

# "Study of HRM Information Systems in Selected Pakistani Organizations"

By Areej Zehra Rizvi

# **ACKNOWLEDGEMENT**

I am grateful to **Allah Almighty** who has provided me the strength required to complete this research study for which I bow my head before Him.

I would like to acknowledge NADRA and its employees, especially Ms. **Farheen Moeen** (HR Manager) for her enormous contribution and help. She provided me very important information that has been of great help in this report. Secondly I'd like to thank Mobilink's **Mr. Syed Fraz** for his time and help.

And lastly I would like to specially thank my teacher **Mr. Naukhez Sarwar** who has guided me all the way from the start till the very end. Thank you sir!

# **Executive Summary**

The title of my thesis is "Benefits of Implementing Human Resource System in Pakistani Organizations". The main aim behind this topic is to prove how Pakistani organization's HR departments can benefit from implementing an HRMS.

Human Resources Management Systems (HRMS) develops computer applications and manages information resources to support the diverse needs of the organization. Human Resource Management System automates and integrates the workflow of critical HR functions like Talent Management, recruitment and Selection, Training and Development, Performance Management, Communication, and Knowledge Management

The goal of an online HRMS (human resource management system) is to streamline HR processes. With such a system in place, employees and managers can easily access the HR information they need, and HR staff can be freed from burdensome paperwork.

HRMS helps establish a link between its activities and the bottom line business goals. HRMS applications gather, collate and distribute information. Theses applications help optimize HR processes, make them more efficient and enable organizations to reduce costs through simplified processes and automated workflow.

# TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
1.1. Introductions to the Study:	2
1.1.1. Broad Problem Area / Background	2
1.1.2. RATIONALE OF THE STUDY	2
1.1.3. OBJECTIVES OF THIS STUDY	3
1.1.4. SCOPE OF THE STUDY	3
1.2. RESEARCH METHODOLOGY:	4
1.2.1 WHAT IS RESEARCH?	
1.2.2. DEFINE RESEARCH METHODOLOGY	
1.2.3. THE GENERAL RESEARCH PROCESS.	
1.2.4. CONDUCTING THE RESEARCH 1.2.4.1. STEP 1DEFINE THE PROBLEM	
1.2.4.1. STEP IDEFINE THE PROBLEM  1.2.4.2. IDENTIFY SOURCES OF INFORMATION	
1.2.4.3. Analyze Secondary Sources	
1.2.4.4. IDENTIFY THE SAMPLE	
1.2.4.5. DATA COLLECTION	
1.2.4.6. Analyze Data and present Results	
1.2.5. DETERMINING THE RESEARCH LEVEL  1.2.51. DESCRIPTIVE RESEARCH	8
1.2.6. LIMITATIONS OF THIS RESEARCH	
CHAPTER 2: LITERATURE REVIEW ON HRMS	
2.1 WHAT IS HRMS AND HOW IT WORKS:	
2.1.1. HRMS – EVOLVING A BETTER APPROACH	
2.1.2. HRMS SOLUTIONS FEATURES:	12
2.1.2.1. AN EASY TO USE INTERFACE FINELY TUNED TO EACH USER'S NEEDS	12
2.1.2.2. Configurable to Support your Organization	13
2.1.2.3. Providing Absolute Security to the System	
2.1.3. EFFECTING THE BUSINESSES BOTTOM LINE	
2.1.3.1. Understand the business strategy	
2.1.3.2. Asses the HR strategy in relation to business strategy	
2.1.3.3. ESTABLISH LINKAGE BETWEEN HR AND BUSINESS GOALS	
2.1.3.4. SETUP THE HUMAN RESOURCE MANAGEMENT SYSTEM	
2.1.3.5. Realize HR Strategy Through Business Strategy	15
2.1.4. BENEFITS OF EMPLOYING HRMS	15
2.1.4.1. ATTRACT AND RETAIN THE BEST EMPLOYEES	
2.1.4.2. CONTROL WORKFORCE COSTS AND IMPROVE SERVICE	
2.1.4.3. IMPROVE DECISION-MAKING WITH WORKFORCE INTELLIGENCE	
2.1.4.4. Total Compensation to Attract Employees	
2.1.4.5. DEFINE AND ACCESS EXISTING COMPETENCIES / SKILLS	
2.1.4.6. IMPROVE WORKFORCE PRODUCTIVITY, AND ACHIEVE EFFICIENCY GAINS	
	~ ^

2.1.4.8. ALIGN YOUR WORKFORCE TO CORPORATE OBJECTIVES	21
2.1.4.9. ACCURATE INFORMATION ON WORKFORCE HEADCOUNT	
2.1.4.10. Ensure Successful Learning	22
2.1.4.11. On-line Access to Talent Management Information	22
2.1.4.12. Connect People, Content, and Community	23
2.1.4.13. Drill Directly to Detail & Search Facility	
2.2. GENERIC IMPLEMENTATION STRATEGY	313
2.2.1. IMPLEMENTATION METHODOLOGY	25
2.2.1.1. Structure Phase - Project Initiation	25
2.2.1.2. Prototype Phase - Product Fit	
2.2.1.3. DEVELOP PHASE - CONSTRUCTION AND INTEGRATION	25
2.2.1.4. Test Phase - Validation	25
2.2.1.5. Deploy Phase - Move into Production	25
2.2.2. IMPLEMENTATION PROCESS	26
2.2.2.1. IMPLEMENTATION PLANNING	
2.2.2.2. HRMS Project Implementation Team	27
2.2.2.3. POLICY AND PROCEDURE ISSUES	27
2.2.2.4. Project Team Training	28
2.2.2.5. Installation	29
2.2.2.6. FIT ANALYSIS	30
2.2.2.7. MODIFYING THE SYSTEM	
2.2.2.8. Unit Testing	30
2.2.2.9. CONVERSION	30
2.2.2.10. Parallel Testing	31
2.3. HR PRACTICES THAT CAN BE AUTOMATED	31
2.3.1. EXTRA FEATURES OF HRMS	
CHAPTER 3: FINDINGS ON HRMS IN PAKISTANI ORGANIZATIONS	34
3.1 Implementation of HRMS in National Database and Registration	
AUTHORITY	35
3.1.1. About NADRA:	36
3.1.2. NADRA's HR Department:	
3.1.3. HR'S VISION & MISSION	
3.1.4. HR'S VALUES	
3.1.5. HR'S DEPARTMENT'S ORGAN-O-GRAM:	
3.1.6. NADRA'S HR'S CYCLE:	39
3.1.6.1. RECRUITMENT & SELECTION	
3.1.6.2 .Employees Data Management	39
3.1.6.3. Performance Management	40
3.1.6.4. Training & Development	
3.1.6.5. CAREER & SUCCESSION PLANNING	
3.1.6.6. SEPARATION	40
3.1.7. NADRA'S HRMS MODEL:	41
3.1.7.1. PEOPLE:	
3.1.7.2. Work Structure:	
3.1.7.3. Compensation and Benefits:	
3 1.7.4. ASSIGNMENTS:	10

3.1.8. BENEFITS OF HRMS REAPED BY NADRA	43
3.1.9. ADVANTAGES OF HRMS:	43
3.1.9.1. Transparency	43
3.1.9.2. ACCURACY, SPEED AND REAL TIME DATA AVAILABILITY	
3.1.9.3. BETTER RESOURCE ALLOCATION AND DECISION MAKING	
3.1.9.4. PROACTIVE VS REACTIVE	
3.1.9.5. BETTER CONTROLS:	
3.1.9.6. More efficient Hiring:	
	-
3.1.10. NADRA'S HUMAN RESOURCE MANAGEMENT SYSTEM 3.1.10.1. CLOSER LOOK AT THE AUTOMATED PERFORMANCE EVALUATION SYSTEM	45
3.1.10.2. CLOSER LOOK AT THE AUTOMATED PERFORMANCE EVALUATION SYSTEM	
3.1.10.3. CLOSER LOOK AT THE E-RECRUITMENT STSTEM	
3.1.10.4. Customized Reports	
3.2. Implementation of HRMS in Mobilink	670
3.2.1. ABOUT MOBILINK:	61
3.2.2. MOBILINK VISION	
3.2.2. MOBILINK 'S HR DEPARTMENT	
3.2.4. MOBILINK'S HRMS MODEL:	
3.2.5. MOBILINK'S INDIVIDUAL AUTOMATED SYSTEMS	62
3.2.5.1. SELECTION PROCESS	62
3.2.5.2. Employee Information	
3.2.5.4. BUDGET	
CHAPTER 4: ANALYSIS	
4.1. Analysis of Companies	
4.1.1. ANALYSIS HRMS IMPLEMENTATION IN NADRA	
4.1.1.1. ANALYSIS OF THE PERFORMANCE EVALUATION SYSTEM	
4.1.1.2. Analysis of the e-Recruitment System	
4.1.1.3. Analysis of the Leave Calculation System	
4.1.2. ANALYSIS HRMS IMPLEMENTATION IN MOBILINK	
4.1.2.1. Analysis of the Selection Process	
4.1.2.2. Analysis of the monthly new hires report 4.1.2.3. Analysis of the Employee Information	
4.1.2.5. ANALYSIS OF THE EMPLOTEE INFORMATION	
4.2. Similarities between NADRA and Mobilink	69
4.3. DIFFERENCES BETWEEN NADRA AND MOBILINK	
4.4. ADVANTAGES OF IMPLEMENTING HRMS	
4.4.1. PAPERLESS ENVIRONMENT	
4.4.2. SHORTER PROCESS-ING TIME	
4.4.3. ERROR FREE SYSTEM	70
4.4.4. EASY ACCESS TO INFORMATION	71

4.4.5. LESS AMOUNT OF WORKFORCE REQUIRED	71
4.4.6. FASTER DECISION MAKING PROCESS	71
4.4.7. MORE TIME TO FOCUS ON STRATEGIC ISSURES	71
4.4.8. DATA MORE SECURE	71
4.4.9. INCREASED EMPLOYEE SATISFACTION	72
4.4.10 CUSTOMIZEABLE	72
4.5. PITFALLS IN HRMS IMPLEMENTATION	792
4.5.1. COSTLY SYSTEM	72
4.5.2. IMPLEMENTATION PROBLEMS	72
4.5.3. MAINTAINING THE SYSTEM	73
4.5.4. LACK OF MANAGEMENT CONTRIBUTION	74
4.5.5. EXCESSIVE AMOUNT OF CUSTOMIZATION	74
4.5.6. FAILURE TO ASSIGN A PROJECT TEAM	74
4.5.7. POOR NEED ANALYSIS REPORT	74
4.6. Cultural Implications	74
4.6.1. PAKISTANIS WORKFORCE'S OUTLOOK TOWARDS AUTOMATIED SYSTEMS	74
4.6.2. HR DEPARTMENT'S EVOLUTION IN PAKISTAN	75
Chapter 5: Conclusion & Recommendations	77
5.1. CONCLUSION	7885
5.2. RECOMMENDATIONS	<i>78</i>
5.2.1. RECOMMENDATIONS FOR NADRA	78
5.2.2. RECOMMENDATIONS FOR MOBILINK	79
5.2.3. STRATEGIES TO HELP LESSEN RESISTANCE TO THE HRMS IMPLEMENTATION	<u>1</u> 80
APPENDICES	892
RIRLIOGRAPHY	970

# **TABLE OF FIGURES**

Figure 1: Research Plan	.Error!	Bookmark not defined.
Figure 2: Research Process	.Error!	Bookmark not defined.
Figure 3:Data Collection Tools	.Error!	Bookmark not defined.
Figure 4: Matching business and HR performance parameters	eters	Error! Bookmark not
defined.		
Figure 5: An HRMS Interface	.Error!	Bookmark not defined.
Figure 6: HRMS Customizable	.Error!	Bookmark not defined.
Figure 7: HRMS Customizable	.Error!	Bookmark not defined.
Figure 8: Helps Make Important Decisions;	.Error!	Bookmark not defined.
Figure 9: Compensation Chart		
Figure 10: Competency Scenario	.Error!	Bookmark not defined.
Figure 11: HRMS Committee Members	.Error!	Bookmark not defined.
Figure 12: HRMS PMS	.Error!	Bookmark not defined.
Figure 13: HR Department Organogram		
Figure 14: HR Cycle	.Error!	Bookmark not defined.
Figure 15: The HRMS Model		
Figure 16: Every employee initiates his/her own PA as Ir	nitiating	Officer (IO)Error!
Bookmark not defined.		
Figure 17: IO views supervisory hierarchy	.Error!	Bookmark not defined.
Figure 18: IO explains whether yearly targets were achieval.	ved or n	otError! Bookmark
not defined.		
Figure 19: Reporting Officer (RO) rates targets and gives	s commo	ents Error! Bookmark
not defined.		
Figure 20: RO rates competencies and skills		
Figure 21: RO & SRO give comments & compute final s	core	Error! Bookmark not
defined.		
Figure 22:The Candidates Have to Register on Line		
Figure 23: Sample Screen- Multiple Choice Question bas	sed Onli	ne Test Error!
Bookmark not defined.		
Figure 24: Instant Scoring to ensure transparency		
Figure 25: Leave Requsition		
Figure 26: The HRMS Screen shot 1		
Figure 27: The HRMS Screen Shot 2		
Figure 27: The HRMS Screen Shot 2		
Figure 28: Registering to Mobilink		
Figure 29: Developing or Uploading your CV to Mobilin	k websi	teError! Bookmark not
defined.		
Figure 30: Linkages of hR Maturrity		
Figure 31: NADRA's Call Centre Performance Evaluation	on Syste	ms Main Page Error!
Bookmark not defined.		
Figure 32: List Of Competencies & Skills	.Error!	Bookmark not defined.
Figure 33: Achievement Details Submission		
Figure 34: Rating Achievements		
Figure 35: Oracle HRMS Map	.Error!	Bookmark not defined.

Figure 36:Oracle Self-service	Error! Bookmark not defined.
Figure 37: Modeling Compensation Scenarios	Error! Bookmark not defined.
Figure 38: Competency Strategy Scenario	Error! Bookmark not defined.
Figure 39: Head Count Activity	Error! Bookmark not defined.
Figure 40: Architecture for HRMS Application	Development Error! Bookmark not
defined.	
Figure 41: Access to HRMS Database	Error! Bookmark not defined.

# 1.1. Introductions to the Study:

When people are the cornerstone of your business, making the right strategic decisions about staffing, hiring, and workforce deployment is critical to your competitive advantage. Yet, making the right decisions requires more than just operational data; you need to view patterns and trends in order to truly maximize the workforce.

With people-related costs averaging over 60% of total corporate expenditures, leading firms are paying increased attention to the contribution made by their workers and are developing a new model for HR. This model includes programs to improve the efficiency, effectiveness, and productivity of the workforce.

Human Resources Management Systems (HRMS) develops computer applications and manages information resources to support the diverse needs of the organization. Human Resource Management System automates and integrates the workflow of critical HR functions like Talent Management, recruitment and Selection, Training and Development, Performance Management, Communication, and Knowledge Management.

## 1.1.1. Broad Problem Area / Background

Many organizations are faced with declining budgets and aggressive growth targets. To meet these challenges, they need to achieve the highest level of performance from their workforce. They look to their human resources (HR) departments for workforce planning, information management, and employee development aimed at raising the overall level of workforce skills and commitment

Yet HR is often overwhelmed by day-to-day activities and paper-intensive administrative work such as address changes, benefits enrollment, approval routing, and manager reports. Although these maintenance tasks are important, they leave little time for HR professionals to be proactive and strategic in their mission to develop a productive and reliable workforce. And, as the importance of having knowledge-able, committed workers grows, HR departments must find ways to effectively address the alignment of employee recruitment, salary and benefits, and compensation management with the current and future needs of the organization.

# 1.1.2. RATIONALE OF THE STUDY

The basic purpose of this study is to explain how to manage critical human resources activities while staying focused on your core business. This task can be achieved by streamlining and automating everyday administrative tasks. Human Resources Management System allows you to focus on strategic activities such as recruiting the right people and etc. HRMS captures detailed workforce related information into a single

environment, and combines it with complex analysis of the companies recruiting, compensation, benefits, and training initiatives. With this level of insight, managers can make the right strategic decisions to maximize your workforce and improve HR performance. It further helps to:

- Cut the costs out of HR transactions
- Increase the accuracy of HR transactional data
- Enable your HR team to focus on HR programs, management and consultation
- A Single Entry Point for All Your Day-to-Day People Management Activities

This solution also makes it easy for you to assess your new employees to ensure that you are attracting the best candidates. You can track criteria such as:

- Where you are getting your employees
- How long they stay.
- Whether they have the right qualifications.
- How much it costs to recruit and replace employees.

Human Resources management System (HRMS) provides the staff with the tools to manage the full spectrum of human resources functions, from recruitment through retirement to budgeting and planning decisions linked to human resource management. HRMS automates many of the administrative tasks that occupy employee's time, allowing them to focus on the strategic direction of the department and organization

# 1.1.3. OBJECTIVES OF THIS STUDY

Following are the objectives of this study:

- How Pakistani organizations have implemented and are benefiting form HRMS
- Explain how it increase the efficiency of work performed by HRMS
- The HRMS implementation process

# 1.1.4. SCOPE OF THE STUDY

This study is only going to explore the automation of the HR department's activities and how it benefits the employees and the department as a whole. Only those organizations have been considered who have a well established and mature HR department and who have automated at some of their HR activities.

# 1.2. RESEARCH METHODOLOGY:

# 1.2.1 WHAT IS RESEARCH?

In his book, *Practical Research: Planning and Design*, Paul Leedy describes research as "The systematic process of collecting and analyzing information (data) in order to increase our understanding of the phenomenon with which we are concerned or interested." Leedy suggests that the word *research* has so many meanings attached to it in that "few people have any idea of the real meaning." The most important characteristics of formal research, as Leedy defines it, is that it involves the interpretation of data to draw conclusions. Research is not, then, the mere restating of previously known facts or the process of obtaining new knowledge by searching for information. The process of formal research has eight distinct characteristics as identified by Leedy:

- Research originates with a question or problem.
- Research requires a clear articulation of a goal.
- Research follows a specific plan of procedure.
- Research usually divides the principal problem into more manageable subproblems.
- Research is guided by the specific research problem, question, or hypothesis.
- Research accepts certain critical assumptions.
- Research requires the collection and interpretation of data in attempting to resolve the problem that initiated the research.
- Research builds on previous research.

Leedy's eight characteristics can also be viewed as the research methodology.

#### 1.2.2. DEFINE RESEARCH METHODOLOGY

A research methodology defines what the activity of research is, how to proceed, how to measure progress, and what constitutes success.

Research is an ORGANIZED and SYSTEMATIC way of FINDING ANSWERS to QUESTIONS. Research is an ORGANIZED and SYSTEMATIC way of FINDING ANSWERS to QUESTIONS.

