

# **Impact of the ICT Use on Marketing Performance within Algerian Economic Institutions**

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**Abstract:** The institutions awareness of the importance of the marketing outputs has increased, especially with regard to cost reduction and raising benefits from funds particularly attached to reduce the cost and increase the benefits of the invested funds, therefore, focusing on marketing as a way to drive future sales, profits and growth and orientating the resources in all their forms toward optimal use. And the pressure on the institutions has increased due to the opening up of global markets and the intrusion of the IT into all the aspects of life, so the aim of this study is mainly identifying the importance of the ICT use in the economic institutions and its impact on the marketing performance.

**Keywords:** Marketing Performance, ICT, Volume of Marketing Performance, Competency of Marketing Performance, Algerian Economic Institutions

**JEL Classification Number:** D83, M3, M31, L10, L86

## **1. Introduction**

With these economic and social fluctuations and shifts that the world has been witnessing and the increasing pace of the technological growth; the institutions attempted to adapt with these data and develop its marketing activities to in line and keep pace with these developments as to guarantee the achievements of direct and instant communication regardless of distancing, so the institutions are experiencing extra dependence on the technology for its effects on achieving high performance rates since it contributes in cost and time reduction and place overruns as well as its ability to employ production elements over time which requires the institutions' focus on improving its outputs quality. And the marketing performance is considered as an important part of the overall institution performance since it fully represents the reached results through the institution activities. Also, the performance outcomes are the basis for the survival, growth and competitiveness. However, the fact that the institution is exposed to many challenges and pressure, significantly affect its marketing performance, which requires confrontation and trying to minimize its negative effects and take advantage of the positive aspects

## **2. Literature review**

Based on the previous studies that have dealt with the subject of the marketing performance and ICT which has been a subject of interest by many researchers, and among the previous researches and studies are as follow:

Noh and Fitzsimmons (1999) aims to identifying the impact of IT on the marketing performance within the Korean services institutions, as it dealt with the investment case in IT in the service sector which was critically acclaimed by researchers and what outcome could be achieved in the services sector is not as clear as it was accomplished in the productive sector, however, the study confirmed that the investment in the IT has its positive outcomes over the services sector, the marketing performance has been measured through the following dimensions: competitiveness in marketing, the marketing activities and the operational effectiveness in marketing, and there was a correlation between the level of the IT and the marketing performance use in the services institutions.

Al-Umari (2004) aimed to analyze the joint use of information and knowledge technology for achieving a high value for Jordanian commercial banking, and this is based on a fundamental problem which was the gap between what is owned by the banks from the IT and of knowledge management on the one hand and what is in need of possessing from IT and knowledge management to assist in making decisions and solving problems and achieving high value on the other hand. O'Sullivan and Abela (2007) aimed to analyse the joint use of information and knowledge technology for achieving a high value for Jordanian commercial banking, and this is based on a fundamental problem which was the gap between what is owned by the banks from the IT and of knowledge management on the one hand and what is in need of possessing from IT and knowledge management to assist in making decisions and solving problems and achieving high value on the other hand. The study also found that Irish institutions do not use reference comparisons when measuring with competitors compared to English and Spanish, but it depends on comparison with the marketing plan or business plan compared to the historical, and the study found that the institutions performance using non-financial metrics such as customer trends, indicators renewal is much better that the ones using only financial metrics.

Yang (2008) showed that the ICT has the greatest impact in influencing the overall performance, Therefore, it is necessary to pay attention to the development of staff competence in the technology used such as Internet services, and Integrating technology into the marketing function where this technology will enable the linking of front offices (sales, marketing and customer services, Enterprise Services) back- offices (finance, operations, HR) for this IT extends and enhances the customer services, and in the second place after technology comes the impact of marketing knowledge on the performance of the customer relationship management.

