

**THE EXTENT TO WHICH BALANCE SCORE CARD
IS USED IN AVIATION SECTOR
(An Empirical Study on Royal Jordanian Airlines)**

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Abstract. *The objective of this study was to assess the practicalities of the application of the Balanced Scorecard at Royal Jordanian Airlines, which was the sole subject of the study. The financial statements published for the years (2014–2015) were analyzed and personal interviews with relevant company employees were conducted in order to assess the financial performance using the Balanced Scorecard. The results of the study concluded the presence of the effect of the application and use of the four axes of the Balanced Scorecard on performance measures based on indications of accounting profit (rate of return on assets and rate of return on equity) at Royal Jordanian Airlines. As well as having the effect of the application and use of Balanced Scorecard four axes on modern performance measures Accounting Profit (measure of economic value added, market value added) at Royal Jordanian Airlines. In the light of these results, the researcher recommends that RJA makes the necessary efforts to build robust foundations for the assessment of its strategic performance based on the application and use of various aspects of the Balanced Performance Card in such a way as to emphasize the conformity of predefined objectives with the strategy the company decided to adopt to cope with the rapid changes and developments characteristic of an intensely competitive business environment.*

Keywords: *Balanced Scorecard, Royal Jordanian Airlines*

Introduction. Modern service projects are subjected to many development and growth factors. Also, these projects management is facing various problems that require a sufficient amount of information which enable us to recognize the real causes of these problems and to find appropriate solutions to them in form of reports to help management to take right decisions. That illustrates the important role played by management accounting and its various methods.

The subject of performance measurement for service businesses facilities is considered as important subject which take the attention of researchers and experts in the field of management accounting in light of the developments in the global competition conditions and pressures towards the need to improve the service performance facilities in order to keep pace with the rapid changes in the surrounding environment.

Many models of performance measure and evaluate which combine financial performance and non-financial performances have been emerged. The most important ones are Determinants and Results model, balanced scorecard model and Benchmarking model. However, there are many questions that are still under

research and study about the types of measurement performance to achieve the strategic and competitiveness objectives which achieve survival and continuity in business environment. Because the service facilities are characterized by a special nature, they need non-financial measures alongside traditional financial measures.

The environmental variables surrounding the accounting system in general and particularly management accounting- including growing global competition, technological developments and information revolution – has increased the need to have strategic information relating to the external environment and competitor analyzes. In contrast, conventional methods of management accounting have shown incapability in the field of planning, control and performance assessment which require the necessity to develop new measuring methods such as customer satisfaction, the ability to keep customer and employees satisfaction and their skills for that the financial measures alone are insufficient to guide and evaluate the work of facilities.

A new development in control model and performance assessment has been appeared through a term (Balance Scorecards) which is one of the management accounting strategic techniques. This method over other methods of control and performance methods is characterized by combining financial performance and non-financial measures which characterized to be easily traced and linked to facility strategy. Accordingly, the study attempts to identify the status of the application of the balanced Scorecard in the Royal Jordanian.

Problem of the Study and its Questions. Airline industry sector has gained attention in recent years due to the increasing needs and demand for its products. It is recognized that the performance financial measures reflect the results of previous decisions not the necessary steps that may be performed to meet the current competitive environment. So, they are not appropriate to guide managers in their search to improve present and future processes. The performance measures including traditional accounting thoughts are no longer sufficient to evaluate the performance of service facilities.

They are internal measures focused on financial results for short term. it is necessary to rely on new measure for the evaluation and performance measurement for long term taking into account the performance dynamics and the causative factors in addition to the presence of financial measures where there is an urgent need for the development of management accounting methods due the important role they play in business systems represented in providing appropriate management information at different levels in order to help managers to do the basic jobs of planning, performance measurement control and decision-making, and to support the facility to cope with modern changes to enable it to face the competitive environment. From here, companies depend on the use of the Balanced Scorecard to evaluate company financial situation its ability to achieve profitability.

The study attempts to answer the following questions

- What is the reality of the application of the Balanced Scorecard at the Royal Jordanian?
- Does the Royal Jordanian evaluate its performance according to the axes of Balanced Scorecard?
- What is the perception of Royal Jordanian management for the concept of the Balanced Scorecard?

Research objectives. This research aims to study and analyze the reality of Royal Jordanian usage for Balanced Scorecard as a criterion for evaluating activities and ability to succeed and continue. There are the following sub-objectives.

- Shed light on the concept and importance of Balanced Scorecard.