SYSTEMATIC because there is a definite set of procedures and steps which you will follow. There are certain things in the research process which are always done in order to get the most accurate results.

ORGANIZED in that there is a structure or method in going about doing research. It is a planned procedure, not a spontaneous one. It is focused and limited to a specific scope.

FINDING ANSWERS is the end of all research. Whether it is the answer to a hypothesis or even a simple question, research is successful when we find answers. Sometimes the answer is no, but it is still an answer.

QUESTIONS are central to research. If there is no question, then the answer is of no use. Research is focused on relevant, useful, and important questions. Without a question, research has no focus, drive, or purpose.

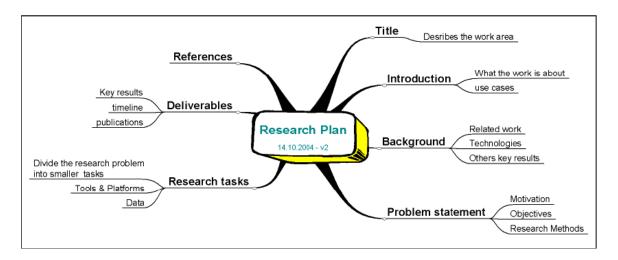
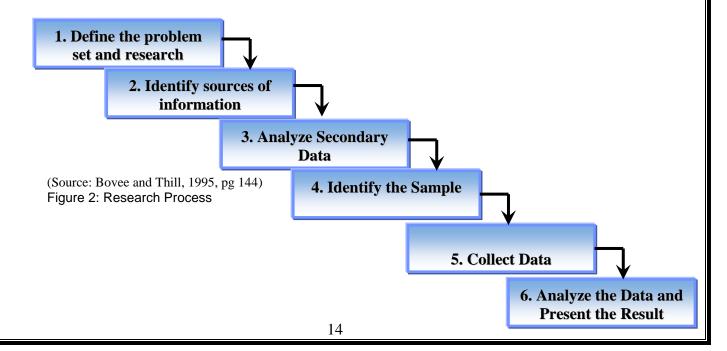


Figure 1: Research Plan

The Research Seminar (2-4 cr) P

## 1.2.3. THE GENERAL RESEARCH PROCESS

The general research process consists of the following six steps;



# 1.2.4. CONDUCTING THE RESEARCH

#### 1.2.4.1. Step 1Define the problem

# **Hypothesis development**

HI: Explore the extent of HRMS implementation in various organizations HR department's process

H2: Explain how it increase the efficiency of work performed by HRMS

• *H3*: How Pakistani organizations have implemented and are benefiting form HRMS

#### 1.2.4.2. IDENTIFY SOURCES OF INFORMATION

# 1.2.4.2.1. Qualitative Techniques

The qualitative techniques consist of the following tools to gather information:

# ■ *In-depth Interviews*

For my thesis research I conducted a number of In-depth interviews with HR manager in NADRA, Ms. Farheen Moeen and Mr. Syed Faraz in Mobilink

These interviews were a mixture of *structured* as well as *unstructured*. The common questions to all the managers were structured. Whereas the implementation and design in each organization was different, therefore the interview here was unstructured.

#### Observations

The thesis research required observing the working of HRMS in actual work settings. I got plenty of opportunity to do this in NADRA's HR department.

# 1.2.4.2.2. Quantitative Techniques

The qualitative techniques consist of the following tools to gather information:

- Surveys
- Experiments

During my thesis research none of these quantitative tools were required or necessary. Therefore the quantitative techniques were not employed in this study.

#### 1.2.4.3. Analyze Secondary Sources

# 1.2.4.3.1. Internet, TV, Radio

The internet was my prime source to collect the secondary data. I gathered most of the HRMS information form different websites.

# 1.2.4.3.2. Book, Magazines, Newspapers, General Business Publications

Most of the literature review about HRSM was gathered through general publications and different works by different authors. However this information was also present on the internet.

## 1.2.43.3. Government Sources

My biggest source of information was NADRA. It was here that I got most of my information about the system and actually saw HRMS being implemented and used in its purest form.

#### 1.2.4.4. IDENTIFY THE SAMPLE

The sample size of this thesis is very small. It is limited to 3 organizations. The reason is that a very small amount of organizations have implemented the HRMS in their HR department. And the limited number of organizations that have employed the system have not implemented it in its truest form.

Another reason for the small sample size is the corporate secrets confidentiality factor. Many of the organizations were not willing to share the information with outsiders.

#### 1.2.4.5. Data Collection

There are a number of methods and tools used to collect data for research purposes. Following is a comprehensive diagram of data collection tools and techniques:

# **Data Collection Techniques / Tools for Research** Questionnaire Interview Observation Opinionnaire & Tests & Attitude Scale Appraisal Instruments Close Open Picture Scale Form Form Form Form

Figure 3:Data Collection Tools

Source Malik 1998, pg 15

While conducting this study only two tools were employed:

#### 1. Interview:

As mentioned earlier the interviews were both structured and non structured; as well as open ended and close ended.

#### 2. Direct Observation:

In NADRA I was given the opportunity to observe the system in their working environment.

#### 1.2.4.6. Analyze Data and present Results

Analysis and result presentation will be done at the end of the study.

#### 1.2.5. DETERMINING THE RESEARCH LEVEL

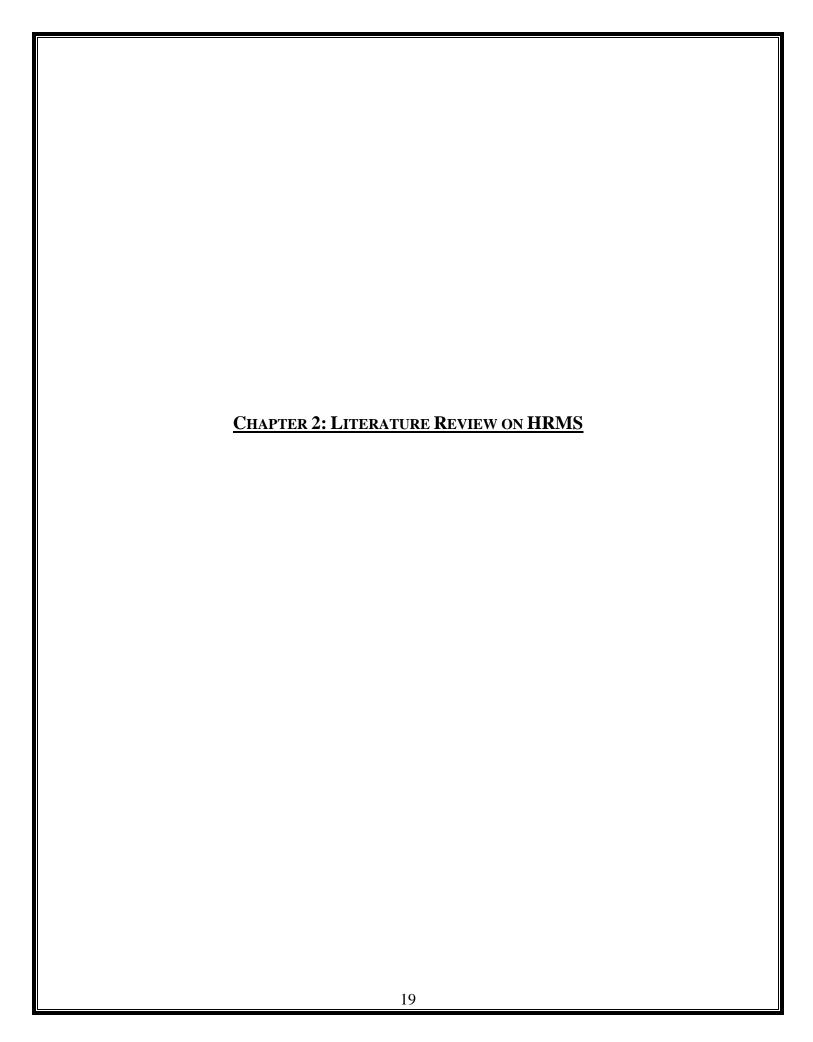
#### 1.2.51. DESCRIPTIVE RESEARCH

Descriptive research is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The level of my research is "Descriptive Research Level"

# 1.2.6. LIMITATIONS OF THIS RESEARCH

This thesis is based on the implementation, usage and benefits of the HRMS in Pakistani organizations. Following are the limitations of this research topic:

- 1. Not many companies have implemented the HRMS in their HR department. And the companies that have implemented the system is not in its truest form
- 2. The companies that have implemented HRMS have no documentation of the system
- 3. Some companies are reluctant to share their information with outsiders, due to the confidentiality of their system
- 4. Only the organizations from Islamabad and Rawalpindi have been considered



# 2.1 WHAT IS HRMS AND HOW IT WORKS:

HMRS provides a window into the centralized repository for human capital management. Users are granted access to personal details, employment information and application functionality based on their roles. For example, a person with no direct reports has access to their own data only. However, a manager with headcount or the correct security has access to their subordinate's information and other related manager self-service functionality.

Users can be granted direct access to a set of self-service web pages. Through these pages, employees can make choices about benefits options, view on-line pay slips, enroll in learning, enter timesheets, perform self-assessments, indicate work preferences, skills and qualifications, request leave, and apply for jobs.

They can also view and update their personal information including but not limited to emergency contacts, dependents, and beneficiaries. Additionally, they can also maintain basic personal information needed for accurate benefits eligibility, taxation and payments, such as address and bank information.

In addition to having access to their own personal data, managers are granted access to review other user's data. In addition to approving their subordinate's transactions, they can perform many day-to-day operational deployment processes, such as generating offers to candidates, transferring or promoting employees, conducting budget allocations, performing group or individual compensation reviews, terminating employees or contingent worker placements, appraising others, and locating suitably skilled people for new job openings.

## 2.1.1. HRMS – EVOLVING A BETTER APPROACH

HRMS helps transform transactional data on human capital into information and knowledge that enables managers to derive better business results. There are three elements to be considered here; Context, Analysis and Outcomes. The "Context" refers to organizational, environmental, and strategic factors. The "Analysis" includes performance measures, drivers, and informed decision making. The "Outcome" refers to desired business results.

This produces value for an organization. These can be used at different levels. At the simplest level they can be applied to diagnose specific problems in an organizational unit. At an evolved level, they can be use to develop an ongoing capability for the entire organization.

The HR activities can be classified into three categories: Operational (Transactional), Tactical (Traditional) and Strategic 9Transformational). Theses categories can be mapped to specific processes within HR. however this mapping can be different for different initiatives based on the frame of reference. For example compensating review is a

Tactical exercise if past data is used for a financial analysis, where as if the same data is use to build a forward looking compensation model, the exercise is strategic.

	Operational	Tectical	Strategic
Process	Efficiency	Processes effectiveness	Algament
Recultment	Cost/ Time to Hire	Competency Fit	Planning Right Workforce Mix
Compensation & Benefits	Revenue per employee	Compensation Mix	Compensation Modeling
Training and Development	Training Cost/ Employee	Training Effectiveness	R&D Success
Retention	Attrition % Cost of Attrition	Cost of Retention Initiative to Attrition	Linking Employee Engagement to Attrition Linking Attrition to Profitability
Talent Management	Staffing Targets Utilization Planning	Competencies Management Effectiveness-Ideal Skill Models	Leadership Development, Succession Planning

Figure 4: Matching business and HR performance parameters

#### **2.1.2. HRMS SOLUTIONS FEATURES:**

The HRMS solution provides a number of interesting features to the users. These features help the user in better understanding the system and thus producing more meaning full results and activities. Following are a number of HRMS solutions features:

#### 2.1.2.1. AN EASY TO USE INTERFACE FINELY TUNED TO EACH USER'S NEEDS

HRMS solution providers offer an easy to use end-user environment. It can be the entry point for all day-to-day management and employee processes. The interface changes its display intelligently based on information stored about the end user.

The interface 'knows', for instance, who a user supervises, what they can approve, what their viewing preferences for information are, what language they speak, the address style for their country and what business metrics they need to see in Oracle HR Intelligence, and will present these to the end user so that they do not need to spend time searching for the information. In addition to this, eligibility criteria HRMS applications can be set by the HR department so that a manager can only perform actions that a person is eligible for based on these criteria.

When a manager needs to perform an HR transaction, such as a job transfer, he logs on to the manager facility and is presented with a navigation tree of his direct reports. He selects the individual, who is going to transfer, and the system identifies this employee's home country and then, processes his transfer with the appropriate data and validations. You can go further by configuring our delivered HR processes, to finely tune the HR self-service process to each user's needs. Each process can be configured to include help text.

For each type of user there is a complete online view of information for either themselves or their team in the case of a manager or their section of the company in the case of a HR professional user. This information is also available for the individual as a complete view of their own record includes a full history of details.

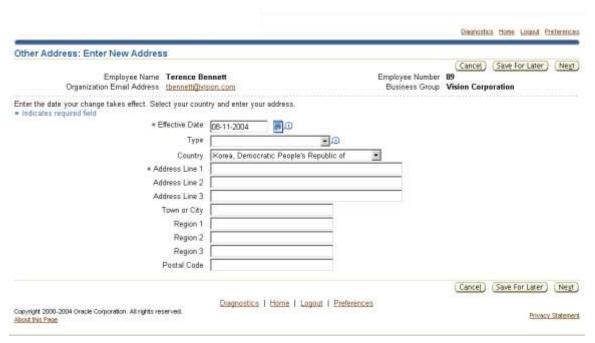


Figure 5: An HRMS Interface

#### 2.1.2.2. Configurable to Support your Organization

HRMS software's are highly extensible and configurable application that enables you to design user sites that addresses your organization's needs. Content, labels, links and logos can all be configured to match your corporate identity. You can include content such as corporate knowledge repositories, HR policies or even external links such as benefits providers, competency libraries or salary survey specialists.

Furthermore, HR business processes can be configured for different user groups based on their specific requirements. It can hide or show different regions of the application and even fields of a transaction based on the category of user. You can omit process steps in an HR transaction, which may not be relevant for your business. You can also choose to display your own configured fields to capture unique information to your organization. If

you have determined a need for extra information, you can allow line managers or employees to update and use this information.

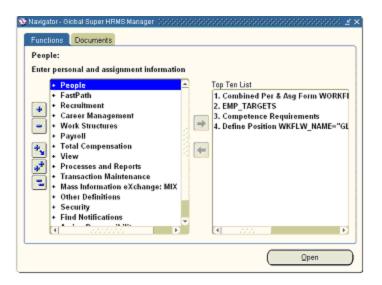


Figure 6: HRMS Customizable

#### 2.1.2.3. Providing Absolute Security to the System

When a user enters information, it is validated behind the scenes to ensure that information is always accurate and consistent. This reduces the cost of maintaining secure access by automating security changes as an employee joins the business, or moves around the company.

# 2.1.3. EFFECTING THE BUSINESSES BOTTOM LINE

HRMS helps ensure tying business strategy to HR initiatives. The HR department should create a road map for HRMS. This involves the following five steps:

#### 2.1.3.1. Understand the business strategy

Assess the current state of the organization, its strategy and its business goals.

#### 2.1.3.2. Asses the HR strategy in relation to business strategy

Identify the gaps in HR strategy with respect to business goals.

#### 2.1.3.3. ESTABLISH LINKAGE BETWEEN HR AND BUSINESS GOALS

Use a casual analysis to establish cause-effect relationships between business goals and HR processes

#### 2.1.3.4. Setup the Human Resource Management System

Use the above linkages to track key performance indicators and tune HR parameters through clearly articulated metrics. The tracking and tuning process is a very important piece of this step and should include the following activities.

- **Measure** HR performance wit respect to bottom line business goals.
  - o Chose right measures tracking leading and lagging indicators
  - Establish right cause-effect relationships (through validation)
- **Analyze** through real time tracking and predictive planning through what-if scenario

#### 2.1.3.5. Realize HR Strategy Through Business Strategy

Realign HR strategy, processes and goals with appropriate course corrective initiatives. This will help organizations to make their HRMS initiative more effective by connecting their corporate strategy to HR processes at all operating levels. Organizations are therefore better prepared to maintain a strategic edge over its competitors and provide their stakeholders a clearer picture of the business and the ROI.

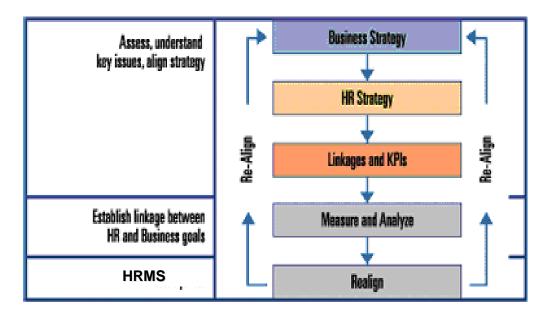


Figure 7: HRMS Customizable

# 2.1.4. BENEFITS OF EMPLOYING HRMS

The implementation of HRMS in a company provides numerous benefits and facilities. Following is a detailed list of all the benefits HRMS provides its users:

#### 2.1.4.1. ATTRACT AND RETAIN THE BEST EMPLOYEES

To stay ahead of the competition, organizations are deploying online portals to provide a collaborative environment for real-time recruitment. HRMS solution providers offer a full-cycle online self-service recruiting solution that addresses all aspects of applicant tracking for managers, recruiters, and candidates. It enables organizations to access a wider pool of applicants via the Web than with traditional recruiting methods and reduce the time to fill positions. It is deeply integrated with Human Resources database to share and leverage common data such as:

- Competencies and job qualifications
- Applicant assignments, job requisitions, and vacancies
- Recruitment activity
- Employee information and applicant information
- Compensation packages by role
- Budgets to justify more head count
- Benefits information for new-hire enrollment

#### 2.1.4.2. CONTROL WORKFORCE COSTS AND IMPROVE SERVICE

HRMS helps you keep on top of headcount spending. It facilitates collaboration between your HR and accounting departments so that you are better able to plan, forecast, monitor, and control budgets for new hires. The system tracks approved positions and headcount by company and department and automatically updates this information to reflect any changes in employees' status.

With this solution, you no longer have to worry about managers hiring employees without the budget to do so. They are easily able to verify that an open position is budgeted for before submitting a new hire requisition. Employee and manager self-service capabilities can help control and lower administrative and labor costs to improve the bottom line. Online self-service capabilities give employees the ability to manage their own information, including personal profiles, benefits, expenses, vacation, training, and appraisals. Traditionally paper-based tasks—such as employee transfers, promotions, and career planning—can be accomplished more efficiently online and automatically routed for approval, eliminating paperwork bottlenecks and lowering administrative costs.

In order to meet increasing commitments within tight budgetary constraints, you need to manage workforce costs tightly to:

• Budget different components of the cost of each post, and track expenditure against committed activities.

