

KAHNIR  
MANAGEMENT REPORT SYSTEM FOR  
ELECTRICITY COMPANIES: A PROPOSED MODEL  
FOR MANAGEMENT REPORT SYSTEM (MRS) IN  
ZANJAN REGIONAL ELECTRIC COMPANY

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## DECLARATION

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**Nama Syarikat: KAHNIR**

**Nama Produk: Sistem Pengurusan Repot untuk  
Syarikat-syarikat Elektrik**

**Tajuk Penyelidikan: Suatu Cadangan Model untuk Sistem  
Pengurusan Repot (MRS) bagi Syarikat Elektrik di Daerah  
Zanjan**

## **ABSTRAK**

Desertasi ini membincangkan mengenai plan perniagaan untuk sebuah syarikat (KAHNIR) yang ingin memberi perkhidmatan dan perisian untuk Sistem Pengurusan Repot (MRS) bagi syarikat elektrik di Iran. Objektif utama setiap syarikat elektrik ialah untuk memberikan perkhidmatan kepada pelanggan di mana aliran informasi merupakan suatu kepentingan dan alat keperluan bagi setiap organisasi untuk memberikan mutu perkhidmatan yang berkualiti. Pada mulanya, syarikat elektrik Iran menggunakan sistem komputer dalam sistem pembilan. Dengan tersebar dan berkembangnya Informasi Teknologi dalam perniagaan baru, sistem transaksi kini lebih kerap digunakan oleh syarikat elektrik. Kebanyakan syarikat elektrik Iran menggunakan kaedah yang mudah untuk mengumpul data dari cawangan mereka secara elektronik atau manual dan kemudian memprosesnya menggunakan perisian seperti Microsoft Word dan Excel.

Objektif utama penyelidikan ini adalah untuk memperbaiki proses sistem

laporan di syarikat elektrik daerah dengan menawarkan satu model pemprosesan bagi proses pengurusan laporan yang dibina berdasarkan Model Pemprosesan Perniagaan (BPM) yang membolehkan suatu Sistem Pengurusan Laporan Untuk Syarikat Elektrik dibangunkan bagi memberikan perkhidmatan kepada pengurus-pengurus syarikat ini dalam membantu mereka membuat keputusan yang betul dan cepat.

**Company Name: KAHNIR**

**Product Name: Management Report System for Electricity  
Companies**

**Research Title: A proposed model for Management Report  
System (MRS) in Zanjan Regional Electricity Company**

## **ABSTRACT**

This dissertation will discuss about a business plan for the company (KAHNIR), which wants to offer software and services for Management Report System (MRS) in Iranian electricity companies. The main objective of each electricity company is to serve its customers and flow of information is one of the important and essential tools to manage each organization in providing good service. In the early years, Iranian electricity companies used computer systems in its billing system. As information technology spread and developed in new business enterprises, electricity companies have increasingly used computerized transactional systems. Most of Iranian electricity companies use simple method to gather data from their departments either electronically or manually and process those using softwares like Microsoft Word and Excel.

The main objective of doing this research is to improve the process of report system in regional electric companies by offering a process model for management report process which is built based on Business Process Modeling (BPM) that

enables us to develop a Management Report System For Electricity Companies (MRSFEC) to serve the managers of these companies by assisting them in making the accurate and timely decisions and taking the most effective actions.

## **Section 1.0 EXECUTIVE SUMMARY**

KAsb va kar Hoshmand NIROo (KAHNIR) Company will be established next year (2011), and trade in Iran. The company will develop a Management Report System for Electricity Companies (MRSFEC). Actually, MRSFEC is an analytical information system, which can analyze huge volume of data extracted from transactional information systems such as financial and managerial systems. In the early years, Iranian electricity companies would use computer systems in billing system. As information technology spread and developed in new business enterprises, electricity companies are using transactional systems more and more. This process has provided opportunities to develop a management report system for these companies. In other words, electricity grid is an essential infrastructure for every country and managing this kind of industry requires suitable information systems which help managers make the right decisions and take the right actions at the right time to improve their services as a utility company. Most Iranian electricity companies use simple method to gather data from their departments either electronically or manually and process those using softwares like Microsoft Word and Excel. Their employees and experts have to get reports from Transaction Processing System (TPS) such as Billing system, Financial and Administrative system, Prevention and Maintenance system, Project Management system and to be used in Microsoft Word and Excel to make reports for managers and other stockholders.