- Identify the employees' attitudes towards the use of Balanced Scorecard.

- Measure the perception of Royal Jordanian management for the concept of Balanced Scorecard.

- Specify the reality of applying the Balanced Scorecard in performance evaluation by Royal Jordanian.

Research importance. This study is important because of the important role played by Royal Jordanian in the national economy, and its success is linked to its ability to invest human resources in achieving its objectives. That requires the use of modern methods of accounting for its operations through the use of Balanced Scorecard which helps Royal Jordanian to increase their capacity to achieve profits.

Study Hypotheses

The hypothesis

- Royal Jordanian does not apply the Balanced Scorecard in their operations.

- Royal Jordanian does not evaluate its performance according to the axes of Balanced Scorecard.

- There is no realization of Royal Jordanian management for the concept of Balanced Scorecard.

Research Method. Having reviewed a number of researches and studies published in specialized scientific journals and magazines, the researcher used a descriptive and analytical method in this study, as this method is adopted in many researches and studies.

The Study Population: Alia Company – the Royal Jordanian Airlines

The Time Limits: 2014–2015

Methodology and analysis. A questionnaire formed of 23 questions was used for data gathering. It was entered into the Statistical Package for the Social Sciences (SPSS) for analysis.

Literature Review. Al- Fayez (2011) study titled " Using the strategic Evaluation Approach to Measure performance by using the balanced evaluation card: Applied study at Ministry of Interior in Jordan.

This study aimed to use the strategic evaluation approach to measure performance: by using the balance evaluation card: applied study at Ministry of Interior in Jordan.

To achieve this goal, a questionnaire has been designed, included (90) items to collect the primary information from the study population consisted of (75) individuals.

While the study sample consisted of (59) individuals, the study reached the following important results:

1. The presence of effect with statistical significance of the organizational reality (organizational structure, institutional culture, organizational team, and the organizational climate) an improving the performance level of the Jordanian Ministry of Interior.

2. The presence of effect with statistically significance of the available resources (available resources, communication, technological resources, the

common abilities) on improving the performance level of Jordanian Ministry of Interior.

3. The presence of effect with statistically significance of the cognitive abilities (clients knowledge, knowledge at the business sector, financial knowledge) an improving the level of the Jordanian Ministry of Interior.

4. The presence of effect with statistically significance of the planning knowledge (institutional planning, the current strategy, planning system, the current plan) on improving the performance level of the Jordanian Ministry of interior.

- (Tohidi et al, 2010) study titled: using balanced performance card especially in the governmental educational institutions, with the goal to evaluate performance by it through comparing the planned and targeted performance with the actual performance to evaluate the results of providing the education services through the internet.

The study reached a number of results, the most important are:

1. The use of the card has led to maximize the revenue from providing the educational services by the increase of the beneficiaries and those who receive the service which reflects on the growth of the revenues of this service as a results of performance improvement resulting from the continuous development in its production and delivery based on performance evaluation through the clients perspectives (the students).

2. Facilitating the way to introduce the educational service and the continuous change in the users spread sheet leads to the perpetual interaction between the user and the institution which reflects on the students increased satisfaction, then to the increase of the revenues from providing the service.

- (Ala'a & Noor,2010) study titled:

Developing measurement mathematical model in management change and strategic planning using BSC perspectives .This study aimed at developing a mathematical model in change management and strategic planning by using the balanced performance measure, through revealing the relation.

- (Ramesh, 2010) study titled :

Importance of balanced scorecard for growth of (SME) sector.

This study addressed the use of the balanced performance card in evaluating the small projects performance from the strategic planning point of view used widely in business management for – profit organizations, especially the vision of this sector is based on revenue maximizing from the practiced activities in the shadow of social and financial environment care about continuity of the projects resources, since they born small under the state's monitoring to continue in achieving their goals by the financial and non financial measures, but did not measure the performance of the government units catering those small projects to measure the extent of ability to apply the balanced performance card to them, such as the parties supporting the governmental service for those projects in Egypt such as the social fund for development .

Theoretical framework

Definition of Balanced Scorecard:

Balanced performance card considers one of the contemporary administrative means introduced by Kaplan & Norton as a new concept for the strategic management, since this contemporary model introduces comprehensive solution to the weakness and uncertainty in the old orientation of the administrative system

which focuses only on the financial performance through adding other dimensions turning the strategic plan to tangible actions and outputs linking the goals, the means and the measures to the needed performance level and the programs and initiatives with the strategic plan.

