The impact of market orientation on the new products development

- a case study of the Enicab Company, Algeria-

Rania Bennedjai* (1)

rania.bennedjai@univ-biskra.dz

Banking, Finance and Management Laboratory

University of Biskra, (Algeria)

Messaoudi Houssam (2)

messaoudihm@gmail.comBanking,

University of Tebessa, (Algeria)

Abstract

This study aims to demonstrate the impact of adopting the philosophy of market orientation, which includes understanding the needs of customers, competitors, and market trends. In the new products development (NPD) for Enicab Company, especially in the current business environment, which forces companies to innovate and develop new products to meet the changing needs of customers.

The study sample included 32 questionnaires directed to Enicab workers. The questionnaires were analyzed using the SPSS V22, and one of the most prominent results of the study was that there was a positive impact of market orientation on the development of new products at ENICAB in general. Some suggestions were presented to Enicab based on the results of the study.

✓ **Keywords**: market orientation, new product development, Enicab.

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* Corresponding author: Rania Bennedjai

1. INTRODUCTION

The concept of market orientation has emerged as a philosophy adopted by many organizations in an environment witnessing rapid development in the technological, economic and social fields. This strategic approach focuses on understanding and meeting the needs and preferences of customers, competitors, and the overall market environment. This philosophy prioritizes all actors that have a relationship with the organization, including customers, competitors, distributors, suppliers, and others.

The relationship of market orientation to new product development reflects the great importance of understanding customer needs and directing the new product development process towards meeting these needs effectively, as market-oriented companies give priority to the customer, which allows a deep understanding of the needs and requirements of the market, including the dynamic variables of the needs and desires of customers and potential markets. And the developments taking place in the industry. Therefore, companies can direct development efforts towards producing the products that customers are most searching for to ensure the success of developing new products, taking into account competing products and technology, and directing attention towards innovation and continuous improvement to enhance the competitive position in the market.

➢ **Previous studies:**

Many researchers argue that a market-oriented culture leads to superior organization performance because of new products that are developed and brought to market. This is done by revealing that market-oriented culture works on the success of new products. Many studies have highlighted the positive relationship between market orientation and product development in general, and this theory has been strengthened by researchers (Langerak , Hultink , & Rob, 2004) . Their study relied on a sample of 126 companies in the Netherlands to study the structural relationships between market orientation, new product advantage, efficiency in new product launch activities, and

new experience. Product performance and organizational performance. The results of their study provided evidence that market orientation is positively related to product advantage and efficiency in market testing, launch budget, launch strategy, and launch tactics. Product advantage and efficiency in launch tactics are also positively related to new product performance, which itself is positively related to organizational performance.

In another study conducted by (Narver & Slater, 1990) on "competitive strategy in market-focused businesses" with a sample of 228 manufacturers in the Midwestern state of the United States of America. The results showed that market-oriented companies are companies that seek to develop and innovate their products and focus on opportunities in individual market segments by focusing on both differentiation and low-cost strategies. Through a market-driven culture as the only variable that relates to all strategic dimensions of the organization.

In a study conducted by researchers (Wren , Souder , & Berkowitz, 2000), the purpose was to evaluate the effect of market orientation on the success of a new product in a transnational context. Conducted in six countries, the study examined two aspects of market orientation – market intelligence and customer orientation – compared to traditional determinants of new product success. The study results generally supported the importance of market orientation and market information for new product success. In addition to customer orientation. And technical skills (technology) that played a greater role in the success of products. (Wren , Souder , & Berkowitz, 2000)

Through the above, we summarize the main problem of our study as follows:

- ➢ **Main problem:**

  Qx0: Is there a statistically significant effect of market orientation on the development of new products at Enicab at a 5% significance level?

- ➢ **Sub-questions:**

- **Qx1**: Is there a statistically significant effect of market orientation in developing the quality of new products at Enicab at a 5% significance level?

- **Qx2**: Is there a statistically significant effect of market orientation in developing the characteristics and features of new products at Enicab at a 5% significance level?

- **Qx3**: Is there a statistically significant effect of market orientation in developing the basic design of new products at Enicab at a 5% significance level?

  ➢ **Main hypothesis:**

  H0: There is a statistically significant effect of market orientation on the development of new products at Enicab company at a 5% significance level.

  ➢ **Sub-hypotheses:**

- **H1**: There is a statistically significant effect of market orientation in developing the quality of new products at Enicab company at a 5% significance level.

- **H2**: There is a statistically significant effect of market orientation in developing the characteristics and features of new products at Enicab company at a 5% significance level.