- Use automated approach to controlling spending means to require approvals prior to the creation of new posts,
- Control the hiring of new people to existing posts outside budget limits, according to your policies.
- Cascade the allocation of budget and spend through the management chain, and retain control by reviewing how budgets and expenditure are taking place throughout the organization.
- Monitor utilization, absence headcount and costs on a global basis.

#### 2.1.4.3. IMPROVE DECISION-MAKING WITH WORKFORCE INTELLIGENCE

Managing staff shortages is an important effort for many organizations. To maintain adequate amount of employees, organizations need up-to-date information on their current employees and possible new recruits. HRMS also provides an integrated solution for analyzing workforce trends and providing business intelligence that can assist in identifying potential workforce shortages.

HRMS allows you to cut through the reams of data entered about your employees to give you a complete picture of issues and trends. The software makes it easy for you to create ad hoc reports, summarize data, or report detail. You will have access to actionable information that helps you find and correct negative trends before they become costly, long-range problems. At the same time, positive information can help you direct procedure and process improvements.

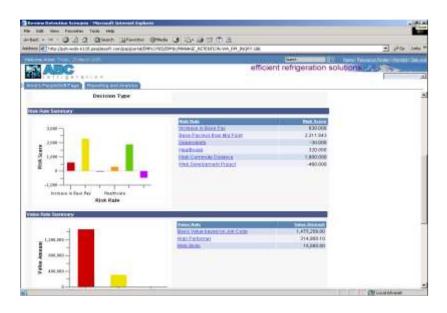


Figure 8: Helps Make Important Decisions; i.e. Identify risk factors that may cause employees to leave the organization.

#### 2.1.4.4. TOTAL COMPENSATION TO ATTRACT EMPLOYEES

Increased competition for scarce skilled resources mean that every business has to become more innovative in offering total compensation packages that meet the many and varying needs of the people it is trying to attract and retain. At the same time, organizations need to exert strong control over employment costs. You have to adopt the latest thinking based on benefits best practices as well as comply with governmental regulations. HRMS delivers a highly flexible, configurable approach to designing compensation and benefits programs to meet any degree of complexity, as well as wizards to make plan design implementation fast and error free.

It also enables job changes/promotions and performance reviews. It allows the manager to perform employee validations, budget definitions and distributions, compensation allocations, promotions, performance reviews, approval processing and notifications through workflow. This provides flexibility to enforce compensation policies and to ensure such policies are administered consistently. Employee compensation history may also be viewed for employee awards, job changes, performance reviews, and ranking.

# It also helps to:

- Support employee enrollment and choice in benefits programs, which exactly reflects the choices that they are eligible to make
- Reduce administrative costs and reduce errors through policy automation
- Reduce implementation time and chance of setup errors using the templates and process flows based on commonly used plan types and benefits best practices
- Automate grade step progression process
- Allow managers to undertake specialized activities during compensation review cycles such as issue budgets and allocate compensation using wizards to calculate budgets or allocations based on criteria such as performance or length of service.
- Create and manage leave plans for different employee categories that are finely tuned to the needs of the organization and of the individual.

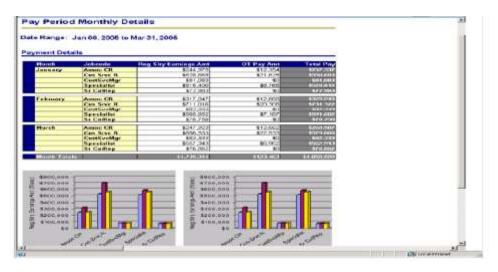


Figure 9: Compensation Chart

#### 2.1.4.5. DEFINE AND ACCESS EXISTING COMPETENCIES / SKILLS

Capturing, measuring, and developing the skills of employees and matching them to job requirements can be difficult. Using the HRMS, organizations can efficiently identify, measure, and record employee competencies. This solution streamlines the tasks of recording and storing data, allowing the development of a single source of information for quick and efficient retrieval. The organization can accurately review and measure their workforce competencies and responsibilities against their goals.

HRMS helps you create a workforce strategy that identifies key jobs, competencies, and profiles essential to accomplishing your strategic business goals today and in the future. It also offer's a complete framework for developing the skills and knowledge of your workforce, and a systematic method for assessing and rewarding their use in meeting business objectives. It helps to:

- Define or upload a library of competency definitions together with appropriate measurement scales, and apply these to job requirements, to people, and to training.
- Use on-line appraisals to measure objectives, assess competencies, test strengths
  and weaknesses, and conduct competency gap analysis for recruiting, employee
  development and planning of learning
- Link directly to learning plans, and then to on-line learning delivery
- Link performance directly to pay through compensation workbench

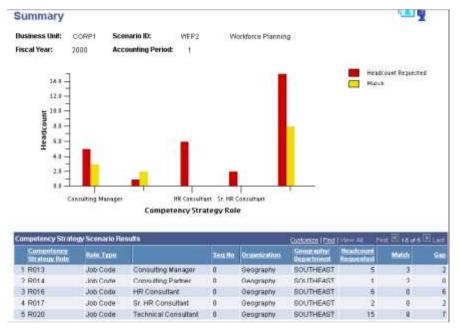


Figure 10: Competency Scenario

# 2.1.4.6. IMPROVE WORKFORCE PRODUCTIVITY, AND ACHIEVE EFFICIENCY GAINS

With people-related costs averaging over 60% of total corporate expenditures, leading firms are paying increased attention to the contribution made by their workers and are developing a new model for HR. This model includes programs to improve the efficiency, effectiveness, and productivity of the workforce. To be fully effective, these programs require new processes supported by leading technologies. HRMS allows you to automate all aspects of workforce management to achieve drastic productivity gains and cost savings throughout your workforce, while ensuring that confidential data is maintained electronically and securely. You can streamline your business processes with self-service, workflow and policy automation, speeding up transactions and reducing overheads and error. At the same time, HRMS helps dramatically reduces the cost of permitting access to all employees in the business, as well as the costs of HR support and interventions. Consequently, HR services to employees and managers are improved, and everyone has access to better real-time workforce intelligence from a single consolidated source. HRMS enables you to:

- Automate basic policy rules, ranging from eligibility for compensation to rules about placing people into funded positions, and security access.
- Use predefined policy rules and dynamic eligibility determination to manage a person's career and salary advancement through grades and/or steps.
- Seamlessly integrate with the rest of the E-Business Suite, including Financials for payroll and Projects for project-based staffing and deployment.
- Route approvals automatically to shorten the time to complete workforce related changes.
- Ensure timely transactions with no errors, and eliminate many unnecessary process steps.

#### 2.1.4.7. HARNESSING THE POWER OF WORKFLOW TO SPEED UP PROCESSES

HRMS solution providers also offer workflow templates. Workflow helps to streamline inter-user approvals and participation in review processes. Workflow is a complete and robust workflow management system that enables routing information of any type according to user-defined business rules. You can configure any process using the Workflow that requires routing to other users for review, approval and finalization. Workflow template delivers reports and approval requests to approvers in sequence, with appropriate checks to see that the process is moving quickly and effectively and to confirm that the information is still valid. Each user has an on-line inbox that delivers messages on the status of the process and informs the user if he needs to take action. Each approver is able to return for correction to selected people before them in the approval chain or the person who submitted the transaction.

The HRMS implementation allows individuals to perform a range of important functions like:

- View/Edit personal details e.g. Home Phone number, Home Address, Postal Address
- View/Edit Emergency Contact details
- View Staff Training History
- View employment information relating to your position/s at the company
- Enquire on Leave Balances and leave bookings
- View monthly pay-slips
- View/Edit bank account details

#### 2.1.4.8. ALIGN YOUR WORKFORCE TO CORPORATE OBJECTIVES

With increasing demands to optimize the use of the workforce in a dynamic business environment, businesses are rapidly adopting new e-business practices to succeed in an increasingly competitive environment. These practices enable companies to align the workforce to business objectives, and to systematically grow and reward talent as strategic resources. Solution providers, provides this via collaborative, internet enabled capabilities. With Self-service you can:

- Rapidly implement jobs, positions, grades and steps using tools designed to help setup your organizational structure.
- Create and manage evolving business structures; quickly redirect the workforce to meet new goals via mass changes to organization structures, compensation, and work terms.
- Manage flexible working arrangements using permanent, short-contract and contingent workers to staff new projects quickly and at the appropriate level of cost and skill.
- Plan to meet business objectives by identifying current and future job capability requirements and increasing staffing capability through job pathing and structured learning.
- Use automation to identify required skills and qualifications and help fit and deploy people to jobs or projects.
- Measure and monitor performance to personal goals and corporate objectives. Continually monitor personal performance and use structured career development methods, such as on-line appraisals of objectives and competencies, to ensure that employees continue to develop and utilize skills.
- Motivate the workforce and influence performance through targeted total compensation, including adjustments to performance-based pay, bonuses, non-cash, and benefits.

#### 2.1.4.9. ACCURATE INFORMATION ON WORKFORCE HEADCOUNT

The sheer variation of today's workforce in terms of working hours, short-term and parttime working, and time-off arrangements means that keeping track of the capacity of employees to perform work, expressed in terms of headcount or a % of full-time work, is critical. Equally, people must be deployed very rapidly to meet new opportunities, or have changed working conditions applied when demand ceases. There is an increasing demand to conduct detailed and accurate 'accounting' of the workforce. The business also needs to be able to detect patterns of change, usually by workforce movements such as voluntary turnover.

The 'headcount' shows start and end totals throughout the management hierarchy, as well as the totals and % changes due to transfers into and out of each manager's control throughout the period. The user can drill at any level of the hierarchy to see the line-by line detail behind the statistics. For instance, a termination total enables the user to drill to a list of all terminated employees, showing termination reasons and length of service, as well as job and location details.

## 2.1.4.10. Ensure Successful Learning

Rapid changes in organizational administration can place significant stress on staff, particularly when the changes demand new skills and ways of working and different measures of success. Ensuring that your employees and partners have the necessary skills for their jobs improves morale, quality of care, and employee retention rates. Learning Management tools supports all education models by providing a single, unified learning delivery system that can be used by an extended enterprise of employees, customers, and partners.

HRMS solutions are also designed to be very flexible to change with your business practices as your business evolves. It is designed to be configurable so that they can change over time. It helps to:

- Manage mass change processes for rapid reactions to changes. A change to reporting structures, or a business acquisition, can all be incorporated quickly into your business processes.
- Use rapid data upload facilities combined with mass change processes to implement changes to high volumes of information, such as employee job data, security, new departments, or new work relationships.
- Expand to meet your changing needs for managing information, and grow with your business using standard, upgradeable configuration capabilities

#### 2.1.4.11. On-line Access to Talent Management Information

In order to enable the talent management processes, people can maintain their skills and knowledge profiles on a global basis. Line managers use this information to graphically search for suitably skilled individuals or groups and match them to work opportunities.

The system can automatically rank candidates' skills and compare them either with the profile of the job or with each other. With these skills and knowledge profiles, managers

can gain an accurate picture of strengths and weaknesses and can then identify the appropriate training opportunities to fill in the gaps. The training identified can then be added to an individual's training plan to be progressed through the training functionality.

# 2.1.4.12. Connect People, Content, and Community

The amount of corporate and external information is often overwhelming. Therefore to ensure productivity, timely information must be organized via job relevancy and accessible anytime, anywhere. Using HRMS you can:

- Use role-based portals for secure access to reports, analysis, and transactions relating to specific job functions; e.g., a line manager may view or approve salary transactions, but only for his or her direct reports.
- Define what are 'newsworthy' metrics or events that require action, and to whom these events should be notified.
- Leverage partner links that deliver specialist advice embedded in relevant transactions; e.g., use of GeoAccess. Data to deliver information on HMO providers at the time of benefits elections.
- Enable multi-channel (phone, PC, etc.) access to multiple content sources (voicemail, e-mail, web, calendar, etc.).

#### 2.1.4.13. Drill Directly to Detail & Search Facility

HRMS offers visibility into aggregated summary information as well as easy navigation to the granular details of the transactions that make up the summary data and KPIs. This allows users to identify and view the specific transactions that are behind the aggregation to answer detailed questions that might arise.

The HRMS also provides a search facility. Through this search managers can find employees with particular skills, total number and type of competency available at hand, total number of jobs available etc.

# 2.2. GENERIC IMPLEMENTATION STRATEGY

The implementation strategy of the HRMS project rests on two approaches: consultation and participation of the user community and the solution providers.

# **The User Community**

The user community will be consulted throughout the implementation, with intensive participation by the prototyping team members, individual meetings with departments, and ongoing meetings with advisory groups, including a Steering Committee, Control Unit Administrators, and the HRMS User Group.

The role of the HRMS Steering Committee is to champion this company wide change. The Steering Committee will set direction, monitor progress, and communicate with the solution providers and the employees

The **HRMS Prototyping Team** participates in intensive development of testing, fit analysis, and review of business processes and system requirements. The Prototyping Team provides detailed user input to project development.

The **Control Unit Administrators Group** provides a broad, company wide perspective on the needs and concerns of the company at the control unit level, and ensures a liaison with all company departments on issues such as the identification of users and their roles, training rollout, and progress toward implementation.

The **HRMS User Group** engages in a dialog with the project members and company managers regarding system development, business process changes, and training, from both the perspective of departmental human resources management and that of day-to-day transactions. With members at the manager, analyst, and personnel assistant levels, the User Group provides an integrated view of beginning-to-end processes.

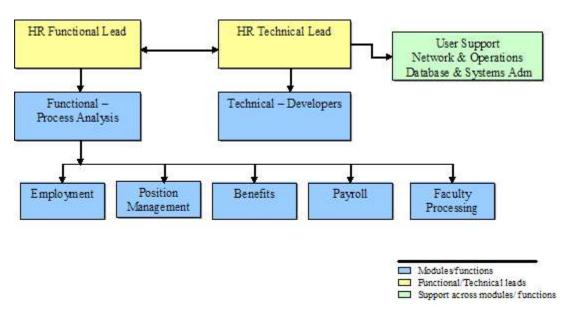


Figure 11: HRMS Committee Members

## 2.2.1. IMPLEMENTATION METHODOLOGY

Implementation Methodology consists of a set of phases, stages, and step. Variations due to the level of client participation, results of the fit/gap analysis, the degree of system modification, etc. may vary the steps of the stages.

The steps constituting each of the phases are described below. These 16 major steps are considered as core to a successful implementation effort. Many of the activities related to these tasks can be performed concurrently based upon available resources.

#### 2.2.1.1. STRUCTURE PHASE - PROJECT INITIATION

- Project Management and Organization
- Implementation team training
- Technical environment assessment
- As-is Business Process Analysis (substantively completed)

## 2.2.1.2. PROTOTYPE PHASE - PRODUCT FIT

- Technical environment implementation
- Iterative prototyping-Gap Analysis

#### 2.2.1.3. Develop Phase - Construction and Integration

- Interface planning, design, and development
- Conversion planning, design, and development
- Enhancement design and development
- Security requirements and development
- Procedures, training materials, and user documentation

## 2.2.1.4. TEST PHASE - VALIDATION

- System and Integration Testing
- Acceptance testing
- User training

## 2.2.1.5. DEPLOY PHASE - MOVE INTO PRODUCTION

- Database conversion
- Cut-over to full production
- Pilot user testing

## 2.2.2. IMPLEMENTATION PROCESS

The implementation process consists of the following steps:

- Implementation planning
- Role of the steering committee
- Policy and procedure development
- Project team training
- Installation
- Fit analysis
- Modification
- Interfaces
- Conversion
- User training
- Unit and integrated testing
- Parallel testing

#### 2.2.2.1. IMPLEMENTATION PLANNING

When the software programme has been chosen and it arrives on-site, a great deal of time must be invested in planning the HRMS implementation. To start the planning process, a number of things must be known, including the scope and goals of the project. If the needs analysis was thorough, and the successful software vendor was quite clear on the capabilities of their product, this task will be simpler.

An effective **Project Plan** will include:

- n Project Goals
- n Timetables
- n Responsibilities
- n Resources
- n Monitoring and Reporting Mechanisms

# Priorities

During the development of the overall Implementation Plan, key resources from Human Resources and from the Information Technology area must work together on a realistic plan that covers all of the expectations of both areas. If, in fact, users are going to be greatly impacted (through new duties, responsibilities, re-engineering, etc.) they too should be involved in the initial planning

The priority list should be made out; that what activities have to take place and in which sequence. The priority list is:

• The technical environment; what equipment, technology must be purchased;

- Priority of individual HR modules; whether to implement all at once, or in a specific sequence;
- Expectations of new users, such as moving to a decentralized system;
- Availability of resources including whether human resources or information technology expertise will be provided by: internal organization resources, contract resources, or external consultants;
- Availability of training for project team.

# Implementation Schedules

Once the priorities have been reviewed and a consensus reached, the HRMS Project Manager must work with the team leaders to scheduling each task in the plan. This is a critical component of success and the only way to control costs and resources effectively.

The implementation schedule must include estimated completion dates as well as the elapsed time or duration of each task, and who will be responsible.

### 2.2.2.2. HRMS Project Implementation Team

During the earlier stages of the HRMS project, key people involved are often functional HR & MIS expert's line management, a consultant (if applicable). And the Project Manager (often from Human Resources). Other members may now be added, i.e.:

- implementation specialists:
- internal or information systems auditor:
- training coordinator/advisor:
- user representatives:

#### The HRMS Manager

Often, the HRMS Project Manager is an HR Manager, if someone with appropriate skills exists. Regardless, it is the HRMS Manager who effectively takes over or accepts the new system for implementation.

#### 2.2.2.3. POLICY AND PROCEDURE ISSUES

Attention must be paid to impacts of implementing a new HRMS on policies and procedures due to possible impact on:

- Work Flow
- Regulatory
- Business Cycle
- Security
- New Technology

## The Steering Committee

The steering committee will generally be made up of a minimum of the following:

- Chair (Corporate/Executive Sponsor) or other senior executive
- Vice President or Director of Human Resources
- Vice President or Director of Information Technology
- Executive level representative(s) from line management.

Others that may be included on a Steering Committee:

- Vice President or Director of Finance;
- change agent (senior person responsible for Business Process Re-Engineering;
- Representative from the Board of Directors; and
- Director of Internal Audit.

Steering committee does not generally include:

- HRMS Project Manager (this person reports to the Steering Committee);
- HRMS Manager;
- Information Technology Manager;
- other HRMS Project Team members

#### 2.2.2.4. Project Team Training

The best HRMS in the world will only work if users know how to use it effectively. Human Resources can foster that knowledge by providing explicit training and ongoing support.

