



RESEARCH ARTICLE - MANAGEMENT

The Role of Lean Marketing in Achieving Sustainable Competitive Advantage: An Analytical Study at Al-Mosul Dairy Manufactory

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Article Info.	Abstract
<p><i>Article history:</i></p> <p>Received 05 January 2021</p> <p>Accepted 08 April 2021</p> <p>Publishing 30 June 2021</p>	<p>This paper aims to examine the relationship between Lean Marketing (LM) and implementing Sustainable Competitive Advantage (SCA). Based on discussing the different types of waste that a company can produce during the production process. This study targeted the Mosul Dairy Manufactory. In total (67%) valid completed questionnaires, out of (75) questionnaire forms distributed to the manufacturer's marketing departments and distribution outlets. This study is based on a number of conceptual and applied questions concerning the relationship of correlation and its influence between the variables of research. The questionnaire was used as the main tool for collecting data and information. Statistical quantitative methods like (SPSS) were adopted in analyzing the data collected by the questionnaire. The main outcomes indicated, the existence of a significant correlation between the two variables, as well as, the existence of a significant impact of lean marketing on the sustainable competitive advantage. The main significance suggests; the necessity to adopt the concept of lean marketing in the manufacturing facility to achieve sustainable competitive advantage.</p>

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1. Introduction

Currently, the majority of production and service organizations face many challenges of great market competition. An uncertain marketing environment, high market risks, results from continuous and unpredictable technological innovation challenges. Which requires anticipating these changes and preparing for them in order to survive, grow, and maintain the competitive advantage in the global market by addressing weaknesses and exploiting appropriate market opportunities.

Many of the previous studies refer to flexible marketing as an effective tool in reducing wastage rates in production and then contribute to increasing marketing efficiency, which lead to the organization achieving a competitive advantage. Despite this fact, the philosophical approach to lean marketing is based on striving to eliminate all sources of waste that do not add value to the marketing activity. The process of eliminating these sources of waste helps promote marketing efficiency.

Lean Marketing is one of the most important marketing tools used by the organization to capture a competitive advantage. In the same context. Bay (2004) stressed that lean marketing, is the marketing tool for business growth that eliminates waste by applying the idea of lean in marketing activities.

This paper had included four main sections: (1) research methodology, (2) the theoretical framework, (3) the analysis results and discussion, and finally, the significant conclusions that have been reached by this study and proposals that can contribute to strengthening and increasing awareness of the importance of applying lean marketing to achieve sustainable competitive advantage.

2. Research Methodology

The importance of this research amounts to reducing the cost and enhancing the quality, which leads to achieving sustainable competitive advantage in manufacturing as a result of applying lean marketing. The objectives of this study aim to identify whether the extent to which the manufacturer has adapted to the concept of LM and whether it is being used to achieve sustainable competitive advantage. Diagnosis of the role played by LM in the field manufactory. Identifying the type and nature of appropriate means to manage the Manufactory within the Iraqi environment. Qualitative methods and a questionnaire have been valid and reliable.

The research problem had identified the ability of applying lean marketing and the criteria of achieving it in the industrial sector. In addition to achieving a sustainable competitive advantage by using the least resources to achieve high efficiency in the factory. From the foregoing, the research problem addresses the following questions:

- Does the selected manufactory have any idea about the lean marketing that faces environmental variables and correct future paths?
- Is there a clear perception in the Manufactory concerned about the sustainable competitive advantage and the requirements to achieve it?
- Does the adoption of lean marketing contribute to achieving sustainable competitive advantage in manufactory?
- Is there a correlation between the search variables in the manufactory?
- Is there an impact between the search variables in the manufactory?

2.1. The Research Model and Hypotheses

The conceptual framework is used to determine the relationship between LM as an independent variable and SCAR as a dependent variable, as shown in Figure 1.

