

The Role of Balanced Scorecard Indicators in Enhancing the Marketing Performance of dairy industries, in Jordan

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Abstract:

This study aims to identify the relationship between the four dimension indicators of the balanced scorecard, they are: stakeholders and beneficiaries, internal processes and procedures, education, development and innovation of human resources, and finally the financial dimension, The study recommended a series of recommendations that are believed to be important in the development of the process of using Balanced Scorecard indicators within the dairy industry companies in Jordan, because of their role in promoting the aspects of profitability and market capitalization.

1.Introduction:

Measuring performance is considered one of the trends of modern management that is the basis of all the institutions and organizations of different objectives and activities, the fact that it is done according to a set of criteria to be used for this purpose, and the measuring of performance for the pharmaceutical companies and extracting indicators of this performance is considered important to determine the level of productivity and effectiveness of these devices in the performance of their tasks and work, it reflects the effectiveness of this performance and its efficiency in the implementation of plans and programs in these organizations, and its primary objective is reflected in an improved performance and increased productivity so that it can carry out its duties to the fullest.

The level of success of performance measurement to businesses is based on the development of standards that are referenced when needed for the development of this performance in the organization, or to find out its course of action, determine the size of the deviation in the actual performance of desired or planned, knowing the strengths and weaknesses, and to extract indicators that reflect the level of this performance, which may vary depending on the activity of the organization and its objectives, as the agricultural organizations vary in performance criteria and in indicators from the industrial organizations, or commercial, or educational, or banking organizations.

2.Problem of the study:

Jordan witnessed in the recent years, a remarkable development in all fields, and the food industry, especially in the area of the dairy industry had the largest share of this development, and the information indicates that there are in the Kingdom more than 96 dairy factories that operate on the basis of profitability, and have achieved self-sufficiency in the production of raw milk, and these companies produce approximately 85% of the total production, and the share of their exports reached about 35% in 2008 of total food exports to the Kingdom. (www.dos.gov.jo)

Despite the economic importance of the industry in overall economic activity, it suffers weaknesses in many aspects, especially in the marketing and processing aspects: long distance of production areas from the consumption areas

and what follows in obstructing the flow of the production of the product to the consumer, as well as increased marketing costs, and competition from the imported manufactured dairy products towards the local products, and the concentration of dairy factories in some areas without the others, and the poor coordination between the factories, and in particular with regard to the quantities of milk produced and the rest of the dairy products, and the lowered capacity of some factories (Qurmla, 2008).

Therefore, the above input is used to improve the process of marketing differentiation, and the link between the application of the Balanced Scorecard indicators, and the development of marketing performance for these companies, and this study tries to find the answer to the problem of the study through the following questions:

- What is the relationship between the application of the standard of stakeholders and beneficiaries, and the marketing performance of the dairy industry in Jordan?
- What is the relationship between the application of the standard of internal processes and procedures and marketing performance of the dairy industry in Jordan?
- What is the relationship between the application of the standard of education and development and innovation of human resources and marketing performance of the dairy industry in Jordan?
- What is the relationship between the application of the standard of investment returns and financial and marketing performance of the dairy industry in Jordan?
- What are the differences in the marketing performance of the dairy industry companies according to market share and profit volume differences?

3. Objectives of the study:

This study aims to identify:

- determine the relationship between the application of the standard of stakeholders and beneficiaries, and the marketing performance of the dairy industry in Jordan?
- determine the relationship between the application of the standard of internal processes and procedures, and the marketing performance for the dairy industry in Jordan?
- determine the relationship between the application of the standard of education and development, and the standard of innovation of human resources and marketing performance of the dairy industry in Jordan?
- determine the relationship between the application of the standard of investment and financial returns, and the marketing performance of the dairy industry in Jordan?
- determine the statistical differences in the marketing performance for the dairy industry in Jordan, according to the company's size and the size of its profits?

3.1 The importance of the study:

This study highlights the importance of:

- Scarcity of studies that tried to link the marketing performance with the Balanced Scorecard Indicators.
- Scarcity of studies that have tried to examine the previous relationship on the dairy sector companies in Jordan.
- Feedback provided by this study to the decision-makers in those companies.
- Feedback provided by this study for all businesses interested in measuring performance.

3.2 Hypotheses:

To achieve the objectives of the study, the following hypotheses have been formulated:

Ho1: There is no statistically significant relationship between the application of the standard of stakeholders and beneficiaries, and the marketing performance in the dairy industry companies in Jordan.

Ho2: There is no statistically significant relationship between the application of the standard of internal processes and procedures, and the marketing performance in the dairy industry companies in Jordan.