- (Horngren, 2005, puu8) indicated that the balanced performance card translates the organization's mission and strategy to a set of performance procedures representing the application framework for its strategy.

- There are different definitions of the balanced performance card, the most important " it is a concept helps translating the strategy to action, it starts from determining the organization's vision and strategy and from determining the critical success factors, and organizing the measures that help in setting a goal and measuring the performance in the critical fields relating to the strategies " (Abdallateef Torkman, 2006, p. 144).

- Also identified as " An instrument through which translating the company's strategy and message to goals and measures, and providing a set of coherent ideas, principles and a comprehensive path's map for the companies to follow the message translations into a set of coherent performance measures, and these measures contribute to accomplish the works and setting the businesses strategy and the strategy link to the businesses and the help in coordination between the individual and organizational performance till reaching the management goals.

- This card is based on four basic pillars which are: financial performance to satisfy the customers, operational performance of competency, then the opportunities the company provides to its employees and growth, by this the competition between the companies became based on the availability of the initiative spirit and the creative and innovative ability more than based on the available fixed tangible assets (Kaplan & Norton, 2004, p. 52).

- Balanced performance card can be defined as an administrative system aims at helping the establishment to translate its vision and strategy to a set of coherent goals and strategic measures. This is through depending on the balanced score performance card, since the financial report is no longer considers representing the only way through which the companies can evaluate their activities and drawing their future mores (Kaplan & Norton, 1992).

Benefits of Balanced performance measurement card:

Adopting the balanced performance measurement card's conception help in determination of the work plans and to make sure they work in an appropriate way also considers as a mechanism to follow- up these plans and controlling them, also it achieves many benefits, including (Al- amerig& Al-Galibl, 2003,p. 32).

1. It helps the management in explaining and clarifying its strategy to the shareholders, and enables it to determine and setting the strategic goals very clearly.

2. It helps the management in monitoring performance from one measurement board, and contributes to unifying the commercial goals for each establishment.

3. It eliminates the uncertainty through keeping quantitative indicators, since each element of the cards elements represents a ring in the " cause – effect" chain, which at the end of each one it is possible to achieve one goal of the goals ending with achieving the financial goals.

4. The presence of clear plan to achieve the goals, whether the strategic or the tactical goals represents competitive advantage facilitates the process preparing the annual budget, and supporting more accountability and achieving transparency.

5. It helps in delivering- communicating the strategy to all of the employees, disseminating the organizational change and the organizational learning through a repetitive cycle to review the theory.

6. Correspondence of the individual's goals and the division goals with establishment strategy, and providing strategic communication plan linking the top management with the individuals.

7. It facilitates the periodic review of the strategy, and accelerates the correction procedures, since the presence of balanced card represents a continuous chain of understanding and perception, and applying principles and rules work to achieve the strategic goals, and monitors the process of their application.

(Bernardo, 2010, p. 263) sees that the balanced performance measurement card translates the organizations vision and strategy to a comprehensive set of performance measures that provide the complete frame to implement its strategy, and does not only depend on achieving the financial goals rather also assets on the non financial goals that should be achieved by the organization to meet its financial goals.

Characteristics of the balanced performance card:

Launching from the increasing competitive pressures on the business organizations, and as a result of the defects in the traditional system to measure performance to provide the needed information to the strategic performance management, so the balanced performance measure considers an integrated instrument to measure and to manage the strategy performance.

There are some of the basic characteristics that distinguish the balanced performance measure, including: (Zagloul, 2010, p.13).

1. Balanced performance measure considers a four dimensional model, it springs from four perspectives. Financial performance, relations with the customers, internal operating processes and learning and growth process perspectives.

2. Balanced performance card based on dividing each perspective into five components sub- strategic goal, indicators, targeted values, procedural steps, initiatives and the actual values.

3. Balanced performance measures are based on blending between the financial and know the extent of progress towards achieving the strategic goals, quantitatively and financially.

4. Balanced performance measure links between the financial basic indicators and the non financial indicators specific to each perspective with the sub-strategic goals basically derived from business organization strategy.

5. Balanced performance measure characterizes by limited number of basic performance indicators, launching from the limited rational specificity, and the specificity restricting more information of the analytical energy to the decision maker.

6. Balanced performance measure is based on a set of setting causal links between the sub- strategic goals and the basic performance indicators with each

other's through what is known as (cause- result) relations include in the strategy plan.

7. Balanced performance measure requires the availability of advanced information system, and infrastructure for information technology, to enable the usage of the software report systems, for information flow horizontally and vertically just-in- time.