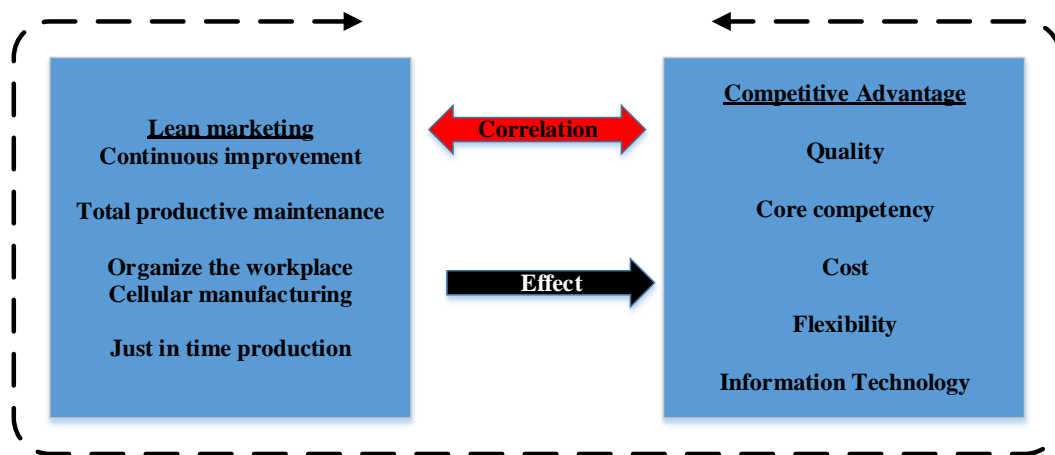


Fig. 1 The conceptual framework for the research hypothesizes

The Research Hypotheses were:

A. The first main hypothesis: There is a significant relationship between lean marketing and sustainable competitive advantage”, and it is derived from the following sub- hypothesis:

- There is a significant correlation relationship between continuous improvement and sustainable competitive advantage.
- There is a significant correlation relationship between overall productive maintenance and sustainable competitive advantage.
- There is a significant correlation relationship between workplace organization and sustainable competitive advantage.
- There is a significant correlation relationship between cellular manufacturing and sustainable competitive advantage.
- There is a significant correlation relationship between production time and sustainable competitive advantage.

B. The second main hypothesis: There is a significant impact relationship between lean marketing and sustainable competitive advantage”. The following sub- hypothesis are derived:

- There is a significant impact relationship between continuous improvement and sustainable competitive advantage.
- There is a significant impact relationship between overall productive maintenance and sustainable competitive advantage.
- There is a significant impact relationship between the organization of the worksite and the competitive advantage.
- There is a significant impact relationship between cellular manufacturing and sustainable competitive advantage.
- There is a significant impact relationship between production time and competitive advantage.

2.2. Simple Study

For investigating the research questions and hypothesis, the Mosul Dairy Manufactory was selected for the General Company for Dairy Products, one of the companies of the Ministry of Industry and Minerals, as a simple study for many reasons, such as being a large governmental industrial organization in Nineveh province, having a technical cadre in the field of its activity, and having marketing outlets for products in Nineveh governorate and a number of governorates Kirkuk, Salah al-Din and others. A preliminary definition of the respondents for some of the characteristics of the research sample (gender, age, certificate, and years of service, is shown in Table 1.

Table 1 Respondent characteristics of individuals in the Manufactory Research sample

Variable	Categories and nomenclature	The number	The ratio
Gender	Males	46	92 %
	Female	4	8 %
	Total	50	100%
Age	Less than 30 years	4	8 %
	30- less than 40	39	78 %
	40 - less than 50	7	14 %
	50 years and over	-	-
	Total	50	100%
Educational attainment	Preparatory and below	-	-
	Diploma	8	6%
	Ba	38	84%
	Postgraduate Research	4	10%
	Total	50	100%
Number of years of service	Less than 5 years	2	4%
	From 5 to 9 years	6	12%
	From 10 to 14 years	10	20%
	From 15 to 19 years	12	24%
	20 years and over	20	40%
	Total	50	100%

Source: preparation researcher

Table 1 above is demonstrations the following results:

- The percentage of males was higher than the percentage of females in the sample, as it reached (92%) compared to (8%).
- The age group (30-40 years) recorded the highest percentages (78%) compared to different percentages of the other groups. The research sample has age groups with experience and maturity.
- The percentage of those holding bachelor's degree was the highest percentage of the scholastic achievement variable, as it reached (84%) compared to different rates concerning the other grades. This indicates that the sample of the Research has different scientific qualifications, and the diploma from the classification, but the largest proportion registered for the bachelor's degree, which means that the majority are holders of a university degree primary compared to a very low proportion of the lower classes in education.
- In terms of the number of years of service, the numbers in Table (1) shows that most of the sample members of the sample are those who have a service (20 years and over), about 40%, followed by 15% - 19 years) and reached (24%) of the respondents in the sample.

It includes the main variables of research: Each of these variables includes a set of sub-variables shown in Table 2, which represents the structure of the questionnaire.