- **H3**: There is a statistically significant effect of market orientation in developing the basic design of new products at Enicab company at a 5% significance level.

  ➢ **study Importance:**

The importance of our study stems from the great impact that the applications of the market orientation philosophy have on developing new products, as it is a new perspective that allows organizations to become familiar with everything related to their surroundings, while shedding light on ENICAB as a pioneer in the cable market in Algeria.

  ➢ **study Objectives:**

  ✓ Theoretical grounding of the study variables based on previous books and academic studies.

✓ Highlighting the significant impact of the market orientation philosophy on the development of ENICAB's new products.

✓ Providing very important suggestions and recommendations regarding the application of market orientation as an important strategy for developing products and enhancing the competitive position of institutions based on the results of our study.

➢ **methodology:**

In this study, we used the descriptive and analytical approach to describe the research sample, in addition to using experimental analysis to examine the relationship between the variables of the study.

2. *Theoretical grounding of the study variables*

➢ **Market orientation***:*

The roots of market orientation go back to Drucker's research in 1954 and Levitt and Keith's research in 1960. McCarthy and Perrault in 1960 also considered market orientation as a philosophy that aims to achieve the profitability of organizations in the long term by directing the organization's activities to meet the requirements and needs of customers (Gottland, 2005, p. 27).

From an academic standpoint, the concept of market orientation appeared at the beginning of the nineties of the twentieth century through famous researchers (Kohli & Jaworski, 1990) and (Narver & Slater, 1990).

Kohli and Jaworski define market orientation as: "the ability of organizations to generate, disseminate and make optimal use of information about both customers and competitors".

The first definition was published by (Kohli & Jaworski, 1990) and (Narver & Slater,

1990) in 1990 in order to lay the foundations through which the concept of market orientation is defined.

Market orientation is an effective and efficient organizational culture in developing behaviors that allow for the creation of superior value for customers. An organization is market oriented if these actions are consistent with a marketing mindset, then its approach is behavioral. From the researchers' point of view, an organization's market orientation can be discovered through three types of behavior: (Gottland, 2005, p. 30)

- Produce information about current and future consumer needs.

- Disseminate this information to the various departments of the organization.

- The organization's reaction to this information.

On the other hand, the concept of market orientation was introduced from a cultural perspective by (Narver & Slater, 1990).

It is defined as "a set of beliefs that puts the interests of the consumer first in order to develop a profitable business in the long term." (Narver & Slater, 1990)

Market-oriented culture is manifested through: behavioral routines, symbols, myths, and rituals and can be discovered in society, where the dimensions of market orientation from a cultural perspective have been limited to customer orientation and competitor orientation, and have been extended to include technological orientation. The power of distributors and suppliers was then integrated into the analysis of the marketing system and highlighted the sources of competitiveness they could be a source of, and "supplier orientation" and "distributor orientation" came to be seen as aspects of a market-oriented culture (Rochette & Cassiere, 2007)

➢ **New product development (NPD):**

As technology advances and consumer purchasing power increases, the pursuit of

new products and services remains constant. The path to success is New Product Development (NPD), which is often fraught with challenges. (Falahat, Chong, & Liew, 2024)

According to (Crawford, 1991), a new product, whether a good or service, is a product that is new to the company, which is marketing it (excluding products whose promotion methods have changed). Developing a new product is the comprehensive process that includes strategy, organization, concept generation, concept evaluation, marketing plan, and marketing of the new product (Crawford, 1991, p. 539).

The company develops a new product by reviewing its product range to determine the compatibility of the proposed new products with existing products. Or change in old production lines, or make a modification to existing products (in terms of quality, function or style) instead of developing a new product from scratch (Blythe, 2005, p. 139)

In addition, developing new products requires a wide range of activities through which product specifications and production processes are determined, as the development of new products within the company must be continuous in order to remain competitive in the market and meet customer requirements. (Almeida, Amaral, & Coelho, 2021), and according to (Kotler & Armstrong, 2015) there are two ways that enable a company to obtain new products. The first way is through the efforts of the company's new product R&D teams. The second method is through acquisition, through a patent, the purchase of an entire company, or a license to produce a product for another company. (Kotler & Armstrong, 2015, p. 294)

3. Case-study Enicab

➤ **Identification information about the company** (Enicab biskra, 2021)

Enicab, a leading Algerian company in the field of power cable manufacturing, is headquartered in Biskra, and includes a large workforce, with more than thirty-

two years of service in this field, offering its customers a wide and diverse range of products including low-voltage cables and power cables. Industrial, medium voltage cables, high voltage cables and bare voltage cables.

