



## A Survey on Corporate Intranet for Attractive Communication and Data Sharing in ME

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### Abstract –

*Now a day's primitive functioning of intranet services are captured by the Corporations due to frequent needs of business firms. And one which is chartered by a state and given many legal rights as an entity separate from its owners. This study was undertaken with the purpose of measuring role of the intranet in efficient communication and data sharing in Medium Enterprises (ME). The qualitative approach that was adopted produced grounded clarification through case study description. Defining effectiveness as composite constructs of intranet distinctiveness, intranet usage and individual performance, the study employed a cross-sectional survey method. A total of 10 ME participated in the study. Examination of the knowledge management implementation actor-network, in which the intranet played a part, reveals that an intranet initially intended to motivate knowledge sharing has multiple roles. Intranet provides an opportunity to bring new value, new rewards, manage information in new ways. Internal communications within a company are simplified substantially and make for more success in terms of growth, as productivity increases. It's basically an internal database which every employee can access, with different permissions for various staff. In order for a company to succeed, all players must understand its goals. The intranet characteristics namely, task fit, information quality and systems quality are found to be significantly related to intranet usage. The broad explanatory factor for these intranet dimensions is the nature of power relations within the corporate environment. The research develops the subject of information, communication technologies and knowledge sharing to the role of the intranet in such activity. Ideally, an enterprise Intranet will supply a database of contact details for all members of the enterprise, allowing instant communications to be sent between departments and employees regardless of physical proximity.*

**Index Terms-** Intranet; Knowledge Sharing; Collaboration; Communication; Mobile Integration

### 1. INTRODUCTION

An intranet is a computer network that uses Internet Protocol technology to securely share any part of an organization's information or network operating system within that organization. The term is used in contrast to internet, a network between organizations, and instead refers to a network within an organization [1].

Corporations are the most common form of business organization, and one which is chartered by a state and given many legal rights as an entity separate from its owners. The process of becoming a corporation called incorporation, gives the company separate legal standing from its owners and protects those owners from being personally liable in the event that the company is sued. The web was intended to be a collaborative environment where users could exchange ideas but has turned into a read-only environment. The same is true for corporate intranets. In this we examine whether the removal of this read-only limitation can facilitate knowledge sharing. By using a Web 2.0 feature like wiki, corporate blog, chat, internal emailing system, Mobile Integration in a corporate Intranet, we intervened in an organizational setting and studied the results of this provocation. We found that the intranet transformed from being a semi-static bulletin board to a dynamic exchange forum for internal information.

Organizations can benefit greatly by providing all of their employees access to a wide range of information, even if the information is only of regular use to a small portion of the workforce [2]. By using an enterprise Intranet as an information portal, employees can gain access to useful information of which they may have previously been unaware. Access to such information can increase productivity, improve decision making and reduce the need to reproduce information each time it is required [5]. It helps to large organizations, and especially in decentralized organizations such as multi-nationals, an Intranet can be extremely useful as a way of allowing departments and employees to collaborate effectively and communicate important business information

efficiently [3]. By enabling fast and efficient inter-office communication, an Intranet should assist in increasing efficiency and allow the knowledge held within an organization to be shared for the benefit of everyone within the organization [4].

## 1 DISCREPANCY AMONG INTERNET, INTRANET & EXTRANET

Most people know what the Internet is, and many use it both at home and at work. Internet is a network of networks. An intranet is a computer network that uses Internet Protocol technology to securely share any part of an organization's information or network operating system within that organization. An intranet is a private analog of the Internet, or as a private extension of the Internet confined to an organization [8], [4].

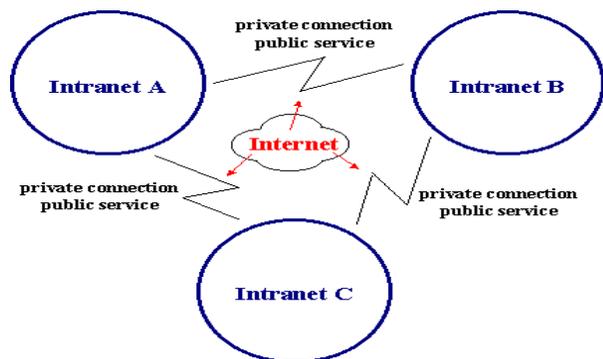


Figure 1: Extranets Architecture

There's one major distinction between an intranet and the Internet: The Internet is an open, public space, while an intranet is designed to be a private space. From within a company, an intranet server may respond much more quickly than a typical Web Application [8]. An extranet is a computer network that allows controlled access from the outside, for specific business or educational purposes. An extranet can be viewed as an extension of a company's intranet that is extended to users outside the company, usually partners, vendors and suppliers [8].

## 2. ADVANTAGES OF INTRANET

### 2.1 Employees productivity

Intranets can help users to locate and view information faster and use applications relevant to their roles and responsibilities. With the help of a web browser interface, users can access data held in any database the organization wants to make available, anytime and - subject to security provisions - from

anywhere within the company workstations, increasing employees' ability to perform their jobs faster, more accurately, and with confidence that they have the right information. It also helps to improve the services provided to the users.