KAsb va kar Hoshmand NIRoo (KAHNIR) will continuously expand their research and development to produce and release new versions of the software based on market niche and customer needs. It helps us to stay competitive and remain in market effectively and maintain a good position.

KAHNIR will offer application package in three categories for all electricity companies operating in Iran: Express version, Standard version, and Enterprise version. In addition, the company will provide some services other than selling application package such as customizing software, and determining Key Performance Indicators (KPI). A KPI is used to measure how well an organization or individual is accomplishing its goals and objectives. Organizations and businesses typically outline a number of KPIs to evaluate progress made in areas where performance is harder to measure (superpages.com, 2009). Measuring and monitoring indicators that are capturing critical activities at the coalface of your business will give ample time to take corrective action so your business can continue to smoothly accelerate ahead (Ambrosiussen, 2010).

The potential market of MRSFEC will consist of electricity companies, which operate in generation, transmission, distribution and related fields, especially in Iran. The KAHNIR management team comprises professionals from information technology, computer engineering and electricity engineering fields.

There are currently three partners: Vahid Farrokhi (43), Mehrdad Babazade (39) and Mohsen Afsharchi (36), who have extensive experience in computers, electrical and



training.

We have three methods for selling and contracting: first, selling as off the shelf application package. Second, selling as customizing software based on customer needs. Third, offering software with KPIs determining function for those companies that have not determined their key performance indicators. Our method for determining KPIs is arranging interview with business users in gathering KPI requirements. In order to help with this requirement interview process, we will use a tool called the KPI Wheel (Gonzalez, 2005) which will be described in section four. We expect to generate a sufficient profit to finance future growth and provide the resources needed to achieve the goals.

Our estimate for revenue is \$135,000 at the end of first year that we will gain from contracts signed with at least four electricity companies in Iran. To develop the business at a rate that is both challenging and manageable, and leading the market with innovation and adaptability, the four companies that we start with in the first year will increase with a growth of 100% in the next year and about 200% for the following years. In other words, by the third year, we will have 16 customers in the region (Iran). With the growth rate, we predict our income by the end of third year to reach at about \$325,000. We have \$50,000 capital to invest in the company and are seeking for an additional fund of \$60,000 from a bank for our development for the next three years.

## **Section 2.0 INTRODUCTION TO THE COMPANY**

### **2.1 Company Background**

KAHNIR Company will start its operation next year (2011), and it will do business in Iran. The main activity of the business is to sell and obtain contracts with electricity companies, which operate in Iran. Our principal office will be located at ICT Park, Zanjan, Iran (Institute for Advanced Studies in Basic Sciences (IASBS), 2008) which is one of ICT Parks in Iran to facilitate growing ICT young companies.

Our company is at the start-up stage of business and we do research and develop efficient software to help and assist our customers in making and taking right decisions at the right time. Actually, KAHNIR is established to care and assist managers and experts of Iranian electricity companies who need to make critical decisions in providing reliable electrical energy to people, industries and commercial sectors.

MRSFEC offers analytical reports based on KPI and it uses a dashboard to facilitate working and provides different alarms and warnings to indicate the condition of the system (company). In other words, the product is a management report system, which is capable of presenting analytical reports in the form of text and graphs beside traditional reports like routine and periodical reports. To better assist the managers, we will prepare a dashboard with the purpose of providing managers with actionable business information in a format that is both intuitive and insightful.

Dashboards leverage operational data primarily in the form of KPIs.

## **2.2 Business Intent**

### **2.2.1 Product**

2.2.1.1 The company offers three versions of product which focus on the operations of electricity companies as follows:

2.2.1.1.1 Express version- It is useful for small electricity companies like electricity distribution companies with less than 500,000 subscribers that include 24 electricity distribution companies and seven other related companies and it uses Microsoft SQL Server and one database on one server. In fact, it will work only on Microsoft windows platform.

2.2.1.1.2 Standard version- This version is suitable for medium range electricity companies such as electricity distribution companies with more than 500,000 and less than 1,000,000 subscribers, common regional electric companies and generation management companies that include 13 electricity distribution companies, 10 regional electric companies and 33 generation management companies and it uses Oracle and one database on one server. As we know, Oracle is a free platform.

2.2.1.1.3 Enterprise version- This version is for large electricity companies like

electricity distribution companies with more than 1,000,000 subscribers or large regional electric companies that include 2 electricity distribution companies and 6 regional electric companies and it uses Oracle and multiple database on multiple servers with different operating systems.

