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## Performance Evaluation of Palestinian Telecommunication Corporations by using Balanced Scorecard approach.

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## **Dedication**

To all those who provided me with love, hope and sacrifices...

To all those who paved my way to knowledge...

To my family...

Parents, Brother and Sisters for their love and belief in me...

Wife, Daughters and Sons for leaving them to see me working many nights on the computer....

To all those who sacrificed their rights to achieve this work...

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## Abstract

The aim of this study which was conducted on the Palestinian Telecommunications companies in Gaza strip was to evaluate the performance of Jawwal and Paltel in light of the four Balanced Scorecard perspectives as assessed by their employees and shareholders.

This study relied mainly on both analytical descriptive and the field study methods, where a special questionnaire was designed and distributed on a sample of 185 employees and shareholders representing the research population of 668 employees and unknown number of individual shareholders, therefore, a stratified random sample was adopted composed of three stakeholders categories: Managers, Employees and Shareholders. "170" questionnaires out of 185 were retrieved and were processed and analyzed by using SPSS software application "for the Statistical Package for the Social Sciences", including Frequencies, Percentile Values, Means, Person Correlation, One-Way ANOVA, Relative Weight, Standard Deviations, One- Sample T-Test, Linear Regression and Scheffe Test. Strategic plans and financial reports of the companies were analyzed to reveal the consistency between the Balanced Scorecard perspectives and the components of their visions, missions , main objectives and financial indicators.

The results of the research shows that:

- there was a strong, direct and significant relation between every perspective and the total degree of the Balanced Scorecard. Four equations have been formed to predict the relation between every perspective and the whole Balanced Scorecard:

1-BSC= 41+3.9C 2- BSC=43+1.9I 3- BSC=86+2.5L 4- BSC=88.8+ 3.3F

BSC: Total performance in Balanced Scorecard perspectives

C: Customer, I: Internal Processes, L: Learning and Growth, F: Financial.

- Most of the stakeholders equally evaluate the performance of the company in Customers and financial perspectives which was consistent with the companies' visions, missions and main objectives of Jawwal and Paltel.

- Most of the stakeholders were different in assessing the performance of the two companies in Internal Business Processes and Learning and Growth perspectives.

The employees of Jawwal and the post graduate stakeholders expected better Learning activities. The stakeholders more than 50 years old expected better performance in the financial perspective.

Finally, the study recommended the necessity of enhancing and developing the training programs and the internal business processes in addition of conducting more effective communication, cascading and deployment activities to assure both the external and internal stakeholders' support.

## Chapter one

### Introduction

#### 1-1 Preface:

Performance Evaluation is a system consists of a group of financial and non-financial measurements and indicators. It aims to measure the results level of every unit without looking at the detailed relationships among the elements, such as: individuals, divisions, or units inside the firm, but it concentrates on the effect of each unit on the overall organizational performance.

Performance evaluation depends on four consequential stages:

- 1- Specifying institutional objectives.
- 2- Translating the institutional objectives to analytical performance plans.
- 3- Specifying the responsibility centers.
- 4- Developing the performance measurement indicators, which includes: indicators of effectiveness, efficiency, productivity, and quality.(Yousef, , 2005: PP. 97-103)

Early in 1990's, a new approach to strategic management was developed by Robert Kaplan and David Norton. They named the system " Balanced Scorecard ". Recording some of the weaknesses and vagueness of previous management approaches. The Balanced Scorecard (BSC) approach provides a clear prescription as to what companies should measure in order to 'balance' the financial perspective. (Arveson, 1998).

Working through the BSC process enables management to define those key perspectives that will drive the business to success, as well as to define how to measure them. The BSC helps organizations align multiple strategies, from various units to the organizational strategy by linking their

deliverables to these key perspectives that drive the business. Balanced Scorecard provides a clear understanding of the company's strategy, and how it is supported by the commitment to objectives from divisions and functions and functional units of the organization.(Balanced Scorecard Institute, 2006)

Performance measures used in the balanced scorecard approach tend to fall into four groups: financial, customer, internal business process, and learning and growth.( Garrison,2003: p.446)

A few points concerning the balanced scorecard to be emphasized; First the balanced scorecard should be tailored to the company's strategy ; each company's balanced scorecard should be unique, they should not be interpreted as general templates to be fitted to each company. Second, the balanced scorecard reflects a particular strategy, or, theory, about how a company can further its objectives by taking specific actions. The theory should be viewed as tentative and subject to change if the action do not result in improvements in the company financial and other goals. The balanced scorecard should be viewed as a dynamic system that evolves as the company's strategy evolves. ( Garrison,2003: p454).

The performance measures mentioned in exhibit (1-1) template are included in three perspectives only. A fourth perspective ( Financial) has been added to meet the main four management aspect according to Kaplan(1992) BSC model and PAL TEL strategy plan elements. This template has been used as a basis to design the study questionnaire to evaluate the company's performance.

**Exhibit (1-1)Balanced Scorecard template for performance measures**

<b>Customer Perspective</b>	
<b>Performance Measure</b>	<b>Desired Change</b>
Customer satisfaction as measured by survey results	+*
Number of customer complaints	-**
Market share	+
Product return as a percentage of sales	-
Percentage of customers retained from last period	+
Number of new customers	+
<b>Internal Business Processes Perspective</b>	
<b>Performance Measure</b>	<b>Desired Change</b>
Percentage of sales from new products	+
Time to introduce new services to market	-
Percentage of customer calls answered within 20 seconds	+
On – time delivery as a percentage of all deliveries	+
Work in process inventory as a percentage of sales	-
Unfavorable standard cost variances	-
Defect-free units as a percentage of completed units	+
Delivery cycle time	-
Throughput time	-
Manufacturing cycle efficiency	+
Quality costs	-
Setup time	-
Time from call of customer to repair of product	-
Percent of customer complaints settled on first contact	+
Time to settle a customer claim	-
<b>Learning and Growth Perspective</b>	
<b>Performance Measure</b>	<b>Desired Change</b>
Suggestion per employee	+
Value added employee	+
Employee Turnover	-
Hours of in-house training employee	+

**Source: Garrison 2003, P 448**

\*+ : It means that the measure has a positive effect on the performance of the company

\*\* -: It means that the measure has a negative effect on the performance of the company

## **1-2 Problem of the study:**

AS a measurement tool and a strategic management system the **BSC** approach may help in specifying the competitive advantage of the company and the lead objectives that drive to achieve its goals. It helps in solving the problem of the study:

How to enhance the performance of Palestinian Telecommunication Corporations (PTC) by implementing Balanced Scorecard methodology.

## **1-3 Study objectives:**

- 1-Evaluating the different performance perspectives of PTC by balanced scorecard approach.
- 2- Explaining the factors which have significant impact on Balanced Scorecard results in PTC.
- 3- Explaining the relation between different environment variables and performance level in Palestinian Telecommunication corporations
- 4- Suggesting solutions and recommendations for the problems which affect the performance of PTC.
- 5- Suggesting suitable balanced scorecard metrics to make measuring of generic performance in PTC easier.

## **1-4 Hypothesis:**

**The First Hypothesis:** There is a significant correlation between the degrees of every perspective and the total degree of all the Balanced Scorecard.

**The Second Hypothesis:** There is a relative importance of the Customers Perspective( Independent Variable) to the Balanced Scorecard ( Dependent Variable)

**The Third Hypothesis:** There is a relative importance of the Internal Business Processes Perspective( Independent Variable) to the Balanced Scorecard ( Dependent Variable)

**The Fourth Hypothesis:** There is a relative importance of the Learning and Growth Perspective( Independent Variable) to the Balanced Scorecard (Dependent Variable)

**The Fifth Hypothesis:** There is a relative importance of the Financial Perspective( Independent Variable) to the Balanced Scorecard ( Dependent Variable)

**The Sixth Hypothesis** There are significant differences in the Balanced Scorecard results attributed to the following stakeholders Characteristics: Place of work, the relation with the PAL TEL corporation, the scientific qualification, gender, age, level of income, period of work, and marital status.

**The first sub-hypothesis:** There are significant differences between the employees of Paltel, the employees of Jawwal and the shareholders of PAL TEL according to the BSC perspectives, at significance level 0.05.

**The second sub-hypothesis:** There are significant differences among Managers, Employees, Shareholders according to the BSC perspectives, at significance level 0.05.

**The third sub-hypothesis:** There are significant differences between the scientific qualifications and the BSC perspectives at sig. level 0.05

**The fourth sub-hypothesis:** There are significant differences between the age categories and the BSC perspectives at sig. level 0.05

**The fifth sub-hypothesis:** There are significant differences between the Income Levels of the sample persons, and the BSC perspectives at sig. level 0.05

**The sixth sub-hypothesis:** There are significant differences between the work or shareholding periods and the BSC perspectives at sig. level 0.05

**The seventh sub-hypothesis:** There are significant differences between the male and female sample persons, and the BSC perspectives at sig. level 0.05

**The eighth sub-hypothesis:** There are significant differences between the married and single sample persons, and the BSC perspectives at sig. level 0.05

### **1-5 Limitations:**

**1-5-1 Scope of study:** The study has coped with evaluating the performance of Jawwal and Paltel according to BSC perspectives through the analysis of two information resources; The questionnaire results and the strategic plan elements( vision, mission, and main objectives).

The primary information related to the stakeholders point of views are limited in the period of conducting the questionnaire from December 2006 to February 2007. The study depended on the annual report of the year 2005 as a source of strategic management and financial information.

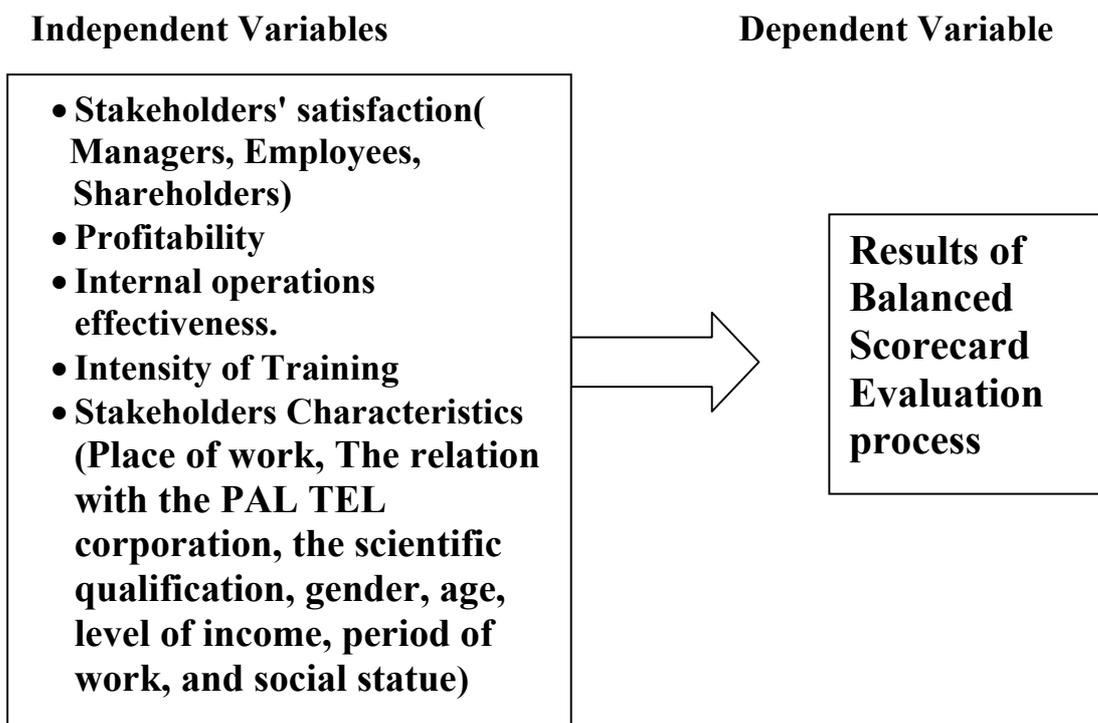
**1-5-2 Limitations of place:** The study has been conducted only in Gaza Strip because of the huge obstacles which are imposed by the Israeli occupation that prevents communication between Gaza and the West Bank. Palmedia and Hadara companies have been exempted also since they started from short time and still have little experience. Customers of the companies

have been exempted since all the stakeholders of the company could be considered as customers benefit from the company's services. Customers may face difficulties to understand the statements of the questionnaire therefore give significant answers.

The owners have been exempted too because of their small number and most of them live in West Bank.

**1-6 Study Variables** : According to BSC approach , four perspectives should be measured which composed of number of independent variables like explained in figure (1-1):

**Figure (1-1): Variables of the study**



### **1-7 The importance of the study**

Palestinian organizations have recently started to conduct strategic planning, and have difficulties to do that especially in uncertain , risky and change environment It applies traditional evaluation which often depends on financial perspective evaluation. Executives need a new way to assess

how well their organizations are functioning, how to predict future performance, and how to align the organization toward new strategies to achieve breakthrough performance. The balanced scorecard transferred the strategic plan from an attractive but passive document into the "marching orders" for the organization on a daily basis, therefore it may help Palestinian executives to find other measurements beside profitability to evaluate their organizations' performance. (Balanced Scorecard Institute, 2006)

Every organization needs to know how well its strategies perform, how to execute their strategies effectively, and how to collect data to report to its sponsors or customers, so, many major corporations – about 40% of large ones by 2002 – have adopted, or are in the process of implementing the balanced scorecard as their framework for executing strategy and monitoring performance. (Balanced Scorecard Institute, 2006)

### **1-8 Research structure:**

The study Text is divided into six chapters as follows:

- A) Chapter 1: Introduction and Previous studies.
- B) Chapter 2: Theoretical Literature .
- C) Chapter 3: The Palestinian telecommunication companies.
- D) Chapter 4: Research methods
- E) Chapter 5: Research methodology (Analyzing the probabilities of the sample, discussing the study perspectives and testing hypotheses.)
- F) Chapter 6: Conclusions and Recommendations.

## **1-9 Previous studies**

### **1-9-1 Kaplan and Norton, 1992 : The balanced scorecard Measures That Drive Performance .**

In this article the balanced scorecard approach has suggested first by Kaplan and Norton , they proclaimed that BSC enables the executives to see whether they have improved in one area at the expense of another , by tracking both financial and operational metrics in four sets of parameters ,first" customers perspective " how customers see the company ? second "International business perspective "what must the company excel at ? Third " Innovation and learning perspective " can the company continue to improve and create value ? Fourth , " Financial perspective " how has your company done by its shareholders ? After answering those questions ,Kaplan and Norton explains the importance of measurement to avoid sub-optimization especially when measures tailored to fit company's particular challenges .

This article provides executives with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures, and may help in introducing the theoretical part of the study and build the same or adapted comprehensive framework for PALTEL company as well .

### **1-9-2 Kaplan and Norton, 1993: Putting the balanced Scorecard to work.**

In this paper Kaplan and Norton have analyzed the total performance of three companies follow the Balanced Scorecard approach in specifying the financial and non-financial measures and appreciate their interrelated relationship among them. This study reached the result that the Balanced Scorecard is likely to become the cornerstone of the management system

more than a total performance measurement system. It has been transformed from just a performance measurement system to a strategic management system. Therefore it concentrates on the individual and departmental long term objectives beside the detailed information which could be introduced by this system in measuring performance.

### **1-9-3 Paul Niven, 2000: Step-by-step Development of Balanced Scorecard. USA**

This study has suggested a group of characteristics which should be available in the measurement tools :

- a- The linkage between the measurement tool and the strategy.
- b- Quantitative to avoid bias from evaluator to another.
- c- Easy to be understood and accurate.
- d- Suits the desired objective.

### **1-9-4 Kaplan and Norton, 2000: Having trouble with your strategy ? Then Map It . USA**

This paper introduces a new tool built on the balanced scorecard called : Strategy map which is a visual framework for the corporate objectives within the four balanced scorecard perspectives –financial , customer , internal and learning and growth processes .The authors created strategy map templates for various industries , including retail , Telecommunications , and e-commerce , those strategy maps enable the management to link the four perspectives with each other , specify the components which need development and take early corrective actions and use the maps as the foundation for management system that can help an organization implement its growth initiatives effectively and rapidly . To make the term "strategy map " more clear the article affords an example of strategy map of Mobil North American Marketing and Refining used to

transform itself from a centrally controlled manufacturer of commodity products to a decentralized customer-driven organization . The strategy map templates of the telecommunication corporations may be useful in reviewing the PALTEL strategy map and connect it with balanced scorecard

**1-9-5 Fred Nikols 2000: The stakeholder scorecard , A stakeholder-based Approach to " Keeping score"**

It is a theoretical study about an assessing organizational performance approach similar to the balanced scorecard and has its importance – like the balanced scorecard –from the multi-perspective measurement . The central point of this paper is that organization would be well served by making use of scorecards reflecting this mutual accountability between the organization and its stakeholders ,such scorecards known as "stakeholders scorecards ".

A prototype of a stakeholder scorecard has been introduced for the author's company , Educational Testing Service (ETS),composed of five stakeholder related perspectives: Clientele, Employees, Suppliers, Stewards and Society . The main thought of this paper may help in clarifying the special importance of different stakeholders and integrate it in the Balanced Scorecards.

**1-9-6 Andre'asson, Magdalena and Svartling, Andreas.(2000): The Balanced scorecard- A tool for managing knowledge? Sweden**

This thesis focuses on two concepts that are believed they have, and further will, add insights of how to manage a company today: the Balanced Scorecard and knowledge management. The Balanced Scorecard provides a new way to manage more of a company's resources than just the financial, by offering a widened scope for essential management activities and processes for future competitiveness.

The main purpose of this thesis has been to explore whether the Balanced Scorecard is a proper tool for managing knowledge in an organization.

The researchers have chosen a sample consists of three companies from not similar business that are working with the Balanced Scorecard on a strategic level, and have been doing so for a period of time.

The authors decided that the Balanced Scorecard could be useful as a tool for managing knowledge and management control in the studied companies. This thesis may help in explaining the ways of exploiting the Knowledge management issues in implementing the Balanced Scorecard, and which measures that should be used.

#### **1-9-7 Haward Rohm 2001 : A Balancing Act. USA**

The article discussing a main thought about doing the right things and doing things right , it describes how to develop a Balanced Scorecard performance system ,explores issues that organizations face in building and implementing scorecard system ,and share lessons learned from organizations that have taken the balanced scorecard journey .

The author decides that the balanced scorecard journey has tow phases: Building the scorecard and implementing the scorecard. He suggested six – steps framework to be used in building an organization's balanced scorecard , and addional three steps to implement the scorecard system throughout all levels of an organization .

This article has a high instructing value that it expresses the general rules of building and implementing BSC .

**1-9-8 Mary A. Malina & Frank H. Selto 2001: Communicating and controlling Strategy: An Imperical Study of the effectiveness of the Balanced Scorecard. USA**

This paper reports evidence on the effectiveness of the Balanced Scorecard (BSC) as a management- control and strategy communication device. The study includes data collected from BSC designers, Administrators and North American managers whose divisions are objects of the BSC.

Data indicates that this specific BSC, as designed and implemented, is an effective device for controlling corporate strategy. Results also indicate disagreement and tension between top and middle management regarding the appropriateness of specific aspects of the BSC as a communication, control and evaluation mechanism.

This study helps executives to exploit from the BSC approach in realizing effective communication and control and avoiding poor motivation or the conflicts among the corporate divisions or the employees layers.

**1-9-9 FAA,2003: Logistic Center Strategic plan 2003-2007. USA**

FAA is an American organization located in Oclahoma city, provides distribution and supply chain management, maintenance , repair and other industrial and business services for the nation's aviation and airspace systems, and to world-wide aviation related customers by offering innovative solutions, consulting expertise, and project management services.

After expressing its mission and values and analyzing the external and internal environment of the organization, FAA introduces the components of its Balanced Scorecard showing how to translate its broad strategies into action goals.

The Balanced "Scorecard" of FAA consists of four perspectives (Customers, Financial stakeholders, Internal business and Learning and Innovation) which have the strategies of acquiring every perspective, and every strategy has its strategic objective, measures and targets. Measures describe what should be measured to determine whether or not the goals have been met. Targets for the measures are set 1-3 years out and are designed to stretch the organization performance, if the organization achieves these targets, it can transform the logistics center and achieve the organization's vision. This document could be considered as a guide for building the Balanced " Scorecard" for PAL TEL.

**1-9-10 Will Kaydos 2003 : What should your company measure Besides Financial results . USA**

As a result of various measurement framework , Will Kaydos expresses a measurement model consists of :

- 1) The needs and expectation of customers and stakeholders .
- 2) Strategy consists of finding your intended customers and how you are going to complete for them .
- 3) Operation include all direct and support business activity .
- 4) The capabilities of company's organization and infrastructure .
- 5) Stakeholder contributions include Products and services that are essential to operations .
- 6) Products and services provided to customers create financial returns.

The author developed ten critical questions executives must be able to answer about their company and the performance measures that apply to each question .

The paper clarifies some points in the process of measurement :

- The importance of market share .

- Measurement and business success .
- Determining what to measure .
- Cascading measures .
- Implementing performance measures .

This paper could be exploited in developing measurements to build a balanced scorecard for PALTEL company .

**1-9-11 Radwan M. El-Anati,2004: Driving a model for performance Evaluation by using Balanced Scorecard( BSC) for Jordanian Construction Companies.Jordan**

This study has been applied on Jordan construction sector. It has included 106 companies from various construction companies.

The study has shown that only one company used BSC, Activity-Based Costing/Management (ABC/M), while two companies adopted BSC and six companies used (ABC/M) and another six only used Activity Based Costing (ABC).

The researcher has built a model consisted of six perspectives as the follows:

$$P= 0.48F+0.17c+0.14E+0.10S+0.09W+0.02R$$

P= Performance, F=Financial, C= Customers, S=Safety Measures, E=Internal Business Processes, W= Employees Innovation and Learning, R= Social Responsibility.

It is shown that the construction companies appreciate the importance of the BSC model and support building evaluation and measurement model for total performance by using BSC.

**1-9-12 Department of Energy (DOE) 2005: Balanced Scorecard performance measurement and performance management program, for Federal Procurement and Major Site and facility Management Contractor Purchasing System. USA**

The document introduces an example for using the Balanced Scorecard approach in measuring and management performance of the department of energy(DOE) in a huge American Federal organization. Consistent with that long-term strategy, and building on the originally redesigned Federal and Contractor Purchasing Assessments, the department's business assessment models evolved to bring them more formally into line with the Balanced Scorecard(BSC) approach to performance measurement and management.

The organization considers the Balanced Scorecard approach as a performance measurement and management system, it applies the method as has been introduced by Kaplan and Norton in 1992. The core objectives and performance measures established under this program for the Federal and Contractor organizations are applicable to all activities. Under the BSC program, performance objectives and measures are established, targets are assigned and measurements taken. The core objectives and measures contained in the Federal and Contractor BSC, are to be used by participating activities to monitor their business processes.

Formal document self-assessments are the principal data generating or gathering source measurement in the Balanced "Scorecard" are formulated to report status of performance to management and the customer and the feedback cycle drive improvement actions as an appropriate.

This document is useful as a practical experience in building and implementing BSC in measurement and management and may help in transforming it to other business fields after specific adaptations.

**1-9-13 Jihad Ribhee Al Natour, 2005: The Impact of Balanced Scorecard on Investment Decision in Jordanian Industrial Companies. Jordan**

This study has been conducted on Jordanian industrial companies to check the applicability of Balanced Scorecard and its effect on operational performance improvement.

The analysis of survey results shows how much the Balanced Scorecard is useful as a measurement tool with its integrated set of financial and non-financial measurement – that enable a strategy to be managed and validated. It also provides evidence of the usefulness of the balanced scorecard (BSC) as a tool for improving project management effectiveness through the development of financial score.

**1-9-14 Adrian Ward, (2005): " Implementing the Balanced Scorecard at Lloyds TSB" USA**

The focus of this study is the experience of the financial services group Lloyds TSB in creating an effective performance management system to develop the individuals and the organization. Adrian Ward describes how Lloyds TSB revolutionized its approach by linking the objectives of its 80,000 employees to an overarching Balanced Scorecard.

The company conducted many steps to assure applying the BSC approach such as; attendance of education seminars, and cascading generic objectives for a large and diverse workforce,

It has been realized that if the organization was to fulfill its aspiration to become "the best bank in the UK," it had to reorientate itself around the organic growth of topline revenue. The author concluded some action points:

\*Invest time and effort in up-front education. Employees need to know what a BSC is and how it can benefit them before real buy-in can be created.

\*Involve employees in designing measures. They are likely to have a better knowledge of what performance data does and doesn't exist in their departments.

\*A community of practice facilitated by HR is a good way of sharing best practice around using the BSC.

\*Make sure to focus evaluation on outcomes and impact, not just the process of using the Scorecard.

**1-9-15 Nigel Evans,2005: Assessing the balanced scorecard as a management tool for hotels. UK**

This study seeks to assess the BSC approach to strategy and its usefulness for the international hotel industry. The paper undertakes a wide-ranging literature review which focuses on strategic implementation and the BSC approach, which is compared and contrasted with evidence of practice derived from a survey of hotels in Northeast England.

Within this context, this paper aims to place one of the frameworks within the context of strategic management and to assess the way in which performance measurement is being dealt with in the hotel industry.

The research for this exploratory study focuses on the UK hospitality sector and in particular the medium to large hotels in the Northeast of England. The primary research is directed particularly towards the stated objective of evaluating the means by which a sample of hotels are measuring their performance.

The hotel respondents were categorized as to the extent each was using the chosen measurement indicators. Overall the respondents are making very

high use of the performance measures, with over 70 per cent in the very high category and relatively few making low or very low usage of the performance measures chosen. This somewhat high level of usage indicates that many of the hotels are currently operating a performance measurement system, which in terms of the aspects being measured approximates to the balanced scorecard approach. However few of the hotels appear to be utilizing the BSC approach explicitly and few seem to be operating an integrated form of performance measurement as advocated by BSC proponents.

Furthermore, using the categorization developed by the author, 71 per cent of respondents are making very high use of the chosen performance measures.

**1-9-16 Elsa Cardoso and others, 2006 : A balanced scorecard approach for strategy-and quality-driven Universities . Spain**

This paper describes a balanced scorecard strategic system integrated in the Decision Support Systems for university effectiveness and efficiency(DSS-UEE) Project, developed at the department of science and information technologies( DCTI) of Instituto superior de cie'ncias do trabalho e da Empersa (ISCTE), a management, social sciences and informatics university in Lisbon, Spain.

The paper describes the development of the strategic information system for the creation and restructuring of Higher Education Degrees, and reports on the results achieved in the development of this Strategic System applied to case study: The creation of a new Master degree (MSIAD).

**1-9-17 Erkki K. Laitinen (2005): Microeconomic analysis of the Balanced scorecard: a case of Nokia Corporation.**

The purpose of the research is to analyze the theoretical foundation of the Balanced Scorecard (BSC) with the aid of a microeconomic model and to illustrate the results in an empirical case. The model includes demand, production, and objective functions. Demand is presented as a function of price and customer relationship management (CRM) costs. Production depends on labor, capital, and development and learning (D&L) costs. The strategy is depicted by objective function based on profit and net sales. The output variables are classified as four perspectives of BSC. The study claims that this model makes it possible to maintain a consistency between the strategy and the resource allocation. In this model, the strategy is described by the objective function to be maximized. With respect to this objective, the firm is assumed to optimize its actions subject to demand and production constraints as well as to constraints set on customer relationship management (CRM) and development and learning (D&L) costs. The shadow prices of the constraints are used to show the relative importance of perspectives for different strategies. The variables of the model are used to drive performance measures. Financial and Non-financial performance measures are analyzed in the context of a shift in the strategy. The theoretical model is applied to the annual financial statement data from Nokia corporation. Simulation is used to find appropriate estimates for the parameters of the model. It is shown that a shift in the objective function (strategy) toward revenue maximization may alter the importance order of the BSC perspectives. Non-financial and financial performance ratios may change into opposite directions, when the strategy is shifted. The theoretical model is based on the traditional assumptions of microeconomic analysis.

Empirical analysis is only based on a naïve estimation methods. The theoretical analysis showed that all the shadow prices decline, when the strategy is shifted towards revenue maximization. However, the shadow prices of demand and production decline at a higher rate than those of CRM and D&L stocks. The authors concluded that for a modern company, that is shifting its strategy, the importance of the management areas ( production, demand, CRM, D&L) may change which should be taken into account when designing the BSC. The BSC should be elastic with respect to the shift in the strategy.

**1-9-18 Bruce W. Harber (2006): working together for success, the Balanced Scorecard solution at Peel Memorial Hospital. Canada**

This study concentrates on the development and implementation of a BSC at Peel Memorial Hospital (PMH), it also highlighted the values and benefits to be gained when best practices from the corporate sector are successfully adapted to the health care environment. In this case study the author declares that hospitals and regional health authorities across Canada are under siege from tremendous and very complicated challenges confusing the attempts of health care entities to remain focused on delivering high quality patient care. Bruce W. Harber sees that a clearly articulated vision statement, measurable corporate goals and objectives, together with a strategic plan all help to bring more certainty to staff, patients and volunteers. The author concluded that applying the BSC approach could change PMH from an organization with non-measurable targets, tired mission statement that tried to be all things to all people, and unclear objectives, to an organization with better patients satisfaction levels, more ability to align funding to improve results particularly in the areas of

staff/team satisfaction, a better handle on how to invest in learning objectives, and higher performance results.

Considering that this case study is about a public service corporation, its BSC has been adapted from the profit-driven private sector organizations, which PAL TEL belongs to both of them.

### **1-9-19 Commentary on the previous studies**

Most of the previous studies have tried to prove the effectiveness of the BSC approach as a performance measurement tool and a strategic management system by analyzing the total performance of companies that follow it.

It has been shown that the model is widely spread in western corporations. But in the middle east few companies appear to be utilizing the BSC approach explicitly.

When Kaplan & Norton (1993) analyzed the total performance of three companies adopting BSC, they found that it is likely to become the cornerstone of the management system more than a total performance system.

Kaplan and Norton also(2000) created a visual framework called "strategy map" to help an organization implement its growth initiatives effectively and rapidly.

Andre'asson & Svartling (2000) decided that BSC provides a new way to manage more of a company's resources than just the financial ones and proved that the BSC could be useful as a tool for managing knowledge and management control in the studied companies.

Malina and Selto(2002) reached the results that the Bsc is an effective device for controlling corporate strategy.

El-Anati (2004) built a model consisted of six perspectives as a BSC model for the Jordanian construction sector. Two companies only from the 106 ones adopted BSC. He found that even when the companies do not utilize BSC explicitly they appreciate the importance of it.

Al Natour (2005) checked the applicability of BSC and its effect of operational performance improvement, it provided evidence of the usefulness of BSC as a tool for improving project management effectiveness.

Ward (2005) focused on the experience of the financial services group Lloyds TSB in creating an effective performance management system by using BSC. Ward described how Lloyds TSB revolutionized its approach by linking the objectives of its 80000 employees to an overarching BSC.

Evans(2005) seeked to assess the BSC approach to strategy and its usefulness for the international hotel industry. It indicated that few hotels appear to be utilizing the BSC approach explicitly, but most of them use its performance measures.

