Developing an Intranet System for a Small to Medium Enterprise (SME): Case Study of MFZ Company

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Abstract: An Intranet system is, undoubtedly, a very important technology for improving communication, collaboration and inter-departmental information sharing for any company; it enables all the employees to share common information about their company’s operation, which is important to the success of its business. Therefore, it has become a priority for many companies around the world. Many companies have begun establishing and developing their own Intranet system in order to enhance the company’s productivity and performance to access the required information in time. In this paper, MFZC “Misurata Free Zone Company” was chosen as a case study to investigate and evaluate the development of the Intranet system, detecting problems and suggesting proper solutions to tackle the issue of the Intranet system.

Keywords: Information, MFZC, Intranet System

1. Introduction

Most of the companies today, with their aim being success in business, need to share a considerable amount of information, as well as inter-departmental communications, with their employees. In order to accomplish their jobs efficiently, employees will need to access this information in a fast and cost-effective way. The employees waste a lot of time and effort using the traditional method of communication and distributing information (system of paper-based back office) in order to achieve the required outcome. Consequently, there needs to be a major development in terms of using a system that will enable information sharing, communication improvement and collaboration between employees and departments throughout the company in a fast, efficient and cost-effective manner. Due to this issue, many companies around the world have developed their own information systems in order to break away from the tediousness of the traditional ways of distributing information throughout a company, making the process of obtaining information easier and faster. One of these new technologies is using an Intranet system.

As stated by Marja Rajalampi [1], the Intranet system plays an important role in the organization, in enhancing communication, collaboration and knowledge sharing.

2. Overview of the Intranet System

An Intranet system is a private internal network that is only available to the company’s employees. It provides:
- Faster access to information.
- Greatest information sharing.

As maintained by Macmillan [2] an Intranet system is an enterprise network that shared information resource for employees, within a private network connecting to different types of computers in various parts of the organization, using private TCP/IP Internet protocol and it used different techniques of Internet such as Web browsers and Web servers in dealing with information and complete work assignments within the organization.

The Intranet system replaced many of the manual file archiving and reducing the use of paper-based back office that stores enormous amounts of information. Now, that information can be disseminated on the Intranet system instead of being printed on paper, the employees can find the information much faster; the Intranet system has revolutionized the communication of information within company or enterprise.

3. Importance of the Intranet System

The importance of the intranet has been widely documented by researchers. It is not a surprise that intranet has become one of the main communication channels, information sharing within organisations and has been incorporated by both private and public sectors around the world. As stated by Ross. S. C, Bajwa D. S [3] Today, Intranet systems are more dynamic. Information can be
accessed from any computer at any time; Intranet systems also provide access to legacy systems and data warehouses to query online. The content of Intranet system can be changed dynamically with inputs and pages can collect data from users and record into a database. Intranet system is now seen as platforms of organizational knowledge management, it is an effective tool to reduce the waste of time, effort and materials within an organization at the same time generating new opportunities for collaboration and productivity.

4. Current State of MFZC

The Intranet system was focused on providing static information which enables the employee to access corporate policies and procedures, company regulations, publication of company news, whose access was mostly available through internal computer networks located within the company, all the information was static information and the benefits were limited to the individual employees who work in the core. Furthermore, the employees have different experience with IT. The company still utilizes a semi paper-based back office system. In addition, the company lacks a reliable networking system whether it is wired or wireless, which is spanning in various units of the company.

The existing computer applications are very few and they are operated independently. Furthermore, the web–based application is very basic consisting of a couple of static pages with no means of any interaction between the system and end-users. As a result, the following problems are raised and recognized as the failure of the current system:

- Information is difficult to reach: This causes problems throughout the company, especially with units and branches that are located away from the core.
- The information may also run out of date before it reaches the employees who need it.
- As a result, corporated hours are lost just confirming and verifying the validity of information.
- The employees, who work at units and branches which are located away from the core, finds it difficult to reach desired information such as employment, salary, resolutions, regulations, application forms, such as, vacation application form, daily news and announcements surrounding their company.