Ho3: There is no statistically significant relationship between the application of the standard of education and development, and innovation of human resources, and the marketing performance of the dairy industry companies in Jordan.

Ho4: There is no statistically significant relationship between the application of the standard of investment and financial returns, and the marketing performance of the dairy industry companies in Jordan.

Ho5: There are no statistically significant differences in the marketing performance of the dairy industry companies, depending on the size of the company and the size of its profits.

3.3 Previous studies:

- The study of (Qahtani and Eagles, 2009) entitled **Measuring the performance of governmental organizations in Jordan: An Empirical Study on some government departments in Dhlail province**. This study was aimed to identify the level of performance of governmental departments in Jordan through the application of the criteria used in the axes of the Balanced Scorecard. The study found that 74.7% of indicators that reflect the interests and needs of the beneficiaries of government services are not available, and that 68% of the indicators that reflect the processes and procedures within those departments are not available as well, and the study also found that 43.7% of the departments involved have indicators that reflect the creativity and development and qualification of human resources, the study also adds that 30.7% of government departments apply financial indicators that are related to its strategic objectives. The study recommended a set of recommendations believed to be important in the development process for measuring government performance and improving it through the use of the Balanced Scorecard in governmental organizations operating in Jordan.
- The study of (Zureikat, 2008) entitled "**Balanced Scorecard in Jordanian industries**", which aimed to try to understand the Balanced Scorecard in the Jordanian Industrial Companies, by identifying the use of this card in these companies, and studied a range of internal and external factors affecting its use, and among these factors are: the company's strategy, organizational structure, the external environment, the degree of competition in the markets, and the size of the company. The results showed that there was considerable support for the application of the Balanced Scorecard in the Jordanian Industrial Companies, and they also shows that the organization of administrative procedures, and the size of the company positively affect the use of the Balanced Scorecard, and that the company's central strategy, external environment and the degree of competition does not positively affect the use of the Balanced Scorecard. Finally, the study recommended directing researchers to study other areas in the Balanced Scorecard, and the possibility of expansion in its application and focusing on the benefits of its use.
- The Study of (Shibley, 2005) which has implemented the idea for the balance score panel on the commercial banking sector in Iraq, and showed the importance of this panel and its various dimensions to provide its strategy with prior information that it needs, it also organized the flow of information within four integrated dimensions that depend on each other, and they are: financial dimension, customer dimension, internal processes dimension, learning and growth dimension, as well as its help for the management of the organization to overcome some of the conventional problems facing the Organization, namely: the problem of the time spent between planning processes and the need for information, and the problem of lack of language understanding between business executives and officials for information systems in the organization. The study found that the management of commercial banks in Iraq lacks the environmental information analysis, which form an important basis in the organization's strategic

direction, and a strategic module has been developed in accordance with the work of the panel that helps those banks in the formulation and implementation of an effective strategy that controls the balance between the bank's strategic orientations and the development of its operations.

4. Balanced Scorecard:

This card is represented through the different dimensions that create it; strategic direction of the organization towards future performance, and its operational performance measures, which is not satisfied by only using measures of financial performance, but adds measures of non-financial performance, and provides a whole and clearer picture about the organization's performance and the best way to achieve this performance, as it represents the card through a perspective that combines the important performance indicators or the key success factors of the organization, and this card represents consecutive chains of goals and measures that are interdependent on each other, supports and binds it in the light of reason and the subsequent acts and procedures (Kaplan & Norton, 1992, PP 64-65).

Therefore, the Balanced Scorecard is considered as a means to revitalize the performance of business units and its measuring, as it contributes to improved the performance and measuring its progress and the changes that happen on it, and as it was defined, the card consists of four dimensions: financial, customer, internal processes, growth and education; it provides a balanced vision about the operational performance for the company's future direction (Kaplan & Norton, 1996, p.53).

Both Kaplan & Norton in building the card and determining its implications, adopted two assumptions: the effective measurement which should be the main part in the management process, and the other part is what should be measured, as in what can be obtained, therefore, the effective administration depends on the effective measurement of performance and its results (Bulter et al, 1997, P.242).

(Bulter et al, 1997) has tried to critique the idea underlying the balanced scorecard which was brought by both Kaplan & Norton, where in his critique he showed the long-term strategy on one hand, and the principles that realize the connection status between the measures and the method that the organization use as a basis of its work, The principles included the following: clients, people, innovation & renewal, operation, performance, suppliers, and the commlocal unity. He also adopted three major dimensions of the card, and they are: Shareholders, extraordinary growth, and continuous development.