Laitenen (2005) analyzed the theoretical foundation of the BSCX with the aid of microeconomic model. The output variables were classified as four perspectives of BSC. He concluded that when the company design its BSC it should take in account the effect of changing its strategy on the relative importance of the management areas (Production, demand, CRM, D&L)

Cardoso and others (2006) described a BSC strategic system integrated in the DSS for university effectiveness and efficiency. They reported on the success in achieving the desired results.

Bruce (2006) concentrated on the development and implementation of a BSC at PEAL Memorial Hospital(PMH). He concluded that applying the

BSC approach could help PMH to overcome the tremendous and very complicated challenges which face the health care entities.

It could be noticed that this study differs from all the previous studies in trying to analyze deeply the performance of a telecommunication corporation according to the BSC perspectives. Beside analyzing the announced strategic plans the stakeholders had the chance to evaluate their company's performance according to detailed measures of BSC. The results of this study help the decision makers in the company to know how their company look to its stakeholders and what objectives need to be explicitly announced developed.

## **Chapter 2**

### **Theoretical Literature**

#### **2-1 Introduction:**

This chapter consists of seven main topics. The first discusses the Performance Measurement in general including its importance, categories and development. The second topic discusses the Balanced Scorecard as a model ; its main principles and perspectives. In the third topic, the background and the evolution of the Balanced Scorecard model is reviewed to distinguish the changes which have been conducted through the past two decades and their effects.

In the fourth and fifth topics, two interrelated subjects have been discussed , one of them is dealing with the Balanced Scorecard as a measurement system and the second is dealing with the Balanced Scorecard as a strategic management system. Discussing the Balanced Scorecard as a strategic management system is the fifth topic which shows how it is possible to manage the corporations' strategies over their long run. The sixth topic is about how the company builds its Balanced Scorecard as the result of the integral relationship among different success factors of the main work areas.

The seventh and the last topic of this chapter is dealing with implementing the Balanced Scorecard and the necessary steps should be conducted in order to enable the corporation to implement the Balanced Scorecard approach.

This chapter aims to:

- 1- Reviewing the Performance measurement importance, models, Categories and purposes.

2-Showing the importance of the balance view which is afforded by the BSC approach.

3- Exhibiting examples of suggested measures for each one of the four BSC perspectives.

4- Showing the relationship between organization's strategies and the selected measures.

5- Discussing the different kinds of measures according to their direct or indirect effect on the corporations performance.

6-Discussing the six steps of building the Balanced Scorecard and other related subjects.

7-Discussing the three implementation's sub-processes: a) Cascading, b) Developing an implementation plan, C) Conducting Periodic Reviews.

## **2-2 Performance Measurement:**

Performance measures or indicators are measurable characteristics of products, services, processes and operations the company uses to track and improve performance. The goal of making measurement is to permit managers to see their company more clearly- from many perspectives- and hence to make wiser long-term decisions. ( Arveson, 1998)

### **2-2-1 The importance of performance measurement:**

Since it is not possible to improve what is not measured, metrics must be developed based on the priorities of the strategic plan, which provides the key business drivers and criteria for metrics that managers most desire to watch.( Arveson, 1998)

Performance metrics play a crucial roles in four of the most significant leadership activities:

**a-Reporting:** Reports are prepared for different work areas to show consumed resources and the value created and ensure that people in the company get full credit for what they have accomplished.

**b-Making decision:** It enables the manager to practice fact-based management

**c-Implementing strategy:** The performance metrics must be directly based on the organization's strategic direction

**d-Improving performance:** It is one of the most important components of the leader's job, so it is necessary to exploit metrics to specify the right tasks and align efforts behind them. (Frost, 2000: pp.14-16)

### **2-2-2 Categories of Performance Measures:**

Performance measures can be put into the following categories:

- Qualitative or subjective- When numbers on a scale are assigned by human judgment. This does not necessarily imply there is any bias in the measure.
- Quantitative or objective- When measures are derived from physical measurements or countable units.
- Attribute- When a characteristic, such as a defect, is measured as either being present or not.
- Variable or continuously variable- When the degree or extent of a variable is measured on a continuous scale. The dimensions of a table top are variables; dents are attributes since they are counted as either being present or not.

Anything can be measured to a useful degree, especially in a business environment. If something can't be measured directly, it must have an

effect, which can be measured. If a process has no intended effect, it is clearly not worth measuring in the first place.( Kaydos, 1999: pp.19-20)

### **2-2-3 Uses of Performance Measures**

Performance measures can be used for a number of different purposes. Such purposes can range from determining current performance levels to predicting future ones to carefully controlling an existing process. In some instances, a single performance metric, such as cycle time, can serve multiple purposes.

In other instances , a particular performance metric, such as queue time for a single operation, may have only a very limited, but still important use.

As noted , performance measures can be used for multiple purposes. Some general types of performance measures are discussed in the following sections:

#### **a- Baseline Performance Measures**

Baseline Performance Measures are some of the most important measures that can ever be gathered. They answer the question" Where am I starting from?" That is, they establish a baseline for current performance, forming the basis for all subsequent measures. So always start with collecting baseline measures, establishing a starting point to compare subsequent changes or improvements against.

#### **b- Trending Performance Measures**

Trending Performance Measure shows how something is doing over time by comparing something- usually an activity, output, or accomplishment- with a predetermined baseline measure.

#### **c- Control Performance Measures**

Control Performance Measure ( often in the form of control chart) answers the question, "Am I staying within some predetermined boundary or

tolerance?" Usually used as rapid feedback measures, control measures provide early warnings that something is starting to stray from a predetermined or required performance level. If it is important to keep a process within predetermined levels, then you need control performance measures... control performance measures must often be collected in almost real time. This information in turn must be provided immediately to the people directly performing a specific task.

#### **d- Diagnostic Performance Measures**

Frequently, performance problems are identified through performance measurement." Although you can not improve what you can't measure, sometimes you also can not even identify what is wrong unless you measure". A diagnostic measure attempts to orient the company to a specific problem area. In some instances, trending or control performance measures can also serve as diagnostic measures.

#### **e- Planning Performance Measures**

All organizations must plan, both on a micro and macro level. Having "hard" data to assist them in their planning efforts is invaluable. Planning performance measurements are predictive measures. They answer the question, "Given certain information and past performance levels, what can I plan for in the future?" Such measurement-or fact-based information also allows a company to more intelligently develop various what-if scenarios. Performance measures take much of the guesswork out of the planning function because the best indicator of future performance levels is often a measured record of past performance levels and associated trends.

( Jerry, 1997, pp. 10-19)

## **2-2-4 Performance Measurement models:**

### **1- Traditional models:**

In traditional industrial activities, "quality control" were the watchwords. In order to shield the customer from receiving poor quality products, aggressive efforts were focused on inspection and testing at the end of the production line. That mean the company loses of the bad products and services and in the same time the cause of defect will stay unknown.

### **2- Total Quality Management:**

The Deming philosophy emerged in the US government in 1987 via two initiatives, one military and one civilian. Under defense Secretary Frank Carlucci, the Total Quality Management(TQM) program was introduced to create a new focus on total ownership cost in acquisitions.

What Deming saw was that variation is created at every step in a production process, and the causes of variation need to be identified and fixed. If this can be done, then there is a way to reduce the defects and improve product quality indefinitely. To establish such a process, Deming emphasized that all business processes should be part of a system with feedback loops. The feedback data should be examined by managers to determine the causes of variation, what are the processes with significant problems, and then they can focus attention on fixing that subset of processes.(Arveson,1998)

### **3- The Performance Prism:**

The Performance Prism is a framework jointly developed by the Centre for Business Performance at Cranfield School of Management and Accenture. It is a three dimensional model. It has two ends, The stakeholder wants and needs and the stakeholder contribution as well as three faces, strategies, processes and capabilities. Prism works as follows:

- satisfying the wants and needs of stakeholders( SWANS) is the starting point.
- Strategies an organization adopts should be related to achieving the needs of the key stakeholders.
- The key business processes which may enable the organization to deliver its strategy need to be identified, developed and measured.
- The key capabilities that may underpin the performance of the organization processes should be identified
- Identifying the wants and needs of the organization (Our wants and needs OWANS) taking in account the contributions of the stakeholders.

The prism framework has been put as an alternative model for the Balanced Scorecard to meet one of its shortages about not meeting all kinds of stakeholders needs.(Bourne, 2002: pp.90-93)

#### **4- The Baldrige Award:**

The civilian initiative of 1987 was the Malcom Baldrige National Quality Award. The Baldrige Award questionnaire booklet is published each year by the National Institute for Standards and Technology, which also administers the award reviews. The booklet contains, in addition to the questions, several pages describing various underlying concepts and values. In brief, what the Baldrige winners have in common is a management system that incorporates something like Deming's Plan-Do-Check-Act cycle, in which Both Strategic and Tactical plans are deployed along with measurement system, and feedback is obtained from the data to monitor results and revise the plans. The Baldrige Information and Analysis Criteria are simply looking for data to answer the question, " How well do we know how well we do our work?"(Arveson,1998)

### **5-Service Quality model:**

Service quality is the difference between what a customer expects and what is provided. The expectations/perceptions conceptualization has been extended to incorporate "desires" in evaluating customers' perception of service quality.

The SERVQUAL model is used as a diagnostic tool for the measurement of customer service and the satisfaction of service perception. The framework has been developed by Parasuraman and others and subsequently refined between 1985 and 1994 to have a final condensed list consisted of five correlated major categories:

1. (1) Tangibles
2. (2) Reliability
3. (3) Responsiveness
4. (4) Assurance
5. (5)Empathy.( Van der Wal,et.al,2002)

### **2-2-5 Deciding the right metrics:**

Many different measurement models could be applied, but none of them can decide exactly what to measure. Haward Rohm (2001) has suggested three different models to be used in specifying the measures that matters the most:

- 1- The logic model:** This model depend on exploring the relationship among four types of performance measures: inputs( What we use to produce value), processes ( How we transform inputs into products and services) outputs( what we produce), and outcomes( what we accomplish). This model reinforces the logic of the strategy map by showing the relationship among the activities that produce good outcomes.

- 2- Process flow:** This model is applied to build a better scorecard performance system, as flow charting processes helps identify the activities( and measures) that matter most to produce good outcomes.
- 3- Causal analysis:** causal analysis identify the causes and effects of good performance. It could be started with the result( the effect)that the company want to achieve and then to identify all the causes that contribute to the desired result. The causal model is most useful for identifying input and process measures that are leading indicators of future results. (Rohm,2001)

Bob Frost(2000) has added the Three-Steps Method to decide what to measure which involves three distinct steps by translating a general performance topics into specific performance indicators:

- 1-Examine the business strategy to find crucial performance topics( e.g., *customer service*)
- 2-Determine where and how the company must succeed on each topic( for "customer service" may include : quick access, accurate information, and friendly manners).
- 3-Consider each critical success Factor and define specific performance indicators that will track success on it.( for "quick access" factor these might include Telephone wait time and Number of rings to answer.)

Paul Arvesson(1998) sees that the value of the metrics is in their ability to provide a factual basis for defining:

- Strategic feedback to show the present status of the organization from many perspectives for decision makers.

- Diagnostic feedback into various processes to guide improvements on a continuous basis.
- Trends in performance over time as the metrics are tracked.
- Feedback around the measurement methods themselves and which metrics should be tracked.
- Quantitative inputs to forecasting methods and models for decision support system.

### **2-3 BSC as a model**

In the 1980s Many academics and consultants became concerned that too much emphasis was being put on financial and accounting measures of performance. Management accounting systems had been perfected to produce detailed cost breakdowns and extensive variance reports but these were seen as not being useful for managing a business because they were too internally focused and were backward looking. To overcome these shortcomings various academics and consultants started to consider the concept of balance. ( Bourne, 2000: p.11).

In 1990 Robert Kaplan and Davis Norton developed the Balanced Scorecard to understand how organizations create value in the information age. The BSC measures the company's performance from four major perspectives: Financial, customer, internal processes, and learning and growth. Briefly, Balanced Scorecard provides the knowledge, skills, and systems that the employees will need (Their Learning and Growth) to innovate and build the right strategic capabilities and efficiencies (the Internal Process) that deliver specific value to the market (the customer) which will eventually lead to higher shareholder value (the financial).

( Kaplan, 2000)

The authors have carried out a year-long research Project with 12 organizations at the leading edge of performance measurement to come to the conclusion that traditional performance measures, having a financial bias and being centered on issues of control, ignored the key issue of linking operational performance to strategic objectives and communicating these objectives and performance results to all levels of the organization. Realizing that no single measure can provide a clear performance target or focus attention on all the areas of business, they proposed the concept of a Balanced Scorecard as a more sophisticated approach enables companies to cope with rapidly changing environments( Song, Yoon, 2004).

The idea of Kaplan and Norton was that these four perspectives represent a balanced view of any organization and that by creating measures under each of these headings no important area would be missed. "It is important to remember that the scorecard itself is just a framework and it does not indicate what the specific measures should be"( Bourne, 2002: p.12). That is a matter for people within the organization to decide, so the set of measures for each organization will be different.

The Balanced Scorecard is a system in which the procedures of applying it is a critical part of it. Some measures may give real picture about the performance of the company. If they have been designed by a team of planners without the contribution of the different levels of business units and departments and without using the scorecard as a mean of communication, cascading, and alignment, it gives the same results of any traditional performance measurement model. " Much of the success of the scorecard depends on how the measures are agreed, the way they are implemented and how they are acted upon. So the process of designing the scorecard is just as important as the scorecard itself". (Bourne, 2002: p.12)

The complexity of managing an organization today requires that manager is able to view performance in several areas at once. The balanced scorecard allows managers to look at the business from four perspectives as it provides answers to the following four questions:

- How do customers see us?( Customer perspective)
- What must we excel at?(Internal business perspective)
- Can we continue to improve and create value?(Innovation and learning perspective)
- How do we look to shareholder?(Financial perspective) ( Kaplan, 1992)

The four-perspectives framework of a business unit's Balanced Scorecard describes how the unit creates the shareholder value through enhanced customer relationships driven by excellence in internal processes. These processes are continually improved by aligning people, systems and culture. Each of these four perspectives is lined in a chain of cause- and- effect relationships. When the BSC designed in the highest-level management, it passes it down to the lower levels in order to decompose it to more specific objectives and targets linked to the main scorecard. "The four-perspective framework of business unit strategies turns out to extend naturally for developing an enterprise Balanced Scorecard"

( Kaplan & Norton,2006: pp.6-7)

In Balanced Scorecard language, vision, mission, and strategy at the corporate level are decomposed into different views, or perspectives, as seen through the eyes of business owners, customers and other stakeholders, managers and process owners, and employees. (see figure 2-1)

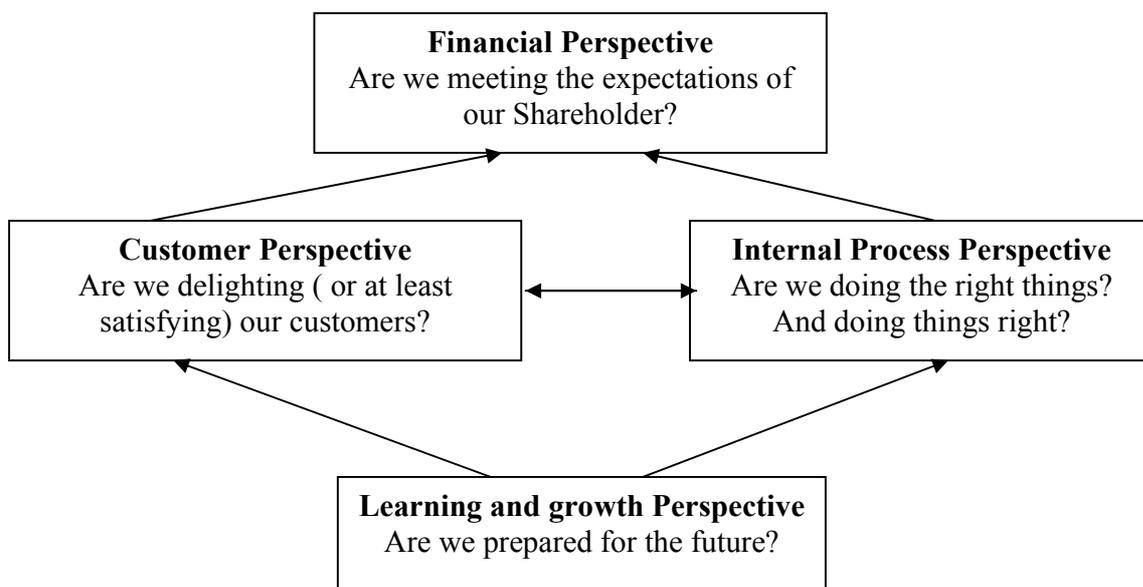
The owners of the business are represented by the financial perspective ; customers and stakeholders( customers are a subset of the larger universe of stakeholders) are represented by the customer perspective; managers and

process owners by the Internal Business Processes Perspective; and the employees and infrastructure( Capacity by the Learning and Growth perspective.(Rohm, 2002)

The balanced scorecard provides executives with a comprehension framework that translates a company's vision and strategy into a coherent set of performance measures. Many companies have adopted mission statements to communicate fundamental values and beliefs to all employees. The mission statement addresses core beliefs and identifies target markets and core products.

BSC analysis method is constituted as four perspectives like in Figure 2-1.

**Figure 2-1: Four Perspectives of BSC**



**Source:( Kaplan and Norton, 1996a)**

The measures of Balanced Scorecard should be used to realize three purposes:

- 1- To articulate the strategy of the business.
- 2- To communicate the strategy of the business.

3-To help align individual, organizational, and cross-department initiatives to achieve common goal, so, while using BSC as a controlling system it should be used as a communication, informing, and learning system as well.

The four perspectives of the scorecard permit a balance between short-term and long-term objectives, between outcomes desired and performance drivers of those outcomes, and between hard objectives measures and softer more objective measures. While the multiplicity of measures on a balanced scorecard may seem confusing, properly constructed scorecards contain a unity of purpose since all the measures are directed toward achieving an integrated strategy.( Kaplan 1996a: pp. 24-25)

Since the Balanced Scorecard tool aims at communicating the strategy to the entire company, there might be a better chances for knowledge management work to succeed. All employees of a company using this tool should know where they are heading. They will then have the possibility to judge their own actions in the light of the company's complete strategies.

( Andre'asson,1999:p.36)

The frameworks have increasingly purported to represent not merely a way of measuring the success of an organization but go further in that they offer managers a "road-map" by which they can manage. In particular they focus on the way in which a strategic vision can be realized. (Evans, 2005)

### **2-3-1 Financial Perspective:**

Despite the important role of the intangible objectives and their effect on the long-term goals, many authors consider the financial objectives as the "end of mind" of company's journey.( Niven, 2005: p.68) "Financial performance measures indicate whether a company's strategy, implementation and execution are contributing to bottom-line improvement".( Kaplan, 1996a: p.25)

The objectives and measures in this perspective tell us whether our strategy execution, which is detailed through objectives and measures chosen in the other perspectives, leads to improved bottom-line results or not. (Niven, 2006, p.16)

It is clear that most of the writers see the intangible objectives as factors of improving the financial results and raising its indicators, but not something that the company may sacrifice on the account of its return ratio in order to reach its destination.

The owners of the business are the category of the stakeholder who should be aware of the dimensions of concentrating on the financial results, and be aware of their effect on the other perspectives, since some executives supported by stockholders and different external stakeholders may support the desire of realizing high returns as an odd success indicator.

*"Measures of share price and market valuation are often found on Balanced Scorecard. Those working in organizations that rely heavily on innovation and human capital( who isn't?) may desire a financial measure that captures the value of the intellectual assts. As with all Balanced Scorecard measures, the key is alignment to your strategy. The measures selected for the financial perspective will help set your course in determining measures for the rest of the scorecard, so ensure they accurately translate the objectives appearing on the Strategy Map. the measures should tell every individual story." (Niven 2006: p.147)*

The measures in exhibit (2-1) may help the company get started.

**Exhibit ( 2-1 ) Commonly Used Financial Measures**

---

- Total assets
- Value added per employee
- Total assets/employee
- Compound growth rate
- Profits as a % of total assets
- Dividends
- Return on net assets
- Market value
- Return on total assets
- Share price
- Revenues/total assets
- Shareholder mix
- Gross margin
- Shareholder loyalty
- Net income
- Cash flow
- Profit as a % percentage of sales
- Total cost
- Profit per employee
- Credit rating
- Revenue
- Debt
- Revenue from new products
- Debt to equity
- Revenue per employee
- Times interest earned
- Return on equity(ROE)
- Days in payable
- Economic,value added(EVA)
- Days in inventory
- Market value added(MVA)
- Inventory turnover ratio.

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**Source :( Niven, 2006: p. 148)**

When the financial perspectives measurements revised in profit-pursuing organizations, they give a real and clear definition to the main desired goals. In times when the competitors may make advantage of their full capacity resources, and realize progress in the market, in these touch times of business, many might seem like everything , but the financial perspective gives us the following reminder:

- *The main goal of business is wealth creation, as measured by series of financial targets achieved.*
- *The purpose of financial targets 9is to galvanize the operating units to manage performance and gain competencies for future success.*
- *It is one of many other perspectives but the one that funds the mission and purpose of the organization.*
- *It is a lagging indicator of performance because it records success after the fact.*( Nair,2004:p22 )

Developing the BSC to be a strategy-focus management system make it concentrate on the future, something may look as contradicted with the nature of the financial measures. Should senior managers even look at the business from a financial perspective? Should they pay attention to short-term financial measures like quarterly sales and operating income? Many have criticized financial measures because of their well-documented inadequacies, their backward-looking focus, and their inability to reflect contemporary value-creating actions. "Shareholder Value Analysis(SVA), which forecasts future cash flows and discount them back to a rough estimate of current value is an attempt to make financial analysis more forward-looking. But SVA still based on cash flow rather than on the activities and processes that drive cash flow".( Kaplan and Norton, 1992)

Some critics go much further in their indictment of financial measures. They argue that the team of competition have changed and that traditional financial measures don't improve customer

satisfaction, quality, cycle time, and employee motivation. In their view financial performance is the result of operational actions, and financial success should be the logical consequence of doing the fundamentals well.

( Kaplan and Norton,1992)

Periodic financial statements remind executives that improved quality, response time, productivity, or new products benefit the company only when they are translated into improved sales and market share, reduced operating expenses, or higher asset turnover.

( Kaplan and Norton,1992)

### **2-3-2 Customer Perspective:**

Answering questions like: to whom the firm introducing products and services? or what is the customers proposed value? and how it could be improved? What chances available to increase market share? And which methods and techniques most effective to attain the highest customers value by the lowest cost? These questions and many more ones could be asked from the very beginning of establishing a business. It is all about the customer, the final user and the strict evaluator who can decide the firms success.

In the customer perspective of the balanced scorecard, managers identify the customer and market segments in which the business unit will compete and the measures of the business unit's performance in these targeted segments. "This perspective typically includes several core or generic measures of the successful outcomes from a well-formulated and –implemented strategy.

The core outcome measures include customer satisfaction, customer retention, new customer acquisition, customer profitability, and market and account share in targeted segments. But the customer perspective should also include specific measures of the value

propositions that the company will deliver to customer in targeted market segments. " (Kaplan & Norton,1996a,p. 26)

The balanced scorecard demands that managers translate their general mission statement on customer service into specific measures that reflect the factors that really matter to customers.

Kaplan and Norton(1992) see that customer's concern tend to fall into four categories: time, quality, performance and service, and cost;

- Time could be measured by lead time which can be the time from receiving the order to the time the company actually delivers the product or service to the customer.

- Quality measures the defect level of incoming products as perceived and measured by the customer.

- The combination of performance and service measures how the company's products or services contribute to creating value for its customers.

- Cost measures beside price many other cost elements such as the administrative hassles of ordering, invoicing, inspecting, and paying for materials. An excellent supplier may charge a higher unit price for products than other vendors but nonetheless be a lower cost supplier because it offers more administrative facilities.

To put the balanced scorecard to work, companies should articulate goals for time, quality, and performance and service and then translate these goals into specific measures.

Mohan Nair(2004:p.22) consider this perspective as the second most forgotten or misunderstood set of objectives in business, and to let the company gain customer acquisition, acceptance, and perpetuation he suggests to answer the following questions before setting goals:

- What is your target market?
- Who are/is your customer(s)?

- Who do they call our customers?
- Who do I compete against to gain the customer?
- What value does the existing customer of the organization perceive?
- If the organization disappeared, who would miss us? What will they do?

The customer perspective considered as a changeable and vague one, that represents a challenge in front of the executives to put new marketing methods and manufacturing operations pursuing the fast changes in the customers characteristics and tastes.

"Often, the customers of today may not be the desired customers of tomorrow. As the audience of customers mature, what they desire in the organization changes also. What does your customer value?"

(Mohan Nair, 2004:p.23)

In addition to specifying the customer segment and value proposition Paul R. Niven (2006:pp.14-25) suggested a third question concerning what the customers expect or demand from the company. Despite their simplicity he decides that each of these questions offers many challenges to organizations. Concerning the importance of many other measures included in this perspective, the organization must develop performance drivers which can lead to improvement in these "lag" indicators of customer success.

Mohan Nair ( 2004:pp.50-51) Suggested a set of measures that may help in planning for customers perspective and measuring or evaluating it as well:

- Brand equity measures
- Market share
- Share of mind
- Total available market

- Total accessible market
- Customer retention
- Customer satisfaction
- Customer attrition
- Average selling price
- Lifetime value of customer
- Sales per employee
- Customer profitability by channel by product
- Design win (number of wins per year).

### **2-3-3 Internal business Perspective:**

Deciding the means by which the company can realize various improvements such as:

- How we can realize customers satisfaction.
- How we can reduce costs.
- How we can enhance quality.
- How we can improve productivity.
- How we can raise our profits.

The solutions of all these problems are implied in the continuous development of the operational efficiency.

In the Internal Process Perspective of the scorecard, we identify the key process at which the organization must excel in order to continue adding value for customers. Our task in this perspective is to identify those processes and develop the best possible measures with which to track our progress. To satisfy customers, you may have to identify entirely new internal processes rather than focusing your efforts on the incremental improvement of existing activities. Service development and delivery, partnering with the community, and reporting are

examples of items that may be represented in this perspective.(Niven,2005: pp.15-16)

The internal measures for the Balanced Scorecard should stem from the business processes that have the greatest impact on customer satisfaction- factors that affect cycle time, quality, employee skills, and productivity. To achieve goals on these factors, managers must device measures that are influenced by employees' actions. Since much of the actions takes place at the department and workstation levels, managers need to decompose overall cycle time, quality, product, and cost measures to local levels. That way, the measures link top management's judgment about key internal processes and competencies to the actions taken by individuals that affect overall corporate objectives. This object ensures that employees at lower levels in the organization have clear targets for actions, decisions, and improvement activities that will contribute to the company's overall mission.(Kaplan and Norton, 1992)

For many companies, their ability to manage successfully a multiyear product-development process or to develop a capability to reach entirely new categories of customers may be more critical for future economic performance than managing existing operations efficiently, consistently, and responsively.

Managers do not have to choose between the two vital internal processes, the long –term financial success and the short-term of value creation, hence the internal-business-process perspective of the Balanced scorecard incorporates objectives and measures for both the long-wave innovation cycle as well as the short –wave operations cycle.(Kaplan,1996a: p.28)

Companies seldom fail because they have the wrong strategy. They fail because they lack of the methods to achieve the tactics that

surround a strategy. The internal perspective reminds us that the background works, driven by objectives and goals, must be in place to ensure that the customer and financial objectives are achieved. Typically, organizations have habits or internal behavior will sabotage their ability to meet targets in the customer and financial perspectives. "These organizations must re-tool to win, and this perspective helps them define what this retooling is. Conversely, if an organization can identify these internal characteristics and define ways to enable them, their execution arsenal can be turned to win the customer and also to destroy the competition".(Nair,2004: pp.23-24)

#### **Samples of Internal Perspective Measures:**

- Patent filed in engineering
- Product lifecycle measures:
- Meantime between failures of existing products
- Spec to prototype cycle
- Bug-count on release
- Weighted defect count.
- Activity-based costs of major contributing activities and outputs
- Inventory turns
- Number of new products in pipeline
- R&D pipeline for new products
- Number of returns
- Percentage claims ratio( insurance company)(Nair,2004: p.52)

#### **2-3-4 Learning and Growth Perspective:**

The question which Kaplan and Norton (1992) have suggested to measure this perspective is: Can we continue to improve and create value? Hence the targets for success keep changing in an intense global competition, it requires that the companies make continual

improvements to their existing products and processes and have the ability to introduce entirely new products with expanded capabilities.

A company's ability to innovate, improve, and learn ties directly to the company's value. That is, only through the ability to launch new products, create more value for customers, and improve operating efficiency continually a company can penetrate new markets and increase revenues and margins-in short, grow and thereby increase shareholder value.

Financing research and development activities helps companies to solve perpetual problems, create new services and products, and predict the characteristics of future environment to be able to avoid sudden crises. Learning objectives should drive to growth and concentrate on the training needs of the employees and the renewal of manufacturing supplemental operations.

Businesses are unlikely to be able to meet their long-term targets for customers and internal processes using today's technologies and capabilities. The financial, customer, and internal-business-process objectives on the balanced scorecard typically will reveal large gaps between the existing capabilities of people, systems, and procedures and what will be required to achieve breakthrough performance. The required capabilities represent the learning and growth perspective of the Balanced Scorecard.( Kaplan & Norton1996a: pp,28-29)

Paul R. Niven (2006:p,16) expresses almost a similar gap which appear when some objectives, measures and related initiatives are identified in the customer and internal process perspectives. You can be certain of discovering some gaps between your current organizational infrastructure of employee skills(human capital), information system( informational capital), and the environment required to maintain success( organizational capital). The objectives

and measures you design in this perspective will help you close the gap and ensure sustainable performance for the future.

Although many companies, in crisis, remove training and development programs from their shrinking budget as the first victim. Mohan Nair (2004:p.53) considers learning and growth perspective as the basis for all other results in the internal, customer, and financial perspectives, when learning means how people absorb new ideas and turn them into action. In a sense, it is more than just learning to action but the speed at which learning is transformed to action. Usually, current failures in the competitive business world is the result of past failure in the acknowledgment and exploitation of learning and the growth of talent.

Measures in the Learning and Growth Perspective:

- Training by level
- Retention numbers
- Redeployment percent
- Forced and unforced attrition
- One-on-one interviews per employee
- Employee and vendor satisfaction
- Pay Benchmark
- Rankings
- Six-month performance after hire
- Promotion from within
- Personal development plan creation (Nair, 2004,p.53)

## **2-4 BSC Evolution:**

Many changes have been conducted through the past two decades, either in the model basic design or in its application. Variations in the basic design are common. Typical changes include changes in the

categorization of perspectives (Innovation and Learning of Employees, in place of Learning and Growth) and the number of perspectives (adding Stakeholders as a fifth separate, perspective).

( Rohm,2002)

Kaplan and Norton(1996a:pp.34-35) consider the four-perspectives model as a template but not a strait jacket, it depends on industry circumstances and a business unit strategy. Fewer than four perspectives may be used in some companies, and in the same logic, one or more perspectives may be needed in another cases, they don't think that all stakeholders are automatically entitled to a position on a business unit's scorecard.