#### 2.2.1.2 Customizing the versions based on customer needs and requests

Generally, most of Iranian electricity companies are similar but there are some differences such as their administrative and financial forms, reports, processes and procedures. Of course, these differences among these same category companies are few. For example, regional electric companies are very similar and the same goes with the electricity distribution companies. We use agile methodology (eXtreme Programming) and this enables us to customize the versions of our software swiftly. This methodology will be described in section four.

#### 2.2.1.3 Determining Key Performance Indicators as requested by customers

Some of Iranian electricity companies have determined their Key Performance Indicators by taking measures such as strategic planning, measuring productivity and applying the EFQM Excellence Model. However, some of them do not take these measures and therefore might request for their Key Performance Indicators, which are necessary in MRS project to be determined.

#### 2.2.1.4 Setup and installation of the soft wares

This service is offered free-of-charge for the first setup and installation for all customers but after that, we will charge our travelling and manpower costs.

#### 2.2.1.5 Helpdesk (with subscription)-phone and online

We provide for our customers a helpdesk as a central point to get help for their various issues about our software (MRSFEC) if they were our subscribers. We will use helpdesk softwares for online services beside traditional services like telephone assistance.

#### 2.2.1.6 Technical support (with subscription)

When the customers subscribe to our technical support services we integrate seamlessly as part of their team in solving their technical problems and we can even offer resident expert at their site. This satisfies some of our customers who want to outsource the solution of their problems.

#### 2.2.1.7 Pay-per-use

Sometimes cost of subscription is high for some customers, hence we offer this kind of support based on work hours. However, these customers are our second preference after our subscribed customers.

### **2.2.2 Market Need**

Nowadays, most Iranian electricity companies tend to use information systems in their decision-making. This trend was discussed at the symposium of Information and Statistical managers of electricity companies on 15 Jan. 2009 (Tavanir, 2009). From our investigation and survey, it was found that there are about 100 companies in electricity field which include generation, transmission, distribution, and related fields. There is only one Distribution Company (<http://www.meedc.com>), which uses management report system, which is simple and *démodé* with old technology. It is based on two-layer architecture (Client/Server) and was developed three years ago by Delphi and Microsoft Sql Server 2000 . Thus, the market is ready for a new MRS with new technology and model.

In addition, we prepared a questionnaire and distributed to the personnel of a regional electric company to prove the needs for MRS system in these companies and for extracting User Stories based on our methodology (XP). Of course, about User Stories and questionnaire, we will discuss in detail in section 4 and you can find the questionnaire form in appendix A (It is translated from Persian to English). We distributed 66 forms among a rational percentage of personnel in all organizational levels include top managers, operational managers, information experts and other experts. 30 is the “rule of thumb” for very tight studies (William G. Zikmund, 2000). Sixty people answered our questions (about 90%). We know that over 85% response rate is excellent for questionnaires (Alan Bryman & Emma Bell, 2007).

Distribution of filled questionnaire is depicted in table 2.1.

Table 2.1: Distribution of filled questionnaire based on organizational levels

Organizational Layers	Population	Sample	Responded
Top Managers	16	10	7
Operational Managers	28	17	17
Information Experts	13	13	12
Other Experts	120	26	24

From our observation, out of the rational percentage of total personnel selected as our sample, a good percentage responded. We know that most of other experts are not involved in statistics and information, which are needed for decision-making. They are often technical engineers who work in substations and involved in construction and repair and maintenance affairs. Figure 2.1 shows this distribution:

