

**DEVELOPING A PERFORMANCE MANAGEMENT SYSTEM AT  
ROYAL JORDANIAN AIRLINE COMPANY**

By  
**Eng. Zahia Thaher H. AbuAli**

Supervisor  
**Dr. Mahmoud AbuAli**

**This Thesis was Submitted in Partial Fulfillment of the Requirements for the  
Master's Degree of Science in Industrial Engineering / Industrial Management.**

**Faculty of Graduate Studies**

**The University of Jordan**

**August, 2005**

الجامعة الاردنية

نموذج تفويض

أنا زهية ظاهر حسام أبو علي، أفوض الجامعة الاردنية بتزويد نسخ من رسالتي للمكتبات أو المؤسسات أو الهيئات أو الاشخاص عند طلبها.

التوقيع:

التاريخ: 28/08/2005

**The University Of Jordan**

**Authorization Form**

I, Zahia Thaher Hussam Abu Ali, authorize the University of Jordan to supply copies of my thesis to libraries or establishments or individuals on request.

Signature:

Date: 28/08/2005

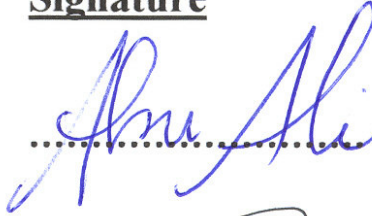
## Committee Decision

**This Thesis/Dissertation (Developing a Performance Management System at Royal Jordanian Airline Company) was successfully defended and approved on August 28<sup>th</sup>, 2005.**

### Examination Committee

Dr. Mahmoud Abu-Ali  
Assistant Prof. of Industrial Engineering

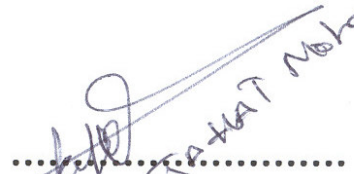
### Signature

  
.....

Dr. Sa'ed M. Salhieh  
Assistant Prof. of Industrial Engineering

  
.....

Dr. Mohammad Al- Tahat  
Assistant Prof. of Industrial Engineering

  
.....

Dr. Ramy Hikmet Fouad  
Associate Prof. of Industrial Engineering  
(Hashemite University)

  
.....

تعتمد كلية الدراسات العليا  
هذه النسخة من الرسالة  
التوقيع..... التاريخ 2005/8/28

DEDICATION

*To My Father*

*My Mother*

*My Sister*

*My Brothers*

*And All My Friends*

## ACKNOWLEDGEMENT

*No one who achieves success does so without obstacles. Thanks GOD for your gift\_ my great father and mother who help me to overtook these obstacles, and reach my goals. MOM & DAD you are the only one who can never be thanked enough for all that you do. THANK YOU. My greatest thanks also go to my sincere sister and brothers; Mohammad, Tahany, Amro, Bader & Hatem for their love, care and Support. My dear FAMILY Thank you.*

*I would like to kindly express my deepest appreciation and great thanks to my Advisor Dr. Mahmoud Abu Ali who directs this research with a great deal of interest, and support me continuously by his valuable advises and comments through out the period of the thesis. My thankful is also extended to the Department of Industrial Engineering at the University of Jordan including all the staff members for their support and encouragement.*

*I would always maintain my special thanks to all my colleagues at Royal Jordanian for their efforts to facilitate my work on this research.*

*Last but not least my deepest gratitude goes to all my dear FRIENDS for their kindness, care and support.*

*Usually roses have thorns and No one achieves success does so without the help of others. Thank You All for making me realizes that thorns have roses.*

*Zahia Thaher AbuAli*

*Summer 2005*

## TABLE OF CONTENT

Subject	Page
Committee Decision.....	iii
Dedication .....	iv
Acknowledgement.....	v
Table of Contents.....	vi
List of Tables.....	ix
List of Figures.....	x
List of Appendices .....	xi
List of Abbreviations.....	xii
Abstract.....	xiii
<b>INTRODUCTION</b>	
1. PREFACE.....	1
2. PROBLEM DEFINITION.....	2
3. RESEARCH FRAMEWORK AND METHODOLOGY .....	2
4. THESIS ORGANIZATION.....	3
<b>LITERATURE REVIEW</b>	
1. DEVELOPMENT OF PERFORMANCE MEASUREMENT .....	4
2. PERFORMANCE MANAGEMENT SYSTEM & ITS IMPORTANCE...	6
3. MOVING FROM PERFORMANCE MEASUREMENT SYSTEM TO PERFORMANCE MANAGEMENT SYSTEM.....	7
4. PERFORMANCE MANAGEMENT MODELS.....	8
4.1 Balanced Scorecard (BSC) .....	8
4.2 Economic Value Added.....	10
4.3 Intangible Asset Monitor (IAM).....	10
4.4 Activity-Based Costing .....	11
4.5 The Performance Pyramid approach.....	11
4.6 Customer Value Analysis.....	11
4.7 Critical Few.....	12
4.8 Action-Profit Linkage.....	13
4.9 QEST (Quality, Economic, Social and Technical) Factors.....	13
4.10 Quality management Models.....	14
5. MODELS COMPARIOSON.....	15
<b>PROBLEM DEFINITION &amp; RESEARCH OBJECTIVES</b>	
١ PROBLEM DEFINITION.....	20
٢ OBJECTIVES OF THIS RESEARCH.....	23
<b>RESEARCH FRAMEWORK AND METHODOLOGY</b>	
1. INTRODUCTION.....	25
2. RESEARCH FRAMEWORK: THE BALANCED SCORE CARD.....	25
3. RESEARCH METHODOLOGY.....	٢٧
3.1 Revise RJ Corporate Mission, Vision and Strategies.....	28
3.2 Develop The corporate Strategy Map.....	28
3.3 Review of marketing and sales documents.....	28

Subject	Page
3.4 Review of the marketing and sales processes.....	29
3.5 Analyze Processes and Develop Process Objective and Process Flow Chart.....	29
3.6 Develop Marketing and Sales Process Flow Chart.....	29
3.7 Develop the Marketing and Sales Mission and Vision, and study its objectives.....	29
3.8 Apply SWOT Analysis on Marketing and Sales Department.....	30
3.9 Develop Marketing and Sales Strategy Map.....	30
3.10 Development of performance measurements.....	30
3.11 Performance Management Process.....	30
<b>RESULTS AND DISCUSSION</b>	
1. INTRODUCTION.....	32
2. RJ MISSION, VISION AND STRATEGIES.....	32
2.1 Royal Jordanian (RJ) Mission Statements.....	32
2.2 Royal Jordanian (RJ) Vision Statement.....	33
2.3 RJ Strategies for the years (2004-2008).....	33
2.4 Strategy Implementation.....	33
3. RJ STRATEGY MAP.....	34
4. MARKETING AND SALES SECTION ANALYSIS.....	35
4.1 Marketing Section.....	36
4.2 Sales Section.....	36
4.3 Capacity management Section.....	38
4.4 Customer Relations.....	39
4.5 International and Industry Affairs.....	40
4.6 Sales Performance Section.....	40
5. MARKETING AND SALES PROCESS FLOW CHART.....	42
6. DEVELOP MARKETING AND SALES MISSION AND VISION, AND STUDY ITS OBJECTIVES.....	43
6.1 Marketing and Sales Mission.....	43
6.2 Marketing and Sales Vision.....	43
6.3 Marketing and Sales Objectives.....	43
7. STRATEGIC ANALYSIS .....	44
7.1 Business Environment Analysis.....	44
7.2 Strategic Options Analysis.....	52
8. MARKETING AND SALES STRATEGY MAP MODEL WITH RESPECT TO THE PERFORMANCE PERSPECTIVES.....	55
8.1 Learning and Growth Objectives.....	56
8.2 Internal Processes Objectives.....	57
8.3 Customers Objectives.....	58
8.4 Financial Objectives.....	59
8.5 Marketing and Sales Strategy Map.....	60
9. MARKETING AND SALES PERFORMANCE MEASURES.....	62
10. PERFORMANCE MEASUREMENT SOFTWARE.....	67

Subject	Page
10.1 Introduction.....	67
10.2 Steps Involved to Develop the Software.....	67
10.3 Software Output.....	68
10.4 Software Policies.....	69
10.5 Software controls.....	69
10.6 Program Specification.....	70
<b>CONCLUSIONS AND RECOMMENDATIONS</b>	
1. CONCLUSIONS.....	80
2. RECOMMENDATIONS.....	81
4. RECOMMENDATION FOR FUTURE WORK.....	83
<b>REFERENCES.....</b>	<b>84</b>
<b>APPENDICES.....</b>	<b>89</b>



## LIST OF TABLES

Table No.	Table Name	Page
1	Models Comparison Matrix	19
2	Strengths, Weaknesses, Opportunities and Threats Ranking.	49
3	Strategic Options.	52
4	Performance measures with respect to each perspective.	65
5	Measures summary saved in the measurement Program.	75

## LIST OF FIGURES

Figure Number	Figure Name	Page
1	RJ Market Share over sixteen years.	21
2	Operating Revenue per Employee over the Last Fifteen Years.	22
3	Marketing and Sales Organizational structure	24
4	Research Methodology	27
5	RJ Strategy Map	35
6	Marketing Process Diagram	36
7	Pricing Process Diagram	37
8	MIDT Process Diagram	37
9	Reservation Process Diagram	38
10	Revenue Management Process Diagram	39
11	Charter Affairs Process Diagram	39
12	Sales Performance Process Diagram	41
13	Marketing and Sales work Flow Diagram	41
14	Marketing and Sales Process Flow Chart	42
15	SWOT Matrix	50
16	SWOT Analysis Using BCG Matrix	51
17	Strategic Options Matrix	54
18	Performance Perspectives Hierarchy	55
19	Marketing and Sales Strategy Map	61
20	Measures Map	64
21	Software Development Steps	67
22	Software Data Flow Diagram	68
23	Program Main Menu.	71
24	Data Entry Screen	71
25	Editing Measure Screen	72
26	Confirmation Screen	72
27	Caution screen	72
28	Enter Info for the Measure Screen; Cost-Revenue Ratio was the selected Measure	74
29	Warning Screen that asks the user to confirm his deletion action to one of the records.	74
30	Report and Graph generation Screen.	77
31	Historical data For the Cost Revenue Ratio Measure	77
32	Perspective reports Screen.	78
33	Summary Report for all perspectives.	78
34	Perspective Objective Report.	79

## LIST OF ABBREVIATIONS

<b>ABC</b>	: Activity Based Costing
<b>APL</b>	: Action Profit Linkage
<b>BAM</b>	: Business Activity Monitoring
<b>BSC</b>	: Balanced Scorecard
<b>CF</b>	: Critical Few
<b>CRM</b>	: Customer Relation Management
<b>CVA</b>	: Customer Value Analysis
<b>EFQM</b>	: European Foundation for Quality Management
<b>EVA</b>	: Economic Value Added
<b>IAM</b>	: Intangible Asset Monitor
<b>IATA</b>	: International Air transport Association
<b>IOSA</b>	: IATA Operational Safety Audit
<b>JALCO</b>	: Jordan Air Motive Limited
<b>JORAMCO</b>	: Jordan Aircraft Maintenance Limited
<b>KPI</b>	: Key Performance Indicators
<b>MBNQA</b>	: Malcolm Baldrige National Quality Award
<b>MIDT</b>	: Marketing Intelligence Data Tape
<b>MS</b>	: Microsoft
<b>PAX</b>	: Passengers
<b>PEST</b>	: Political, Economical, Social, and Technological
<b>PM</b>	: Performance Management
<b>PMS</b>	: Performance Management System
<b>PPA</b>	: Performance Pyramid Approach
<b>QUEST</b>	: Quality, Economic, Social and Technical
<b>QMM</b>	: Quality Management Models
<b>RJ</b>	: Royal Jordanian
<b>ROI</b>	: Return on Investment
<b>SWOT</b>	: Strengths, Weaknesses, Opportunities and Threats
<b>TQM</b>	: Total Quality Management
<b>VB</b>	: Visual Basic

**LIST OF APPENDICES**

<b>Appendix Number</b>	<b>Appendix Name</b>	<b>Page</b>
Appendix A	Table 5: Measures summary saved in the measurement Program	90
Appendix B	Analyzing Marketing Sections (As Is Study)	103

**DEVELOPING A PERFORMANCE MANAGEMENT SYSTEM AT  
ROYAL JORDANIAN AIRLINE COMPANY**

By

**Eng. Zahia Thaher H. AbuAli**

Supervisor

**Dr. Mahmoud AbuAli**

**ABSTRACT**

A Performance Management System (PMS) offers companies the edge for better competitiveness in changing business environment. This stems from its ability to track the performance of the companies with respect to its goals such that a continuous improvement strategy is maintained.

This study was concerned with proposing a Performance Management Model in Passenger Marketing and Sales Department at Royal Jordanian (RJ). This department was selected because of its impact on RJ's performance regarding for example the financial and customer satisfaction aspects.

The Performance Management System (PMS) employed is the Balanced Scorecard (BSC). This flexible model can measure to what extent Passenger Marketing and Sales is online with its strategies. The use of such model is important in aligning

activities and processes with the key goals and objectives stated by the management of Passengers Marketing and Sales to achieve the corporate mission, vision and goals.

Four aspects of the company's performance are measured in this work, namely; the financial, customer, internal processes, and learning and growth. General indicators to calculate the department's performance is developed by measuring and weighing the above four mentioned aspects.

The proposed system is implemented using easy to use software. This software uses Microsoft Access to store the data, while Visual Basic is used to code the proposed work and Microsoft Excel is used to show the historical trend for each measure. Executives can easily use this software to take any needed actions to improve the department's performance.

The performance management model developed in this research is not a choice for the marketing and sales department; it is a must to be used in order to achieve the improvement goals. This work could be extended to cover different departments in RJ and the software developed could be modified to measure any new indicators.

## INTRODUCTION

### 1. PREFACE

Managing performance is an important task facing managers. Performance measures are used to direct and improve employees' activities and processes. The difficulties stems from the fact that measuring performance requires the integration of a large disparate pieces of information in order to measure outcomes and compare it to the objectives.

It is highly important to develop and implement a performance management system (PMS), to identify deficiencies, use the performance results to improve processes in order to satisfy customers while reducing costs and establish mechanisms of accountability. Effective performance management systems assist the companies to draw a line between success and failure for the activities, processes, individuals, teams and the organization.

Performance Management system guides and enables the organization to carry out its mission, vision, and objectives through defining, communicating and measuring the progress of its strategic options. It facilitates aligning employees' activities and processes with organization's strategies and provides feedback to senior management that indicates whether these strategies are functioning according to expectations or not. It also shows the gaps between the targets and the actual, develops action plans, and generates better understanding to the company's customers, products, services, and channels of profitability in order to achieve targets.

## 2. PROBLEM STATEMENT AND OBJECTIVES

After the establishment of the Jordan's National Flag Carrier: Royal Jordanian (RJ) in 1963, it blossomed and dominated in the Jordanian market and with a steady progress it started its services expansion to finally cover the four continents. According to difficulties resulted from the successive wars occurred in the middle east started by gulf war and ended by Iraqi war, which cause a sever downturn in the international travel and tourism in general, it leaves RJ devastating and facing obstacles, challenges, and repercussions because of its geographic proximity to the region of conflict.

As results of these entire crises in addition to the privatization process which limit the government support that was provided when it was in a public sector, RJ left in a shortage of fund that limit its ability to modernize and develop its services to be online with its competitors. This leads RJ to suffer a loss in its market share and decrease its revenue which is about 70% composed of the passenger handling.

Due to these facts the research objective is to study the Marketing and Sales Department which is responsible for the passenger sales in the hub and out stations and propose an appropriate model of performance management that aims to link activities and processes with the organization strategic goals, to facilitate making administrative decision about initiatives that will improve the process continuously.

## 3. RESEARCH FRAMEWORK AND METHODOLOGY

After studying different performance frameworks; the Balanced Scorecard was chosen as the Performance Management Model for the Marketing and Sales Department. Mission, Vision and key strategic options were defined for this department and its processes were analyzed. Strengths, Weaknesses, Opportunities and Threats (SWOT)



analysis is used to set objectives and develop performance measurement indicators, which are used to manage and monitor the progress toward the department short and long term objectives.

The main challenges faced were the lack of documented processes and procedures in Marketing and Sales Department, and the large number of measures involved. This leads to excess work of data flow development to ease the performance measures selection. It was found that the most important element to support this research and let it applied successfully is the management support and employees involvement.

#### **4. THESIS ORGANIZATION**

This thesis is divided into six chapters; Introduction is presented in the first chapter, followed by the literature review where the performance management models are reviewed. Problem definition and research objectives are discussed in chapter three, while research framework and methodology are discussed in chapter four. Chapter five includes results and discussions which are started by generating RJ Strategy map, applying SWOT analysis on Marketing and Sales Department and producing its performance measures, in addition to the development of software that measures and present performance in a dashboard using Microsoft Access and Microsoft Visual Basic programs. The conclusions from this research and recommendations for improvements are presented in the last chapter.

## LITERATURE REVIEW

### 1. DEVELOPMENT OF PERFORMANCE MEASUREMENT

Managing performance and making continuous improvements is highly demanded in the global business environment, where more companies are entering the international market and seeking to gain competitive advantage through employees, products or services offered.

Quoting from Oakland (1995) and Kaplan & Norton (1996), "If you cannot measure it, you cannot manage it", performance measurement issues are rooted in the traditional management theory. In the early 1900s the three DuPont cousins developed the pyramid of financial ratios and the return on investment (ROI) approach to help them manage their growing business, but their approach was based on financial aspects of work. The take-up of these techniques was rapid and was adopted by other organizations (Waal, 2003).

Performance is an outcome of both organizational and human activities; its measures are used to surrogate these outcomes. Direct links between performance management systems (PMS), human nature, and outcomes were not made until Argyris (1952) and Simon (1954) addressed them. They both concluded that budget and budgeting processes could be associated with important human relations, after exploring these relations on the performance management system (PMS). Companies continued to use these concepts in a largely unchanged format, until the 1970s and 1980s when they recognized that these traditional accounting approaches were no longer relevant to the business environment, which had changed significantly, and customer satisfaction became the most important for any business continuation. This shift toward customer focus required broadening the measures used by any company to manage its business

processes. Therefore the field of performance measurement saw a movement towards considering non-financial in addition to financial indicators.

While researchers focused on performance measurement techniques, especially measuring individual employee performance, which tended to ignore the influence of parameters measured on the management process. A comprehensive performance improvements arising from increased integrations which continues to be one of the primary competitive issues of the 1990s, (Noe *et al.*, 2000; Umit *et al.*, 1997). Performance issues are becoming increasingly important for both reasons of justification to general management and to support management practices within the organization (Amaratunga and Baldry, 2002).

Performance measurement is an established concept that was developed historically as means of monitoring and maintaining organizational control. It ensures that organizations pursue strategies that lead to the achievement of their overall goals and objectives. This concept is defined as the process of quantifying the efficiency and effectiveness of an action. In 2001, Gartner group coined the term business activity monitoring (BAM), which is “the provision of real-time access to critical performance indicators” (Flint, 2002). This process is accomplished through measuring variables and developing methods for collecting data that is useful in identifying problems and developing situations (Amaratunga and Baldry, 2002).

Simmons (2000) and Bititci, Carrie & Turner (2002), specified the importance of measuring and managing business performance in its ability to help the management by monitoring, controlling, driving improvement, maximizing the effectiveness of the improvement effort, achieving alignment with organizational goals and objectives and

establishing a system that will help in employees and processes development. This can be accomplished by balancing five major tensions within a firm which are: profit, growth and control; short term results against long-term capabilities and growth opportunities; performance expectations of different constituencies; opportunities and attention; and the motives of human behavior.

## 2. PERFORMANCE MANAGEMENT SYSTEM & ITS IMPORTANCE

Amaratunga & Baldry (2002) criticized measurement systems that provide the basis for organizations to assess how well they are progressing towards their predetermined objectives. They are not an end in themselves, but tools for more effective management. The results indicate what happened, not why it happened, or what to do about it. So in order to make the best use of the performance measurement outcomes, organizations must move from measurement system to management system, to control and to improve its operations and processes (Rea & Rea, 2002).

Flapper *et al.*, (1996) defined the Performance Management system as "a system that covers all aspects of performance that are relevant to the existence of an organization as a whole, such a system should offer the management a quick insight into how well the organization is performing its tasks and to what extent the organizational objectives are realized", while Umit *et al.*, (1997) definition was "a process by which the company manages its performance in line with corporate and functional strategies and objectives".

Performance management system is focusing on conveys financial and non-financial information that influence the decision-making and the managerial actions. It serves as a key contributor to the coordination or control capabilities of the organization or any of

its departments or entities that is seeking to survive or thrive in its competitive environment; it is used for the purpose of continuous improvement, (Waal, 2003).

Performance Management system (PMS) can be used to help monitoring and controlling specific activities; to predict future internal and external status; to monitor status and behavior relative to its goals; to make decisions within needed time frames; and to alter the entity's overall orientation and/or behavior (Macaulay and Cook, 1994). Thus performance management provides organizations with the opportunity to refine and improve their processes and activities. It helps to shift the emphasis to a risk based approach that diagnoses problems, evaluates effectiveness, and links performance to consequences in order to strike a proper balance between risk and return in organizations, (Amaratunga and Baldry, 2002).

### **3. MOVING FROM PERFORMANCE MEASUREMENT SYSTEM TO PERFORMANCE MANAGEMENT SYSTEM**

Organizations must move from performance measurement to performance management systems because it is more required to have a consistent performance management system that leads to a continuous improvement process rather than performance measurement system that gives an indication about the status without any effort to improve it, (Flapper *et al.*, 1996).

Effective performance management requires that organizations should consider their strategic goals, which are where they expect to be in the future; incorporate these goals into the performance management structure; establish an improvement structures and procedures that will help to implement performance improvements and to make commitment to performance management, (Jarrar, 2004)

#### 4. PERFORMANCE MANAGEMENT MODELS

Performance management models are system based approaches that cultivate the achievement culture in any economic entity, by linking primary objectives to the secondary one and pinpointing the measures of important outcomes from stakeholder view of point, (Mwita, 2000; OSI, 2002).