The scorecard outcomes and performance drivers should measure those factors that create competitive advantage and breakthroughs for an organization.

When the BSC was developed, Professor Kaplan(1992) and his associates initially positioned it as a "tool for performance measurement." Namely, the BSC was seen as a method to recognize and correctly measure the performance of an organization. Calling this the BSC's first generation, its important constituent elements include the breakdown of a strategy along four perspectives i.e.(financial, customer, internal, and learning and growth), strategic objectives, performance indicators, leading indicators, key performance indicators, and a compensation system linked to performance, etc. The BSC of this generation took the most fundamental form, and needed to undergo a transition in moving to the next stage.

As the first generation is only one facet of the BSC. In fact, many companies that introduced the BSC methodology have started to realize that the method demonstrates not only the effect of the framework, but also includes additional functions to correctly evaluate

the achievement of specific organizations. Using the BSC in measurement afforded self checklist to individuals, units, departments, and the whole company. While examining and auditing according to the scorecard's measures, they started to enhance performance to meet the level required to attain high scores.

By analyzing, in detail, the gap between the evaluated organizational objectives for performance and the actual results, they have started to recognize the causes of unsatisfactory performances, "identifying and solving operational problems, reflecting the previous term's details in the next BSC, and identifying problems with the skill-building ability of the organization's head"( Morisawa, 2002).

This is the stage at which the BSC can function as a core of management system in company-wide, and is appropriately called the second generation of the BSC approach. Many companies have shifted to this stage, and have begun attaining additional BSC outcomes. Additional elements that are not found in the first and second generations include methods such as:

- "**Strategy map**" which describes the strategic system of an organization as a map.
- "**Strategic communication**" which communicates the organizational strategy of executives to general employees based on that map.
- "**Change in the organizational climate**" which aims at activating supervisors and general employees through strategic communication. ( Morisawa,2002)

## **2-5 The Balanced Scorecard as a Measurement System**

In 1992, after a study conducted on 12 companies at the leading edge of performance measurement, Robert S. Kaplan and David P. Norton suggested four sets of parameters, called Balanced Scorecard, which considered as a measurement tool lets the executives see whether they have improved in one area at the expense of another. Knowing that, say the authors, will protect companies from posting suboptimal performance( Kaplan & Norton, 1992)

Many organizations espouse strategies about customer relationships, core competencies, and organizational capabilities while motivating and measuring performance only with financial measures. The Balanced Scorecard retains financial measurement as a critical summary of managerial and business performance, but it highlights a more general and integrated set of measurements that link current customer, internal process, employee, and system performance to long-term financial success.( Kaplan & Norton,1996a: p.21)

The scorecard outcomes and performance drivers should measure those factors that create competitive advantage and breakthroughs for an organization. Thus, all stakeholder interests, when they are vital for the success of the business unit's strategy, can be incorporated in a Balanced Scorecard. Stakeholder objectives, however, should not be appended to the scorecard via an isolated set of measures that managers must keep "in control."

Other measurement and control systems can establish diagnostic and compliance requirements far more effectively than the Balanced Scorecard. "The measures that appear on Balanced Scorecard should be fully integrated into the chain of causal event linkages that define and tell the story of the business unit's strategy"

( Kaplan & Norton,1996a: p.35)

When Kaplan and Norton initially conceived the Balanced Scorecard, they were attempting to solve a problem of measurement: How do we acknowledge the importance of financial metrics in decision making and business success while also recognizing the rapid rise of intangible assets and their critical importance to the overall recipe for organizational success? Their answer to this quandary lay in the development of measures in each of four distinct yet related perspectives of performance: Financial, Customer, Internal Process, and Employee Learning and Growth.

It is important here to indicate that measuring performance in each perspective means that the high score of one of them may drive to lower the others, but conversely the question is: How the high score of one of them would affect to raise the scores of the rest?

" Kaplan and Norton rightly hypothesized that financial measures will always remain a vital part of any enterprise's attempts to gain an accurate picture of its performance, but those measures must be balanced by indicators demonstrating how those financial yardsticks will be maximized".( Niven,2006: p.18)

BSC therefore enabled companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they would need for future growth. The scorecard was not a replacement for financial measures it was their complement.( Kaplan & Norton, 1996b)

Managers recognize the impact that measures have on performance, but they rarely think of measurement as an essential part of their strategy. When executives renew strategies, they logically should create new measures. "For example, executives may introduce new strategies and innovative operating processes intended to achieve breakthrough performance, then continue to use the same short-term

financial indicators they have used for decades: like return-on-investment, sales growth, and operating income. These managers failed not only to introduce new measures to monitor new goals and processes but also to question whether or not their old measures are revealed to the new initiatives".( Kaplan & Norton, 1993 )

Effective measurement, must be an integral part of the management process. The Balanced Scorecard provides executives with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures. Clearly, many companies already have myriad operational and physical measures for local activities. But these local measures are bottom up and derived from ad hoc processes. The scorecard's measures, on other hand, are grounded in an organization's strategic objectives and competitive demands. Furthermore by requiring managers to select limited number of critical indicators within each of the four perspectives, the scorecard helps focus this strategic vision. ( Kaplan & Norton, 1993 )

Each Performance objective should be supported by at least one measure that will indicate an organization's performance against that objective. Measures should be precisely defined including the following elements:

- Population to be measured.
- The method of measurement.
- The data source.
- The time period for the measurement.

Whenever possible they should be written as mathematical formula.

Ideally, measures should possess the following characteristics:

- ✓ Objective- not judgment calls

- ✓ Controllable- the results are substantially in the hands of the organization with the effects of potential outside influences minimized.
- ✓ Simple – easily understood and measuring only one thing.
- ✓ Timely – frequently available indicators of recent or current performance.
- ✓ Accurate – reliable, precise, sensitive indicators of results.
- ✓ Graded – traceable data available before system failure-not binary yes/no measures.
- ✓ Cost-effective – providing data worth the cost of gathering it.
- ✓ Useful – providing data necessary for the organization to manage the business.
- ✓ Motivating – achieving the targets should drive good business decisions-not over expenditure, over compliance, or other sub-optimization ( PAM,2006).

In addition, One of the most important points, which have been concluded from 20 Japanese companies experience by Toru Morisawa(2002) is the one related to indicators used to measure performance. He emphasized that not all indicators used to measure performance necessarily need to be financial indicators, but they do all need to be quantifiable, which makes it possible to avoid the establishment of qualitative and vague objectives such as "Tackle XXX to full extent" or "strive for XXX" .

The performance measurement system as outlined in the BSC is derived from the following perception: " What kind of measures can we adopt to evaluate whether or not our performance was fully achieved?" (Morisawa,2002)

When a company build its Balanced Scorecard document, it had to answer different questions may face its strategic management and measurement system such as:

- What kind of tasks it needs according to the measurement results?
- Do those tasks should concentrate on lead drivers, or on lag drivers,?
- Are they meant in long-term objectives, or on short-term ones?
- Is the purpose of the intended tasks should have direct results or passive ones?
- How can the company be sure of the relation between its strategy objectives and performance measures?

The Office of Procurement and Assistance Management PAM (2006:p.9) has put four types of measures in its Balanced Scorecard document :

**-Core Measures:**

These are measures the department to employ where applicable. The formulae and methods for core measures shall be maintained as standard as is practicable from site to site.

**-Optional Measures:**

These are measures suggested, but not required, by the department, and may be useful indicators for assessing progress towards the predetermined core objective.

**-Local Measures:**

These are measures, which have site or contractor specificity, that each site may identify and include as part of their BSC.

**-Outcome and In-Process Measures:**

Core, optional, and local measures may be outcome or in-process measures. All are indicators of performance( mission success in business systems). Outcome measures may be found in the Customer, Financial, or Internal Business Process Perspectives. Outcomes are

products delivered to customers. Outcome measures establish the current performance of a system.

In-Process measures are no less important than outcome measures as they will drive future performance; However, success is only desirable in these metrics, to extent that it leads to success in outcome measures. Success in these measures alone will not satisfy customers. Poor performance in these measures may be addressed in time to prevent negative impact on process outcomes and customer satisfaction. Generally, in-process measures are management tools to drive and sustain performance.

Traditional metrics may separate between internal measures, and external measures in order to make performance analysis easier, but according to Kaplan ( 1993 ) the information from the four perspectives suppose to provides balance between external measures like operating income and internal measures like new product development. This balance set of measures that reveal the trade-offs that managers have already made among performance measures and encourage them to achieve their goals in the future without making trade-offs among key success factors. As a senior executive at one major company said," previously, the one-year budget was our primary management planning device. The BSC now used as the language, the benchmark against which all new projects and businesses are evaluated"

To obtain a correct cause and effect relationships among measures that drive performance toward the firm's goals, the Balanced Scorecard should contain a mix of Leading and Lagging indicators. If we concentrate on the Lagging indicators separated from their drivers, we are not entitled to specify the causes of success or failure, and yet to repeat the success experience or even know how to avoid failure.

Without performance drivers, Lagging indicators cannot inform us of how we hope to achieve our results. Conversely, Leading indicators may afford key improvements through the organization, but on their own, they don't reveal whether these improvements are leading to improved customer and financial results or not. Coming up with the Lagging measures probably will not pose much of a challenge, because measurement language is awash in such indicators: Sales, profits, satisfaction and many others are common measures in use today. It is appropriate to feature a number of these Lagging indicators on the scorecard. While a company may share such measures with many other organizations, its Leading indicators set the company apart by identifying the specific activities and processes considered as critical to driving those Lagging indicators of success( see exhibit 2-2). ( Niven,2006:pp. 144-145).

### **Exhibit (2-2) Lag and Lead Performance Measures**

	Lag	Lead
Definition	<ul style="list-style-type: none"> <li>* Measuring focusing on results At the end of a time period</li> <li>* Normally Characterizes historical Performance</li> </ul>	<ul style="list-style-type: none"> <li>* Measures that "drive" or lead to the performance of lag Measures</li> <li>* Normally measures Intermediate processes and activities</li> </ul>
Examples	<ul style="list-style-type: none"> <li>* Market share</li> <li>* Sales</li> <li>* Employee satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>* Hours spent with customers</li> <li>* Proposals written</li> <li>* Absenteeism</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>* Normally easy to identify and Capture</li> </ul>	<ul style="list-style-type: none"> <li>* Predictive in nature, and allows the organization to make adjustments based on results</li> </ul>
Issues	<ul style="list-style-type: none"> <li>* Historical in nature</li> <li>* Does not reflect current activities</li> <li>* Lacks predictive power</li> </ul>	<ul style="list-style-type: none"> <li>* May prove difficult to identify and capture</li> <li>* Often new measures with no history at the organization</li> </ul>

*The Balanced Scorecard should contain a mix of lag and lead measures of performance (Niven,2006:p.145)*

Understanding the relationship between leading and lagging indicators may help to look at the measurement from another point view. We can take a perspective; the Customer Perspective, and break it down into two groups of measurement: Lagging indicators like customer satisfaction, retention, and market share; And Leading indicators such as competitive pricing, excellent quality. Outstanding reputation, image and customer relationship. When the organization in its high level management can break all the perspectives to their leading and lagging indicators, it affords the chance to the rest of employees levels to understand and therefore support an interrelated template of measurement consistent with the real needs of the organization and its stakeholders will.( Evans, 2002)

In summery , BSC could be used as a measurement system by implementing the following steps:

- 1- specifying the objectives as they are extracted from values, vision, mission, and goals.
- 2- Discover those most critical objectives as factors of success and transform them to at least one measure against each objective and to be aware of distributing them among the BSC's four interrelated perspectives.
- 3- Analyze the specified measures to Lag indicators, which are the end-line desired results, and the leading indicators, which interpret the results and discover the factors.
- 4- When every thing about the measurement template become clear, we pass this template through the different levels of the employees as a mean of informing every individual about his role in attaining the satisfying performance.

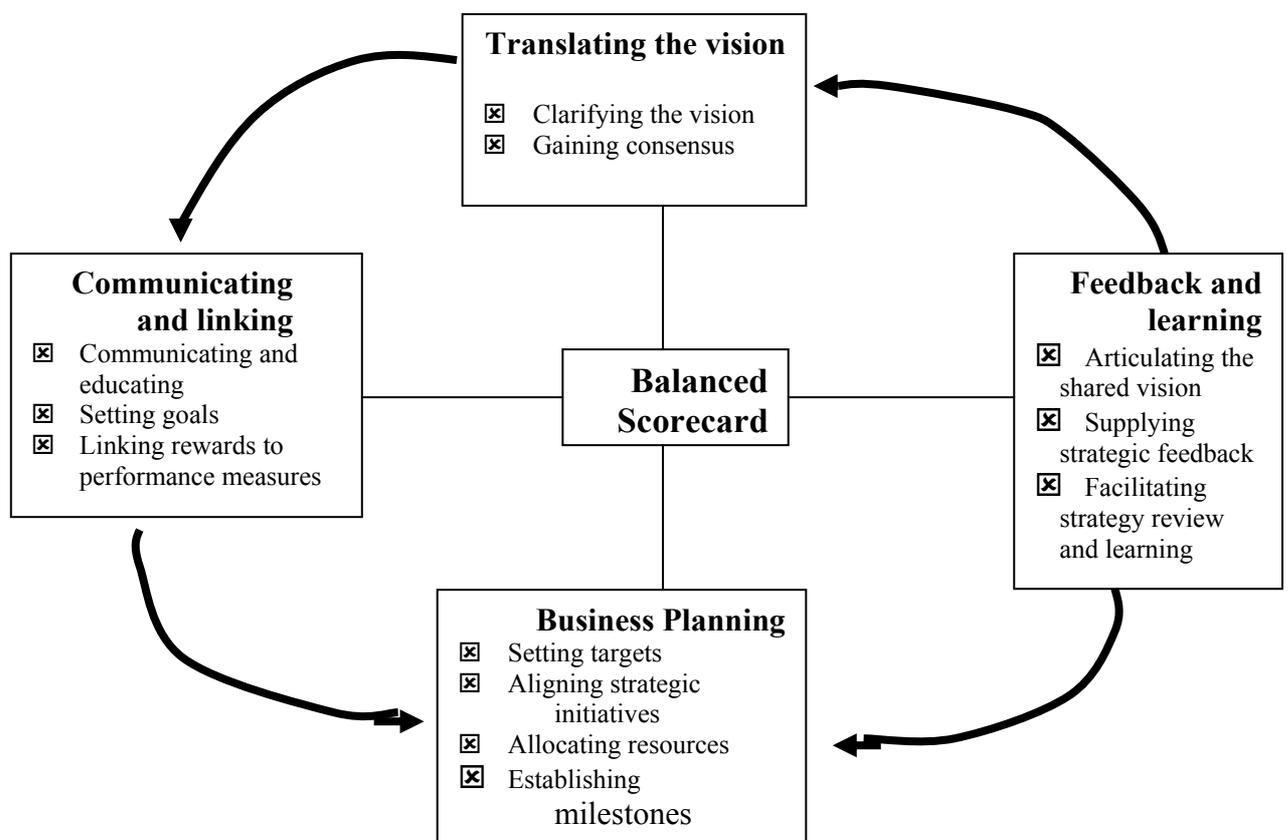
So analyzing, informing, cascading, and deploying processes lead us to speak about the BSC as a strategic management system.

## 2-6 The Balanced Scorecard as a Strategic Management System

The Balanced Scorecard is more than a critical or an operational measurement system, it depends on how a company brings the Balanced Scorecard tool to play, it can be used both for internal management control and/or as a more externally oriented system, designed to create disclosure for owners and other interest parties (Andre'asson, 1999: pp. 36-37).

Innovative companies are using the scorecard as a strategic management system, to manage their strategy over their long run ( see figure 2-2). ( Kaplan & Norton, 1996a: p10)

**Figure 2-2: Managing Strategy: Four Processes**



Source: (Kaplan, 1996, P: 4)

Companies who adapted early Balanced Scorecard concepts to improve their performance measurement systems, achieved tangible but narrow results. Adopting those concepts provided clarification, consensus, and focus on the desired improvements in performance. Recently many companies have expanded their use of the Balanced Scorecard, employing it as the foundation of an integrated and iterative strategic management system.. They are using the measurement focus of the scorecard to accomplish critical management processes:

- Clarify and update strategy .
- Communicate strategy throughout the company.
- Align unit and individual goals with the strategy.
- Link strategic objectives to long- term targets and annual budgets.
- Identify and align strategic initiatives .
- Conduct periodic performance reviews to learn about and improve strategy.

The Balanced Scorecard enables a company to align its management process and focuses the entire organization on implementing long-term strategy. The BSC provides a framework for managing the implementation of strategy while allowing the strategy itself to evolve in response to changes in the company's competitive market, and technological environments.( Kaplan & Norton,1996b )

Applying the Balanced Scorecard as an evaluation system in any firm requires the perception of techniques of realizing the strategic management of the activity, and translating that strategy to a balanced scorecard. So the management, while applying BSC system, depends on using the scorecard in managing the firm. It means that the firm should prepare a specification for all the stages of execution,

exploiting from all the experiences in other firms, locally and internationally. Transforming process of managerial thinking from traditional to strategic is required as a necessary step before using the BSC in the evaluation process, it makes the gap narrower between the results of both the evaluation system and the strategic management system.(Yousef 2005: pp.183-184)

### **2-6-1 Link strategic objectives to long- term targets and annual budgets:**

The problem is that most organizations have separate procedures and organizational units for strategic planning and for resource allocation and budgeting. The budget consists almost entirely of financial numbers that generally bear little relation to the targets in the strategic plan. To integrate the strategic planning and budgeting processes and therefore help to ensure that the companies' budgets support their strategies, Scorecard users select measures of progress from all four scorecard perspectives and set targets for each of them. Then they determine which actions will drive them toward their targets, identify the measures they will apply to those drivers from the four perspectives, and establish the short-term milestones that will mark their progress along the strategic paths they have selected.

Building a scorecard thus enables a company to link its financial budgets with its strategic goals.

Considering the financial budget as a main basis to build the Balanced Scorecard on, Kaplan and Norton(1996) suggest three steps to assure linking BSC to strategic management actions:

I)The first suggested step could be achieved by conducting three initiatives:

- 1- Clarify the strategic objectives.
- 2- Identify the view critical drivers.

3- Create a framework for managing an organization's various change programs by following initiatives such as: reengineering, employees empowerment, time-based management, and total quality management, among others. These initiatives promise to deliver results but in the same time compete with each other for scarce resources, including the scarcest resource of all, senior managers' time and attention.

**II)** Once the strategy is defined and the drivers are identified, the scorecard influences managers to concentrate on improving or reengineering those processes most critical to the organization's strategic success. That is how scorecard most clearly links and aligns actions with strategy.

**III)** The final step in linking strategy to actions is to establish specific short-term targets, or milestones, for the balanced scorecard measures. Milestones are tangible expressions of managers' beliefs about when and to what degree their current programs will affect their measures.

( Kaplan & Norton, 1996b )

### **2-6-2 Communicate strategy throughout the company**

Communication and education efforts are of paramount importance as the executive share the scorecard with his employees, discussing what the objectives and measures mean, why they are selected, and how they advance the company's goals. Expressing the BSC and enrolling it through different levels of the company as P. Niven emphasizes enables the employees in different levels to grasp the foundational dimensions of the company's highest level scorecard. They become able to translate it into a scorecard that outlines how they will influence the execution of corporate strategy, demonstrating how their day-to-day activities are contributing to strategic objectives.

(Niven, 2005: pp.130-131)

"It all begins with the highest-level scorecard, what some would refer to as the corporate- level or organization-wide Scorecard. The objectives and measures appearing on this scorecard represent what is considered to be the critical variables driving the companies success. Therefore, every scorecard subsequently created, at all levels of the organization, should link back to this document".(Niven,2005:p. 131)

### **2-6-3 Strategy Maps**

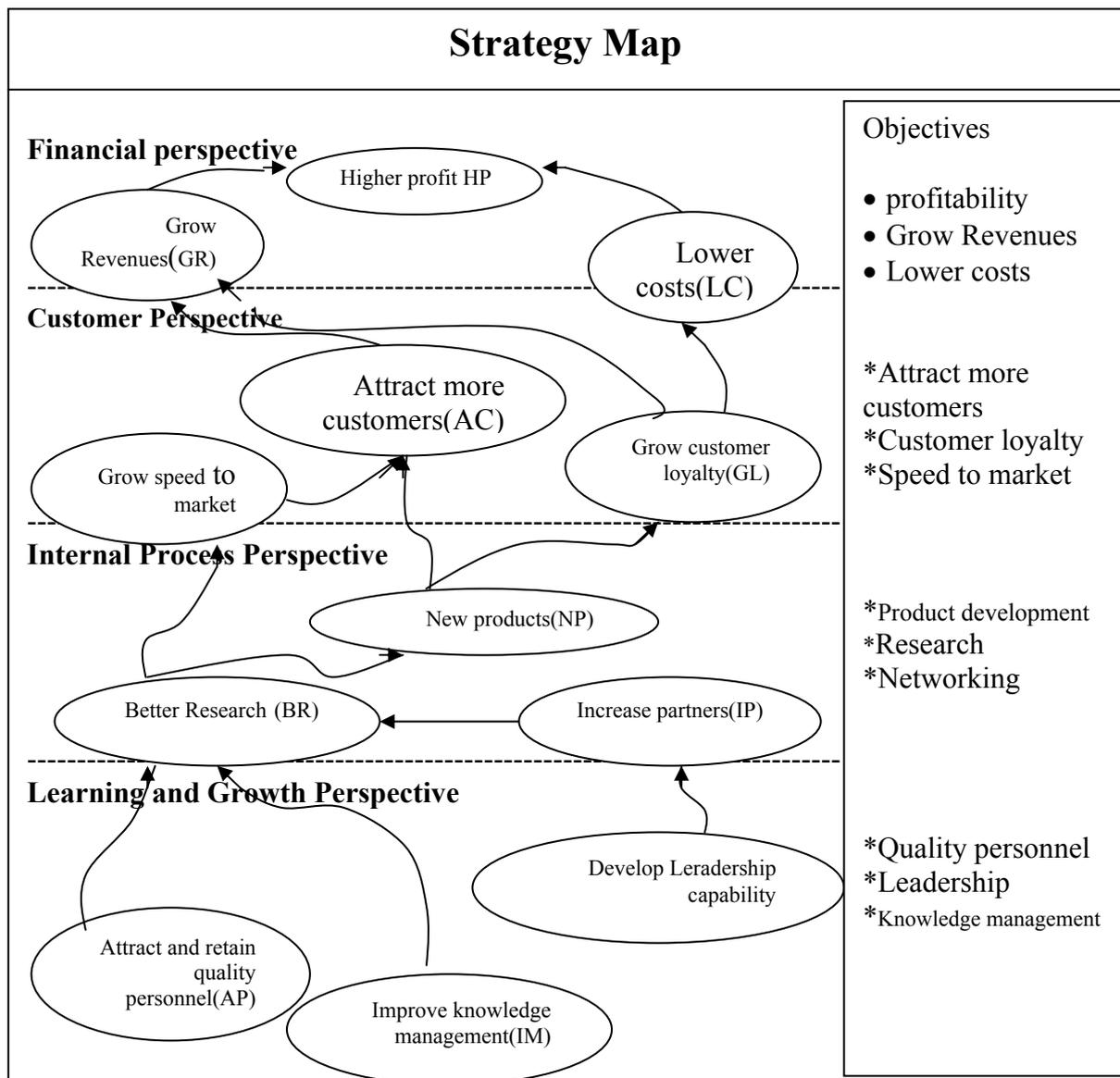
In some periods of strategic management you find your self need to diagnose the dimensions of the companies' external and internal environments; You may follow different analysis approaches such as SWOT, or STEEP or others, but you have to decide what the most positive elements you have already possess, and what elements you need to develop.

To decide these important issues and discover the cause-and-effect relationships among-a-very-sophisticated performance drivers, the strategy map has been created. The strategy map is a pattern brought into a common visual framework that can be used in both the private and public sectors to embed the different items on an organization's balanced scorecard into a cause –and-effect chain, connecting desired outcomes with the drivers of those results.

Willcocks (2005) considered the strategy map as the starting point in the Balanced Scorecard process, and that the company has to face the main challenge of identifying the thread beginning from resources and across the perspectives that drives the successful achievement of stakeholder outcomes.

Strategy maps have been developed for companies in various industries to create a standard template that executives can use to develop their own strategy maps ( See figure 2-3 ).

**Figure 2-3: Example of strategy map**



**Source: Huegens & Zelewski,2005, P:2**

The template contains four distinct regions that correspond to four perspectives of the balanced scorecard. The template provides a common framework and language that can be used to describe any strategy, much like financial statements provide a generally accepted structure for describing financial performance (Kaplan & Norton, 2000) Companies can use the template here to develop their own strategy maps, which are based on the balanced scorecard. The template shows how "employees need certain knowledge, skills, and systems (learning

and growth perspective) to innovate and build the right strategic capabilities and efficiencies ( internal process perspective) so that they can deliver specific value to the market ( customer perspective), which will lead to higher shareholder value ( financial perspective)" ( Kaplan & Norton, 2000) .To show the factors of increasing value of market for the customer perspective, for example, companies typically select one of three strategies: operational excellence, customer intimacy, or product leadership( Kaplan & Norton, 2000).

A strategy map is a diagram that gives a two-dimension depiction of the operations( functions) and strategy of an organization. The map shows a financial objectives as a final goal, with the strategic objectives from each of four perspectives connected to each other by arrows indicating links. All objectives are shown in connection with the financial performance( Morisawa, 2002)

The objectives in the "standard" strategy map are connected using arrows, which only explain that the objectives are connected. There is no statement possible about the strength of the influence from one objective on another. If causal maps or cognitive maps could be used to model a strategy map, the direction and the strength of the influence could be stated. Traditionally the identification process is done in management meetings using intuitive and subjective knowledge about possible objectives and connections. "A validation" is only possible in using the objectives and introducing new actions. After some time the behavior of the model can be identified and it becomes clear that the connections and objectives are right or wrong.

The correctness of the assumed causal links between the objectives can be proved using correlation analysis, structural equation or "path" analysis, neuronal networks and another quantitative techniques, some qualitative techniques, such as qualitative simulation technique

developed by Kuipers, have been developed also to meet the needs for handling both quantitative and qualitative data".( Huegen and Zelewski, 2005)

A strategy map enables an organization to describe and illustrate, in clear and general language, its objectives, initiatives, and targets; the measures used to assess its performance ( such as market share and customer survey): and the linkages that are the foundation for strategic direction. "But one of the principal contribution of a strategy map is to highlight the opportunities for enhancing financial performance through revenue growth, not just by cost reduction and improved asset utilization. Strategy maps show how organization plans to convert its various assets into desired outcomes"( Kaplan & Norton, 2000).

While there is no shortage of literature discussing the "what and why" elements of strategy mapping, nothing exists on an actual general step-by-step process for delivering on a strategy mapping initiative. A framework that has proven useful for several organizations is a six-step process that results in not only a completed strategy map, but also a well-understood, describable strategy that can be communicated throughout the organization:

- Choose the overriding objective.
- Select appropriate value proposition
- Determine general financial strategies to follow
- Determine customer-focused strategies.
- Decide how internal processes will support execution of strategies choosen.
- Implement the skills/capabilities and employee programs that are required to achieve strategy.

In complementing the six-step method in mapping the company's strategy, there is a little doubt that the company will become aware of certain gaps( skills, knowledge, technology) between where the company is today and where it needs to be to execute the selected strategy properly. General programs that assist the organization in attracting and retaining the best people, and that establish a culture of loyalty and commitment, can apply to all organizations.

(Scholey, 2005)

#### **2-6-4 Deployment and alignment:**

The deployment phase will involve reviewing and aligning the first scorecard with other parts of the business( divisions, operating units, departments, etc.).The Corporate or Business Unit Scorecard should be integrated into lower level scorecards. While moving the scorecard forward, a more formal collection and reporting system should emerge for the Balanced Scorecard. Once we get more and more scorecards working, we will begin to explore the possibility of linking compensation to the measurements within the Balanced Scorecard.

(Evans,2002)

In the BSC as a management system, alignment is a process that ensure employees' support and cooperation by the way of letting employees attaining a commonality of purpose, a shared vision, and an understanding of how their personal roles support the overall strategy. The organization whose employees are being aligned after a common purpose, which represents their own purpose also, will have the motivation , the will, and the ability to solve the organization's problems and achieve its goals in an innovative ways. "An aligned organization encourages behavior such as innovation and risk taking because individuals' actions are directed toward achieving high-level objectives". ( Kaplan & Norton, 2004)

There are many issues involved in making a good fit to a specific organization, and in estimating and minimizing the cost and time of deployment. Change management is always going to be a major challenge in deploying the balanced Scorecard system, because it must touch every significant activity in the organization. The change process needs some conditions to prevail in the organization such as the sense of urgency, Does the agency's management have a sense of urgency or complacency? "The change needs also confronting the organization culture, when it is a culture of complacency or even cynicism. As young people are hired, it is critical to prevent these attitudes from perpetuating themselves" (Arveson, 1999) .

By providing greater openness and visibility of an agencies mission and strategy, BSC can give rank-and-file employees a better sense of what their jobs are about, and empower them to improve how that work is done. Strategic goals, balanced scorecard plans and improvement plans should be posted on an intranet web site for all employees to see. Broad participation in planning should be encouraged (Arveson, 1999)

*"Measuring alignment readiness is relatively straightforward. Many survey instruments are already available for assessing how much employees know about and how well they understand high-level strategic objectives. It is also fairly easy to see whether or not individuals' personal objectives and company's existing incentive schemes are consistent with the high-level strategy" ( Kaplan & Norton, 2004:p.62)*

### **2-6-5 Governance:**

With the increased emphasis on corporate governance, executives are now creating additional corporate value by using the Balanced Scorecard to enhance governance processes and to improve communication with the shareholders. Effective governance,

disclosure, and communication reduce the risk that investors face when they entrust their capital to company managers. Companies should use a system to enhance their corporate governance and disclosure process, one of the most important component of this entire system is a company's board of directors, who could be active in shaping and executing a successful strategy. Boards contribute to organizational performance when they fulfill the following five major responsibilities:

- 1- Ensure that processes are in place for maintaining the integrity of the company, including:
  - Integrity of financial statements
  - Integrity of compliance with law and ethics
  - Integrity of relationships with customers and suppliers
  - Integrity of relationships with other stakeholders.
- 2- Approve and monitor the enterprise's strategy.
- 3- Approve major financial decisions.
- 4- Select the chief executive officer, evaluate the CEO and senior executive team, and ensure that executive succession plans are in place.
- 5- Provide counsel and support to the CEO.(Kaplan,2006:pp191-197)

## **2-7 Building the Balanced Scorecard**

The decision of building a Balanced Scorecard should be a result of belief in the complementary relationship among different success factors of the main work areas and the relative importance of short-term, Financial, direct, and tangible factors against long-term, none financial, indirect, and intangible factors, respectively. All these

factors should be appreciated as serious contributors to the company's capabilities to realize its goals.