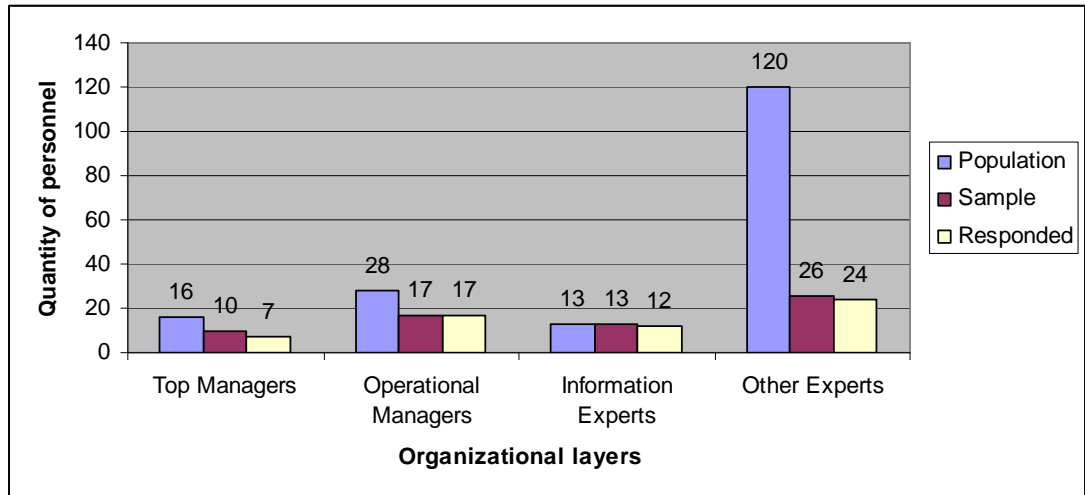


Figure 2.1: Distribution of filled questionnaire based on organizational levels

The responses to questions indicate that 97% of the personnel think that they need to have an MRS system and 95% of them believe that MRS is necessary for an

electrical company. 63% of the employees think this system can affect decision-making and 50% believe the MRS system can affect decisions, which are made by managers.

Actually, there is an information gap between existence information and reports, which are extracted from Transaction Processing System (TPS) systems and the knowledge that managers need for decision making. As we know in TPS systems like billing system and accounting system, each system works in one area. For example, if we want to generate a report for annual sale of electricity power to subscribers, we can easily extract it from billing system but if we want to generate a report for those subscribers who are contractors of the company (Electricity Company) too, we cannot prepare it from one system. We need to extract different reports from billing system and accounting system and then compare and merge with tools like spread sheets. Some of information, which is necessary for managers to make decision, cannot be extracted from one system as in our example. A Management Report System (MRS) like MRSFEC can solve this problem, which will be described further. This concept is shown in Figure 2.2 below.