8. Balanced performance measure requirement the presence of an independent administrative unit in the organizational structure, directly follow the administrative board, this unit undertake the supervision process on the management of the strategic administration linking it to the operation performance.

Steps of building the balanced performance card

(Kaplan and Norton,1996) have determined four basic steps for the methodology building and applying the balanced performance card (BSC), which are doing the following :

Steps 1: Determining building the balanced performance card's structure.

What is required in this step is deeper understanding of the existing institutional performance for the card to be a reflection on the strategy, this is through the following (Kaplan and Norton,1996).

1. Determining the business unit upon which the card will; be built, and the card's levels in the company, and the likely different.

a. Determining the businesses unit and its relation with the financial sides and the goals and unit the companies general frame, and the link between the other businesses unit.

Step 2: Determining he strategic Goals:

Designing the balanced measurement card based on the inputs from the work team sessions from the top management and the other teams this will be through the following (Kaplan & Norton, 1996):

1. Obtaining the organizational strategy through the information and goals that help the management in translating the strategy and the goals in executive forms with informing the concerned individuals about that.

2. Obtaining the response and a list which links between the goals in the for fold perspective taking into account to the strategy of the business unit and the link between the goals and the cause effect relation.

3. Top management divides the team into four groups, each groups is responsible for one perspective of the four perspectives, and the need and the outputs were determined in the goals strategy for each perspective, including the details in phrases and expected list for the likely measure3s for each goals.

Step 3: Determining the strategic measure:

Developing the card's work which achieves linkage, communication, accomplishments sequence and the strategies progress relations, this is through: (Kaplan & Norton,1996).

1. Designing the measures or the best measures connecting with the goals, and determining the information source for each measure and designing the linkage relations between the internal measures in each perspective and the other perspectives in the card, determining the final outputs that should be placed with the goals and measures for description for each perspective, and setting a geographic model for all internal and external measures and linking between them.

2. Conducting workshop for the implementers taking in it the organizational and strategic vision the goals, and the measures in the balanced performance card, communication, and the individuals works in the businesses unit.

Step 4: setting the work plan and the complete application:

What is required is the clear determination at the plan for all work team, the divisions and the departments, This is through the following (Kaplan & Norton, 1996).

1. Setting the frame for the team's goals and developing the achievement plan for the balanced performance card which includes the frame for linking between the database, information system, and the communication process with the card from the organization.

2. Top management team meetings to approve the vision the goals, measures, safety of the operational goal, achievement program and communications with the individuals, the card integrations with the administration philosophy which will agree upon through the time and information systems that support this program.

3. Performance card should integrate with the organization management system as long as this is possible . with the assertion on the prevailing philosophy and the best system used for the information balanced performance card should be built in the prevailing sense as a very to confirm the organizational focus in the frame and vision of the organization and its strategy for the individuals to become interesting in the orientation towards using the balanced performance card, and the card to be at all levels in the organizational structure, and following the individuals outputs continuously.

The four axes forming the balanced performance card. Balanced performance card enable the organization to evaluate the performance in an integrated form through linking the multiple goals that the organization seeks to achieve with the goal to support its competitive position.

In the card, the organizations vision and strategy translate to goals and measures in four dimensions, each dimension evaluates performance from different perspective, and performance evaluation conducts from the investors, customers, internal. (Abdalacheem, 2005,p.76) operational processes, and learning and growth perspectives balanced performance card stems from multiple idea to measure the total performance in the company, since it allows measuring at four axis, and for each axes for these four axes determining the goals and presenting them through the indicators with Cheri targeted values, blending the initiatives in order to modify with the strategic coals, the total harmony between the four axis, the company performance measure respects performance through viewing its activities in order to coordinate the strategy with the executive system, these axes are:

1. Financial Axis

Financial side represents one side of the balanced performance measures card which focuses an only measuring the financial performance on the short – term, showing the events and the decisions results actually made, not the causes and the drivers of these results, the goals achieved show the study of the financial side in achieving the companies goal survival and sustainability achieving the goal determining the financial strength side, and the defects sides resulting from specific financial decisions and policies in the company, achieving the company's ability to

grow and create, confirming the goal from using the financial resources at maximum effectiveness as possible . (Al- Omari, 2009,p.18).