## Training Plan

An effective training plan will:

- identify the actual kinds of users requiring training;
- identify the kinds of training needed;
- estimate the number of individuals to be trained on each topic;
- provide an inventory of specific information and skills required;

- include decisions on training media;
- identify the trainers;
- provide a schedule for the training;
- include a development plan for training materials;

If the organization is adopting a whole new area of technology, it will need to address:

- technical training on the new technology;
- 2computer equipment, data bases, programming tools, communications tools, security, etc.;
- key user training on the HRMS software;
- technical training for the information systems personnel;
- Specific user training for Human Resources personnel including: benefits, payroll, reporting, staffing applications, etc.;

# **Technical Team Training**

Technical training must take place early, especially if the organization is changing technology. The HRMS Project Team, in particular, must receive thorough training on all aspects of the new product in order to assist others on the project with its use. This training must be delivered early on in the project or the team will spend a great deal of time trying to figure out things that would be readily clear if proper training had been given.

## **Extended Team Training**

Once the project is well underway and the core Project Team is well trained, time should be set aside to train other users; for example, the employees in Human Resources, Payroll and Benefits who will be using the system as soon as it is ready. Generally this training can be conducted in-house by members of the core project team, usually from Human Resources. Training addressed during these sessions relates to the way the new system works and any new procedures that may have evolved during the early phases of the implementation.

#### **2.2.2.5.** *Installation*

The installation of the new HRMS software is much more than just removing the shrink wrap from the packages and loading the software. In many cases a new system means new technology. By the time the software is ready to be loaded and run on real data, in a test mode, the project team should have done a great deal of groundwork. In addition to the steps outlined above, this will mean having set up the capability for the old system and the new one to run in parallel until the new system is running smoothly.

#### 2.2.2.6. FIT ANALYSIS

Sometimes called gap analysis, a fit analysis is basically the determination of the differences between the delivered system and what the client wants to do with it.

To complete a fit analysis, the project team divides up the various requirements to be tested. Generally a two to three person team works on each task. Each task is modelled or trialled on test data bases.

A simple example of a task to be reviewed under the fit analysis would be to simulate the hiring of a new part time casual worker.

#### 2.2.2.7. MODIFYING THE SYSTEM

Making modifications to the system after it is delivered system can have very significant long-term costs. Traditionally such modifications meant that, with each subsequent official software release from the supplier, the modification has to be redone, or carried over.

This is changing with modular systems and new tools designed to track these modifications. Software vendors today try and deliver systems where the changes made to the original version can be tracked and accounted for relatively easily with vendor supplied updates (releases).

## **2.2.2.8.** *UNIT TESTING*

To some extent, the system has already been heavily tested. During the fit analysis, every possible requirement should have been tried on the system. By now the system should be running almost as it will when it is fully implemented.

Unit testing involves a review of every major process planned for the system and the testing of outputs.

Included might be hiring hypothetical employee to ensure deductions are correct; terminating hypothetical employee to ensure final deductions are correct; calculating pay for a hypothetical employee and comparing it to an actual pay, etc

#### **2.2.2.9.** *CONVERSION*

Often underestimated, this is a very important phase in the project. Information in the existing HRMS is an accumulation of a succession of HR systems which have in turn been converted. In most cases, the new HRMS will have been designed significantly

differently from the old one and the data elements will not translate to the new HRMS exactly as they are in the old system. As well, each software package may handle data a little bit differently than the last one.

#### 2.2.2.10. PARALLEL TESTING

Once the system has been stabilized with all the new data on it, the project plan will call for a parallel test that may vary from one to several months. During this time period, corporate information will be entered into both systems and the results compared. Generally the old system will be used to actually pay the employees, but the new system will be handled exactly as it would during full live production. The results from the payroll runs, reports, and other activities will be carefully compared during the parallel trial period and adjustments made to the new system, if necessary.

During the parallel testing, Human Resources should monitor the system very carefully. Once they have determined that the system is operating to their full satisfaction, the project team will work out an actual cut over date where, the old system will be shut down and the new system will be used in full live production

## 2.3. HR PRACTICES THAT CAN BE AUTOMATED:

Following are the HR practices that can be automated by a number of software/solution providers.

- Recruitment
- Applicant Tracking
- Requisitions
- Position control
- Benefits and Compensation administration
- Job information
- History/turnover analysis
- Employee Performance Management
- Internet Based Testing and Assessment
- Talent Management Solutions
- Compensation Management
- HR Employee Intranets
- Attract, acquire, & retain your best talent.

- Pay grade/step administration
- Reporting tools

## 2.3.1. EXTRA FEATURES OF HRMS

## **Growth Centre**

This module deals with the KRAs, reviews and assessment processes. Users can maintain their resume and search any vacancies available within group companies.

Goals - Users can post the goals set for the financial year. On approval users can update the status on goals set. Approver can put his remarks and the marks obtained Reports - Approver / administrator gets a report department-wise, user-wise goal status and marks obtained.

Appraisal - Administrator can setup appraisal form grade wise. He can decide who is going to evaluate and assess users, department-wise & designation-wise.

## Knowledge Center

This is a knowledge center consisting of tools such as:

Doc. Management System for posting articles of interests in various formats with explores, discussion forum to share ideas and thoughts. Suggestion box for posting your comments to the management Search enabled directory of web site URLs. Expert advice tool to have panel of experts reply to user's queries

## **Learning Centre**

This module helps the HRD manager to schedule training programs and conduct online tests.

Internal training / external training:

Administrator keys in the training details and identifies what type training is it. If the training is taken by a person who works for the organization is considered as internal training. Users can nominate themselves for the training and approved from their higher authorities.

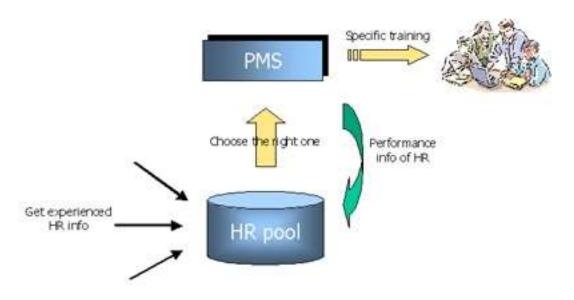
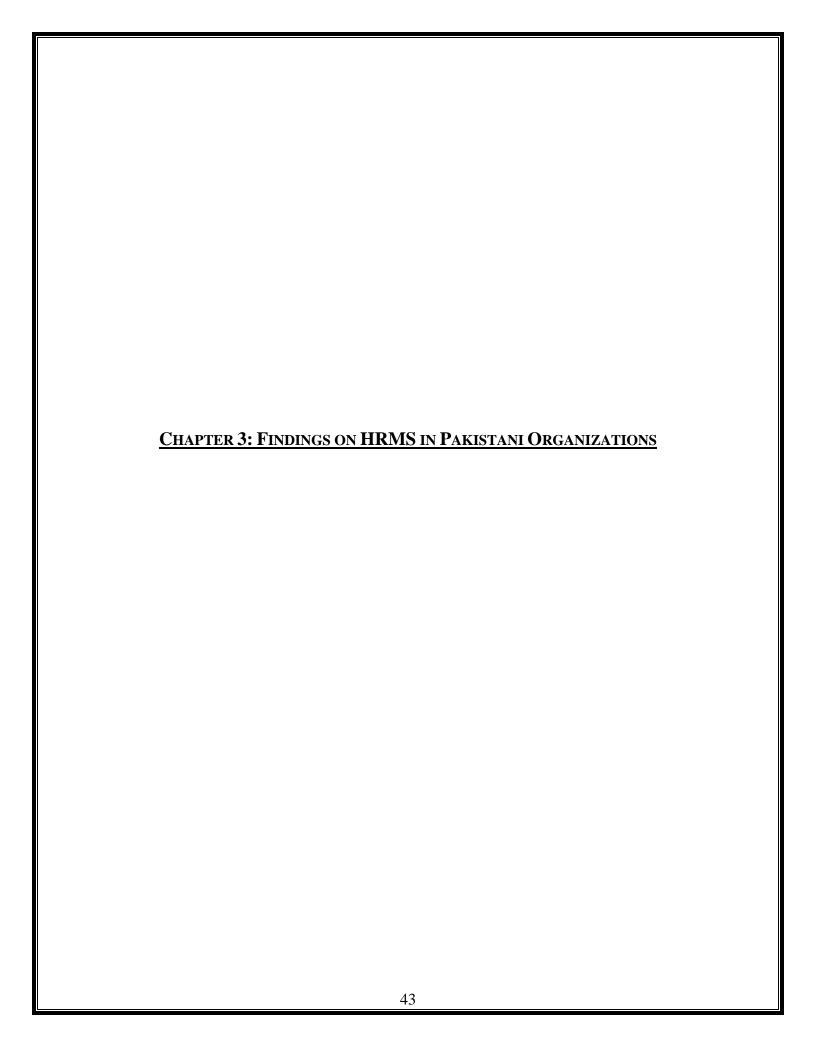


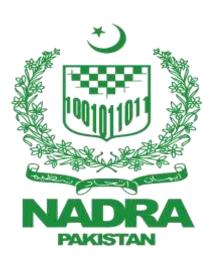
Figure 12: HRMS PMS

## Recruitment Manager

This module helps HRD personnel to track the vacancies and resumes posted. He can also maintain Personal Records. Administrator can select users who can post vacancies. Users can decide while posting vacancy whether it should be available to internal or external or both the users. A link is provided on the home page 'build careers' which helps the external users to view vacancy posted and post their resume as well.

Administrator gets the full status of each vacancy posted (no. of resumes received, no. of candidate called for interview, selected candidate, rejected candidate etc). Once a candidate is selected all the joining formalities can be carried out. (For e.g. appointment letter printing, adding the user to user master etc)





# 3.1 IMPLEMENTATION OF HRMS IN NATIONAL DATABASE AND REGISTRATION AUTHORITY

## **3.1.1. About NADRA:**

National Database and Registration Authority (NADRA) is the largest IT Company in Pakistan and employs a highly skilled work force of more than 12,000 technical and

management personnel. The company has been placed, by ID WORLD magazine in their June 2005 issue, among the top 50 companies of the world in the field of secure document solution integration. NADRA not only takes pride in producing the Computerized National ID Card of Pakistan but also in producing World's first Machine Readable Multi-Biometric Electronic Passport with Biometrics.



NADRA has the experience of designing, implementing and maintaining one of the largest integrated citizen's database in the world. This database is centrally located and comprises of identity information of 71 million citizens and is completed backed by facial and fingerprint identification technologies. Today, the volume of this database stands at a staggering figure of 23.8 Tera Bytes and each passing day is amplifying it by additional data of 30,000 citizens. Every person in this database is linked to a family tree structure and can be distinctively identified and found, within a fraction of a second, with the help of any of the linkages, and our in-house search engine developed by NADRA's R&D department. NADRA has printed more than 48 million Computerized ID cards and around 670,000 Machine Readable Passports with biometrics.

NADRA is one of the few companies in the world to have the synergy, experience and expertise to successfully design and implement extremely large sized projects that involve data acquisition from large populations belonging to geographically dispersed locations, data transfer over multiple backbone and last mile technologies, data warehousing, data mining and secure printing. Today, NADRA serves as a central repository where data pertaining tens of thousands of people is added & updated daily.

NADRA is urging donors to fund the upcoming NADRA's Human Resource Development program which will go a long way in advancement of capacity building of specialized trained Human Resource which will not only improve quality of public service being delivered to citizens of Pakistan but also effective implementation of programs developed in-house by NADRA both nationally and internationally.

#### 3.1.2. NADRA's HR Department:

Following is a little information about NADRA's HR Department:

## 3.1.3. HR's Vision & Mission

The vision & mission of *Human Resources* department is to contribute to NADRA's strategic plan by:

- 1. Dedicated to providing the most helpful, effective, progressive, courteous, and responsive service to NADRA's most important resource; its people.
- 2. Recruiting, developing, and retaining the highest quality employees.
- 3. Educating, assisting, counseling, and communicating with all its resources for better productivity.
- 4. Supporting nationally and internationally competitive performance.
- 5. Promoting compliance with NADRA Service Regulations, 2002.
- 6. Committed to the highest standards of excellence; to innovation, efficiency, creativity, and continuous improvement.
- 7. Developing and strengthening NADRA culture consistent with the people values and philosophy of the Chairman, Senior Management, and the Board Members of NADRA.
- 8. Enhance career opportunities for employees for individual growth and development.

## **3.1.4. HR'S VALUES**

- QUALITY/EXCELLENCE: In the spirit of continuous quality improvement, NADRA HR enhances the effectiveness of others through excellent service that consistently meets the employee needs
- INTEGRITY: HR fulfills expectations and "lives" its values.
- <u>COURTESY:</u> It always treats other departments of NADRA with dignity and respect.
- <u>CARING/COMPASSION:</u> HR is empathic and caring in all what it says and does.
- <u>COMMITMENT:</u> HR team is dedicated to providing employee services in accordance with the principles and policies of NADRA. It takes responsibility for all of its employees and does the needful for collective actions.
- <u>RESPECT:</u> HR honors and holds in high regard the dignity and worth of all people working at NADRA. It interacts and provides service in a manner that demonstrates an understanding of, and a sensitivity and concern for each person's individuality and importance.
- <u>TEAMWORK/TRUST:</u> HR has a high degree of confidence in the honesty, integrity, reliability and sincere good intent of those with whom it works.

## 3.1.5. HR'S DEPARTMENT'S ORGAN-O-GRAM:

# Organogram: HR Dept

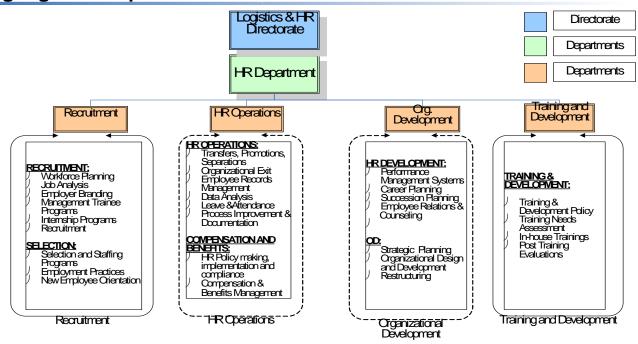


Figure 13: HR Department Organogram

## 3.1.6. NADRA'S HR'S CYCLE:

NADRA's HR cycle consists of the following activities. This cycle is similar to the typical HR cycle.

# Recruitment to Separation Planning Recruitment & Organizati onal Selection Design **Employee Data** Mgt Separation <u>Performance</u> Mgt Sys Career & Succession **Planning** Training & Development

Figure 14: HR Cycle

NADRA has automated a number of HR cycle activities. Following is a brief description of the activities:

#### 3.1.6.1. RECRUITMENT & SELECTION

In this process NADRA attracts potential employees and choosing the best out of them. This process has been automated by using the e-recruitment application. A complete description of this process is given below.

## 3.1.6.2 .EMPLOYEES DATA MANAGEMENT

All the employees' information is entered into a database, where it can be accessed by the employee, his/her manager and the concerned HR personnel directly. The complete detail of employees is present here. For example, the employees complete name, temporary and permanent address, contact number, his/her designation, grade, pay, benefits etc. besides

all this any other type of information about the employee can also be entered, for example the type and nature of previous jobs held by the employee in the current and previous organizations. Every employee is provided with his/her login. Through this login an employee can access and view his/her information

## 3.1.6.3. PERFORMANCE MANAGEMENT

In this process employees are evaluated on their performance and are rewarded or compensated accordingly. A detailed description of this process is given below.

#### 3.1.6.4. Training & Development

In this process employees are taught new and innovative ways of performing their current jobs or they are given a job performing refreshing course. In the developing process employees are prepared for the future jobs. Through the HRMS the manager and HR department can easily access a complete list of employees who have received a particular training/development course or who require a particular training/developing course.

In addition if any department's employees require training they notify the HR department via intranet. The list of employees for the training is sent to the HR department. Individual employees may also sign up their name for a training they desire.

#### 3.1.6.5. CAREER & SUCCESSION PLANNING

In career and succession planning, the career path for each manager is defined. He knows exactly where his career is heading and whose successor he and who is his succors. A complete hierarchy of the organization and for each managerial post exits. In case if a manger leaves the company on a short notice due to any reason, his succor will already be present to take up that post.

#### 3.1.6.6. SEPARATION

When an employee leaves the organization an exit interview is taken. The employee fills out a questionnaire which is then uploaded in the database. With the help of these exit interviews the HR department personnel try to find a pattern or a trend in the reason for leaving the organization. For example it helps to uncover areas of employee dissatisfaction, like salary, bosses, peers etc. These forms can be retrieved whenever desired form the database to help improve the decision making process about that post.

The departing employee has to fill out four forms:

- 1. Handing taking form
- 2. Exit interview form
- 3. Equipment recovery form
- 4. Clearance by directors

#### 3.1.6.7. STRATEGIC PLANNING

Strategic planning is the process of analyzing and designing work and determining human resource needs. By automating most of the HR activities the HR department has a lot of time to focus on aligning its activities with the corporate goals. The HRMS helps the employees make better and knowledgeable decisions to improve the work and process to satisfy the employees and ultimately the company.

#### 3.1.7. NADRA'S HRMS MODEL:

NADRA has employed the Oracle applications to automate its HR activities. The Oracle HRMS lets companies define their own human resource model to reflect their own enterprise structures and policies. This information model lets them record the personal, work, and pay information for all the people the company wants to hold and process.

The model is both flexible and adaptable. It is flexible, so that you can reflect the needs of different companies, or different groups within the same company. It is adaptable, so that you can easily change the basic model as your enterprise changes.

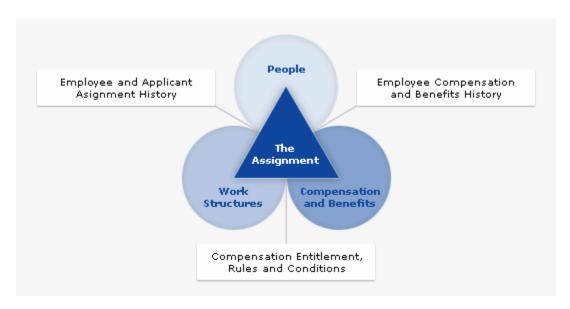


Figure 15: The HRMS Model

The Oracle Hr Products and Services applications bought by NADRA are:

- HR
  - o Core HR
  - o Payroll (customized)
- Procurement
- Inventory

#### 3.1.7.1. PEOPLE:

In Oracle HRMS, you can hold information about current and former employees, applicants, their educational background, their career history etc, permanent employees, contracted employee and external contacts such as contractors.

In addition to standard information such as addresses, nationality, interview records, qualifications, and absence information, you can define any other special information you need to hold for people. For example, you can define what information to hold on medical history, previous employment and number of languages spoken or any other outside interests.

## 3.1.7.2. WORK STRUCTURE:

Work structures represent the different ways in which employees can work within your enterprise. They provide the framework for defining the work assignments of your employees. They also enable you to manage the information about your enterprise that is independent of your employees.