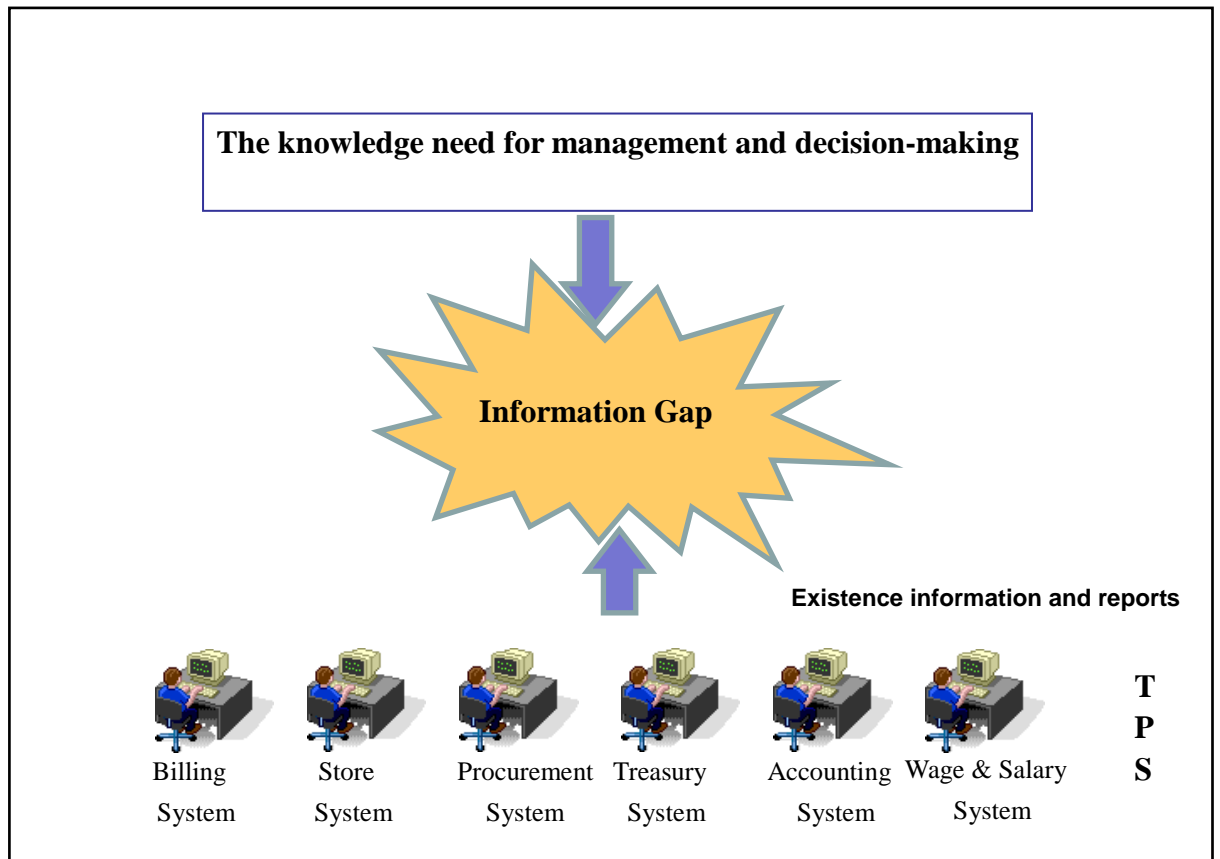


Figure 2.2: Information gap in companies

Other problems in electricity companies, which prove the need for a MRS system, include:

- I. Non-clear defined information items- There are pollution of information. Some of the reports have been generated based on ad hoc requests and unfortunately, programmers and power users generate these reports without writing and producing good documents. This causes repeated and unnecessary items in most of Iranian electricity companies' information flow.
- II. Involvement of personnel in sending information- People's behavior affect their operations and works, for example, if an employee who is responsible to gather and

- send some information to statistical department is not satisfied with his job for some reasons like low compensation, he or she will not gather and send the information.
- III. Unable to coordinate between data and information resources- Multiple sources for one data makes it different. Sometimes, there is different information for the same item, reported by multiple departments and this causes difficulty to coordinate and arrange them manually or semi-manually.
  - IV. Unsuitable access to information by users and managers- There are many TPS and manual information with different access rules. Each system's administrator and user define his/her rules on system to access the information and this leads to complexity in availability of information.
  - V. Unable to send information on time-Right decisions are made based on information received right on time. If information is not prepared and sent on time by the personnel involved, maybe the managers cannot make the right decision, especially in electricity companies, which generate essential product (electric power).

### **2.2.3 Degree of Innovation**

The KAHNIR is using the efficient MRS process model based on Business Process Modeling and Management (BPM) concepts for electricity companies that is specialized in this field. This model is unique because no Iranian software company offers MRS system using BPM concepts and methods in its analyzing and developing softwares and as we told before this in section one we are using KPI in

our software that enables us to improve decision-making process in electricity companies which are located in Iran. We will discuss BPM more in section four.

Our model is a conceptual model and based on changing existing process in producing and using of information for experts and managers in electricity companies. Actually, it is a process model, which is ‘an abstract representation of a process. It presents a description of a process from some particular perspective’ (Sommerville, 2001). In analyzing phase, we try to change and improve current process based on Business Process Management concepts by modeling it and in this way, we use Key Performance Indicators in making good and suitable reports which are based on those indicators and criteria in our software (MRSFEC) in assisting managers in decision-making. Figure 2.3 shows this concept.