2. Customers Axis

Customers side considers the care of the non financial measures, and the strategic goals is to achieve the customers satisfaction, and gaining their continuous loyalty to the company which increase the company share in the market, through acquiring new customer and retaining the current customers often the goals the company seeks to achieve from studying the customers and meeting his needs represent in:

Reducing the production cost as much as possible, reducing the production and time deficit, achieving the production and work flexibility, and working to reach the implementation of just- in – time production, increasing the products quality level, attempting to reduce the delivery time.

And the company needs to direct its interest to meet its customer's needs and desires, because those customers are those who pay to the company to cover the costs and achieving revenues.

Through this perspective, indicators are set to reflect the customers positions relative to the organization, ability to attract the customers, and the customers profitability Husain, 2001,P. 376).

3. Internal operation Axis

This axis means the process transforming the inputs (the available economic resources to the company) into outputs and creativity fields with value to the company, in the transformation process three phases unite, and through the basic value chain phases, determining the customer's needs and between achieving the customers' satisfaction, first phases:

Innovations phase which includes: determining the targeted market, innovating the product which satisfy the market needs, second phase: Manufacturing phase which includes manufacturing and presenting the product to the market. Third phase: After sale services phase which includes the product maintenance services and sales to the customer, and other services, the customers receives after buying the product or the company performing the service, the internal systems effectiveness of the company are measured in order to guarantee its competitiveness, in addition to the production system |(products quality, production time (nd also the after sale service system) is one of the important systems (customer reception, problem solving term) - Abdallateef & Torkman, 2006, p. 149).

4. Learning and Growth Axis

Growth and learning side considers and of the determinants of the firm's success and its continuity in the competition, since this side depends on the employee's abilities and capabilities to create, innovate and grow, in addition to acquiring new production techniques and advanced technology with high efficiency in order to reach renewing innovations to improve quality and to increase productivity. Reducing production time and reducing defects rates.

Growth and learning side consists of three basic elements: Individuals, systems, and organizational procedures. (Abdalatheem, 2005,p29).

Analysis Results & Hypotheses Test

Characteristic of the study respondents

Demographic items are those that provide information about the respondent who completed the questionnaires. The demographic items that were investigated

in this research are: Gender, education, age, Material statue,. Regarding gender, the majority of the samples were males at percentage of (% 53.6) and female percentage about (% 46.4) of the sample. The majority of respondent have bachelor's degree at percentage of (%77.3). Regarding to respondent age the result indicate that (% 44.5) of the respondent majority have 21–24 years, Regarding to respondent Material statue, the result indicate that (% 77.3) of the respondent majority have single statuses

Table (1): demonstrate a description of the demographic variables of the sample that provides general background about respondents.

1. Demographic variables Frequency Distribution

Demographic variables	Category	Frequency	Percentage
Gender	female	51	46.4
	male	59	53.6
total		110	100.0
education	secondary	15	13.6
	bachelors	85	77.3
	graduate	10	9.1
total		110	100.0
age	0–20 years	9	8.2
	21–24	49	44.5
	25–30	42	38.2
	31–35	10	9.1
total		110	100.0
Material statue	Single	85	77.3
	Married	23	20.9
	Divorce	2	1.8
total		110	100.0

Independent variables

Financial Axis: table 2 demonstrate the average mean scores for Financial Axis Items

2. Means and Std. Deviation for Financial Axis Items

No	Item	Mean	S.D	Rank
3	Financial decisions and policies in the company, achieving the company's ability to grow and create.	4.37	0.728	1
1	return on investment used to measure that financial nations,	4.35	0.737	2
2	return on investment used to measure different financial numbers	4.24	0.765	3
4	cash flow, and used to measure that financial nations	4.15	0.68	4
5	Companies the situation might differ, but they should preserve the continuity in their activities.	4.04	0.729	5

Table 2 shows the level of importance of Flexibility, where the arithmetic means range between (4.04 - 4.37) . We observe that the high mean was to item" financial decisions and policies in the company, achieving the companies ability to grow and create. "with arithmetic mean (4.37) and Standard deviation (0.728). While the lowest arithmetic mean was to item "companies the situation might differ, but they should preserve the continuity in their activities." with Average (4.04) and standard deviation (0.729). In general the important level of Financial Axis was high.