The work structures include your internal organizations (such as departments or divisions), payrolls, jobs or positions, grading structures, and any special employee groupings that you use in your enterprise.

## 3.1.7.3. Compensation and Benefits:

Oracle HRMS lets companies define their own types of compensation and benefits, and the business rules they want to apply to them. As you change policies, move people within your enterprise, and adjust their individual remuneration packages, the system maintains their compensation and benefit history.

For example, suppose you want to define a special type of payment and make this available only to employees who work at a particular location. In Oracle HRMS you use a compensation *element* to represent the payment. You define the business rule as a *link* between the element and the specific location. Then when you assign employees to the location, they automatically become eligible for the payment.

#### **3.1.7.4. ASSIGNMENTS:**

In Oracle HRMS, the assignment describes employees' places within the enterprise: the organization for which they work, their role, grade, location, and so on. As you change the assignment information for an employee, you automatically build up his or her work history.

Your compensation eligibility rules link compensation and benefits to work structures, such as jobs or grades. The assignment places employees within the work structures of

the enterprise. In this way, an employee's assignment determines his or her eligibility for compensation and benefits.

You can use assignments to identify major employee groups within the enterprise for management, for reporting and costing, and for compensation and benefit planning and administration.

## 3.1.8. BENEFITS OF HRMS REAPED BY NADRA

Following are benefits NADRA is achieving from implementing the HRMS in their department: obtain

- 1. Transparency
- 2. Accuracy, speed and validity
- 3. Real time data availability
- 4. power reporting capabilities
- 5. Faster and easier decision making

## 3.1.9. ADVANTAGES OF HRMS:

## **3.1.9.1. TRANSPARENCY**

Before the implementation of HRMS, Headcount figures from regional headquarters, payroll and HR would never reconcile. No one knew how many employees, with what kind of experiences and skill sets were working in which office. All this has changed now. With the introduction of system generated employee and applicant numbers, real-time transfer details, up-to-date professional and personal employee information, duplication of employees is non-existent and managing careers has never been easier.

## 3.1.9.2. ACCURACY, SPEED AND REAL TIME DATA AVAILABILITY

Being a semi-government entity, NADRA has to continuously provide clarification reports on manpower state, adherence of quota's and recruitment procedures etc to the National Assembly and Ministry of Interior. Before the implementation of HRMS, it would take weeks to collect information from 670 plus geographically dispersed offices all over the country and abroad. Moreover, by the time data was received and compiled into reports, it was already a month late at the minimum. Workforce data such as employee assignment details, qualifications and skill sets etc was maintained in MS-Excel spreadsheets and was updated infrequently. Now, with the implementation of HRMS, reporting time has been reduced to hours with powerful report generating capabilities on a wide range of parameters. The best part is that data is real time. Overall, it's faster, with more accurate responses and less reporting errors.

Moreover, with power business intelligence tools such as Cognos BI, top management is not dependent on HR dept to provide reports. All workforce information is just a click away.

#### 3.1.9.3. BETTER RESOURCE ALLOCATION AND DECISION MAKING

Every time a new project comes up, it is now easier to allocate resources and form teams. By searching for employees with the requisite skill set, experience, competencies, domain knowledge etc. required for a particular project or task, we are in a position to place the right man for the right job. Similarly, decisions on promotions, transfers, job enrichment etc have never been easier.

## 3.1.9.4. PROACTIVE VS REACTIVE

Since a large part of our workforce is on short or long term contracts, we found it very difficult to keep track of employee's contract periods. In a lot of instances, contracts would end but the employee would still be coming to work and drawing a salary. Now, with the help of Notifications in HRMS, we are in a position to proactively approach HR tasks before their due dates. For instance, performance appraisals are completed before the employee's probation/contract period ends; exit and clearance programs are completed before an employee's retirement date etc.

## 3.1.9.5. Better Controls:

While NADRA's HR Dept was concentrating on a more strategic focus within the organization, it became imperative for operational and administrative tasks to be decentralized at the regions. However, this was only possible if the Headquarter could monitor their activities and ensure compliance. With the implementation of HRMS, it has become very easy to decentralize recruitment, performance appraisals and other HR tasks.

#### 3.1.9.6. MORE EFFICIENT HIRING:

We have designed an e-recruitment module which is fully integrated with HRMS. The entire recruit-to-hire process is automated. We have successfully integrated HRMS with our Online Testing Software. All activities from Letter Generation to interviewing to final selection are carried out through HRMS. This has shortened our recruitment and selection process by ten days.

#### 3.1.9.7. PERFORMANCE APPRAISAL:

With the introduction of a new competency and skill based Performance Appraisal System, we are in a position of conducting efficient and timely Performance Appraisals of all employees of NADRA, regardless of location. We have a comprehensive library of competencies and skills defined against employees and positions.

## 3.1.10. NADRA'S HUMAN RESOURCE MANAGEMENT SYSTEM

Here is a closer look at how different HR activist/processes in NADRA have been automated by using the Human Resource Management System. These activities have been discussed in detail below.

#### 3.1.10.1. CLOSER LOOK AT THE AUTOMATED PERFORMANCE EVALUATION SYSTEM

NADRA's automated performance evaluation system consists of the following six steps:

## Step 1:

The first step in the assessment begins by the employee initiates his/her own PA as Initiating Officer (IO). The employees does the initiating by logging into their respective accounts and selecting the "Employee Assessment" option. After clicking the assessment option two options appear as displayed in the screen shot. These options are

- Reporting Officers Assessment (RO)
- Senior Reporting Officers Assessment (SRO)

Every employee is assessed by two officers. First is the reporting officer. Reporting officer is the immediate supervisor of the employee being assessed. Second is the senior reporting officer. Senior reporting officer is the immediate supervisor of the reporting officer. The purpose of having employees assessed by two officers is to reduce the probability of biasness.

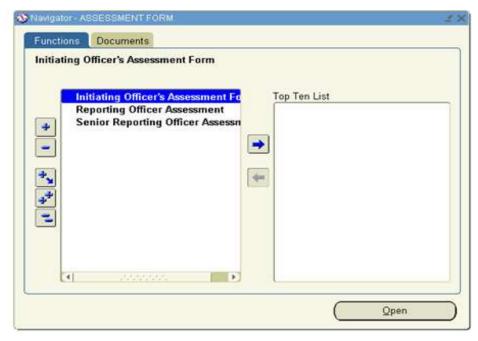


Figure 16: Every employee initiates his/her own PA as Initiating Officer (IO)

# Step 2:

In the second step Initiating Officer views his supervisory hierarchy. This page contains details about the following:

- The review period
- Himself: initiating officer's name, Grade, Position, Department and Working in position since
- First Appraisal: Reporting officer and Position
- Second Appraisal: Senior reporting officer and Position

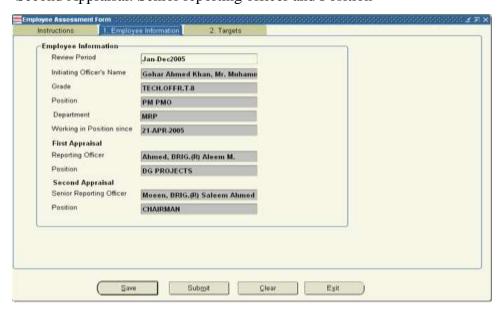


Figure 17: IO views supervisory hierarchy

## Step 3:

At the beginning of each year, the reporting officer and initiating officer discuss and mutually agree on the initiating officer's current years target and their achievement date. At the end of the year the initiating officer explains whether yearly agreed upon targets were achieved or not. If the targets were achieved then the status is written "Achieved" the respective comments are written, if any. If however the targets are not achieved, it is mentioned in the status column, and its reason is stated in the comments column.

After filling out the form the initiating officer either saves it, submits it, or clears it. If he clears it then he will fill out the form again. If he clicked the saved option the form will remain on his login, till he does not submit it. The initiating officer may save the form for further review or consideration. When the initiating officer finally submits the form it goes into the HRMS database. It can now be reviewed by the initiating officer's reporting officer.

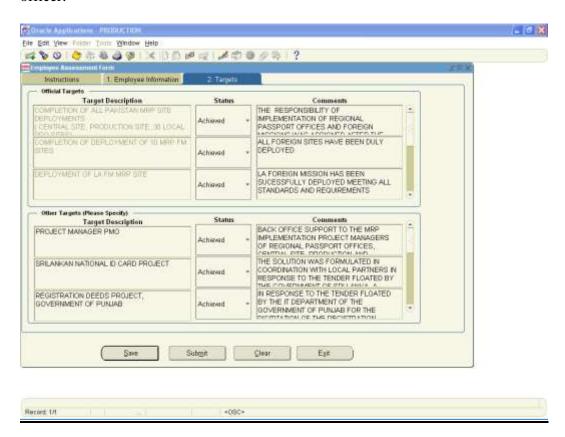


Figure 18: IO explains whether yearly targets were achieved or not

## Step 4:

The reporting officer can now access their subordinate's performance appraisal form and fill it out. The reporting Officer rates his subordinates targets agrees or disagrees with him. And finally gives his comments on the targets and its status.

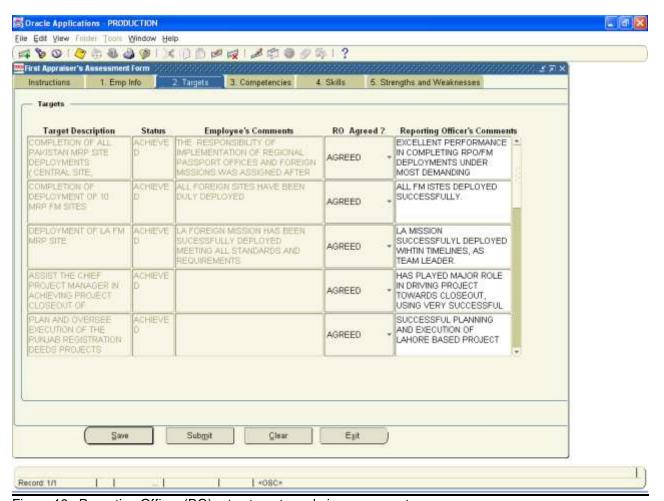


Figure 19: Reporting Officer (RO) rates targets and gives comments

## Step 5:

In the fifth step the reporting officer rates competencies and skills of the initiating officer. The initiating officer is rated on two types of competencies:

- 1. General managerial/Clerical competency
- 2. Technical competency

The "General managerial / Clerical competency" is the general skills the employee posses that help him to execute his basic responsibilities for e.g. job knowledge, decision making, problem solving etc. The technical competency is the specific knowledge the employee must have in-order to execute is job for e.g. electronic engineering knowledge etc.

The weight-age of each competency is defined at the start of the year. The weight-ages of the competencies tell the initiating officer and the reporting officer the absolute importance of them. The weight-age is different for different job positions and grades. The weight-age may range from 1 to 10. The reporting officer rates his subordinate's competencies from a scale of 1 to 10. Where 10 is the highest, and 1 the lowest. The senior reporting officer also fills out the initiating officer's form in the same way.

The RO then submits this form. The form is again transmitted to the HRMS database.

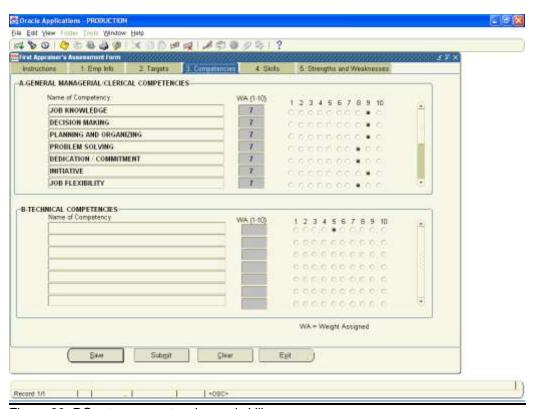


Figure 20: RO rates competencies and skills

## Step 6:

Finally in the sixth step the HRMS software automatically detects the initiating officer's strengths and weaknesses. A particular competency/skill is strength if the total value the IO obtained is above the EPL "Expected Performance Level". If it is not above the EPL then it is termed to be a weakness. The score the IO received is also displayed against each weakness/strength. This score is automatically calculated by the system and is based on the ratings of the RO &SRO. The RO & SRO give their comments.

The final score is then automatically calculated by the system. It applies a mathematical formula on the total competency score and total skill score, and finally generates the "Overall Score".

This phase thus completes the performance evaluation of the employees.

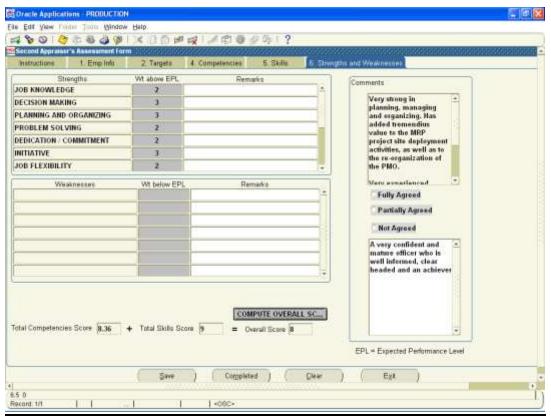


Figure 21: RO & SRO give comments & compute final score

#### 3.1.10.2. CLOSER LOOK AT THE E-RECRUITMENT SYSTEM

An integrated recruitment process streamlines the position control applicant tracking, and hiring process. The time it takes to gather and process employment information is reduced— allowing managers more time to interview and hire the right candidates. With Human Resources Management, you always have a current database of applicant and employee skill sets. You can also use this data-base to find the right people with the right skills for the right positions.

The recruitment process has been automated, by using the e-recruitment system. The e-recruitment module is fully integrated with HRMS. The entire recruit-to-hire process is automated. This module has been successfully integrated HRMS with NADRA's Online Testing Software. All activities from Letter Generation to interviewing to final selection are carried out through HRMS. This has shortened NADRA employee's recruitment and selection process by ten days.

The e-recruitment process begins by the user registering to NADRA online. After registering the candidate has to upload hi/her CV. Resumes can be uploaded or created online in the form provided by the website.

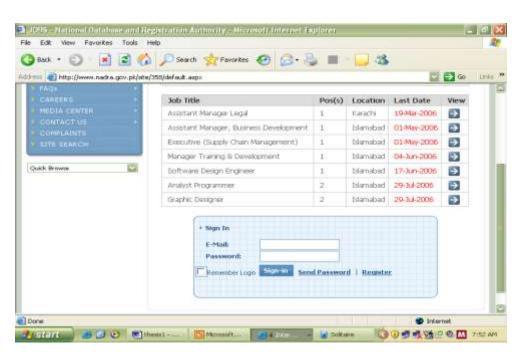


Figure 22: The Candidates Have to Register on Line

If the qualifications are up-to the mark, the candidate is called for an online test. The test questions are related and relevant to the post/filed applied for. The following screen shot is an online test for a marketing candidate.



Figure 23: Sample Screen- Multiple Choice Question based Online Test

The test has to be complete in a specific time limit. The result of the online test is calculated immediately. The applicants who pass the test are called for an interview. In this way the e-recruitment system helps to sift the likely candidates from the unlikely ones. The candidates with high potential are singled out automatically. This makes the process extremely efficient, errorless, saves the manager's precious time and most importantly it is a very transparent system.

The online test presents the user with another very useful aspect. It generates a report about the applicant's performance, which helps the interviewer focus on different aspects of the candidate which seemed vague or extraordinary. The letters for interviews are system generated.



Figure 24: Instant Scoring to ensure transparency

## 3.1.10.3. CLOSER LOOK AT THE AUTOMATED LEAVE CALCULATION SYSTEM

The HRMS system also provides the facility to automatically calculate the leave of the requesting employee. This system gives the full information on the leave availability and the total number of pending leaves. The system automatically tells weather there are any casual leaves, medical leaves or maternal leaves of the employee available, and if yes, then how many.

If a person has a certain amount of pending leaves left. He may request for a leave then. This request is saved in the system and the numbers of leaves requested are deducted from his pending leaves. The start date and end date of the leave is also stored in the system. The employee sends the request for leave to his supervisor.

This system again provides transparency into the leave allowance system.

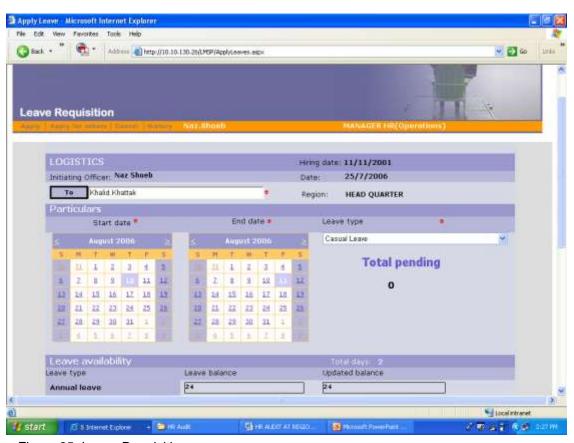


Figure 25: Leave Requisition

#### 3.1.10.4. CUSTOMIZED REPORTS

The HRMS Oracle application allows NADRA to generate a number of customized reports, which serve the individual needs of the company. Following is the list of the customized reports and data the HRMS application allows the company to generate.

#### 3.1.10.4.1. DETAIL HEAD COUNT REPORT

This report gives a detailed and a complete list of all the employees currently employed by NADAR. The chairman or HR manager at any point at time can check the total number full time employees.

## 3.1.10.4.2. DIRECTORATE WISE EMPLOYEE INFORMATION

This report gives a detailed and a complete list of all the directorates and the name and information of all the employees working in those directorates. It gives the name, designation/title and grade of the employees.

#### 3.1.10.4.3. DOMICILE DISTRICT AND PROVINCES

This report gives a detailed and a complete list of which employees belongs to which domicile district and province.

#### 3.1.10.4.4. EMPLOYEE CONTRACT SUMMARY REPORT

This report gives detailed and complete information about the employee's contract. This report contains information like, employees joining date in NADRA, contract duration, contract expiry date, etc.

## 3.1.10.4.5. EMPLOYEES HISTORY REPORT

This report gives detailed and complete information about the employee's past career paths. This report contains information like, what previous jobs the employee had in NADRA or in any other organization before joining NADRA.

## 3.1.10.4.6. EMPLOYEES PERSONAL INFORMATION

This report gives detailed and complete information about any employee. This report contains information like, employee's full name, employees fathers name, blood group, permanent and current address etc.

## 3.1.10.4.7. EMPLOYEES TERMINATION REPORT

This report gives detailed and complete information about employees who are leaving NADRA. This report contains information like, the employees name, his designation/title, date f leaving NADRA, reasons for leaving, his successor, equipment recovery etc.