Some consultants see specifying the company's strategy as a "fence line" restricting the organization to a selected areas for achieving strategic success, and confine the organization needs to a few major areas. " This will provide the "scope" we need for building a set of Balanced Scorecard. For most organizations, the strategic thrust of the organization will revolve around stakeholder groups; such as customers, shareholders, and employees" (Evans,2002,p. 8)

Matt H. Evans(2002) explained an example about what he considered as a major strategic area in the traded corporations " Shareholder value", and illustrated this major strategic area as it flows up across the four perspectives just like in exhibit (2-3):

**Exhibit (2-3): Major strategic areas**

Shareholder Value	
Financial	Revenue Growth
Customer	More Customers
Processes	Customer Marketing & Service Program
Learning	Support Systems & Personnel

**Source: (Matt H Evans, Balanced Scorecard, course 11,2002: p.8)**

Paul Nevin (2005:p.24) claims that "The most important question to ask yourself before embarking on a balanced scorecard implementation is simply: Why? Why are we developing a Balanced Scorecard for this organization, and why now?"

When the organization specifies its goals, it must have the ability to discover the gap between its current performance and the desired performance, and focus on "vital view" actions necessary to close the gap. Some organizations such as Peel Memorial Hospital (PMH),

formed a team to prepare performance indicators Through a number of preparatory stages:

- 1- Identify the strengths of the organization and areas which need development to ensure effective implementation.
- 2- Deciding the required change by developing the organization vision statement and how the Balanced Scorecard is an effective integration mechanism in achieving desired performance results.
- 3- Defining the major categories of the business and how they intersected with each other, and specifying the focus of the business which should be put as the end line of the organization.
- 4- Developing the performance measures, by going into a structural process to ensure indicators are aligned to objectives, targets and performance results. ( Bruce, 2006)

Although Kaplan and Norton consider each organization is unique and entitled to follow its own path for building a Balanced Scorecard, they have suggested a systematic development plan to create the balanced scorecard and encourage commitment to the scorecard among senior and mid-level managers. Their plan consists of eight steps, six of them for building the scorecard could be conducted in the following contest:

- 1- Starting with preparation stage, the company defines the business unit for which a top-level scorecard is appropriate.
- 2- Conduct frequent interviews and workshops in which each senior manager receive background material on the Balanced Scorecard as well as internal documents that describe the company's vision, mission, and strategy,

- 3- Develop a tentative Balanced Scorecard with a possible help of an external facilitator, the top management team must be brought together to undergo the process of developing the scorecard. The Team concentrates on linking measurement to strategy by debating with each other till they reach consensus.
- 4- Suggest the ways by which the company will be able to perform in order to achieve those different but desired results(Success factors). Different information resources must be available to the participants such as; interviews, videotapes, consulting studies, competitor data, organizational histories, analyst reports, and etc.  
( Niven,2006:pp.103-105)
- 5- After deciding the key success factors, the group formulates a preliminary balanced scorecard containing operational measures for the strategic objectives. Opinions about this tentative BSC should be collected and reviewed in a special workshop involving the senior management team, their direct subordinates and a larger number of middle managers. They should make their comments on the proposed measures, and they should be asked to formulate stretch objectives for each of the proposed measures, including targeted rates of improvement.
- 6- The consensus on the vision, objectives, measurements, and targets is the final necessary step before conducting preliminary action programs and set an implementation program including communicating the scorecard to employees, integrating the scorecard into a management philosophy, and developing an information system to support scorecard.( Kaplan & Norton,1993)

As we can notice, Kaplan plan starts with reviewing the strategy and advances to decide the processes by which the company can realize its objectives represented in specific targets, and to ensure a

communication stream, different kinds of facilitating techniques has been suggested such as interviews workshops, and enough time for debating and discussions.

Howard Rohm(2002) suggests that the main stations that supposed to ensure continuous improvement in the Balanced Scorecard building journey are:

- 1- Assessment of the organization's foundations,
- 2- Developing of overall business strategy,
- 3- Decomposing of business strategy,
- 4- Creating strategy map shows the cause-effect relationships among the strategy elements,
- 5- Developing performance measures,
- 6- and finally identifying new initiatives to ensure the success of the organization.

In his framework Rohm insists on doing the right things more than doing things right, therefore, in his six steps framework he specified some discreet start and stop points. Along the way of the Balanced Scorecard journey, one should not miss the point that the real value of a scorecard system comes from, " The continuous self-inquiring and in depth analysis". In another way, those processes which are suggested by Howard Rohm are what should take place in Kaplan's plan interviews and workshops. People while debating and discussing in the interviews and the workshops, they have to assess, decompose, diagnose, and initiate, it is a journey starts from a well known place (assessed) to an unknown place (designed), but a better one.

Most of the Balanced Scorecards consist of about 25 measures, chosen from much more number of measures by following the "4 to 5 rule." This rule says that we build Balanced Scorecards with four to

five layers, four to five measurements per scorecard( strategic grid).If despite this rule the number become huge, another rule could be followed by indexing multiple measurements into one single measurement applying the weighted percentage approach as follows:

<b>Measurement description</b>	<b>Value</b>	<b>importance</b>	<b>index</b>
Customer Satisfaction Rating	.78	50%	.39
Customer Compliment Index	.89	25%	.22
Quality Satisfaction indicator	.72	25%	.18
Single Measurement used in Balanced Scorecard			.79

**Source: Evans, 2002: p.15**

Despite the effectiveness of these approaches in reducing the number of measurements, the best approach is to use stand-alone measurements to avoid neglecting some critical details wherever possible. (Evans,2002: p.15)

People who think that this number is suitable do not refer only to the number of measurements, it is also because of the way the organization deals with the scorecard, when it focuses on 25 or even 10 measurements separately as independent measures. The huge number makes the work too complicated. Measurement in the Balanced Scorecard system is an " instrumentation " for one strategy compounds of related elements in a cause-and-effect chain coherent and complement each other and linked to one strategy.

( Kaplan,1996a: p.163)

The focus of the BSC should be shifted into the same direction of the strategy. In practice , a shift in the strategy from profit-maximization strategy towards another strategy such as revenue-maximization means that the firm is going to try to sell more at a lower selling price.

The new strategy may improve productivity through economies to scale but enhance financial performance by decreasing the selling price. For the profit-maximizing firm it is important that demand and production will stay at the optimal level, which gives rise for demand and production-oriented performance measurement system. However, for a revenue maximizing-firm it is more important to focus on customer relationship management (CRM) and development and learning (D&L).(Laitinen,2005)

When we have unrelated measurements, whatever the number is, it will be considered a big one. Here we have to be aware of distinguishing between diagnostic measures, and strategic measures, the first kind could be in hundreds or thousands since they are needed to be monitored to ensure that the corporations are functioning as expected, and to signal when corrective action must be taken, these measures capture the necessary " hygiene factors" that enable the company to operate, but don't drive to competitive success. The second kind defines the corporations strategies which can lead to competitive excellence. ( Kaplan,1996a: p.163)

" Companies rarely suffer from having too few measures. More commonly, they keep adding new measures whenever an employee or consultant makes a worthwhile suggestion" as Rohm have stated, but managers should focus on the handful of measures that are most critical ones which are related to the corporation's particular view of the world and its defined strategy. ( Rohm,2002)

## **2-8 Implementing the Balanced Scorecard**

It is may be much easier to distinguish between the two fazes of the Balanced Scorecard journey when we take it as a measurement system. When we consider it as a tool, it is like any measurement tool.

First we build it and then we implement it, although it is not so easy as it looks, it is sure easier from separating the two fazes in a strategic management system Here the two fazes are going simultaneously , processes of strategic management are designed and executed, and in the same time those processes are undertaken in what may be called implementation actions.

One of the substantial processes in strategic management is developing the companies' abilities in communicating and aligning the strategy elements, values, vision, mission , objectives, measures and targets through all the levels of the employees. Therefore" Implementing a strategy begins with educating those who have to execute it. Whereas some organizations opt to hold their strategy close to the vest, most believe that they should disseminate it from top to bottom. Abroad-based communication program shares with the employees the strategy and the critical objectives they have to meet if the strategy is to succeed. (Kaplan & Norton, 1996)

Many communication mechanisms could be followed in disseminating strategies: brochures, newsletters, town meetings, orientation and training programs, executive talks, company intranets, and bulletin boards, then update them with monthly results.

As mentioned before Balanced Scorecard journey consists of two fazes, the second one of them is implementing the Balanced Scorecard in three additional steps:

- Computerizing and Communicating Performance Information
- Cascading the BSC throughout the Organization.
- Using scorecard Information to evaluate and improve Performance.( Rohm,2002)

"To computerize data means dealing with several issues such as data quality, validation, and ownership". ( Cardoso, et al, 2006)

Paul R. Niven(2006:p.107) suggests creating binders and electronic file directories that mirror the specific steps in the company's plan. The importance of the electronic files stems from the ability of every member of the team to name and store files according to his preferred methods.

Each member can develop a process everyone can agree on and post it in a shared drive that every member can access. Some companies create portal to capture all the Balanced Scorecard information including the discussion groups and the latest announcements. However managers should be aware of information abundance and poor data management.

Cascading is the process of developing scorecards for every level of organization and aligning the scorecard elements through all layers of the organization. (Cardoso, et.al, 2006)

Aligning has been mentioned before as a strategic management process, its purpose is integrating the first scorecard with other parts of business and into the lower-level scorecards. It is clear here that alignment is considered as a technique of building the scorecard consistent to the strategy, but alignment as a sub-process in the implementation stage of the BSC journey, is considered as a matter of communication which makes the final scorecard clear and understood, on the way to achieve consensus and cooperation.

*"Achieving alignment is a two-step process. First managers communicate the high-level strategic objectives in ways that all employees can understand. The goal of this step is to create an intrinsic motivation, to inspire employees to internalize the organization's values and objectives so that they want to help the organization succeed. The next step uses extrinsic motivation. The organization has employees set explicit personal and team objectives aligned to the strategy and establish incentives that reward employees*

*when they meet personal, developmental, business unit, and corporate targets"*( Kaplan & Norton, 2004: p.62)

In their framework of balanced scorecard developing plan, Kaplan and Norton (1993) specified the last two actions for implementing the scorecard:

Implementation is the seventh suggested step in which "a newly formed team develops an implementation plan for the scorecard, including linking the measures to database and information systems, communicating the balanced scorecard through the organization, and encouraging and facilitating the development of second-level metrics for decentralized units".

The execution of the Balanced Scorecard as a measurement and a strategic system should be monitored instantly, if the measurements were accurate and the results are satisfying , that must support the strategy, if we have some deficiency, so it should be decided if that refer to bad strategy or poor performance?

What Kaplan and Norton (1993) emphasized in their Balanced Scorecard framework as the eighth and the last action is. "Periodic reviews". It should be conducted each quarter or month in what they called, "A blue book" which includes prepared information for top management to be reviewed and discussed with managers of decentralized divisions and departments. The balanced scorecard metrics are revised annually as part of the strategic planning, goal setting, and resource allocation processes.

It is important to get into a habit of regularly reviewing the performance measures. This should be done by the whole team in a group meeting. One may find this difficult at first as it takes time to set up the measures and often the first couple of meetings can be

frustrating when the data simply is not available. Persistence will overcome this hurdle. (Bourne, 2002: p.62)

Data collection, environmental analysis, cause-and-effect chain, strategy mapping, and processing systems are some hard mental work that could be done by the sharing of enthusiastic and persisting high-level team members to design a measurement system, but to implement an efficient and effective measurement system need much more effort and persistence. People who made the hard work in designing the measurement system will find themselves must educate and train the employees who will use it. The new measurements mean new goals and objectives linked to an initiated strategy, in other word it means change.. Is it possible to realize new innovative goals by the means of old methods and believes?

*"Perhaps the greatest challenge faced when implementing performance measurement systems is changing an organization culture. Using performance measures requires managers and employees to change the way they think and act...The best measurement system in the world will yield few benefits if the right knowledge, skills, abilities, and values are not developed in a company"* (Kaydos, 2003: p.4)

A well designed and implemented measurement system may afford the following benefits as mentioned in Will Kaydos article "What should your company measure besides financial results"(2003) :

- \* The ability to determine if sales and profit problems are caused by strategies, operations, or both;
- \* Early identification of problems and opportunities;
- \* Increased productivity, quality, and customer service;
- \* A clear understanding of what drives financial and operational performance so resources can be allocated to the areas of greatest return;
- \* A cohesive organization working toward common goals.

## **Chapter 3**

### **The Palestinian telecommunication companies**

#### **3-1 Introduction:**

This chapter gives background on the Palestinian telecommunication companies especially Paltel and Jawwal as the main members of PAL TEL group which has been selected for the study.

Each part of this chapter will start with a short general presentation of the company in question, and thereafter describe its commitment to the strategic management as planning, operating and evaluating system through its ability to link its vision, mission, and objectives with each other.

After analyzing every company's vision, mission and main objectives, a comparison between the Balanced Scorecard's four perspectives and the actual perspectives of the company's strategic plan will be conducted to discover the awareness of the importance of the balanced performance.

The purpose of doing this is to present a more comprehensive view of the telecommunications companies and their work before analyzing details and evaluating their performance from the different stakeholders' point of views .

This chapter has the following aims:

- 1- Introduce the main Palestinian telecommunications companies.
- 2- Know the main strategic management characteristics of PAL TEL group.
- 3- Analyze the main companies visions, missions and main objectives on the bases of Balanced Scorecard model.

- 4- Suggesting Balanced Scorecard model and strategy map for the PAL TEL group.

### **3-2 PAL TEL Group:**

Established in 1995 as a public shareholding company, Palestine telecommunications company (PAL TEL), commenced its operations on the 1<sup>st</sup> of January 1997 as an operator and provider of all telecommunication services including fixed lines, cellular, internet and data communications services. According to 2005's report, PAL TEL group capital amounts to 101.25 million Jordanian Dinars(JOD), with about 7500 shareholders by the 31<sup>st</sup> of December 2005. The list of shareholders includes a broad list of investors ranging from prominent individuals, companies, institutions and the Palestinian Investment Funds.

PAL TEL introduced all types of telecommunication and internet services to the Palestinian society. The company expanded its activities by establishing PAL TEL Group in year 2005. The group includes (Paltel) for fixed-line telephone, (Jawwal) the Cellular Telecommunications company, (Hadara) for Technological Investment company, and (Palmedia) that specialized in media and advertising. PAL TEL set out to the world, adopting new projects and plans to operate mobile phone services in Yemen, Afghanistan and obtaining licenses to operate as a fixed line operator and internet service provider in Kazakhstan. Moreover, Paltel established a new Voice Over IP (VOIP) Company in UAE.

(PALTEL annual report, 2005)

### **3-2-1 Integrated services:**

Paltel introduces several integrated services within the context of integration strategy such as:

**I-Integrated Telephone Services** including the following contributions::

- ✓ Restructuring its calling areas to have Palestine as one calling area.
- ✓ Increasing working lines by 20% from year 2004 levels, amounting to around 349,000 lines, of which 234,000 in the West Bank and 115,000 in Gaza Strip.
- ✓ Serving 98% of Palestinians who live within the realm of the Palestinian Telecommunications network distributed over 533 localities.
- ✓ Affording different value-added services such as Caller Id, Voice Mail, Conference Calls, in addition to several integrated Telephone Services like, Prepaid Services, Public Payphones, and promotion of outgoing International Calls. (PALTEL annual report, 2005)

**II-Integrated Internet Services** by setting up technical requirements to ensure affording internet access to all subscribers:

- ✓ Subscription-Free Internet(SFI) by providing the necessary capacity for introducing such service throughout Palestine via numbers with prefix (010), as a result the internet unique users increased from 30,000 to 67,000.
- ✓ ADSL Services to enhance the quality of internet services in the major Palestinian cities and towns, with the number of working lines amounting 7534 towards the end of the year 2005, distributed over 39 locations. Fiber to End User Services

available for customers with large capacity needs. The company has an operational plan to increase the capacity.

- ✓ Digital Leased Line services and Backbone connectivity to economic and academic institutions as well as to Internet Service Providers. (PALTEL annual report, 2005)

### 3-2-2 PAL TEL Centers

The main idea behind setting up Paltel centers was to provide customers with easy access to telecom and IT related services and products, all in one place. Telephone handsets, faxes, computers, mobile phones and their accessories, in addition to all Paltel and Jawwal services are lined up in Paltel Centers.

The implementation plan was carried out in three phases. The first phase included the setting up of Al-Ezariyyeh, Ramallah, and Tulkarem centers. The second phase was implemented during 2005 and included opening centers in Bethlehem and Hebron. The third phase was implemented in 2006 including the setting up of main centers in : Nablus, Jenen, and Nuseirat, in addition to mini centers in Nablus, Ramallah, Jenen, Gaza and Hebron.

**Table (3-1): Performance Indicators of PAL TEL (1997-2005)**

Indicator	12/97	12/99	12/2001	12/2002	12/2003	12/2004	12/2005
Main switches	15	35	54	53	53	50	52
Secondary switches	34	57	88	86	86	95	100
Capacity	134,202	314,221	435,002	426,880	427,310	421,092	425,302
Served Localities	74	345	460	498	499	518	533
No. of working lines	110,893	222,198	260,673	250,982	252,038	290,010	349,524
Penetrating Rate	4%	8%	9%	9%	9%	7.6%	9%
No. of Paltel Centers	10	21	23	26	25	25	25

**Source: PAL TEL Annual Report 2005**

We can notice from tables (3-1) and (3-2) that there is a continuing growth in all the work aspects, but the growth of the

financial ratios is much bigger than the rest of performance indicators, for instance; the ROA has been duplicated approximately six times from 2002 to 2005, while the number of working lines increased by approximately 30% only in the same period, which interprets the huge growth in Free Cash Flow (FCF) by approximately 10 times from 7256625 JD to 70063832 JD.

The Paltel family consists of around 1600 employees who work in all the directorates and branches in the West Bank (about 1000 of them in the West Bank and the rest in Gaza Strip). Female employees constitute 14% of the total staff. Paltel is not only the largest Palestinian private sector company in terms of its operational capacity, but also the largest in terms of employment. (PALTEL annual report, 2005)

**Table (3-2) Financial ratios and indicators of PAL TEL**

<b>Year</b> <b>indicator</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>*ROA</b>	3.2%	5.1%	15.9%	24.5%
<b>CR</b>	71%	59.4%	97.6%	158%
<b>Quick Test Ratio</b>	42.61%	56.11%	39.19%	59.27%
<b>FCF</b>	7256625	11499127	38083383	70063832

**Source: Calculated by the researcher from the Financial reports of 2005.**

**\*ROA** = Return On Assets

**CR** = Current Ratio

**FCF** = Free Cash Flow

As we can see from its mission (Appendix No.3), PAL TEL group committed to its essential function by Maximizing its shareholders value and show awareness of connected national and moral responsibilities through perpetual growth and enriching Palestine's

information communication technology sector with a commitment to excellence and with continued commitment to major societal and citizens' needs.

In its vision (Appendix No.3) PAL TEL considers technology as a tool for both human resource development and nation building. Utilizing the opportunities which are afforded to the convergence of the information communication technology is considered as the foremost challenge in front of a certain and solid discipline that adopts scientific thinking and good governance.

It could be noticed from analyzing both the mission and vision of PAL TEL group that they concentrate on various perspectives that could be compared to the Balanced Scorecard four perspectives as we can see from exhibit (3-1)

**Exhibit ( 3-1 ):The BSC perspectives in the PAL TEL mission and vision**

<i>Perspective</i>	<i>Elements of PAL TEL vision and mission</i>
Customer Perspective	Continued commitment to major societal and citizens' needs
Internal Business Processes	Utilizing the opportunities that will evolve with the convergence of Information technology and communication.
Learning and Growth	Adopting scientific thinking and good governance
Financial perspective	Maximizing Shareholders value

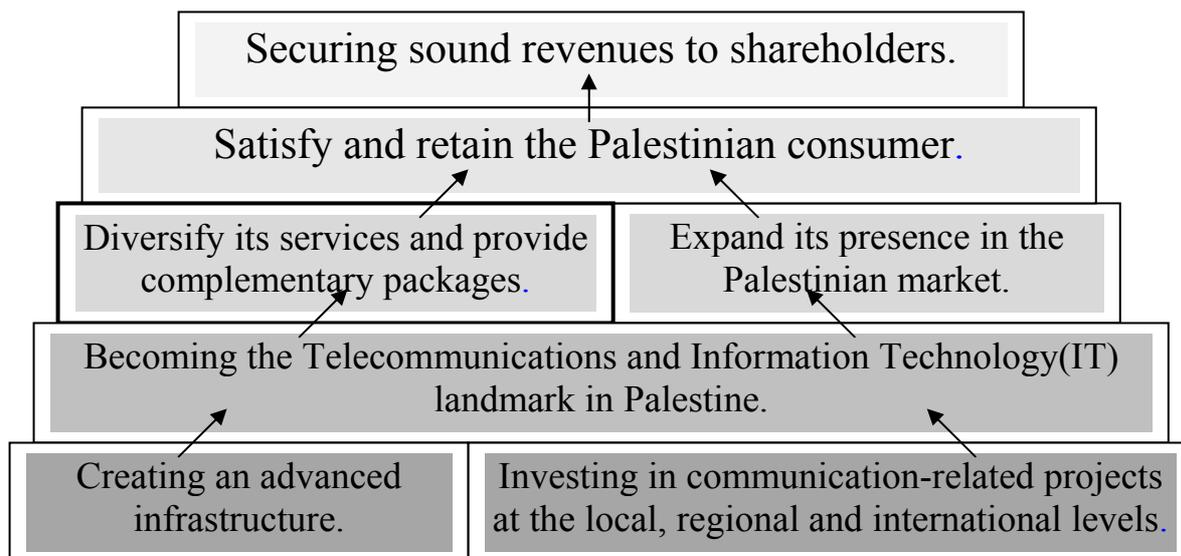
**Source: Created by the researcher from the PAL TEL annual report 2005 ( See appendix No.3)**

**3-3 Paltel:** As it has been mentioned before Paltel company is the first PAL TEL group member which has been established in 1997.

According to its vision Paltel aspires to become the Telecommunications and Information Technology(IT) landmark in Palestine. The elements of Paltel vision could be built from up down in a cause-and-effect relationships to show how these elements, when they are built in blocks, support each other and in the same time they support the main financial objective like it is seen in exhibit (3-2)

The elements in the blocks could be divided into Lag objectives and Lead objectives. "*Securing sound revenues to shareholders*" is the main Lag objective could be achieved by many other Lead objectives such as

**Exhibit ( 3-2 ): The cause-and-effect relationship among Paltel vision statement elements.**



**Source: Created by the researcher from PAL TEL annual report 2005 ( see appendix No 3)**

"*expanding its market*", and consequently to realize this objective the company needs to "*diversify its services*".

It is clear that "*expanding the market*" could not happen without "*satisfying and retaining consumers.*"

From analyzing the vision statement and the main objectives of Paltel company , it could be concluded that the company interested in the

customer perspective more than the other perspectives especially the Learning and growth, and Internal Business Processes perspectives, since there is no direct indications to these two perspectives neither in the vision statement nor in the main objectives, but this may not mean that the company is obsolescing any of them since both of them are must be lead objective to the objectives of the financial and customer perspectives. (See Exhibit: 3-3)

**Exhibit ( 3-3 ) : Distributing the main objectives of Paltel to the four Balanced Scorecard Perspectives**

Main objective	Perspective
<ul style="list-style-type: none"> <li>• Provide modern telecommunication services by deploying the latest technology, information systems, line access, and value-added services in order to satisfy the needs of all customers throughout Palestine.</li> </ul>	<b>Customer</b>
<ul style="list-style-type: none"> <li>• Achieve sound returns for shareholders, preserve their investments, and meet their expectations and aspirations, ensuring continuous communication and interaction with them.</li> </ul>	<b>Financial</b>
<ul style="list-style-type: none"> <li>• Provide wide range of services to the broadest possible subscribers' base in all Palestinian areas.</li> </ul>	<b>Customer</b>
<ul style="list-style-type: none"> <li>• Contribute to building the Palestinian society through providing support to the largest possible number of social, educational, health, economic and infrastructure development initiatives and activities; Its contribution aims at building a unique interactive relationship with the Palestinian society at large, in a manner that contributes to fulfilling the ambitions of the society and building its capacities.</li> </ul>	<b>Customer</b>

**Source: Created by the researcher from PAL TEL annual report 2005. (see appendix No 4)**

Concluding these very important objectives by analyzing the strategy map of the company could not be available or easy to any company's stakeholder to do. Since the strategic management is meant with cascading, alignment and support of all the company's stakeholders, these objectives should be mentioned clearly in the vision statement and the main objectives as well to let the stakeholders negotiate them till they become convinced and deployed.(Appendix No.4)

### **3-4 Jawwal**

Palestine Cellular Communications Company obtained its license from Palesinian National Authority (PNA) in 1996.It started on 1999 to become the first Palestinian legal cellular operator working inside the Palestinian territories.

The company's capital amounts to JD25 million and is fully owned by PAL TEL company as PNA has sold its 35% share in Jawwal through the Palestinian Investment Fund to the parent company in 2003.

Jawwal coverage extends to 97% of the PNA territories. This has been achieved by investing and on phases in cellular networks and systems which provided a capacity of about 570 thousand subscribers by end of 2005, in addition to having 373 macro and micro sites in the West Bank and Gaza .(PALTEL annual report,2005)

In addition to cellular communications services, Jawwal opend 21 showrooms and sales points spreading in all the West Bank and Gaza Strip areas ( 7 centers in Gaza Strip and the rest in the West Bank) in order to be able to deal with the high forecasted increase in number of Palestinian subscribers and to provide an integrated group of services to different subscribers.

**Exhibit ( 3-4 ): Distributing the main objectives of Jawwal to the four Balanced Scorecard Perspectives**

<b>Objective</b>	<b>Perspective</b>
✓ To achieve continuous revenue and growth and highest returns on investments for the benefit of Jawwal shareholders and other stakeholders.	<b>Financial</b>
✓ To promote subscribers' satisfaction and trust by providing the best cellular programs and services and investing in network development and improvement.	<b>Customer</b>
✓ To achieve the highest efficiency, with regard to the utilization of available resources and controlling operational costs.	<b>Internal Business Processes</b>
✓ To polarize the most distinguished Palestinian skills and competencies to provide the best services to both subscribers and shareholders.	<b>Learning and Growth Customer</b>
✓ To know subscribers requirements and expectations and seek to fulfill them as soon as possible.	<b>Customer</b>
✓ To continuously communicate with the Palestinian community by facilitating the daily life aspects of its citizens.	<b>Customer</b>
✓ To maintain the company's good image by maintaining its present and future accomplishments.	<b>Internal Business Processes</b>

**Source: Created by the researcher from PAL TEL annual report 2005 ( see appendix No 5)**

The license granted to PAL TEL entitles Jawwal to work for five years as exclusive operator in the Palestinian territories or till

acquiring 120,000 subscribers, whichever comes first. According to 2005's report, Jawwal has already acquired 570,000 subscribers which means that one of the two conditions has been met.

The Jawwal vision statement conforms to the PAL TEL group vision and could be analyzed to the following elements :

- a- Attending leadership in the Palestinian cellular market.
- b- Providing the best coverage.
- c- Expanding and improving its cellular services.
- d- Incorporating technological developments and breakthroughs.
- e- Developing innovative marketing strategies to the best interest of both our subscribers and shareholders.(see appendix No. 5)

When the main objectives of Jawwal are compared to the Balanced Scorecard perspectives, It could be noticed that all the Balanced Scorecard Perspectives are represented in Jawwal main objectives which indicates that the company is aware of the importance of the balance among its objectives as we can see from exhibit (3-4 ).

### **3-5 Hadara and Palmedia:**

The another two companies from PAL TEL group have more devoted vision and mission to their specific communications fields; Hadara which established in 2005 after integrating the main four internet services providers(PALNET, Palestine on line, PIS, InterPAL) has devoted its mission to achieve market leadership in the ICT market and to become an ideal provider for value added internet services .

The fourth company of PAL TEL group is PALMEDIA Established in 2005. It devoted its mission to utilize, implement, research and develop the latest multimedia technology, The company introduces many services through its Media centers such as work spaces for journalists, computers, internet, local and international calls and office

facilities. In addition to advertising services and call centers, the Palmedia centers offer breaking news facilities and official conference schedules through SMS services provided for journalists using Jawwal SMS services.(PALTEL annual report,2005:pp.51-52)

**3-6 PAL TEL's Balanced Scorecard:** The announced strategic plan has been analyzed and rebuilt to conform a suggested Balanced Scorecard model for PAL TEL group as shown in exhibit. (3-5)

From the actual balanced scorecard template it could be found that there is more concentration on the customer perspectives than the rest of the perspectives. This what could be considered as an unbalanced performance will be discussed in fourth and fifth chapters as well, but meanwhile a previously mentioned approach could be used to specify the gaps, and fill them so far? A virtual strategy map will be designed.

