transferred in 2009 to the Colombian airline Viva Air, which they own. On the other hand, Shahin et al. (2018) established as the objective of competitive strategy to develop patterns of goals and objectives that guide the organization to understand the activity in which it is engaged and in which activity it wants to be, the basic theory of other concepts that are enriched more by the variables and trends of management in the following decades (Rukijkanpanich and Mingmongkol, 2020). It is these concepts that allow an approach to the methods that organizations use to determine the competitive strategy of each of their business units, the full implementation of actions that embody goals and imbue in all employees a culture that provides dynamism, sustainability and added value.

2.2 Five Key Elements of Strategy

As Oliveira and Lopes (2020) define: Strategy consists of an integrated set of options (p. 52), which includes acknowledgment of resignations and suggests that strategy is based on five elements that make up the diamond, among which focus heavily not only on their individual concept, but also on their integration And their mutual reinforcement, without which it would not make sense These researchers showed that there is not always a strategy in companies, but parts of it are designed by taking one or two elements out of five of the proposed structure, and get negative results. This situation has recently been exacerbated by specialization in some fields and academic trends that do not involve the entire organization. The idea is to add value, not isolate it in the service of a few processes, which, although it creates a slight consistency, does not contribute to the strengthening of efforts within the organization and reducing its competitiveness. Without a complete strategy, divergent and fragmented actions are obtained, guided by the closed interpretation of each middle management, which ends with weak and disjointed actions (Dellagi and Darghouth, 2021).

Another frequent mistake is that companies adopt descriptive phrases for corporate strategy or other references, presenting these ideas that do not fit the built strategy and are not articulated with the proposed goals and mission, which generate chaos and visualization narrows and disintegrates the organization. Pancholi et al. (2021) reveal the place of strategy within a company, as it is directed by mission and objectives; The supporting structures, such as the organizational chart and the operations of the organization, follow them; It contributes to the analysis of the environment in terms of methodologies, design, etc. All of these strategic elements must reinforce and maintain and are critical choices.

2.3 Competitive Advantage and Organizational Performance

In Xiao et al. (2019) study, the phrases competitive advantage and organizational repercussions are used interchangeably. However, there appears to be a complicated link. There is a strong link between these two factors, according to research. This work was also funded by (Bahria et al., 2021).

According to Hafidi et al. (2021), the organizational advantage from a resource-based perspective is as important as it can be. It is utilized as a conceptual framework for businesses to improve their differential advantage position. Competencies help firms improve their performance by allowing them to apply and manipulate recognized internal resources. Using an experimental method and a Resource-Based View, they contributed to the corpus of knowledge. These attributes can help the company achieve greater success.

Au-Yong et al. (2019) proposed the notion of a persistent differential edge based on historical data to explain why leading businesses consistently outperform their peers in terms of quality. They mostly target firms such as GM, DuPont, Standard Oil, and IBM.

Porter's (1980) significant work in the early 1980s established the idea of sustainable competency as the primary explanation for prolonged outstanding performance. Monopoly is achieved when a company captures a dominant market position in a highly competitive industry (Rødseth and Schjøberg, 2017).

T.C Powell, in 2003, looked at three industries that had the most dominance. Pharmaceuticals, brewing, and computing were among them. These are some of the industries that have been utilized to support competitive lead hypotheses. He suggested that performance speculation may be readily influenced by including false and incorrect models of how the performance would be distributed in a fair competitive process.

Chua et al. (2018) suggested that achieving a sustainable position is difficult. It can lead to a better presentation, which is generally measured in conservative measures like market share and fertility. It's also known as the financial performance measurement method. To put it another way, if we take this perspective rigorously, competitive circumference and performance are two completely different concepts and proportions. Firms must emphasize their management tactics in order to achieve and sustain a bloodthirsty advantage over their competitors. As a result, a strong leadership position will lead to improved company performance.

According to research, there is a strong correlation between distinctive advantage and an organization's sales appraisal. There have been several types of research that have found a link between distinctive advantage and organizational success. Ebekozien et al. (2022) used efficient organizational internal procedures to gauge organizational excellence.

Different resources and capacities, according to Hemmati et al. (2018), have an impact on export company enterprise. Different possibilities and positioning improvements in the export market affect the performance of export ventures. The findings show that critical resources and competencies are related to one another and are directly linked to the competitive strategy decisions made by the export endeavor. It has also been established that there is a considerable link between product quality and organizational success. Companies that have a higher product-based margin than their competitors have been found to perform better.