### 2.2 Time

Intranets allow organizations to distribute information to employees on an as-needed basis; Employees may link to relevant information at their convenience, rather than being distracted indiscriminately by electronic mail [9].

### 2.3 Communication

Intranets can serve as powerful tools for communication within an organization, vertically and horizontally. By providing this information on the intranet, staff has the opportunity to keep up-to-date with the strategic focus of the organization. Some examples of communication would be chat, email, and or blogs [8].

### 2.4 Business operations and management

Intranets are also being used as a platform for developing and deploying applications to support business operations and decisions across the internetworked enterprise.

### 2.5 Cost-effective

Users can view information and data via web-browser rather than maintaining physical documents such as procedure manuals, internal phone list and requisition forms. This can potentially save the business money on printing, duplicating documents, and the environment as well as document maintenance overhead [6].

## 3. RELATED WORK

The main purpose of a related work is to describe and establish the theoretical framework on work that has been reported on a subject or field. "Security systems typically attempt to introduce barriers (such as passwords or other authentication mechanisms) while human-computer interaction (HCI) designers attempt to remove such barriers." The above quote is very meaning to the primary reason for conducting this review: security and usability in software development are two important factors that until now have been unable to cooperate in the same development process. Information systems security is a very important consideration during software application development process. It is just as important as the delivery of the functional requirement.



### 3.1. Problem Statement

The survey was conducted on ME. In the Existing system of communication the data transfer between the different individuals of the organization is conducting the works for the company is a cost effective and not a reliable architecture where even the security standards are very low. In the traditional 2-tier architecture there existed only the server and the client. In most cases the server was only a data base server that can only offer data. Therefore majority of the business logic i.e., validations etc. had to be placed on the clients system. This makes maintenance expensive. Such clients are called as 'fat clients'. This also means that every client has to be trained as to how to use the application. Before web was intended to be a collaborative environment where users could exchange ideas but has turned into a read-only environment. In this dissertation we examine whether the removal of this read-only limitation can facilitate knowledge sharing.

There was no other system or action plan exist in any company to share to knowledge or idea with other personal of company. Because employees also have their view about the companies policy or even they may have idea or views, those may help company to increase the growth, performance and productivity of company as well as of the employees. Even though, these companies are running their branch office in the same city or other city. But there is no concrete system for the communication with the branches or with the head office or with the production unit. No or less security measures were adopted by the organizations to maintain the confidentiality of the important documents.

The application's architecture should be driven from an agreed security policy for the web application or website. All inter- Functional design analysis and planning and the creation of system design specifications, including the security framework, will provide an understanding of the security issues and methods of negating or minimizing security risks. The web was intended to be a collaborative environment where users could exchange ideas but has turned into a read-only environment. The same is true for corporate intranets. It is highlighted as an important area for knowledge management, as well as a concern of knowledge management practitioners. Executing an intranet redesign project takes time effort and there will be many decisions made and actions taken during this time. It is important that all of these decisions, comments and suggestions be noted down as and when they take place.

The blog format is ideal for such note taking. Start a project blog and have the intranet team use it to

document the progress of the project. If An intranet strategy is a high-level plan to make the intranet useful and effective. It gives a direction to everyone working on the project and helps in getting resources and making decisions. Intranet is a secure and internal implementation of the Internet.

### 3.2. Website threat modeling

The context of a website will affect the types of threats identified. The term website can include intranets, extranets and public sites but there can be a huge overlap of these in the websites of enterprise organizations.

For websites and web applications (transactional website processes), the following are likely to be the major categories of vulnerabilities:

Input and output data validation

- Authentication
- Authorization
- Session management
- Configuration management
- Sensitive data
- Cryptography
- Exception handling
- Auditing and logging

Any website or web application which has any form of user interaction will include all of these potential categories.

## 4. OBJECTIVES

- The objectives of our work for ME are:
- To identify various problems and failures in corporate.
- The removal of this read-only limitation can facilitate knowledge sharing.
- To establish rules and measures to use against attacks over the Intranet.
- To use like wiki, corporate blog, chat, internal emailing system, Mobile Integration in a corporate intranet
- By using features we can easily developed application in favors of corporate for doing their smooth working among remote location
- To protect web portals from a high risk of intrusion or fraud.
- To develop different methods have been used to protect the transfer of data, including encryption.

## 5. PROPOSED SYSTEM

Naturally, the implementation of the intranet must be done in line with organizational needs,

processes, and objectives, as outlined in the section on implementation of knowledge management systems.

The benefits of the proposed system:

- The same document/information is shared by staff.
- Can be updated easily by any member of staff who has the permission(s) to do so, with checks such as version control in place.
- Online discussions may prevent the need to physically meet or can help before a meeting and planning.
- People should work smarter as they will find information quicker and more easily.
- Acts as an up-to-date information sharing area and, therefore, the information is timely available.
- Documents can be mapped so that any related documents can be linked or if staff read a particular document then it may be possible to push them towards other related documents or documents which may be of interest to them.
- Easy for staff to use as it uses familiar web technology.
- Relieve the need for numerous paper-based forms as they can be delivered, and submitted electronically.
- One access point to the organization's databases which allows a remote worker to access the knowledge available.
- Information and data will remain accurate and remain the same for all users accessing it.