#### 3.1.10.4.8. EMPLOYEE'S EXIT CLEARANCE REPORT

This report gives detailed and complete information about the employee who is leaving NADRA. This report contains information like, clearance from directors, clearance of bills etc.

## 3.1.10.4.9. EMPLOYEE'S QUALIFICATION CLASSIFICATION SUMMARY REPORT

This report gives detailed and complete information about the qualifications of all or any particular employee. This report provides information on the different types and numbers of qualifications available in NADRA.

## 3.1.10.4.10. HRMS HEADCOUNT REPORT

This report gives detailed and complete information on the total number of employees on the HRMS team

#### 3.1.10.4.11. NEW APPLICATION USER CREATION

This report gives detailed and complete information on the number of new logins created and names of the employees from whom it has been created.

#### 3.1.10.4.12. NEW EMPLOYEE REPORT

This report gives detailed and complete information on all the newly hired employees. This report contains information like, employees name, departments name, designation/title name, etc.

## 3.1.10.4.13. PROACTIVE HR REPORT

This report gives detailed and complete information about which skills/competencies are available in NADRA and which are required.

#### 3.1.10.4.14. REGION AND GRADE WISE HEADCOUNT REPORT

This report gives detailed and complete information about the names of employees in different regions and the total number of employees in those regions.

# 3.1.10.4.15. REGION WISE HR AND PAYROLL COMPARISON

This report gives detailed and complete information about region wise comparison in employee's payrolls and skills.

#### 3.1.10.4.16. REGION WISE POSITION COUNT

This report gives detailed and complete information on the positions in different regions and their total number

#### 3.1.10.4.17. STRENGTH SUMMARY REPORT

This report gives detailed and complete information about the major strengths of the company.

## 3.1.10.4.18. TERMINATED EMPLOYEES GETTING SALARY

This report gives detailed and complete information about those employees who have been terminated but still are receiving salary from NADRA.

## 3.1.10.4.19. TERMINATION HEADCOUNT REPORT

This report gives detailed and complete information about the total number of employees who have left NADRA.

#### 3.1.10.4.20. AGE REP

This report gives detailed and complete information about the different age groups working in NADRA

#### 3.1.10.4.21. EMPLOYEE DOES NOT EXIST IN PAYROLL BUT EXIST IN HRMS

This report gives detailed and complete information about those employees who are not paid by NADRA but are working in NADRA e.g. Army officers on deposition, employees from different companies working in NADRA on a particular project.

## 3.1.10.4.22. EMPLOYEE HISTORY (REGIONWISE)

This report gives detailed and complete information of all employees previous careers region wise.

#### 3.1.10.4.23. EMPLOYEE'S TERMINATION REPORT (REGION WISE)

This report gives detailed and complete information about all the employees who have left from NADRA in different regions.

#### 3.1.10.4.24. **DISABLE REPORT**

This report gives detailed and complete information about the name and number of disabled people in NADRA

#### 3.1.10.4.25. EMPLOYEE PREVIOUS EXPERIENCE REPORT

This report gives detailed and complete information about the employee's previous experience in NADRA or any other company.

## **Screen Shots of These Reports**

Following are couple of screen shots of NADRA's HR departments HRMS software. The "Function" tab allows the HR personnel to retrieve a number of different types of HR function related data. This process is not only efficient but error free as well. As can be seen from the screen shots information about people, recruitment etc can be accessed instantly.

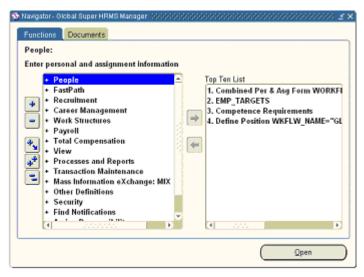


Figure 26: The HRMS Screen shot 1

On the right hand side of the screen the most often used field's information link is given.

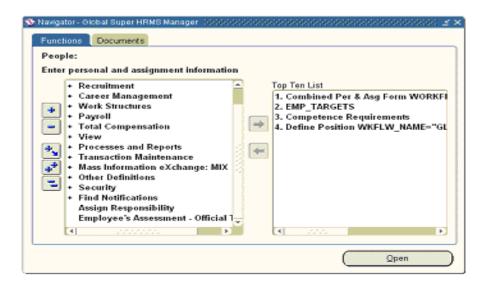


Figure 27: The HRMS Screen Shot 2



# 3.2. IMPLEMENTATION OF HRMS IN MOBILINK

## 3.2.1. ABOUT MOBILINK:

Mobilink GSM (PMCL), a subsidiary of Orascom Telecom, started its operations in 1994, and has become the market leader both in terms of growth as well as having the largest customer subscriber base in Pakistan - a base of over 14 Million and growing. We pride ourselves on being the first cellular service provider to operate on a 100% digital GSM technology in Pakistan that also provides state-of-the-art communication solutions to its customers.

Mobilink offers exclusively designed tariff plans that cater to the communication needs of a diverse group of people, from individuals to businessmen to corporate and multinationals. To achieve this objective, we offer both postpaid (Indigo) and prepaid (JAZZ) solutions to our customers. Compared to our competitors, both the postpaid (Indigo) and prepaid (JAZZ) brands are the largest brands of their kind in the Pakistan cellular industry.

In addition to providing advanced voice communication services that makes the lives of millions that much easy, we also offer a host of value-added-services to our prized customers. At the same time, Mobilink places high importance to its coverage, which is why we cover you in 1000 cities and towns nationwide as well as over 100 countries on international roaming service. In other words, we speak your language, everywhere.

## 3.2.2. MOBILINK VISION

To be the leading Telecommunication Services Provider in Pakistan by offering innovative Communication solutions for our Customers while exceeding Shareholder value & Employee Expectations.

Mobilink. Reshaping Communication!

## 3.2.2. MOBILINK 'S HR DEPARTMENT

At Mobilink, our belief is that "Our people are our greatest asset. We take great pride in acknowledging the contribution each one of us makes". We focus on People Development and for that we ensure:

- Staff Mobilink with world class Professionals and ensure that the right systems are in place to encourage them to develop to their full potential
- Create a collaborative and mutually supportive work environment that encourages people to grow

- Build a team of professionals who deliver expertise by participating in business decisions
- Develop Performance Management and reward systems underlying our Business strategy

## 3.2.4. MOBILINK'S HRMS MODEL:

Mobilink is also one of the companies to automate its HR activities and processes. Being such a large company spread all over the country and dealing with thousands of departments and employees needs implemented an automated system.

Mobilink was initially using independent Oracle applications to automate its HR process. These processes were not connected to each other. That is to say, the data of different activities/processes was present in different formats. The applications were not interconnected and thus could not communicate with each other. This was due to a number of reasons, for example, different activities were automated individually at different times.

Now the company has realized the need for an integrated HRMS system, which is interconnected with all the HR activities/processes and also with the payroll and the financial database. The company is currently shifting to HRMS solution provided by Microsoft i.e. MS Technologies. At this point of time it is undergoing the implementation of the new HRMS. Through this solution providing company Mobilink will finally have an HRMS system in its truest form.

## 3.2.5. MOBILINK'S INDIVIDUAL AUTOMATED SYSTEMS

The old system was more of an Information System. The HR personnel could retrieve information from different applications to make a decision. The existing applications were isolated from each other. Following are the HR activities/processes Mobilink had initially automated by individual software's:

## 3.2.5.1. SELECTION PROCESS

The selection process begins by the user registering to Mobilink online. After registering the candidate has to upload hi/her CV. Resumes can be uploaded or created online in the form provided by the website.

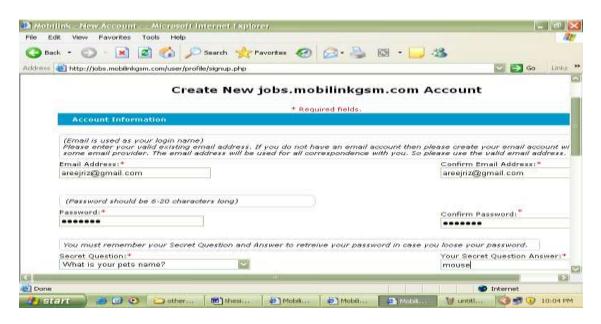


Figure 28: Registering to Mobilink

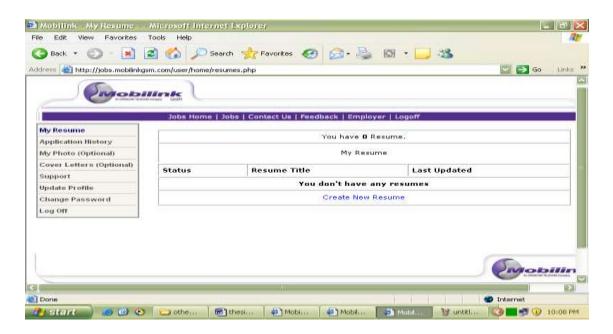


Figure 29: Developing or Uploading your CV to Mobilink website

The concerned department looks at the uploaded CV's. If there is a match between the company's requirement and the applying candidate, he/she is emailed or called immediately for an interview.

#### 3.2.5.2. EMPLOYEE INFORMATION

All current employees' basic information can be retrieved through this system. This information includes:

- Employee's full name
- Employee's current and permanent address
- Employee's contact number
- Employee's NIC number
- Employee's post
- Employees Mobilink number
- Employee's salary
- Benefits allotted to employee

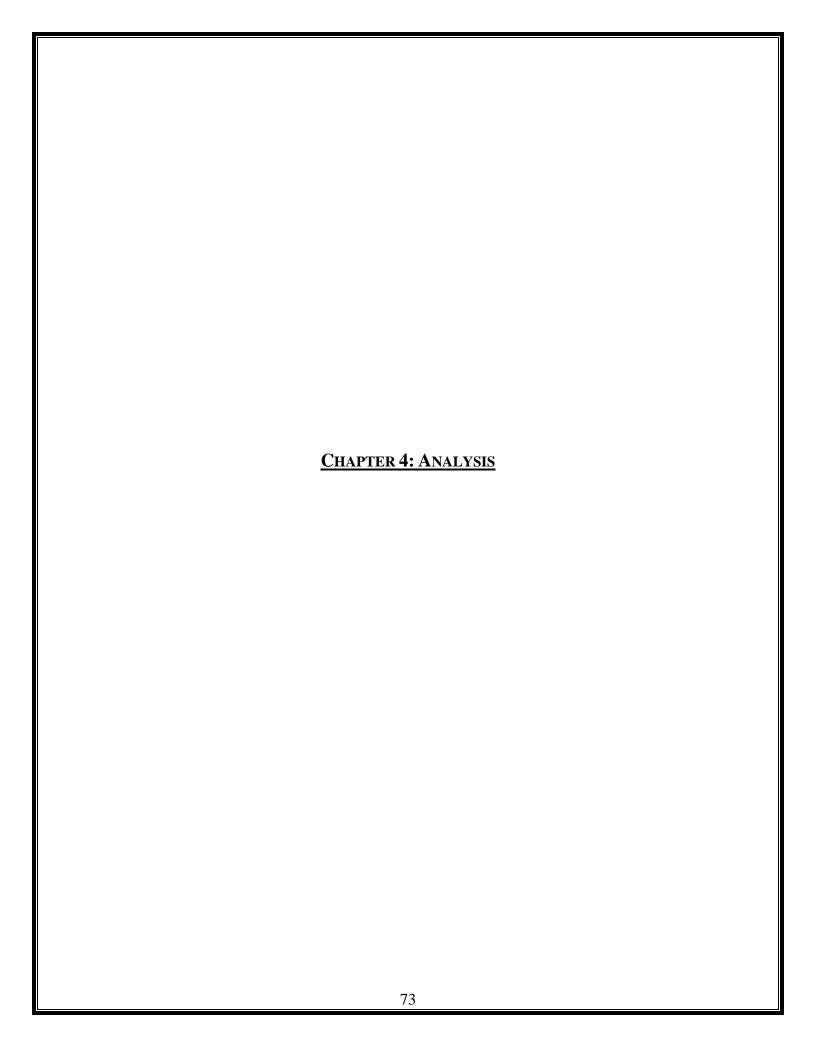
#### 3.2.5.3. MONTHLY NEW HIRES

A monthly report is generated in which there is a list of new employees hired in Mobilink. The list contains the name of the new hires along with the name of the department in which he/she is hired.

This report helps the HR personnel to do the necessary follow up work on the new hires. i.e. provide the employee with a Mobilink number, allocate the necessary benefits (if any) that go along with that post, for example new mobile phone number, pick and drop facility, mobile phones etc.

#### 3.2.5.4. BUDGET

With the help of the report generated from the budgeting software, the HR personnel get an idea about how much resources are allocated to a particular department and remaining within that budget what benefits and new programs can be run in that particular department.



# 4.1. Analysis of Companies

The study was aimed at determining the benefits of implementing the HRMS in an organization and how it increases the work efficiency. For this purpose two companies had been chosen.

- 1. NADRA
- 2. Mobilink

The reason for choosing these two organizations is that; firstly they have implemented HRMS in one form or the other. Secondly information of HRMS implementation in these companies was available.

## 4.1.1. ANALYSIS HRMS IMPLEMENTATION IN NADRA

NADRA has implemented a well planed HRMS system in its HR department. All the HR process are fully integrated and well linked with each other. They are all connected to one HR data base. The HRMS has helped to increase the performance and efficiency of the tasks being performed.

The Human Resource Management System can also communicate with the Payroll and Financial database. This communication of the databases further helps to increase the efficiency and lower the cost and time of the work being performed. With one click of a button a manger can retrieve vast information about any employee. For example how many trainings has a particular employee received, what was the cost of these trainings (total cost of training this particular employee) and what resources have been provided to him/her (mobile phone, car etc).

#### 4.1.1.1. Analysis of the Performance Evaluation System

The HRMS's performance evaluation system is a very neat and efficient way of performing the PMS. At the end of the year a date is set when PMS is initiated. All the employees are informed about that date. There are a number of benefits of this system:

- The mangers do not have to go through the awkward routine of having to confront the employees about their appraisal interview. Each employee initiates his/her own PMS.
- The employee knows who his first and second appraisers are going to be so there is no ambiguity.
- The employee is given a chance to evaluate his/her own performance. The employee is also given a chance to explain why or why not he was unable to achieve his targets. He is fully given the chance to defend himself in the comments column.
- The employee has the option to go over his own evaluation again and again to check or re-check. The employee forwards his evaluation to his manager only when he is satisfied.

- The rest of the process is the same as any other PMS. The RO and SRO rate the IO.
- The system speeds up the entire process and efficiently determines the strengths and weaknesses of the employee, without having to do it manually. It helps save a lot of time and effort. The system has been designed in such a way that the manager and employee can go through the evaluation from whenever they want.
- A soft copy of the form stays with the employee throughout the year, so that he may be able to go through his goals /targets. This serves as a reminder of the targets fro the employee.
- The RO evaluation carries 30% weightage where as the SRO's is 70%. Weightage. The logic behind this weightage distribution is to minimize any biasness that may occur. This is not the best approach to solve the problem. In most cases in NADRA the IO does not work directly with the SRO. The SRO's don't have a proper knowledge about the potential of the IO, it is the RO who has the complete knowledge about the IO's potential.

#### 4.1.1.2. Analysis of the e-Recruitment System

The e-recruitment system has dramatically reduced the application sorting time for the HR department. It has reduced the processing time and the necessary paperwork. The system automatically does all the work. This is a very transparent system.

The e-recruitment system takes online tests of the candidates and separates the highly potential candidates from the average ones. This system again is very efficient and saves a lot oh HR departments time. The HR personnel utilize this time on strategic planning. The interview letters are also system generated. This system turns the recruitment process into a light breeze. This system identifies the strengths and weakness of the candidates. This is calculated from the online test. This system helps the interviewing officer to focus on specific areas while interviewing. Every department has a separate online questions related to their fields.

## 4.1.1.3. Analysis of the Leave Calculation System

The leave calculation system allows every employee to view his/her own leaves. This system saves the mangers time and trouble of trying to tell the employees that they have any leaves left or not. The managers and employees no longer have to get into arguments about taking leaves. It is also a very transparent system. In this way the manger cannot favor any employee for extra leave. If an employee does take extra leaves it is immediately shown on the leave calculation report.

#### 4.1.1.4. Analysis of the Customized Reports

The customized reports help in the improved decision making process. It provides complete detail and information about a number of activities. For example total number of head count, type and classification of competencies, new recruits, terminations etc.

These reports help in identifying the strengths and weaknesses of the organization. Through these reports the HR department know where to focus there attention on, which skill to develop or acquire, which training or development module is required, how many employees are on NADRA's payroll etc.

## 4.1.2. ANALYSIS HRMS IMPLEMENTATION IN MOBILINK

Mobilink has automated some, but not all of its HR processes. These processes have been automated by individual software's, which is why theses processes can not communicate with each other, i.e. the processes are not inter-connected. In Mobilink the HRMS is not implemented in its truest form. The current system of automation in Mobilink is speeding up a number of activities/processes; however it does not help in figuring out trends in the workforce or provide any great help in making strategic decisions.

The current number of employees is the same in the company, when the work was being performed manually. That is to say, that the current system did not help reduce the number of workforce in the HR department.

Since the new HRMS has not been implemented yet, therefore nothing can be said about the results yet. However based on the literature review and the implementation results from NADRA, Mobilink will definitely benefit from the implementation of a completely integrated HRMS system.

#### 4.1.2.1. Analysis of the Selection Process

The selection process only develops a large pool of talented candidates for Mobilink. These applications regularly reviewed by the concerned department. This process does not serve any other purpose. It does not sort even sort the employees based on their qualification. This system does help Mobilink to go through a list of possible candidates and hire the best out of them

#### 4.1.2.2. Analysis of the Monthly New Hires Report

The list of new hires is added to the employee's database. It contains the new hires entire information. This report helps the HR department to update the employee database and perform the necessary paperwork. It however, does not provide any strategically important information to make better decisions.

#### 4.1.2.3. Analysis of the Employee Information

This report simply provides a complete list of employees and their entire information. Through this report the HR can determine what skills and capabilities they have and which skills and capabilities they lack. Through this report you can also see the number of employees working in different parts of the country.

This report does not provide a total head count of Mobilink's employees or region and grade wise headcount report. The employee's qualification classification summary report and region and grade wise headcount report etc. has to be generated manually.

#### 4.1.2.4. Analysis of the Budget Report

This report helps the HR managers to make decisions about the allocation of different resources to different departments. For example what type and how many trainings are needed by different departments or what skills/employees are required by the departments. This report does help the HR personnel in making strategic decisions.