5. Methodology

MFZ is a large company consists of 15 divisions and employs more than 1700 employees. A questionnaire is an obvious way to discover the points of view of the employees. The questionnaire approach was used to obtain required information about the current intranet system in MFZC. The questionnaire includes some questions about the accessibility and availability of information, and employee's requirements. The majority of questions were restricted by Yes/No choices. The questions are carefully prepared to cover all the points that can cause difficulties in current system. The subjects of the questionnaire were thirty-four employees and seven departmental managers at Misurata Free Zone. They were chosen from different divisions in MFZ.

5.1. Data Gathering

Evaluating and understanding the nature and mechanism of the existing system is very important in order to provide a good solution. A questionnaire was created and handed out to a random set of staff who deal with the existing intranet system to obtain their views, feedback, and opinions for improvement of the current system to meet their requirements. The questionnaire was classified into several groups, varies from basic information to a very technical ones. Fifty employees were targeted in this study and their responses are clarified as shown in section 4.2

5.2. Data Analysis and Interpretation

The collected data was interpreted and analyzed for sake (purpose) of proposing a suitable solution. Fig. 1. shows the satisfaction of MFZC staff with the existing Intranet system.

Fig. 1. Satisfaction of MFZC staff about the existing Intranet system.

As can be seen in Figure 1, the majority of asked employees expressed their dissatisfaction about the existing Intranet system.

Fig. 2. shows the Intranet system integrated with the rest of other computer applications in the company.

Fig. 2. Integration with the rest of the other computer applications.

The majority of asked employees expressed that the Intranet system did not integrate with the rest of the other computer applications. As in Figure 2.

Fig. 3. shows the existing information on the Intranet system updated periodically.
The majority of asked employees expressed that information on Intranet system are not updated periodically. As in Figure 3.

Based on gathered data, Figure 4 illustrates that all data exchanged among departments is not on the Intranet system.

Figure 4 shows that, all data exchanged among departments is on the Intranet system.

Figure 5 shows that Intranet system support system for decision-making inside the company.

According to surveyed employees of MFZC, all persons strongly believe that the system lacks all the functions and capabilities that are required. Moreover, the desired information such as employment and salary information did not reach on the intranet system, as shown in Figure 6.

6. Possible Solutions

MZFC is a very large company that employs hundreds of employees who have different experiences with IT. Its offices are spread over different sites. As a result, the volume of needed, shared and processed data is a very massive.

The availability of right information at right time is a very crucial factor for a good decision making. Based on gathered data, MZFC lacks good communication infrastructure and information systems.

To tackle this problem, following solution is suggested. The optimal solution for such company is adopting an integrated system which requires establishing a reliable networking system whether it is wired or wireless.

The functional requirements of the proposed solution will be implemented as follows:

First, the proposed solution will be the active Intranet system that will provide many different applications that can be utilized by company's employees.

These applications include the centralised service, web publishing of corporate documents, web forms, and web-to-database links that allow employees to access information, and also work documents, newsletters, information and classifieds, organizational policy, procedure manuals and communication as well as many applications can be also implemented based on development of Misurata Free Zone's system, such as: follow-up procedure of monitoring the shipped containers till the end point (customer). The customer procedure also can be completely managed by the Intranet system.

Second, integrating the proposed Intranet system with the existing legacy organizational computer-based information system such as salary, employment, stocks and inventory system that could be accessed via the Intranet system. They can be integrated into a single interface.

Third, providing the company with a central database system to store and manage information. All employees' needs were stored in database and special directories. A database system will be part of the integrated system.

Fourth, concentrating on developing of the human resources, therefore, company management is required to invest in training the employees, bringing its employees up to date to use the Intranet system effectively.

It is important for managers to recognize that successful
Intranet systems relies on successful management more than anything else.

7. Conclusion

The present study has focused on the evaluation and development of the Intranet system in MFZC by considering it is an important technology and an essential system for sharing information. A massive investment in developing intranet system is very crucial and urgent for MFZC and most of Libyan companies in order to improve their performance, productivity and survival in business. The investment should include the physical communication infrastructure as well as integrating all computer applications with the Intranet system. The Intranet system built is used by many employees who have different experience with IT; the Intranet system may fail in the long run if the employees continue to lack the required IT experience to utilise the Intranet system. Therefore, Concentrating on developing of the human resources is the de-facto factor for MFZC to be competitive and to grow rapidly in business

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