Mussa (2011) stated that the most important findings of the study is the absence of a correlation between the degree the e-marketing tools use to its websites (customers attraction tools, customer interest, knowledge of customer preferences, customer retention) and marketing performance for those hotels to its variables (number of visitors, the transition from visitor to customer, the duration of the website visit by the visitor, the number of beneficiaries of the provided hotel services, the size of the electronic hotel transactions), and the presence of a strong correlation between the effectiveness degree of the websites electronic marketing tools for the selected hotels and the electronic marketing performance for those hotels.

### **3. Theoretical Framework**

#### **3.1. Marketing Performance and concepts associated with IT**

The concept of marketing performance refers to the level of achieving the objectives established in the marketing plan (Zaloum et al., 2010, p147), and reflects the extent of the institution capacity to adapt to its environment or its failure to adapt to, and achieve sustainable competitive advantage (Sheikh, 2010, p 217). employing its comprehensive marketing knowledge through activating the marketing operations based on the knowledge of the strategic perspective, which would achieve the customer's satisfaction and pleasure and his loyalty consolidation, and marketing innovations and increasing the market share. The implementation of the proactive in order to survive in its environment, marketing performance (Sadek, 2011, p 641) is of great importance for being the focus of an essential and central to predict the success and failure of institutions in the implementation of their strategies and decisions (Kotler et al., 1999, P187) which already can say that marketing performance is the degree of success of the organization and achieve its objectives for marketing through the efficient and optimal use of resources, there are several concepts closely linked to marketing performance:

#### **3.2. Marketing Censorship**

Censorship marketing does not exceed the general scope of control, as defined by Al-sahn on it: "The process of measuring and evaluating the results of marketing strategies and plans and to take corrective action to ensure the achievement of the objectives marketing". Al-sahn (2005) aimed to show the strengths and weaknesses in implementation with the purpose of addressing these errors, and prevent their recurrence, and as defined by Philippe Justas: " process to match the measurement of the degree to achieve the goals set out in the operational plan or in the balance sheet and take corrective decisions" (Jestaz and Aubert, 2008). and the existence of a system of control lead to prevent and detect errors before they occur as well as to identify positive and negative incentives systems for individuals based on the implementation of the marketing plan and is the primary goal of correcting the mistakes which control in the past to prevent their occurrence in the future.

### **3.3. The Marketing audit**

The Marketing audit is a comprehensive, systematic and independent and periodic attempt to test the marketing environment of the institution (Mohamed Abdel Azim Abu Al-Naja, 2008, p 423) or certain business unit in within, it also includes a review of the objectives, strategies and activities and help to identify areas of opportunities and threats from which we can recommend a specific plan to improve marketing performance Foundation, kotler Indicates to six basic dimensions for effectively marketing review is to (Morgan, Clark and Gooner, 2002, p 365 ):

- Marketing Environment Review
- Marketing Strategy Review
- Review marketing career within the enterprise
- Review of marketing systems
- Review productivity
- Review marketing posts

### **3.4. Marketing performance and its relationship to financial performance**

Performance is represented in the Sales Catalog of the basic element of the Governor in measuring the success and continuity of institutions in the world of business, marketing performance is achieved through a specific volume of sales with an attempt to increase this size constantly (Ziouani, 2003, pp17-18), meaning that marketing performance is reflected in the share of the market and try to increase it always, either the financial performance is the actual translation of administrative decisions taken for a specific time period. whether these administrative decisions or marketing, or productivity, therefore, the financial performance is the final outcome of all the actions and acts of the administration, and then we see a close relationship between sales and marketing representatives in the performance of the rate of change and the financial performance of the synergy of its various. so, the composition of the integrated view of all administrative decisions within the institution, which is guaranteed by the information system for the study of the reciprocal influences between marketing elements and the rest of the administrative elements, which measure the impact of sales forecasting possible variations for each elements affecting sales.