# 4.2. SIMILARITIES BETWEEN NADRA AND MOBILINK

NADRA and Mobilink have a very few similarities between their HRMS. Following are the similarities between NADRA and Mobilink HRMS:

- 1. Both the companies are moving towards automating their entire HR processes. NADRA has taken a lead in this case; however, Mobilink is on the path of catching up.
- 2. Both companies can generate a list of employee's entire information, their skill capabilities and title.
- 3. Both companies can generate a list of new hires and their complete information.
- 4. Both companies selection (CV uploading) process is automated
- 5. Both the companies are using Oracle HR solutions.

# 4.3. DIFFERENCES BETWEEN NADRA AND MOBILINK

There are quite a many differences between NADRA's and Mobilink's HRMS. Following are the differences between NADRA and Mobilink HRMS.

- 1. NADRA has a very integrated system, where majority of the process are automated. In contrast Mobilink does not have an integrated HRMS; its certain processes have been simply automated. And these processes are not even linked to each other.
- 2. NADRA has a completely automated performance evaluation system, whereas Mobilink still has a manual performance evaluation system. NADRA's PMS is efficient and less time consuming, but Mobilink's PMS is a very lengthy and time consuming process.
- 3. NADRA's selection system is completely automated and the recruitment system is partially automated. Only the interviews are taken physically. In Mobilink's

- case only the CV uploading and browsing system is automated. Rest of the entire selection and recruitment process is conducted manually.
- 4. NADRA has a completely automated leave calculation system. Mobilink does not have facility yet.

# 4.4. ADVANTAGES OF IMPLEMENTING HRMS

During my research study I observed a number of benefits the companies were obtaining by implementing the HRMS. Following is the list and a brief description of these benefits:

#### 4.4.1. PAPERLESS ENVIRONMENT

When a system is automated, all the processes are conducted on the system. There is no more a requirement to keep physical files and folders. All the data is maintained and stored on the electronic database (HRMS). This helps to reduce the physical data and create a paperless environment.

Another benefit of the paperless environment is that, there is absolutely no chance of losing any document, file or folder, because they are all saved in the HRMS database. And the search option allows you to locate file/folders whose destination you have forgotten.

## 4.4.2. SHORTER PROCESS-ING TIME

The processing time of different activities has been dramatically enhanced by the new system. The documents or information can be instantly sent to the required office or person.

Raw data is very quickly processed into information; showing different trends and patterns. These trends and patterns help the HR manger uncover and resolve major people related issues. All the data can be retrieved within seconds, without having to go through a number of physical files.

#### 4.4.3. ERROR FREE SYSTEM

The new HRMS helps reduce the number of errors while performing work. For example in a form specific data fields have been defined by the system for each entry. If a user enters the wrong type of data, the system will automatically generate an error message or will not take the input.

This system also helps to track and maintain accountability of the work being performed. Employees are more careful in performing their task, since it is very simple to track down the person who made the error.

#### 4.4.4. EASY ACCESS TO INFORMATION

Through HRMS it is very simple to access and retrieve information. You can have information on the total number of head counts, available competency and skills, number or leaves or holidays available, benefits and bonuses etc. With a single click of a button you can view all this information, without having to consult a number of files and different people.

## 4.4.5. LESS AMOUNT OF WORKFORCE REQUIRED

The HRMS helps reduce the total number of work force required to perform a task. Since the tasks are automated the extra or redundant staff is not required. Thus, only the absolutely required amounts of people are hired. This helps in lowering the total organization cost of hiring, training and maintaining extra/redundant employees.

#### 4.4.6. FASTER DECISION MAKING PROCESS

The HRMS helps in uncovering and highlighting different trends in the work force. For example, if employees are continuously leaving the organization, the exit interview taken can help in discovering the reason behind it. It may be due to the poor salary or benefits package or employees are not satisfied by their work etc.

Furthermore, through the HRMS the reports can be instantly sent to different departments and that can help the respective managers make better, improved and informed decisions.

#### 4.4.7. MORE TIME TO FOCUS ON STRATEGIC ISSURES

Since HRMS provides easy access to information and helps in the decision making process, the HR staff now has more time to focus their attention on the strategic issues. This helps to better the HR department to the needs of the organizations major goals. For example the HR develops the company's work force in new areas, or creates a pool of talented candidates that might be required in the future.

#### 4.4.8. DATA MORE SECURE

The data in the HRMS is more secure than it was in the physical file. Not every employee has access to all the data. There is a restriction on who can access what type of data. Every employee has access to his/her data only. The HR staff has access to all the employees' information (only managers). If an HR staff member makes any changes in the data. The time of change made, and the name of the person who made the change is saved in the system. Therefore if any wrong change is made the person responsible for it can immediately be identified.

#### 4.4.9. INCREASED EMPLOYEE SATISFACTION

The HR staff members are more satisfied and happy while performing their task through the HRMS. The system is fast efficient and secure. They don't have to manually process a large amount of data or manually search any information they require. It has saved their time and cost of performance.

#### 4.4.10 CUSTOMIZEABLE

The HRMS solutions bought from any company provide the organizations to optimize the system according to their specific needs. This is a very useful option since every organizations requirements are different and unique. The HRMS software when customized helps the organizations perform their processes/activities as they desire.

## 4.5. PITFALLS IN HRMS IMPLEMENTATION

HRMS's implementation benefits a company in a number of ways, however, there a certain number of downsides of implementing this system. These pitfalls are not great in number and neither are they extremely hazardous. If a company properly planed the implementation process, it can easily avoid risking these pitfalls. These pitfalls are as follows:

#### 4.5.1. COSTLY SYSTEM

One of the most significant challenges facing human resource managers today is the justification of the costs associated with the purchase and implementation of a Human Resource Information System. The system acquiring company not only has to pay the solution providing company for implementing the solution. But it also has to acquire the necessary hardware and other equipment used in the implementation of the HRMS. The grand total cost of the entire system can be very over whelming. And in many cases it is the cost factor that goes against acquiring and implementing the system in a company.

In many cases the finance department votes against the acquisition of this system. In this case the HR department has to market the benefits of the HRMS and show predicted ROI of the system after its implementation.

#### 4.5.2. IMPLEMENTATION PROBLEMS

A number of problems can occur during the implementation phase. Some of these problems occur due to the following reasons:

## 1. Management of Scope

The scope of the HRMS project was not defined clearly or accurately at the beginning of the project. This results in unrealistic expectations from the user's side and frustration from the solution providing company. Also a number of major activities/processes may remain un-automated because of lack of proper scope definition.

## 2. Project Resources

Not enough resources have been allocated to the project i.e. time and money

#### 3. Conversion

The old system could not be completely converted into the new system. Again this problem occurs due to the lack of initial study of the original system, its working and workflow.

## 4. Testing

Testing should occur at every stage of the implementation process.

- Parallel: There should be parallel testing of every process as it is being implemented. Lack of parallel testing may cause a number of problems that surface later on. And at that point it is very difficult to isolate and rectify the problem.
- o Integration: The failure of integrating all the automated systems together is the biggest and major implementation problem that can occur.

The inability to accurately forecast remaining work within interface testing, financial interface development and data conversion are also problems that occur during the implementation phase.

#### 4.5.3. MAINTAINING THE SYSTEM

Every system needs to be maintained regularly. Other wise unexpected problems begin to occur; such as system degeneration, wear and tear bugs and errors etc. the failure of the HR manger to regularly have the system upgraded will seriously affect the working and efficiency of the HRMS. For instance certain problems may start to occur such as HRMS users periodically experiencing page load problems, system becoming extremely slow etc.

The unavailability of the vendors support may also become a major problem. Since they are ones to upgrade and maintain the system.

#### 4.5.4. LACK OF MANAGEMENT CONTRIBUTION

Lack of management's commitment may lead to inadequate resources and personnel be allocated to the implementation of the new process. If the management does not backup the new systems implementation, it is bound to fail .To make the project a complete success management must participate and review the complete details in the different steps of implementation, such as; how much work has been done in the installation, configuration, analysis/design, and infrastructure implementation etc.

## 4.5.5. EXCESSIVE AMOUNT OF CUSTOMIZATION

Many HRMS systems become unsuccessful because they increase the number of customizations up to an unreasonable number. ALL customizations must be tracked diligently.

#### 4.5.6. FAILURE TO ASSIGN A PROJECT TEAM

One of the pitfalls in the project is the failure to assign a project team for the duration of the project. It is imperative that the core project team members stay with the project from inception to implementation.

Another pitfall is the failure to include key personnel on the project team. This can exacerbate political problems and reduce perceived ownership to a small group.

#### 4.5.7. POOR NEED ANALYSIS REPORT

Poorly written, incomplete needs analysis reports lead to incorrect decisions and a costly system that does not meet the needs of the organization. Failure to survey/interview key groups in the organization also results in a poorly written need analysis report.

# 4.6. CULTURAL IMPLICATIONS

#### 4.6.1. PAKISTANIS WORKFORCE'S OUTLOOK TOWARDS AUTOMATIED SYSTEMS

Pakistan is a country where people are slowly acknowledging the importance of computer automation in the company's processes. People in offices still feel very intimidate by computers and their applications in the business setups. Following are the reasons why they are against the automated system:

- They feel that if the process is automated they will lose their job (which is true in certain cases)
- They are so used to and comfortable with the old system that they don't want to change

- They don't have the capability of learning to perform work on the automated system
- Fear of the unknown

Now the trends are changing, Pakistani executives are viewing automated systems as an investment and not as an expense. The automated systems have provided a means of doing routine tasks better, faster, and cheaper. In fact in some cases it ids the employees who are urging their mangers to automate their processes and activities.

This change in the trends has come about due to the increase in the awareness amongst people. They now realize the benefits and advantages of automating their systems. Most of the business activities are now being automated in the Pakistani business environment.

## 4.6.2. HR DEPARTMENT'S EVOLUTION IN PAKISTAN

Initially the HR activities and processes were considered purely as administrative tasks in Pakistan. The admin department took care of all the personnel related issues and the mangers would train and develop them. As the Pakistani businesses and companies grew and had to face foreign competition, they realized the importance of HR. These realizations lead to the origin of HR departments in Pakistan. The HR departments have evolved through a number of different stages of linkages to strategic planning and HR processes.

Initially the linkage of strategies planning and HR was purely "Administrative Linkage" the HRM's function attention was focused on the day-to-day activities. The HRM executives had no time or opportunity to take a strategic outlook towards the HRM issues. The department simply engaged in administrative work unrelated to the company's core business needs. This link still exists in very small companies.

The administrative linkage then evolved into a "One-Way Linkage". In this the firm's strategic business planning function develops the strategic plan and then informs the HRM department of the plan. This is the primary level of linkage of HR department to the strategic planning prevailing in small to medium sized organizations.

Large organizations, with have a well developed and slightly matured HR departments have a **Two-way Linkage.** This integration occurs in three sequential steps. First the strategic planning team informs the HRM function of the various strategies the company is considering. Then the HRM executives analyze the human resource implications of the various strategies, presenting the result of this analysis to the strategic planning team. After the strategic decision has been made, the strategic plan is passed on t the HRM executives, who develops programs to implement it. The strategic planning function and the HRM function are independent of each other.

In large multinational organizations an **Integrative Linkage exits.** It is dynamic and multi facets based on continuing rather then sequential interaction. The HRM executive is

part of the senior management team. The HRM function is built into the strategy formulation and implementation processes.

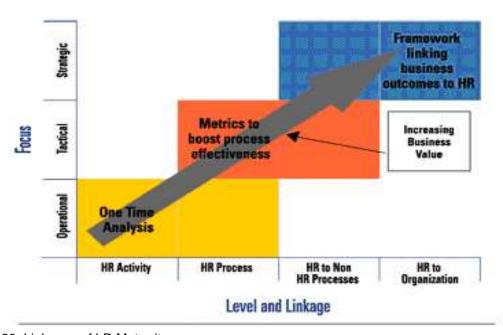
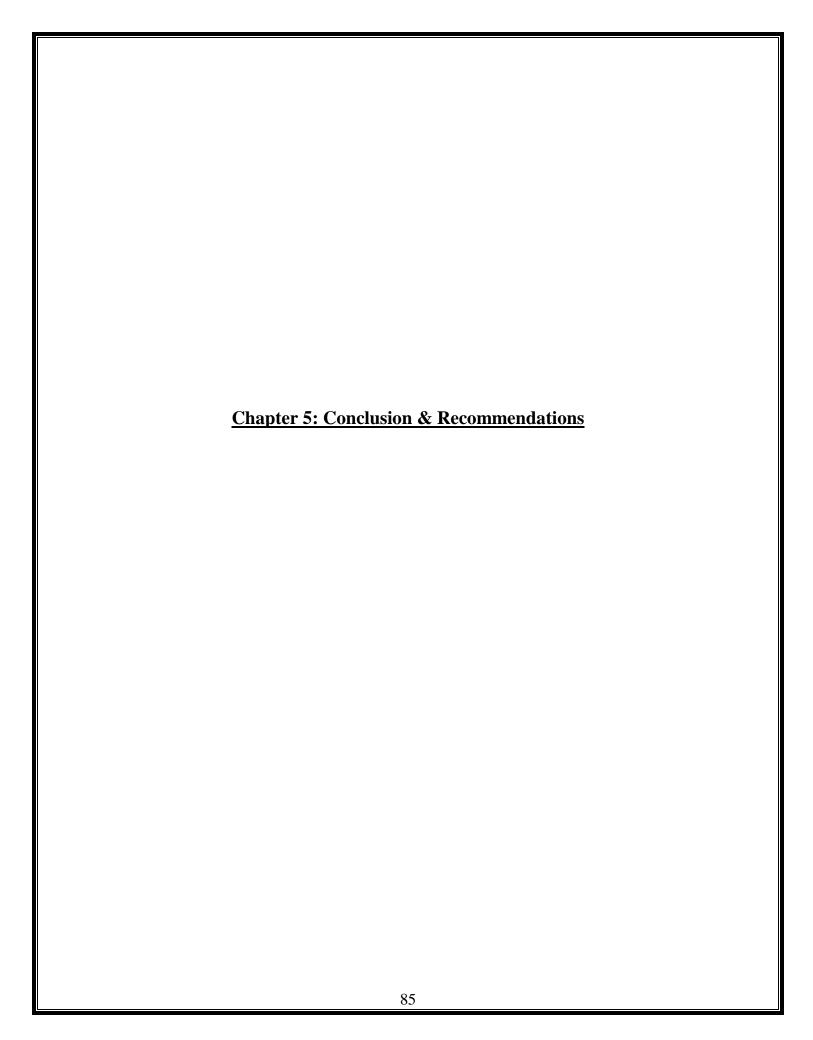


Figure 30: Linkages of hR Maturrity

It is in the Two-way linkage and the Integrative linkage companies where HRMS benefits the organization to its maximum. This is because:

- 1. The companies are very large, with a large number of employee's. This naturally results in a great number of HR related work. Here HRMS can play a very significant role.
- 2. HR department is well established and matured and is most ideal to implement the HRMS solution.



## 5.1. CONCLUSION

It is very obvious from the above analysis that HRMS *does* provide significant amount of advantages and benefits to the organizations. In fact it is the need of the time. Every company wants to move ahead of the other, and attract the most talented employees and eventually retain them. This can only happen if the company has a very strong and well established HR department. The HR department can help the companies create their own competitive advantage in eyes of the workforce. By solving the employee related issues, keeping them happy, providing a challenging, healthy and transparent environment. HRMS can help the HR department to achieve all this and more. HRMS automates the daily day-to-day activities and allows the HR department to focus on other strategic issues. This helps to improve the standard of the HR department; it then improves the employee satisfaction, which eventually leads to a healthy competitive organization

NADRA has a very well-integrated HRMS. This system has helped the HR department shorten the processes time and has helped increase the overall efficiency of work being performed. The automated "Performance Evaluation System" has dramatically reduced the manager's time for evaluating his subordinates. The weightage distribution system is not the solution to help reduce the biasness in the PMS system. In an organization like NADRA where, the Initiating Officer and the Senior Reporting Officer have no direct contact with each other, this division in percentage will not serve its purpose. The erecruitment system and the leave calculation system help increase the transparency in the entire system. As every candidate and employee knows that there is no human involved in the system. The process is entirely being conducted by the system. So no candidate or employee can complain about the process being unfair, as every one is treated based upon the same rules. The customized reports have helped the HR department make very important strategic decisions. And have helped the department become more proactive.

The system in Mobilink does help in speeding up certain processes. However, they are not helping the company in any strategic way. Mobilink requires a completely automated system to support and benefit its HR department's processes. The automated processes that it currently has implemented as are a step in the right direction, but it still needs to go further. Mobilink has realized this fact now, and it is under the process of purchasing a complete HRMS solution provided Microsoft.

The goal of an online HRMS (human resource management system) is to streamline HR processes such as recruitment, payroll, performance evaluations, and benefits administration and to provide a central repository of employee-related information. With such a system in place, employees and managers can easily access the HR information they need, and HR staff can be freed from burdensome paperwork.

HRMS helps establish a link between its activities and the bottom line business goals. HRMS applications gather, collate and distribute information. Theses applications help optimize HR processes, make them more efficient and enable organizations to reduce costs through simplified processes and automated workflow.

## **5.2. RECOMMENDATIONS**

#### 5.2.1. RECOMMENDATIONS FOR NADRA

Although majority of NADRA's HR activates have been automated, however, there is still room for improvement. Following are recommendations for NADRA:

- The online new candidates test and the leave application system are 3<sup>rd</sup> party software. These two applications should also be bought from the same vendor as the other applications. These applications will then be able to directly communicate with the other applications with out having to go through the format changing process.
- The biasness factor will inherent in the PMS, it can never be eliminated. Therefore the weightage should be the opposite way around i.e. RO should have 70% and SRO should have 30% weightage in the evaluation form.
- It should make sure to have the solution providers upgrade the software regularly
- NADRA should have a backup data warehouse for all its HR data.
- They should request the solution providers to provide them with a complete documentation of their system. The documentation is very important; it has the complete detail of the entire system. And helps in identifying and debugging errors.

#### 5.2.2. RECOMMENDATIONS FOR MOBILINK

At this point in time Mobilink has spent a lot of money and time on automating its some of its current processes. Yet, these automated processes do not provide the HR department with a significant amount of advantage. These systems have only helped to reduce the processing time, but have played no role in helping the department align itself to the companies over all goals. Following are some of my recommendations to improve Mobilink's current HR system:

- Moblink is a well established multi-regional organization with a mature HR department. Because of the size of the company and high HR maturity, Mobilink must implement HRMS. It is not only a need for it, but in fact a necessity to remain competitive in this cut throat environment. Moblink has hundreds of employees all over the country, it needs an efficient HR system to perform its activities and satisfy the employees.
- Mobilink's HR department should now focus its attention (i.e. time and money) on implementing a completely integrated HRMS, in which all the HR automateable processes are automated and connected to a single database.
- It should use the solutions provided by those companies who are renowned in this field (e.g. Oracle, SAP, Microsoft).
- It should make sure that the solutions providing companies support/implementation office is present within the country. Incase if any problem

- occurs in the system, the solution providing company can immediately provide remedies for it without any delay.
- The HR team should be closely working with the solution providing company, and provide explicit details of each and every process. How the process works and how it is linked to the other process. This step is very important so that the solution providing company knows exactly what Mobilink wants. This helps save time and money in the implementation process.
- At every step Mobilink should demand to see a prototype of the new system. This will help in clearing confusions and misunderstandings between the two parties. It will also help the solution providing companies to stay on track.
- After the implementation of the new HRMS, the entire HR team "must" attend the training session. This training session teaches the employees on how to use the new system and what or how many options there are available in the software.
- Mobilink should have the complete documentation on the new HRMS. This documentation will help the company and the solution providers in the future to update or debug the software.
- The two parties i.e. Mobilink and the solution providing company should determine the cost and time of the new systems implementation.