Table 2 Composition of the questionnaire

T	Key variables	Sub-variables	Number Paragraphs	Numbers Paragraphs	Measurement sources
1.	LM	Continuous improvement	4	1-4	Heizer & Render (2011)
		Total productive maintenance	4	5 - 8	Al-Samman, (2008)
		Organization of the work site	4	9-12	Kerper (2006)
		Cellular manufacturing	4	13-16	Alkhoraifa et.al., (2018)
		Timed output	4	17-20	Ferdousi & Ahmed (2010)
2.	Sustainable Competitive advantage development	The quality	5	1-5	Carneli et.al., (2006)
		Core competency	5	6-10	Hafeez & Ali (2007)
		Cost	4	11-14	Russel & Taylor (2011)
		Flexibility	4	15-18	Kak, & Sushil. (2002)
		Information technology	4	19-22	Anderson & Markides (2006)

Source: The researcher

The five-dimensional Likert scale was used in the measurement of the variables of the search variables in which the answer was divided from (5-1) degrees, where the maximum (5 degrees) is given to support (strongly agree) and gradually decreases until the lowest grade (1) (strongly disagree) to ensure objective results and avoid neutral responses that affect the accuracy of the results of the analysis. The Research questionnaire was tested according to its standards of reliability and reliability tests. Alpha (92%) was an appropriate value confirming the stability of the questionnaire and its suitability for measurement.

3. Literature Review

A previous study that discussed Lean Marketing, Sadeq & Daoud (2015) study had indicated that "Diagnosis of the reality of marketing and sales in the productive organizations" case Research at coca-cola company ltd –Erbil [12]. The objective of this research to diagnose the extent of the researched marketing and sales organization to identify and adopt lean in the field on how to reflect this concept in reality and research found a group of the results of which coca-cola company ltd. - Erbil approved the marketing and sales of the rational when marketing and selling its products and made a set of proposals, the most important necessity approval a company coca cola limited of marketing and sales lean in major deportation in its form that drives to improve the performance the catalog excludes the waste in a processes marketing.

Wu & Wang (2017) study had indicated that "Achieving market agility through organizational mindfulness towards it innovation and information processing capacities" [13]. This research focused on the development and improvement of relationships and their relation to the management of IT infrastructure. Despite the prevailing belief that the existing relationships with the regular organizational structure tend to improve communication between the processes of the organization and lead to better performance, this Research highlights a number of effects, including analysis of agility in the market for an interesting new way to consider the value of information for a company what. With the evolution of information technology on the Internet, this research explored the relationship between information technology and agility in the market from the point of view of information processing proactively. A theoretical model was then created to provide a comprehensive platform to test this relationship.

Roy (2007) study had indicated that 'The dawn of Lean marketing' [71] gave a unique definition of Lean Marketing, as it showed that it has two parts: (1) Eliminate waste and non-value-activity (NVA), (2) Have respect for people". The respect for people is further explained as "Respect means you hold people accountable to the system and clarified the term Lean marketing to mean a systematic continuous improvement process that will eliminate waste and inefficient processes, speed up production cycles and increase the professionalism of the people in every aspect of marketing.

On the other hand, previous studies that discussed sustainable competitive advantage were, Carneli et al. (2006) study had indicated that "product development service to achieve sustainable competitive advantage" [7] use of performance model, situation, and resources. The Research aimed at achieving competitive advantage through creativity and investment in developing the skills of the workers in the service product. The problem of the research was to achieve success in the organization through creativity and service and work on training and developing the individual skills of the employees. The Research sample consisted of 70 individuals. Creativity is more important than the process of creativity itself in achieving success. Creative organizations are those who go beyond the process of creativity towards the market and invest in the brand and accept risk to sustain the sources of competitive advantage, to reinvest their profits by training employees and developing their skills. The most important recommendations are to continue training staff to achieve the best services.

Sana & Bawi (2010) study had indicated that "The removal of the strategy of social responsibility and comprehensive role in the strategic performance to achieve sustainable competitive advantage analytical Research in the General Company for the manufacture of southern fertilizers". Mukesh et al. (2013) study had indicated that it "Analyzes cross-industrial best practices and future trends in the context of the contemporary resource-based competitive advantage model of the firm" [72]. Firms will need to take a longer-term perspective in building resources and capabilities that provide the highest entry barriers for competitors. Once attained, these higher levels of trust and differential technology can open up opportunities of maintaining a higher margin business and so securing a sustained competitive advantage. The Research aimed to determine the mechanism by which the organization's activities and social practices are formulated within the framework of a social strategy supported by the business strategy, and towards the sustainability of the objectives pursued by the organization so that the comprehensive social responsibility strategy model has been formulated.

In summary, the current research differs from previous studies through the following contribution

- Have been applied and adapted to fit the Iraqi environment with all the turmoil and instability.
- A number of quantitative measures were used, as well as a questionnaire, which did not previously use both methods in this subject.

Reviewed a number of methods that can help improve the sustainability of competitive advantage using marketing tools.