## **4. Methodology**

Institutions are more dependent on technology because they have a positive impact on achieving high rates of performance, because they contribute to reducing the cost and shorten the time and exceeded the place. as well as their ability to employ of production elements over time, which requires the concentration of institutions to improve the quality of their outputs and the performance of their activities Marketing through the previous display is the problem of this study as follows:

How affect the use of ICT on the Marketing Performance of Algerian economic institutions?

**Hypotheses:** Depending on the problems involved are, we developed the following hypotheses which attempt after tested:

- a) There is an impact of using ICT on marketing performance in the institutions of study sample.
- b) There is a statistically significant relation between marketing performance and characteristics of the study sample.

This study mainly aims to identify the level of ICT use in the Algerian economic institutions and clarifying the impact on the marketing performance, and identifying the practices of the marketing performance evaluation of the study sample belonging to different sectors; while the study importance is emerged as a serious attempt seeking to attract various bodies attention for the importance of IT use within the Algerian economic institutions in accordance with the global developments and international orientations, along with clarifying the importance of setting standards covering all the aspects related to the marketing performance capable of predicting the performance possibilities, and of completing deficiencies and shortcomings in the researches of the marketing performance evaluation which were found restricted to a large extent in Algeria.

**4.1. The Study Sample**

The study reflects the community of the Algerian economic institutions; the study included a sample of Algerian enterprises located in the different departments. where 450 were distributed a questionnaire, we were able to retrieve 300 of them only after the count excluded 28 questionnaires lack a lot of information and frequent blanks, so that the final sample consisting of 272 institution.

**Table 1: The characteristics of the sample**

	<b>Information</b>	<b>Percentage %</b>
1. Activity sector	Services	47.80 %
	Industrial	43.40 %
	Agricultural	07.00%
	Artisanal	01.80%
2. Ownership nature	General ownership	11.00 %
	Private ownership	89.00 %
3. The size	Small	25.75 %
	Medium	31.62 %
	Big	42.64 %
4. Markets in which the organization activates	Local	18.40%
	National	65.10%
	International	16.50%

Source: The table was prepared basing on the information recuperated.

**4.2. Test the veracity and consistency of the study tool**

The design of the form the study relied on a series of studies of the court in advance with respect to marketing performance or IT mainly rely on questionnaires contained in each of the study. Ambler (2001), Clark (1999), Thomas (2000), Clark (2000) and O'Sullivan and Abela (2007) conducted by some of the amendments to make them appropriate for the current study. Table 2 shows transactions Consistency of all the variables of the study where Cronbach noted that the alpha values were greater than 60%, a percentage of distribution of the acceptance of the results of the study accepted:

**Table 2: A parameter value unchanged (Alpha Cronbach) the internal consistency of the study variables**

The study variables	Stability Factor	Coefficient of Trust
Marketing performance in the Enterprise	71.1%	8.43
The use of ICT in the organization	86.1%	9.27
The overall rate for stability	96.1%	9.80

Source: The table had been prepared on the basis of the statistical program SPSS Output

**5. Results**

**5.1. Test the first hypothesis:** There is an impact of using ICT on marketing performance in the institutions of study sample to address this hypothesis was broken into three partial hypotheses as follows:

**5.2. The first partial hypothesis:** There is an impact of using ICT on size of the marketing performance, to test the validity of this hypothesis of unilateral was the use of the variance analysis and simple regression, the representation of the relationship between the independent variable and changing as follows:

$$Y = \alpha + \beta X + \epsilon$$

where Y= marketing performance, α=static value (Constant), B= Miles steep, X= The use of ICT.

**Table 3: The variance analysis of the size Marketing Performance and use of ICT**

The source of the Variance	The total boxes	Boxes %	Degree of freedom	F	R	R-deux	Specifically factor ratios	Specifically factor ratios
Digression	323,698	323,698	1	110,008	0,532	0,284	0,281	.0020
Error	818,013	2,942	278					
Total	1141,711		279					

Source: The output of the statistical program SPSS, α = 1%.