Different frameworks and reference models for measuring and managing performance have been mentioned in the literature and from a variety of origins. Frameworks are approaches to measure those businesses frequently, often with significant diversity in their design and use. Reference models are more rigorous standards, typically built around specific performance metrics and associated business processes, adopted by an industry or by a common functional unit, (Daum, 2002). There are a lot of frameworks that are widely mentioned in the literature as Balanced Scorecard, Economic Value Added, Intangible asset Monitor, Activity-based costing, The Performance Pyramid approach, Customer Value Analysis, Critical Few, Action-Profit Linkage Model, QEST Framework and the Quality Management reference models that are important and widely used in the corporate levels. These models cover the European Foundation for quality management (EFQM), and Malcolm Baldrige National Quality Award.

##### 4.1 Balanced Scorecard (BSC):

Perhaps the most widely used performance management framework is the Balanced Scorecard (Kellen 2003). Established by Robert S. Kaplan from the Harvard School of Business and consultant David P. Norton in 1990 and introduced in their paper published in 1992, titled by “The Balance Scorecard – Measures that drive performance”. This model has changed the face of performance measurement; (Harmon, 2003). The main driver for it was the complexity of managing an organization today, which requires managing performance in several areas simultaneously. Initially this

model focused on finding a way to report on leading indicators of a business's health rather than traditional accounting measures which are lagging indicators, the balanced scorecard was refocused to measure the firm's strategy. Instead of measuring anything, firms should measure those things that directly relate to the firm's strategy (Kaplan & Norton, 2001).

This model was defined as "a set of measures that gives top managers a fast but comprehensive view of the business" (Kaplan and Norton, 1992; Kaplan and Norton, 1996a). It moves from antiquated bottom line focus to four perspectives (Financial, Customer, Internal Business Processes-operational-, and Learning and Growth) linked to the company vision, mission and objectives, (Kaplan and Norton, 1993; Kaplan and Norton, 1996), by the use of the strategy map.

Strategy map provides a visual representation of the organization's strategy in a single page view to show how the organization creates value, provides the company with the missing link between strategy formulation and strategy execution, and connecting the strategic objectives in explicit cause and effect relationship with each other (Kaplan and Norton, 2000; Cobbold *et al.*, 2004; Kaplan and Norton, 2004).

This tool enables the company to align its management processes and focuses the entire organization on implementing long term strategies. It treats the operational aspects or measures as drivers of future financial performance, and minimizes information overload by limiting number of measures used (Kaplan and Norton, 1996b; (IP and Koo, 2004). This model Provides management with a more complete picture of performance, it aligns measures with strategies, turns strategies into actions, and provide

the opportunities for feedback and learning (Sharif, 2002; U.S. Department of Commerce, 2002).

#### **4.2 Economic Value Added (EVA):**

Developed by the Stern Stewart Corporation as an overall measure of financial performance, it is both a specific financial performance measure that is most directly linked to the creation of shareholder value over time (Stern Stewart 2002) and the basis for a larger performance measurement framework (Kellen 2003). EVA is the net operating profit less than appropriate charge for the opportunity cost of all capital invested in an enterprise. It is designed to give managers better information and motivation to make decisions that will create the greatest shareholder wealth. It is typically used as a manager incentive plan.

#### **4.3 Intangible Asset Monitor (IAM):**

Intangible Asset Monitor (IAM) model was developed by Sveiby (1987). It classifies the intangible part of a balance sheet into a so-called family of three thematic areas. Each of which is composed of four categories, which are growth, renewal, efficiency and stability or risk. The first theme is the internal structure, which consists of a wide range of concepts, models, computers and administrative systems. The second one is the external structure, which define the relationships with customers and suppliers, brand names, trademarks and image. The last one is the individual competence by which people's capacity act in different situations including skills, education, experience, values, and social skills. The basic principle of the (IAM) framework is that people are the only profit generator to the organization, since every human action is converted into both tangible and intangible structures, (Abran and Buglione, 2002).



#### **4.4 Activity-Based Costing (ABC):**

Activity-based costing (ABC) was developed to provide better insight into how overhead costs should be allocated to individual products or customers. Typically, businesses make simple adjustments to allocate overhead costs that do not accurately model how the product or cost consumes those overhead activities. ABC links expenses related to resources supplied to the company to the activities performed within the company. Expenses flow from resources to activities and then to products, services and customers, by using this approach, companies get insights into profitable and profitless activities based on a customer or a product viewpoint (Kaplan 2001). ABC then is a way of measuring which of the firm's activities generate revenues in excess of costs and as a result, provide keen insight into what is really providing value for customers (Meyer 2002).

#### **4.5 The Performance Pyramid approach (PPA):**

This Framework developed by Lynch and Cross on 1995, it uses a pyramid-shaped – map- for understanding and defining the relevant objectives and measures for each level of the business organization (four levels are identified: business, core business processes, department and teamwork, and individuals), this is used to measure the performance during the software development. (Abran & Buglione, 2002).

#### **4.6 Customer Value Analysis (CVA):**

Gale (1994) explains the role of managing customer value, which has recently a strong focus in businesses that have begun to deploy technologies, and measurement systems, to manage business activities that directly or indirectly interact with the firm's customers. It is clear in Baldrige National Quality Award's that the customer focus and satisfaction criteria accounts for about 30% of the overall score for the award. By the

customer relationship management (CRM) technologies Businesses are provided with better data integration and better measurement regarding customers.

Rust, *et al* (2000) decompose the customer problem down to three top-level areas correspond to three distinct disciplines in the CRM and marketing literature (brand management, customer value analysis and customer loyalty analysis), each of which with its own detailed measurement approaches. Numerous other CRM measurement frameworks exist (Kellen, 2002). The implications for Business Performance Measurement systems are clear: measuring business activities and outcomes regarding customers is becoming increasingly complex and increasingly important to the firm's strategy.

#### **4.7 Critical Few (CF):**

The critical few framework develops strategically focused business perspectives and then identifies performance objectives and measures for each perspective by using indexes. It measures what are the most critical to the organizational success; this will help sharpen understanding of the strategic plan and its supporting objectives.

The selection of a critical few set of performance measures highlights the need for a balance between internal and external requirements, as well as financial and non-financial measures. As with the Balanced Scorecard, the critical few framework develops strategically focused business perspectives and then identifies performance objectives and measures for each perspective. Performance Indexes for each perspective developed, these indexes take data from many measurement sources and roll them up into a single, meaningful, reportable number. The Critical few framework generate key measures that were grouped in the literature into one of the following general categories; effectiveness, efficiency, quality, timeliness, productivity, and safety.

However, certain company may develop its own categories depending on the company mission.

using these measures will enable the management to focus on 'big picture' outcomes that should cover the mission completion, business objectives, strategic measures, major milestones, Pricing effectiveness, and others important aspects for the business improvement. Progress against the Critical Few measures has to be assessed on a regular basis (annually, semiannually, quarterly, or monthly), and summarized and analyzed in an annual report. (U.S. Department of Energy and Oak Ridge associated University, 1995).

#### **4.8 Action-Profit Linkage (APL):**

Epstein and Westbrook (2001) developed the Action-Profit Linkage (APL) model to help firms identify measure and understand the causal links between company actions and profits. This framework is a multiple-stakeholder behavior model that lays out the chain of effects as a result of changes in stakeholder behavior. This model starts with the corporate strategy and moves to the four main components: company actions, product / service delivered, customer actions and economic impact. Behaviors (perceptions and attitudes) are measured in each of the components, which lead firms to show dramatic improvements. (Epstein & Westbrook, 2001).

#### **4.9 QEST (Quality, Economic, Social and Technical) Factors:**

Proposed by Abran and Buglione on 2002, this is a generic multidimensional model measures the performance of the software development process that take the quality, economic, social and technical factors in consideration.

#### **4.10 Quality Management Models (QMM):**

Over the past few decades, various quality programs were adopted by many firms, to improve the quality of the manufacturing and service offerings. A central tenant for all of these programs is business performance measurements that discuss quality from different aspects, (Neely *et al.*, 1995; Kaplan & Lamotte, 2001; Hasan and Kerr, 2003; Montes *et al.*, 2003), such as European Foundation Quality Management (EFQM) which measures businesses in nine categories and The Baldrige National Quality Program which measures businesses in seven categories.

##### **4.10.1 Malcolm Baldrige National Quality Award Criteria (MBNQA):**

Malcolm Baldrige National Quality Award (MBNQA) was instituted in 1988 to promote total quality management (TQM), through standard calls for balance among customer satisfaction, employee satisfaction, and business results (Vokura, 2001; Waldman, 1994). The award is based on criteria created through the public-private partnership and focused on three business factors; Approach (the processes used to run an organization), Deployment (The execution of an approach), and Results (The outcome of the approach and the deployment), based on 1000 point scale, the award criteria are divided into seven perspectives; Leadership, Strategic planning, Customer and Market Focus, Information and Analysis, Process Management, and Business Results.

##### **4.10.2 European Foundation for Quality Management (EFQM):**

EFQM was founded in 1988 by 14 major European companies; This Model for Business Excellence - now called the EFQM Excellence Model - was introduced in 1991 as the framework for organizational self assessment and as the basis for judging entrants to the [European Quality Award](#). Its Mission is to be the driving force for

sustainable excellence in organizations in Europe, and its Vision is: A world in which organizations in Europe excel, (EFQM 2004).

This Model is a non-perspective framework that reorganizes many approaches to achieve sustainable excellence, based on enabling criteria, which cover what the organization does, and results which cover what it achieves, the award criteria is divided into nine perspectives; Leadership, People, Policy and Strategy, Partnerships and Resources, Processes, People Results, Customer Results, Society Results, and Key Performance Indicators (KPIs).

## 5. MODELS COMPARIOSON

From the above discussed models, it is clearly argued that the Balanced Score card is the most widely used performance management framework (Kellen 2003), from here all other models / frameworks mentioned will be compared with this framework.

We can find that the quality programs performance measurement as argued by Kaplan and Lamotte (2001) need not be exclusive of balanced scorecard measurement systems.

They point out differences and synergies between the frameworks:

- The BSC emphasizes explicit causal links through strategy maps ad cascaded objectives more than the quality programs do.
- The BSC targets breakthrough performance whereas the quality programs rely on benchmarking approaches
- The BSC sets strategic priorities for process enhancements.
- The BSC integrates budgeting, resource allocation, target-setting, reporting and feedback on performance into ongoing management processes.

Quality programs, while grounded in product quality improvement and applied to many other business processes (Wruck & Jensen, 1998), are continuous improvement frameworks that might not be best suited to help manage discontinuities in business strategies (Kaplan and Lamotte, 2001). Despite the differences between quality programs and the BSC, Kaplan and Lamotte (2001) see commons between the two frameworks. They point out similarities in the four perspectives of the BSC and the four sub-categories (customer-focused results, financial and market results, human resource results and organizational effectiveness results) in the Baldrige Business Results category. The EFQM is also converging on more detail in assessing the organization's results. Proponents of the Baldrige frameworks also note the shift over the years to integrated measurement. In 1997, the Baldrige criteria moved "further away from a perceived narrow focus on 'managing quality' to a comprehensive framework for improving overall organizational performance excellence" (Evans, 1997).

In this business case we can find that these excellence models are used in order to build and maintain quality in the organization so one can adopt it to handle quality within the whole organizations rather than in one department within it.

For the Economic Value Added (EVA) model, which is a single metric (although it can cascade down and across an enterprise to evaluate the performance of specific investments) it is complementary to the balanced scorecard and can be included in one of its perspectives (Kaplan 2001). Using EVA alone can cause managers to invest in less risky, cost-reducing activities rather than in growth activities and as a pure financial model, EVA cannot serve as a vehicle for articulating a strategy. But coupled with the BSC, the trade-offs between short-term productivity improvements and long-term growth goals can be managed (Kaplan 2001).

Again, just as with Economic Value Added (EVA), the Activity-Based Costing (ABC) can be complementary to the BSC. Companies with large and growing indirect and support expenses may benefit from an ABC measurement scheme first. Companies with a low return on capital and a weak financial structure may start with EVA first (Kellen 2003). If the organization wishes to implement a major change in its strategy, a BSC scheme may be embarked upon first. Over time, EVA and ABC metrics can find their place within the BSC (Kaplan 2001).

For the Action-Profit Linkage (APL) model that shares features in common with BSCs and ABC. Like ABC, APL looks at a firm as a collection of activities. Unlike ABC, APL describes these activities in a strict behavioral linkage. Like the BSC, the APL model accommodates measures from different aspects of a firm and combines internal and external measures and lagging and leading indicators. While the BSC does have this notion of causal linkages between elements within the BSC, the APL model ascribes behavioral causal linkages and because of this, focuses more on the company's actions (Epstein & Westbrook, 2001). Despite the differences between APL and the BSC, Epstein & Westbrook stress the compatibility between the APL and the BSC frameworks.

Balanced Scorecard framework deals with the performance from four perspectives, which are financial, customer, internal processes, and learning and growth each in separate means or measures from the other without giving one indicator that reflect the overall performance in general. The same can be found in the Intangible Assets Monitor (IAM) which measure the net-book value as a tangible asset and the internal structure, external structure, and individual competence as intangible assets without giving indicator that reflect the overall performance in general.

In the contrary we can find that QEST model, which measure performance for four categories (quality, economic, social, and technology) each with respect to many perspectives which may include the BSCs Perspectives and more, was solve this problem and give one indicator to all perspectives, but this model is oriented to measure the software development performance (Abran and Buglione 2002).

Other models such as the performance pyramid which may used as methodologies that helps to divide the entity into levels (Business, core business, process, department and team work, and individuals) and measure the performance in each level regardless what to measure. While the Balanced score card and critical few framework could be designed in a way that combine several of the previous models. Table 1 shows a brief comparison between all models and frameworks.



Table 1: Models Comparison Matrix

No.	Model	Financial Aspect (Tangible Assets) Covered	Non Financial Aspects (Intangible Assets) included	Multi Dimensional	Performance Value for each perspective	Consolidate Performance Value "All measures integrated into one or few measures"	Simplicity (Ease of use)	Validity (For Marketing & Sales)	Flexibility	Aspects	Limitation	Lagging / Leading Indicators exist	Advantages over the other models
1	BSC	YES	YES	YES	NO	NO	Simple	YES	Not Flexible	Financial, Customer, Internal Processes, and Learning and Growth	N/A	YES	Could be used for a unit in the corporation
2	EVA	YES	NO	NO	YES	N/A	Simple	NO	Not Flexible	Financial	Overall measure of financial performance	NO	It is a financial performance metric that is most directly linked to the creation of shareholder value over time.
3	IAM	NO	YES	YES	NO	NO	Complicated	YES	Not Flexible	Internal / External Structure. (Growth, renewal, efficiency, and stability).	The people are the only profit generator to the company.	NO	Convert every human action into tangible and intangible structure, by this performance could be measured for humans.
4	ABC	YES	NO	NO	YES	NO	Simple	YES	Flexible	Which activities generate revenue excess of cost, and provide insight to what provide value to customer.	Provide insight on how overhead costs should be allocated to individual products and customers.	NO	Lead managers to get insight on profitable activities based on customer or product viewpoint.
5	PPA	YES	YES	YES	N/A	N/A	Simple	YES	Flexible	Define and measure objectives of (business, core business processes, teams and individuals).	Used in software development projects	NO	Software development measurement model.
6	CVA	NO	YES	NO	NO	NO	Simple	YES	Not Flexible	Customer	Provide data integration and measurement regarding the customers.	YES	Used in managing the customer value.
7	CF	YES	YES	YES	YES	YES	Simple	YES	Flexible	Financial and non financial depending o the category identified by the management.	N/A	YES	Could be used for a unit in the corporation
8	APL	YES	NO	NO	YES	NO	The difficulty is on reflect the action and its economic impact	NO	Flexible	Corporate Strategy, company actions, product / service delivered customer action and economic impact.	Linkages between company actions and profit	YES	Ascribes behavioral causal linkages and focuses on the company's actions.
9	QEST	NO	YES	YES	YES	YES	Complicated	NO	Not Flexible	Quality, economic, social, and technical.	For software performance measurement	NO	A multi dimensional model for software performance measurement.
10	QMM	YES	YES	YES	YES	YES	Need a long time to use it easily	NO	Not Flexible	Quality management models' perspectives (MBNQA & EFQM)	Continuous improvement programs that might not be best studied to help manage business discontinuities in business strategies.	NO	Quality Management program that must be adopted for all the organization over a long period of time

**KEY:** BSC: Balanced Score Card, EVA: Economic Value Added, IAM: Intangible Asset Monitor, ABC: Activity-Based Costing, PPA: Performance Pyramid Approach  
 CVA: Customer Value Analysis, CF: Critical Few, APL: Action-Profit Linkage, QUEST: Quality, Economic, Social and Technical, QMM: Quality Management Models

## PROBLEM DEFINITION & RESEARCH OBJECTIVES

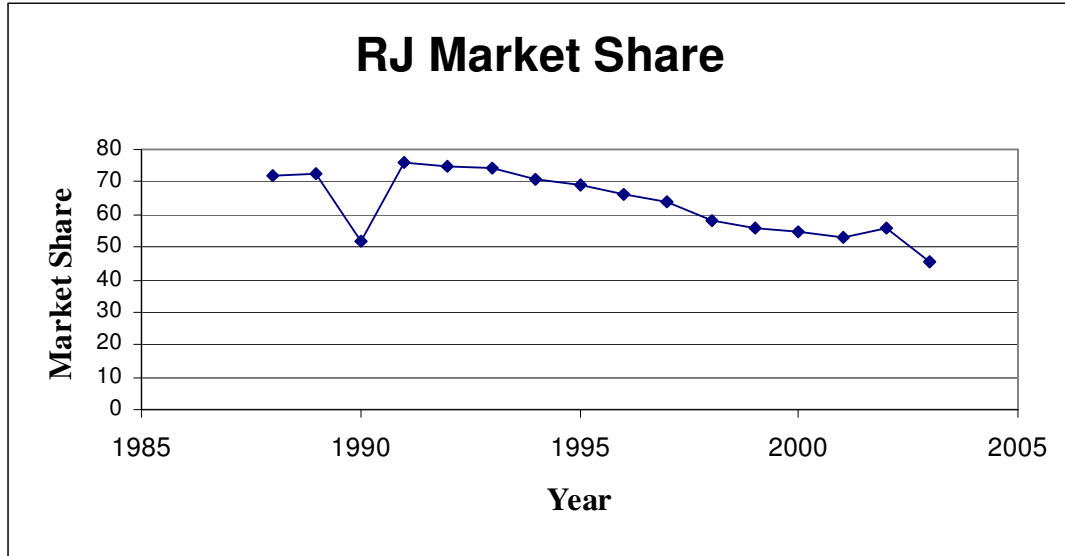
### 1. PROBLEM DEFINITION

In 1963 Royal Jordanian (RJ) was established by an order from his majesty the late King Hussein to be Jordan's National Flag Carrier. RJ expanded its services to cover the four continents, connecting about 50 different stations with Jordan via its fleet. During this, RJ aimed to activate the cooperation and integration between other airlines and enhance its position in the airline industry market. In order to succeed, RJ must stay ahead of the competition to ensure that it is in accord with processes of modernization and growth.

During the past decade the airline industry in general and RJ in particular faced difficulties, because of the sever downturn in the international travel and tourism as a result of the second gulf war, revolts in the west bank, September 11<sup>th</sup> attacks, and the Iraq War in 2003. The effect of these events on Royal Jordanian was devastating and since then RJ is facing obstacles, challenges, and repercussions because of its geographic proximity to the region of conflict. This appeared on the financial aspect of the international airline industry which shows great losses of \$13 billion, \$ 11 billion, and about \$ 13 billion during the years 2001, 2002, and 2003, respectively, International Air Transport Association IATA (2004).

RJ has various sources of revenues, but passenger revenue has usually been the prime source with about 70% of the total revenue (RJ, 2004). Cargo, excess baggage, and mail are other sources of revenue. After reviewing the market share of RJ regarding the number of passengers carried over the last sixteen years as shown in Figure 1 (RJ, 2003) it is obvious that RJ is losing its market share due to the fierce competition. Therefore,

RJ should work hard to recover and regain its position, especially with the fact that there is always upswing in travel activity and blossoming in the airline industry. RJ must compete to obtain a better position amongst other airlines especially with the eight years exclusive right to operate regular flights from and to the kingdom starting from February 5<sup>th</sup>, 2002. After this period other airline companies will be allowed to operate scheduled flights to and from the kingdom on the same RJ routes.

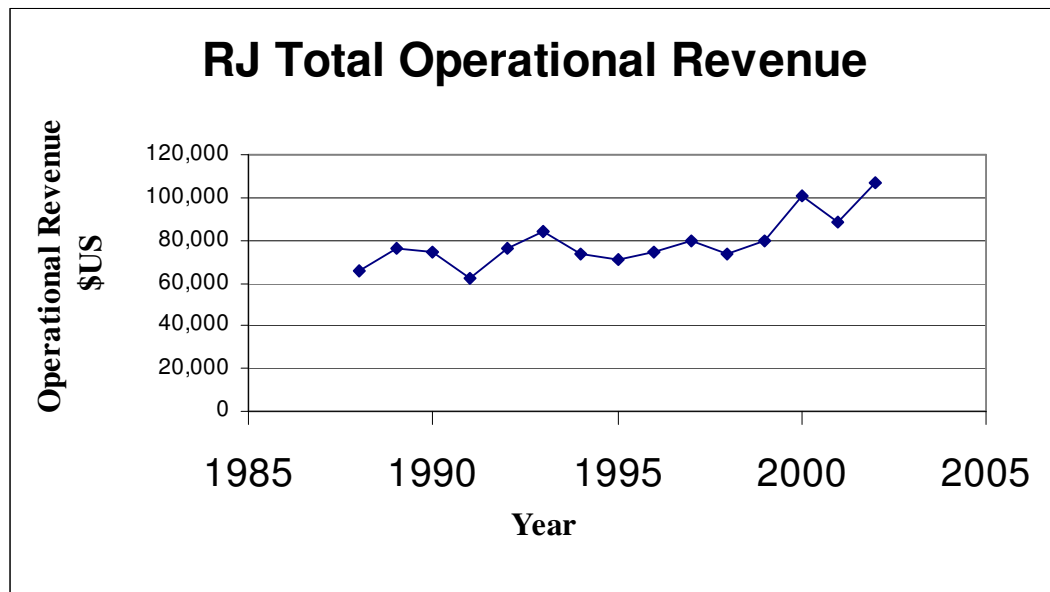


**Figure 1: RJ Market Share over sixteen years.**

This will be achieved by identifying the causes of this lose, and developing and improving the quality of the services offered to its customers in the air and on the ground. RJ is concerned with safe, secure and smooth transport of passengers and luggage despite of all challenges, and yet it has to remain profitable and generate revenue. This is highly relying on its performance which is its main key and real asset to its competitiveness in the international market. This will enables it to face the challenges in the air transportation industry and to stand among the world's most successful airlines.