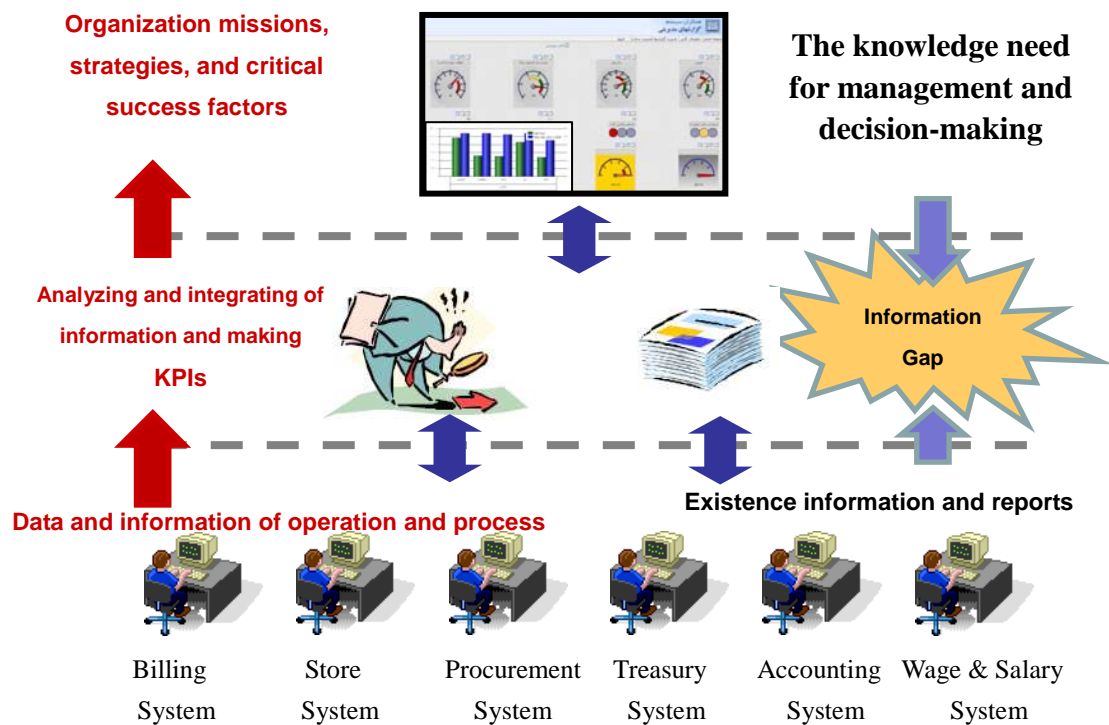


Figure 2.3: Facilitating monitoring and managing of organization by using KPIs

The only new application software, which is specialized for management report system in Iranian electricity companies was designed and developed by new technologies. We will describe our product and our methodology (eXtreme Programming) in Production, Services and Technology chapter (section four).

#### **2.2.4 Feasibility and Profitability**

Each electricity company is serving as an essential utility company and the core of controlling, monitoring, and managing of electrical grid in these companies are managers and usually, they allocate enough budget for this system if it would be useful for them.

We are the only company that is offering MRS system for electricity companies in Iran and if we want to compare ours with other companies in other countries, which offer MRS package, we will find that our cost for developing the software in Iran is the lowest. For example, average of salary per month in IT sector is between USD600 to USD800 in Iran (developercenter.ir, 2008) and for a programmer is about USD1,200, whereas this specialist can make about USD6000 in America (salary.com, 2008). Unfortunately, in recent years many experts in this field migrate to other countries. Of course, the key personnel in our company (KAHNIR) have family dependency in Iran and therefore they do not migrate to other countries. On the other hand, we plan to sell some shares of the company to key personnel such as researchers and developers.

As we know, the main cost of our software is wage and salary for the experts and this enables us to make more profit in comparison to other foreign companies. As our estimation for developing MRSFEC, we need 1,657 hours and if we assume each month's work hours are 160 hours; roughly, we reach USD10,356 for Iranians wage cost and USD62,137 for Americans.

Average salary in Iran=USD1,000

Average salary in America=USD6,000

Cost of developing MRSFEC in Iran based on wage is USD10,356  $[(1,000 \div 160) \times 1,657 = \text{USD}10,356]$

Cost of developing MRSFEC in America based on wage is USD62,137  $[(6,000 \div 160) \times 1,657 = \text{USD}62,137]$

We estimate hours of work based on interviews with experts and investigation on similar projects. Our estimation is shown in Table 2.2 and it is categorized according to XP methodology stages.

Table 2.2: Estimation hour of work based on XP methodology stages

	Stages	Who*	Time(Hour)
Works	Planning	1	40
		2	40
		4	15
	Sum		95
	Short releases , Simple design , Metaphor and Iterating to last release	1	40
		2	60
		3	1000
		4	20
		5	60
	Sum		1180
	Testing	1	10
		2	10
		3	100
		4	2
		5	15
	Sum		137
	Refactoring	1	10
		2	10
		3	30
		4	5
		5	15
Sum		70	
Integration and maintenance	3	100	
	4	5	
	5	50	
Sum		155	
Consultant		20	
Total			1,657

\* 1=Data Analyzer      2=System Analyzer      3=Web Programmer

4=Developer Manager 5=System Architecture

## **2.3 Growth Strategies**

### **2.3.1 Financial Strategies**

2.3.1.1 This project will be funded by Venture Capital Financing. However, we will try to find angel investors. There are affluent individuals in Iran who have a lot of money searching for investment opportunities, and willing to provide capital for a business. We know some of them in our city (Zanjan) and perhaps we can get them interested in investing in our software.