It is clear from table 3 that the value (F) calculated (110,008) moral standard (set at 0.002) this is less than the level of morale (1%). where the value of the correlation coefficient is

equal to (53.2%), therefore the original hypothesis is accepted, which provides for the existence of a statistically significant relation between the size of the marketing and use of ICT, which means that the use of ICT, explains the increase in the volume of marketing performance by 28.4%.

**Table 4: transactions simple moral linear of size Marketing Performance and use of ICT**

Sample		Standard transactions	Non-Standard transactions		Sig
		the standard regression coefficient beta	The standard error of the regression parameter		
.0010	9,963		0,389		3,879
Technology of information	0,003	10,488	0,532	0,019	0,203

**Source:** The output of the statistical program SPSS,  $\alpha = 1\%$ .

It is clear from the previous table that ICT moral according to test (t), where the level of morale (0,003) less than the level of morale is unacceptable (0.01). and thus, the acceptance of the original hypothesis, which provides for the existence of the impact of the use of ICT on the size of the Marketing performance, this relationship can be expressed as follows:

$$\text{Size of the Marketing Performance} = 5,001 + 0,203 \text{ ICT}$$

**5.2.1. The second partial hypothesis**

There is an impact of using ICT on the quality of the marketing performance to test the validity of this imposition of unilateral was the use of the variance analysis, and simple regression, the following tables show the results of this analysis:

**Table 5: The variance analysis of the size Marketing Performance and use of ICT**

The source of the Variance	The total boxes	Boxes %	Degree of freedom	F	R	R-deux	Specifically factor ratios	Specifically factor ratios
Digression	323,698	323,698	1	110,008	0,532	0,284	0,281	.0020
Error	422,891	422,891	1	36,523	,341a	,116	,113	.0000
Total	3218,934	11,579	278					

**Source:** Output of the statistical program SPSS;  $\alpha = 1$ .

It is clear from the above table that the value (F) calculated (36,523) moral level (80,000) this is less than the level of morale (1%), where the value of the correlation coefficient is equal to 6% 34.1), therefore the original hypothesis is accepted, which provides for the existence of a statistically significant relation between the quality of performance and the marketing and use of ICT, which means that the use of ICT explains the increasing quality of marketing performance by 11.6%.

**Table 6: Transactions simple moral linear Marketing Performance quality and use of ICT**

Sample	T calculated	Standard transactions	Non Standard transactions		Sig
		B	The standard error	Beta	
Fixed	.0010	9,352	,772		7,223
IT	,000	6,043	,341	,038	,232

Source: The output of the statistical program Spss accepted moral level  $\alpha = 1\%$

It is clear from the previous table that ICT moral according to test (t), where the level of morale (,0000) is less than the level of morale is unacceptable (0.01), and thus the acceptance of the original hypothesis, which provides for the existence of the impact of the use of ICT on the quality of performance and the catalog, this relationship can be expressed as follows:

$$\text{Quality of Marketing Performance} = 7,223 + 0,232 \text{ ICT}$$

**5.2.2. The third partial hypothesis:** affect the use of ICT on the efficiency of the catalog, to test the validity of this imposition of unilateral was the use of the variance analysis, and simple regression, the following tables show the results of this analysis, the representation of the relationship between the independent variable and changing as follows:

$$Y = \alpha + \beta X + \varepsilon$$

where: Y: the efficiency of the catalog,  $\alpha$ :static value representing the elements, B: Miles steep, X : The use of ICT.

**Table 7: The variance analysis of the efficiency of the marketing and use of ICT**

The source of the Variance	The total boxes	Boxes %	Degree of freedom	F	R	R-deux	Specifically factor ratios	Specifically factor ratios
Digression	920,776	920,776	1	134,687	,571a	0.326	,324	0.000
Error	1900,524	6,836	278					
Total	2821,300		279					

Source: The output of the statistical program SPSS,  $\alpha = 1\%$ .