After reviewing the operating revenue per employee over the last fifteen years shown in Figure 2 (RJ, 2003), we can notice that there is an increase in the operating revenue per employee, although the company is losing its market! This may be caused by the decrease in the number of the employees in 2002, or according the normal growth in the market in general. From figure 1 and figure 2, we can conclude that it is necessary to review the performance and develop an improvement plan to increase the market share that will lead to increase the revenues and profits.

This research will study one of the most important departments inside RJ which is marketing and sales department and identify its needs to develop and implement a systematic performance management system against robust standards in order to measure, manage and improve all activities carried out to pursue the corporate key strategies and objectives effectively.



**Figure 2: Operating Revenue per Employee over the Last Fifteen Years.**

The importance of this department is that any small improvement or change to the processes inside it will have a large / remarkable impact on the output in the corporate level both financially and on the customer satisfaction issues especially that it covers the tangible part of the airline industry to its customers which is sales, on the hub and outstations as shown in its organization chart figure 3.

This will adhere with the IOSA certification (IATA Operational Safety Audit) RJ applied to have in November 2003, this certification aims to use a single standardized system that will be accepted worldwide, it will cause greater cost efficiencies through improved operations in the long term. From one side IOSA covers operational aspects to be complied with this accepted global standard, on the other the Marketing and Sales services is not included in the IOSA scope since it is not an operational department, although it is very important for the company blossoming. Its vision, mission and strategies should be defined and the progress of it should be measured and managed. From here this research come into existence and has the following objectives.

## **2. OBJECTIVES OF THIS RESEARCH**

The main objectives of this research are to:

1. Propose an appropriate model of performance management that aims to link activities and processes with the organization strategic goals,
2. Facilitate the use of performance information for making administrative decision about initiatives to achieve continuous improvement.

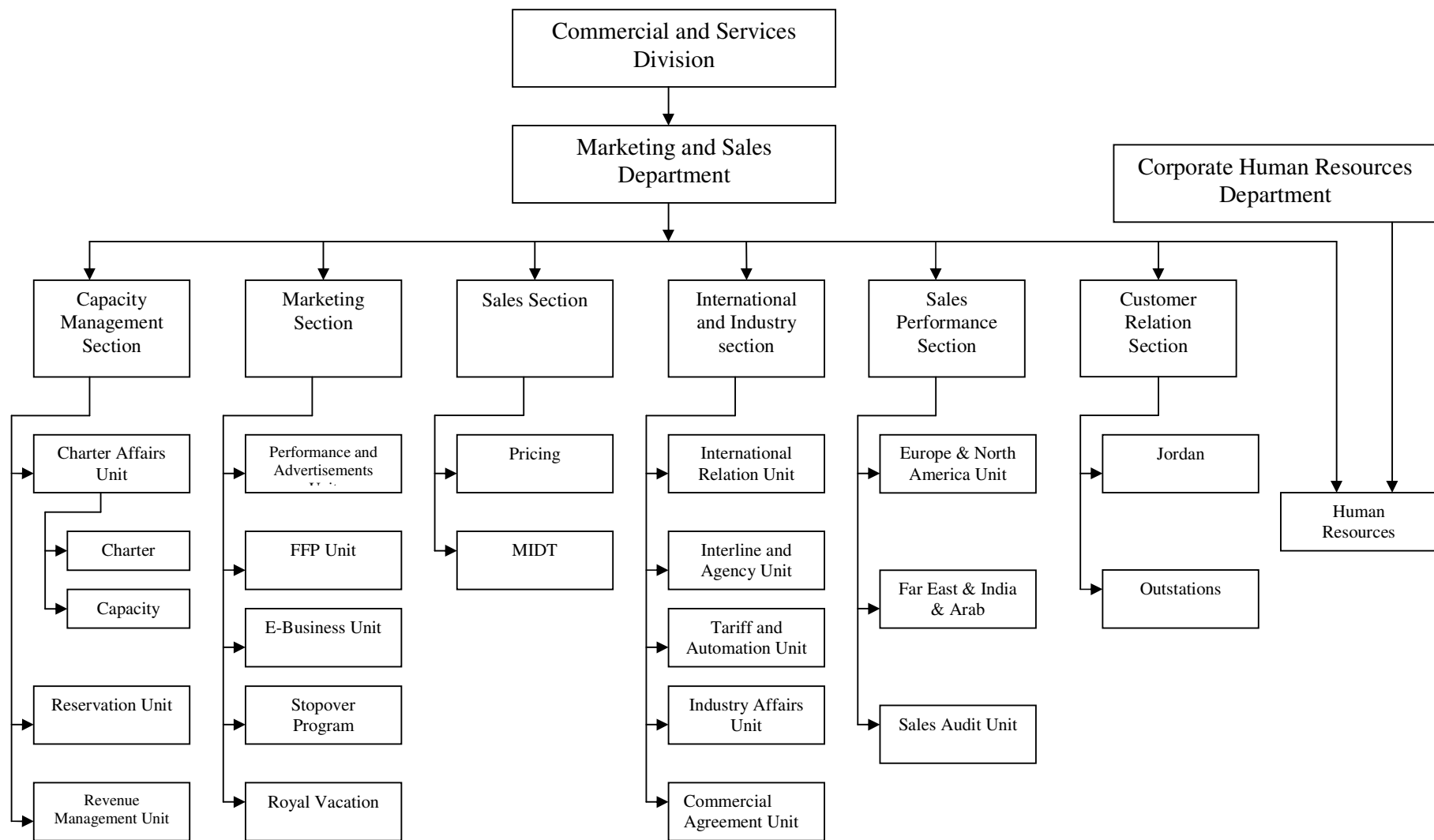


Figure 3: Marketing and Sales Organizational structure, (RJ, 2004).

## **RESEARCH METHODOLOGY AND FRAMEWORK**

### **1. INTRODUCTION**

Establishing a comprehensive and flexible strategic performance management system that is able to adapt the fast changes in the business environment, and is able to translate strategy, goals and objectives into actions by connecting them in a logical relationship is important. Therefore, a model that is based on the Balanced Scorecard and critical few concept has been developed.

Mission, Vision and key strategic options for the Marketing and Sales department were derived and defined from the corporate vision, mission and strategic objectives. Then the current situation is analyzed by using the SWOT analysis. From the strategic options and objectives performance measures has been developed in order to be used in the performance management cycle.

To facilitate the use of these measures and support managing the performance of the department, a software was developed using Microsoft Access, Excel and Visual Basic. This software compare the current situation with last and targeted objectives for each measure then present it in a dashboard.

### **2. RESEARCH FRAMEWORK: BALANCED SCORECARD (BSC)**

BSC Model is selected to be the performance management model for the Marketing and Sales Department. This model is proposed and modified by integrating all measures per perspective together and come out with four critical measures that represent the overall department's performance.

This department is considered to execute plans for local and international RJ's markets, thus enhancing RJ image and keep the public informed about RJ's services. These services are considered to be future product that must be sold before its production and can't be stored if not sold. These services are affected by all other operational departments' performance in addition to the general economic and political situation in the country and the region.

The performance model proposed is covering four perspectives of key measures that are; Financial, Customer, internal processes and learning and growth. These measures are integrated with each other depending on a preset weight per measure and per perspective's objectives; these weights are specified by the management. The outputs of this are four critical measures.

These measures represent what is important only, and help senior management to focus on outcomes that should cover all aspects considered in the strategic objectives derived from the mission and vision, and to focus on the most critical factors to its success. These proposed measures must be fully integrated with existing departmental processes and initiatives, and then the progress against these measures has to be assessed, analyzed, summarized and reported on a regular basis depending on the program goals that established as targets to be achieved. By this, managers will know how well they were in making corrections? and what improvements are needed accordingly at every level of the company.



### 3. RESEARCH METHODOLOGY

The performance management process provides insight on how each department implements the corporate strategic plan and achieves its mission more effectively. The methodology to accomplish this research and develop the performance management model is shown in figure 4.

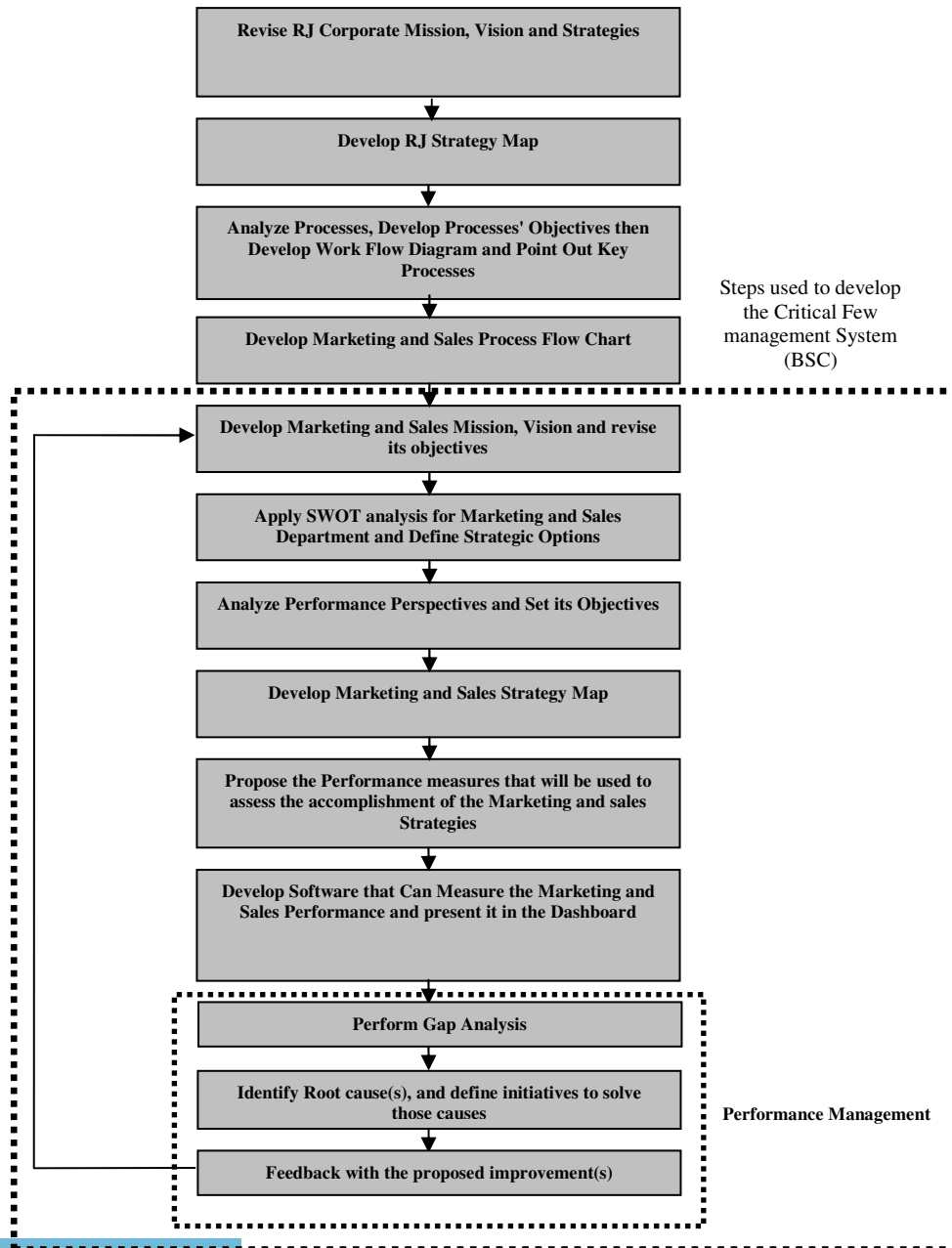


Figure 4: Research Methodology

This methodology covers the following steps:

**3.1 Revise RJ Corporate Mission, Vision and Strategies:** This step aims to review the corporate mission, vision and strategies; it started by collecting information available about the company's mission, vision and objectives that found to be stated and documented.

These are analyzed and used in the developed Marketing and Sales mission and objectives.

**3.2 Review RJ Strategies and Develop the Corporate Strategy Map:** After reviewing the corporate strategies it was found that these strategies are not summarized and mapped in a strategy map. This map was developed; it provides a visual representation of the organization's strategies. Its importance is simplifying and characterizing links between corporate strategic goals. The output of this step will be used in the development of the Marketing and Sales strategy map.

**3.3 Analyze Marketing and Sales Processes, Develop Processes' Objectives then Develop Work Flow Diagram and Point Out Key Processes:** This step started by reviewing Marketing and Sales Policies and Procedures Manual, which is divided according to functions or section but not processes, it contains nothing about the jobs for each employee and how to measure the performance of each section or job, because of this Marketing and Sales processes were specified and reviewed. Several meetings were conducted with Marketing and Sales employees, and this is controlled by using (FORM A) presented in Appendix B. The output of this step is a process flow diagram developed for each process includes input and output. The information collected is used to develop the work flow diagram which was not found in Marketing and Sales documents. This diagram will simplify the understanding of department's main processes.

**3.4 Develop Marketing and Sales Process Flow Chart:** This was developed depending on the work flow diagram.

### **3.5 Develop the Marketing and Sales Mission, Vision and Revise it's Objectives:**

After reviewing Marketing and Sales Documents it was found that there is no stated department's mission or vision, from here Marketing and Sales mission and vision were developed to answer the following:

- What Marketing and Sales want to be 3-5 years from now?
- What is the reason for Marketing and Sales existence?
- What are Marketing and Sales services?
- What are the markets that Marketing and Sales target?

Then objectives are reviewed and linked to its mission and vision.

### **3.6 Apply SWOT Analysis for Marketing and Sales Department and Define**

**Strategic Options:** in order to develop the strategic options (objectives) that will be used in developing Marketing and Sales strategy map and performance measures, SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) is took place. This analysis used to study the main factors that affect Marketing and Sales from outside the department (External) as infrastructures and political, economical, social and technological factors (PEST), etc...that considered to be opportunities and threats, then analyzing factors that affect the processes inside Marketing and Sales (Internal) as the flow of processes, way of accomplishing work, staff qualifications, etc... and considered to be strength or weakness.

### **3.7 Analyze Performance Perspectives and Set its Objectives:**

Performance is classified into four perspectives; each perspective has its own objectives that derived from the strategic options. These objectives used to develop Marketing and Sales performance measures and strategy map.

### **3.8 Develop Marketing and Sales Strategy Map:**

After reviewing the corporate strategies and the Marketing and Sales main functions, then applying the SWOT analysis

on Marketing and Sales department and develop its strategic options for each opportunity and each threat, in order to maximize the effect of the opportunities and strengths and, minimize the effect of the threats and weaknesses. These options are used to identify alternative strategies that directly linked to the departmental mission and vision; and used to develop the strategy map for this department.

**3.9 Propose the Performance Measures that Will Be Used to Assess the Accomplishment of the Marketing and Sales Strategies:** After set the objectives derived from the strategic options, performance measures are proposed for each performance perspective.

**3.10 Develop Measurement Software that Will Be Used in Measuring Marketing and Sales Performance and Present it in a Dashboard:** In order to simplify the measurement process and its presentation, a software was prepared using Microsoft access as the data base engine, excel to show some historical trends and visual basic for user interface. This software was developed to help the responsible management identifying the status for each measure. The importance of the software is simplifying the performance management process, which will be completed by the key people in the department, after monitoring the performance measures, pinpoint weakness points, and solves it.

**3.11 Performance Management Process:** it is a system based approach where employees, management and processes are joined together, evaluated and directed in means of achieving stated objectives successfully and providing a feedback about the progress toward these objectives. A corrective action must be taken if there is any difference (gap), and employees and managers should work together to improve processes and performance continuously. The following should be done to complete the management cycle:

- 1. Gap Analysis:** To identify opportunities for processes' improvements by comparing the current situation for each measure with the stated target set by the management. This gives an indication of how well each process is progressing toward its objectives.
- 2. Root Cause Identification and Initiative Definition;** After identifying whether there is a gap between measured and targeted values, root cause(s) must be identified to solve the problem that prohibit any process or any indicator from achieving its goal. This will help in understanding whether the weakness(s) is in the strategic plan, the process, or in the tools used to perform the process, and it will help in making improvements for the next performance period. After that; initiatives to solve these problems and improve performance must be stated, these initiatives are generated and managed by the key people who directly deal with the problem and its root cause(s).
- 3. Feedback and Improve the Processes and Strategies Continuously;** The ultimate cause of transitioning from performance measurement to performance management is to lead organization for continuous improvement by let the department continuously tracks its performance with respect to its targets. The feedback provided will help Strategy Formulators who are responsible for making sure whether these strategies are still applicable or not by conducting environment analysis and whether these strategies could still be achieved as planned or not. Based on such analysis, strategies could be adjusted; redirected or even new strategies may be developed in order to align processes and activities with the general corporate goals and objectives.

## RESULTS AND DISCUSSION

### 1. INTRODUCTION

The development of Marketing and Sales Performance management System contains several steps starting from reviewing RJ Mission, Vision and strategies, developing RJ strategy map, studying Marketing and Sales processes, analyzing its environment, defining its relevant strategic options and establishing its performance measurement system. After that, this system was automated in order to facilitate scanning the results and managing processes which lead to continuous improvements. Following are the results of this work:

### 2. RJ MISSION, VISION AND STRATEGIES

RJ Mission and vision were declared in RJ Corporate Management Manual (2004) and were as follows:

#### 2.1 Royal Jordanian (RJ) Mission Statements:

- Provide safe, reliable and convenient air transport services and connections between the Middle East and the rest of the world and to extend such services through alliance with complementary carriers.
- Deliver quality service through integrated and dedicated teams of highly trained professionals at standards surpassing the competition.
- Perform at increasing levels of productivity and efficiency that will generate rate of probability to sustain its growth and allow for its reinvestments in the development, improvement and well being of its human resources.
- Represent the best of Jordan, its people, culture, products and services, guided as always by its pioneering spirit of innovation and imagination to reach higher skies.

## 2.2 Royal Jordanian (RJ) Vision Statement:

We Team Up to make Royal Jordanian:

The Company Known for Excellence in Performance and Service, In the Business of Transporting Passengers and Cargo.

## 2.3 RJ Strategies for the years (2004-2008) as presented on Strategic business plan 2004-2008 and future resources requirements (Nov, 2003)

This strategic plan focuses on achieving the results of increasing revenue, stabilizing RJ's financial and cash flow situation, and making RJ a higher value business. Its main focus was on: Corporate restructuring and investment; Network optimization; Marketing strategy; Product improvement; and Fleet renewal.

## 2.4 Strategy Implementation

2.4.1 **Corporate Restructuring and Investment;** which covers the commercial driven organizational structure, human resources and the information technology. It will support the transparency between departments, decentralization of work processes, elimination of the duplicate work within the department, and provide coherent integration within sections of each department and RJ as a whole.

2.4.2 **Network Optimization;** which is divided into network restructuring and yield improvement. This will be achieved by studying the route economics to optimize the net work and rationalize the pricing policy and to establish yield criteria.

2.4.3 **Marketing Strategy;** it is focusing on increasing the market share and compensation for the reduction of destinations served directly by RJ. This will happen after investing in the Marketing and Sales team to improve the market share

through aggressive sales campaigns, state of the art training programs and access to the market intelligence through the Market Intelligence Data Tapes (MIDT).

2.4.4 **Product Improvement;** this concentrates on the product to be tailored to serve customers, starting with improving services in all stages such as reservation and ticket sales, airport services, in-flight catering & services and on-board systems.

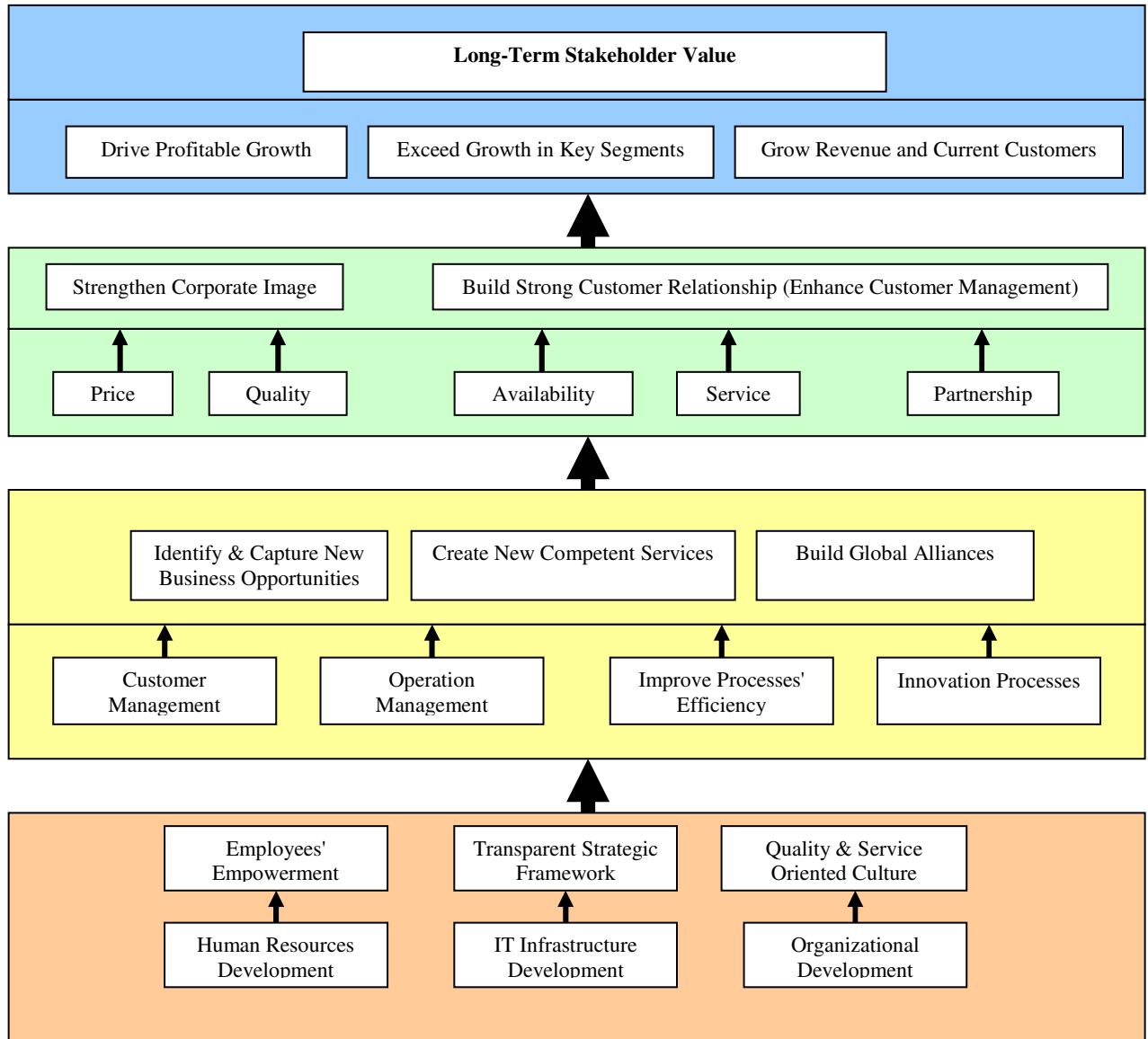
2.4.5 **Fleet Renewal;** which aims to achieve reductions in maintenance and operating costs.