Customers Axis values:

Table 3: demonstrate the average mean scores for Customers Axis Items

3. Means and Std. Deviation for Customers Axis Items

No		Mean	Std. Deviation	Rank
1	Customers considers the care of the non financial measures	4.44	0.567	1
3	Customers side Reducing the production cost as much as possible.	4.31	0.674	2
5	Customers side increasing the products quality level, attempting to reduce the delivery time.	4.31	0.726	3
4	Customers side working to reach the implementation of just- in – time production.	4.12	0.739	4
2	Customers side have strategic goals is to achieve the customers satisfaction.	3.88	0.885	5

Table 3 shows the level of importance of Customers Axis, where the arithmetic means range between (3.88–4.44). We observe that the high mean was to item "Customers considers the care of the non financial measures "with arithmetic mean (4.44) and Standard deviation (0.567). While the lowest arithmetic mean was to item “Customers side have strategic goals is to achieve the customers satisfaction.” with Average (3.88) and standard deviation (0.885). In general the Customers Axis was high.

Internal operation Axis

Table 4 demonstrate the average mean scores for internal operation Axis Items

4. Means and Std. Deviation for Internal operation Axis Items

No	Item	Mean	Std. Deviation	Rank
4	Manufacturing phase which includes manufacturing and presenting the product to the market.	2.77	1.186	1
2	Innovations phase which includes: determining the targeted market	2.69	0.965	2
3	innovating the product which satisfy the market needs	2.52	1.002	3
1	Internal operation means the process transforming the inputs) the available economic resources to the company) into outputs and creativity fields.	2.11	1.191	4

Table 4 shows the level of importance of Internal operation Axis, where the arithmetic means range between (2.11–2.77).

We observe that the high mean was to item "Manufacturing phase which includes manufacturing and presenting the product to the market. " with arithmetic mean (2.77) and Standard deviation (1.186). While the lowest arithmetic mean was to item "Internal operation means the process transforming the inputs) the available economic resources to the company) into outputs and creativity fields." with Average (2.11) and standard deviation (1.191). In general the important level of Internal operation Axis was medium.

Learning and Growth Axis: table 5 demonstrate the average mean scores for Learning and Growth Axis Items

5. Means and Std. Deviation for Learning and Growth Axis Items

No		Mean	Std. Deviation	Rank
4	Learning and Growth shows the gap between the present capabilities and the capabilities there is the need to reach.	3.05	0.228	1
1	Growth and learning side considers and of the determinants of the firm's success.	2.16	0.551	2
2	Learning and Growth depends on the employees abilities and capabilities to create	2.08	0.275	3
3	Learning and Growth acquiring new production techniques and advanced technology with high efficiency	2.02	0.134	4

Table 5 shows the level of importance of Learning and Growth Axis, where the arithmetic means range between (2.02- 3.05) . We observe that the high mean was to item "Learning and Growth shows the gap between the present capabilities and the capabilities there is the need to reach." with arithmetic mean (3.05) and Standard deviation (0.228). While the lowest arithmetic mean was to item "Learning and Growth acquiring new production techniques and advanced technology with high efficiency " with Average (2.02) and standard deviation (0.134). In general the important level of Learning and Growth Axis was high.

Testing the hypothesis

The first hypothesis

H0.1: There is no significant effect of Financial concepts on Balanced performance measure of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).

In order to test this hypothesis, simple linear regression was applied to determine whether Financial concepts had significant effect on Balanced performance measure. The results are provided in table 6.

6. Model summary for effect of financial concepts on Balanced performance measure of companies in Jordan

Result	Independent Variable	R	R2	t	T	Sig
Significant	Financial concepts	0.400	0.160	4.535	1.96	0

As it is noticed in tables 6 the simple regression (R) coefficients for Financial concepts is (0.400) while the t calculated (4.535) are higher than T tabulated 1.96, which indicates significant effect of the predicting variable (Financial concepts) on the dependent variables (Balanced performance measure). The null hypothesis was rejected and the alternative hypothesis was accepted which state:

There is significant effect of Financial concepts on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

The second Hypothesis

H0.2: There is no significant effect of Customers concepts on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

In order to test this hypothesis, simple linear regression was applied to determine whether Customers concepts had significant effect on balanced performance measure. The results are provided in table 7.

7. Model summary for effect of Customers concepts on balanced performance measure of companies in Jordan

Result	Independent Variable	R	R2	t	T	Sig
Significant	Customers concepts	0.878	0.771	19.079	1.96	0

As it is noticed in tables 7 the simple regression (R) coefficients for Customers concepts is (0.878) while the t calculated (19.079) are higher than T tabulated 1.96, which indicates insignificant effect of the predicting variable (Customers concepts) on the dependent variables (Balanced performance measure). The null hypothesis was rejected and the alternative hypothesis was accepted which state:

There is significant effect of Customers concepts on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

The third hypothesis:

H0.3: There is no significant effect of Internal operation on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

In order to test this hypothesis, simple linear regression was applied to determine whether internal operation had significant effect on balanced performance measure. The results are provided in table 8.