It is clear from the above table that the value (F) calculated (134,687) moral level (80,000) this is less than the level of morale (1%), where the value of the correlation coefficient is equal to 6% 57.1, therefore the original hypothesis is accepted, which provides for the existence of a statistically significant relation between the efficiency of the marketing and use of ICT, which means that the use of ICT explains further improve marketing performance by 32.6%.



**Table 8: simple moral linear parameters of the efficiency of the Marketing and use of ICT**

Sample	T calculated value	Standard transactions	Non-Standard transactions		Sig
		B	The standard error	Beta	
,000	7,257		,593		4,306
IT	,000	11,605	,571	,029	,342

**Source:** The table had been prepared on the basis of the output of the statistical program SPSS accepted moral level  $\alpha = 1\%$ .

It is clear from the previous table that ICT moral according to test (t), where the level of morale (0.0000) is less than the level of morale is unacceptable (0.01), and thus the acceptance of the original hypothesis, which provides for the existence of the impact of the use of ICT on the efficiency of the catalog, this relationship can be expressed as follows:

$$\text{The Efficiency of the Catalog} = 4,306 + 0,342 \text{ ICT}$$

**5.2.3. Test the second hypothesis:** "There is a statistically significant relation between marketing performance and characteristics of the study sample, to test this hypothesis test was used Khi-deux table, test results:

**Table 9: Relationship of the characteristics of the enterprise marketing performance**

Characteristics	K <sup>2</sup>	Degree of freedom	Degree of Morality
Nature of activity	4.798	1	0.028
Sector of activity	4.536	4	0.338
Nature of markets	33.286	3	0.000
Size of organization	10.659	3	0.014

Source: Output of the statistical Program Spss,  $\alpha = 5\%$ .

Khi-deux (K<sup>2</sup>) calculated for each of the nature of the property, and the nature of the institutions, markets and the size is respectively (4.798), (33.286), (10.659), the level of the moral order (0.013)(0.000) (0.014), this level is less than the level of morale is unacceptable (0.05) Therefore, accept the imposition, which provides for the existence of moral differences between the characteristics of the institution of the nature of the property, and the nature of the markets and the size of the enterprise, institution and marketing performance, and also rejected the assumption that the moral differences between the characteristics of the institution of the nature of the activity of the institution, because the value of the (K2) is calculated (decreased by more than), moral standard (RO 0.338), so there is no moral difference between the activity of the institution and marketing performance.

## **6. Conclusion**

The world today is witnessing a set of new challenges affecting various aspects of life, especially in the technological dimension, generate the need to abandon the classic ideas and tools of modern competition produced by the ICT effective decision-making, IT being incorporated in the operations and activities of the Foundation as the main instrument of the administration, which would enable them to provide the capacity of the institution to improve workflow through information processing, and management of the exchange and transfer of knowledge, and the promotion of learning and development, performance excellence in return has become an imperative necessity engendered by the competitive environment variables, so organizations are seeking to achieve the highest levels of performance marketing in the business environment in order to achieve the requirements of the survival and continuity, and in the light of previous conclusions that we can make a series of recommendations, which help enterprises to improve their marketing performance Through the optimal use of the available technology, these recommendations were:

- Good review of the data contained in the reports of the development indicators of the use of ICT in the world, and to reduce disparities between groups in society; and interaction with the international community for the transfer and development of technology, attracting investments and creating job opportunities in the area;
- The expansion in the plans for the development of the IT infrastructure of individuals, families and institutions;
- Move the institutions are aware of the importance of IT in improving marketing performance in various aspects, so training staff continuously on developments and should be introduced to support the spirit of innovation among workers and increase financial allocations for special allocations of new innovations in the institution.
- The officials of the institutions of interest IT and that it is not simply the introduction of advanced technologies, but in how to use the optimal exploitation in marketing activities and the adoption of analytical marketing systems that help in identifying the market and feedback of the products in the market that allows to achieve competitive advantage.

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