### 3 RJ STRATEGY MAP

The strategy map shown in figure 5 defines the stakeholders' objectives of long-term value, for growth and productivity at the highest level. The second level of the strategy map has to do with the customer and a value proposition. This can be accomplished by enhancing customer management and strengthen corporate image, through appealing a unique value proposition of price, quality, relationship, brand and so forth. Then the third level defines the processes developed to satisfy that customer, and include building global alliances, creating competent services, and identifying new business opportunities. Finally, the base is the people, the technology and the organizational culture—the intangible assets. This level defines the logic about finding the skills and technologies needed to support all processes, and help in creating new products in order to satisfy a customer and create profit for the stakeholder.

This map is used in developing Marketing and Sales strategic options, after conducting the departmental analysis that depends on its Policies & Procedures manual and related reports prepared by its sections.





**Figure 5: RJ Strategy Map**

#### 4. MARKETING AND SALES SECTIONS' ANALYSIS

Marketing and Sales main sections are as shown in its Organization diagram documented on the Corporate PPM (2004) as in figure 3. At the time of applying the study these sections do not have a documented mission, objectives or process diagram, which was developed after analyzing these processes and shown as follows:

#### 4.1 Marketing Section:

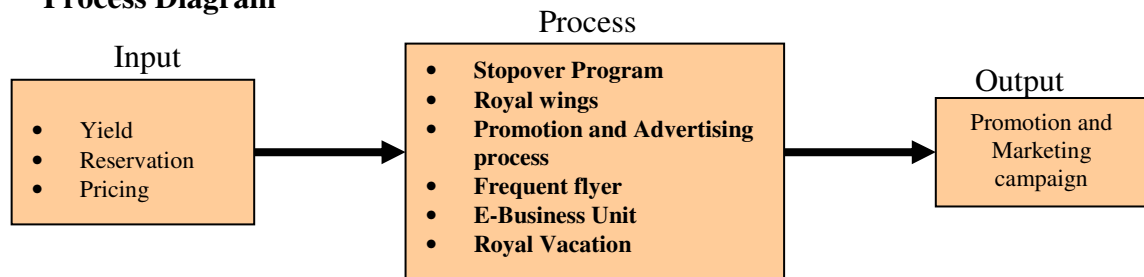
##### A. Mission

Look into many new types of channels, which will bring many customers to our services.

##### B. Objective

Study, organize, produce and distribute all the tools and materials used to support the yearly marketing plan locally and internationally, in order to accomplish the target of the commercial department.

##### C. Process Diagram



**Figure 6: Marketing Process Diagram**

#### 4.2 Sales Section

This section is composed of two units the pricing unit and the MIDT (Marketing Intelligent Data Tape) unit.

##### 4.2.1 Pricing:

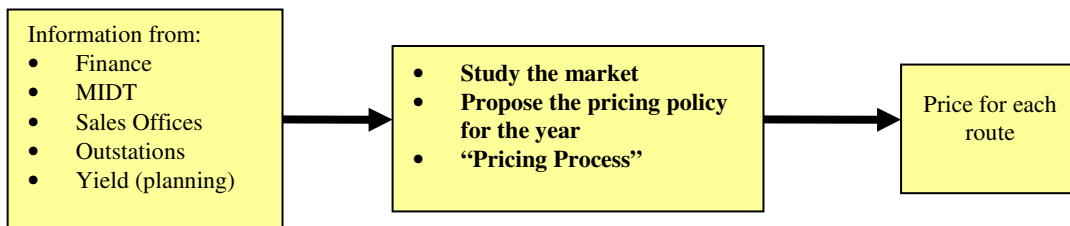
##### A Mission

The pricing section mission in airline industry is to study and offer prices that are able to maintain and expand the existing customer base in addition to keep the company's product make profit.

##### B Objective

Study, adopt and implement a pricing policy that includes offers, fares and discounts of various levels to enable RJ to compete with other airlines in the industry and therefore increase the market share.

### C Process Diagram



**Figure 7: Pricing Process Diagram**

## 4.2.2 Marketing Intelligent Data Tape (MIDT)

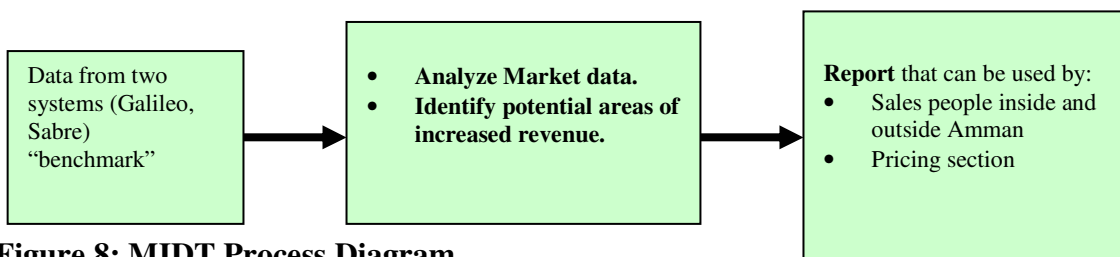
### A Mission

Manage leading sales efforts and support sales process in order to maximize efficiency, increase market share and increase revenue.

### B Objective

Monitor the market through continuous scanning of the MIDT report that shows some of the sales agents' sales for RJ and other carriers, and Communicate with Royal Jordanian representatives in foreign countries regarding major capacity and reservations obstacles in order to offer some facilities and increase market share.

### C Process Diagram



**Figure 8: MIDT Process Diagram**

## 4.3 Capacity management Section:

This section is composed of three units; Reservation unit, Revenue management and Charters affairs.

#### 4.3.1 Reservation:

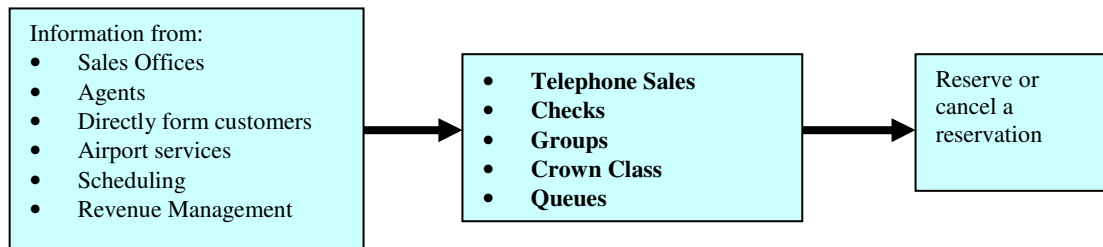
##### A. Mission

Directing and coordinating flight reservation activities for Royal Jordanian and manage the selling activities of personnel engaged in selling Royal Jordanian tickets for scheduled flights

##### B. Objective

Manage Reservation Process, preflight check and related activities to achieve planned capacity, increasing volume of reservations as well as ensuring that competitive scheduling services are being provided for all flights in R.J.

##### C Process Diagram



**Figure 9: Reservation Process Diagram**

#### 4.3.2 Revenue Management

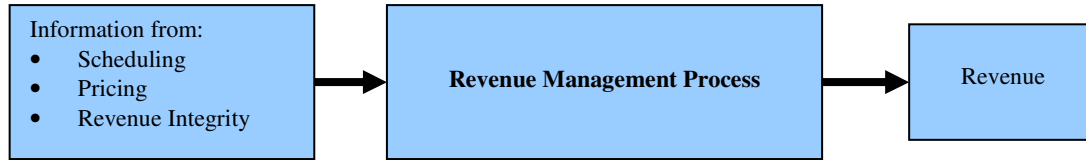
##### A. Mission

Analyze air transport economic data, to estimate future volume of flight reservations; in order to increase the chance of achieving higher seat factor.

##### B. Objective

Direct the activities so as to achieve high seat factor rating along with attempting to decrease cost of under booked flight to achieve higher revenue.

### C Process Diagram



**Figure 10: Revenue Management Process Diagram**

### 4.3.3 Charter Affairs

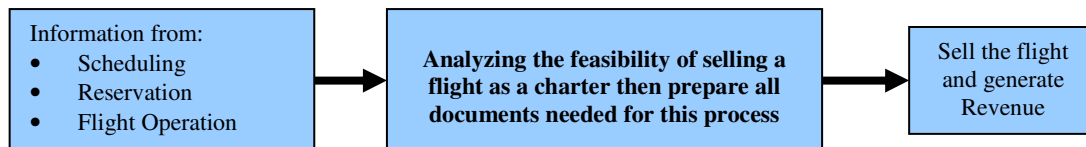
#### A. Mission

Provide and manage competitive services for customers, to increase the utilization of RJ flights and increase the revenue.

#### B. Objectives

Planning charter flights and planning for them in coordination with concerned departments.

### C Process Diagram



**Figure 11: Charter Affairs Process Diagram**

### 4.4 Customer Relations:

The function of customer relation management is not centralized in Marketing and Sales departments, there is another two locations perform analysis related to this function but not integrated with it, one in the Corporate Quality Management Department and the other one is in the Airport Services Department.

#### A. Mission

Interpreting and implementing Royal Jordanian's policies and procedures regarding customer relations and contact with public so as to ensure quality service and commendable corporate image.

#### **B. Objective**

Handle walk in customers' complaints and promote Royal Jordanian's services so as to reflect a positive image for Royal Jordanian's customer services.

### **4.5 International and Industry Affairs**

#### **A. Mission**

Liaise with International Air Transport Association (IATA) and coordinate with concerned departments and outstations for the interpretation and correct the application for fares, resolutions, rules and regulations as well as ensure implementation of new rules and regulations adopted by Royal Jordanian.

#### **B. Objective**

Manage and maintain agreements with air transport entities, to test its applicability and assure its implementation in coordination with applied rules and regulations.

### **4.6 Sales Performance Section**

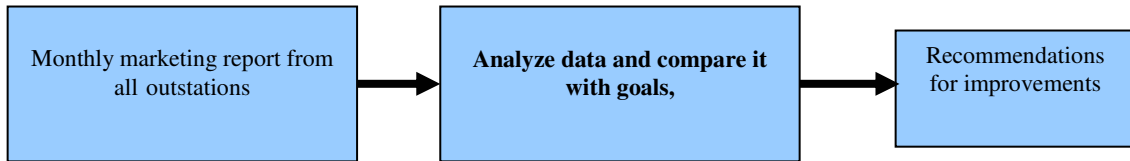
#### **A. Mission**

Monitoring outstations sales performance and ensuring implementation of Royal Jordanian's sales strategy and goals.

#### **B. Objective:**

To monitor in and out stations sales performance and ensure that RJ sales strategy is implemented and its goals are achieved.

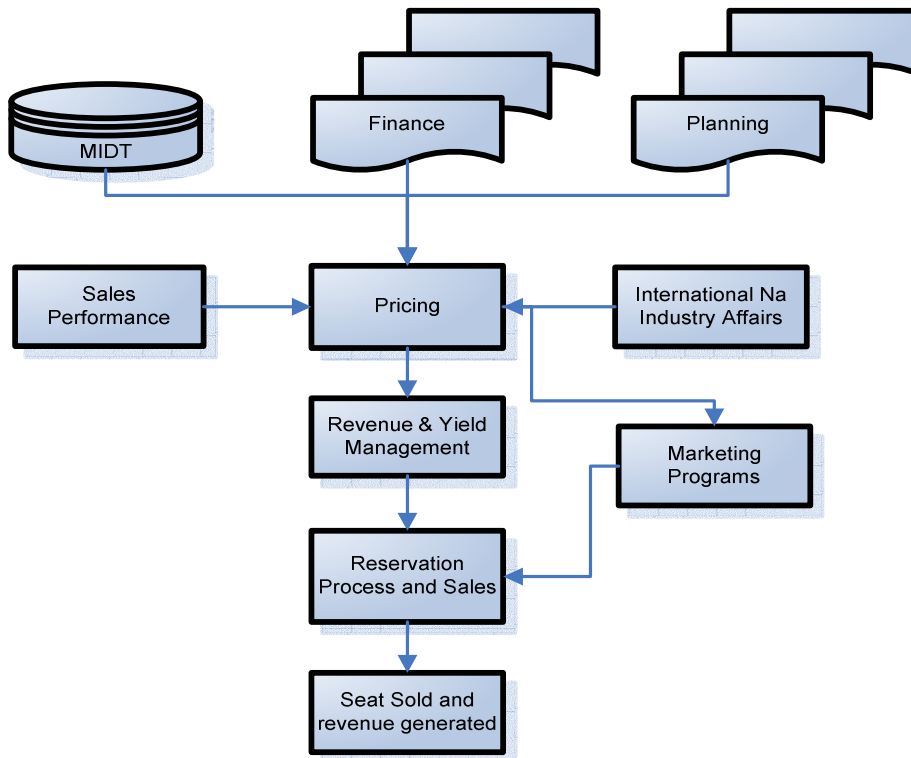
### **C Process Diagram**



**Figure 12: Sales Performance Process Diagram**

From the above analysis the Data flow can be described as shown in Figure 13. From the previous information it is obvious that Marketing Programs Affect the image of the Airline and affect the action of selling seats & generate revenue. From here key processes inside the Marketing and Sales department considered to be:

1. Pricing Process,
2. Revenue and Yield management, and
3. Marketing Programs.



**Figure 13: Marketing and Sales work Flow Diagram**

## 5. MARKETING AND SALES PROCESS FLOW CHART

Marketing and Sales department does not have a process flow chart that describes its main processes. This chart was developed as shown in figure 14 depending on the data flow diagram shown in figure 13 in order to facilitate understanding the flow of processes inside the department. It defines the process model for accomplishing Marketing and Sales main objectives. Input, output and customers for each process are identified to facilitate the development of the performance measurement / management system for this department.

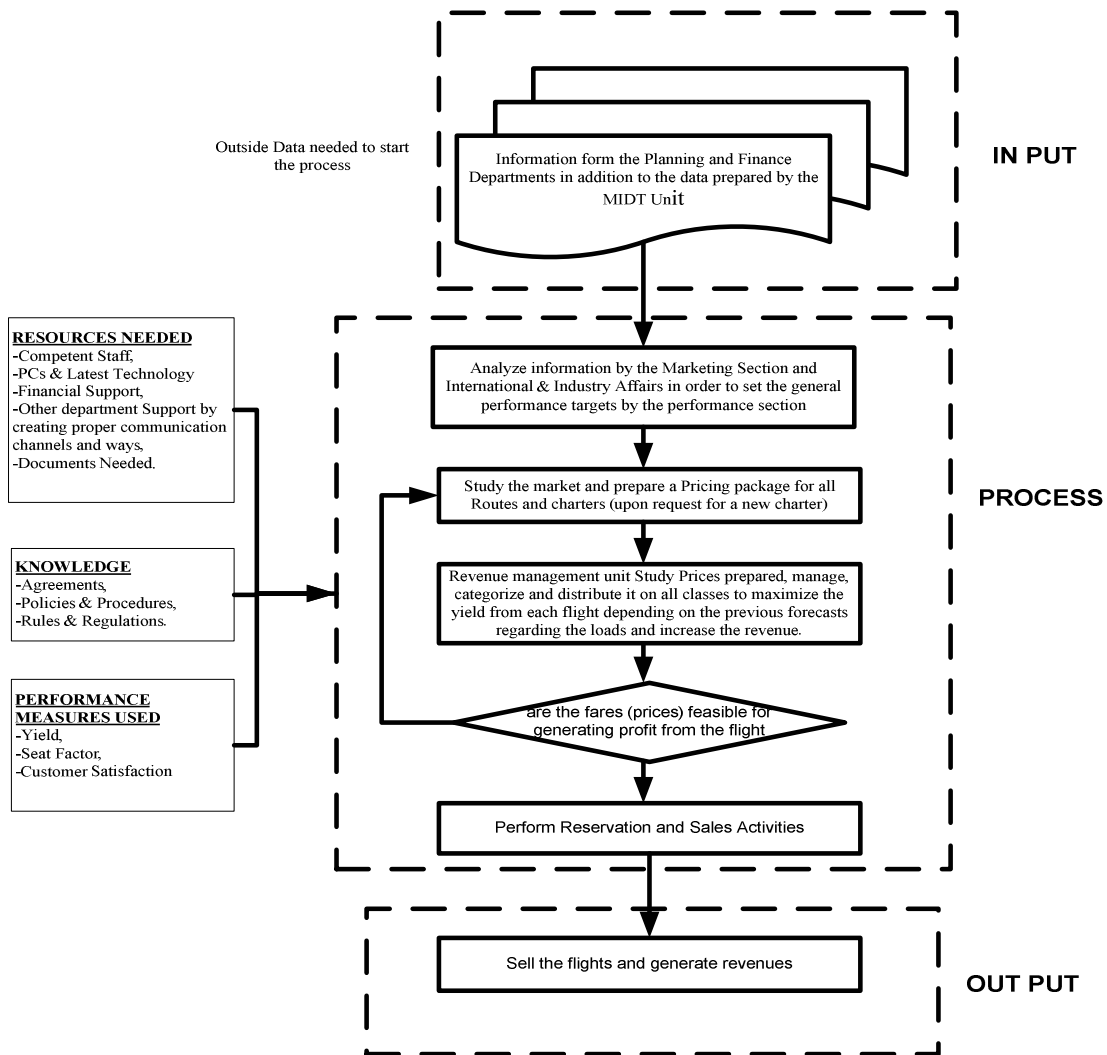


Figure 14: Marketing and Sales Processes Flow Chart



## **6. DEVELOP THE MARKETING AND SALES MISSION AND VISION, AND STUDY ITS OBJECTIVES**

After reviewing Marketing and Sales documents, it was found that no declared Mission, vision and objectives were included. From here and after studying department processes; mission; vision and objectives were stated as follows.

### **6.1 Marketing and Sales Mission**

Marketing and Sales Department is committed to provide quality services to suit customers' needs and expectations, through efficient communication methods in order to improve sales and market share, and drive revenue and profit improvement.

### **6.2 Marketing and Sales Vision**

Marketing and Sales department will continue to:

1. Promote RJ and Jordan culture, tradition and capabilities to the world.
2. Be the model for Service excellence as well as leading efforts to closer cooperation and strong marketing alliances between the regional carriers.
3. Extend our destinations reached through aggressive development of its bilateral alliances.
4. Use the e-ticketing way to sell our product.

### **6.3 Marketing and Sales Objectives**

Marketing and Sales objectives are:

1. Propose long, medium and short-term strategies to manage activities concerning the Marketing and Sales Department.
2. Endorse suggested plans and programs so as to achieve objectives.
3. Develop and execute a comprehensive marketing plans and programs, both short and long range to support sales and revenue objectives of Royal Jordanian.

4. Research, analyze and monitor financial, technological and demographic factors to capitalize on market opportunities and minimize effects of competitive activity.
5. Develop and manage RJ's local and international marketing operation.
6. Develop and recommend service positioning, presentation and pricing strategy to produce the highest possible long-term market share.
7. Achieve satisfactory profit/loss ratio and market share in relation to present standards of aviation industry and economic trends.
8. Ensure effective control of marketing results and taking corrective action to guarantee the achievement of marketing objectives.
9. Monitoring competitive airline services and marketing activities.

## **7. STRATEGIC ANALYSIS**

This is accomplished by performing SWOT analysis on Marketing and Sales department, which covers the following:

### **7.1 Business Environment Analysis:**

This step composed of two levels of analysis which are; External and Internal Variables analysis. These variables are affecting the current environment of RJ's business opportunities and classified into external variables, which are factors that affect RJ in general and Marketing and Sales performance in particular and represent opportunities and threats, while internal variables that represent strengths and weaknesses inside Marketing and Sales activities and processes. After reviewing and analyzing department's processes and documents used, variables are identified and discussed by the responsible management in a meeting held to approve and rank these points according to its importance and effect.

**a. External Variables Analysis:**

External Variables affecting the operations inside Royal Jordanian in general and Marketing and Sales in particular and covered under Political, Economical, Social, and Technological (PEST) aspects were studied and classified in view of:

1. International and National Laws;
2. Company Rules and Regulations;
3. Agreements;
4. Political and competitive environment that affect RJ services and the demand rate for these services;

From here we can conclude the following **Opportunities**:

1. Aviation Industry liberalization and globalization which gave RJ an access to New markets. This Assure the need for improving cooperation with international alliances that will support RJ, and increase the market demand for the extended routes.
2. Lower overhead cost structure, which was benefited from by RJ presently.
3. Privatization and restructuring process; by privatizing the general non-core activities, RJ have a space to restructure its departments for improvement purposes, which will lead to concentrates on its general goal which is; providing safe, reliable and convenient air transport services and connections to its customers.
4. Royal Jordanian Reputation which was built in two basis; moderation and modernization.
5. The large Share of 6th freedom traffic.