### Exhibit ( 3-5 ): Suggested Balanced Scorecard for PAL TEL

Customer Perspective	
Goals	Measures
-Modern and value added services	-No of telecommunication services introduced to the public
-Line access	-Time to settle a customer claim
-Contribute to building Palestinian society.	-Number of projects that support the week categories.
-Satisfying the needs of the customers.	-Customer satisfaction survey
-Introduce high quality services	Procedjers of sales from proprietary services.
_Provide wide range of services to the broadest possible subscribers	-Number of integrated services afforded to subscribers.
	-Number of customers retained

Financial Perspective	
Goals	Measures
-Prosper	- Return on equity
-Preserve the shareholders investment.	-Return On Assets
-Meet Shareholders expectations and aspiration	-Free Cash Flow
	-Current Ratio
	-Quik acid test ratio
	-Market Share

Learning and Growth Perspective	
Goals	Measures
Deploying the latest technology.	-Time to develop next generation.
- Deploying information system	-Values of information exploitation in facilitating work
-Offer innovative solutions	-Unit cost, yield.
-High professional and trained staff	- Number of training sessions of the employees.
	-Engineering efficiency

Internal Business Processes	
Goals	Measures
Modernising the operational mechanism	▪ Unit cost
Provide good quality goods.	-cycle time
New product introduction	-Actual production schedule versus plan

Adapted from the Balanced Business Scorecard of Electronic Circuits Incorporated ( ECI) (Kaplan, 2005: p.5)

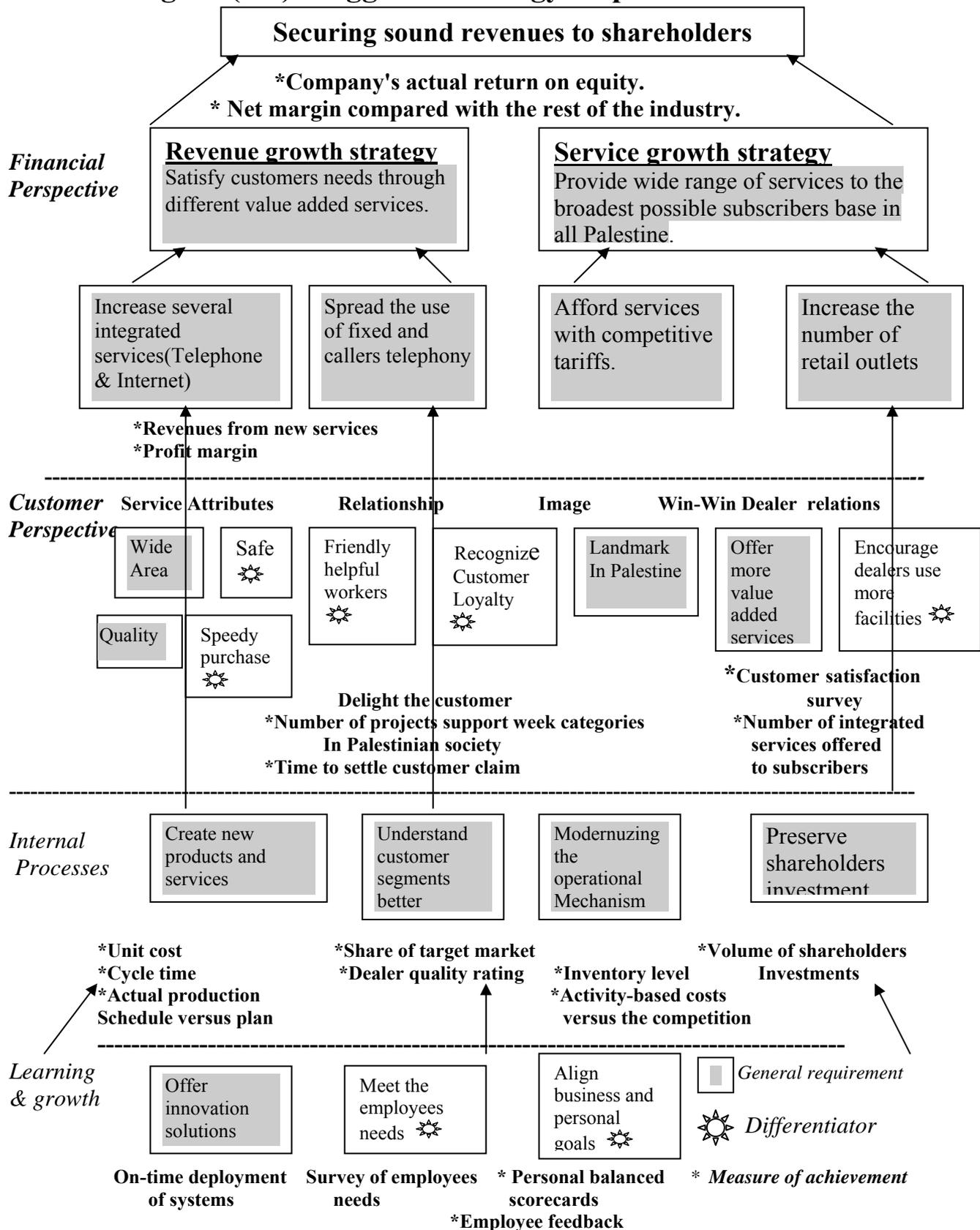
### **3-7 Designing Strategy Map for PAL TEL:**

As it has been mentioned before in chapter two, the strategy map is one of the analysis approaches to decide what most positive elements the company already possess, and what elements it needs to develop. From reviewing the visions, missions and main objectives of the PAL TEL group companies, it may be useful to depend on the available information to afford a good visual framework for the organization's strategic management based on the Balanced Scorecard perspectives as it is shown in figure (3-1).

To build a strategic map for any company many consequential steps should be followed by all the management and employees levels as it has been clarified in chapter two. To design this proposed one some procedures have been followed by the researcher:

- 1- Analyzing the strategic plan of PAL TEL to find the aspects that the company is interested in.
- 2- Conforming the planed performance into actions, objectives and measures.
- 3- Imbed the different items on a supposed template of the company's Balanced Scorecard into a cause-and-effect chain.
- 4- Connecting the desired results with the drivers of those results.
- 5- Distinguishing between things are already exist and things that are not and they should be done to realize the desired Balanced performance.

**Figure (3-1): Suggested strategy map for PAL TEL**



Adapted from Mobil North American Marketing and refining company.  
 source: Kaplan 2000:p.8

Reviewing the supposed strategy map template, some gaps in the company's performance could be discovered. The strategy map, as mentioned before, should resemble the point view of the top management, and this one may not. It has been created just to show a visual framework for the announced strategy and help stakeholders review and contemplate their work.

If PAL TEL corporation decided to design strategy map, it is certainly would be something different from the one shown above, and it may lead to substantial and actual results and then discover more serious drivers. The participation of the top management and the stakeholders in designing the strategy map on the basis of the Balanced Scorecard may enable the company to make critical decisions toward desired changes that affect the company's strategies and priorities, and it may also agree with the current strategy and support its continuous success.

## **Chapter Four**

### **Research Method**

#### **4-1 Introduction:**

This chapter introduces a detailed presentation of methodology and procedures which have been followed in conducting the study about the performance evaluation of Palestinian telecommunications companies by using the Balanced Scorecard approach. The chapter includes Study methodology, Data collection, Study Population, Sample, Study Tools, and Statistical methods

#### **4-2 Study methodology and data collection:**

Analytical descriptive methodology has been used to sustain quantitative measurement and analysis. Data has been collected through different means such as:

**4-2-1 Secondary resources:** To introduce the theoretical literature of the subject, the researcher has depended on the following data resources:

- 1- Books and references in Arabic and English about the Balanced Scorecard.
- 2- Periodicals, articles, published papers and referred previous studies in different countries which has been conducted on the same subject.
- 3- The published annual reports from Palestinian Statistic Center and PAL TEL corporation.
- 4- The Internet sites and the available electronic versions.

#### **4-2-2 Primary recourses:**

To analyze the qualitative and quantitative characteristics of the phenomena, it has been depended on collecting the primary data by interviews and the questionnaire ( see appendix 1) as a main tool for

the study, it saves time and effort. The questionnaire has been designed especially for this study and contains three parts:

- 1- The definition of the study.
- 2- The primary information about the demographic specifications of the sample individuals.
- 3- A set of 50 statements regarding stakeholders evaluation and of the four perspectives of BSC( Customer, Internal Business Processes, Learning and Growth and Financial). This section is based on Garrison and Noreen(2003) with some refinements regarding questions to be more suitable to telecommunication business. Some measures has been represented by several ones to give more certainty of the consistency of the stakeholders responses.. The aim of the questionnaire is to find the stakeholders evaluation of PAL TEL performance in different BSC perspectives. Every question has five alternative answers according to Likert Scale which consists of five degrees (Strongly agree, Agree, Average, Disagree, Strongly disagree). This scale has been transformed to quantitative degrees as shown in table No.4-1:

**Table No.4-1: The significance of the answers:**

The answers	values	Relative weight
Strongly disagree	1	<= 20%
Disagree	2	21-40%
Average	3	41-60%
Agree	4	61-80%
Strongly disagree	5	>=81%

### **4-3 Study Population:**

The population of the study consists of two kinds of stakeholders; the employees and shareholders of PAL TEL group as the odd telecommunications corporation working currently in Palestine. The employees and stakeholders who live in Gaza Strip represent the study

population. There are about 668 employees approximately 500 of them are working in Paltel and 168 in Jawwal. (Telephone calls, March 7<sup>th</sup>, 2006 )

The list of shareholders includes a broad list of investors ranging from prominent individuals, companies, institutions and the Palestinian Investment Funds. The number of the individual shareholders is unknown exactly since it is changing daily (Telephone calls, March 7<sup>th</sup>, 2006) .

Exempting the WEST Bank's stakeholders was arbitrary because of the political situation which prevents easy communication between Gaza Strip and the West Bank. Therefore Hadara and Palmedia companies, as members of PAL TEL group, have been exempted too. (see Table 4-2)

**Table (4-2): The study Population in Gaza Strip:**

<b>Stakeholders corporation</b>	<b>Managers</b>	<b>Employees</b>	<b>Shareholders</b>
PalTel	50	500	Unknown
Jawwal	15	168	Unknown
Total	65	668	Unknown

**Source: composed by the researcher from: Telephone calls, March 7<sup>th</sup>, 2006**

#### **4-4-2 The study sample:**

The study sample has been selected as a random sample composed of three stakeholders categories: Managers, Employees and Shareholders and represents the number of the employees in every company consisted of 185 persons who are employees in Paltel and Jawwal companies and shareholders of PAL TEL group. It was not possible to have a stratified sample because of the hardship of collecting rational numbers of the questionnaires from the sample individuals. The

distribution of the questionnaire has started after coordinating with the Paltel and Jawwal executive managers, and the management of Sahn\* and Palestine currency markets in Gaza city and Khanyounis. The distribution to the different centers and currency markets has been conducted in the second week of January 2007. The questionnaire has been collected within two to four weeks. (170) of them have been collected back. (13) of Gaza city center employees and (2) shareholders have not given the questionnaires back. The Gaza center employees refused to mention the cause of not answering, but the shareholders have alleged that they did not have enough information about the companies.

#### **4-5 Validity and liability of the study tool:**

##### **4-5-1 Pilot study:**

The measurement has been applied on 50 employees and shareholders of PAL TEL as a simple random sample in order to check the usefulness of the used tool and its validity and reliability. The pilot sample has been distributed in the last week of December 2006 and collected within two weeks and has been exempted from the study sample.

##### **4-5-2 First : Validity of referees:**

The initial questionnaire has been given to a group of referees to judge the validity of it according to its content, the clarity of its items meaning, and suitability to avoid any misunderstanding and to assure its linkage with the main study aims.

After a detailed feedback from the referees, the possible adaptation has been done to meet their suggestions. ( see table 4-3)

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\* Brokerry company for currency and shareholders market.

**Table (4-3): The number of the questionnaire's items specified according to each perspective:**

NO.	Perspectves	Number of items
1-	Customer	10
2-	Internal Business Perspective	21
3-	Learning and Growth	11
4-	Financial	8
Total		50

#### **4-5-3 Second: The validity of the questionnaire**

To check the validity of the scorecard, it has been accounted by two means:

##### **D)The validity of Internal Consistency:**

The correlation between the score of each perspective and the total score of the questionnaire has been accounted, and the correlation between the score of every item and the total score of its perspective has been accounted as well, (see tables 4-4, 4-5,4-6, 4-7 and 4-8):

**Table 4-4: Correlation coefficients(R) between the BSC perspectives and the Total score of it.**

Perspectives	r	Sig.
First: Customers perspective	0.78	0.01 SIG.
Second: Internal Process Perspective	0.91	0.01 SIG.
Third: Learning and Growth Perspective	0.82	0.01 SIG.
Fourth: Financial Perspective	0.52	0.01 SIG.

We observe that there is a high and significant correlation between every perspective and the whole scorecard, which means that the Balanced Scorecard enjoys high validity coefficient. Table (4-5) shows the correlation coefficient between every measure score in the Customers Perspective and the whole score of the perspective which it belongs to. All the measures enjoy strong and significant correlation coefficients at the significance level of 0.01, the " r " values located

between 0.44 and 0.76, which means that Customers Perspective enjoys high validity coefficient.

**Table (4-5): Correlation coefficients between every measure in the Customers Perspective and the whole perspective.**

Measures	r	Sig.
1	0.67	Sig.
2	0.50	Sig.
3	0.48	Sig.
4	0.44	Sig.
5	0.47	Sig.
6	0.72	Sig.
7	0.62	Sig.
8	0.54	Sig.
9	0.76	Sig.
10	0.67	Sig.

From table (4-6) we can see that there is high and significant correlation coefficients between every item score of the Internal Processes Perspective and the score of the whole perspective. The " r " values located between 0.43 and 0.80, which means that there is high validity coefficient between the Internal Processes Perspective and its items.

**Table (4-6): Correlation coefficients between every measure in the Internal Processes Perspective and the whole perspective.**

Measure No.	r	Sig.	Measure No.	r	Sig.
11	0.43	Sig.	22	0.64	Sig.
12	0.61	Sig.	23	0.59	Sig.
13	0.8	Sig.	24	0.53	Sig.
14	0.78	Sig.	25	0.75	Sig.
15	0.76	Sig.	26	0.7	Sig.
16	0.74	Sig.	27	0.63	Sig.
17	0.56	Sig.	28	0.53	Sig.
18	0.59	Sig.	29	0.6	Sig.
19	0.48	Sig.	30	0.69	Sig.
20	0.49	Sig.	31	0.61	Sig.
21	0.67	Sig.			

There is a strong and significant correlation at significance level 0.01 between the individual measures scores and the Learning and Growth Perspective score, since it located between 0.31 and 0.86.

(see table 4-7)

**Table (4-7): Correlation coefficients between every measure in the Learning & Growth Perspective and the whole perspective.**

Measure No.	r	Sig.	Measure No.	r	Sig.
32	0.79	Sig.	38	0.31	Sig.
33	0.77	Sig.	39	0.77	Sig.
34	0.69	Sig.	40	0.76	Sig.
35	0.67	Sig.	41	0.77	Sig.
36	0.37	Sig.	42	0.86	Sig.
37	0.56	Sig.			

We find that there is a strong and significant correlation between every individual measure in the financial perspective and the whole perspective at the significance level 0.01, which means that the financial perspective and their measures enjoy a high validity coefficient.(see table 4-8)

**Table (4-8): Correlation coefficients between every measure in the financial Perspective and the whole perspective.**

Measure No.	r	Sig.
43	0.66	Sig.
44	0.69	Sig.
45	0.80	Sig.
46	0.59	Sig.
47	0.41	Sig.
48	0.61	Sig.
49	0.52	Sig.
50	0.58	Sig.

## II)The validity of terminal comparison

This comparison substantially depends on dividing the items into two parts and comparing the mean of the higher quarter with the mean of

the lower quarter, and after distributing the scores, a comparison between the higher 25% of the scores and the lower 25% of the scores is put through.( see table 4-9)

Since the Means, Standard Deviations and T values has been accounted at a significance level less than 0.01, we find a substantial and significant variation between the high scores and the low ones in all the four perspectives of the scorecard. This indicates that the Balanced Scorecard discriminates between the individuals who give high degrees and those who give low degrees to the four perspectives of the BSC, which means that the scorecard items have a high validity coefficient and that indicates that the card is valid to discriminate between the high scores and the low ones.

**Table 4-9: The Means, Standard Deviations and T values for the higher quarter and the lower quarter of the four BSC perspectives**

Perspective	Groups	Mean	SD	T	SIG
Customers	Lower 25%	29.7	3.4	-12.2	0.01sig
	Higher 25%	44.5	2.1		
Internal Processes	Lower 25%	60.5	7.2	13.2	0.01sig
	Higher 25%	94.1	5.3		
Learning & Growth	Lower 25%	29.7	5.3	-12.0	0.01sig
	Higher 25%	51.0	1.9		
Financial	Lower 25%	25.5	1.2	-15.1	0.01sig
	Higher 25%	36.3	2.1		
Total	Lower 25%	154.5	15.2	-11.12	0.01sig
	Higher 25%	218.2	12.7		

#### **4-5-4 Third: The reliability of the Balanced Scorecard**

After applying the Balanced Scorecard and treating the data by SPSS program, the reliability has been accounted by two ways:

##### **1- The reliability by Alpha-Cronbach:**

The Balanced Scorecard has been applied on a pilot sample consists of 50 persons of the people working in PAL TEL( Paltel and Jawwal)

and the shareholders. Alpha- Cronbach coefficient validity for the sample has been accounted , it equals 0.94 which means that the Balanced Scorecard has a high reliability coefficient. It is approximately the same results for every perspective of the scorecard. (see table 4-10)

**Table 4-10: Alpha-Cronbach coefficient for the four perspectives of BSC**

<b>Perspective</b>	<b>No. of questions</b>	<b>Alpha</b>
I Customers	10	0.78
II Internal Operational Processes	21	0.92
III Learning and Growth	11	0.87
IV Financial	8	0.74
The Total of the scorecard	50	0.94

## **2- Reliability by Split-half method:**

The BSC measurement tool has been applied on a pilot sample including 50 persons of the people who work in Paltel , Jawwal and the Stakeholders of PAL TEL, then reliability has been accounted by split-half method. In this way the whole tool measures are splitted into two divisions and then the measures of every perspective splitted into two divisions as well. The correlation between the two halves has been accounted; it equals (0.78) for the whole scorecard. After using the adjusted Spearman-Brown equation the reliability coefficient became (0.88). It means that the questionnaire has a high degree of reliability. By accounting the correlations for every perspective we find that almost similar results which means that every perspective has a high reliability degree (see table 4-11).

**Table (4-11): Reliability coefficients by using the split-half method for the perspectives of the Balanced Scorecard**

Perspectives	Pearson correlation coefficient	Reliability coefficient according to adjusted Spearman-Brown Method
Customers	0.50	0.66
Internal Operational Processes	0.78	0.88
Learning and Growth	0.74	0.85
Financial	0.45	0.62
The Whole Scorecard	0.78	0.88

#### **4-6 The Statistical Methods:**

##### ***First : Type of Data Distribution:***

The researcher has analyzed the questionnaire by using SPSS program. In order to know the type of Data distribution and so the possibility to apply the Parametric tests, the Kolmogorov-Smirnov Z Test has been used.

All the results of the Kolmogorov-Smirnov Test indicate that the four perspectives follow the normal distribution and the whole scorecard follows the normal distribution as well, since their level of significance is more than 0.05.(See table 4-12)

**Table (4-12): The results of Kolmogorov-Smirnov Test for the Normal Distribution of the four perspectives.**

Perspectives	Kolmogorov-Smirnov Test	Sig.
Customers	1.2	0.1 Not Sig.
Internal Business Processes	1.0	0.3 Not Sig.
Learning and Growth	1.1	0.2 Not Sig.
Financial	1.3	0.1 Not Sig.
The Four Perspectives	1.0	0.3 Not Sig.

The following statistical methods have been used:

**1- Statistic Methods used in analyzing the validity of the questionnaire:**

- Pearson correlation coefficient: to find the validity of Internal Consistency by the correlation between every statement and its perspective.
- Terminal comparison: by comparing the Mean, Standard Deviation and T values for the higher and the lower quarters of the sample.

**2- Statistics Methods used in testing the reliability of the tool:**

- Alpha-Cronbach coefficient.
- Split-half method: by computing the correlation between the two halves and using the adjusted Spearman-Brown equation to find the reliability coefficient.

**3- Statistic Methods used in Data Analysis:**

- Frequencies
- Percentages
- Means
- Standard Deviations
- Relative Weight

**4- The Statistic Methods which have been used in testing hypotheses:**

- One-Sample T-Test to check differences between the Mean of the responses of every perspective and the Average Mean.
- Pearson Correlation: to test the relation between two variables of parametric and normally distributed data.
- Linear Regression: to check the effect of every perspective on the total degree of the questionnaire.

- One Way ANOVA: to test differences.
- Scheffe Test: to find the differences among the Means and specify their directions and significance.

## 5- Chapter five

### Analyzing and Interpreting Results

#### 5-1 Introduction:

In this chapter the results of the data analysis which has been conducted on the study sample have been explained. Then the results were analyzed and discussed to evaluate the performance of PAL TEL in Gaza Strip according to everyone of the four perspectives of the BSC model. This chapter has been divided to three sections:

**Section one:** Analyzing the properties of the sample.

**Section two:** Analyzing and discussing the perspectives of the study.

**Section three:** Testing the study hypotheses.

#### 5-2 Section one

##### Analyzing the properties of the sample

#### 5-2-1 Introduction:

In this section the properties of the sample have been introduced. The researcher has analyzed both personal and organizational properties and the results was as follows:

##### 1- The Place of Work:

The majority of the sample are from Paltel employees, they form 58.8% of it. Jawwal employees form 22.4% of the sample, it seems logic since it approximately resembles the ratio between the number of employees in every company (table 4-2 and table 5-1).

**Table (5-1): Sample persons by place of work & shareholdres**

Place of work	Frequency	Ratio%
Paltel	100	58.8
Jawwal	38	22.4
Shareholders	32	18.8
Total	170	100

It was not possible to know the number of shareholders so the questionnaire has been distributed to every shareholder could be reached.

## **2- The relation between the persons of the sample and PAL TEL group:**

Most of the sample persons are employees in the PAL TEL corporation hence the ratio of ordinary employees is 70.6%, while shareholders form 21.2% of the sample. The managers form 8.2% of the sample as shown in table 5-2:

**Table (5-2): The relation of the sample persons with PAL TEL corporation**

Job specification	Frequency	Ratio%
Manager	14	8.2
Ordinary employees	120	70.6
Shareholder	36	21.2
Total	170	100.0

## **3- The scientific qualification of the sample persons:**

It consists of 4.1% persons less than GSC(General Secondary School), 5.9% persons have GSC, 21.2% persons have Diploma( Two years after GSC), 55.3% have bachelor degree, and 13.5 persons have Postgraduate degrees, as it is shown in Table (5-3).

**Table (5-3): The scientific qualification of the sample persons**

Scientific qualification	Frequency	Ratio
Less than GSC	7	4.1
GSC	10	5.9
Diploma	36	21.2
Bachelor	94	55.3
Postgraduate degree	23	13.5
TOTAL	170	100.0

It is noticed that the ratio of bachelor degree and post graduate (68.8%) is much higher than their ratio in the Palestinian society

which equals 5.6% only. ( Palestinian Central Bureau of Statistics, 2001). It means that most of the sample persons are high qualified and can understand the questionnaire statements and give significant response.

#### **4- Gender:**

Most of the sample persons are Male;88.8%, (see Table5-4):

**Table (5-4): The gender of the sample persons:**

Gender	Frequency	Ratio
Male	151	88.8
Female	19	11.2
Total	170	100.0

The ratio of the employed women was 9.4% in Gaza strip and 17.3% in the West Bank in 2004. The low ratio of the employed women may due to the traditional oriental habits of the Palestinian society which prefers that the women work in specific professions like education and health (Palestinian Central Bureau of Statistics, 2005). It is noticed that the ratio of female persons of the sample is higher than the ratio of the employed women in the Palestinian society in Gaza strip which may reflects the company policy of appointment.

#### **5- Age categories of the sample persons:**

There is 21.2% of the sample persons between 20 and 30 years old. The category (31-40) is the biggest one. It represents 57.6% of them which is twice of the same category ratio in the Palestinian society. This seems logically because of the high ratio of the high qualified persons. The (41-50) category ratio is 12.9%, and 8.2% of the sample persons are more than 50 years old.(See table 5-5):

**Table5-5: The Age Categories of the sample persons**

Age Category	Frequency	Ratio%	* Ratio in Palestinian society
20-30	36	21.2	44%
31-40	98	57.6	29.8%
41-50	22	12.9	16.1%
>50	14	8.2	10.1%
Total	170	100.0	100.0

\*Calculated from the Palestinian Central Bureau of Statistics(2005)

### 6- Level of Income:

There is 12.9% of the sample persons which their monthly income is less than 2000 NIS, 44.7% their monthly income ( 2000 -3000), 28.8% (3001-4000) and 13.5% their monthly income is more than 4000, (see table 5-6):

**Table (5-6): The monthly income of the sample persons**

The level of monthly income	Frequency	Ratio%
Less than 2000 NIS	22	12.9
2000-3000 NIS	76	44.7
3001-4000 NIS	49	28.8
More than 4000 NIS	23	13.5
Total	170	100.0

The monthly average income of the Palestinian family which equals JD 498.2, is approximately consistent with the average income of the sample persons.(Palestinian Central Bureau of Statistics,2005)

### 7-The years of work or shareholding in PAL TEL:

There is 29.4% of the sample persons have been working in PAL TEL for less than 5 years, 42.4% persons have 5 to 10 years experience, 28.2% of them are working for 10 years. (see table 5-7)

**Table (5-7): The year of work or shareholding in PAL TEL.**

Year of work	Frequency	Ratio%
Less than 5 years	50	29.4
5-10 years	72	42.4
10 years	48	28.2
Total	170	100.0

**8-Marital status :**

The married people are 87.1% of the sample(see table (5-8), this high ratio of the married people may refer to the stable and rational income of the employees and it consistent with the high ratio of the people who are more than 30 years old and the people who work since more than five years. These conditions encourage people to get married according to the Palestinian society traditions.

**Table (5-8): Social statue of the sample persons:**

Social statue	Frequency	Ratio%
Single	22	12.9
Married	148	87.1
Total	170	100.0

**5-3 Section two****Analyzing and discussing the perspectives of the study****First: The field of Customers Perspective.**

One Sample T-Test has been applied to check the difference between the Mean of the sample persons' responses about the Customers Perspective , and the Average Mean(Test value) which equals (3). Table (5-9) shows a significant difference between the Customers Perspective measures Mean and the Average Mean in favor of customer perspective since its Mean is more than the Average Mean which equals (3)

**Table (5-9): The results of One Sample T-Test for the degree of responsivity about the measures of Customers Perspective**

NO.	Customer Perspective statements	The Test Value =3			
		Mean	Mean of Variation	T value	Sig
1	There is an accepted level of Customers satisfaction from the services which are introduced from the company.	4.1	1.10	20.68	0.001**
2	The customers complaints are in the expected range	3.3	0.25	2.79	0.01**
3	The company's Market Share from the cellular communication Market is suitable.	4.1	1.08	16.39	0.001**
4	The return from every introduced service forms a good ratio of the sales volume.	4	0.95	14.77	0.001**
5	The overwhole management expenses forms a moderate ratio of sales volume	3.7	0.68	10.25	0.001**
6	Most of the companies customers prefer it rather than the other competitors.	3.7	0.69	9.18	0.001**
7	The number of new users of Jawwal meets the expectations	3.9	0.88	13.56	0.001**
8	The number of new users of fixed line telephone meets the expectations	3.7	0.69	8.78	0.001**
9	The company contributes in building the Palestinian society by supporting the non-profitable institution such as health and education.	4.3	1.33	20.44	0.001**
10	The company contributes in strengthening the Palestinian society by supporting the projects of infra structure,	4.0	1.04	14.19	0.001**
Total of Customer Perspective		38.6	5	35.3	0.001**

\* Sig. at 0.05

\*\* Sig. at 0.001

This mean that the sample persons are highly satisfied from the performance of the company in the customers perspective with a score located between (61-80%) .

To show the responsivity level of the sample persons about every statement of customer perspective, frequencies, percentages, Mean, and the relative weight of every statement has been computed as shown in table No. (5-10)

**Table ( 5-10): The responsibility level of the sample persons about every statement of customer perspective**

No	Customer Perspective	No & %	1	2	3	4	5	Sum	Mean	Relative weight	Rank
1-	There is an accepted level of Customers satisfaction from the services which are introduced from the company.	N	1	4	15	107	43	697.0	4.1	82.0	2
		%	0.6	2.4	8.8	62.9	25.3				
2-	The customers complaints are in the expected range	N	18	28	37	67	20	553.0	3.3	65.1	10
		%	10.6	16.5	21.8	39.4	11.8				
3-	The company's Market Share from the cellular communication Market is suitable.	N	0	10	26	75	59	693.0	4.1	81.5	3
		%	0.0	5.9	15.3	44.1	34.7				
4-	The return from every introduced service forms a good ratio of the sales volume.	N	0	12	28	86	44	672.0	4.0	79.1	5
		%	0.0	7.1	16.5	50.6	25.9				
5-	The overwhole management expenses forms a moderate ratio of sales volume	N	1	19	36	92	22	625.0	3.7	73.5	9
		%	0.6	11.2	21.2	54.1	12.9				
6-	Most of the companies customers prefer it rather than the other competitors.	N	3	18	44	68	37	628.0	3.7	73.9	7
		%	1.8	10.6	25.9	40.0	21.8				
7-	The number of new users of Jawwal meets the expectations	N	1	11	33	87	38	660.0	3.9	77.6	6
		%	0.6	6.5	19.4	51.2	22.4				
8-	The number of new users of fixed line telephone meets the expectations	N	6	17	36	76	35	627.0	3.7	73.8	8
		%	3.5	10.0	21.2	44.7	20.6				
9-	The company contributes in building the Palestinian society by supporting the non-profitable institution such as health and education.	N	0	8	18	54	90	736.0	4.3	86.6	1
		%	0.0	4.7	10.6	31.8	52.9				
10-	The company contributes in strengthening the Palestinian society by supporting the projects of infra structure,	N	1	14	26	65	64	687.0	4.0	80.8	4
		%	0.6	8.2	15.3	38.2	37.6				
Total of Customer Perspective									38.6	77.4	

From table (5-10) we can see that statement number 9 which indicates that the company contributes in building the Palestinian society by supporting the non-profitable institution such as health and education has the highest Mean(4.3) and relative weight (86.6). This

means that the majority of the stakeholders believe that the company has a high social responsibility aims. It consists with the main objectives of Paltel and the achievements which has been mentioned in its annual reports.(PAL TEL annual report, 2005).

Statement number 10 which says that the company contributes in strengthening the Palestinian society by supporting the projects of infra structure. has the rank of (4) with a relative weight of (80.8) and a Mean of (4.0). It supports the previous statement and show high evaluation of the social responsibility achievements.

Statement number (1) is the second highest scored one in the customer perspective which indicates that there is an acceptable level of customers satisfaction from the services which are introduced by the company. It means that the stakeholders are satisfied of the performance of the telecommunications companies and this could be considered as a logical result of the high scores of statement number (9) and with the main objectives of Paltel and Jawwal as seen from their strategic plan.(Annual report, 2005).

The high relative weight (81.5) and Mean (4.1) of statement number (3) which indicates that the company's Market Share from the cellular communication market is suitable, shows that the marketing policies of the companies are highly evaluated by the stakeholders. This could be referred to the approximately monopoly of the market in Gaza Strip and the absenteeism of the competitors.

Statement number (4) which indicates that the return from every introduced service forms a good ratio of the sales volume, has the rank of (5) with a relative weight (79.1) and Mean of 4 which mean that the stakeholders are highly evaluating the profitability of every product or service unit . It may be referred to the high growth of financial ratios.

The stakeholders have given the rank of 96) to the seventh statement "The number of new users of Jawwal meets the expectations" with relative weight of (77.6) and Mean of (3.9) which means that they believe that Jawwal meets the needs and expectations of its clients.

Statement number (6) which indicates that most of the companies' customers prefer it rather than the other competitors has the rank of (7) with a relative weight of (73.9) and a Mean of (3.7), which means that the stakeholders are satisfied from the performance of the company and they are not expecting better services from the virtual future competitors.

The statement: "The number of new users of fixed line telephone meets the expectations" has the rank of 8 with relative weight of (73.8) and Mean of (3.7) which means that the fixed telephone company (Paltel) meets the expectations of its clients, for the several integrated services which are introduced to the subscribers.

The stakeholders are highly evaluating the sufficiency of the management since the fifth statement which indicates that the overwhole management expenses forms a moderate ratio of sales volume have a mean of (3.7) and a relative weight of (73.5) but it has the rank of (9).

The least relative weight (65.1) and Mean (3.3) has been given to the second statement "The customers complaints are in the expected range", which means that the stakeholders see that the customers are satisfied of the performance of the telecommunications companies and they do not have that much complaints.