Product competency was assessed by Kimera and Nangolo (2020) in terms of greater product quality, packaging, design, and style. Similarly, research has shown that there is a strong link between service-based advantages and organizational outcomes. In comparison to their competitors, businesses benefited from services as a competitive advantage. More product flexibility, convenience, delivery speed, consistency, and technical assistance, for example, have all been shown to improve performance.

Abdelhadi (2018) addressed that there was a correlation between distinctive advantage and organizational sales success. He evaluated sales growth by looking at revenue, profitability, return on investment, yield, product added value, and market share.

Tsarouhas (2022) suggested that the institution of high-level performance includes a distinct advantage. Moderating factors such as company size and age will accentuate this association. These factors' moderating effects give valuable information regarding strategic management in achieving a competitive advantage and improving performance. The age of the business is a crucial mediator in Ismail's theoretical and empirical analyses. We may explain Ismail's results by the simple fact that experience comes with age, and businesses that have

been around for a long time and have a lot of experience are better able to enhance their overall performance.

III. Methodology

The current study used a quantitative research approach to collect data from the participants (the sample). This research employed a survey questionnaire, which was distributed to the research sample. The selected sample consists of 205 employees in the home ovens factory in the city of Ajdabiya. This research has used one popular statistical software to analyze the collected data, namely, SPSS. One of the most important uses of the SPSS in the study is to test the direct impact of competitive advantage on improving organizational performance.

IV. Findings

There were several tests conducted in this study. The first test was the response rate. As this study aims to explore the role of (competitive advantage) on organizational performance of the home ovens factory in Libya, the targeted sample is 210 respondents. As shown in Table 1, the distributed questionnaires were 210, while the returned ones were 205. Only 5 questionnaires were not returned, which leaves the research with 205 returned and usable questionnaires. The overall returned and usable questionnaires present 97.6%, which is a good and valid response rate to be used for further analysis.

Table 1: *Response rate*

Response Rate	
Questionnaires Distributed	210
Returned	205
Unusable Questionnaires	0
Returned and Usable	205
Not Returned	5
Response Rate	97.6 %
Usable Response Rate	97.6 %

Missing values in statistics arise when no data value for a variable in an observation is stored. Missing data is ubiquitous, and it can have a big impact on the inferences that can be taken from the data. Nonresponse can result in missing data: no information is supplied for one or more components, or for the entire unit (subject).

A. Little and Rubin (2014) accept a missing value within 15% to 25% and considered it common. According to the following table 2, the variable competitive advantage had 2 missing values, while organizational performance variable had 1 missing value. To sum it up, the total missing values were 3, which is considered by A. Little and Rubin (2014) as an acceptable result.

Table 2: *Missing values test*

Variable	Number of Missing Values
Competitive Advantage	2
Organizational Performance	1
Total	3

An outlier is a single observation that appears to diverge significantly from the rest of the sample. An outlier might be a sign of skewed data. In some circumstances, determining

whether an outlying point is faulty data may be impossible. Outliers might be the result of chance, or they could signify something scientifically significant.

The following table 3 shows the results of the assessment of outliers in the study. According to Brannen (2017) the mean and standard deviations shown valid data with extreme values.

Table 3: Examining Existence of Significant Outliers

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	1.378	4.915	3.778	0.609
Std. Predicted Value	(3.942)	1.867	0.000	1.000
Standard Error of Predicted Value	0.032	0.137	0.067	0.021
Adjusted Predicted Value	1.410	4.943	3.780	0.609
Residual	(0.642)	2.702	(0.000)	0.321
Std. Residual	(1.959)	8.245	(0.000)	0.981
Stud. Residual	(2.002)	8.312	(0.002)	0.997
Deleted Residual	(0.671)	2.747	(0.001)	0.332
Stud. Deleted Residual	(2.027)	12.320	0.028	1.275
Mahal. Distance	0.242	21.984	4.962	3.980

The variation explained by the variable on that particular factor is shown by factor loading. As a rule of thumb in the SEM technique, factor loading of 0.6 or above indicates that the factor removes enough variation from the variable (Hair Jr et al., 2021).

Based on table 4, the variable competitive advantage had 3 items and the factor loading for these items were ranged between 0.613 and 0.804. The variable organizational performance had 4 items and the factor loading for these items were ranged between 0.697 and 0.819.