Enicab introduces new products such as high and extra high voltage cables, communication and data cables as well as halogen-free cables. This is after the acquisition by the giant Condor company in 2017, which led to strengthening its leading position, in addition to a large portfolio of clients that included the most important companies in the field of electricity and construction in Algeria, such as Sonalgaz and its branches, Sonatrach and its branches, national and international engineering, procurement and construction companies and contractors, in addition to institutions. Different country.

Enicab supports research and development related to electrical energy through seminars and conferences, and also provides practical training opportunities in the technical and technical fields of management.

➢ **The role of market orientation on the development of new products at ENICAB:**

To identify the role of market orientation in developing new products at Enicab, specifically among a sample of the workers of this corporation, a questionnaire was used as a tool for collecting data.

➢ **Study Population and Sample:**

Study population: The study population consists of ENICAB workers.

Study sample: The questionnaire was distributed to a sample of 32 ENICAB workers.

➢ **Study Tool:**

As we mentioned previously, the questionnaire was used as a tool for collecting data, and then entered into SPSS v22 for analysis, in order to achieve the objectives of the study.

➢ **Description of the general characteristics of the study sample:**

The following table shows an overview of the characteristics of the study sample by gender, age, educational level, job, and experience.

Table 01:

		Frequency	Percent
Gender	**Male**	29	90.6
	Female	3	9.4
	Total	32	100.0
age	**Less than 30 years old**	5	15.6
	From 30 to less than 40	11	34.4
	From 40 to less than 50 years old	15	46.9
	From 50 years and over	1	3.1
	Total	32	100.0
educational level	**Secondary or less**	6	18.8
	University	21	65.6
	Postgraduate	5	15.6
	Total	32	100.0
job	**Company Director**	1	3.1
	Marketing Officer	2	6.3
	Another job	29	90.6
	Total	32	100.0
experience	**Less than 05 years**	7	21.9
	From 05 to less than 10 years	12	37.5
	From10 to less than 15 years	6	18.8
	15 years and more	4	21.9
	Total	32	100.0

source: The table was prepared based on the questionnaire data and processed using SPSS v22.

Demographic analysis of the sample members shows that 90.6% are male while only 9.4% are female, which reflects the nature of the work. Data indicate that the most common age group is 40-50 years, at 46.9%, Regarding educational level, 65.6% of the sample held university degrees. The table also shows that 90% of the sample work at ENICAB in various positions, while marketing staff constitute 6.3%. Finally, 37.5% of the sample have 5 to 10 years of experience.

➢ **Validity and reliability test:**
Testing the validity of the study tool:

The validity of the study tool was verified by measuring the Pearson correlation coefficient and the level of significance to evaluate the internal consistency between the items of each dimension of the study. The results are presented in the following table:

Table 02: Internal Consistency Validity of the Questionnaire

Axis	Dimensions	Statement	Pearson Correlation Coefficient	Significance Level	Dimensions	Statement	Pearson Correlation Coefficient	Significance Level
market orientation	Customer orientation	QX1	.629**	0.000	Technological orientation	QX9	.758**	0.000
		QX2	.812**	0.000		QX10	.721**	0.000
		QX3	.760**	0.000		QX11	.672**	0.000
		QX4	.818**	0.000		QX12	.758**	0.000
	Orientation towards competition	QX5	.721**	0.000				
		QX6	.829**	0.000				
		QX7	.829**	0.000				
		QX8	.829**	0.000				
new product development	Developing the quality of new products	QY1	.738**	0.000	Develop the basic design of new products	QY7	.689**	0.000
		QY2	.798**	0.000		QY8	.769**	0.000
		QY3	.827**	0.000		QY9	.683**	0.000
	Developing the characteristics and features of new products	QY4	.937**	0.000				
		QY5	.937**	0.000				
		QY6	.618**	0.000				

Source: The table was prepared based on the questionnaire data and processed using SPSS v22.

From Table 02, we observe that the correlation coefficients between the dimensions of the study and their items range between 0.620 and 0.937, and these correlations are somewhat strong and statistically significant, because their probability value reached 0.000, which is less than the level of significance required in the study of 0.05. This indicates that the data has good internal consistency.