## **Second: The field of Internal Business Processes.**

One Sample T-Test has been applied to check the difference between the Mean of the individual responses about every measure of

the Internal Business Processes and the Normal Mean which equals (3) degrees (see table 5-11)

**Table (5-11): The results of One Sample T-Test for the degree of responsivity about the measures of Internal Business Processes Perspective**

No	Internal business Processes	Test Value =3			
		Mean	Mean of Variation	T value	Sig.
11	The sales from the newly created services forms a high ratio from the sales	3.8	0.84	14.8	0.001**
12	The newly created services and products exceeds the customers expectations	3.8	0.84	12.8	0.001**
13	The company provides the market with the newly created services at the suitable time	3.5	0.54	6.7	0.001**
14	The procedures of affording the newly created services and products are fast and according to the market needs.	3.7	0.69	9.0	0.001**
15	Percentage of customers calls answered within short time.	4.0	0.99	13.8	0.001**
16	The clerks answer the public calls even if they were busy in routine works	3.9	0.91	11.1	0.001**
17	The company can attain its needs from goods and services on time without keeping them stored.	3.3	0.32	3.7	0.001**
18	The stored volume of procurements (inventory) suits the volume of customers' demand.	3.7	0.68	9.5	0.001**
19	There is a high ratio of goods and services delivery contracts that have the same date of procurement contracts date.	3.7	0.66	9.5	0.001**
20	It is possible to predict the volume of sales and keep a suitable quantity of goods in the stores of the company.	3.7	0.68	10.2	0.001**
21	The services and goods are introduced according to consumers needs and tastes	3.7	0.66	8.8	0.001**
22	The products and services are produced in a cost almost similar to the standard cost	3.6	0.60	9.7	0.001**
23	The indirect costs which are added to the goods and services prices are logic.	3.6	0.56	8.9	0.001**
24	The marketing campaigns which are conducted by the company have positive effects on attracting new customers	4	1.04	15.6	0.001**
25	The shortness of the time spent in affording products and services indicates to the fastness of procedures.	3.9	3.9	12.7	0.001**
26	The utmost quality is afforded by the least cost	3.7	3.7	9.0	0.001**
27	The level of the products and services' quality suits their costs	3.8	3.8	11.2	0.001**
28	Using new technology does not cause any confusion in the work	4.2	4.2	20.0	0.001**

No	Internal business Processes	Test Value =3			
		Mean	Mean of Variation	T value	Sig.
29	Using new technology does not cause any increase in the cost or the price of service.	3.8	3.8	10.2	0.001**
30	Time from call of customer to repair of product is short in proportion of the defect volume	4.0	4.0	13.3	0.001**
31	The company responds to the customers' complaints on first contact.	4.0	4.0	11.5	0.001**
Total of Internal Processes Perspectives		79.37	11.44	61.9	0.001**

\* Sig. at 0.05

\*\* Sig. at 0.001

From table (5-11) we can see that there is a significant difference between the Internal Business Processes measures Mean and the Normal Mean in favor of Internal Business Processes Mean since its Mean is more than 3 ( the normal Mean).

This means that the sample persons are highly satisfied of the company's performance in the Internal Business Processes perspective with a score of (61-80% ).

**Table (5-12): The responsivity level of the sample persons about every statement of Internal Business Processes perspective**

No	Internal Business Processes Perspective	No &%	1	2	3	4	5	Sum	Mean	Relative weight	rank
11-	The sales from the newly created services forms a high ratio from the sales	N	0	8	38	97	27	653.0	3.8	76.8	9
		%	0.0	4.7	22.4	57.1	15.9				
12-	The newly created services and products exceeds the customers expectations	N	0	12	42	77	39	653.0	3.8	76.8	10
		%	0.0	7.1	24.7	45.3	22.9				
13-	The company provides the market with the newly created services at the suitable time	N	4	27	44	64	31	601.0	3.5	70.7	20
		%	2.4	15.9	25.9	37.6	18.2				
14-	The procedures of affording the newly created services and products are fast and according to the market needs.	N	3	23	32	77	35	628.0	3.7	73.9	14
		%	1.8	13.5	18.8	45.3	20.6				
15-	Percentage of customers calls answered within short time.	N	1	17	18	80	54	679.0	4.0	79.9	5
		%	0.6	10.0	10.6	47.1	31.8				

No	Internal Business Processes Perspective	No &%	1	2	3	4	5	Sum	Mean	Relative weight	rank
16-	The clerks answer the public calls even if they were busy in routine works	N	6	14	27	66	58	669.0	3.9	78.7	7
		%	3.5	8.2	15.9	38.8	34.1				
17-	The company can attain its needs from goods and services on time without keeping them stored.	N	10	36	38	62	24	564.0	3.3	66.4	21
		%	5.9	21.2	22.4	36.5	14.1				
18-	The stored volume of procurements (inventory) suits the volume of customers' demand.	N	4	16	37	86	27	626.0	3.7	73.6	15
		%	2.4	9.4	21.8	50.6	15.9				
19-	There is a high ratio of goods and services delivery contracts that have the same date of procurement contracts date.	N	3	12	55	69	31	623.0	3.7	73.3	17
		%	1.8	7.1	32.4	40.6	18.2				
20-	It is possible to predict the volume of sales and keep a suitable quantity of goods in the stores of the company.	N	1	18	40	86	25	626.0	3.7	73.6	15
		%	0.6	10.6	23.5	50.6	14.7				
21-	The services and goods are introduced according to consumers needs and tastes	N	6	13	44	77	30	622.0	3.7	73.2	18
		%	3.5	7.6	25.9	45.3	17.6				
22-	The products and services are produced in a cost almost similar to the standard cost	N	3	11	52	89	51	792.0	4.7	93.2	1
		%	1.8	6.5	30.6	52.4	30.0				
23-	The indirect costs which are added to the goods and services prices are logic.	N	3	11	60	80	16	605.0	3.6	71.2	19
		%	1.8	6.5	35.3	47.1	9.4				
24-	The marketing campaigns which are conducted by the company have positive effects on attracting new customers	N	3	5	27	83	52	686.0	4.0	80.7	3
		%	1.8	2.9	15.9	48.8	30.6				
25-	The shortness of the time spent in affording products and services indicates to the fastness of procedures	N	1	16	27	83	43	661.0	3.9	77.8	8
		%	0.6	9.4	15.9	48.8	25.3				
26-	The utmost quality is afforded by the least cost	N	5	19	33	78	35	629.0	3.7	74.0	13
		%	2.9	11.2	19.4	45.9	20.6				
27-	The level of the products and services' quality suits their costs	N	4	12	33	87	34	645.0	3.8	75.9	11
		%	2.4	7.1	19.4	51.2	20.0				

No	Internal Business Processes Perspective	No &%	1	2	3	4	5	Sum	Mean	Relative weight	rank
28-	Using new technology does not cause any confusion in the work	N	0	8	15	79	68	717.0	4.2	84.4	2
		%	0.0	4.7	8.8	46.5	40.0				
29-	Using new technology does not cause any increase in the cost or the price of service.	N	5	12	40	74	39	640.0	3.8	75.3	12
		%	2.9	7.1	23.5	43.5	22.9				
30-	Time from call of customer to repair of product is short in proportion of the defect volume	N	2	18	17	69	64	685.0	4.0	80.6	4
		%	1.2	10.6	10.0	40.6	37.6				
31-	The company responds to the customers' complaints on first contact.	N	6	17	18	64	65	675.0	4.0	79.4	6
		%	3.5	10.0	10.6	37.6	38.2				
Total of Internal Processes Perspective									79.3	75.6	

To show the responsiveness level of the sample persons about every statement of Internal Business Processes perspective, Frequencies, Percentages, Mean, and the Relative weight of every statement has been computed as shown in table No. (5-12).

Statement number (22) which indicates that the products and services are produced in a cost almost similar to the standard cost, has been ranked as the first one with a relative weight (93.3) and a Mean of (4.3) that means that the stakeholders are highly evaluating the performance of the company in exploiting the available resources sufficiently.

The statement number 28 which indicates that using new technology does not cause any confusion in the work, has been ranked as the second one with a relative weight of (84.4) and a Mean of (4.2) that means that the stakeholders are highly evaluating the change of the technology and that the company manages the change smoothly.

The stakeholders highly evaluate the efficiency of the promotion campaigns since the (24<sup>th</sup>) statement which indicates that the

marketing campaigns which are conducted by the company have positive effects on attracting new customers, has a Mean of (4) and a relative weight of (80.7) and has been ranked as the (3<sup>rd</sup>) one.

Statement number (30) which indicates that time from call of customer to repair of product is short in proportion of the defect volume has been ranked as the (4<sup>th</sup>) one with a relative weight of (80.6) and a Mean of (4.0) that means that the stakeholders are highly evaluating the speed of reaction to any emergency.

The stakeholders have given the rank of (5) to the (15<sup>th</sup>) statement "Percentage of customers calls answered within short time". with relative weight of (79.90 and Mean of (4.0) which means that the stakeholders believe that the clerks are active and answering the customers' calls in a short time.

Statement number (31) which indicates that the company responds to the customers' complaints on first contact, has the rank of 6 with a relative weight of (79.4) and a Mean of (4.0) which means that the stakeholders are satisfied of the fast response to the customers' complaints.

The result of statement number (16) which indicates that the clerks answer the public calls even if they were busy in routine works, has the rank of (7) with a relative weight (78.7) and a Mean of (3.9) which means that the stakeholders highly evaluate the clerks reaction to the public calls.

We can see the clear relation between the statements 15, 16, 30, and (31) and their high level of evaluation since they concern with the customers' satisfaction of the internal operations especially in dealing with customers. This could be referred to the policy of the company toward customers satisfaction which is noticed in PAL TEL strategic plan.( Annual report, 2005).

Statement number (25) which indicates that the shortness of the time spent in affording products and services indicates to the fastness of procedures, has the rank of (8) with a relative weight of (77.8) and a Mean of (3.9) which means that the stakeholders are satisfied of the fastness of affording the new services and products.

Statements number (11) and (12) are indicators for one of Garrison Model BSC measures " Percentage of sales from new products", they have the rank of (9) and with relative weights (76.8) and Mean of (3.8). It means that the stakeholders see that the new products contribute in increasing the sales.

Stakeholders have given the rank of (11) to the (27<sup>th</sup>) statement which indicates that the level of the products and services' quality suits their costs and they have given the rank of (13) to the (26<sup>th</sup>) statement which indicates that the utmost quality is afforded by the least cost. it means that the stakeholders highly evaluate the quality of the services and products and see that the costs are rational.

The stakeholders are satisfied of the quality cost for that they have given the rank of (12) with relative weight of (75.3) and Mean of (3.8) to the (29<sup>th</sup>) statement which indicates that using new technology does not cause any increase in the cost or the price of service.

The two statements number (13) and (14) have the ranks of (20) and (14) and indicate that the company provides the market with the newly created services at the suitable time and that the procedures of affording the newly created services and products are fast and according to the market needs. It means that the stakeholders believe that the company introduce to the market the right new services and products in the right time.

The two statements number (18) and (19) indicate that the stored volume of procurements (inventory) suits the volume of customers'

demand, and that there is a high ratio of goods and services delivery contracts that have the same date of procurement contracts date. The two statements have the ranks of (15) and (17) with relative weights of (73.6) and (73.3) and Means of (3.7) for both of them.

Statements number (20) and (21) indicate that it is possible to predict the volume of sales and keep a suitable quantity of goods in the stores of the company, and that the services and goods are introduced according to consumers needs and tastes. The two statements have the ranks of (15) and (18) with relative weights of (73.6) and (73.2) and Means of (3.7) for both of them.

The previous four statements are connected to the measure " On-time delivery as a percentage of all deliveries" from Garrison BSC model.(Garrison 2003)

It means that the stakeholders believe that there is a high percentage of on-time delivery of all deliveries.

The statement number (23) which indicates that the indirect costs which are added to the goods and services prices are logic, has the rank of 19 with a relative weight of (71.2) and a Mean of (3.6) which means that the stakeholders believe that the company has efficient internal business processes in exploiting its resources and decreasing costs.

The least relative weight (66.4) and Mean (3.3) has been given to the 17th statement " The company can attain its needs from goods and services on time without keeping them stored" which means that the stakeholders see that the company still need to store goods despite its will to realize on-time delivery. It could be referred to the anxiety and uncertainty in the Palestinian business environment.

### Third : The field of Learning and Growth Perspective?

One Sample T-Test has been applied to check the difference between the Mean of the individual responses about every measure of the Learning and Growth and the Normal Mean which equals (3) degrees (see table 5-13):

**Table (5-13): The results of One Sample T-Test for the degree of responsivity about the measures of Learning and Growth Perspective**

No	Learning and Growth	Test Value =3			
		Mean	Mean of Variation	T value	Sig.
32	Every employee suggests a number of improvements annually	3.6	0.65	7.45	0.001**
33	The company suggests enough training programs for the employees.	3.7	0.75	8.21	0.001**
34	There is a suitable ratio of employees whose employment adds value to the company.	3.8	0.82	11.15	0.001**
35	There is a high ratio of the employees whose existence in the company considered as value added	3.5	0.55	7.28	0.001**
36	There is enough number of employees who have special practical experience useful for the work	4.2	1.18	18.46	0.001**
37	The employees are insisting to stay in their jobs in the company	4.1	1.12	16.43	0.001**
38	There is a low ratio of the employees who leave the company to work in another one.	3.8	0.78	8.14	0.001**
39	The employees have enough in-service training hours	3.7	0.75	9.56	0.001**
40	The company affords Training for the employees to develop their abilities according to everyone need and the company's need as well.	4.0	0.96	12.82	0.001**
41	The employees have an obvious thoughts about the Professional, cultural and virtual characteristics in addition to its capabilities	3.8	0.79	11.15	0.001**
42	The employees of the company enjoy suitable training services refer to their scientific qualification and the nature of their work in the company	3.9	0.87	11.77	0.001**
Total of Learning and Growth Perspective		42.2	7.6	29.4	0.001**

\* Sig. at 0.05

\*\* Sig. at 0.001

From table (5-13) we can see that there is a significant difference between the Learning and Growth measures Mean and the Normal Mean in favor of Learning and Growth perspective since its Mean is more than the Normal Mean which equals (3).

This means that the sample persons are highly satisfied of the company's performance in the Learning and Growth perspective with a score of (61-80%).

As in the previous perspectives, several statistical methods have been used to show the responsivity level of every statement of Learning and Growth perspective (see table No. 5-14)

**Table (5-14):The responsivity level of the sample persons about every statement of Learning and Growth perspective**

No	Learning and Growth Perspective	No && %	1	2	3	4	5	Sum	Mean	Relative weight	order
32-	Every employee suggests a number of improvements annually	N	7	26	29	66	42	620.0	3.6	72.9	10
		%	4.1	15.3	17.1	38.8	24.7				
33-	The company suggests enough training programs for the employees.	N	6	28	26	53	57	637.0	3.7	74.9	9
		%	3.5	16.5	15.3	31.2	33.5				
34-	There is a suitable ratio of employees whose employment adds value to the company.	N	2	16	36	72	44	650.0	3.8	76.5	5
		%	1.2	9.4	21.2	42.4	25.9				
35-	There is a high ratio of the employees whose existence in the company considered as value added	N	5	17	56	64	28	603.0	3.5	70.9	11
		%	2.9	10.0	32.9	37.6	16.5				
36-	There is enough number of employees who have special practical experience useful for the work	N	0	9	19	75	67	710.0	4.2	83.5	1
		%	0.0	5.3	11.2	44.1	39.4				
37-	The employees are insisting to stay in their jobs in the company	N	1	9	25	68	67	701.0	4.1	82.5	2
		%	0.6	5.3	14.7	40.0	39.4				
38-	There is a low ratio of the employees who leave the company to work in another one.	N	13	14	34	46	63	642.0	3.8	75.5	7
		%	7.6	8.2	20.0	27.1	37.1				

No	Learning and Growth Perspective	No && %	1	2	3	4	5	Sum	Mean	Relative weight	order
39-	The employees have enough in-service training hours	N	5	16	37	71	41	637.0	3.7	74.9	8
		%	2.9	9.4	21.8	41.8	24.1				
40-	The company affords Training for the employees to develop their abilities according to everyone need and the company's need as well.	N	3	12	30	69	56	673.0	4.0	79.2	3
		%	1.8	7.1	17.6	40.6	32.9				
41-	The employees have an obvious thoughts about the Professional, cultural and virtual characteristics in addition to its capabilities	N	3	15	31	86	35	645.0	3.8	75.9	6
		%	1.8	8.8	18.2	50.6	20.6				
42-	The employees of the company enjoy suitable training services refer to their scientific qualification and the nature of their work in the company	N	4	10	37	72	47	658.0	3.9	77.4	4
		%	2.4	5.9	21.8	42.4	27.6				
Total of Learning and Growth Perspective									42.2	76.7	

Statement number 36 which indicates that there is enough number of employees who have special practical experience useful for the work , has been ranked as the first one with a relative weight of (83.5) and a Mean of (4.2).

Statement number (34) which indicates that there is a suitable ratio of employees whose employment adds value to the company, has been ranked as the fifth one with a relative weight of (76.5) and a Mean of (3.8).

Statement number (35) which indicates that there is a high ratio of the employees whose existence in the company considered as value added, has been ranked as the eleventh one with a relative weight of (70.9) and a Mean of (3.5).

The three previous statements which have the ranks of (1,5) and (11) respectively are connected to Garrison BSC measure: "Value added

employee". It means that the stakeholders highly evaluate the level of qualification and experience of the PAL TEL employees and they believe that the employees are adding value to the company.

The two statements number (37) and (38) indicate that the employees are insisting to stay in their jobs in the company and that there is a low ratio of the employees who leave the company to work in another one. The two statements have the ranks of (2) and (7) with relative weights of (82.5) and (75.5) and Means of (4.1) and (3.8) respectively. It means that the stakeholders highly evaluate the level of belongingness and loyalty of the PAL TEL employees to their work. They may also believe that the Employee Turnover ratio is low.

Statement number (42) which indicates, has the rank of (4) with a relative weight of (77.4) and a Mean of (3.9) which means that the stakeholders are satisfied of the effectiveness of the training services which are introduced to the employees.

Statements number (40) indicate that the company affords training for the employees to develop their abilities according to everyone need and the company's needs as well, has the rank of (3) with a relative weight of (79.2) and a Mean of (4.0).

Statements number (42) indicate that the employees of the company enjoy suitable training services refer to their scientific qualification and the nature of their work in the company, has the rank of 4 with a relative weight of (77.4) and a Mean of (3.9).

Statements number (39) indicates that the employees have enough in-service training hours, has the rank of 8 with a relative weight of (74.9) and a Mean of (3.7).

Statements number (33) which indicates that the company suggests enough training programs for the employees, has the rank of 9 with a relative weight of (74.9) and a Mean of (3.7).

The four previous statements (number 40, 42, 39 and 33) are connected to the measure: "Hours of in-house training employee" of Garrison BSC model (Garrison, 2003). It means that the stakeholders highly evaluate the training programs which are conducted by the company.

The stakeholders think that the employees of the company have enough knowledge about the properties of the company for that they have given the rank of (6) with relative weight of (75.9) and Mean of (3.8) to the (41<sup>st</sup>) statement which indicates that the employees have an obvious thoughts about the Professional, cultural and virtual characteristics in addition to its capabilities.

Statement number (1) which indicates that every employee suggests a number of improvements annually has been ranked as the tenth one with a relative weight (72.9) and Mean (3.6), which means that the stakeholders see that the employees initiate in specifying the aspect of improvement.

#### **Fourth: The Field of Financial Perspective**

One Sample T-Test has been applied to check the difference between The Mean of the individual responses about every measure of the Financial Perspective and the Average Mean which equals 3 degrees (see table 5-15)

From table (5-15) we can see that there is a significant difference between the Financial measures Mean and the Average Mean in favor of the Financial Perspective since its Mean is more than the Average Mean which equals (3).

This mean that the sample persons are highly satisfied of the company's performance in the Financial perspective with a score of (61-80% ).

**Table (5-15): The results of One Sample T-Test for the degree of responsivity about the measures of Financial Perspective**

No	Financial	Test Value =3			
		Mean	Mean of Variation	T value	Sig.
43	The company realizes a suitable return on the invested capital.	4.2	1.2	19.8	0.001**
44	The ratio of the profits which distributed to the stakeholders meets their expectations	3.7	0.7	8.6	0.001**
45	The regional and the international investments profits realize the goals of the company's investment policies.	3.7	0.7	11.4	0.001**
46	The company acquire a continuous decrease in the indirect expenses which are assigned on the company's activities	3.6	0.6	8.9	0.001**
47	There is a high trust in the sufficiency of the company's performance in its different business fields.	4.1	1.1	16.0	0.001**
48	The company has enough cash flow .	4.1	1.1	18.6	0.001**
49	The company is able to decrease the prices of its services	3.9	0.9	14.9	0.001**
50	The company's profits suit the volume of its sales	4.0	1.0	15.3	0.001**
Total of Financial Perspective		31.2	4.3	18.8	0.001**

\* Sig. at 0.05

\*\* Sig. at 0.001

To show the responsivity level to every statement of the Financial perspective we can contemplate the results of table No (5-16)

The statement number (43) which indicates that the company realizes a suitable return on the invested capital, has been ranked as the first one with a relative weight of (83.9) and a Mean of (4.2).It means that the stakeholders highly evaluate the achieved revenues.

Statement number (48) which indicates that the company has enough cash flow, has been ranked as the first one with a relative weight of (82.1) and a Mean of (4.1).It means that the stakeholders highly

evaluate the ability of the company to cover the costs of the expected expenditures.

The stakeholders trust in the sufficiency of PAL TEL since they have given the rank of (3) with relative weight of (81.9) and Mean of (4.1) to the (47<sup>th</sup>) statement which indicates that there is a high trust in the sufficiency of the company's performance in its different business fields.

**Table (5-16):The responsivity level of the sample persons about every statement of Financial perspective**

No	Financial Perspective	No & %	1	2	3	4	5	Sum	Mean	Relative weight	Rank
43-	The company realizes a suitable return on the invested capital.	N	1	5	18	82	64	713.0	4.2	83.9	1
		%	0.6	2.9	10.6	48.2	37.6				
44	The ratio of the profits which distributed to the stakeholders meets their expectations	N	4	17	47	68	34	621.0	3.7	73.1	7
		%	2.4	10.0	27.6	40.0	20.0				
45	The regional and the international investments profits realize the goals of the company's investment policies.	N	0	11	55	72	32	635.0	3.7	74.7	6
		%	0.0	6.5	32.4	42.4	18.8				
46	The company acquire a continuous decrease in the indirect expenses which are assigned on the company's activities	N	3	8	69	71	19	605.0	3.6	71.2	8
		%	1.8	4.7	40.6	41.8	11.2				
47	There is a high trust in the sufficiency of the company's performance in its different business fields.	N	1	11	21	75	62	696.0	4.1	81.9	3
		%	0.6	6.5	12.4	44.1	36.5				
48	The company has enough cash flow .	N	0	4	31	78	57	698.0	4.1	82.1	2
		%	0.0	2.4	18.2	45.9	33.5				
49	The company is able to decrease the prices of its services	N	1	6	38	84	41	668.0	3.9	78.6	5
		%	0.6	3.5	22.4	49.4	24.1				
50	The company's profits suit the volume of its sales	N	4	4	25	93	44	679.0	4.0	79.9	4
		%	2.4	2.4	14.7	54.7	25.9				
Total of Financial Perspective									31.2	78.2	

The stakeholders believe that the company realize a good return according to its sales volume since they have ranked the 50<sup>th</sup> statement " The company's profits suit the volume of its sales" as the 4<sup>th</sup> one with relative weight of (79.9) and Mean of (4.0)

The stakeholders have given the rank of 5 to the 49<sup>th</sup> statement "The company is able to decrease the prices of its services" with relative weight of (78.6) and Mean of (3.9) which means that the stakeholders believe that the company is able to develop new methods to afford services in cheaper prices.

Statement number (45) which indicates that the regional and the international investments profits realize the goals of the company's investment policies, has been ranked as the sixth one with a relative weight (74.7) and a Mean (3.7), which means that the stakeholders see that the local and international investments of PAL TEL are successful.

The stakeholders are satisfied of the dividend policy of the company since they have given it a relative weight of (73.1) and a mean of (3.7) to the (44<sup>th</sup>) statement "The ratio of the profits which distributed to the stakeholders meets their expectations"

The statement number (46) which indicates that the company acquire a continuous decrease in the indirect expenses which are assigned on the company's activities, has been ranked as the eighth one with a relative weight (71.2) and Mean (3.6), which means that the stakeholders see that the company successfully applies the activity based costing (ABC) accounting method.

### **Fifth: Evaluating the total Balanced Scorecard**

To know the level of responsivity of the sample persons to the Balanced Scorecard perspectives , The Means , Standard Deviations and the relative weights have been accounted for every perspective in

addition to the total degree of the Balanced Scorecard , as shown in table (5-17)

By reviewing table No (5-17) we can see:

- The Financial perspective has been ranked as the first one with a Mean of (3.91) and relative weight of (78.2%). The total degrees equals (31.3) and its Standard Deviation (4.3) which means that the sample persons highly evaluate the performance of the company in the financial perspective.

**Table (5-17):The relative weight of every perspective of the Balanced Scorecard**

Perspectives	Total degree		No. of measures	Total degree of every perspective	Mean	SD	The relative weight	Rank
	Lowest	Highest						
Customer	10	50	10	38.7	3.87	5.0	77.4	2
Internal Business Processes	21	105	21	79.4	3.78	11.4	75.6	4
Learning and Growth	11	55	11	42.2	3.84	7.6	76.7	3
Financial	8	40	8	31.3	3.91	4.3	78.2	1
The Balanced Scorecard	50	250	50	191.5	3.83	23.3	76.6	

**The relative weight has been accounted by dividing the Mean of every perspective by the total degree of every perspective and multiply by 100**

- The Customer perspective has been ranked as the second one with a Mean of (3.87) and relative weight of ( 77.4%).The total degrees equals (38.7) and its Standard Deviation is (5), which means that the sample persons highly evaluate the performance of the company in the Customer perspective.
- The Learning and Growth perspective has been ranked as the third one with a Mean of (3.84) and relative weight of (76.7%).The total degrees equals (42.2) and its Standard

Deviation is (7.6), which means that the sample persons are satisfied of the performance of the company in the Learning and Growth perspective.

- The Internal Business Processes perspective has been ranked as the last one with a Mean of 3.78 and relative weight of (75.6%). The total degrees equals 79.4 and its Standard Deviation is (11.4), which means that the sample persons are satisfied of the performance of the company in the Learning and Growth perspective.
- The Balanced Scorecard Mean is (3.83) with relative weight equals (76.6%). Its total degrees is (191.5) and its Standard Deviation is (23.3) which means that the sample persons are satisfied from the performance of the company in the total Balanced Scorecard.

## **Section three**

### **Testing the study hypotheses**

**1-The First Hypothesis:** There is a significant correlation between the degrees of every perspective and the total degree of all the Balanced Scorecard.

To test this hypothesis, the Pearson Correlation coefficient has been computed between the degrees of every perspective and the total degree of all the Balanced Scorecard as shown in table (5-18).

By reviewing table No.5-18 we can see:

- It has been found that there is a strong, direct and significant relationship between the Customers Perspective degree and the total degree of the Balanced Scorecard ( $r=0.78, p\text{-value}<0.01$ ).

This means that whenever the degree of the Customers Perspective increases, the total degree of the BSC increases also and vice versa.

**Table (5-18): Pearson Correlation coefficient to study the relation between the degrees of every perspective of the BSC and the whole scorecard**

<b>Perspectives</b>	<b>r</b>	<b>Sig.</b>
Customer	0.78	0.001 Sig.
Internal Business Processes	0.92	0.001 Sig.
Learning and Growth	0.81	0.001 Sig.
Financial	0.61	0.001 Sig.

- It has been found that there is a strong, direct and significant relation between the Internal Business Processes Perspective degree and the total degree of the Balanced Score Card(  $r=0.92, p\text{-value}<0.01$ ). This means that whenever the degree of the Internal Business Processes Perspective increases, the total degree of the BSC increases also and vice versa.
- It has been found that there is a strong, direct and significant relation between the Learning and Growth Perspective degree and the total degree of the Balanced Score Card(  $r=0.81, p\text{-value}<0.01$ ). This means that whenever the degree of the Learning and Growth Perspective increases, the total degree of the BSC increases also and vice versa.
- It has been found that there is a strong, direct and significant relation between the Financial Perspective degree and the total degree of the Balanced Score Card(  $r=0.61, p\text{-value}<0.01$ ). This means that whenever the degree of the Financial Perspective increases, the total degree of the BSC increases also and vice versa.

This strong correlation proved undoubtedly the researcher's hypothesis of the correlation between every perspective and the total Balanced Scorecard result. This result agreed with Evans study (2005) who decided that different stakeholders and their interests are considered appears to be corroborated by the fact that many respondents are aware of the BSC approach. The results are consistent also with Al Natour's Study (2005) and El-Anati's study (2004) results.

**2-The Second Hypothesis:** There is a relative importance of the Customers Perspective( Independent Variable) to the Balanced Score Card ( Dependent Variable)

To test this Hypothesis, the Simple Regression Analysis has been used to study the effect of Customers Perspective on the total degree of the Balanced Scorecard, and to know the relative importance of the Customers Perspective to the whole Balanced Scorecard as shown in table (5-19).

**Table (5-19): Summary of the results of the simple regression analysis for the Customers Perspective on the total degree of the Balanced Scorecard**

The independent Var.	B	s.e	Beta	T test
Constant	41.0	8.4		**4.9
Customer Perspective	3.9	0.2	0.81	**18.0
F (1.166)	**323.6			
R <sup>2</sup>	0.661			

\*\* Sig. at level 0.001

By reviewing table No.(5-19), we can see that F value is statistically significant (F=323.6,P<0.001) which means that the Customers Perspective has a significant effect on the Balanced Scorecard as a whole, and that the customers perspective as an independent variable has interpreted 66.1% from the total variation of the Balanced Scorecard, since R<sup>2</sup> =0.661.

From this table we can form a regression equation helps in predicting the BSC degree by knowing the degree of customers perspective like follows:

$$\text{BSC} = 41 + 3.9(\text{customers perspective})$$

(t=4.9,P<0.001)    (t=18.0,P<0.001)

From the previous equation we conclude that when the Balanced Scorecard increases by one degree, the Customers Perspective increases by 3.9 degrees, and vice versa.

This proves the researcher's hypothesis about the strong effect of the customers perspective on the balanced performance of the Palestinian telecommunications companies. This result agreed with the study of Kaplan and Norton (1993) and conformed with El-Anati study results (2004). It may reflect the devotion of the company on the customer objectives in its strategic plan (Annual Report 2005).

**3-The Third Hypothesis:** There is a relative importance of the Internal Business Processes Perspective( Independent Variable) to the Balanced Scorecard ( Dependent Variable)

To test this Hypothesis, the Simple Regression Analysis has been used to study the effect of Internal Business Processes Perspective on the total degree of the Balanced Scorecard, and to know the relative importance of the Internal Business Processes Perspective to the whole Balanced Scorecard as shown in table (5-20).

**Table (5-20): Summary of the results of the Simple Regression Analysis for the Internal Business Processes Perspective on the total degree of the Balanced Score Card**

The independent Var.	B	s.e	Beta	T test
Constant	43.0	5		**8.7
Internal Business Processes Perspective	1.9	0.1	0.91	**30.3
F (1.168)	**916.6			
R <sup>2</sup>	0.84			

\*\* Sig. at level 0.001

By reviewing table (5-20), we can see that F value is statistically significant ( $F=916.6, P<0.001$ ) which means that the Internal Business Processes Perspective has a significant effect on the Balanced Scorecard as a whole, and that the Internal Business Processes perspective, as an independent variable, has interpreted 84.0% from the total variation of the Balanced Scorecard, which is the highest effect, since  $R^2=0.84$

From this table we can form a regression equation helps in predicting the BSC degree by knowing the degree of Internal Business Processes perspective like follows:

$$\text{BSC} = 43.0 + 1.9(\text{Internal Business Processes perspective})$$

(t=30.3, P<0.001)    (t=8.7, P<0.001)

From the previous equation we conclude that when the Balanced Scorecard increases by one degree, the Internal Business Processes Perspective increases by 1.9 degrees, and vice versa.