Therefore, this card provides various real-time information for the managers (Kaplan & Norton, 1992, P.71), and it was developed to meet the many needs of managers at one time, and provide senior management with a comprehensive view of the business in a clear and a fast way, and the card through its four dimensions, show the integration between the financial measures and the non-financial measures, and thus it represents the operational goals and standards in its various dimensions, and those are considered the movers towards the future financial performance of the organization, as it embodies the card through its objectives and standards by an interactive and integrated relationship between the long-term strategic orientations and its operational operations.

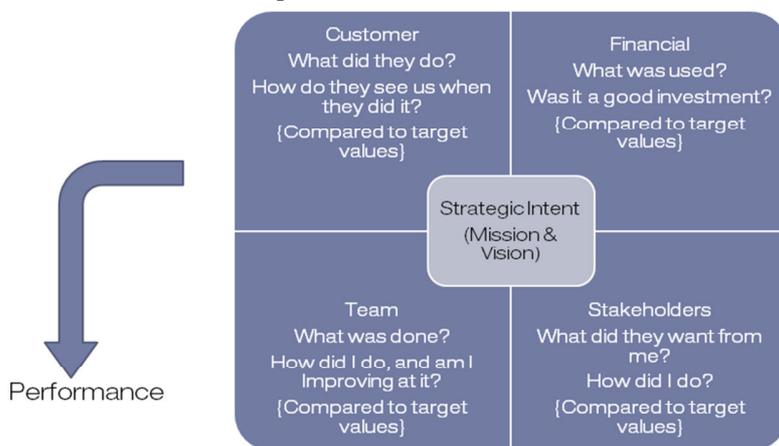
The Balanced Scorecard leads the strategy from a general concept to a frame, which guides the organization in guiding its work, and in the determination of its image that should be in the future, which enable them to take appropriate decisions in the administrative levels and all regulatory departments. This card is a method or a plan that consists of integration, and balance between the organization's main goals, its policy, and in a simultaneous way, with the procedures that it does in its general form (Certo: 1995, P.6).

The card represents a group of homogeneous patterns of decisions taken by the organization (Schroeder, 1989, P.11),

and the meanings of the strategy has been summarized that it includes a Plan, a Pattern, a Poly, a Position, and a Perspective (Mintzberg: 1987, P.11) and of them individually or jointly may represent the meant strategy in a particular area.

Finally, this method might erupt a set of problems, mainly: wasted time between planning processes and the need to supply the information, and the need for a language understanding shared between business executives and officials about information systems (VanDer Zee & DEJong, 1999, P.199). Avoiding these problems requires an immediate response to the need of the strategy and its information management, which requires the development of a special information model that feeds the strategy with information that helps it and clears the way for success into the future, as well as providing measures designed to measure the impact of the multi environmental dimensions on the strategy, from which it is possible to measure the development or improvement made by the strategy towards the future through its relationship with these dimensions.

4.1 Balanced Scorecard components:



Modified Balanced Scorecard © Norton Creative Solutions, Brad Norton, PHR, PMP

These balanced goals consist in its original form of four separate cards, each containing targets specialized in one field, and ultimately all of them realize the materialistic and private goals for the development of physical work, and these cards are as follows:

4.2.A Financial goals card:

This Card uses Financial indicators because they reflect the profitability objectives of the organizations in general, and its role is to maximize the share of shareholders and stakeholders, however, it's different in non-profit organizations, despite their need for adequate resources to perform their activities and maintain continuity in the market. The financial targets are based on the rate of return, cost reduction, improving productivity, returns on investment, the growth of sales, income, and market share. And to measure these goals, financial percentages and numbers of various goals that represent the operational performance in various times are used, and here it is indicated, for example, that the value of the net profit is large, while the rate of return on investment is less, additionally, the cash flow is very important in times of financial hardship (Kaplan, 1992 & Norton).

4.2.B Customers Card:

This card consists of goals related with customer and the beneficiaries satisfaction of the organization, which includes a set of quality standards: customer satisfaction and retention, gaining a new one, customer profitability, and the market share of the targeted sectors, it is also linked with client markers such as, time, quality, performance,

service, and reduced cost, it also satisfies the needs of the clients through new products, responding to complaints and questions, improving the service or the sale methods, and increase product knowledge (Kaplan & Norton, 1992). This card helps to cover the shortcomings of the organizations that do not measure these goals, where it is rare to find an organization in the developing countries that asks their clients to comment on the services they provide, while the organizations that work in developed countries send a lot of questionnaires that aim to identify the customer wishes, preferences, tendencies and trends.

The organization, which is trying to maximize the financial figures in the short term will find after a period of time that customer requirements have changed, and its products have become undesirable, and the organization that does not track customer requests, suggestions and complaints, will be subject to loss of many of its clients and their leak to other competitors in the market (Shibley .2005).