Table 4: Factor Loading

	CA	PS
CA1	0.736	
CA2	0.613	
CA3	0.804	
OP1		0.774
OP2		0.819
OP3		0.697
OP4		0.750

Where CA; competitive Advantage, OP; Organizational Performance

Descriptive statistics are used to characterize the fundamental characteristics of a study's data. They give quick summaries of the sample and the metrics. They are the foundation of practically every quantitative data analysis, along with simple graphical analysis.

According to the following table 5, the minimum measurement scale was 1, while the maximum measurement scale was 5. The mean scores for the variables (competitive advantage and organizational performance) = 3.145 and 3.990 respectively. These results confirm that the majority of respondents were in average agreement with the items stated in the questionnaire. Also, these results also confirm the essential role of competitive advantage on organizational performance. Furthermore, the standard deviations for the variable were 0.532 and 0.563 respectively.

Table 5: Descriptive statistics

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
Competitive Advantage	205	1.00	5.00	3.145	0.532
Organizational Performance	205	1.00	5.00	3.990	0.563

Finally, the direct effect test was employed for the purpose of examining the type of relationships between competitive advantage and organizational performance of the home ovens factory in Libya. The following conclusion was drawn based on the results on the following table 6:

There is a positive and significant relationship between competitive advantage and organizational performance of the home ovens factory in Libya with $r = 0.034$, $t\text{-value} = 2.484$, and a significant level of 0.013.

Table 6: Direct effect

Relationship	Std Beta	Std Error	t-value	p-value	Decision
CA -> OP	0.034	0.014	2.484	0.013	Supported

Where CA; competitive Advantage, OP; Organizational Performance

V. Discussion

This study has found a positive and significant relationship between competitive advantage and organizational performance of the home ovens factory in Libya. Thus, this study can accept the proposed hypothesis. This result is in line with what was suggested in other studies, according to Rukijkanpanich and Mingmongkol (2020) there are three major business strategies used by Thai vehicle manufacturers. They discovered that they had a positive impact on the financial and marketing performance of the company. They discovered that the top worry was cost focus, the second priority was cost leadership, and the third concern was incorporated cost difference. They came to the conclusion that these variances had a positive impact on the organization's success.

In their research, Oliveira and Lopes (2020) found that corporate heterogeneity has a significant role in generating differences in research productivity. Two of their architectural abilities processes are noteworthy, and they all produce the expected effects. It implies that the capacity to combine information across and inside the firm's borders is a key component of diversified competence.

According to Ahmad and Kamaruddin (2017), middle management harmony on competencies is linked to improved performance. The findings suggested that if businesses are serious about successfully overseeing skills, managers should maintain a discourse about their institution's competencies. Managers may verify their businesses' capabilities and approve competencies via an ongoing debate about competencies. Methods for determining middle managers' perceptions of organizational skills should be implemented. Surveys may be used in these procedures to allow middle managers to express their opinions on important competencies. Managers may also utilize information technology and the internet to create simple online communities of middle managers from throughout the firm. These methods may aid in anticipating the capabilities that the company will need to acquire in order to succeed in the future, as well as in establishing trust. Decision-makers who use the competence judgment technique are more likely to notice significant drift or changes early on. They categorized and examined major distinguishing characteristics of competencies, as well as the relationship between middle managers' perceptions of skills and business performance. Middle managers

in two industries, textile manufacturing, and hospitals, were researched by (Kammoun et al., 2020), and they discovered a link between competence qualities and business success. They also described a way that every company's management may apply to boost its competitive edge.

VI. Conclusion

It was noticed that scientific means were not used in organizing and programming the maintenance process in preparing work orders and preventive and curative maintenance cards in the home ovens factory. There is also the organization's lack of interest in using modern technology means (computer), for example, in programming maintenance work, which contributes to shortening the time and effort expended in business and providing a competitive advantage. Also, the factory does not rely on indicators to measure the quality of performance of maintenance operations and the availability of production machines for operation and production.

Quantitative research is carried out in cases where it is important for a researcher to have statistical conclusions to gather actionable data for the study.

This study has found that the hypothesis of the current study was supported. It showed that there is a positive and significant relationship between competitive advantage and organizational performance of the home ovens factory in Libya.

The disbursement of incentives must actually be linked to the level of performance so that a distinction is made between employees according to their level of performance, which encourages all employees, regardless of their job title, to make every effort to improve the production to be delivered on time, and thus providing incentives is linked to improving performance as well.

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