This proves the researcher's third hypothesis about the effect of the Internal Business Processes perspective on the Balanced Performance of the company and assures what Kaplan and Norton decided in their BSC model (1993) and consistent with the Balanced Scorecard Model which has been suggested by El-Anati (2005)

This result shows that the stakeholders highly evaluate the performance of the company in Internal Business Processes perspective and conforms with what Kaplan and Norton decided in their study (2000) when they have built a cause and effect relationships among the Balanced Scorecard Perspectives.

Although the designers of the strategic plan have not mentioned it clearly in the main objectives of the PAL TEL (Annual report 2005) the stakeholders have shown an appreciation of the internal processes

great effect. That may refer to lack of stakeholders' participation in building the strategic Plan.

**4-The Fourth Hypothesis:** There is a relative importance of the Learning and Growth Perspective( Independent Variable) to the Balanced Scorecard ( Dependent Variable)

To test this Hypothesis, the Simple Regression Analysis has been used to study the effect of Learning and Growth perspective on the total degree of the Balanced Scorecard, and to know the relative importance of the Learning and Growth Perspective to the whole Balanced Scorecard like exhibited in table (5-21).

**Table (5-21): Summary of the results of the Simple Regression Analysis for the *Learning and Growth* Perspective on the total degree of the Balanced Scorecard**

The independent Var.	B	s.e	Beta	T test
Constant	86.7	5.9		**14.7
Learning and Growth Perspective	2.5	0.1	0.81	**18.0
F (1.168)	**325.4			
R <sup>2</sup>	0.66			

\*\* Sig. at level 0.001

By reviewing table (5-21) we can see that F value is statistically significant(F=325.6,P<0.001) which means that the Learning and Growth Perspective has a significant effect on the Balanced Scorecard as a whole, and that the Learning and Growth Perspective, as an independent variable, has interpreted 66.0% from the total variation of the Balanced Scorecard, since R<sup>2</sup> =0.66

From this table we can form a regression equation helps in predicting the BSC degree by knowing the degree of Learning and Growth Perspective like follows:

$$\text{BSC} = 86.7 + 2.5(\text{Learning and Growth perspective})$$

(t=18.0,P<0.001)    (t=14.7,P<0.001)

From the previous equation we conclude that when the Balanced Scorecard increases by one degree, the Learning and Growth Perspective increases by 2.5 degrees, and vice versa.

This agreed with the researcher's fourth hypothesis about the significant effect of the Learning and Growth Perspective on the total balanced scorecard result and conforms with El-Anati's study (2004) and what Kaplan and Norton decided in their studies (1992 and 1993). Laitinen (2005) also concluded that the company shifts toward Learning and Development when it shifts to the strategy of revenue-maximizing.

**5-The Fifth Hypothesis:** There is a relative importance of the Financial Perspective (Independent Variable) to the Balanced Scorecard (Dependent Variable)

To test this Hypothesis, the Simple Regression Analysis has been used to study the effect of Financial perspective on the total degree of the Balanced Scorecard, and to know the relative importance of the Financial perspective to the whole Balanced Scorecard as shown in table (5-22).

**Table (5-22): Summary of the results of the Simple Regression Analysis for the *Financial Perspective* on the total degree of the Balanced Score Card**

The independent Var.	B	s.e	Beta	T test
Constant	88.8	10.3		**8.6
Financial Perspective	3.3	0.3	0.61	**10.0
F (1.168)	**101.1			
R <sup>2</sup>	0.38			

\*\* Sig. at level 0.001

From table (5-22), we can see that F value is statistically significant (F=101.1, P<0.001) which means that the financial Perspective has a significant effect on the Balanced Scorecard as a whole, and that the Financial Perspective, as an independent variable,

has interpreted 38.0% from the total variation of the Balanced Scorecard, since  $R^2 = 0.38$

From this table we can form a regression equation to help in predicting the BSC degree by knowing the degree of Financial Perspective like follows:

$$\text{BSC} = 88.8 + 3.3(\text{Financial perspective})$$

(t=10.0, P<0.001)    (t=8.6, P<0.001)

From the previous equation we conclude that when the Balanced Scorecard increases by one degree, the Financial Perspective increases by (3.3) degrees, and vice versa.

This proves the researcher's fifth hypothesis about the significant effect of the financial factors on the Balanced Scorecard results and agreed with El-Anati's study( 2004) and Kaplan and Norton studies (1992, 1993 and 2000)

**6-The sixth Hypothesis** There are significant differences in the Balanced Scorecard results attributed to the following stakeholders Characteristics: Place of work, The relation with the PAL TEL corporation, the scientific qualification, gender, age, level of income, period of work, and social statue.

This hypothesis has been divided into the following sub-hypotheses:

**6-1 The first sub-hypothesis:** There are significant differences between the employees of Paltel, the employees of Jawwal and the shareholders of PAL TEL according to the Balanced Scorecard perspectives, at Significance level 0.05.

By applying the One-Way ANOVA analysis to study the differences among the individuals of Paltel employees, Jawwal employees and shareholders of PAL TEL according to the Balanced

Scorecard perspectives, (see tables 5-23&5-24) the following results have been found:

**Table 5-23: One-Way ANOVA analysis among Paltel employees, Jawwal employees and shareholders of PAL TEL according to the Balanced Scorecard perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	114.5	2	57.3	2.3	0.1 Not Sig.
	Within groups	4185.5	167	25.1		
	Total	4300.1	169			
Internal Business Processes	Between groups	1809.0	2	904.5	7.4	0.001 Sig
	Within groups	20332.9	167	121.8		
	Total	22141.9	169			
Learning and Growth	Between groups	1245.2	2	622.6	12.1	0.001 Sig
	Within groups	8565.2	167	51.3		
	Total	9810.4	169			
Financial	Between groups	59.7	2	29.8	1.6	0.2 Not Sig.
	Within groups	3129.4	167	18.7		
	Total	3189.1	169			

**F value at level(0.05) and degree of freedom "df" (2 and 167) = (3.06)**

-The F value for Customers Perspective equals (2.3), which is smaller than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are not significance nor substantial differences among Paltel employees, Jawwal employees and shareholders of PAL TEL according to Customers Perspective.

It means that the individuals from Paltel employees, Jawwal employees and shareholders of PAL TEL equally evaluate the performance of the company in Customers Perspective. This disagree with the first sub hypothesis for that the three categories of stakeholders are customers in and have the same services from the companies.

-The F value for Financial Perspective equals (1.6), which is smaller than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are not significance nor substantial differences among Paltel

employees, Jawwal employees and shareholders of PAL TEL according to Financial Perspective.

It means that the individuals from Paltel employees, Jawwal employees and shareholders of PAL TEL equally evaluate the performance of company in Financial Perspective. This disagree with the first sub hypothesis for that the high financial ratios could be equally satisfying all the stakeholders.

-The F value for Internal Business Processes Perspective equals (7.4), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significance and substantial differences among Paltel employees, Jawwal employees and shareholders of PAL TEL according to Internal Business Processes Perspective. This agree with the first sub hypothesis.

By applying Scheffe test for *post-comparisons*, It is found that the difference between the groups in their evaluation of the performance of the company in the Internal Business Processes Perspective refers to the difference between the individual degrees of Paltel employees and the individual degrees of the shareholders of PAL TEL in favor of Paltel employees since its Mean is bigger than the Mean of PAL TEL shareholders, but there is no significant differences between the rest of the groups. This agree with the first sub-hypothesis and what Kaplan and Norton decided in their study(1992) for that the Paltel employees have given more scores to the Internal Business Processes than what the PAL TEL shareholders have given. It is may be because of the clearer information which the employees have about the internal processes and that they think they do things right referring to the objectives of their company especially if the company involve employees in designing measures as Ward (2005) has concluded from his study. From another side the shareholders may expect better

performance since they do not have enough information about either the effectiveness of the internal processes or their level of performance, the matter which needs more verification.

-The F value for Learning and Growth Perspective equals (12.1), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significance and substantial differences among Paltel employees, Jawwal employees and shareholders of PAL TEL according to Learning and Growth Perspective. This agree with the first sub hypothesis.

By applying Scheffe test for *post-comparisons*, It is found that the difference between the groups in their evaluation of the performance of the company in the Learning and Growth Perspective refers to the difference among the individual degrees of Paltel employees, Jawwal employees and the shareholders of PAL TEL in favor of Paltel employees. This may refer to the confusion caused by the difficulties of traveling abroad to have advanced training on cellular telecommunications for the Jawwal employees. The shareholders may expect more learning and growth actions since they may believe that the employees need more training.

**Table 5-24: The results of Scheffe test for post- comparisons in both Internal Business Processes and Learning and Growth perspectives of the BSC**

Perspectives	Group	Mean	Group		
			Paltel	Jawwal	PAL TEL Shareholders
Internal Business Processes	Paltel	81.9	-	0.15 Not Sig	0.001 Sig.
	Jawwal	77.8		-	0.28 Not Sig.
	PAL TEL Shareholders	73.5			-
Learning and Growth	Paltel	44.4	-	0.006 Sig.	0.001 Sig
	Jawwal	40.0		-	0.49 Not Sig.
	PAL TEL Shareholders	38.0			

Although the Mean of Paltel degrees is bigger than the two other Means of Jawwal employees and PAL TEL shareholders, there is no significant difference between the rest of the groups.( see table 5-24)

**6-2 The second sub-hypothesis:** There are significant differences among Managers, Employees, Shareholders according to the Balanced Scorecard perspectives, at Significance level 0.05.

**Table (5-25): One-Way ANOVA analysis among Managers, Employees, Shareholders according to the Balanced Scorecard perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	99.7	2	49.8	1.98	0.14 Not Sig.
	Within groups	4200.4	167	25.2		
	Total	4300.1	2			
Internal Business Processes	Between groups	1139.0	167	569.5	4.5	0.01 Sig
	Within groups	21002.9	2	125.8		
	Total	22141.9	167			
Learning and Growth	Between groups	1021.5	2	510.7	9.7	0.001 Sig
	Within groups	8788.9	167	52.6		
	Total	9810.4	2			
Financial	Between groups	67.8	167	33.9	1.8	0.17 Not Sig.
	Within groups	3121.3	2	18.7		
	Total	3189.1	167			

F value at level(0.05) and degree of freedom "df" (2 and 167) = (3.06)

By applying the One-Way ANOVA analysis to study the differences among the individuals of Managers, employees and shareholders of PAL- TEL according to the Balanced Scorecard perspectives, ( see tables 5-25&5-26) the following results have been found:

-The F value for Customers Perspective equals (1.98), which is smaller than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among Managers, Employees and Shareholders of PAL TEL according to Customers Perspective.

It means that the individuals from Managers, Employees and Shareholders of PAL TEL equally evaluate the performance of the company in Customers Perspective. This disagree with the second sub hypothesis for that the three categories evaluate the performance of the companies in the customers perspective as users of the companies' services and they are all satisfied.

-The F value for Financial Perspective equals (1.8), which is smaller than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among Managers, Employees, and shareholders of PAL TEL according to Financial Perspective.

It means that the individuals from Managers, Employees, and shareholders equally evaluate the performance of the company in the Financial Perspective. This disagree with the second sub hypothesis for that the three categories evaluate the performance of the companies in the Financial perspective according to the level of the financial ratios which are considered high and satisfying.

-The F value for Internal Business Processes Perspective equals (4.5), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significance and substantial differences among Managers, Employees, and shareholders according to Internal Business Processes Perspective. This agreed with the second sub hypothesis.

By applying Scheffe test for *post-comparisons*, It is found that the difference between the groups in their evaluation of the performance of the company in the Internal Business Processes Perspective refers to the difference between the individual degrees of the Employees and the shareholders of PAL TEL in favor of the Employees since its

Mean is bigger than the Mean of PAL TEL shareholders. It may refer to that the shareholders have less information about the internal processes and expect better performance in this perspective.

There is no significant differences between the rest of the groups.

**Table 5-26: The results of Scheffe test for post- comparisons in both Internal Business Processes and Learning and Growth perspectives of the BSC**

Perspectives	Group	Mean	Group		
			Managers	Employees	PAL TEL Shareholders
Internal Business Processes	Managers	80.3	-	0.98 Not Sig.	0.25 Not Sig.
	Employees	80.8		-	0.01 Sig.
	PAL TEL Shareholders	74.4			-
Learning and Growth	Managers	46.2	-	0.31 Not Sig.	0.001 Sig.
	Employees	43.1		-	0.001 Sig.
	PAL TEL Shareholders	37.8			-

-The F value for Learning and Growth Perspective equals (9.7), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significance and substantial differences among Managers, Employees, and shareholders of PAL TEL according to Learning and Growth Perspective. This agree with the second sub hypothesis.

By applying Scheffe test for *post-comparisons*, It is found that the difference between the groups in their evaluation of the performance of the company in the Learning and Growth Perspective refers to the difference among the individual degrees of Managers, Employees and shareholders of PAL TEL in favor of both the managers and the employees Since their Means are bigger than the Mean of PAL TEL shareholders according to the Growth and Learning Perspective. There is no significant difference between the rest of the groups.( see table 5-26). It may refer to that according to the Palestinian traditions there are no training services introduced to the external stakeholders

(shareholders) and that the shareholders have less information about the Learning and Growth activities since the companies usually introduce the training programs to meet their employees needs.

**6-3 The third sub-hypothesis:** There are no significant differences between the scientific qualifications and the Balanced Scorecard Perspectives at Sig. level 0.05

By applying the One-Way ANOVA analysis to study the differences among the different scientific qualifications ( Less than GSC. GSC, Diploma, Bachelor, High studies) according to the Balanced Scorecard perspectives, ( see tables5-27&5-28) the following results have been found:

-The F value for Customers Perspective equals (0.71), which is smaller than the *Tablated F* =2.43 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the Low qualifications, Medium qualifications and High qualifications according to Customers Perspective.

**Table5-27: One-Way ANOVA analysis among the different scientific qualifications according to the BSC perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	72.4	4	18.1	0.71	0.59 Not Sig.
	Within groups	4227.7	165	25.6		
	Total	4300.1	169			
Internal Business Processes	Between groups	642.8	4	160.7	1.23	0.30 Not Sig.
	Within groups	21499.1	165	130.3		
	Total	22141.9	169			
Learning and Growth	Between groups	602.1	4	150.5	2.7	0.03 Sig
	Within groups	9208.3	165	55.8		
	Total	9810.4	169			
Financial	Between groups	16.1	4	4.0	0.21	0.93 Not Sig.
	Within groups	3173.0	165	19.2		
	Total	3189.1	169			

**F value at level(0.05) and degree of freedom "df" (2.43 and 165.4) = 2.43)**

It means that the individuals from Low qualifications, Medium qualifications and High qualifications equally evaluate the

performance of the companies in Customers Perspective. This disagree with the third sub hypothesis for that the three categories are users of the telecommunications services and they are satisfied.

-The F value for Internal Business Processes Perspective equals (1.23), which is smaller than the *Tablated F* =2.43 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the Low qualifications, Medium qualifications and High qualifications according to Internal Business Processes Perspective.

It means that the individuals from Low qualifications, Medium qualifications and High qualifications equally evaluate the performance of the company in Internal Business Processes Perspective. This disagree with the third sub hypothesis.

-The F value for The Financial Perspective equals (0.21), which is smaller than the *Tablated F* =2.43 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the Low qualifications, Medium qualifications and High qualifications according to the Financial Perspective.

It means that the individuals from Low qualifications, Medium qualifications and High qualifications equally evaluate the performance of the company in the Financial Perspective. This disagree with the third sub hypothesis and agree with the analysis of the financial statements of PAL TEL which shows high financial ratios.

-The F value for Learning and Growth Perspective equals (2.7), which is bigger than the *Tablated F* =2.43 at Sig. level 0.05. So we can decide that there are significance and substantial differences among Low qualifications, Medium qualifications and High

qualifications according to Learning and Growth Perspective. This agree with the third sub hypothesis.

**Table (5-28): The results of Scheffe test for post- comparisons in the Learning and Growth perspective of the BSC**

Group	Mean	Group				
		Les than GSC	GSC	Diploma	Bachelor	Postgraduate
Less Than GSC	41.7	-	0.21Not Sig.	0.85 Not Sig.	0.70 Not Sig.	0.25Not Sig.
GSC	46.3			0.13 Not Sig.	0.16 Not Sig.	0.004 Sig.
Diploma	42.3			-	0.71 Not Sig.	0.03 Sig.
Bachelor	42.8				-	0.007 Sig.
Postgraduate	38.0					-

By applying Scheffe test for *post-comparisons*, ( see table 5-28) It is found that the difference between the groups in their evaluation of the performance of the company in the Learning and Growth Perspective refers to the difference among the individual degrees of Low qualifications, Medium qualifications and High qualifications in favor of GSC, Diploma and Bachelor since their Means are bigger than the Postgraduate categories. It means that postgraduate stakeholders are less satisfied of the companies' performance in the Learning and Growth perspective for that they expect more sophisticated training which is not available inside the besieged Gaza strip. there is no significant variance between the rest of the groups.

**6-4 the fourth sub-hypothesis:** There are significant differences between the Age Categories and the Balanced Scorecard Perspectives at Sig. level 0.05

By applying the One-Way ANOVA analysis to study the differences among the different Age Categories (20-30 years,31-40 years,41-50

**Table 5-29: One-Way ANOVA analysis among the different Age Categories according to the Balanced Scorecard perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	193.2	3	64.4	2.60	0.54 Not Sig.
	Within groups	4106.9	166	24.7		
	Total	4300.1	169			
Internal Business Processes	Between groups	753.3	3	251.1	1.95	0.12 Not Sig.
	Within groups	21388.6	166	128.8		
	Total	22141.9	169			
Learning and Growth	Between groups	390.3	3	130.1	2.29	0.08 Not Sig.
	Within groups	9420.1	166	56.7		
	Total	9810.4	169			
Financial	Between groups	202.3	3	67.4	3.75	0.01 Sig
	Within groups	2986.7	166	18.0		
	Total	3189.1	169			

**F value at level(0.05) and degree of freedom "df" (3 and 166) = (2.66)**

years and More than 50 years) according to the Balanced Scorecard perspectives, ( see tables5-29&5-30) the following results have been found:

-The F value for Customers Perspective equals (0.2.6), which is smaller than the *Table F* =2.66 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) according to Customers Perspective.

It means that the individuals from the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) equally evaluate the performance of the company in Customers Perspective. This disagree with the fourth sub hypothesis for that the companies introduce several integrated services satisfy customers from different ages.

-The F value for Internal Business Processes Perspective equals (1.95), which is smaller than the *Tablated F* =2.66 at Sig. level 0.05. So we can decide that there are no significance nor substantial

differences among the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) according to Internal Business Processes Perspective.

It means that the individuals from the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) equally evaluate the performance of the company in Internal Business Processes Perspective. This disagree with the fourth sub hypothesis for that the companies may follow internal business processes that meet the special needs of every age category. In addition every age category is distributed to different positions and scientific qualifications who evaluate internal processes differently according to the results of second and third hypotheses.

-The F value for The Learning and Growth Perspective equals (2.29), which is smaller than the *Tablated F* =2.66 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) according to the Learning and Growth Perspective.

It means that the individuals from the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) equally evaluate the performance of the company in the Learning and Growth Perspective. This disagree with the fourth sub hypothesis for that the age category could not be considered as an effective factor in specifying the level of performance in Learning and growth perspectives since they are distributed to different positions and scientific qualifications which considered as an effective factors in evaluating Learning and Growth perspective according to the results of the second and third sub hypotheses .

-The F value for the Financial Perspective equals (3.75), which is bigger than the *Tablated F* =2.66 at Sig. level 0.05. So we can decide that there are significance and substantial differences among the different Age Categories (20-30 years,31-40 years,41-50 years and More than 50 years) according to the Financial Perspective.

By applying Scheffe test for *post-comparisons*, It is found that the variance between the groups in their evaluation of the performance of the company in the Financial Perspective refers to the variance among the individual degrees of the different age categories; Since the Means of (31-40) and (41-50) categories are bigger than the Mean of the people whose age more than 50 years according to the Financial Perspective. This agree with the fourth sub hypothesis.

There is no significant variance between the rest of the groups. (see table 5-30)

**Table (5-30): The results of Scheffe test for post- comparisons in the Financial perspective of the BSC**

Group	Mean	Group			
		20-30	31-40	41-50	>50
20-30 years	30.6	-	0.64 Not Sig.	0.52 Not Sig.	0.30 Not Sig.
31-40 years	46.331.7			0.93 Not Sig.	0.03 Sig.
41-50 years	42.332.4				0.03 Sig.
>50 years	42.828.1			-	

**6-5 The fifth sub-hypothesis:** There are significant differences between the Income Levels of the sample persons, and the Balanced Scorecard Perspectives at Sig. level 0.05

**Table 5-31: One-Way ANOVA analysis among the different Income Levels according to the Balanced Scorecard perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	87.4	3	29.1	1.15	0.33 Not Sig.
	Within groups	4212.7	166	25.4		
	Total	4300.1	169			
Internal Business Processes	Between groups	928.1	3	309.4	2.42	0.07 Not Sig.
	Within groups	21213.8	166	127.8		
	Total	22141.9	169			
Learning and Growth	Between groups	187.4	3	62.5	1.08	0.36 Not Sig.
	Within groups	9623.0	166	58.0		
	Total	9810.4	169			
Financial	Between groups	85.8	3	28.6	1.53	0.21 Not Sig.
	Within groups	3103.3	166	18.7		
	Total	3189.1	169			

F value at level(0.05) and degree of freedom "df" (3 and 166) = (2.66)

By applying the One-Way ANOVA analysis to study the differences among the different Income Levels(<2000NIS, 2001-3000 NIS, 3001-4000 Nis, >4000) according to the Balanced Scorecard perspectives, ( see table 5-31) the following results have been found:

- There are no significant difference among the different Income Levels. This disagree with the fifth sub hypothesis which indicates that there is a significant effect of the level of income on evaluating the performance of the companies in the BSC perspectives which is consistent with the stakeholders' evaluation .

**6-6 The sixth sub-hypothesis:** There are significant differences between the Work or Shareholding Periods and the Balanced Scorecard Perspectives at Sig. level 0.05

By applying the One-Way ANOVA analysis to study the differences among the different Work or Shareholding Periods (less than 5 years, 5-10 years, 10 years) according to the Balanced Scorecard perspectives, ( see tables 5-32 & 5-33) the following results have been found:

-The F value for Customers Perspective equals (1.39), which is smaller than the *Tabulated F* = 3.06 at Sig. level 0.05. So we can decide that there are no significance nor substantial differences among the different Work or Shareholding Periods (less than 5 years, 5-10 years, 10 years) according to Customers Perspective.

**Table 5-32: One-Way ANOVA analysis among the different Work or Shareholding Periods according to the Balanced Scorecard perspectives**

Perspectives	Resource of variance	Sum of squares	df	Mean of squares	F	P-value (Sig.)
Customers	Between groups	70.5	2	35.3	1.39	0.25 Not Sig.
	Within groups	4229.6	167	25.3		
	Total	4300.1	169			
Internal Business Processes	Between groups	788.6	2	394.3	3.08	0.048 Sig.
	Within groups	21353.3	167	127.9		
	Total	22141.9	169			
Learning and Growth	Between groups	751.3	2	375.6	6.92	0.001 Sig.
	Within groups	9059.1	167	54.2		
	Total	9810.4	169			
Financial	Between groups	47.5	2	23.7	1.26	0.29 Sig
	Within groups	3141.6	167	18.8		
	Total	3189.1	169			

**F value at level(0.05) and degree of freedom "df" (2 and 167) = (3.06)**

It means that the individuals from the different Work and Shareholding Periods equally evaluate the performance of the company in Customers Perspective. This disagree with the sixth sub hypothesis for that all the stakeholders are users of the services and they are satisfied.

-The F value for the Financial Perspective equals (1.26), which is smaller than the *Tabulated F* = 3.06 at Sig. level 0.05. So we can decide that there are no significant nor substantial differences among

the different Work and Shareholding Periods according to the Financial Perspective.

It means that the individuals from the different Work and Shareholding Periods equally evaluate the company's performance in the Financial Perspective. This disagreed with the sixth sub hypothesis for that PAL TEL realized high financial ratios and that is satisfying all the stakeholders .

-The F value for the Internal Business Processes Perspective equals (3.08), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significance and substantial differences among the different Work and Shareholding Periods according to the Internal Business Processes Perspective.

By applying Scheffe test for *post-comparisons*, It is found that the difference between the groups in their evaluation of the performance of the company in the Internal Business Processes Perspective refers to the difference among the individual degrees of the different Work and Shareholding Periods;in favor of (5-10 years and 10 years) groups since their Means are bigger than (less than 5 years) group according to the Internal Business Processes Perspective. This agree with the sixth sub hypothesis for that the new stakeholders do not have enough information about the past challenges which faced the company and the steps taken to enhance the performance of the company in the internal processes perspective so they expect higher level .

It could be referred to the continuous enhancement of the internal processes, the thing which could not be known by the new stakeholders. There is no significant variance between the rest of the groups. (see table 5-33)

-The F value for the Learning and Growth Perspective equals (6.92), which is bigger than the *Tablated F* =3.06 at Sig. level 0.05. So we can decide that there are significant and substantial differences among the different Work and Shareholding Periods according to the Learning and Growth Perspective.

By applying Scheffe test for *post-comparisons*, It is found that the variance between the groups in their evaluation of the performance of the company in the Learning and Growth Perspective refers to the variance among the individual degrees of the different Work and Shareholding Periods in favor of (10 years) group since its Mean is bigger than the Means of (5-10 years and less than 5 years) groups according to the Learning and Growth Perspective. This agreed with the sixth sub hypothesis for that the stakeholders who started from the very beginning with the company may have the advantage of participating in the training programs more than the stakeholders of less experience. There is no significant difference among the rest of the groups. (see table 33)

**Table 5-33: The results of Scheffe test for post- comparisons in the Internal Business Processes and the Learning and Growth Perspectives of the BSC**

Perspectives	Group	Mean	Group		
			Less than 5 years	5-10 years	10 years
Internal Business Processes	Less than 5 years	76.0	-	0.02 Sig	0.03 Sig.
	5-10 years	80.8		-	0.98 Not Sig.
	10 years	80.8			-
Learning and Growth	Less than 5 years	39.9	-	0.43 Not Sig.	0.002 Sig
	5-10 years	41.7		-	0.03 Sig.
	10 years	45.4			-

**6-7 The seventh sub-hypothesis:** There are significant differences between the Male and Female sample persons, and the Balanced Scorecard Perspectives at Sig. level 0.05

To test this hypothesis, the T test has been used to compare between the Mean of Female degrees and the Mean of Male degrees as seen in table No 5-34

**Table (5-34): The T test results to compare between the Means of Female and Male persons according to Balanced Scorecard Perspectives.**

Perspectives	Gender	Number	Mean	SD	T value	Sig.
Customers	Male	151	38.8	5.1	0.64	0.53 Not Sig
	Femal	19	38.0	4.7		
Internal Business Processes	Male	151	79.3	11.7	-0.15	0.53 Not Sig
	Femal	19	79.7	9.6		
Learning and Growth	Male	151	42.3	7.8	0.35	0.53 Not Sig
	Femal	19	41.6	6.6		
Financial	Male	151	31.3	4.4	0.67	0.53 Not Sig
	Femal	19	30.6	3.6		

We can see that there are no significant variations between the Mean of the Males and the Mean of the Females according to the four Balanced Scorecard Perspectives, which means that the Female and Male persons equally evaluate the performance of the company in all BSC perspectives. This disagreed with the seventh sub-hypothesis for that the company do not discriminate between the stakeholders according to gender.

**6-8 The eighth sub-hypothesis:** There are significant differences between the Married and Single sample persons, and the Balanced Scorecard Perspectives at Sig. level 0.05

To test this hypothesis, the T test has been used to compare between the Mean of the Married Persons and the Mean of the Single persons degrees as seen in table No 5-35

**Table (5-35): The T test results to compare between the Means of Married and Single persons according to Balanced Score Card Perspectives.**

Perspectives	Social Statue	Number	Mean	SD	T value	Sig.
Customers	Single	22	39.6	5.5	0.89	0.37 Not Sig
	Married	148	38.6	5.0		
Internal Business Processes	Single	22	79.8	12.1	0.17	0.86 Not Sig
	Married	148	79.3	11.4		
Learning and Growth	Single	22	42.7	7.1	0.30	0.75Not Sig
	Married	148	42.1	7.7		
Financial	Single	22	31.0	5.0	0.25	0.80 Not Sig
	Married	148	31.3	4.3		

We can see that there are no significant variations between the Mean of the Married people and the Mean of the Single people according to the four Balanced Scorecard Perspectives, which means that the Single and Married persons equally evaluate the performance of the company in all BSC perspectives. This disagreed with the eighth sub-hypothesis which may mean that there is no discrimination between the stakeholders according to their social statue.

## Chapter six

### Conclusions and recommendations

#### 6-1 Conclusions

In this chapter, the research question is going to be answered and its related issues are going to be discussed. Other aspects will be elucidated which could be derived from the analysis of research results and they may have special importance. After testing the research hypotheses about the stakeholders' evaluation of the performance of the Palestinian telecommunications companies ( Paltel and Jawwal) in different Balanced Scorecard perspectives , the following results could be stated:

- 1-The stakeholders highly evaluate every BSC perspective as well as the total Balanced Scorecard. Which means that there is a significant correlation between every perspective and the whole Balanced Scorecard. The scores of each perspective as well as the whole BSC are located between 61-80%.
- 2- The relation between the customer perspective and the whole Balanced Scorecard equals the following equation:

$$\text{BSC} = 41.0 + 3.9(\text{Customer perspective})$$

It means that when the Balanced Scorecard increases by one degree, the Customers Perspective increases by 3.9 degrees, and vice versa.

- 3- The relation between the Internal Business Processes perspective and the whole Balanced Scorecard equals the following equation:

$$\text{BSC} = 43.0 + 1.9(\text{Internal Business Processes perspective})$$

It means that when the Balanced Scorecard increases by one degree, the Internal Business Processes Perspective increases by 1.9 degrees, and vice versa.

4-The relation between the Learning and Growth perspective and the whole Balanced Scorecard equals the following equation:

$$\text{BSC} = 86.7 + 2.5(\text{Learning and Growth perspective})$$

It means that when the Balanced Scorecard increases by one degree, the Learning and Growth Perspective increases by 2.5 degrees, and vice versa.

5- The relation between the Financial perspective and the whole Balanced

Scorecard equals the following equation:

$$\text{BSC} = 88.8 + 3.3(\text{Financial perspective})$$

It means that when the Balanced Scorecard increases by one degree, the Learning and Growth Perspective increases by 3.3 degrees, and vice versa.

6- The stakeholders see that the company realize its highest level of performance in the financial performance since its relative weight is 78.2%, then the customer (77.4%), then the Learning and Growth (76.7%), and the Internal Business Processes (75.6%) respectively. The internal Business Processes perspective is the only one which its relative weight is less than the relative weight of total Balanced scorecard (76.6%).