4. The Intellectual and Theoretical Foundations of the Search Variables

For the theoretical coverage of the variables and trends of Research in the field of LM and sustainable competitive advantage, the theoretical framework will be divided into the following axes:

4.1. Lean Marketing

The term lean is derived from reducing the use of resources and not wasting them in the sense of achieving high efficiency in their use. The content of the lean system generally revolves around achieving high achievement while minimizing the use of time, storage, labor, and capital in other words. Achieve as much output as possible using as little input as possible [15]. The convergence of LM philosophy with lean manufacturing philosophy in terms of the unity of purpose and intellectual premise stems from a single basis: the pursuit of minimizing activities and practices that have no value in the sense of removing all activities that do not add value Innovative [16].

LM is a continuous systematic improvement process that eliminates waste and inefficient treatments, increases the speed of the production cycle, and increases the professionalism of individuals in all aspects of marketing, which means focusing on treatments and procedures with technology that supports them rather than technological leadership-driven improvement [17]. From the above, it is possible to refer to the concept of LM through the views of some researchers as shown in Table 3. Consequently, the procedural concept of LM can be defined: the tool used by the organization to seek to eliminate all sources of waste in marketing activity that does not add any value to the business.

Table 3 The concepts of lean marketing from the point of view of some researchers

Researcher Opinions	Concept
Bay (2004)	Is the tool for business growth and the elimination of waste through the application of the idea of lobbying on marketing activities?
Michael (2005)	That it is the completion of all tasks with the lowest possible number of activities and allowing the customer to get what he wants and wants.
Lasnier (2007)	It's a system that cares about remove all forms the waste which exists in all the operations production to do a process a late Hussein continuous inside organization.
Delbaldo (2009)	It's a system that cares about searching about how to use a few from resources humanity and material l production product-related quality high and fewer costs possible in less as soon as possible.
Higgins (2011)	Is the ability to adapt or reconcentration efforts marketing quickly and successfully response for changes in customer behavior, and circumstances market and direction the work to benefit from the period market or period wallet.
Zhou (2019)	A simple mentation optimization continuous in all processes marketing of the organization.
Hamdy & Adnan (2013)	Barogram ensures d z selected from activities marketing Walt from that investigation the growth and more profitability business from without pain b Allah in an expansion in activities.
Joel (2015)	System aged d existing on collection from principles administration which progress improvements dramatic in performance.

Source: preparation of the researcher to refer to the above sources

The Importance of Lean Marketing is to diagnose the value of the customer, defining the value from the point of view of the customer, helps in the speed of decision-making, reduces inventory under manufacture, developing working relationships between working individuals and suppliers, improves communication, and establishing cooperative relations with cooperation and competition [24 - 26].

4.2. The Dimensions of LM

The Research has been presented in Table 4 with a presentation of the most important dimensions of the marketing of some of them. Studies and what researchers have found in terms of definition according to their timelines are aimed at selecting the dimensions that will be adopted in the present Research:

Table 4 The Lean marketing dimensions from the point of view of a number of researchers

Authors opinion	Sales value	Customer motivation	Integration of sales & Value Flowing into the Organization	Sales Team	Demand Management	Target Cost	Kaizen – continuous Improvement	Total productive maintenance	Organization of worksite 5s	Quick Setup / Change	Cellular manufacturing	Output on time JIT	Value Path Map	Total Quality Management TQM	Kanban
Al-Samman(2008)							*	*		*	*	*			
Maskell (2010)	*	*	*	*	*	*	*								
Heizer & Render (2011)							*	*	*		*	*			
Gupta et al. (2015)			*				*				*	*			
Ali (2016)								*	*	*	*	*			
Onwughalu et al. (2017)								*	*	*	*	*	*	*	*
Mohamed et.al (2018)							*	*	*	*	*	*			
The number	1	1	2	1	1	1	5	5	4	3	6	4	1	1	1
Percent	14%	14%	%28	14%	14%	14%	71%	71%	57%	42%	85%	57%	14%	14%	14%

Source: the researcher prepared to refer to the above sources.

This study will focus on these LM dimensions due to its completeness regarding the research hypothesis:

4.2.1. Location of Organization

Is the first step in establishing the ideal site that contributes to the success of the application of the principles of agility, so most organizations implement a 5s system to improve the workplace and make it a more secure and effective site [32]. When applying workplace management principles, good leadership and management capabilities are required [33].

4.2.2. Comprehensive Productive Maintenance

The concept that represents the relationship between all regulatory functions, especially between production and maintenance, is for the continuous improvement of product quality, operational efficiency, and safety as the author emphasized [34]. The principle of participation of all in the implementation of the maintenance work from the top management through the middle and executive, which aims mainly to maximize the efficiency of equipment and achieve holidays and zero accidents in addition to reducing the time of non-stop equipment.