4.3.C Internal processes card:

Many organizations neglect many internal operational performance measures, and this leads to a decline in performance. Generally, this dimension is based on the operations that are characterized by the organization, and has a clear value in revitalizing and pushing it towards achieving its strategic objectives, and the executive managers also identify the processes that give the organization a clear superiority, and provides a high value-added for the customer in the target market, as it responds to the expectations of stakeholders on improving the rates of return.

This card tries to develop the organization from the inside and maintain a high level of performance, including: manufacturing quality, the wastage in raw manufactured materials, the time of progress in industrialization, the rapid change of production from product to product, the quality of design, the relationship with suppliers, the development of business systems management, the use of information technology, cooperation between various departments, new design, and the percentage of reduction in the conversion cycle time. (Kaplan, 1992 & Norton).

4.4.D Learning and creativity card:

This card is used to help the organization to monitor the innovative capacity of its employees compared with the other competitors in the market, and that includes the development of possibilities for working in the organization in accordance with the requirements of innovation and change in order to ensure the progress of the organization in achieving its objectives and continuous improvement, as this requires attention to the prevailing structure which helps in the formation of the long-term growth process, and in improving it. The organizational learning and growth are dependant on three main elements that include persons, the system, and regulatory actions.

This card is connected with the ability of the organization to achieve multiple objectives that include the application of administrative policies that are up to date, learning new technology, providing a number of new products, the number of proposals submitted and implemented by the personnel, and the existence of an incentive in employees for innovation and development (Kapaln & Norton: 1996: P.64). Accordingly, the investment in the development of the skills of the workers and in strengthening the information systems and the information technology, and in organizing the relationship between actions and regulatory pathways; contribute to reducing the gap between the current systems and procedures, with its required goals and performance measures.

5.Study Methodology:

A) the population of the study: The study population consists of all managers of operational units in the dairy industry companies operating in Jordan in 2012.

B) the study sample: a sample was withdrawn from managers working in the dairy industry companies in Dhilail city, and they were numbered in about 50 Executive Directors (Finance, Administration, Control, customers and

marketing).

Table 1: Distribution of the sample by educational level and age

Percentage	Number	Years of experience	Percentage	Number	Age level	Percentage	Number	Educational level
4	2	Less than 5 years	6	3	Less than 30 years	16	8	General Secondary education
24	12	5 – less than 10	16	8	30 – less than 40	22	11	Diploma
44	22	10 – less than 15	58	29	40 – less than 50	50	25	University
24	12	15+	20	10	50 – less than 60	12	6	Higher education
100	50	Total	100	189	Total	100	50	Total

Table 2: Distribution of the company sample by the size and market share

Market Share	Number	Percentage
Less than 5%	3	15
5% - less than 10%	6	30
10% - less than 15%	9	45
15% +	2	10
Total	20	100

C) **Study Methodology:** The study used a descriptive analysis method on that data that has been obtained, and therefore, it used measures of central tendency like the arithmetic mean, the median, standard deviation, as well as statistical methods for testing hypotheses such as: chi square test and the correlation coefficients, and Table 3 shows statistical tests conducted on the study data, which indicate that all previous tests are statistically acceptable.

Table 3: statistical tests and its objective

Axis	Half-axis coefficient of variation	Cronbach alpha
Axis of clients and beneficiaries	0.74	0.91
Internal processes axis	0.95	0.88
Axis of learning, development and innovation	0.96	0.87
Financial Axis	0.87	0.96

D) sources of data collection: The study relied on two types of data: the secondary data was by reviewing the literature of the subject in scientific journals, books and studies of Arab and foreign countries, as well as specialized websites. However, for the raw data, a questionnaire has been developed to collect the necessary data from a study sample.

E) the validity and reliability of the questionnaire: a correlation coefficient variation has been found for each axis, ranging between 74% - 96%, which is statistically significant at the 5% level of significance. and it turned out that the reliability coefficient for the measure as a whole is 90% (alpha Kronbach), noting that the test parameters for each axis individually ranged between 87% - 96%, which indicates that the scale is characterized by a high factor of stability that gave the data used a type of validity and reliability.

To judge the degree of acceptance or rejection of the variables (phrases) the following criterion has been used:

- If the value of the arithmetic mean of the variable was less than 2.33 it is considered weak.
- If the value of the arithmetic mean of the variable lies between 2.34 - 3.66 it is considered average.
- If the value of the arithmetic mean of the variable was more than 3.67 then it's considered to be strong.

6. Study sample:

Independent variables (Balanced Scorecard indicators)

Axis of clients and beneficiaries.