While the **Threats** are as follows:

1. Shrinkage of RJ's market share.
2. Slow Market (passengers) growth; indications showed that RJ is below the IATA's industry averages for the market growth.
3. Regional Volatility (Uncertain regional, political, and economical environment).  
"Regional disturbances that have engulfed the Middle East region for the last few years".
4. Increasing Costs (fuel and insurance),
5. Major reductions of yield Capacity (dump too many seats and chasing fewer passengers).
6. Increasing competition with other airlines.
7. Relatively low paid up Capital "Insufficient or lack of financial resources requested for future investments".
8. Aviation industry liberalization and globalization, which cause losing market ground due to high competition with strong alliances and limited financial resources.

**b. Internal Variable Analysis:**

Inter-departmental analysis was conducted in order to analyze the relation between the Marketing and Sales department and different actors that may affect its efficiency and product quality. The analysis shows that the main actors in Marketing and Sales processes and activities are:

1. Financial Resources (Annual Budget).
2. Hierarchical Relations with other departments (Top Management Commitment).

These actors are affected directly by agreements and cooperation with different parties that affect the department's output, by alliances with other airlines that extend RJ market, which support Marketing and Sales product and by strong competitors in the region.

From here the following **Strengths** were concluded:

1. Availability of RJ Mission and Vision, which facilitate the development of Marketing and Sales mission and objectives.
2. Top Management Commitment that empower Marketing and Sales management to develop its processes and introduce a performance management system to measure and manage its processes and outputs.

While the following **Weaknesses** were found:

1. Non-competitive product (service); resulting from aging fleet (old aircrafts) and not up-to date state of the art in-flight entertainment system and aircraft interiors.
2. Old and outdated Information Technology Systems;
3. Workforce demoralization (Low employees' morale); caused by the No adjustments for salaries, or development of attractive careers path, which cause an expert manpower migration "brain Drain".
4. Low Levels of services when comparing it with that available on the market;
5. Privatization Process cause a Lack of Working Capital / Revenue Dilution; caused by losing major revenue streams from the sale of the non core activities, such as ALDEASA (duty free), JORAMCO (Engineering and Maintenance), JALCO (Engine Overhaul), and ALPHA (Catering), which deprived the airline of the necessary investments needed to maintain its competitiveness.

6. Lack of quality of services standards, which appears on maintain applying the same level of services all the time.
7. Lack of suitable performance management / measurement system.
8. Unavailability of clear Mission and Vision for Marketing and Sales Department.
9. Unavailability of well documented quality management system.

In view of the aforementioned business environment analysis, Strengths, Weaknesses, Opportunities and Threats generated and ranked by the management in a scale of five, where (1) is the least and (5) is the most in the importance as shown in Table 2, and the SWOT Matrix shown in figure 15 is used to present these points with respect to each other. Then this matrix is plotted using the BCG Concept as shown in figure 16, this tool plot the strengths, weaknesses opportunities and threats in two axes in a way that the importance of each one is appeared. The plotted area generated will be divided into four parts. The BCG matrix was devised by the Boston Consulting Group to help companies analyzing their existing portfolio of businesses. Its purpose is to provide a summative view of the company's current markets, showing its competitive position in these markets and their prospects for growth. This concept was adopted in this research in a way that reflects strengths, weaknesses, opportunities and threats to substitute the market, competitive position, and their prospects for growth in each part. In this matrix we can see that **Area 1** where Strengths and opportunities are overlapped, this area represent the most important area since strategies cover it will use opportunities to support the strengths and lead the department to generate profit and maintain its progress toward corporate vision, this area is called **STAR** in BCG tool. Then **Area 2** where opportunities and weaknesses are overlapped, this area is called **CASH COWS** in BCG tool, this area represent points that

may cause a decline in the market if not dealt with appropriate strategies. In this area strategies projected will support opportunities to minimize and remedy weaknesses, thus solve problems in their starting points. **Area 3** where threats and strengths are overlapped, this area is called **QUESTION MARKS** in the BCG tool, also referred to as problem children and wild cats, in this area business lines or strategies projected have potential for success but require investment of resources to develop them into stars. **Area 4** where threats and weaknesses are overlapped, it is called **DOG** according to the BCG tool. This area has the same importance of **Area 1** since strategies projected on it will help in avoiding threats and minimizing weaknesses, thus business threats and weaknesses that guide the department to low market potential and cause little cash generation or even loss are solved and covered. Strategies projected in this area should be divested or managed very carefully.

Table 2: Strengths, Weaknesses, Opportunities and Threats Ranking.

	Opportunities				Threats					
Strengths			O4		S2			TH1		
		O2					TH6	TH2		
		O5	S1			TH5			TH4	
	O3					TH7	TH3			
	O1						TH8			
Weaknesses	O1					TH2				
	O3+	O5					TH8	TH1		
	W5						TH3	TH4		W3
	W6				W3		TH5		W2	
	W8+	W7		W2	W1					W1

Key: S = Strength, W = Weakness, O = Opportunity, TH = Threat.

	Opportunities	Threats
Strengths	<p>S Top Management Commitment.</p> <p>O Royal Jordanian Reputation.</p> <p>O Lower overhead cost structure.</p> <p>S Availability of RJ Mission and Vision.</p> <p>O The large Share of 6<sup>th</sup> freedom traffic.</p> <p>O Privatization and restructuring process;</p> <p>O Aviation Industry liberalization and globalization.</p>	<p>T Shrinkage of RJ's market share.</p> <p>T Slow Market (passengers) growth, indications showed that RJ is below the IATA's industry averages for the market growth.</p> <p>T Increasing competition with other airlines.</p> <p>T Major reduction of yield Capacity (dumply too many seats chasing fewer passengers).</p> <p>T Increasing Cost (fuel and insurance)</p> <p>T Regional Volatility.</p> <p>T Relatively low paid up Capital "Insufficient or lack of financial resources requested for future investments".</p> <p>T Aviation industry liberalization and globalization.</p>
Weaknesses	<p>O Aviation Industry liberalization and globalization.</p> <p>W + Privatization and restructuring process;</p> <p>O The large Share of 6<sup>th</sup> freedom traffic. "low yield"</p> <p>W Lack of suitable performance management / measurement system.</p> <p>W Low Levels of services when comparing it with that available on the market;</p> <p>W Workforce demoralization "brain Drain".</p> <p>W Lack of Quality of services Standards.</p> <p>W Unavailability of Well Documented quality management system.</p> <p>W Unavailability of clear, documented Mission and Vision for the marketing and Sales Department.</p> <p>W Old and outdated Information Technology Systems;</p> <p>W Non-competitive product (service);</p>	<p>T Relatively low paid up Capital "Insufficient or lack of financial resources requested for future investments".</p> <p>T Aviation industry liberalization and globalization.</p> <p>T Regional Volatility (Uncertain regional, political, and economical environment).</p> <p>T Slow Market (passengers) growth, indications showed that RJ is below the IATA's industry averages for the market growth.</p> <p>T Increasing Cost (fuel and insurance)</p> <p>W Workforce demoralization "brain Drain".</p> <p>T Major reduction of yield Capacity dumply too many seats chasing fewer passengers.</p> <p>W Old and outdated Information Technology Systems;</p> <p>W Non-competitive product (service).</p>

Key: S: Strength, W: Weakness, O: Opportunity, T: Threat.

**Figure 15: SWOT Matrix**





Figure 16: SWOT Analysis Using BCG Matrix

## 7.2 Strategic options analysis

After identifying Strengths, Weaknesses, Opportunities and Threats for Marketing and Sales department, strategic option(s) were identified for each one as shown in Table 3, these options are derived from the corporate strategy in order to maximize the advantage of each opportunity and minimize the effect of each threat. These options were evaluated based on their relevance and importance to Marketing and Sales vision.

Table 3: Strategic Options.

No.	Opportunities and Threats		Strategic Option
O1	Aviation Industry liberalization and globalization which gave RJ an access to New markets and highlight Improving Cooperation with international alliances.	ST1	Seek for Strong alliances with other airlines that help in developing procedures, training staff, and expanding the market.
O2	Lower overhead cost structure.	ST2	Invest on resources development.
O3	Privatization and restructuring process.	ST3	Processes Reengineering to develop the current position and lead in our service.
		ST4	Improve performance measurement system and develop performance management system.
O4	Royal Jordanian Reputation.	ST5	Intensive Marketing Campaign that will help in supporting RJ Image, and products.
O5	The large Share of 6th freedom traffic.	ST6	Define customer needs "know my customers".
		ST7	Strengthen other types of traffic freedoms.
TH1	Slow Market (passengers) growth,	ST5	Intensive Marketing Campaign that will help in supporting RJ Image, and products.
TH2	Regional Volatility (Uncertain regional, political, and economical environment).	ST1	Seek for Strong alliances with other airlines that help in developing procedures, training staff, and expanding the market.
TH3	Increasing Cost (fuel and insurance).	ST6	Define customer needs "know my customers".
		ST8	Establishing a new competitive pricing system.

Table 3: Strategic Options Table (continued).

No.	Opportunities and Threats	Strategic Option	
<b>TH3</b>	Increasing Cost (fuel and insurance)... (Continue).	<b>ST9</b>	Reduce Cost of Service without affecting the quality.
		<b>ST10</b>	Strengthen required services types.
<b>TH4</b>	Major reductions of yield Capacity (dump too many seats chasing fewer passengers).	<b>ST8</b>	Establishing a new competitive pricing system.
<b>TH5</b>	Increasing competition with other airlines.	<b>ST8</b>	Establishing a new competitive pricing system.
		<b>ST11</b>	Develop human resources system and qualify a team of expert.
		<b>ST12</b>	Automate all processes "develop IT infrastructure".
<b>TH6</b>	Relatively low paid up Capital "Insufficient or lack of financial resources requested for future investments".	<b>ST13</b>	Introduce initiatives for revenue growth.
<b>TH7</b>	Aviation Industry liberalization and globalization.	<b>ST1</b>	Seek for Strong alliances with other airlines that help in developing procedures, training staff, and expanding the market.
<b>TH8</b>	Shrinkage of RJ's market share.	<b>ST14</b>	Increase the market share through fulfilling the market requirement.

Based on the strategic options proposed the BCG Matrix was prepared as shown in Figure 17. From here we can notice that the most important (vital) areas are Area (1) and Area (4) that include the fourteenth strategies and highlight (ST14) which concentrates on increasing the market share and (ST5) that concerns with supporting RJ image to be the most important strategies.

After performing SWOT analysis, developing the strategic options and identifying its importance; Financial, Customer, internal processes and learning and growth objectives were set and identified with regards to these strategic options in order to generate the final measures, from here Marketing and Sales strategy map is developed.

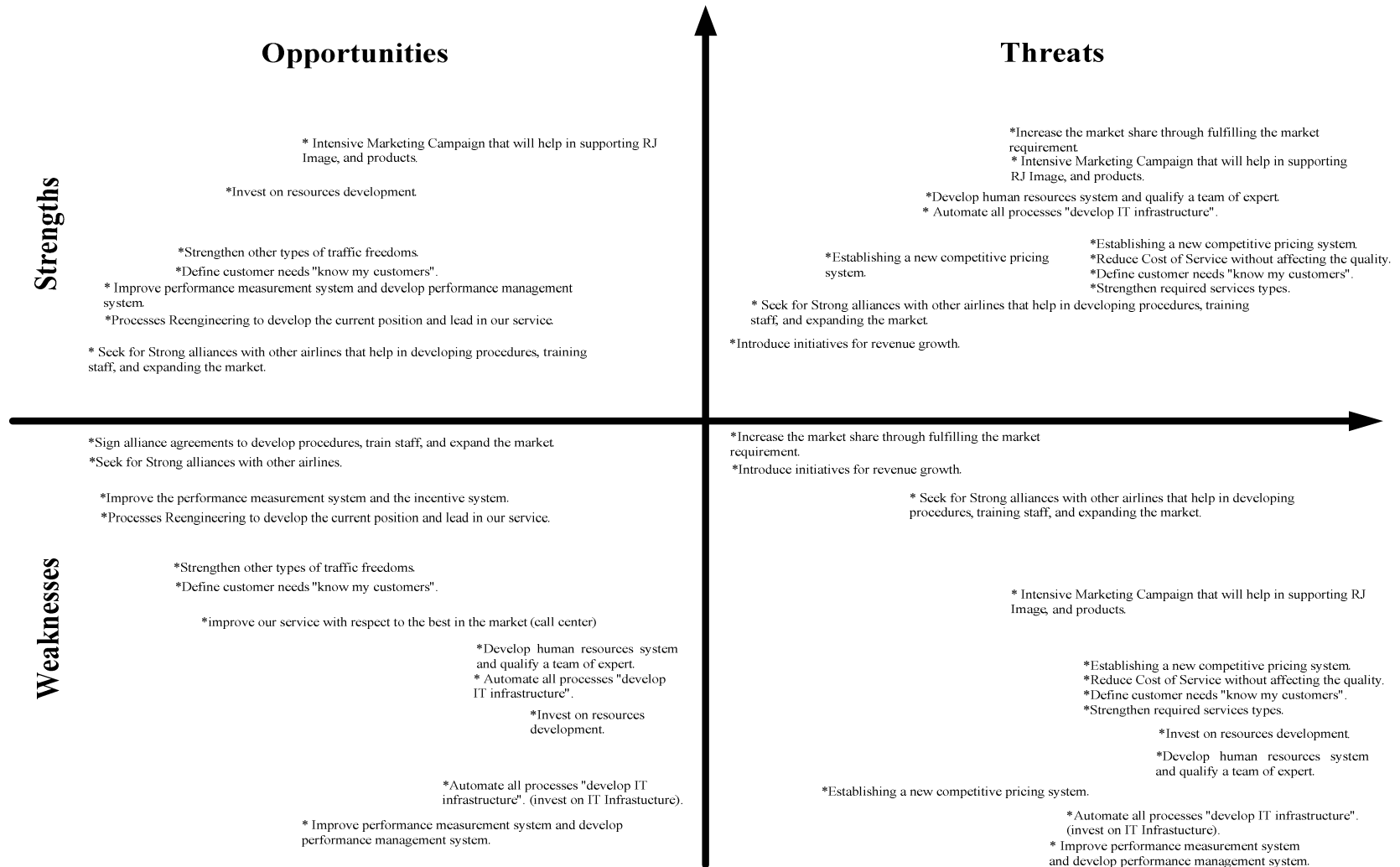
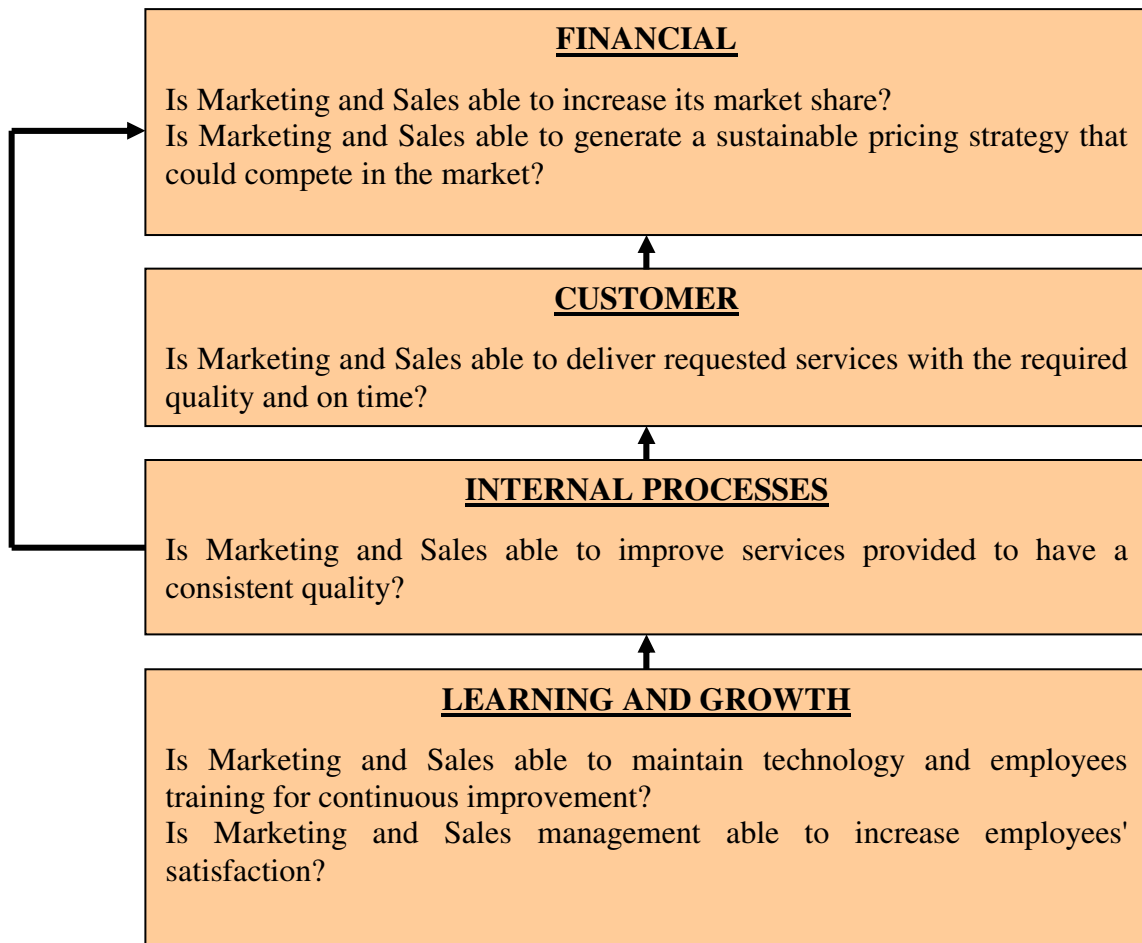


Figure 17: Strategic Options Matrix

## 8. MARKETING AND SALES STRATEGY MAP MODEL WITH RESPECT TO THE PERFORMANCE PERSPECTIVES

According to the BSC Performance Model; performance perspectives are financial, customer, internal processes and learning and growth. In Marketing and Sales Department these perspectives could be arranged in a hierarchy that reflects the relation between each perspective and how they affect each other, this is shown in Figure 18.



**Figure 18: Performance Perspectives Hierarchy**

From perspective hierarchy we can notice that all perspectives depend on the learning and growth, but the internal processes perspective has direct effect on both the financial and the customer perspectives. After identifying this relation, each perspective should have its own

objectives that directly related to Marketing and Sales Strategies, and each objective should have its own measures that show objective's progress with respect to time. Depending on this Marketing and Sales strategy map is developed, and measures were fit on this map. Following are the proposed objectives with respect to the four perspectives taking into consideration its relation to strategies mentioned in section 7 of this chapter.

### 8.1 Learning and Growth Objectives

Learning and Growth is the base for all other perspectives; therefore, strategies for improvement in this performance perspective require investment in human and IT resources, in addition to the systems and procedures followed by employees; this will enhance the department capabilities.

One of the strategies adopted by RJ is to develop its human resources in order to develop t services level produced. Marketing and Sales Department's staff needs to be well acquainted in communication skills and many other skills acquired by training and experience, not ignoring the importance of providing the staff with necessary tools and technologies in order to increase their efficiency and their output quality, then measuring their level of proficiency periodically to make sure that they are in line with the levels set by the management. Objectives proposed for this perspective are as follows:

1. **Increase employees' satisfaction** which is important to get better performance and produce quality services, since dissatisfied employees will have low morale which affect the turn over in the company affect the level of quality provided. This problem could be solved by improving employees satisfaction through empowerment authorities; incentives; and encourage them to create ways of output improvements.

2. **Improve employees Knowledge** by giving the staff training courses that help them to improve their abilities to produce a quality output. This will lead to employee self confidence and will affect the customer satisfaction process.
3. **Motivate employees;** this could be in different ways such as rewarding system. Motivation is important for increasing the staff satisfaction; processes' improvement and customer satisfaction.
4. **Engendering technological infrastructure** which is very important in the airline industry to be online with those who lead the market. By this; employees will have better chance to improve their work.

## 8.2 Internal Processes Objectives

Internal processes is the second basic driver perspective, it has a direct effect on the two other main perspectives; financial and customer. Therefore it is important to have well defined internal processes objectives that are aligned to customer needs in order to achieve customer satisfaction and financial growth. Following objectives are set in a way that will improve internal processes perspective.

1. **Establish customer management process** by which customer needs identified and met, so different surveys should be established for this reason, analyzing procedures should be developed and measures be produced.
2. **Build and develop global Alliances:** Development of strong and global alliances will help RJ in expanding worldwide strongly. This will assure RJ's customers that services provided are according to the best standards in the market, since RJ have to comply with certain standards. This will lead RJ to be able to improve its quality services from one hand, and to benefit from the combined purchasing power of the alliance to reduce

the costs in different areas such as fuel and insurance. By this processes efficiency, customer satisfaction will be affected, and accordingly will affect the revenue.

3. **Identify and capture new business opportunities through the creation of different programs:** After identifying customer needs and benchmark the market to know different programs available; capturing new business opportunities to fulfill customers need, increase customers' satisfaction, and be on line with the best on the market will be achieved, which will accordingly lead to increase the revenue.
4. **Improve process efficiency** through combining several processes with each other to increase (end-to-end) process efficiency, conduct several training courses or using up to date technology. This will affect customer satisfaction and market share indirectly and lead to increase in revenue.
5. **Processes Automation**, which is very important to achieve performance excellence. Its importance implies in excel among competitors and seize opportunities to solve problems efficiently.

### 8.3 Customers Objectives

Service is RJ final product that should be approved by the form of customer satisfaction indicator. This indicator is increasingly getting importance in this industry because of its effect on the business continuance. By this indicator management will be able to judge the business continuation, even if the financial indicators are looking good.

Different strategies could be used to differentiate the company in the marketplace and lead to customer satisfaction. Adopting and mixing one or more of product leadership; customer intimacy and operational excellence strategies is important. This can be accomplished by combining the product leadership through its quality, price and time of services provided



with the customer intimacy by maintaining the customer satisfied. Strategies should be adopted for this perspective and objectives should be developed and measured. These objectives include:

1. **Customer Acquisition:** RJ must intense its marketing programs to invite and acquire all customers levels to experience RJ services and spread RJ image.
2. **Customer satisfaction:** This is one of the most important objectives that must be measured periodically and for all services provided. It is a leading indicator for business continuation.
3. **Customer Retention:** this indicates the success of the aforementioned objectives application and could be achieved after providing high levels of quality services combined with competent prices.
4. **Build and develop global Alliances:** to assure customers that the level of services provided is on line with the best standards in the market, in addition to the benefit of the combined purchasing power of the alliance to reduce different costs.