7- The Performance of PAL TEL in Customer and Financial Perspectives are equally evaluated by Paltel employees, Jawwal employees and PAL TEL shareholders.

8- Managers, employees and shareholders equally evaluate the performance of the company in both customer and financial perspectives, but they are different in favor of the managers and the employees according to Learning and Growth and Internal Business perspectives.

- 9- Stakeholders of different scientific qualification levels equally evaluate the performance of the company in Customer, Internal Business Processes and Financial perspectives, but they are different in favor of the lower qualifications (less than GSC, GSC, Diploma, and Bachelor groups) according to the Learning and Growth perspective.
- 10- All the stakeholders' Age Categories equally evaluate the Customer, Learning and Growth and Internal Business Processes perspectives, but they are different in favor of the categories (31-40) and (41-50) according to the financial perspective. Stakeholders of age more than 50 years expect better performance in the financial perspective.
- 11- Stakeholders from different income levels equally evaluate the performance of the company in all the BSC perspectives.
- 12- Stakeholders from different Work and Shareholding periods equally evaluate the performance of the company in Customer and Financial perspectives, but they are different in favor of the stakeholders of longer period according to Learning and Growth and Internal Business Processes perspectives.  
The stakeholders of 10 years period evaluate the Learning and Growth perspective more than the newer stakeholders.
- 13- Male, female, married, and single stakeholders equally evaluate the four perspectives of the BSC.
- 14- The vision and mission of the PAL TEL group have indicated to the four Balanced Scorecard perspectives.
- 15- The Paltel vision statement has no direct indication to Learning and Growth perspective nor to the Internal Business Processes.
- 16- The main objectives of Paltel show more concentration on customers and financial perspectives.

17- The Jawwal main objectives have a balanced tackle of the four BSC perspectives.

18-The financial indicators of PAL TEL show that the company has realized a high growth rates.

## **6-2 Recommendations**

1-The Palestinian telecommunication companies should exert more efforts in communicating and aligning its strategies among its stakeholders especially the external ones. These efforts may show the indirect effect of the Internal Business Processes and Learning and growth objectives on the financial ones .

2- The companies need to enhance their internal business processes and the learning and growth training activities to meet the different stakeholders expectations.

3- The companies need to explain their financial situation in comparison to the same business group locally and internationally..

4- The company need to conduct more sophisticated training programs that meet the needs of high qualified employees.

5- The company should conduct more condensed and effective in service training programs for the newly appointed employees.

6- The company should enhance the internal business processes to meet the expectations of the long experienced stakeholders.

7- The Paltel need to indicate directly and clearly the importance of Learning and Growth and Internal Business Processes perspectives as a necessary step to put these lead objectives in their vital priority.

8- The visions of Paltel and Jawwal companies should be rebuilt to consist with the vision and mission of PAL TEL group.

9- The company should afford more advanced and innovative services to follow the accelerating development of the telecommunications technology.

10- Finally it will be useful to utilize the BSC approach in measuring the performance of the PAL TEL group companies and in strategic planning and management as well.

## References

### (1) Books:

#### a) English Language:

- 1- Bourne, Mike and Bourne, Pippa (2000,2002) "Balanced Scorecard in a week" , Chartered Management institute, Hodder Arnold, London, Great Britain.
- 2-Frost, Bob (2000) " Measuring performance", Measurement International, [www.MeasurementInternational.com](http://www.MeasurementInternational.com), Dallas, USA.
- 3- Garrison, Ray H and Noreen, Eric W (2003) " Managerial Accounting"Mcgrow-Hill, New York, NY. USA.
- 4-Harbour, L. Jerry (1997) " The Basics of performance measurement" Quality resources, New York, NY, USA.
- 5-Kaplan, R. S. and Norton,D. P.( 1996(a) ) "Translating strategy into action, the Balanced Scorecard", Harvard business school press, Boston, Massachusetts,USA.
- 6-Kaplan, R. S & Norton, D. P.(2006) " Alignment", Harvard Business School Press, Boston, Massachusetts, USA.
- 7-Kaplan, R. S & Norton,D. P.(2002)..... Harvard Business School Press, Boston, Massachusetts,
- 8-Kaydos, W. J. (1999) "Operational Performance Measurement", CRC Press LLC, N.W. USA.
- 9-Nair, Mohan (2004) "Essentials of Balanced Scorecard", John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada.
- 10-Paul R Niven (2006) Balanced Scorecard step by step, ", John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada.

11-Paul R Niven (2005) " Balanced Scorecard Diagnostic Maintaining Maximum Performance", John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada.

**(2)Desertations**

1- Andre'asson, Magdalena & Svartling, Andreas (2000) "The balanced scorecard- A tool for managing knowledge?", MA dissertation in Business Administration, Goteborg, Graduate Business School , (Electronic Version) [www.balancedscorecard.org](http://www.balancedscorecard.org), Retrieved April 2006.

**b)Arabic references:**

- 1- Yousef, Mohammed Mahmoud (2005) " AL BO'D AL ESTRATEGI L'TAQIEEM AL ADAA' AL MOTAWAZEN" " The strategic dimension of balanced performance evaluation", AL MONAZAMAH AL ARABIAH L' A' TANMIAH AL IDARIYAH", Cairo, Egypt
- 2- Al Natour, Jihad Ribhi (2005) "ATHAR TATBEEK MAAYEER BETAKAT AL ADAA' AL MOTAWAZEN ALA AL QARAR AL ISTETHMARI FI A' SHARIKAT A' SINAIYAH AL ORDONIA" "The Impact of Balanced Scorecard on Investment Decision in Jordanian Industrial Companies", MA Degree in Accounting from business and finance administration college in Al El Beit University, Jordan.
- 3- El- Anati, Radwan Mohammed (2004) "BENAA' NAMOUTHAI KIIASS WA TAQUEEM ADAA' SHARIKAT AL MOKAWALAT AL ORDONIAH B' ISTIKHDAM BITAQAT AL ALAMAT AL MOTAWAZENAH (BSC)" "Driving a model for performance Evaluation by using Balanced Scorecard( BSC) for Jordanian

Construction Companies", a PHD desertation in accounting from Arabic Amman University for high studies, Jordan

### **(3) Articles( Published & Internet)**

- 1- Arveson, Paul (1998) What is the balance scorecard? , (Electronic Version), [www.balancedscorecard.org](http://www.balancedscorecard.org), Retrieved April 2006
- 2- Arveson, Paul(1999), Deployment of the Balanced Scorecard measurement system, ( Electronic Version) [www.Balancedscorecard.org](http://www.Balancedscorecard.org), retrieved,Oct.2006
- 3-Arveson, Paul (2004) " the Revolution in Strategic Planning" ,Retrieved April 2006, From [www.balancedscorecard.org](http://www.balancedscorecard.org)
- 4- Balanced Scorecard Institute, (2006) "Frequently asked questions about Balanced Scorecard". Electronic version, Retrieved April 2006 from [www.balancedscorecard.org](http://www.balancedscorecard.org),
- 4- Bruce W. Harber(2006) "working together for success", Peel memorial hospital (PMH), pbVIEWS [www.balancedscorecard.org](http://www.balancedscorecard.org), retrieved 9/7/06)
- 5- Cardoso Elsa, Trigueiros Maria Jose',Narciso Patricia(2006) "A Balanced Scorecard Approach for Strategy- and Quality-driven Universities, Instituto Superior de Ciencias do Trabalho e da Empresa, Portogal, [Elsa.Cardoso@iscte.pt](mailto:Elsa.Cardoso@iscte.pt)
- 6- Laitinen, K. Erkki (2005)" Microeconomic analysis of the balanced scorecard: a case of Nokia Corporation" Journal of Productivity and Performance Management, Bradford: 2005, vol.54, (electronic Version), retrieved May 2007, From <http://proquest.umi.com/pqdweb?cfc=1>
- 7- Evans, Nigel (2005) " Assessing the balanced scorecard as a management tool for hotels" International Journal of Contemporary Hospitality Management, Bradford: 2005, vol.17, (electronic

Version), retrieved May 2007, From  
<http://proquest.umi.com/pqdweb?cfc=1>

8-Huegen, Turben and Zelewski, Stephen (2005) "Combining Quantitative Reasoning and Balanced Scorecard to model future behavior of a company, Institute for production and industrial information management" University of Duisberg-Essen, Germany, Turben Huegen | Stephen [Zelewski@pim.uni-due.de](mailto:Zelewski@pim.uni-due.de), retrieved,OCT2006

9-Kaplan, R. S. & Norton, D. P.(1993) Putting the Balanced Scorecard to work. HBR Sep./Oct.

10- Kaplan & Norton,. (2000) "Having a trouble With your strategy? Then Map It" HBR, Sep./Nov

11- Kaplan, R. S. & Norton, D. P (2004) "Measuring The Strategic Readiness of Intangible Assets" HBR,Feb 2004,retrieved 26/7/2006)

12- Kaplan, R. S. & Norton, D. P (1996(b) ) Using BSC as a strategic Management System). HBR, Jan./Feb.

13- Kaplan, R.S., and Norton, D.P. (1992) " Balanced Scorecard: Measures that Drive Performance", Harvard Business Review, Jan. Feb., , pp.71-79.

14- Kaydos, Will ( 2003 ) " What should Your Company Measures Besides Financial Results?", Retrieved 15, April, 2006, From [www.balancedscorecard.org](http://www.balancedscorecard.org)

15- Liyoun Song, Choonyup Park,Deokkyo Oh, Joong Yeon Lim, YoungJu Kim, Youngbok Shon (2004) An Application of the Balanced Scorecard Model for Evaluation of Technology for Commercialization, Korea Technology Transfer Center, session 2933,B,retrieved nov 2006)

- 16- Malina A. Mary & Selto H. Frank (2001), Communicating and controlling Strategy: An Imperical Study of the effectiveness of the Balanced Scorecard.
- 17- Morisawa, Turu (2002) "Building Performance Measurement Systems with the Balanced Scorecard Approach, nomura Research Institute (NRI Papers), [nri-papers@nri.co.jp](mailto:nri-papers@nri.co.jp)
- 18-Palestinian Central Bureau of Statistics, November (2001) "Statistical Abstract of Palestine" Ramallah, Web-site: <http://www.pcbs.org>
- 19-Palestinian Central Bureau of Statistics (2005), Web-site: <http://www.pnic.gov.ps>
- 20-Paltel annual report (2005), Web-site: [www.Paltel.ps](http://www.Paltel.ps)
- 21- Rohm, Howard (2001) " A Balancing Act " (Electronic Version) Perform, performance Measurement in action, Volume2, Issue 2, <http://www.balancedscorecard.org>, retrieved April, 15<sup>th</sup> , 2006
- 22- \_\_\_\_\_ " Frequently Asked Questions about the Balanced Scorecard" (Electronic Version), Retrieved From [www.balancedscorecard.org](http://www.balancedscorecard.org). April 15<sup>th</sup> , 2006.
- 23- Scholey, Cam (2005) " Strategy maps: a step-by-step guide to measuring, managing and communicating the plan" The Journal of business. Boston, USA:2005. Vol.26, (Electronic version) retrieved May 2007, From <http://proquest.umi.com/pqdweb?cfc=1>
- 24- Van der Wal R. W. E., Pampallis A., Bond C. " Service quality in a cellular telecommunications company: A South African experience", Managing service Quality, vol. 12 no. 5, 2002, Electronic version, Emeraldfultext, retrieved, oct.2006)
- 25- Ward Adrian, (2005): " Implementing the Balanced Scorecard at Lloyds TSB" HR Review. Chicago: Mar/Apr 2005. Vol.4, (Electronic

version) retrieved May 2007, From  
<http://proquest.umi.com/pqdweb?cfc=1>  
 26- Willcocks, Leslie & Graeser, Valerie, (2005): " Balanced Scorecard provides framework to help companies improve IT performance" Computer Weekly. Sutton: May 17, 2005. UK,  
 (Electronic version) retrieved May 2007, From  
<http://proquest.umi.com/pqdweb?cfc=1>

### **(3) Training courses:**

1-Matt H. Evans,(2002) "The Balanced Scorecard", course 11 revised: February 4,2002 :, [www.exinfm.com/training](http://www.exinfm.com/training), retrieved July/2006.

### **(4) Strategic plans of Companies**

- 1- FAA Logistics Center Strategic Plan 2003-2007, Retrieved 15, April, 2006, From [www.balancedscorecard.org](http://www.balancedscorecard.org)
- 2- The Office of Procurement and Assistance Management (PAM) (2006), Balanced Scorecard, (Electronic Version) [www.Balancedscorecard.org](http://www.Balancedscorecard.org), retrieved,2/07/2006)
- 3- PAL TEL annual report (2005), [www.Paltel.ps](http://www.Paltel.ps)

### **(5) Interviews**

Telephone calls with the training managers in Paltel and Jawwal:  
[Hazem Farah and Iyad Tunsi](#), March 7<sup>th</sup>, 2006

## Appendices

### Appendix (1)

#### List of abbreviations

Abbreviation	Meaning
ABC	Activity Based Costing
ABC/M	Activity Based Costing /Management
BSC	Balanced Scorecard
CRM	Customer Relationship Management
D&L	Development and Learning
ICT	Internet & Computer Technology
JAWWAL	Cellular Telecommunication company
OWANS	Our Wants And Needs
PAL TEL	Palestine Telecommunication company
Paltel	Palestine fixed-line telephone company
PNA	Palestinian National Authority
SERVQUAL	Service Quality model
STEEP	Social, Technical, ,Economic, Educational, Political
SVA	Shareholder Value Analysis
SWANS	Satisfying the Wants And Needs of Stakeholders
SWOT	Strengths, Weaknesses, Opportunities and Threats
TQM	Total Quality Management
UAE	United Arab Emmerates
VOIP	Voice Over Internet Processor

## Appendix (2)

### The questionnaire in Arabic



الجامعة الإسلامية - غزة  
كلية التجارة- قسم الدراسات العليا  
برنامج ماجستير إدارة الأعمال

استمارة للتعرف على تقييم أداء شركات الاتصالات الفلسطينية من  
خلال استخدام بطاقة الأهداف الرباعية المتوازنة

الأخ الكريم:

السلام عليكم ورحمة الله وبركاته .... وبعد

يهدف هذا الاستبيان إلى التعرف على تقييم أداء شركات الاتصالات الفلسطينية من خلال استخدام بطاقة الأهداف الرباعية المتوازنة. إن تعاونكم معنا هو دعماً للبحث العلمي والتنمية في فلسطين. مع العلم أن المعلومات التي سيتم الحصول عليها سوف يتم التعامل معها بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي.

أود أن أنتهز الفرصة لأقدم لكم شكري الجزيل على تعاونكم معنا

الباحث  
محمد الشيخ علي

## الجزء الأول: معلومات شخصية

اختر الإجابة المناسبة بوضع دائرة حول رقمها:

### 1- علاقتك بالشركة:

(أ) مدير عام	(ب) مدير في الشركة	(ج) موظف في الشركة	(د) مساهم
--------------	--------------------	--------------------	-----------

### 2- المؤهل العلمي:

(أ) أقل من الثانوية العامة	(ب) ثانوية عامة	(ج) دبلوم بعد الثانوية	(د) بكالوريوس	(هـ) دراسات عليا
----------------------------	-----------------	------------------------	---------------	------------------

### 3- العمر:

(أ) 20-30 سنة	(ب) 31-40 سنة	(ج) 41-50 سنة	(د) أكثر من 50 سنة
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### 4- الجنس:

(أ) ذكر	(ب) أنثى
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### 5- الدخل:

(أ) أقل من 2000 شيكل	(ب) 2000-3000 شيكل	(ج) 3001-4000 شيكل	(د) أكثر من 4000
----------------------	--------------------	--------------------	------------------

### 6- مدة العمل في الشركة أو المساهمة فيها:

(أ) أقل من 5 سنوات	(ب) 5-10 سنوات	(ج) 10 سنوات
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### 7- الحالة الاجتماعية:

(أ) أعزب	(ب) متزوج
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## الجزء الثاني: بطاقة الأداء المتوازن

ضع/ي إشارة (/) في الخانة التي تعبر عن رأيك

غير موافق بشدة (دون 20%)	غير موافق (21-40%)	محايد (41-60%)	موافق (61-80%)	موافق بشدة (81-100%)	العبرة
<b>أولاً: محور الزبائن</b>					
					1- هناك مستوى مقبول من رضى الزبائن عن الخدمات المقدمة من الشركة
					2- عدد الشكاوى المقدمة من الزبائن في حدود المتوقع
					3- حصة الشركة من سوق الاتصالات الخلوية مناسبة .
					4- يشكل العائد من كل خدمة مقدمة للزبائن نسبة جيدة من حجم المبيعات
					5- تشكل النفقات الإدارية العامة نسبة معقولة من حجم المبيعات.
					6- معظم زبائن الشركة يفضلون التعامل معها على غيرها من المنافسين (الحاليين والمحتملين)
					7- يتناسب عدد المستخدمين الجدد للجوال مع مستوى التوقعات
					8- يتناسب عدد المستخدمين الجدد للتلفون الأرضي مع مستوى التوقعات
					9- تساهم الشركة في بناء المجتمع الفلسطيني عن طريق دعم المؤسسات الخدمية في قطاعي الصحة والتعليم
					10- تساهم الشركة في تقوية المجتمع الفلسطيني عن طريق دعم مشروعات البنية التحتية
<b>ثانياً: محور العمليات التشغيلية الداخلية</b>					
					11- تشكل المبيعات للخدمات المستحدثة نسبة مرضية من إجمالي المبيعات
					12- الأجهزة والخدمات المستحدثة تفوق توقعات الزبائن
					13- يتم توفير الأجهزة والخدمات المستحدثة في السوق في الوقت المناسب
					14- إجراءات توفير الأجهزة والخدمات المستحدثة للجمهور سريعة ووفق حاجات السوق.
					15- يتم الرد على مكالمات الجمهور بسرعة معقولة
					16- يقوم الموظفون المختصون بالرد على مكالمات الجمهور مهما كانوا مشغولين بأعمال روتينية.

غير موافق بشدة (دون 20%)	غير موافق 21-40%	محايد 41-60%	موافق 61-80%	موافق بشدة 81-100%	العبرة
					17- تقوم الشركة بالحصول على البضاعة و الخدمات عند الطلب دون الحاجة لتخزينها
					18- يتم تخزين البضاعة المشتراه بما يتناسب مع طلبات الزبائن
					19- هناك نسبة عالية من عقود تسليم البضاعة و الخدمات يتطابق فيها تاريخ عقد الشراء مع تاريخ التسليم للزبائن.
					20- يمكن التنبؤ بحجم المبيعات و توفير كمية ملائمة من البضاعة في المخازن.
					21- يتم توفير الخدمات و الأجهزة وفق نتائج دراسات لحاجات المستهلكين و أذواقهم
					22- تقترب تكاليف توفير الأجهزة و الخدمات من التكاليف المعيارية ( المتوقعة).
					23- نسبة التكاليف غير المباشرة المحملة على ثمن الأجهزة و الخدمات معقولة .
					24- لحملات الترويج التي تقوم بها الشركة أثر إيجابي عل استقطاب أعداد جديدة من الزبائن
					25- يدل قصر الوقت المستغرق في توفير الخدمات و الأجهزة على سرعة الإجراءات المتبعة
					26- يتم توفير أعلى جودة ممكنة بأقل تكلفة ممكنة.
					27- يتناسب مستوى الجودة للخدمات و الأجهزة المتوفرة مع مقدار التكلفة
					28- استخدام معدات و أساليب حديثة في العمل لا يسبب تعطيلًا للعمل في الشركة
					29- توفير خدمات مستحدثة أو استخدام معدات حديثة لا يؤدي إلى زيادة في التكلفة أو في سعر الخدمة .
					30- الوقت المستغرق بين شكوى الزبائن من أي خلل و إصلاحه قصير و يتلاءم مع حجم الإصلاح المطلوب.
					31- تستجيب الشركة لشكاوي الزبائن من أول مرة
<b>ثالثًا: محور التعلم و النمو</b>					
					32- يتقدم كل موظف بعدد من المقترحات التحسينية سنويا
					33- تقترح الشركة برامج تدريبية كافية للموظفين
					34- هناك نسبة كافية من الموظفين الذين يحقق عملهم في الشركة قيمة إضافية لها.
					35- ترتفع نسبة الموظفين الذين يشكل وجودهم في الشركة قيمة مضافة لها

العبرة				
غير موافق بشدة (دون 20%)	غير موافق 40-21%	محايد 60-41%	موافق 80-61%	موافق بشدة 100-81%
				36- هناك عدد مناسب من الموظفين الذين يمتلكون خبرات عملية خاصة ومفيدة للعمل
				37- يتمسك العاملون في الشركة بالاحتفاظ بوظائفهم فيها.
				38- تنخفض نسبة العاملين الذين يتركون العمل وينتقلون لشركات أخرى.
				39- يتلقى العاملون ساعات تدريبية كافية أثناء الخدمة
				40- تهتم الشركة بتدريب العاملين فيها لتطوير قدراتهم كل حسب حاجته أو حاجة الشركة
				41- لدى العاملين فكرة واضحة عن خصائص الشركة المهنية والثقافية والقيمية بالإضافة للإمكانيات المادية
				42- يتمتع العاملون في الشركة بخدمات تدريبية ملائمة لمؤهلاتهم العلمية وطبيعة عملهم في الشركة.
<b>رابعاً: المحور المالي</b>				
				43- تحقق الشركة عائداً ملائماً على رأس المال المستثمر
				44- نسبة الأرباح الموزعة على المساهمين تتناسب مع توقعاتهم.
				45- توفر الاستثمارات الإقليمية والدولية أرباحاً تلبي أهداف السياسات الاستثمارية للشركة.
				46- تحقق الشركة انخفاضاً مستمراً في النفقات غير المباشرة التي تحمّل على أنشطة الشركة.
				47- هناك ثقة عالية في كفاءة أداء الشركة في مجالات أعمالها المختلفة.
				48- يتوفر للشركة تدفقات نقدية تلبي متطلباتها.
				49- تتمكن الشركة من تخفيض أسعار خدماتها .
				50- يتناسب حجم أرباح الشركة مع حجم مبيعاتها

**Appendix (3)****The questionnaire in English****The Islamic University-Gaza****Faculty of Commerce****MBA program****A questionnaire to recognize the Performance Evaluation of  
Palestinian Telecommunication Corporations by using  
Balanced Scorecard approach.****Assalam Alaikom wa Rahmatollah wa Barakatoh,**

This questionnaire aims to recognize the Performance Evaluation of Palestinian Telecommunication Corporations by using balanced scorecard approach. Your cooperation is appreciated and will support the scientific research and development in Palestine.

The information will be confidential and to be used just for scientific purposes.

The researcher  
Mohammed Al Sheikh Ali

## Part one: Personal Information

Circle the number of the suitable answer:

### 1-Your relation with the company:

a)General Manager	b)Manager	c)Normal employee	d)Shareholder
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### 2-Scientific qualification

a)Less than GSC	b)GSC	c)Diploma	d)Bachelor	e)Post Graduate
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### 3-Age

a)20-30 years	b)31-40	c)41-50	d)More than 50
---------------	---------	---------	----------------

### 4-Gender

a)Male	b)Female
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### 5-Income

a)Less than 2000 NIS	b)From2000-3000 NIS	c)From3000-4000	d)More than 4000Nis
----------------------	---------------------	-----------------	---------------------

### 6-The Period of work and Shareholder

a)Less than 5 years	b)5-10 years	c)10 years
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### 7-The Marital Status:

a) Single	b)Married
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## Part 2: Balanced Scorecard

Specify the cell you agree with

<b>Customer Perspective</b>						
NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
1	There is an accepted level of Customers satisfaction from the services which are introduced from the company.					
2	The customers complaints are in the expected range					
3	The company's Market Share from the cellular communication Market is suitable.					
4	The return from every introduced service forms a good ratio of the sales volume.					
5	The overwhole management expenses forms a moderate ratio of sales volume					
6	Most of the companies customers prefer it rather than the other competitors.					
7	The number of new users of Jawwal meets the expectations					
8	The number of new users of fixed line telephone meets the expectations					
9	The company contributes in building the Palestinian society by supporting the non-profitable institution such as health and education.					
10	The company contributes in strengthening the Palestinian society by supporting the projects of infra structure,					

NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
<b>Internal Business Processes Perspective</b>						
11	The sales from the newly created services forms a high ratio from the sales					
12	The newly created services and products exceeds the customers expectations					
13	The company provides the market with the newly created services at the suitable time					
14	The procedures of affording the newly created services and products are fast and according to the market needs.					
15	Percentage of customers calls answered within short time.					
16	The clerks answer the public calls even if they were busy in routine works					
17	The company can attain its needs from goods and services on time without keeping them stored.					
18	The stored volume of procurements (inventory) suits the volume of customers' demand.					
19	There is a high ratio of goods and services delivery contracts that have the same date of procurement contracts date.					

NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
20	It is possible to predict the volume of sales and keep a suitable quantity of goods in the stores of the company.					
21	The services and goods are introduced according to consumers needs and tastes					
22	The products and services are produced in a cost almost similar to the standard cost					
23	The indirect costs which are added to the goods and services prices are logic.					
24	The marketing campaigns which are conducted by the company have positive effects on attracting new customers					
25	The shortness of the time spent in affording products and services indicates to the fastness of procedures.					
26	The utmost quality is afforded by the least cost					
27	The level of the products and services' quality suits their costs					
28	Using new technology does not cause any confusion in the work					
29	Using new technology does not cause any increase in the cost or the price of service.					

NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
30	Time from call of customer to repair of product is short in proportion of the defect volume					
31	The company responds to the customers' complaints on first contact.					
<b>Learning and growth Perspective</b>						
32	Every employee suggests a number of improvements annually					
33	The company suggests enough training programs for the employees.					
34	There is a suitable ratio of employees whose employment adds value to the company.					
35	There is a high ratio of the employees whose existence in the company considered as value added					
36	There is enough number of employees who have special practical experience useful for the work					
37	The employees are insisting to stay in their jobs in the company					
38	There is a low ratio of the employees who leave the company to work in another one.					
39	The employees have enough in-service training hours					

NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
40	The company affords Training for the employees to develop their abilities according to everyone need and the company's need as well.					
41	The employees have an obvious thoughts about the Professional, cultural and virtual characteristics in addition to its capabilities					
42	The employees of the company enjoy suitable training services refer to their scientific qualification and the nature of their work in the company					
<b>Financial Perspective</b>						
43	The company realizes a suitable return on the invested capital.					
44	The ratio of the profits which distributed to the stakeholders meets their expectations					
45	The regional and the international investments profits realize the goals of the company's investment policies.					
46	The company acquire a continuous decrease in the indirect expenses which are assigned on the company's activities					

NO	statement	Strongly disagree	Disagree	Average	Agree	Strongly agree
47	There is a high trust in the sufficiency of the company's performance in its different business fields.					
48	The company has enough cash flow .					
49	The company is able to decrease the prices of its services					
50	The company's profits suit the volume of its sales					

## **Appendix (4)**

### **PAL TEL Group vision and mission**

#### **1-Mission**

Maximizing shareholders' value with perpetual growth and enriching Palestine's information communication technology sector with a commitment to excellence and with continued commitment to major societal and citizens' needs.

#### **2-Promise**

We promise to provide the best services at the lowest cost

#### **3-Vision**

Technology is a tool for both human resource development and nation building. The future holds opportunities that will evolve with the convergence of Information technology and communications.

The opportunities intertwined with the convergence trend will exponentially grow. The foremost challenge is utilizing those opportunities with a certain, solid discipline that adopts scientific thinking and good governance.

## **Appendix (5)**

### **Paltel vision, and main objectives**

#### **1-Vision**

Paltel aspires towards becoming the Telecommunications and Information Technology(IT) landmark in Palestine, through creating an advanced infrastructure, as well as providing of all fixed and cellular telecommunications, information, Internet, and Value added services, and investing in communication-related projects at the local, regional and international levels, thus contributing to the development of the Palestinian economy and securing sound revenues to shareholders.

Paltel seeks to expand its presence in the Palestinian market, diversify its services and provide complementary packages to satisfy and retain the Palestinian consumer. To this end, Paltel has established independent and specialized companies in order to achieve the strategic objectives that conform with Paltel Group vision, namely:

- Spread the use of fixed telephony and its value-added services as high-quality commodity with competitive tariffs.
- Build an advanced infrastructure for Data and Internet and promote its deployment in all aspects of life.
- Increase the number of retail outlets while developing and modernizing their operational mechanism to ensure providing good quality goods and services through highly professional and trained staff.
- Launch promotional marketing campaigns for customers to market the Company's products and services.
- Constant and continuous development of all components of Paltel network.

- Invest locally, regionally and internationally in project that conform with Paltel vision and strategy of synergy.

## **2-Main Objectives**

- Provide modern telecommunication services by deploying the latest technology, information systems, line access, and value-added services in order to satisfy the needs of all customers throughout Palestine.
- Achieve sound returns for shareholders, preserve their investments, and meet their expectations and aspirations, ensuring continuous communication and interaction with them.
- Provide wide range of services to the broadest possible subscribers' base in all Palestinian areas.
- Contribute to building the Palestinian society through providing support to the largest possible number of social, educational, health, economic and infrastructure development initiatives and activities; Its contribution aims at building a unique interactive relationship with the Palestinian society at large, in a manner that contributes to fulfilling the ambitions of the society and building its capacities.

## **Appendix (6)**

### **Jawwal vision , strategy and main objectives**

#### **1- Vision**

Jawwal aspires to attending leadership in the Palestinian cellular market by providing the best coverage, expanding and improving its cellular services, incorporating technological developments and breakthroughs, and developing innovative marketing strategies to the best interest of both our subscribers and shareholders.

#### **2-Strategy**

- ✓ Providing the best programs and services at competitive prices and according to the international quality standards.
- ✓ Providing all services required by subscribers so that the Palestinian cellular telephone can meet all their daily needs.
- ✓ Putting forth marketing policies and programs that aim at attracting new subscribers and maintaining existing ones.
- ✓ Expanding the network of showrooms and sales outlets as well as the base of main and sub dealers so as to provide JAWWAL best quality services to all Palestinian regions.
- ✓ Improving and upgrading the Palestinian cellular network to achieve the highest international standards in terms of coverage and quality of service.
- ✓ Providing integrated care and service to meet Jawwal subscribers' needs through a team of highly professional employees.

#### **3-Main objectives**

- ✓ To achieve continuous revenue and growth and highest returns on investments for the benefit of Jawwal shareholders and other stakeholders.

- ✓ To promote subscribers' satisfaction and trust by providing the best cellular programs and services and investing in network development and improvement.
- ✓ To achieve the highest efficiency, with regard to the utilization of available resources and controlling operational costs.
- ✓ To polarize the most distinguished Palestinian skills and competencies to provide the best services to both subscribers and shareholders.
- ✓ To know subscribers requirements and expectations and seek to fulfill them as soon as possible.
- ✓ To continuously communicate with the Palestinian community by facilitating the daily life aspects of its citizens.
- ✓ To maintain the company's good image by maintaining its present and future accomplishments.

**Appendix (7)**  
**Permission and approval letters**