Axis of internal processes

Axis of learning and development and innovation

Financial Axis.

Intermediate variables

The size of the company, the size of profits

The dependent variable

Market share

6.1 Study hypotheses testing:

H01: There is no statistically significant relationship between the application of the standard of stakeholders and

beneficiaries and the marketing performance of the dairy industry companies in Jordan.

Table 4: Distribution of sample's answers and the descriptive statistics of the axis of the beneficiaries

Phrase	The arithmetic mean	Standard deviation	Decision
Tools are used to measure the satisfaction of the beneficiaries and customers about your products.	3.862	0.950	Strong
Tools are used to measure the growth of beneficiaries from your products.	2.924	1.406	Average
An effective device to examine the complaints of beneficiaries of your products.	3.937	0.906	Strong
Tools are used to measure public participation in events and programs organized by your company.	2.331	1.785	Weak
There is a tool to measure the level of satisfaction of other related sectors with you.	2.458	0.986	Average
There is a guide for the classification of the level of the current relationship with the beneficiaries of your products.	2.816	0.934	Average
There are tools to measure the quality of the beneficiaries of your products.	2.572	0.899	Average
There are tools to expand the size of the company's participation in local community service.	2.741	0.879	Average
There is a public relations device capable of measuring and improving your image to the outside world.	2.343	0.990	Average
There are tools to measure the rate of growth of new products relative to the number of new customers.	2.188	0.888	Weak
Availability of tools to monitor changes in the external environment and take advantage of them in the design of new products.	2.231	1.765	Weak

The above table shows that the dairy industry companies in Jordan are characterized by a moderate level in the application of a lot of indicators that relate to the axis of the beneficiaries of its products, and the table shows that there are two indicators that recorded a strong application level, and they are: the use of tools to measure beneficiaries and client satisfaction from the company's products, as well as having an effective device to examine the complaints of beneficiaries of products in most of the dairy industry companies in Jordan. However, the weak indicators that are not applied by the companies operating in this sector were not using tools to measure public participation in events and programs organized by the company, and the lack of tools to measure the rate of growth of new services relative to the number of new customers, and finally the lack of tools to monitor the changes that occur in the external environment and utilizing it in the design of new products.

The remaining indicators were of average level, and they are arranged according to their importance as follows:

- Use of tools to measure the rate of growth of the beneficiaries of the products.
- Use of a guide to classify the level of the current relationship with the beneficiaries of your products.

- There are tools to measure the quality of the beneficiaries of your products.
- There is a tool to measure the level of satisfaction of other related sectors with you.
- There is a public relations device that is capable of measuring and improving your image to the outside world.

The results of the previous table that were reached by comparing the arithmetic mean of each variable (phrase) with the arithmetic mean of the measure as a whole (3); show the acceptance of the effect of strong variables only, and they are the use of tools to measure beneficiaries and client satisfaction of the company's products, as well as having an effective device to study the complaints of the beneficiaries from the products in most the dairy industry companies Jordan, and to reassure the validity of the previous results, the Step Wise method was used to determine the most influential independent variables on the dependent variable, and Table 5 indicates the results of this method.

Table 5: Analysis of variance using the Step Wise method

	Sig.	F	Sig.	T	B	Variable	Model
	0.000	18.14	0.000	9.725	3.729	(Constant)	1
			0.002	5.162	1.160	the use of tools to measure beneficiaries and client satisfaction of the company's products	
	0.002	10.989	0.000	3.441	2.941	(Constant)	2
			0.001	3.306	4.185	the use of tools to measure beneficiaries and client satisfaction of the company's products	
			0.057	4.255	0.756	having an effective device to study the complaints of the beneficiaries from the products	

The Step Wise gradient analysis arrange the most significant independent variables and separates the least influential variables on the dependent variable, therefore, the initial analysis ruled out the 9 variables (phrases), and then analysis organize the independent variables that have been accepted according to their impact. Model 2 show the acceptance of the impact of variables using tools to measure beneficiaries and client satisfaction from the company's products, and the presence of an effective device to study the complaints of the beneficiaries of the products in most dairy industry companies in Jordan, which interpreted about 17% of the variance in improving the marketing performance, and in Model 1, the analysis showed that the variable of tools to measure beneficiaries and client satisfaction from the company's products, is the most significant variable in influencing the dependent variable, as it alone, has managed to explain 12% of the variance in the dependent variable. The estimated coefficients also show a positive statistical relationship between the two used indicators and between improving the marketing performance of the dairy industry companies in Jordan, and this relationship tended to favor larger companies.