#### 8.4 Financial Objectives:

The ultimate cause of any business existence is to be profitable and to generate revenue. Due to fierce competition faced by RJ its market share suffered from a noticeable shrinkage which affect directly the total revenue generated, thus affect the financial status of the whole company. From here the following financial objectives were set and measures for each one were developed.

1. **Revenue Growth:** by increasing revenue generated by Marketing and Sales department, overall company revenue will be affected and increased. This can be

accomplished by price efficiency, expand new services to cover new profitable routes and identify new business opportunities.

A. **Price Efficiency:** After analyzing the pricing section, it was found that systematic pricing methodology is not followed; this is caused by the fact that they have to compete low cost carriers in the market and sold seats. From here we can conclude that applying systematic pricing methodology will help in increasing the revenue and decreasing the loss.

B. **Expand New Services to Cover New Profitable Routes:** By studying the market demand and performing studies about the feasibility of opening new routes that may generate profit with less costs or closing non feasible routes, by this the chance of increasing profits and cutting costs will increase.

C. **Identify & Capture New Business Opportunities:** Marketing and Sales department should work hard and adopt and identify different ways that support RJ's financial status and increase its market share.

2. **Increase employees Productivity:** by providing them with all tools needed to produce quality services.

Form the above objectives that cover all performance perspectives, Marketing and Sales strategy map is developed.

## 8.5 Marketing and Sales Strategy Map:

After studying each performance perspective and developing their own objectives, these objectives are combined with each other to form the Marketing and Sales Strategy Map shown in Figure 19. From this map we can notice that by developing the human and technological infrastructure, employees' satisfaction achieved. This will directly affect the

internal processes by improving its efficiency which needs to be consolidated by the processes' automation; all these with the institutionalization of the customer management concept inside each process will support RJ and help it to build global alliances. This will help RJ in expanding its services and increasing work efficiency.

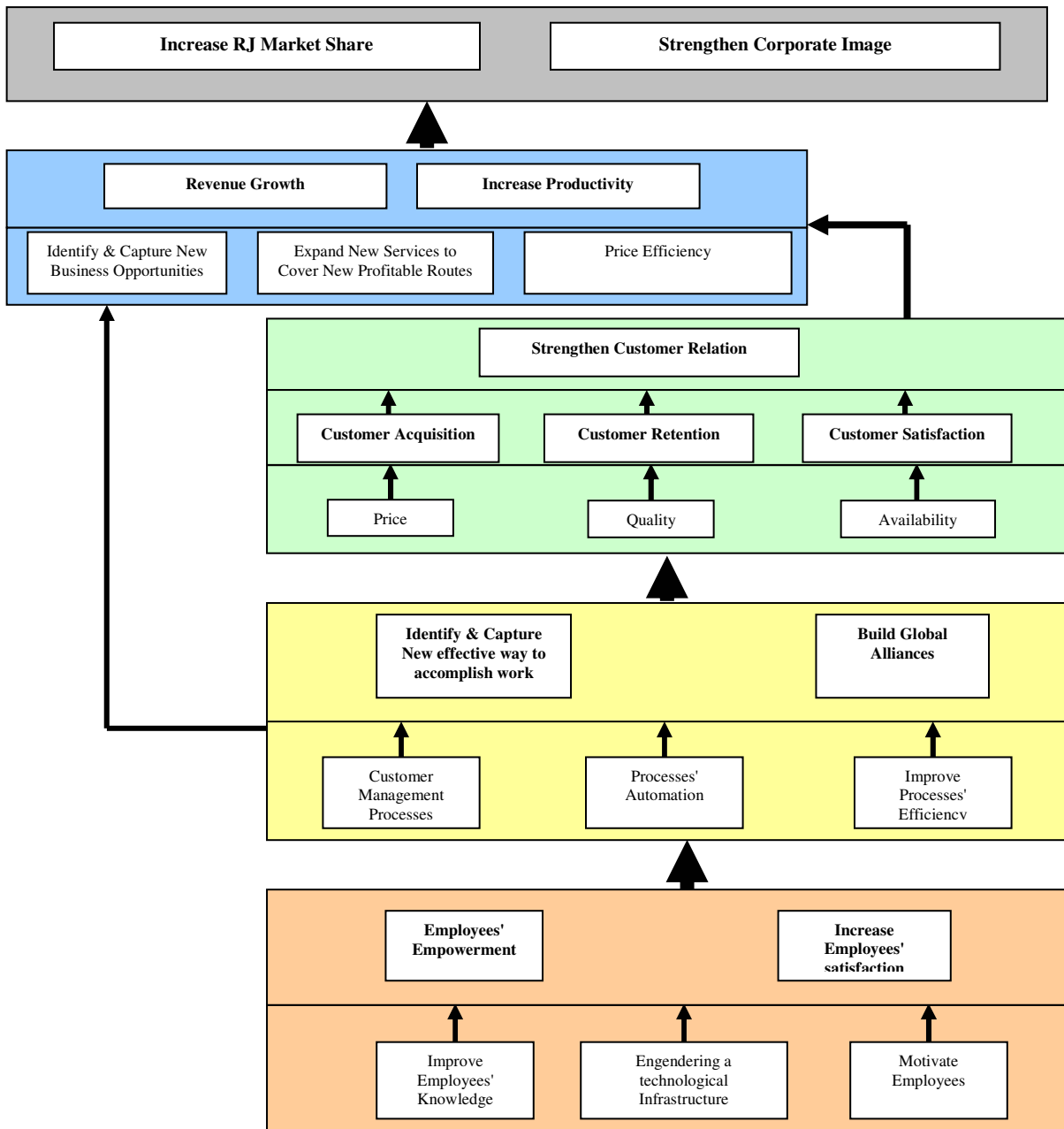


Figure 19: Marketing and Sales Strategy Map

Depending on the Strategic objectives and its relation shown in the strategy map, performance measures were developed to measure the progress toward each objective. This map tells Marketing and Sales management and employees about their overall performance and how well they are in achieving the department's general goals.

## **9. MARKETING AND SALES PERFORMANCE MEASURES**

It is important to define a set of measures that can reflect each perspective (Financial, customer, internal processes and learning and growth), these measures should be related to the critical success factors inside Marketing and Sales and inline with its objectives. They should be developed in a way to be able to compare the past with the current performance not ignoring its alertness ability to the progress toward preset target. Targets for each measure were set after a consensus between the management and staff to assure implementation of all initiatives and achievement of all targets.

Performance measures are developed in a way to be tested periodically in order to assure Marketing and Sales department efficiency to achieve its objectives. Each measure has its alarm value that should be stated carefully to alert the management about any problem exists or that may arise, and has its target value that should be achieved.

In each perspective measures were weighing so that the sum of each group will represent its related perspective. After that each perspective has its weight so the Marketing and Sales department will be able to have critical few measures that reflect its performance with respect to the performance perspectives. These measures were represented individually and by groups on a dashboard that facilitate management understanding for the measure status.

Measures are shown in appendix A, which contains tables that clarify steps to calculate each measure. Each measure is weighing depending on what category it is related, if the measure is related to the routes then routes are weighed and calculated according to the following equation ( $Route\ Revenue \div TotalRoutes\ Revenue$ ). While if the measure is belong to stations' measures the stations are weighed depending to the following equation ( $Station\ Revenue \div TotalStation\ Revenue$ ). One of the measures, which is the % of increase in number of qualified employees per job, jobs were proposed to be weighed depending on the management decision, where jobs or processes are listed and management decide the weight for each one. Another measure needs the alliances to be weighed, since RJ may have agreement with different companies then in this case alliances will be weighted depending on the revenue generated from each alliance as shown in the following equation, ( $Alliance\ Revenue \div TotalAlliances\ Revenue$ ). All measures have alarm value that should not be reached and target value that should always be traced.

Alarm, target, maximum and minimum values presented for each measure are hypothetical values that represent the true but are not true values. Weights given within the measures and for the measures within objectives are stated according to the management decision without studying the effect of changing any of them. Figure 20 shows the measures with respect to Marketing and Sales strategy map while Table 4 shows the measures and there weights with respect to each objective within selected perspectives.

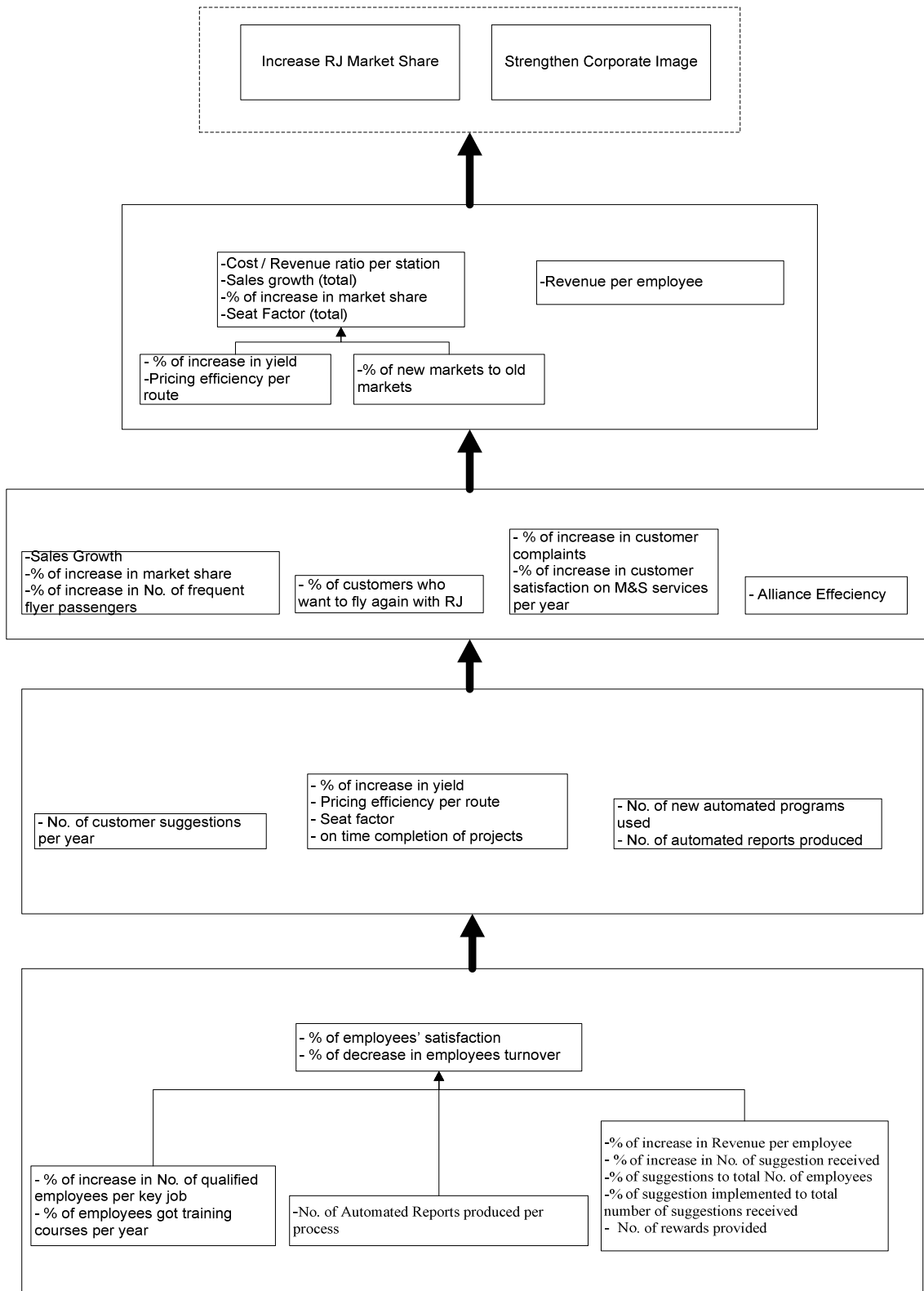


Figure 20: Measures Map.

Table 4: Performance measures with respect to each perspective

Perspective Objective	No.	Measure	Sub-Weight	Weight	Alarm	Target
<b>Learning and Growth Perspective</b>						
Increase employees satisfaction	1.	% Employee satisfaction	40%	25%		
	2.	% Decrease in employees turnover	60%			
Improve employees Knowledge	1.	% of increase in No. of Qualified employees per key job	60%	20%		
	2.	% of employees got training courses per year	40%			
Motivate the employees	1.	% of increase in Revenue per employee	30%	40%		
	2.	% of increase in No. of suggestion received	15%			
	3.	% of suggestions to total No. of employees	15%			
	4.	% of suggestion implemented to total number of suggestions received	15%			
	5.	No. of rewards provided	25%			
Engendering a technological infrastructure	1.	No. of Automated Reports produced per process	100%	15%		
<b>Internal Processes Perspective</b>						
Establish a customer Relation Management process	1.	Number of customer suggestions / year	100%	20%		
Build and develop a global Alliances	1.	Alliance efficiency	100%	25%		
Improve process efficiency	1.	% of Increase in Yield	25%	35%		
	2.	Pricing efficiency per route	30%			
	3.	Seat factor	25%			
	4.	On time completion of projects	20%			
Processes Automation	1.	No. of New Automated programs used	40%	20%		
	2.	No. of Automated Reports produced per process	60%			

Table 4: Performance measures with respect to each perspective (continued).

Perspective Objective	No.	Measure	Sub-Weight	Weight	Alarm	Target
<b>Customer Perspective</b>						
Customer Acquisition	1.	Sales growth	33%	15%		
	2.	% of increase in Market share	33%			
	3.	% of increase in No. of frequent flyer passengers	34%			
Customer Retention	1.	% of customers that prefer to fly again with RJ	100%	25%		
Customer satisfaction	1.	% in increase in customer complaints	60%	45%		
	2.	% of increase in customer satisfaction on Marketing and Sales processes / Year	40%			
Build and develop a global Alliances	1.	Alliance efficiency	100%	15%		
<b>Financial Perspective</b>						
Revenue Growth	1.	Cost - Revenue Ratio / Station	25%	40%		
	2.	Sales growth "total"	25%			
	3.	% of increase in Market share	25%			
	4.	Seat factor (total)	25%			
Price Efficiency	1.	% of increase in Yield	50%	35%		
	2.	Pricing efficiency per route	50%			
Expand New Services to Cover New Profitable Routes	1.	% of new markets to the old markets	100%	5%		
Increase Productivity	1.	Revenue per employee	100%	20%		



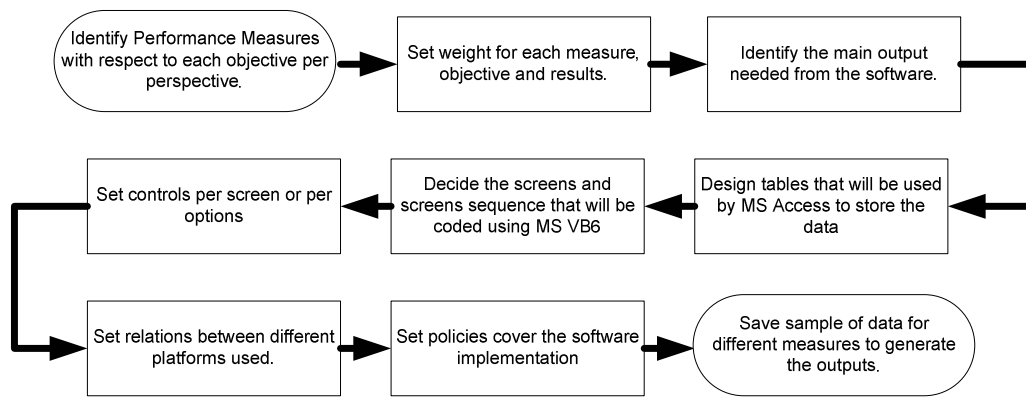
## 10. PERFORMANCE MEASUREMENT SOFTWARE

### 1. Introduction:

User interface software used to simplify the presentation of the research output. Software was prepared using Microsoft access as the data base engine, excel to graph historical data and identify trends, and visual basic to visualize the result for each measure and each step. This will help the responsible management to identify the status of its performance with respect to time.

### 2. Steps Involved to Develop the Software:

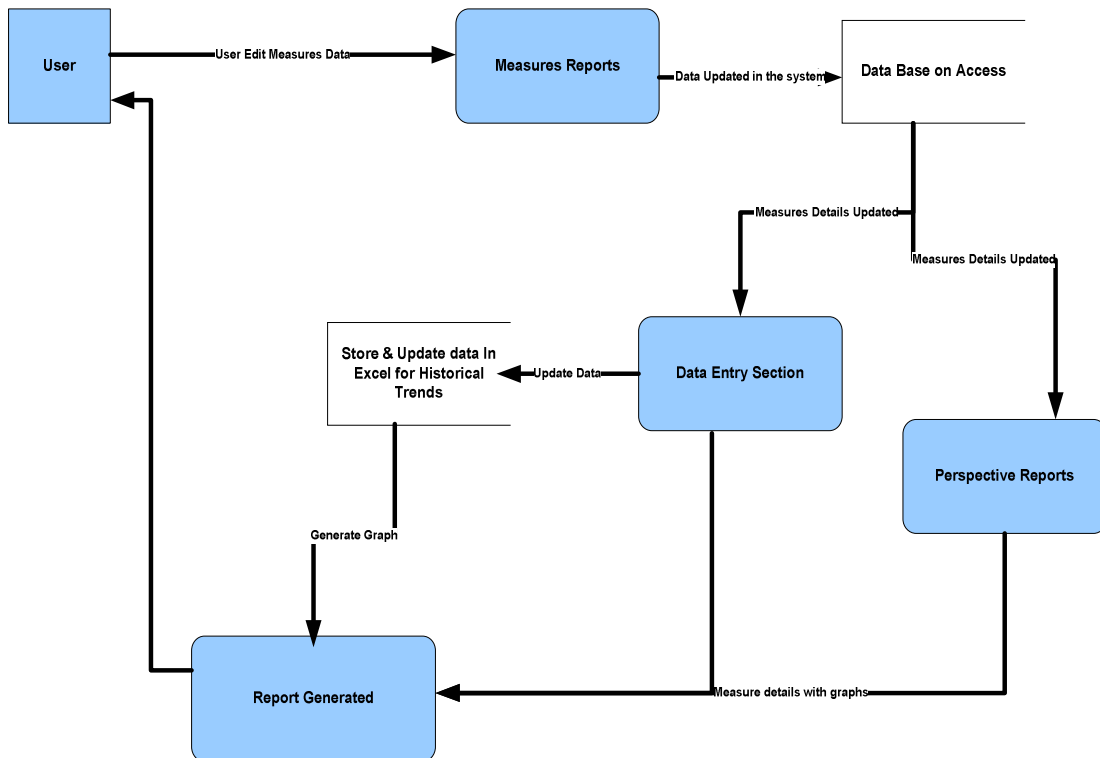
Figure 21 shows the steps involved to develop this software, while figure 22 shows software data flow diagram.



**Figure 21: Software development steps.**

After identifying the performance measures for each objective per perspective, and their weights were agreed on, the main output of this software is identified. Tables that will be used to store the data was designed using MS Access platform, depending on the output needed and the tables designed, VB was used to code the relation between the measures, to develop the screens which will be used directly by the user and program equations stated to calculate the measures.

Each screen in the developed software should have its own controls; these controls are set depending on the authorities for the person that will enter the specified data to the screen and the time of entering this data. After that, the relation between MS Access and Excel was developed to identify the role of each platform in representing the data. By this the software is ready to be used. Policies are set for using this software to govern the relation between people who use it and the authorities per position.



**Figure 22: Software Data Flow Diagram**

### 3. Software Output:

The output of this software is calculated performance measures that were proposed in the previous section for Marketing and Sales department. The output values are weighed for each measure with respect to their objectives and their perspective. Each measure is graphed in a horizontal bar composed of three colors (Red, Yellow, and green) to represent the (Alarm, Accepted and the Target Areas) respectively. The graph could be produced

annually by taking the average of all entries or by month for the monthly measures. If the management desires to know the performance of specified entry for example for specified station or rout, this software is able to produce the dash board for the selected measure per that station or that route.

Historical trends are the most important part produced by this software. It helps the management to identify unusual trends in specific measure, which help them to know about any problem that may arise before its occurrence. The historical graph use to be produced using MS Excel, but the data is dealt with using VB which will calculate the averages per month for all entries per the specified measure then retrieve to excel sheet in order to be plotted in a appropriate graph. The graph generated should be justified each time by selecting the data source need to be plotted.

#### **4. Software Policies:**

Policies govern this software implies in the authorities for person use to enter specific data such as the weight per (Station, Route, Alliance, or key job) and the time selected to enter these data. Values should be entered at the beginning of each year and should not be changed during this year.

#### **5. Software controls:**

Each screen has its own controls that prevent double entries for the same measure or highlight a problem for the user which will help him enter the values correctly. These controls will be mentioned when presenting the screens.

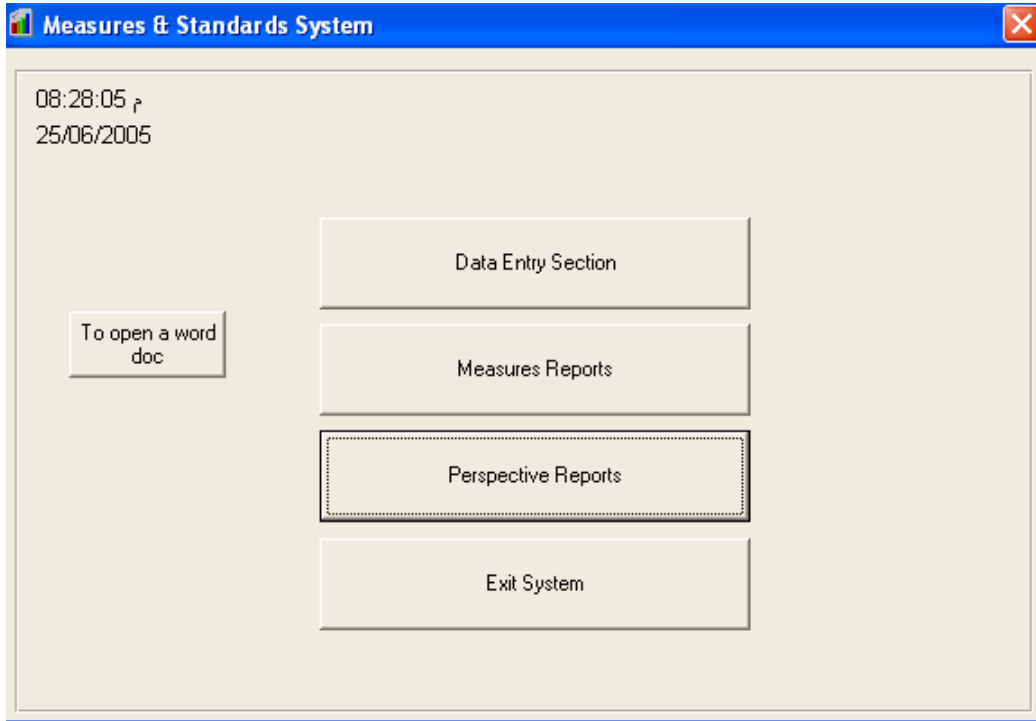
## 6. Program Specification:

The program main window contains Data Entry section, Measures Reports, perspective reports buttons and the Exit System Button. The time and date are shown in this main screen as shown in Figure 23.