4.2.3. Production on Time (JIT)

Mladen (2009) defined the production of the required units according to the required quality and according to the required quantities [35]. Whereas Ahmad (2014) emphasized that the primary objective of JIT is to produce products that are free from loss and waste and make their operations more efficient [36].

4.2.4. Cellular Manufacturing

Goforth (2007) defines cellular manufacturing as a set of machines and processes in the work environment that produce similar products with convergent requirements [37]. While Bhatt (2016) explained that it is the method used to produce a variety of products with minimal waste so that machines and workstations are organized in a sequential manner that facilitates the flow of materials and components during the production process while maintaining the minimum possible delivery and delay [38].

4.2.5. Continuous Improvement

Fitzgerald et al. (2014) had referred that LM used to increase productivity to gain a competitive advantage in a highly competitive market [39]. While Goforth (2007) indicated that it is an approach that is used to create experiences through experimentation, error removal, and process facilitation [37]. This approach has pursued the purpose of constantly searching for problems and recurring solutions and eliminating activities that add no value.

4.3. Sustainable Competitive Advantage

Sustainability is a way of thinking about the future, which takes a range of environmental, social, and economic considerations to improve the quality of life. Sustainability is an ever-increasing model of key success factors in terms of cost, efficiency, quality and time, innovation to promote and develop strategies to achieve financial, social, and environmental goals. Long-term [40]. According to Hoffman (2000), competitive advantage is the evolving model of the competitive advantage of the business organization in the market because it focuses on the elements that ensure the continuity of this feature for as long as possible [41]. Michael Porter is one of the first writers and researchers who focused on the concept of competitive advantage in his book (Competitive Advantage) in 1985 and later became widely used in many areas of management, economics, marketing, and trade [42]. In the light of the above, the term SCA is an important issue that has gained great importance in contemporary business organizations due to developments and changes in the business environment and has taken a great place in the efforts of researchers and academics today, as it contributes to the integration of the knowledge of each individual in the organization as a basic demand for business organizations, and extends its importance to cover a wide range of business activities. Therefore, the trends in the concept of SCA differ by presenting the different points as shown in Table 5.

Table 5 concepts of competitive advantage from the perspective of some researchers

Researcher	Concept
Krajewski & Ritzman, (2007)	As critical trends that must have a series of values to satisfy their internal and external customers in the current and future period.
Oliver (1997)	The ability of the organization to create economic value from its efficient resources of value and scarcity so that it is difficult to reproduce and imitate it by competitors.
Daft (2010)	The ability of the organization to increase market share by keeping costs lower than competitors.
Abu Tabbikh, (2012)	The organization's ability to maintain its current competitive advantage by developing new strategies that competitors cannot easily emulate or imitate in the long term.
Al-Atbi, (2013)	As it is the strategy and its combination of superior performance compared to competitors, while sustainability seeks to achieve excellence in the highest returns and emphasizes the lack of reproduction and steadfastness to achieve value in the face of environmental changes and it maintains its current competitiveness and enhances its future capabilities constantly.
Jumaili (2014)	The image is difficult to reproduce by competitors and is achieved through the organization's understanding of its intrinsic capabilities of integrating its skills and competencies with its resources in a strategy suited to the external environmental conditions surrounding it, leading to its excellence and continuous excellence in creating value and benefit for the organization and customer through continuous strategic innovation in innovation and development.
Al-Anzi (2015)	A position that enhances the position of the organization and its strategic positions in the market to achieve profitability to distinguish it from its competitors in the areas of price and cost and focus on the product.

Al- Safar (2018)	The ability of the organization to differentiate and differentiate from other organizations through its optimal utilization of its internal capabilities and investment opportunities and its response to threats from the external environment to opportunities to provide products and services of high value to its current and future customers and competitors cannot imitate or compete in the foreseeable future
Mansour (2018)	Is the image that is difficult to reproduce by competitors, and this is according to the organization's understanding of its core competencies that are made up of human resources that are compatible with the external environment.

Source numbers of the researcher should refer to the above sources

As apparent from the SCA is the tool of the organization that enhances its ability to implement strategies that make it superior to competitors and a better and stronger position. This feature develops the strategic vision of the management of the organization to anticipate events as they are in a state of competition between them, in addition, the concept of SCA can be defined in terms of the current trends of Research. The competitive advantage is the ability of the organization to apply competitive and confrontational strategies to environmental challenges in the long term in a sustainable manner).