➢ **Reliability of the Study Tool:**

In this research, Cronbach's Alpha coefficient was used to measure the reliability of the study tool, which determines the acceptable level of measurement tool at (0.60) or higher. The results were as follows:

Table 03: Reliability Test of the Questionnaire Items for All Variables Using Cronbach's Alpha Coefficient

Statement	Items	Cronbach's Alpha Value (Questionnaire)
Independent Variable (market orientation)	12	0.799
Dependent Variable (new product development)	9	0.784
The entire questionnaire	21	0.839

Source: The table was prepared based on the questionnaire data and processed using SPSS v22.

Through the above table, we note that the alpha Cronbach coefficient for the questionnaire items, and for all variables, is greater than (70%), which indicates a

relationship of consistency and good correlation between the questionnaire statements. This percentage is more than the statistically acceptable percentage of (60%) or superiority, and thus confirms stability of the study tool.

➢ **Analysis of Results**

Statistical Analysis of Study Variables:

We will analyze and interpret the results extracted from SPSS v22, and understand their order and degree of agreement for each element. This is done through arithmetic means and standard deviations for the variables and dimensions of the study.

➢ **Descriptive analysis of market orientation data:**

Table 05: Evaluating the dimensions of market orientation

dimension No.	Statement	Mean	Standard Deviation	Agreement Level
1	Customer orientation	4.3984	.36400	Very High
2	Orientation towards competition	4.3047	.39521	Very High
3	Technological orientation	4.2969	.35033	Very High
	market orientation	4.3333	.27271	Very High

Source: The table was prepared based on the questionnaire data and processed using SPSS v22.

Based on the table above, it is observed that the mean of customer orientation is 4.3984 with a standard deviation of 0.36400, indicating a very high level of agreement. Similarly, the mean of competitor orientation is 4.3047 with a standard deviation of 0.395033, also indicating a very high level of agreement. Technological orientation, on the other hand, ranked third with a mean of 4.2969 and a standard deviation of 0.35033, also showing a very high level of agreement.

➢ **Descriptive analysis of new product development data:**

Table 06: Evaluating the dimensions of new product development

Dimension No.	Dimension	Mean	Standard Deviation	Agreement Level
01	Developing the quality of new products	4.4063	.36646	Very High
02	Developing the characteristics and features of new products	4.2083	.33601	High
03	Develop the basic design of new products	4.0833	.22401	High
\	new product development	4.2326	.21926	Very High

Source: The table was prepared based on the questionnaire data and processed using SPSS v22.

Based on the table above, it is observed that the mean of developing new product quality dimension is 4.4063 with a standard deviation of 0.36400, indicating a very high level of agreement. Similarly, the mean of developing new product features and characteristics dimension is 4.2083 with a standard deviation of 0.33601, also indicating a high level of agreement. The dimension of developing the basic design of new products ranked third with a mean of 4.0833 and a standard deviation of 0.22401, also showing a high level of agreement.

➢ **Testing the Study Hypotheses:**

Here we will test the study hypotheses to evaluate the impact of market orientation on the development of new products at ENICAB.

Testing the Main Hypothesis:

➢ **H0: The hypothesis states that:** There is a statistically significant impact of market orientation on new product development at ENICAB at a 5% significance level.

Table 07: One-way ANOVA analysis of sample responses between market orientation and new product development at ENICAB

Statement	sum of squares	mean of squares	f	sig
Regression	0,215	0,215	5,052	0,32
Residual	1,276	0,043	Alfa=0.05	
total contrast	1,490		R=0,380	R Square=0,144

Source: Prepared based on the questionnaire data and processed using SPSS v22.

Table 07 above shows that the calculated F-value (5,052) at a significance level of (Sig=0.000), which is less than (0.05), the level adopted for this study. This requires accepting the basic hypothesis that there is a statistically significant effect of market orientation on new product development at Enicab. The relationship between these two variables was confirmed through a correlation coefficient estimated at (0,380), which is a positive relationship, and a coefficient of determination of (0,144), indicating that 14,4% of the changes in the average responses of the sample members regarding the new product development variable are due to changes in marketing orientation.

Testing the First Sub-Hypothesis:

➢ **H1: The hypothesis states that**: There is a statistically significant impact of market orientation on developing the quality of new products at Enicab at a 5% significance level.

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Table 08: One-way ANOVA Analysis of Sample Responses Between market orientation and developing the quality of new products at Enicab

Statement	sum of squares	mean of squares	f	sig
Regression	0, 837	0,837	7,546	0,010
Residual	3,327	0,111	Alfa=0.05	
total contrast	4,163		R=0,448	R Square=0,201

Source: Prepared based on the questionnaire data and processed using SPSS v22.