And The W.L (Wilks Lambada) value demonstrate that the deleted independent variables of the model explained 22%; which gives the variables that are statistically acceptable a high explanatory power of the variable in the model.

Depending on the results of the analysis of variance F, it was found that the calculated significance level was 0.003, which is less than the significance level of the test as a whole 0.005, and this means the rejection of the first text of hypothesis which sees that there is no statistically significant relationship between the application of the standard of stakeholders and beneficiaries and the marketing performance of dairy industry companies in Jordan, and therefore an alternative hypothesis was accepted, which recognizes the existence of such a relationship.

Table 6: Model Summary

Durbin-Watson		Std. Error of the Estimate		Adjusted R Square		R R		Model	
		1.325		0.095		0.425		1	
1.672		1.587		0.136		0.596		2	
Sig.	df	Chi-square	Wilks' Lambda			Test of Function			
0.002	10	6.409	0.78					1	

Ho2: There is no statistically significant relationship between the application of the standard of internal processes and procedures and the marketing performance of the dairy industry companies in Jordan.

The results of Table 7 show the acceptance of the impact of a single phrase of all phrases contained in the second hypothesis that crosses the axis of internal operations, namely: a tool to measure processes with high added value, and that result was reached by comparing the arithmetic mean of these variables with the arithmetic mean of the scale

As stated previously, the Step Wise method has excluded the effects of variables that are not affecting the dependent variable, where it was found from the analysis that all phrases contained in Table 7 are not significant from a statistical point, and cannot be considered effective in improving the marketing performance, therefore the analysis was repeated using Enter method, which also gave a weak statistical significance for the independent variables in terms of their impact on the dependent variable (marketing performance), and the results in both methods were compatible, where they showed that the internal processes in dairy industry companies do not explain more than 1% of the variance in the dependent variable.

Table 7: Descriptive statistics of the axis of internal processes and procedures

	T	B	Decision	S.D	Mean	Phrase
F= 1.465 Sig. = 0.224 r=0.110 R² = 0.014 D-W = 1.943 Chi² = 3.432 W.L= 0.131	3.499	3.781	Strong	0.706	3.544	Tool used to measure processes with high added value
	1.575	9.448E-02	Average	0.901	2.454	The use of a quality system for procedures and processes that take place within your company.
	-0.781	-0.148	Weak	0.990	2.112	Use of procedures that separate you from the rest of other organizations.
	0.829	9.587E-02	Average	0.753	2.455	Tools to measure the percentage of transactions that are scheduled for certain periods of time.
	-0.860	-0.124	Weak	0.771	2.107	Measuring the proportion of time it takes to do certain procedures.
	1.826	1.997E-02	Weak	0.998	1.542	Error rate calculation to total transactions.
	-0.863	-0.207	Average	0.957	2.483	Tool is used to measure the quality of procedural steps at work
		0.240	Average	0.640	2.348	Tool is used to measure the quality of operational steps at work
	0.499	0.159	Weak	0.965	2.145	Tool is used to develop internal processes in your company

The analysis also suggests that the variables included in the model do not suffer from the problem of Auto Correlation, and that result is achieved through the value of the coefficient D-W which amounted to about 1.9, however, the value of W.L found that the other deleted variables from the model explain what accounted for 78%, which gives the independent variables that are statistically acceptable a weak ability in the marketing performance for the dairy industry companies in the Kingdom.

The results of the variance analysis F compatible with the above as well, where the calculated value of significance

was 1.465 and thus it's greater than the significance level of the test as a whole of 5%, and therefore, the second nihilist hypothesis can be accepted, which sees that there is no statistically significant relationship between the application of the standard of internal processes and procedures and the marketing performance of the dairy industry companies in Jordan, and the same result can be achieved by the value of chi square test, which amounted to 3.432.

Ho3: There is no statistically significant relationship between the application of the standard of education and development and innovation of human resources and the marketing performance of the dairy industry companies in Jordan.

The third hypothesis was formed of eight statements: the existence of education and training programs for leaders working in your company, the use of new methods and tools that improve the processes, the use of systems of incentives and rewards to achieve satisfaction of employees, the use of appropriate information systems and means of communication, focus on innovation in the provision of products, the use of a tool to measure the innovation and creativity of employees, availability of a tool to measure the impact of the transfer of knowledge and expertise among its employees, and finally, a guide to measure the training needs and functions of the leaders involved. The results of descriptive analysis in Table 8 show a strong presence of positive trends in the first four phrases (variables), and that was done by comparing the arithmetic mean of each variable with the arithmetic mean of the four-scale of 3.