In conclusion, the Importance of Sustainable Competitive Advantage (SCA) can be identified as follows:

- It must be embedded in the resources, skills, and culture of the organization [52].
- It is an important criterion for successful organizations that distinguish them by possessing unique characteristics that are difficult to imitate by competitors and serve as the basic weapon to meet the challenges of the market and the competing organizations [53].
- It provides incentives and guidance to organizations [54].
- Key to the success of business organizations [55].
- Is it a strategic weapon to meet the challenges of the market and the ability to meet the needs of customers, and the basic standard of the organization, which is sustained in light of the ongoing developments? [49].

4.4. The Dimensions of Sustainable Competitive Advantage

Through the literature and opinions of some writers and researchers have been numerous attempts to dimension the competitive advantage of sustainability, and Table 6. provides a presentation of the dimensions of competitive advantage of the following:

Table 6 The dimensions of SCA from the perspective of a number of researchers

Author opinion	improvement Efficiency of the Organization	Core competencies	Increase quota Market	Quality improvement	Cost	Flexibility	Delivery	Excellence	The motivation	Creative Culture	Information technology	Competitive location
Al-Da'mi & Mohsen (2012)		*				*				*	*	
Al-Abadi & Al-Atbi (2014)	*	*	*	*								
Al-Saffar & Maan, (2015)				*	*	*	*					
Al-Tai (2016)		*		*	*						*	*
Saleh (2017)					*			*	*			
Mansour (2018)	*	*	*			*					*	
The number	2	4	2	3	3	3	1		1	1	3	1
Ratio	%33	%66	%33	%50	%50	%50	%16	%16	%16	%16	%50	%16

Source: Preparation of the researchers by reference to the above sources

According to the dimensions presented by previous studies, it can be said that the dimensions of competitive advantage may vary from one researcher to another, but the research adopted the most focused dimensions and this exclusion is:

4.4.1. Quality

Robbins (2003) had defined quality as a state of satisfaction that is constantly realized by customers through developments for all organizational processes [61]. While Hill & Jones (2001) affirmed that quality products are reliable and reliable for the performance of jobs [53]. Therefore, the high quality of the product is considered to have a strong impact on competitive advantages for two reasons: the first when offering high quality products, It results from the high efficiency and low costs of the unit because any time wasted by the worker will lead to the provision of harmful products and defective, but in the case of a short cut time will lead to higher productivity and reduce costs for the unit.

4.4.2. Core Competence Core Competencies

Bearden (2007) had defined the core competency as a set of outstanding skills that the organization can gain by superior to other organizations, which are the basis of competitive advantage [62]. Whereas, Millmore (2007) sees core competence as the unique organizational capabilities that, if invested efficiently, will enable the organization to achieve a competitive advantage better than its competitors, especially when such capabilities are difficult to imitate [63].

4.4.3. Cost

Both Mohsen & Al-Najjar (2004) indicate that when products are offered at lower prices than competitors, this will increase the market share of the organization based on cost. This increases the interest in reducing all elements of costs, including labor costs, materials, and damage, as well as industrial and other costs. One of the product [64].

4.4.4. Flexibility

The author Najem (2008) had defined it as the organization's ability to shift from one strategy to another when changing the environment and have the ability to respond quickly and adapt to the environment and meet all the needs of the customer [65]. Evans (1997) points out that most organizations use flexibility as a competitive weapon, which is their ability to adapt successfully to changing environmental conditions and operational requirements [66].

4.4.5. Information Technology

Aman (2013) had referee that it is an important factor in the implementation of successful strategies that enable the organization to exploit opportunities and attract new customers and contribute to the development of a value chain that enables the organization to achieve innovative value for the customer and thus aspire to achieve sustainable competitive advantage [67]. Al-Anzi (2015) refer to it as a collection of tools, material means and knowledge experiences used by workers to access the image and graphic information that is processed and stored to become available [49].

4.5. The relationship between LM and Sustainable Competitive Advantage

Due to the importance of the SCA of contemporary organizations, this subject has received great attention from researchers to find out how important it is to achieve in organizations, analyze their relationship to LM and develop appropriate solutions and treatments. As the competitive advantage is assisted an organization in the survival, growth, the ability to excel and succeed at the global markets through providing its products and services of new value and distinct, high quality, relatively low cost, and suitable for customers to earn their satisfaction constantly. Which it's difficult to imitate by competitors. That one of the strategies pursued by the organization to acquire new technology is through the implementation of its research and development, which produces new knowledge of equipment and technologies and then applies them to new products, processes, and services. The organization's competitive advantage means its ability to objectively face the variables of the environment in the market and examine the flourishing of the industry environment and thus its ability to compete with competitors and their viability [68].