Table 08 above shows that the calculated F-value (7,546) at a significance level of (Sig=0.000), which is less than (0.05), the level adopted for this study. This requires accepting the sub-hypothesis that there is a statistically significant effect of market orientation on developing the quality of new products at Enicab. The relationship between these two variables was confirmed through a correlation coefficient estimated at (0,448), which is a positive relationship, and a coefficient of determination of (0,201), indicating that 20,1% of the changes in the average responses of the sample members regarding the quality of new products variable are due to changes in marketing orientation.

Testing the Second Sub-Hypothesis:

➢ **H2: The hypothesis states that:** There is a statistically significant impact of market orientation on the development of the characteristics of new products at Enicab at a 5% significance level.

Table 09: One-way ANOVA Analysis of Sample Responses Between market orientation and the characteristics of new products at Enicab

Statement	sum of squares	mean of squares	f	sig
Regression	0,134	0,134	1,193	0,283
Residual	3,366	0,112	Alfa=0.05	
total contrast	3,500		R=0,196	R Square=0,38

Source: Prepared based on the questionnaire data and processed using SPSS v22.

Table 9 above shows that the calculated F value (**1,193**) is at a significance level (Sig=0.283), which is more than (0.05), which is the level approved for this study. This requires rejecting the sub-hypothesis that there is a statistically significant effect of market orientation on the development of new product characteristics at Enicab. It was confirmed that there was no relationship between these two variables through a

correlation coefficient estimated at (0,196), which is a very weak relationship, and a coefficient of determination of (0,38).

Testing the Third Sub-Hypothesis:

➢ **H3: The hypothesis states that:** There is a statistically significant impact of market orientation on the development of the basic design of new products at Enicab. at a 5% significance level.

Table 10: One-way ANOVA Analysis of Sample Responses Between market orientation and the basic design of new products at Enicab

Statement	sum of squares	mean of squares	f	sig
Regression	0,012	0,012	0,234	0,632[b]
Residual	1,544	0,051	Alfa=0.05	
total contrast	1,556		R=0,88	R Square=0,008

Source: Prepared based on the questionnaire data and processed using SPSS v22.

Table 10 above shows that the calculated F value (0,234) falls at a significance level (Sig=0. 0,632), which is more than (0.05), which is the level approved for this study. This requires rejecting the sub-hypothesis that there is a statistically significant effect of market orientation on the development of the basic design of the new product at Enicab. It was confirmed that there was no relationship between these two variables through a correlation coefficient estimated at (0,88), which is a negative relationship, and a coefficient of determination of (0,008).

4. CONCLUSION

The study showed, in both its theoretical and applied aspects, the importance of institutions developing their products continuously, if they want to succeed and continue in the market, especially those that adopt the philosophy of market orientation, since the markets are witnessing rapid development in the technological, economic, and social fields. Based on this study, it is clear that a deep understanding of the philosophy of market orientation and its effective implementation is crucial, especially in the field of research and development, which is directly reflected in the development of companies' products. The primary objective of this research paper was to study the impact of market orientation on the development of new products for a company. ENICAB, and as we mentioned previously through data analysis, our study

demonstrated that there is a significant impact of adopting a market orientation on the development of the company's products under study. Through the field study, several results emerged, most notably:

Results:

✓ There is a statistically significant impact of the dimensions of market orientation on the development of new products at ENICAB, and the relationship between these two variables was confirmed through a correlation coefficient estimated at (0.380), which is a positive relationship.

✓ There is a statistically significant effect of the dimensions of market orientation on developing the quality of new products at Enicab Company, as the relationship between these two variables was confirmed through a correlation coefficient of (0.448), which is a positive relationship.

✓ There is no statistically significant effect of the dimensions of market orientation on both the development of new product characteristics and the development of the basic design of new products at Enicab Company.

Suggested recommendations:

✓ The necessity of including market orientation practices, which combine customer orientation with the goal of creating the highest value for them on the one hand. On the other hand, competitor orientation which means discovering and understanding the strengths and weaknesses of the current and prospective competitor, in addition to coordinating between functions that primarily aim to efficiently exploit resources and create the highest value for its customers.

✓ Enicab must constantly monitor the technology related to the cable industry to keep pace with everything new in its field;

✓ Enicab must make more efforts related to market orientation in order to respond to the changing needs in its economic, social and technological environment;

✓ Enicab must include all parties with which it has a business relationship (market, customers, competitors, suppliers, distributors...) and take them into considiration when developing the characteristics and basic design of its products.

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