## 5.2.3. STRATEGIES TO HELP LESSEN RESISTANCE TO THE HRMS IMPLEMENTATION

To overcome the cultural resistance to change of the old system to the new HRMS and before bring about the major changes in the organizations process the, Following steps should be taken:

#### 5.2.3.1. Education and Communication

An effective communication program can minimize the uncertainty and fear of the unknown associated with the new HRMS. The lack of reliable information leads to rumors and uncertainty. The leaders of the new system should communicate with their employees and show HRMS's benefits

Information concerning *what* and *why* of the new system should be provided to all the HR departments employees. The advantages and rewards of the communication of the new system should be emphasized, for opposition and fear to disappear.

## 5.2.3.2. Facilitation and Support

Reinforcing the new systems benefits and providing support for those involved is another way managers advocating the new system can deal with resistance. Managers can arrange promotions, monetary rewards or public recognition for those participating in the new system.

## 5.2.3.3. Negotiation and agreement

Negotiate with potential resistors. Some examples include increase an employee's pension benefits in exchange for early retirement, transferring employees to other departments instead of laying them off.

## 5.2.3.4. Participation in change program

One basic technique for increasing the acceptance of the new system is to be certain that the individuals involved are allowed to share in the decision process rather then being forced. The participation of individuals in matters that concern them increases the probability of having an acceptable program. Individuals who have participated in the formation and implementation of the new system have an interest and ownership in the program that is likely to lead to increased motivation and understanding.

## 5.2.3.5. Leadership

The leader's actions and behaviors are very important to bring about a change in the current process and the success of the new system. Therefore the leader should play a very active part before, during and after the implementation of the process. He should encourage guide and motivate his people to learn and use the new system.

## 5.2.3.6. Reward System

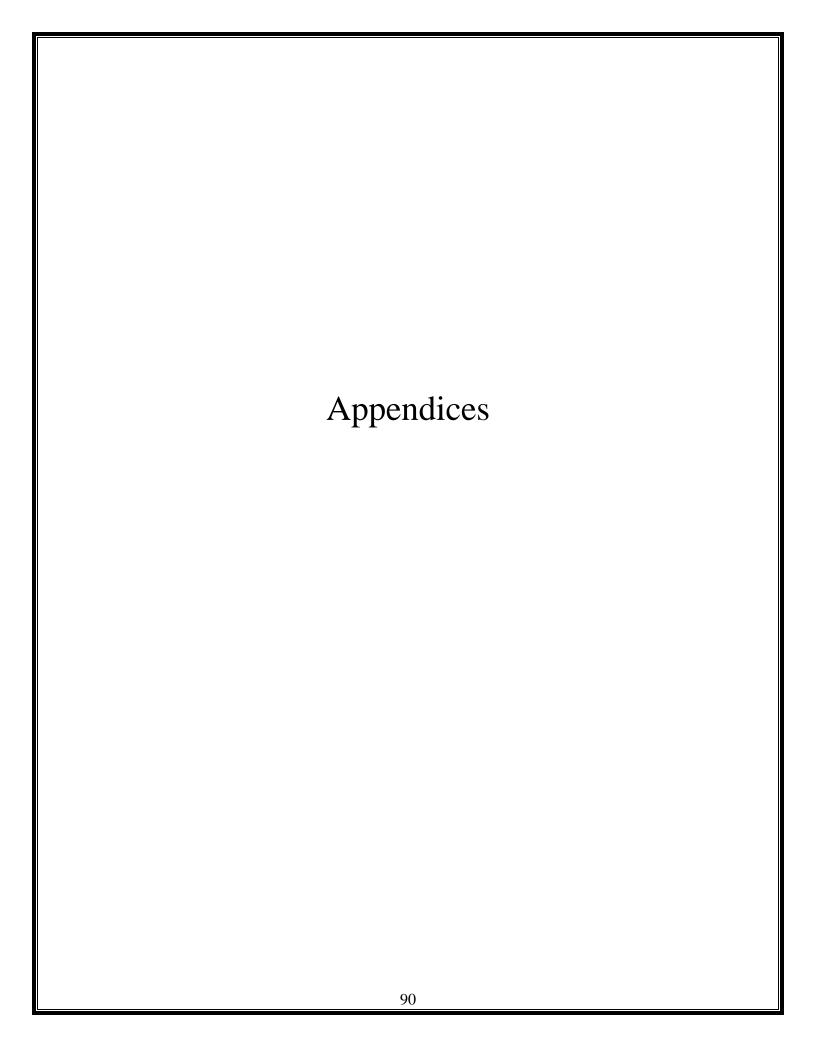
Rewards systems can help in increasing the acceptance of the new system. Bonuses and recognition rewards are some examples. This also helps to increase the ownership in the new system.

#### 5.2.3.7. Climate conducive to communication

Creating a climate where everyone involved in the change program feels free and not threatened to communicate with others can minimize resistance in the long run.

#### 5.2.3.8. Explicit and Implicit coercion

Managers may force people to go along with a change by explicit or implicit threats involving loss of jobs, loss of promotion, or raise. This is not the best technique and is used if none of the above mentioned techniques fail.



# **Appendix 1: Performance Evaluation System Example For NADRA's Call Centre:**

To understand the automated performance evaluation system better. Let's see the example of NADRA's call centre.

# **Main Page**

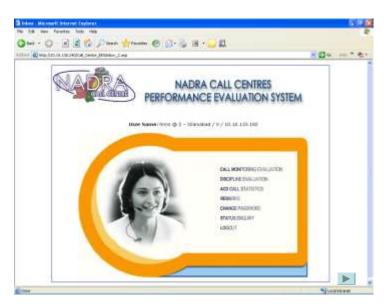


Figure 31: NADRA's Call Centre Performance Evaluation Systems Main Page

## **Competencies & Skills**

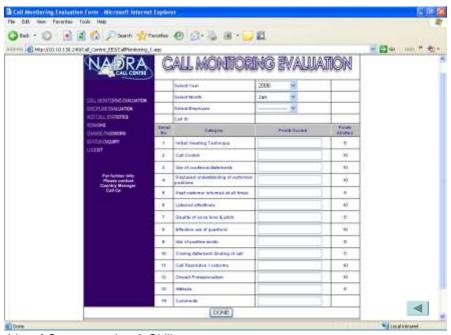


Figure 32: List of Competencies & Skills

## **Employee Achievement Report**

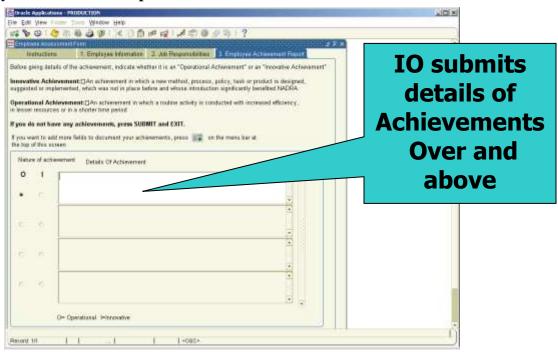


Figure 33: Achievement Details Submission

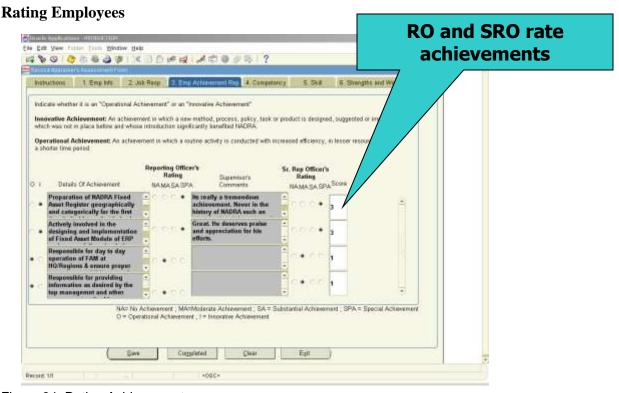
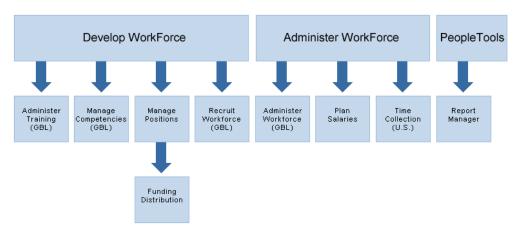


Figure 34: Rating Achievements

# **Appendix 2: Oracle HRMS MAP**

# **HRMS Map**



Copyright 2004 Center for Innovations in Teaching and Technology

Figure 35: Oracle HRMS Map

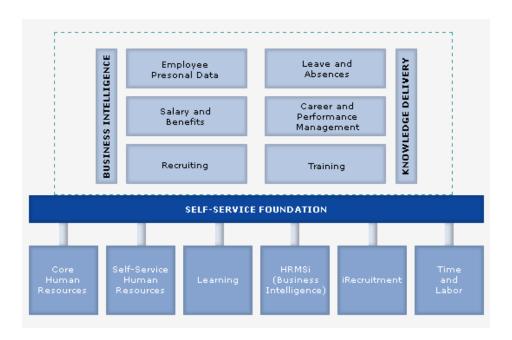


Figure 36: Oracle Self-service

# Appendix 3: Oracle HR Suit:

Oracle HR is a key component of the fully integrated Oracle HRMS suite of Applications, comprising of Oracle HR, Oracle Payroll, Oracle HR: Self-service, Oracle Time and Labor, Oracle iRecruitment, Oracle HR Intelligence, Oracle iLearning EBS, Oracle Advanced Benefits, and Oracle Labor Distribution. Oracle HR also provides a foundation of workforce information leveraged across the E-business suite, to support processes such as professional

Model an unlimited number of compensation scenarios for different types of employees, tracking both employer cost and employee value.

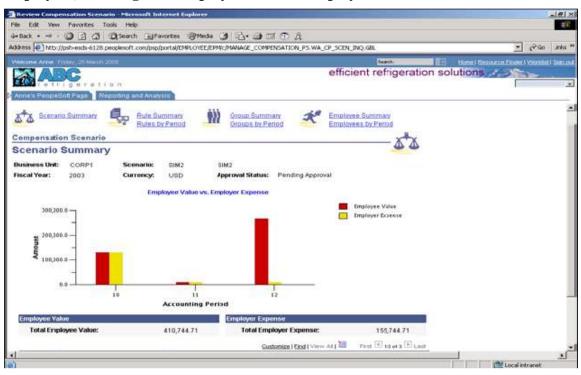


Figure 37: Modeling Compensation Scenarios

## **Competency Strategy Scenario**

Create a competency strategy scenario and then conduct a fit-gap analysis your current workforce against that strategy.

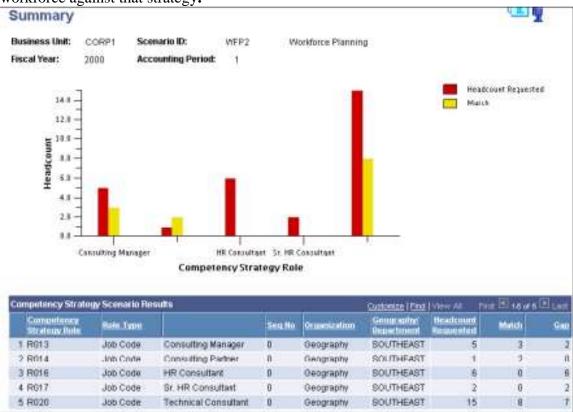


Figure 38: Competency Strategy Scenario

## Understand workforce changes and how they impact ability to meet demand

Headcount Activity by Manager								
		Plus		Minus				
Manager	Start	Hire	Transfer	Termination	Transfer	End	Net	Change
G.Bernard	36	3	<u>Z</u>	<u>6</u>	<u>Z</u>	33	-3	-8.3%
I.Davis	20	8	Z	<u>1</u>	<u>12</u>	22	2	10.0%
A.Edwards	36	5	<u>10</u>	<u>6</u>	<u>12</u>	33	-3	-8.3%
R.Harrods	31	Z	<u>6</u>	<u>7</u>	<u>6</u>	31	0	0.0%
R.Patel	19	3	<u>6</u>	<u>4</u>	<u>3</u>	21	2	10.5%
S.Singh	18	9	<u>11</u>	<u>5</u>	Z	26	8	44.4%
M.Trevors	38	3	Z	8	<u>6</u>	34	-4	-10.5%
Direct Reports	8	2	0	1	1	8	0	0.0%
Grand Total	206	40	54	38	54	208	2	1.0%

Figure 39: Head Count Activity

# **Appendix 4:**

# **Architecture for HRMS Application Development**

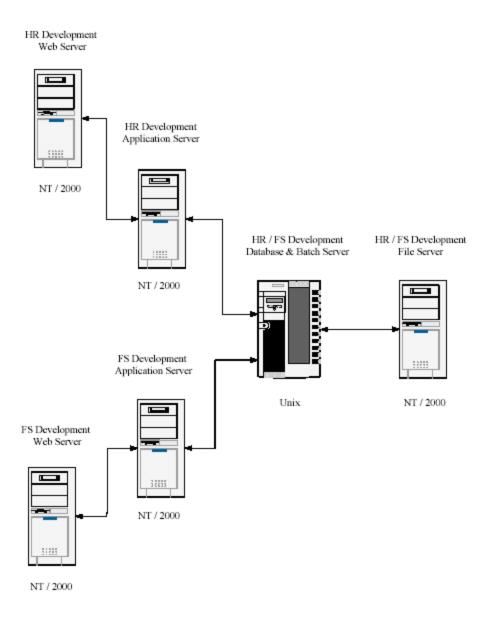


Figure 40: Architecture for HRMS Application Development

# **Appendix 5: How HRMS Data Is Accessed**

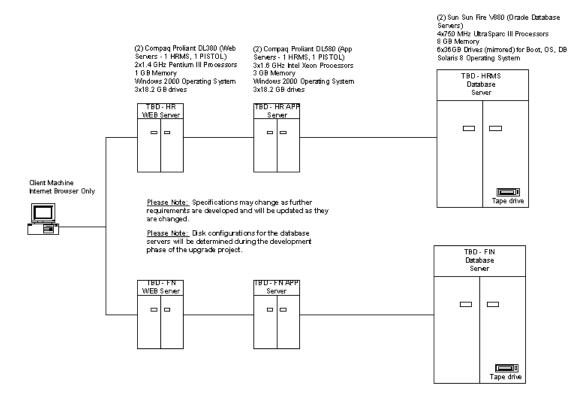


Figure 41: Access to HRMS Database

## **BIBLIOGRAPHY**

- 1. <a href="http://hrnt.jhu.edu/hris/?SMSESSION=NO">http://hrnt.jhu.edu/hris/?SMSESSION=NO</a>
- 1. <a href="http://www.uiowa.edu/hr/webinfo.html">http://www.uiowa.edu/hr/webinfo.html</a>
- 2. http://www.bls.gov/oco/ocos021.htm
- 3. <a href="http://www.hr.howard.edu/hris/default.htm">http://www.hr.howard.edu/hris/default.htm</a>
- 4. http://www.ohr.wisc.edu/ohr/Informationsystems/Links.htm
- 5. http://www.cnpl.co.in/solutions/hrd.htm
- 6. <a href="http://www.admin.mtu.edu/hro/hrit/index.shtml">http://www.admin.mtu.edu/hro/hrit/index.shtml</a>
- 7. http://www.northwestern.edu/hr/forms/hrishris.html
- 8. <a href="http://www.newcastle.edu.au/service/hrs/hris/hronline.html">http://www.newcastle.edu.au/service/hrs/hris/hronline.html</a>
- 9. <a href="http://www.workforce.com/">http://www.workforce.com/</a>
- 10. <a href="http://www.oracle.com/applications/human\_resources/intro.html">http://www.oracle.com/applications/human\_resources/intro.html</a>
- 11. <a href="http://chronicle.com/jobs/id.php?id=0000467633-01">http://chronicle.com/jobs/id.php?id=0000467633-01</a>
- 12. https://hr.unc.edu/abouthr
- 13. http://hrweb.berkeley.edu/hrms/implement.htm
- 14. http://www.nadra.gov.pk
- 15. <a href="http://www.mobilink.com">http://www.mobilink.com</a>
- 16. <a href="http://www.sfsu.edu/~cms/images/hrImplementationTeam.com">http://www.sfsu.edu/~cms/images/hrImplementationTeam.com</a>
- 17. <a href="http://www.cetrtapot.si/pic/page/oracle\_shema-modulo.com">http://www.cetrtapot.si/pic/page/oracle\_shema-modulo.com</a>
- 18. http://www.geoworld.com/Athens/3238/page3-15.htm
- 19. <a href="http://jobfunctions.bnet.com/whitepaper.aspx?&kw=hrms&docid=140790&promo=11">http://jobfunctions.bnet.com/whitepaper.aspx?&kw=hrms&docid=140790&promo=11</a>
- 20. http://linguistics.byu.edu/faculty/henrichsenl/ResearchMethods/RM\_1\_01.html
- 21. <a href="http://www.cs.indiana.edu/mit.research.how.to/section3.12.html">http://www.cs.indiana.edu/mit.research.how.to/section3.12.html</a>
- Human Resources Management Systems: A Practical Approach By Glenn M.
   Rampton, Ian J. Turnbull, J. Allen Doran ISBN 0-459-56370-X Carswell
- 23. http://www.ohr.wisc.edu/ohr/Informationsystems/Links.htm
- 24. http://www.cnpl.co.in/solutions/hrd.htm
- 25. http://www.admin.mtu.edu/hro/hrit/index.shtml

- 26. http://www.northwestern.edu/hr/forms/hrishris.html
- 27. http://www.newcastle.edu.au/service/hrs/hris/hronline.html
- 28. http://www.workforce.com/
- 29. http://www.oracle.com/applications/human\_resources/intro.html
- 30. http://chronicle.com/jobs/id.php?id=0000467633-01
- 31. https://hr.unc.edu/abouthr
- 32. http://hrweb.berkeley.edu/hrms/implement.htm