Table 8: Distribution of sample answers and the descriptive statistics of the axis of innovation and evolution

S.D	Mean	Phrase
0.92182	3.741	There are education and training programs for the leaders in your company.
0.71231	4.303	New methods and tools are used for the improvement of processes in your company.
0.99753	3.9310	Your company uses an incentives and rewards system to realize workers' satisfaction.
0.96618	3.8276	Your company uses information systems and appropriate means of communication.
0.97758	2.459	Your Company is focused on innovation in the provision of their products.
0.77523	2.657	Your Company uses a tool to measure the innovation and creativity of its employees
0.78314	2.217	There is a tool to measure the impact of the transfer of knowledge and experience among its staff
0.91242	2.514	There is a guide to measure the training and operational needs of labor leaders

The result has been confirmed through the Step Wise method of regression, which ruled out the effects of six variables (phrases), and found that there are two variables that are considered an indicator for improving the

marketing performance; namely the existence of education and training programs for leaders working in your company, and the use of systems of incentives and rewards to achieve satisfaction of employees, and those two variables were able explain about 14% of the variation that occurs in the dependent variable, and in spite of the relatively low explanatory power of the two, they are considered an indicator of improving marketing performance.

It was shown that the independent variables included in the model do not suffer from the problem of autocorrelation, and that result is achieved by the value of the D-W test, and the value of W.L indicates that other variables deleted from the model explain 56.5%, which is what gives the independent variables a statistically accepted ability for the explanation of the dependent variable in the model by a percentage of 43.5%.

As it turns out, the results of the analysis of variance by the value of the F-test and by comparing the calculated significance level of 0.002 with the significance level of the test as a whole 0.005, means rejecting the nihilist hypothesis, which sees that there is no statistically significant relationship between the application of the standard of education and development and innovation of human resources and marketing performance of companies dairy industry calculated in Jordan , and therefore, this means accepting the alternative hypothesis that recognize this relationship.

Table 9: Analysis of variance and model coefficients and its statistical indicators

Statistical Indicators		Sig.	T	B	
F= 9.216	Sig. =0.002	0.000	7.047	6.011	(Constant)
r=0.548	R² = 0.267	0.009	2.686	0.404	The presence of education and training programs for labor leaders
D-W = 1.841					The use of incentives and reward systems to realize employee satisfaction
Chi² = 9.106					
W.L= 0.435					

Ho4: There is no statistically significant relationship between the application of the standard of investment and financial returns and the marketing performance of the dairy industry companies in Jordan.

Table 10: Descriptive statistics for the financial axis

Statistical Indicators	Sig.	T	B	S.D	Mean	Phrase
F= 5.732 Sig. = 0.004 r=0.567 R² = 0.113 D-W = 1.723 Chi² = 7.179 W.L= 0.889	0.007	2.777	2.661	0.569	4.32	There is a tool to measure the percentage of financial waste
	0.005	-0.157	4.035	0.645	3.85	There are tools to measure the rate of returns on investment
	0.006	0.338	7.163	0.810	3.6	There is a tool for measuring the rate of growth in revenue.
	0.033	0.278	8.986	0.773	4.37	There is a tool for setting goals and financial needs
	0.021	1.567	0.359	0.861	4.769	There are financial measures used by senior management
	0.031	0.628	0.194	0.983	3.37	There are short and long term financial plans
	0.034	2.66	0.156	0.866	4.76	There is the process of monitoring the needs of the new financial year
	0.007	2.777	2.661	0.678	3.52	There are modern methods in the use of financial budgets
	0.005	-0.157	.035	0.775	4.75	There are tools to measure the feasibility of new investments
	0.036	0.338	7.03	0.456	3.34	There are criteria to annually review the financial performance

The results in Table 10 show the acceptance of all the independent variables included in the fourth hypothesis, and that result was achieved by comparing the arithmetic mean of each variable with the arithmetic mean of the scale of this trio hypothesis of 3. To confirm the result, all the variables were entered using the Step Wise method, which, as we said earlier, it precludes all independent variables that have no impact, where it was found, according to the Step Wise method, that all the variables listed in Table No. 9 are statistically moral, and through this method, strong statistical indicators were obtained, which show the importance of the financial axis's impact on the marketing performance of companies in Jordan, and these variables combined have explained more than 88% of the variance in the dependent variable.

The W.L value indicates that the other deleted variables from the model explain what accounted for 11.1%, which gives the statistically acceptable independent variables a very strong ability to explain the dependent variable in the model (marketing performance). The results of the analysis of variance show that the calculated significance level of the test F is (0.004) which is less than the significance level of the test as a whole (0.05), therefore, it rejects the text of the fourth nihilist hypothesis, which sees that there is no statistically significant relationship between the application of the standard of investment and financial returns and the marketing performance of the dairy industry companies in Jordan.