2.3.1.1 To expand the project value by forming partnerships with electricity companies (E.g. Iran-Zanjan Regional Electric Co, [www.zrec.co.ir](http://www.zrec.co.ir)) and universities and research centers (E.g. Iran- Zanjan University, [www.znu.ac.ir](http://www.znu.ac.ir) and Niroo Research Institute, [www.nri.ac.ir](http://www.nri.ac.ir)). With this partnership, we can participate in their projects in MRS systems. Some of the electricity companies like to develop their softwares by creating a team which includes their own and external experts. Sometimes, electric companies outsource the development of the softwares to universities and research centers and by partnership with these institutes, we can find new customers.

2.3.1.2 To sustain the profit income by obtaining an acknowledgment from Iran Power Generation, Transmission & Distribution Management Company, (Tavanir Holding Company). If a company is acknowledged by Tavanir, that its product or service is acceptable, and good, that company can be successful in finding new customers and obtain contracts with electricity companies to

provide support services because Tavanir is the holder of these companies.

We depict it further in figure 2.4.

2.3.1.3 Applying for loans from banks. There are low-interest loans for ICT fields in Iranian Banks as instructed by government for ICT development (Newspaper, 2008).

2.3.1.4 Applying for the electricity company research fund. Each electricity company has a research budget equal to 5% of its total budget and usually, developing softwares is considered a research in the applied project category which deserves an allocation of the budget.

## **2.3.2 Technology and Product Development Strategies**

2.3.2.1 The technology and product development will be done in 4 phases as below from developing a prototype version to enterprise version:

2.3.2.1.1 Phase 1: During the first step, KAHNIR will focus on developing its prototype for standard version during first six month for twelve regional electric companies where the standard version of MRSFEC is suitable for them. In this phase, we will try to gather our potential customers' opinions via demonstration of prototype based on user stories and our methodology (XP). In fact, this prototype is an outcome of the first iteration. In addition, in demonstration sessions, we will present our company and its goals to common regional electric companies.



- 2.3.2.1.2 Phase 2: Developing standard version for the regional electric companies based on their KPIs until end of first year. In this phase, we can offer MRSFEC to the regional electric companies. In fact, this version is the actual and complete version of the standard version of MRSFEC and is suitable for the common regional electric companies. We will have to build data warehouse based on actual data and information of the companies to run our software in real environment. It will be our first experience, and we predict that it would be the most difficult phase for KAHNIR.
- 2.3.2.1.3 Phase 3: Developing standard version for all Generation Management companies and those distribution companies, which have more than 500,000 and less than 1,000,000 subscribers based on their KPIs until second year. This version in modules are similar to the version that we will offer in phase two but the differences are in the analytical reports and dashboards which we will prepare based on KPIs. In fact, there are differences in the KPIs of these companies.
- 2.3.2.1.4 Phase 4: Developing express and enterprise versions for the rest of electricity companies in Iran until end of third year. The express version is prepared based on electricity distribution companies with less than 500,000 subscribers and other companies in related fields. Of course, there are some differences between the express version for distribution companies and other companies in related fields because

the KPIs are different. We will only determine KPIs for the other related field companies. The KPIs for distribution companies will be determined in phase 3. In addition, we will develop enterprise version for large regional electric companies and electricity distribution companies that have more than 1,000,000 subscribers. There is no need to determine KPIs for these companies in this phase because, they had been determined in previous phases.

2.3.2.2 Invest consistently in potential experts. In view of the our increasing customers, we will need new developers and programmers to upgrade MRSFEC and support for customers.

2.3.2.3 Develop smart partnership with electricity companies in Iran and computer companies which are affiliated with electricity companies. There are some affiliated computer companies in Iran which we can form partnership with but we should be aware that these companies have good relationship with electricity companies and if we offer our know how to these companies, it might cause us to be forced out of this market.

2.3.2.4 Develop the best software to meet the demands of market from time to time. We know the Iranian electricity companies because some of our employees have worked more than 10 years in these companies and we can understand the changes in their needs and their work processes and we can develop new version of MRSFEC as soon as possible and using agile methodologies will enable us to do this.