The availability of substantive capacity by the organization is an essential means of obtaining a market share in global competition. The amount of research and development expenditure varies from organization to organization, and the assessment of the technological capacity of the research and development unit is determined by the use of creative technology [69]. As Bontis (2007) emphasizes, the positive impact of SCA is the position of the organization, which means meeting the needs of customers, their satisfaction, their commitment to their employees, and providing a product of high quality and at lower cost [26]. The competition in technology should be faster than the competitor in responding to the needs and desires of customers, and the speed of response is essential to compete in the global market, through the use of modern technologies and accelerate the changes in production processes [70].

5. Testing of Results and Hypothesis

The final results to investigated the conceptual framework model and its hypotheses as following: -4.1: Test the Research Manufactory and Its Hypotheses:

5.1. Analysis of correlation between search variables

This section includes a diagnosis of the nature of the correlation between the dimensions of the Research and its variables in order to test the validity of the first main hypothesis, which indicates a significant statistical correlation between the LM dimensions and the SCA at the level of the overall index and sub-dimensions) as follows:

5.1.1. The relationship between LM and SCA at the macro level

In order to clarify the correlation between the Research variables (LM and sustainable competitive advantage) in the Manufactory of the Research sample at the macro level, the correlation coefficient was (0.714%) at a significant level (0.01), indicating the strength of the relationship between the two main variables. The data in Table 7. indicate a positive correlation.

Table 7 The results of the correlation between the LM variables and the SCA at the macro level

explanatory variable / Variable	LM
Sustainable competitive advantage	0. 71 4 *

Source: the number of the researcher based on the results of the electronic calculator (SPSS). At a significant level 0.05 n = 50

5.1.2. The relationship between the dimensions of LM and the competitive edge of sustainable competitiveness at the level of variables

Table 8. shows the following:

- There was a significant correlation between continuous improvement and sustainable competitive advantage. The correlation value was (0.672) at a significant level (0.05).

- b. There was a significant positive correlation between total productive maintenance and sustainable competitive advantage. The correlation value was (0.625) at a significant level (0.05).
- c. There was a significant positive correlation between the organization of the worksite and the competitive advantage. The value of the correlation was (0.718) at a significant level (0.05).
- d. There was a significant positive correlation between cellular manufacturing and sustainable competitive advantage. The correlation value was (0.573) at a significant level (0.05).
- e. There was a significant positive correlation between production time and sustainable competitive advantage. The correlation value was (0.736) at a significant level (0.05).

Table 8 Results of the relationship of partial correlation between the LM dimensions and the achievement of sustainable competitive advantage

Explanatory variable / Variable	The marketing dimensions are lean				
	Continuous improvement	Total productive maintenance	Organization of the work site	Cellular manufacturing	Timed output
Achieving sustainable competitive advantage	0.672 *	0.625 *	0.718 *	0.573 *	0.736 *

Source: The number of researchers based on the results of the electronic calculator SPSS at a significant level N =50 *p≤ 0.05

These relationships indicate that the more flexible marketing dimensions are available in the Research sample, the more competitive the competitive advantage will be achieved in a relatively good manner, and through continuous improvement, comprehensive productive maintenance, site organization, cellular manufacturing, and production in time. To achieve sustainable competitive advantage, and based on the above-mentioned correlative and micro-correlation results, we arrive at the validation of the first major hypothesis.

5.2. Analysis of the Relations of Influence between Search Variables

Based on the content of the second main hypothesis, which indicates a significant relationship of the dimensions of LM to achieve SCA at the macro level, and at the level of dimensions, we present the results of the test, as shown in Table 9, indicators and results of the relationship of the impact of LM in the achievement of SCA at the macro level and the dimensions of agencies

At the Macro Level:

Table 9. shows that the LM dimensions have a significant effect on achieving sustainable competitive advantage. This effect is supported by the value of (F) of (18.342), which is higher than the tabular value of (6.00) at the levels of freedom (48.1) and the moral level (0.05), As shown by the R2 (0.513%) coupon, This indicates that the LM dimensions explain the value of (513%) of the responding variable, which is the achievement of competitive advantage, and by following the coefficients of B and T-tests. The value of T (calculated) is 7.399, (1.563) at a significant level (0.05), This confirms the acceptance of the second major hypothesis that the relationship of the impact of LM in achieving SCA in the field in question.