Ho5: There is no statistically significant differences in the marketing performance of the dairy industry companies in

accordance with the variation of the market share and volume gains.

Table 11: Results of descriptive statistics for demographic variables

Property	Arithmetic mean of the sample	Standard Deviation	Arithmetic mean for the year
Company size	3.73	0.4461	2.5
Size of profits	3.21	0.094	2.5

The results of the descriptive statistics in the previous Table show positive trends (acceptance) from the sample study's answers on the impact of personal characteristics on the marketing performance of dairy industry companies in Jordan, where there was acceptance on the impact of marketing performance on company size and profit rate for companies that have been studied according to the comparison of the Arithmetic mean on each description with the arithmetic mean of the year.

Table 12: Analysis of the variance of personal variables with the dependent variable (marketing performance).

Property	F Test	Significance level
Company size	5.658	0.06
Size of profits	4.448	0.013

- The significance level of the test as a whole is 5%

To test the fifth hypothesis, the ANOVA analysis of variance or the so-called F test was used, and the previous Table shows the results of this test, where it was found that the calculated level of significance for the variables of company size and the size of profits was less than the significance level of the test 5%, and therefore, the text of the nihilist hypothesis was rejected, which sees that there is no statistically significant differences in the marketing performance for the dairy industry companies according to the market share and the volume of the profits; the existence of such a relationship was accepted.

7. Discussion of results and recommendations:

7.1 Results:

A. The most important indicators were found, which relate to the axis of the beneficiaries and stakeholders, which recorded a strong level of significance, and they were able to explain 7% of the variance in marketing performance for the dairy industry companies in Jordan:

- Using tools to measure beneficiaries and client satisfaction of the company's products
- An effective device to examine the complaints of beneficiaries from the products in most companies.

B. It was found that there were no variables that are statistically acceptable within the axis of the internal processes and cannot be considered influential on the marketing performance of the dairy industry companies in Jordan. Therefore, the nihilist hypothesis was rejected, which sees that there is no statistically significant relationship between the application of the standard of internal processes and procedures and the marketing performance of the dairy industry companies in Jordan.

C. It was found that there are two variables that are acceptable from a statistical point of view within the axis of learning and development and innovation of human resources, and they have a strong influence on the marketing performance of the dairy industry companies in Jordan, namely: the presence of education and training programs for

leaders working in the companies, the use of incentive and reward systems to achieve satisfaction of employees in the dairy industry companies in Jordan, and the two were able to explain about 14% of the variation that occurs in the dependent variable.

D. It was found that all the variables in the financial axis are statistically acceptable and influential on the marketing performance of dairy industry companies in Jordan, and these variables combined have explained more than 88% of the variance in the dependent variable, and these variables are arranged according to their relative importance as follows:

- There are financial measures used by senior management with an arithmetic mean of 4.769.
- There is a monitoring process to the needs of the new fiscal year with an arithmetic mean of 4.76
- There are tools to measure the feasibility of new investments, arithmetic mean = 4.75.
- There is a tool for setting goals and financial needs, arithmetic mean = 4.37.
- There is a tool to measure the proportion of financial waste, arithmetic mean = 4.32.
- There are tools to measure the rate of return on investments, arithmetic mean = 3.85.
- There is a tool to measure the rate of growth in revenues, arithmetic mean = 3.6.
- There are modern methods in the use of financial budgets, arithmetic mean = 3.52.
- There are short and long-term financial plans, arithmetic mean = 3.37.
- There are criteria to review the financial performance annually, arithmetic mean of 3.34.

E. It was found that there were statistically significant differences in the marketing performance of the dairy industry companies in Jordan (market share), according to the various sizes of the company and the sizes of the profits.

7.2 Recommendations:

In light of the previous findings, a set of recommendations was formulated:

- Activating complaints and suggestions boxes, and use them to identify the needs and desires of customers, based on the concept of modern marketing.
- Attention to the concept of customer relationship management to build strong and profitable relationships with customers and beneficiaries and stakeholders in the dairy industry companies in Jordan.
- For quality improvement and cost reduction, work on the introduction of the concept of information technology in the financial and administrative systems in the dairy industry companies in Jordan is necessary.
- Provide evidence for the classification of the level of the current relationship with the beneficiaries of the services provided by the dairy industry companies in Jordan.
- Attention to the concept of creativity in the design elements of the marketing mix for the dairy industry companies in Jordan.
- Work constantly on providing criteria to measure the satisfaction of employees for the business climate, measure innovation and creativity among employees, and distinctive capabilities and skills among workers in the dairy industry companies Jordan.

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