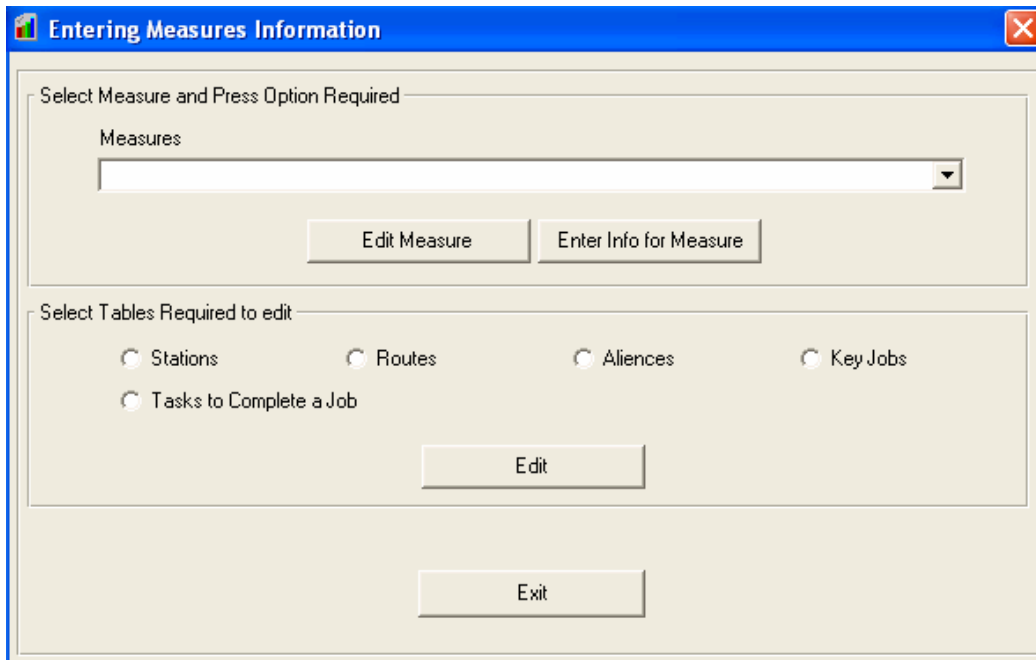
### 6.1 Data Entry Section:

This section which is shown in Figure 24 is responsible for editing, adding, deleting measures and entering data regarding each measure. This screen compose of a drop down menu that contain all saved measures, a button to edit these measures and another one to enter information to these measures. Some of the measures are depending in information related to stations, routes, alliances, key jobs and tasks to complete the job, this screen enable the user to edit this information by adding or deleting selected data but according to the policies governed this software only the authorized user can do these changes in the specified date. There is a control over the weights used to be entered; this control assure that the sum of all weights per category (Station, Route...etc) should not exceed 100%, and if so a message box appears to alarm the user that there is a mistake in the weights per category. When press the "Edit Measure" button, the edit screen will enable the user to edit the maximum, minimum, alarm and the target value of that measure which also govern by the software policies regarding the entry for such data by authorized employees only and at the specified date, this is shown in Figure 25.

When press the save button a confirmation screen will appear which tell the user that data has been modified successfully as shown is Figure 26, this data will automatically fixed in the data base and used when graphically represent that measure. If the user presses the edit measure button by fault without selecting a measure a caution screen will appear that tell him "please select measure to edit", this screen is shown in Figure 27.



**Figure 23: Program Main Menu.**



**Figure 24: Data Entry Screen**

**Figure 25: Editing Measure Screen**

**Figure 26: Confirmation Screen**

**Figure 27: Caution screen**

The "Enter Info for Measure" button is used to enter data per measure in order to save it on the data base, but selecting a measure is a prerequisite, screen with the measure name will appear as shown in figure 28, this screen will enable the user to select the month of entry - if the measure is a monthly measure, then select the variable (station, route, alliance,...etc) from the drop down menu, the weight of that variable will appear automatically. The user is not able to change this weight, by this the user will be able to start enter data for that

specific variable in the selected month. When user wants to amend an entered data all what he/she has to do is to double click the row then this row will transfer upside to be edited, then the user have to press the Modify button to save the new values of this row.

There are four buttons in this screen; the first one is the clear button, this enable the user to clear data from the editing row, the next button is the Save button which enable the user to save his/ her new entries. When the user modify existed row then (s)he should press the modify button while when (s)he want to delete any row (S)he can select this row and press delete button, this will not be completed unless the user assure this by press (ok) on the pop up screen that ask him to confirm the deletion action, this screen is shown in Figure 29. The last button is the Exist button which enables the user to exist this screen.

This software is able to present measures in graphs, though the user can extract information from each measure after editing its own data, this is through the using of "Measure reports button" shown in the main screen figure 23. This section shows Graphs for each measure by using the data entered in the previous section of this software. This data appeared in this screen was entered in specific tables designed on access and shown in Appendix A, which shows all the measures used and the data needed for each one. Some of the measures are monthly, others are semi annually and the rest are annually measured indicators. Table 5 shows a sample of this information regarding the Cost-Revenue Ratio Measure.

**Cost - Revenue Ratio**

**Select Month first and Enter Required Fields then Press Save**

Month

Station  Weight  Cost  Revenue  Last Ratio  Current Ratio  Current/Last  Indicator\*W

No	Station	Weight	Cost	Revenue	Last Year Ratio	Current Ratio	Current/Last	Indicator *W	Month	C Year
2	Jordan / PAX	1.26	2	1	1	2	2	2.52	Jan	2005
3	Greece	19.47	222	10000	0.15	0.02	0.13	2.53	May	2005
4	Italy	11.35	3	33	6	0.09	0.02	0.23	Jan	2005
5	Jordan / PAX	1.26	2	8	8	0.25	0.03	0.04	Apr	2005
6	Greece	19.47	10	10	10	1	0.1	1.95	Feb	2005

**Figure 28: Enter Info for the Measure Screen; Cost-Revenue Ratio was the selected Measure.**

**Select Month first and Enter Required Fields then Press Save**

Month

Station  Weight  Last Sales  Current Sales  Current/Last  Indicator\*W

No	Station	Weight	Last Sales	Current Sales	Current/Last	Indicator*W	Month	C Year
1	Germany	14.7				15.1925	Mar	2005
5	Jordan / PAX	1.26				1.26	Apr	2005
3	Italy	5.25				57.75	May	2005
2	Italy	11.3				15.1925	May	2005
6	North America	7.09				7.09	Jun	2005
4	Italy	3.88	66	3000	45.45	176.35	Sep	2005

**Warning**

Are you Sure you want to delete this record?

**Figure 29: Warning Screen that asks the user to confirm his deletion action to one of the records.**



Table 5: Measures summary saved in the measurement Program.

<b>Measure_1:</b>	Cost - Revenue Ratio	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>	Monthly	30%	1%	25%	3%
<b>Perspective:</b>	Financial				
<b>Category:</b>	Efficiency				

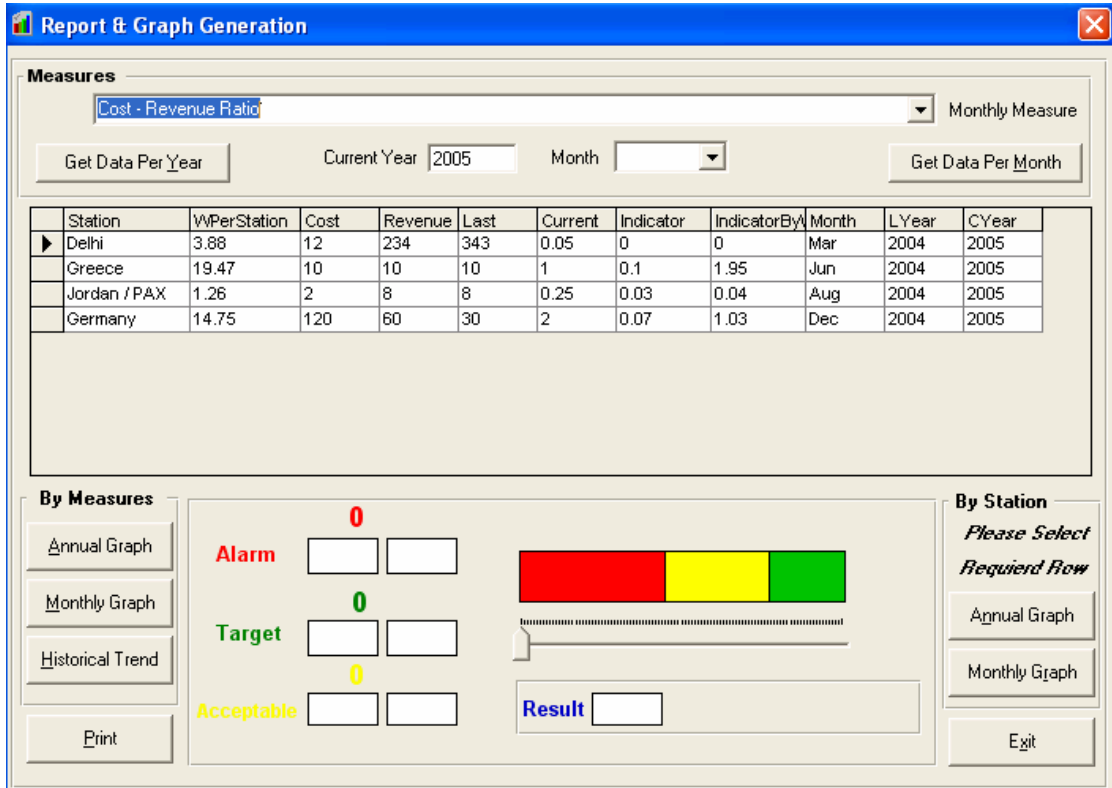
N o.	Station	Weight per Station	Cost	Revenue	Cost / Revenue Ratio For the Same Month Last Year	Current Cost / Revenue Ratio	Current / last	Indicator ↑↓⇒
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
<b>Total</b>								

## 6.2 Measure Reports

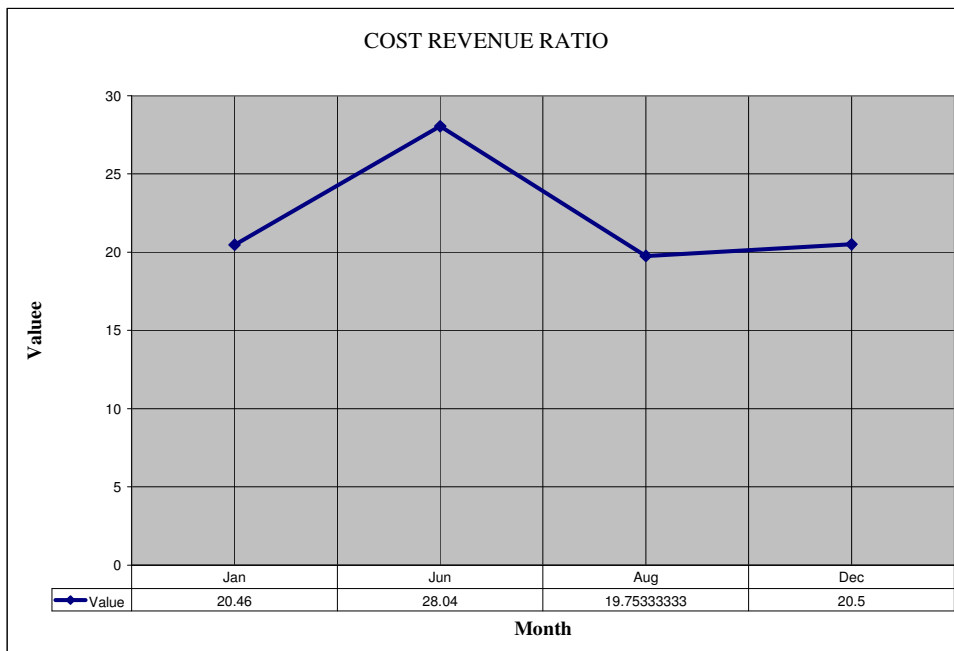
when exist the previous screens related to the data entry button, the user will back to the main menu screen "Measures & Standard Systems Screen", then he will be able to select the "Measures Reports" button and "Report and Graph Creation" Screen will appear as shown in figure 30, in this screen user has to select a measure from the dropdown menu, after this step and according to the measure's category (monthly or yearly), the Month field will be enabled or disabled. Two buttons one enable the user to get average data per year for a specific measure named "Annual Graph" on the left side of the screen, the other one on the right side of the screen enable the user to get data per category (station, route...etc) and both of these buttons are placed in the second part of the screen.

If the user wants to show the measure per month for monthly measures then he has to press the "Monthly Graph" button on the left hand side of the screen to produce the average result per month and the right hand side button to produce the monthly results per category. These buttons produce the graphical presentation for each measure on the horizontal bar (dash board). A pointer will appear to point the current value in the bar that will appear in the result field while the target and alarm values appear to the left of the dashboard. This screen could be printed by pressing the Print Button.

The historical progress of each measure is shown by pressing the "Historical Trend" button, this will take the user to an excel sheet that contain XY chart to present the historical trend for each measure as shown in figure 31. By this management will be able manage these measures through monitor their progress.



**Figure 30: Report and Graph generation Screen.**



**Figure 31: Historical data For the Cost Revenue Ratio Measure.**

### 6.3 Perspective Reports

This screen is shown in Figure 32; the user is able to have a summary report for all measures results as shown in Figure 33 or a summary report regarding each company's objective as shown in Figure 34.



Figure 32: Perspective reports Screen

		Sub-Weight	Alarm	Target	Value	SW-Result
<b>Perspective: Customer Perspective</b>						
Customer Acquisition	% of Increase in No. of frequent flyer passengers	34%	1	5	1142.7	388.51
Customer satisfaction	% in Increase in customer complaints	60%	50	0	0.00	0
Build and develop a global Alliances	Alliance efficiency	100%	3	7	0.00	0
Customer satisfaction	% of Increase in Customer satisfaction on Marketing and Sales processes / Year	40%	5	15	0.00	0
Customer Retention	% of customers that prefer to fly again with RJ	100%	20	80	0.00	0
Customer Acquisition	Sales growth	33%	5	20	0.00	0
Customer Acquisition	% of Increase in Market share	100%	0	10	0.00	0
<b>Perspective: Financial Perspective</b>						
Revenue Growth	Cost - Revenue Ratio / Station	25%	25	3	0.00	0
Revenue Growth	Sales growth "total"	25%	5	20	0.00	0
Revenue Growth	% of Increase in Market share	33%	0	10	0.00	0
Increase Productivity	Revenue per employee	100%	5	10	5.33	5.3325
Price Efficiency	% of Increase in Yield	50%	0	5	0.00	0
Price Efficiency	Pricing efficiency per route	30%	3	7	0.00	0
Revenue Growth	Seat factor (total)	25%	3	15	0.00	0
Expand New Services to Cover New Profitable Routes	% of new markets to the old markets	25%	0	10	0.00	0

Figure 33: Summary Report for all perspectives.

Perspective Objective		07.06/2005	
	Weight	Result	
Increase employees satisfaction	25 %	1.05	
Improve employees Knowledge	20 %	15.56	
Motivate the employees	40 %	3.36	
Engendering a technological Infrastructure	15 %	2.72	
Establish a customer Relation Management process	20 %	4.06	
Build and develop a global Alliance	25 %	0.00	
Improve process efficiency	35 %	0.00	
Process Automation	20 %	19.16	
Customer Acquisition	15 %	58.28	
Customer Retention	25 %	0.00	
Customer satisfaction	45 %	0.00	
Build and develop a global Alliance	15 %	0.00	
Revenue Growth	40 %	0.00	
Price Efficiency	35 %	0.00	
Expand New Services to Cover New Profitable Routes	5 %	0.00	
Increase Productivity	20 %	1.07	

End of Report

Pages: 1

**Figure 34: Perspective Objective Report.**

This software is oriented to measure the proposed indicators in this research only, but it could be developed in a way that enables it to adopt different generated measures and be commercial performance measurement software. This could be accomplished by defining a general form of the tables that will be used to save data regarding each measure, and then an option of generating a new table for a new measure could be added. This software is a user friendly one but it could be modified by developing help instructions for users. Instructions for the use of this software could be generated in an electronic document attached with it when it is downloaded.

## CONCLUSIONS AND RECOMMENDATIONS

Through the development of the performance management model inside marketing and sales department, it was obvious the lack of such system, and how it is important to develop it. Different ideas are observed while developing the BSC. These ideas can be summarized by the following set of conclusions and recommendations:

### 1. CONCLUSIONS

- RJ suffers from a Market share lose, to increase this share and retain market leadership, a performance management will not be an option to marketing and sales department but a must.
- Developing the performance management system for marketing and sales department provide a systematic procedure for continuous feedback that allows the management to follow the progress of its processes toward its mission, vision and objectives and help in pointing out opportunities for continuous improvement process.
- Effective Performance Management System requires:
  - Transition from performance measurement concept to performance management which is the most important part in the changing process toward continuous improvement. This will contribute to the departmental and corporate learning, thus it will lead to the re-assessment of strategies, rather than link departmental and corporate strategies to some form of routine performance measurement elements.
  - Emphasis on risks that helps in diagnoses systematic problems, evaluates effectiveness, and links performance to consequences.

- Be built on a transparent bases by which all employees are aware about the objectives and where the company is going, thus employees will contribute in the process development, and succeed in achieving process's goals.
- Performance management system helps management to allocate its resources with respect to the importance of each area in achieving departmental and corporate objectives.
- performance measurement and management is not an annual event; rather it is a continuous process requiring a clear performance expectations, periodic feedback, gap analysis for the differences that will help in identifying root causes of the problem "if any", and recognition for improvement.
- BSC is a tool that helps in identifying weaknesses and gabs between actual and planned status, thus highlight areas for improvements. It can be adopted by the whole company to monitor the general performance, as well as by each department alone, since it is flexible to be modified and reflect other measures affect the progress toward general objectives.
- The success of this system is depending on the management support and employees involvements in all phases.

## 2. RECOMMENDATIONS:

- Stakeholder and employees must be involved in all Performance management system development phases in order to avoid any resistance for this new concept, which reflects the progress of each section regarding the strategies.
- A Data base should be established inside RJ to facilitate data collection and achieve consistent and easy performance measurement, which will lead to effective Performance Management process.

- Customer relations should be integrated inside RJ and centralized in one department to facilitate measuring customer satisfaction and customer complaints.
- A reengineering process should be applied for all processes inside Marketing and Sales department in order to improve it and minimize any process that don't add value or transfer it to another place where it can add value.
- Weights per objective and per perspective should be studied carefully when amended in the next performance period for Marketing and Sales department; it should be related to factors affect the department from other departments.
- Automated procedures are very important in the key processes inside Marketing and sales Department. It will minimize the effort and maximize the effectiveness of these processes.
- Performance reporting and documentation system should be established thus performance measures and performance results are juxtaposed, revised, updated continuously, in order to support the continuous improvement process.
- Management should focus on the human resources development in particular and learning and growth perspective in general, because it forms the base for all other performance perspectives.
- Employees' satisfaction survey should be developed and used.
- In order to achieve the excellence through improving all operations, it is important to establish benchmarking procedures that will help compare our performance levels with the best practice in the market.



### 3. RECOMMENDATION FOR FUTURE WORK

- It is important to extend this concept of the performance management system to each department inside the company, in order to come out with a general Performance Management System.
- It is recommended to study the impact of implementing such model on the department's environment in general and in the human resources in particular, and to what extent such a model will help in cultural change.
- It is recommended to modify the developed software in a way that enables it to be used in different departments and different measures.

## REFERENCES

- Abran A. and Buglione L. (2002). A Multidimensional Performance Model for Consolidating Balanced Scorecards. **3<sup>rd</sup> International Workshop on Software and performance**, Rome, Italy, July 24-27, 2002.
- Amaratunga D. and Baldry D. (2002). Moving from performance measurement to performance management. **Facilities** Vol. 20 No. 5/6, pp. 217-223.
- Argyris, C. (1952). The impact of budget on people. **The Controllership Foundation**, Cornell University, New York, NY.
- Bititici U. S., Carrie A. S. and McDevitt L. (1997). Integrated performance measurement systems: a development guide. **International journal of operations and production management**. Vol. 17 No. 5, pp. 0144-3577.
- Cobbold, I., Lawrie, G. and Issa, K. (2004). Designing a strategic management system using the third-generation balanced scorecard: A case study. **International Journal of Productivity and Performance Management**, 53(7), 624-633.
- Daum, J.H. (2002). Performance management beyond budgeting: why you should consider it, how it works, who should contribute to make it happen. (Electronic version) retrieved june, 2002, from <http://www.juergendaum.com>.
- EFQM (2004). The EFQM News, March 16 2004.
- Epstein, Marc J. & Westbrook, Robert A. (2001, Spring). **Linking actions to profits in strategic decision making**. MIT Sloan Management Review.
- Evans, James R. (1997). President's Letter. **Decision Line**. Vol. 28(3).
- Flapper S. D. P., Fortuin L. and Stoop P. P. M. (1996). Towards Consistent Performance Management Systems. **International journal of Operations and Production Management**. Vol 16 No. 7, PP. 27-37.
- Flint, D. (2002, March) Research Note: **BAM: Evaluating Tomorrow's Management Technology**, Gartner.
- Gale, Bradley T. (1994). **Managing Customer Value**. The Free Press.
- Harmon, P. (2003, May). Technical Brief— The Evolution of balanced scorecard. Business Process Trends. (Electronic Version) Retrieved September, 2003 from, <http://www.bptrends.com/publicationfiles/5%2D03%20T8%20Evol%20of%20nced%20Scorecard%2Epdf>.