8. Model summary for effect of Internal operation on Balanced performance measure of companies in Jordan

Result	Independent Variable	R	R2	t	T	Sig
Significant	Internal operation	0.128	0.016	2.226	1.96	0

As it is noticed in tables 8 the simple regression (R) coefficients for Internal operation is (0.128) while the t calculated (2.226) are higher than T tabulated 1.96, which indicates insignificant effect of the predicting variable (Internal operation) on the dependent variables (Balanced performance measure).

The null hypothesis was rejected and the alternative hypothesis was accepted which state: There is no significant effect of Internal operation on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

The forth hypothesis

H0.4: There is no significant effect of Learning and Growth on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

In order to test this hypothesis, simple linear regression was applied to determine whether Learning and Growth had significant effect on balanced performance measure. The results are provided in table 9.

9. Model summary for effect of learning and Growth on Balanced performance measure of companies in Jordan

Result	Independent Variable	R	R2	t	T	Sig
Significant	Learning and Growth	0.559	0.313	7.015	1.96	0

As it is noticed in tables 9 the simple regression (R) coefficients for Learning and Growth is (0.559) while the t calculated (7.015) are higher than T tabulated 1.96, which indicates insignificant effect of the predicting variable (Learning and Growth) on the dependent variables (Balanced performance measure). The null hypothesis was rejected and the alternative hypothesis was accepted which state:

There is significant effect of Learning and Growth on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

Hypothesis results

1. In order to test hypothesis, simple linear regression was applied to determine whether Financial concepts had significant effect on Balanced performance measure The null hypothesis was rejected and the alternative hypothesis was accepted which state: There is significant effect of Financial concepts on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

2. In order to test hypothesis, simple linear regression was applied to determine whether Customers concepts had significant effect on balanced performance measure. The null hypothesis was rejected and the alternative hypothesis was accepted which state: There is significant effect of Customers concepts on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

3. In order to test hypothesis, simple linear regression was applied to determine whether internal operation had significant effect on balanced performance measure. The null hypothesis was rejected and the alternative hypothesis was accepted which state: There is significant effect of Internal operation on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

4. In order to this hypothesis, simple linear regression was applied to determine whether Learning and Growth had significant effect on balanced performance measure. The null hypothesis was rejected and the alternative hypothesis was accepted which state: There is significant effect of Learning and Growth on Balanced performance measure **of companies in Jordan at the 0.05 level of significance ($\alpha = 0.05$).**

Recommendations:

The researcher recommends the following

1. Reduce the emphasis on the financial areas alone without discussion and analysis and other fields is for all the financial resources available to the organization.
2. Phases and steps of the balanced performance measurement, companies are working to pursue the stages and steps of the methodology for the design and implementation of balanced performance measurement.
3. The length of time for the design and implementation of balanced performance measure, there is not a specific time can say that they represent a standard can be invoked, but it depends on the company and other factors affecting conditions.
4. Gradient in the application process, it can be balanced performance measurement for certain administrative unit method of application, or a particular branch of the company so that it can expand the experiment on the company as a whole after benefiting from strict application of the results.
5. The key elements of performance measurement include elements of the balanced performance measurement on four key elements: financial, internal operations, customers, and to grow and learn, and add as many resources on the part of the skin businesses, along with the environment, and others.
6. Interest significantly intangible assets and to study their effects on the results of the core work of the Organization.
7. The airline Royal Jordanian Airlines Company depending on the application and use of the Balanced Scorecard axes.
8. The need to sensitize employees to the importance of the impact of non-financial indicators in assessing the performance so as not to be ignored during process.
9. Do Airways airline Royal Jordanian to benefit from the results of the current study and indicators exhibited in evaluating their performance while providing systems able to provide the required information for the purpose of improving the performance information.