Table 9 Indicators and results of the relationship of the impact of marketing exclusion and achieving sustainable competitive advantage

variable transponder Variable interpretive LM	Achieving sustainable competitive advantage				
	B ₀	B ₁	R ²	F calculated	T calculated
Continuous improvement	0.553	0.217 (3.432)	0.513	18.342	7.319
Total productive maintenance		0.187 (2.301)			
Organization of the work site		0.254 (4.537)			
Cellular manufacturing		0.152 (2.130)			
Timed output		0.324 (5.621)			
Dimensions are combined		0.642			

Source: the number of the researcher that based on the results of the electronic calculator (SPSS) N =50, *P ≤ 0.05 df (1, 48)

Test of micro-level impact relationships:

A) Effect of continuous improvement in sustainable competitive advantage

The results of Table 9. indicate that there is a significant effect of continuous improvement in sustainable competitive advantage. This effect is supported by the value of (F) of (18.342) at the freedom (48.1) and the (0.05), as shown by the R2 (0.513%) coupon. This indicates that the LM dimensions explain the value of (51%) of the responding variable, which is the achievement of competitive advantage. This is supported by the value of the regression coefficient (0.217). This increased the value of t (3.432) at the freedom score (48.1) and (0.05), This means achieving the first sub-hypothesis of the second main hypothesis.

B) The impact of comprehensive productive maintenance on sustainable competitive advantage

The results of Table 9. indicate that there is a significant effect of the overall productive maintenance in the sustainable competitive advantage. This effect is supported by the value of (F) of 18.342 at the levels of freedom (48.1), (0.05) and (0.513%). This indicates that the overall productive maintenance explains 51% of the responding variable which is the sustainable competitive advantage. This is supported by the regression coefficient value (0.187). This increased the value of t (2.301), with a significant level (0.05), which means achieving the second sub-hypothesis of the second main hypothesis.

C) Impact on workplace organization Sustainable competitive advantage

The results of Table 9. indicate that there is a significant effect on the organization of the worksite in the competitive advantage. This effect is supported by the value of (F) of 18,342 at the levels of freedom (48.1), (0.05) and (51%). This indicates that the organization of the work site explains the value of 51% of the responding variable, which is the competitive advantage. This is supported by the regression coefficient value (0.254). The value of (t) (48.1) and a moral level (0.05). This means achieving the third sub-hypothesis of the second main hypothesis.

D) The impact of cellular manufacturing on sustainable competitive advantage

The results of Table 9. indicate that there is a significant effect of cellular manufacturing on sustainable competitive advantage. This effect is supported by the value of (F) of 18.342 at the levels of freedom (48.1) and the significant level (0.05) and (0.513%). This indicates that cellular manufacturing interprets the value of (51%) of the responding variable of SCA and supports the value of the regression coefficient (0.152). This increased the value of t (2.130), and a significant level (0.05). This means achieving the third sub-hypothesis of the second main hypothesis.

E) The effect of production on time in sustainable competitive advantage

The results of Table 9. indicate the significant effect of production on time in the competitive advantage. This effect is supported by the value (F) of (8.3421) at the freedom levels (48.1) and the significant level (0.05) and (513%). This indicates that the production at the specified time explains the value of (51%) of the responding variable of the SCA and supports the value of the regression coefficient (0.324). This increased the value of t (5.621) and (48.1) with a moral level (0.05). This means achieving the third sub-hypothesis of the second main hypothesis

6. Conclusions and Recommendations

6.1. The Research reached a number of conclusions

- The results of the statistical analysis of the combined dimensions of LM and the SCA at the Manufactory level showed a positive correlation, this is illustrated by the results of the statistical analysis.
- The results of the statistical analysis of the LM dimensions and the SCA showed a positive correlation relationship. This is reflected in the results of the statistical analysis. The results of the statistical analysis were the first of the dimensions in terms of the strength of the competitive advantage. To achieve the lean work and maintain the operation of the production process on time, followed by importance after the organization of the site of work, while after the continuous improvement in the third place and then the overall productive maintenance and cellular manufacturing, respectively.
- The results of the analysis showed the existence of the relationships between the exclusion of the Research and its variables at the macro and micro level.

6.2. The main recommendations were

- The necessity to give the Manufactory management the attention that the LM topic deserves, as it is the function that is based on the success of the organization and its future in dealing with the competitive environment.
- The management of the Research sample should take the lead in promoting and applying the dimensions of marketing in the field of work, and in accordance with mature vision and organized strategies.
- Emphasize the necessity and inevitability of the use of LM in its dimensions as a method of dealing with a group of customers, not because it produces positive results in support of the competitive position of the organization , But the fact that its use adds to the Manufactory the ability to identify and understand changes in the environment through the data available to him .
- The researcher should conduct surveys and interviews with customers to identify their needs, wishes and reactions, and then listen to their views and suggestions about the service provided to them periodically and adopt them as a basis in the process of improving the service.
- The Manufactory should pay more attention to the staff and urge them to spread the philosophy of removing waste of all kinds among working people, and at all administrative levels.

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