- Hasan, M. and Kerr, R. M. (2003). The relationship between total quality management practices and organizational performance in service sector. **The TQM Magazine**, 15 (4), 286-291.
- IATA (2004). IATA publication: Recovering global airline industry to turn a profit. June, 2004.
- International Air Transport Association, weekly newsletter, January 12<sup>th</sup>, 2004. "2<sup>nd</sup> edition in 2004".
- Ip, Y.K. and Koo, L.C. (2004). BSQ strategic formulation framework: A hybrid of balanced scorecard, SWOT analysis and quality function deployment. **Managerial Auditing Journal**, 19 (4), 533-543.
- Jarrar, Y. (2004). Performance measurement in the 21 century from performance measurement to performance management. **Business Process Management Journal (Electronic version)**, 10(5), Guest editorial.
- Kaplan R. S. and Norton D. P. (1992). The Balanced Scorecard - Measure that Drive Performance. **Harvard business School review** January-February 1992, Reprinted number 92105.
- Kaplan R. S. and Norton D. P. (1993). Putting The Balanced Scorecard to Work. **Harvard business School review** September-October 1993, Reprinted number 93505.
- Kaplan R. S. and Norton D. P. (1996). Using the Balanced Scorecard as a Strategic Management System. **Harvard business School review** January-February 1996, Reprint number 96107.
- Kaplan, R. and Norton, D. (1996a). **Translating strategy into action: the Balanced Scorecard**, (1<sup>st</sup> Ed.). Boston, Massachusetts: Harvard Business School Press.
- Kaplan, R. and Norton, D. (1996b). Linking balanced scorecard to strategy. **California Management Review**, 39(1), 53-97.
- Kaplan, R. and Norton, D. (2000). **The Strategy-Focused Organization: How the balanced scorecard companies thrive in the new business environment**, (1st Ed.). Boston, Massachusetts: Harvard Business School Press.
- Kaplan, R. and Norton, D. (2004). The strategy map: guide to aligning intangible assets. **Strategy and Leadership**, 32(5), 10-17.
- Kaplan, Robert S. & Lamotte, Gaelle. (2001). The Balanced Scorecard and Quality Programs. **Balanced Scorecard Report**. March 15, 2001.

- Kaplan, Robert. (2001). Integrating shareholder value and activity-based costing with the Balanced Scorecard. **Balanced Scorecard Report**. January 15, 2001.
- Kellen, Vince (2003). Business Performance Measurement: At the Crossroads of Strategy, Decision-Making, Learning and Information Visualization. (Electronic Version) retrieved February, 2003, from <http://www.kellen.net/bpm.htm>.
- Kellen, Vince. (2002, March). CRM Measurement Frameworks. <http://www.crm-forum.com>.
- Macaulay S. and Cook S. (1994). Performance Management As The Key To Customer Service. **Industrial and Commercial training**. Vol. 26 No. 11, PP. 3-8.
- Meyer, Marshall W. (2002). Finding performance: The new discipline of management, in Business Performance Measurement: **Theory and Practice**. Neely, Andrew, editor. Cambridge University Press.
- Montes, F., Jover, A. and Frenandez, L. (2003). Factors affecting the relationship between total quality management and organizational performance. **International Journal of Quality Management**, 20(2), 189-209.
- Mwita J.I. (2000). Performance Management Model (A system-based approach to public service quality). **The International Journal for public Sector Management**, Vol. 13 No. 1, PP. 19-37.
- Neely A., Gregory M., Platts K., (1995). Performance Measurement System Design: A Literature Review and Research Agenda. **International Journal Of Operations and Production Management**, Vol. 15, No. 4, 1995, PP. 80-116. MCB University Press, 0144-3577.
- Noe R., Hollenbeck J. R., Gerhart B., Wright P. M. (2000). **Human Resource Management: Gaining and competitive advantage**. Third edition. New York: McGraw-Hill Companies.
- Oakland, J. (1995). **Total quality management: the root for Improving 4 performance**, (2 Ed.). London: Butterworth-Heinemann Ltd.
- OSI (2002). Performance Management Research Report, Literature review & Best Practices. **Organization Systems International 2002**.
- Procurement Executives' Association (1999). **Guide to a Balanced Scorecard Performance Management Methodology**. Procurement Executives' Association.
- Rea Carol A., Rea David M. (2002). Commentary Managing Performance and Performance Management: Information Strategy and Service user involvement. **Journal of Management In Medicine**, Vol. 16 No. 1, 2002, PP. 78-93. MCB UP Limited, 0268-9235, DOI 10.1108/02689230210428643.

- Royal Jordanian Airline p/c (2003), **Strategic Business Plan 2004-2008 and Future Resources Requirements**. Nov, 2003.
- RJ Human Resources Department (2004). **Corporate Management Manual**. Chapter One, PP 4, Revision 00, Date 01/04/04.
- RJ Planning Department, **Past-Present-Future Bulletin**, Issue No. 30, 2003.
- RJ Planning Department, **Performance** "monthly publication ", January, 2004.
- RJ History retrieved January, 2005 from <http://www.rja.com.jo>.
- Rust, Roland T., Zeithaml, Valarie A. & Lemon, Katherine E. (2000). **Driving Customer Equity**. The Free Press.
- Sharif, Amir M., (2002). Benchmarking Performance Management Systems. **Benchmarking: An International Journal**, Vol. 9 No. 1, 2002, PP. 62-85. MCB UP Limited, 1463-5771, DOI 10.1108/14635770210418588.
- Simon H., Guetzkow H. Kozmetsky K. and Tyndall G. (1954), Centralization vs Decentralization in Organizing the Controllers Department. **Controllership Foundation**, York, NY.
- Simmons, Robert. (2000). **Performance Measurement and Control Systems for Implementing Strategy**. Prentice Hall.
- Stern Stewart Corporation (2002). What is EVA? <http://www.sternstewart.com/evaabout/whatis.shtml>. Accessed November, 2002.
- Umit, Bititci, Carrie, Allan & Turner, Trevor. (2002). Integrated performance measurement systems: Structure and dynamics, in *Business Performance Measurement: Theory and Practice*. Neely, Andrew, editor. Cambridge University Press.
- U.S. Department of Commerce Acquisition Community Balanced Scorecard (2002). Guide to a Balanced Scorecard: Performance Management Methodology (**Electronic Version**). Retrieved from <http://oamweb.osec.doc.gov/bsc>.
- U.S. Department of Energy and Oak Ridge associated University, 1995. How to Measure Performance, A Handbook of Techniques and Tools. Prepared by the Training Resources and Data Exchange (TRADE), and Performance-Based Management Special Interest Group. (Electronic Version) retrieved October, 1995, from <http://www.lini.gov/PBM/handbook>.
- Virginia Tech Performance Management Program (2001). **Performance Management Overview**. October 15, 2001.

Vokurka, R.J. (2001). Using the baldrige criteria for personal quality improvement. **Industrial Management & Systems** 101/7 [2001] 363-369. MCB University Press (ISSN 0263-5577).

Waal A. (2003). Behavioral factors important for the successful implementation and use of performance management systems. **Management decision** 41/8 [2003] 688-697.

Waldman, D.A. (1994). Designing performance management systems for total quality implementation. **Journal of Organizational Change Management**, Vol. 7 No. 2, 1994, pp.31-44. MCB University Press (ISSN 0953-4814).

Wruck, Karen Hopper & Jensen, Michael C. (1998). The two key principles behind effective TQM programs. **European Financial Management**. Vol. 4. No. 3.

# *APPENDICES*

## APPENDIX A

### Measures summary saved in the measurement Program

Table 5: Measures summary saved in the measurement Program.

<b>Measure_1:</b>	Cost - Revenue Ratio	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>	Monthly	30%	1%	25%	3%
<b>Perspective:</b>	Financial				
<b>Category:</b>	Efficiency				

No .	Station	Weight per Station	Cost	Revenue	Cost / Revenue Ratio For the Same Month Last Year	Current Cost / Revenue Ratio	Current / last	Indicator ↑↓→
1								
2								
3								
4								
5								
6								
7								
8								
9								
<b>Total</b>								



Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_2:</b>	Sales Growth per Station	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>	Monthly	70%	0%	5%	20%	
<b>Perspective:</b>	Financial, Customer					
<b>Category:</b>	Efficiency, Operating					
No.	Station	Weight per Station	Sales Growth for the same month Last Year	Current Sales Growth	(Current Sales Growth/ Sales Growth for the same month Last Year) %	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						
<b>Measure_3:</b>	% of Growth in Market Share Per Route	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>	Monthly	25%	-50%	0%	10%	
<b>Perspective:</b>	Financial, Customer					
<b>Category:</b>	Quality, Operating					
No.	Route	Weight per Route	Market Share for the same month Last Year	Current Market Share	(Current Market Share / Last Year Market Share) %	Indicator ↑↓⇒
1						
2						
3						
4						
<b>Total</b>						

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_4:</b>		% of Increase in Revenue per Employee	Max	Min	Alarm	Target		
<b>Presentation of the measure:</b>		Yearly	20%	-20%	5%	10%		
<b>Perspective:</b>		Financial, Learning and Growth						
<b>Category:</b>		Efficiency						
No.	Station	Weight per Station	Revenue Per Employee last year	Revenue For this Year	No. Of Employees	Revenue Per Employee This Year	(Revenue Per Employee This Year / Revenue Per Employee last year) %	Indicator ↑↓⇒
1								
2								
3								
<b>Total</b>								
<b>Measure_5:</b>		% of Increase in No. of Frequent Flyer	Max	Min	Alarm	Target		
<b>Presentation of the measure:</b>		Yearly	10%	0%	1%	5%		
<b>Perspective:</b>		Customer						
<b>Category:</b>		Quality						
No.	Station	No. Of Frequent Flyers Last Year	No. of Frequent Flyer This Year	(No. of Frequent Flyer This Year / No. Of Frequent Flyers last year) %		Indicator ↑↓⇒		
1								
2								
3								
4								
<b>Total</b>								

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_6:</b>		% in Increase of Customers Complaints	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Monthly	100%	-20%	50%	0%
<b>Perspective:</b>		Customer				
<b>Category:</b>		Quality				
No.	Month	No. Of Customer Complaints Last Year	No. Of Customer Complaints This Year	(No. of Frequent Flyer This Year / No. Of Frequent Flyers last year) %		Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						
<b>Measure_7:</b>		% of Increase in the Yield per Route	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Monthly	15%	-10%	0%	5%
<b>Perspective:</b>		Financial, Internal Processes				
<b>Category:</b>		Operating				
No.	Route	Yield on the Same Month Last Year	Yield on the Same Month This Year	(Yield on the Same Month This Year / Yield on the Same Month Last Year) %		Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_8:</b>		% of Increase in the Employee Satisfaction	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>		Simi Annual	80%	-20%	5%	60%	
<b>Perspective:</b>		Learning and Growth					
<b>Category:</b>							
No.	Station	Weight	Employee Satisfaction indicator For The Last Period	Employee Satisfaction indicator For This period	(Employee Satisfaction indicator For This period / Employee Satisfaction indicator For The Last Period) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							
<b>Measure_9:</b>		% of Increase in the Employee Turnover	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>		Yearly	15%	0%	7%	3%	
<b>Perspective:</b>		Learning and Growth					
<b>Category:</b>		Quality					
No.	Station	Weight	% of Employee Turnover For The Last year	% of the Employee Turnover For This Year	(% of the Employee Turnover For This Year / % of Employee Turnover For The Last year) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_10:</b>		% of Increase in No. of Qualified Employee Per Key Job	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Yearly	100%	0%	3%	10%
<b>Perspective:</b>		Learning and Growth				
<b>Category:</b>		Operating				
No.	Key Jobs	Weight	No. of Employees per Job Last Year	No. of Employees per Job This Year	(No. of Employees per Job This Year / No. of Employees per Job Last Year) %	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						
<b>Measure_11:</b>		% of Increase in No. of Employees' Suggestions Received	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Monthly	100%	0%	10%	60%
<b>Perspective:</b>		Learning and Growth				
<b>Category:</b>						
No.	Station	Weight	No. of Suggestions Last Month	No. of Suggestions This Month	(No. of Suggestions This Month / No. of Suggestions Last Month) %	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_12:</b>		% of Increase of Suggestions to Total No. of Employees	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Yearly	25%	0%	5%	10%
<b>Perspective:</b>		Learning and Growth				
<b>Category:</b>		_____				
No.	Station	Weight	1 (No. of Suggestions / Total No. of Employees (per station)) Last Year	2 (No. of Suggestions / Total No. of Employees (per station)) This Year	(2/1) %	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						
<b>Measure_13:</b>		% of Suggestions implemented to Total No. of Suggestions Received	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Yearly	10%	0%	1%	5%
<b>Perspective:</b>		Learning and Growth				
<b>Category:</b>		_____				
No.	1 (No. of Suggestions Implemented / Total No. of Suggestions Received Last Year	2 (No. of Suggestions Implemented / Total No. of Suggestions Received This Year	(2/1) %	Indicator ↑↓⇒		
1						
2						
3						

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_14:</b>	% of Rewards Awarded with respect to total No. of employees	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>	Yearly	10%	0%	3%	7%
<b>Perspective:</b>	Learning and Growth				
<b>Category:</b>					

No.	Station	Weight	1 No. of employees	2 No. of Rewards provided	(2/1)%	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						

<b>Measure_15:</b>	Pricing Efficiency per Route	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>	Monthly	10%	0%	3%	7%
<b>Perspective:</b>	Financial, Internal Processes				
<b>Category:</b>	Operational, Quality				

No.	Route	Weight	Cost of sold seat Per Route	Revenue from the sold seat Per Route	1 (Cost / Revenue) per Route for the same month Last Year	2 (Cost / Revenue) Per Route This Month	(2/1) %	Indicator ↑↓⇒
1								
2								
3								
<b>Total</b>								

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_16:</b>		Alliance Efficiency	Max	Min	Alarm	Target		
<b>Presentation of the measure:</b>		Monthly	10%	0%	3%	7%		
<b>Perspective:</b>		Financial, Internal Processes						
<b>Category:</b>		Operational, Quality						
No.	Alliance	Weight	Cost Per Alliance	Revenue Per Alliance	1 (Cost / Revenue) per Alliance for the same month Last Year	2 (Cost / Revenue) Per Alliance for the Same Month This Year	(2/1) %	Indicator ↑↓⇒
1								
2								
3								
<b>Total</b>								
<b>Measure_17:</b>		% of Increase in Seat Factor	Max	Min	Alarm	Target		
<b>Presentation of the measure:</b>		Monthly	25%	0%	3%	15%		
<b>Perspective:</b>		Financial, Internal Processes						
<b>Category:</b>		Operational						
No.	Route	Weight	Seat Factor For the same Month on the Last Year	Seat Factor of the Same Month This Year	(Seat Factor of the Same Month This Year / Seat Factor For the same Month on the Last Year)		Indicator ↑↓⇒	
1								
2								
3								
<b>Total</b>								



Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_18:</b>	% of employees got Training Courses	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>	Yearly	15%	0%	3%	10%	
<b>Perspective:</b>	Learning and Growth					
<b>Category:</b>	Operational					
No.	Station	Weight	Total No. of Employees	No. of Employees Got Training Courses	(No. of Employees Got Training Courses / Total No. of Employees) %	
1						
2						
3						
<b>Total</b>						
<b>Measure_19:</b>	% of on time project Completion	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>	Monthly	100%	0%	60%	90%	
<b>Perspective:</b>	Internal Processes					
<b>Category:</b>	Timeliness					
No.	Tasks To Complete a project	Weight	Time to accomplish this task	Time consumed in accomplishing this task	Difference Value(+, -)	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_20:</b>		% of Increase in No. of Customer Suggestions Received		Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Yearly		10%	0%	3%	7%
<b>Perspective:</b>		Internal Processes					
<b>Category:</b>		Quality					
No.	Station	Weight	No. of Suggestions Last Year	No. of Suggestions This Year	(No. of Suggestions This Year / No. of Suggestions Last Year) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							
<b>Measure_21:</b>		% of Increase in Customer Satisfaction Indicator With respect to Marketing and Sales Processes per Month		Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Monthly		20%	0%	5%	15%
<b>Perspective:</b>		Internal Processes					
<b>Category:</b>		Quality					
No.	Station	Weight	Customer Satisfaction Indicator For the Same Month Last Year	Customer Satisfaction Indicator For the Same Month This Year	(Customer Satisfaction Indicator For the Same Month This Year / Customer Satisfaction Indicator For the Same Month Last Year ) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_22:</b>		% Customers willing to fly again with RJ	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>		Monthly	100%	0%	20%	80%	
<b>Perspective:</b>		Customer					
<b>Category:</b>		Quality					
No.	Route	Weight	% Customer Willing to fly again With RJ last Year	% Customer Willing to fly again With RJ This Year	(% Customer Willing to fly again With RJ This Year / % Customer Willing to fly again With RJ last Year) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							
<b>Measure_23:</b>		% of Increase in Automated Programs Used inside the Department Per Year	Max	Min	Alarm	Target	
<b>Presentation of the measure:</b>		Yearly	10%	0%	3%	7%	
<b>Perspective:</b>		Internal Processes					
<b>Category:</b>		Quality					
No.	Station	Weight	No. Of Automated Processes Used Last Year	No. Of Automated Processes Used This Year	(No. Of Automated Processes Used This Year / No. Of Automated Processes Used Last Year) %		Indicator ↑↓⇒
1							
2							
3							
<b>Total</b>							

Table 5: Measures summary saved in the measurement Program (Continued)

<b>Measure_24:</b>		% of Increase in Automated Reports Generated inside the Department Per Year	Max	Min	Alarm	Target
<b>Presentation of the measure:</b>		Yearly	10%	0%	3%	7%
<b>Perspective:</b>		Learning and Growth, Internal Processes				
<b>Category:</b>		Quality				
No.	Station	Weight	No. Of Automated Reports Generated Last Year	No. Of Automated Reports Generated This Year	(No. Of Automated Reports Generated This Year / No. Of Automated Reports Generated Last Year) %	Indicator ↑↓⇒
1						
2						
3						
<b>Total</b>						

## APPENDIX B

### Form A

#### Marketing and Sales Department

#### As Is Study

#### First Phase

Section: \_\_\_\_\_

Responsible Person: \_\_\_\_\_

Date: \_\_\_\_\_

1. What are the key business objective / purpose?
  
2. The Mission of this Area is:
  
3. Are policies and procedures in your area documented? YES NO
  
4. Are policies and procedures in your area up to date? YES NO
  
5. What is the Key Business Process that occurs in your area? (Description)
  
6. How do you control the major activities, outputs in your area (key internal control).
  
7. What is the key information systems utilized in your area. (Computer system).

8. What are the key performance measures you obtain and utilize to monitor the effectiveness / efficiency of your business process (Description)
9. Is there relation with other sections? What sections?
10. Key means of communication you utilize to inform other departments / activities in your area?
11. Input/output of your section?
12. Which department(s)/section(s) would benefit from communication with your departments?

Rank from 1 to 5 (1 is the least and 5 is the most) the followings:

13.	The effectiveness of your internal control?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5
14.	The quality of your output?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5
15.	The efficiency of your business process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5

## تطوير نظام إدارة الأداء في الملكية الأردنية

م. زهية ظاهر أبو علي

المشرف

د. محمود أبو علي

### ملخص

إن توفر نظام إدارة الأداء في الشركات يمنحها القدرة على معرفة موقعها مقارنة مع منافساتها في سوق العمل سريع التغير بحيث تواكب تقدم الشركة أو المنشأة و مقارنته بالأهداف الموضوعه، الأمر الذي يؤدي إلى الحفاظ على مسيرة التطور المرسومة من قبل الإدارة.

لقد عننت هذه الدراسة باقتراح و تطوير نظام لإدارة الأداء في دائرة التسويق و المبيعات في شركة الملكية الأردنية حيث اختيرت لأهمتها و أثرها الملموس على أداء الشركة ككل من عدة نواحي، منها الأداء المالي و مستويات رضا الزبائن. و قد تم اختيار و تطوير نموذج بطاقة الأداء المتوازن في هذه الدراسة لمرونته و شموله جوانب مختلفة تعكس أداء الأقسام و تقيس تقدمها بالنسبة للأهداف و الاستراتيجية الموضوعه، و تكمن أهمية هذا النموذج في قدرته على إعطاء صورة شاملة و عامة لأداء مختلف الجهات و دورها في تحقيق رؤية الدائرة و إنجاز مهمتها الأساسية.

عولج موضوع قياس الأداء لدائرة التسويق و المبيعات من أربعة جوانب أساسية هي: الأداء المالي و الأداء من وجهة نظر الزبائن و أداء العمليات الداخلية و أخيراً مستوى تطور و تقدم

الموظفين في هذه الدائرة، وقد تم احتساب مؤشرات عامة لهذه الجوانب عن طريق إعطاء أوزان مختلفة للمقاييس المختارة و إنتاج مؤشرات عامة لأداء الدائرة.

لتسهيل عرض المعلومات على الإدارة العليا و تسريع اتخاذ القرارات بما يخص جوانب الأداء المختلفة، تم تطوير برنامج خاص لحساب المقاييس المقترحة و عرضها على لوحة خاصة تعكس أداء كل مقياس على حدة، و قد استعملت لغة (Visual Basic) في عرض الشاشات التي سوف يتعامل معها الموظف المسؤول، و استعمل (Microsoft Access) كقاعدة لتخزين البيانات و استعمل (Microsoft Excel) لبيان تطور كل مقياس بالنسبة للزمن، حيث تكمن أهمية هذا البرنامج في قدرته عرض النتائج بصورة أوضح و أسهل على الإدارة المعنية باتخاذ القرارات المؤثرة على تطوير الأداء و معالجة المشاكل إن وجدت.

إن وجود مثل هذا النظام لم يعد خياراً لدائرة التسويق و المبيعات بل أصبح ضرورة لقياس جودة مخرجات الدائرة و المحافظة عليها بالدرجة المطلوبة. و نقترح تعميم هذا النظام على مختلف دوائر الملكية الأردنية و تطوير برنامج قياس الأداء ليصبح أشمل و أكثر قدرة على قياس مؤشرات عديدة في دوائر مختلفة.