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СТЕПЕНЬ РЕГУЛИРОВАНИЯ БАЛАНСОВОЙ СИСТЕМЫ В АВИАЦИОННОМ СЕКТОРЕ (Эмпирическое исследование Jordanian Airlines Limited)

Mohammad Ahmad Saleh Alnaimat

Анотация. Цель этого исследования состояла в том, чтобы оценить практические аспекты применения сбалансированной системы показателей в Royal Jordanian Airlines, которая была единственным предметом исследования. были проанализированы финансовые отчеты, опубликованные за годы (2014-2015 годы), и личные интервью с соответствующими сотрудниками компании были проведены для оценки финансовых результатов с использованием сбалансированной системы показателей. Результаты исследования завершили наличие эффекта применения и использования четырех осей Balanced Scorecard в отношении показателей эффективности, основанных на показателях бухгалтерской прибыли (доходности активов и нормы прибыли на капитал) в Royal Jordanian Airlines, помимо наличия эффекта использования и использования Balanced Scorecard в четырех осях по современным показателям эффективности бухгалтерской прибыли (показатель экономической добавленной стоимости, добавленной стоимости на рынке) в Royal Jordanian Airlines. в свете этих результатов исследователь рекомендует приложить необходимые усилия для создания надежных основ для оценки его стратегических результатов на основе применения и использования различных аспектов балансовой карты эффективности таким образом, чтобы RJA подчеркнуть соответствие predetermined целей со стратегией, которую компания решила принять, чтобы справиться с быстрыми изменениями и изменениями, характерными для интенсивно конкурирующей бизнес-среды.

Ключевые слова: сбалансированная система показателей. Royal Jordanian Airlines

СТУПІНЬ КОРИГУВАННЯ БАЛАНСОВОЇ СИСТЕМИ В АВІАЦІЙНОМУ СЕКТОРІ (Емпіричне дослідження - Royal Jordanian Airlines)

Mohammad Ahmad Saleh Alnaimat

Анотація. Метою даного дослідження було оцінити практичні аспекти застосування збалансованої системи показників у Royal Jordanian Airlines, що було єдиним предметом дослідження. Проаналізовано фінансову звітність, опубліковану на протязі багатьох років (2014-2015 рр.), і проведені персональні інтерв'ю з відповідними працівниками компанії для оцінки фінансових результатів за допомогою збалансованої системи показників. Результати дослідження підтвердили наявність впливу застосування та використання чотирьох осей збалансованої системи показників на показники ефективності, що базуються на показниках облікового прибутку (норми доходності активів та норми прибутку на власний капітал) у Royal Jordanian Airlines. Окрім впливу застосування і використання Balanced Scorecard чотирьох осей на сучасні показники діяльності обліку прибуток (міра економічної доданої вартості, доданої

ринкової вартості) у Royal Jordanian Airlines. З огляду на ці результати, дослідник рекомендує, щоб RJA зробив необхідні зусилля для створення надійних підвалин для оцінки його стратегічних результатів на основі застосування та використання різних аспектів роботи з картою збалансованих результатів роботи таким чином, щоб підкреслити відповідність від заздалегідь визначених завдань із стратегією, яку компанія вирішила прийняти, щоб впоратись із швидкими змінами та подіями, характерними для сильно конкурентного ділового середовища.

Ключові слова: збалансована система показників Royal Jordanian Airlines

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АНАЛІТИЧНИЙ ОГЛЯД РЕФОРМУВАННЯ СИСТЕМИ ДЕРЖАВНОГО УПРАВЛІННЯ ЯКІСТЮ ПРОДУКТІВ ХАРЧУВАННЯ ТА ЗАХИСТУ СПОЖИВАЧІВ В УКРАЇНІ

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Анотація. *Висвітлено питання проведення реформи у сфері забезпечення якості та безпечності продуктів харчування й продовольчої сировини, розглянуто досвід зарубіжних країн. Визначено, що створення Державної служби з питань безпечності харчових продуктів та захисту споживачів дало змогу оптимізувати роботу підлеглих підрозділів та уникнути дублювання їх функцій. Проаналізовано основні законодавчі документи, що регулюють трансформаційні процеси в сільськогосподарській галузі України, визначено основні напрями змін. Зазначено, що оновлення нормативно-правових актів України забезпечить гармонізацію з міжнародними стандартами якості та дозволить перенести відповідальність за контроль якості кінцевої продукції з боку держави на операторів ринку.*

Ключові слова: *якість продуктів харчування, державне управління, контроль, реформування, законодавча база, сертифікація*

Актуальність. Безпека харчової продукції і продовольчої сировини є однією з вирішальних економічних складових кожної держави й визначається спроможністю країни ефективно контролювати якість та безпеку вироблених і ввезених продовольчих товарів. Ця сфера діяльності має надзвичайно важливий гуманітарний, соціальний, економічний і політичний аспекти у суспільстві. Від споживання якісних та безпечних продуктів харчування залежить здоров'я людини, продуктивність її праці й тривалість життя. З

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