### 2.3.3 Marketing Strategies to Increase Market or Mind Share

We selected 7-Ps or Extended Marketing Mix of Booms and Bitner as our marketing strategy, which expands the number of controllable variables from four in the original marketing mix model to seven. “The traditional Marketing Mix model was primarily directed and useful for tangible products,” said Bernard H. Booms and Mary J. Bitner. The 7-Ps model is more useful for services industries and arguably also for knowledge-intensive environments (12manage.com, 2008). Traditional Marketing Mix model (also known as the 4Ps) includes Product, Price, Place and Promotion. The additional three Ps in Extended Marketing Mix of Booms and Bitner model include People, Process and Physical Evidence. Table 2.3 shows this 7-Ps as a schema.

Table 2.3: Extended Marketing Mix of Booms and Bitner

7-Ps Marketing Mix						
PRODUCT	PRICE	PLACE	PROMOTION	PEOPLE	PROCESS	PHYSICAL EVIDENCE

- I. Product: In fact, the software and services are intangible products and as described in section 2.2.1, we will offer the software (MRSFEC) and provide support services for electricity companies in Iran. Our product will focus on processes in reporting system in electricity companies and we predict that it will be the first

choice for these companies. Actually, our brand (MRSFEC) and KAHNIR's after sale services are intangible values. We will try to obtain copyright from High Council of Informatics (<http://www.shci.ir>) for MRSFEC to avoid our brand being used by other software companies.

II. Price: Our software and services are worth whatever the customers are prepared to pay for. The prices of our software and services should be competitive and we can do this because our company is a small business with nine people in the first year and the cost of our software and services are lower than those of the larger companies. For example, the overhead costs in large software companies are high and the expert's wage rate in Iran is lower than other companies which are located in foreign countries and are also offering this kind of softwares. KAHNIR also will offer discounts for repeating sales and will give commissions to the software companies that are affiliated to electricity companies. We will provide a one-month trial standard version for free to potential customers to help them decide whether to buy the product or contact us. In addition, we will offer a guarantee for one year and a three-year warranty to our customers.

III. Place: We will market the software through electricity companies in Iran, which need to this software except one. However, it has to change its software as soon as possible because the company has many problems with its old system. For doing this, we have to travel to different provinces in Iran to demonstrate MRSFEC to electricity companies. In addition, we use e-sale via our web site to sell MRSFEC by Internet for more availability. Of course, we will use traditional marketing

channels like retailers, distributors and so on.

IV. Promotion: We believe that promotion is the way that we can communicate with our customers and potential customers and it is not a one-way communication. We can describe the benefits of our services via traditional promotion media like brochures, catalogues and new ones like websites and e-mails. MRSFEC will be offered to our partners where the commission rate will be 10% in the first year and 15% from second year onwards. Gifts will also be given to key users in electricity companies who are responsible in using and buying from KAHNIR or signing up a contract with KAHNIR. For better promotion and advertisement, it will be advertised in the search engine, keyword ads, and affiliated network of electricity companies.

V. People: We know that continuous sales and services rest in our people's hands and thus it is essential to ensure that all employees who are in contact with customers are not only properly trained, but also have personalities that are suitable for this job. During recruitment process, we will be careful in selecting our staff and will perform a psychological test to select the right personnel. Of course, we will evaluate their work skills. After that, we will send our staff to public relation and marketing courses.

VI. Process: The process of giving a support service is very important and we will try to decrease the support service waiting time by providing an online service. Of course, sometimes going to the customers' sites is good for customer satisfaction. However, the operating processes in customers' sites (electricity companies) for

gathering, categorizing and analyzing of data should be observed carefully and sometimes it needs to change to some methods like Business Process Reengineering. Actually, by using BPR, we can simplify our workflows and decrease time and cost needed to accomplish the processes like support services.

- VII. Physical evidence: A software and service are intangible products. However, we can offer the trial version of our software for evaluation by our potential customers and we will show our customers proofs of our commitment and obligation in offering the software and support services like our personnel resume and acknowledgements from other electric companies or research centers.

All ingredients in the Extended Marketing Mix are important and we should not observe them separately in spite of the fact that each of them is a key to success.

## **2.4 Target Markets**

We target on electricity companies in Iran and from our study and surveys extracted from discussion at the symposium of Information and Statistical managers of electricity companies on 15 Jan. 2009 (Tavanir, 2009) and visiting the websites of these companies, we have found that all of them need to use this system. However, we divide our market into four categories based on types of electricity companies: first; 16 regional electricity companies, which are responsible for the voltages of 63, 132, 230 and 400 KV. Second; 39 distribution electricity companies, which are responsible for voltages of 20 KV and less. Third; 33 Generation Management companies that are responsible for generating electricity power and fourth; 7 other