The goal is to create a web application service where security is assured both by common safety techniques for transport and privacy and a trust-based approach for access control. Creating such a system is not an easy task because systems regulated by trust-based mechanisms tend to be unstable in long-term view.

### 5.1. Diagrammatical View of Proposed System

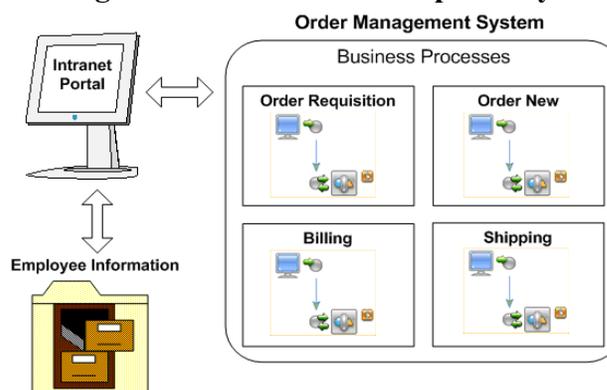


Figure 2 Diagrammatical view of proposed system

The diagrammatical view of proposed system shows the various features provided in the corporate intranet Administration control

## 6. REQUIREMENTS OF THE WORK

The data can be collected for either theoretical or practical, may be strategically conceptualized along with operational planning methods and change management. The requirement of this work is to build up security services for hack resilient application. Security is a path, not a destination. As we analyze our infrastructure and applications, we identify potential threats and understand that each threat presents a degree of risk. Security is about risk management and implementing effective countermeasures [8]. Web application security must be addressed across the tiers and at multiple layers. A weakness in any tier or layer makes our application vulnerable to attack. To make our application hack-resilient, we need a holistic and systematic approach to securing our network, host, and application [7]. In this we need to require work on security at three levels:

A weakness at any layer can be exploited by an attacker.

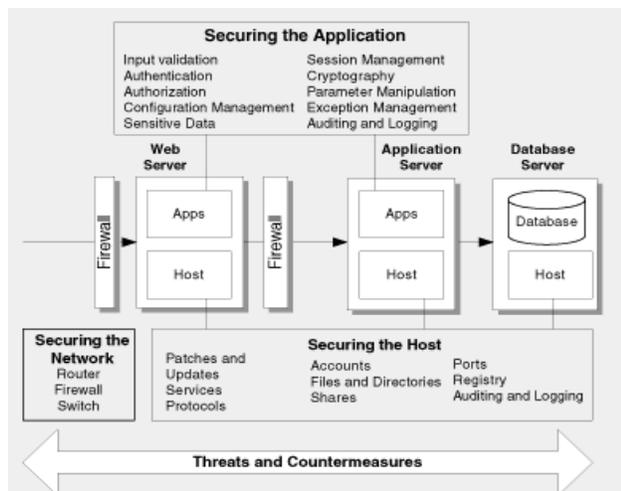


Figure 3: Securing network, host and application

- Network

Network security is to stop and watch unauthorized right of entry, mistreatment, alteration, or denial of all available network-accessible resources. When user want to log in through the unregistered PC, which was not listed in registered MAC address list, applications will generates 4 digit random numbers and send it to the users mobile, who want to log in.

- Host

Web servers are one of the majority targeted faces of an organization, as they hold sensitive and important data. If we have a secure web application and an insecure web server, or vice versa, it still puts our business at a huge risk. In case of remote access is needed, one must make sure that the remote connection is secured properly, by using tunneling and encryption protocols. Using security tokens and other single sign on equipment and software, is a very good security practice. Remote access should also be restricted to a specific number of IP's and to specific accounts only.

- Application-Application level security at present getting a huge deal of concentration. Badly protected applications may give easy access to confidential data and records. Access control/authentication ensures only authorized users are able to access the application.

- Authentication – All the pages of application can be accessed only by authenticated user. Means first user has to log in through Login.aspx web page. Implement logout functionality to allow a user to end a session that forces authentication if another session is started.

- Authorization – In this application secret pages are saved in Account sub directory. One

web.config is also saved in this folder. Restrict access to trusted code with the appropriate authorization. We use identity and role-based authorization to ensure that only the user or users with the appropriate level of authority are allowed access to sensitive data.

### Security Features considered

- Secured Login
- Exception Handling
- Role-based Security
- Non-reversible Password
- Strong Passwords
- Account Lockout
- One-Time Password

Following attacks may be

- Buffer overflows
- Cross-Site Scripting
- SQL Injection
- Network Eavesdropping
- Brute force attacks
- Dictionary attacks

## 7. CONCLUSION

In this paper by providing such a web application, we can drastically accelerate the sharing of knowledge. The web was intended to be a collaborative environment where users could exchange ideas but has turned into a read-only environment. The same is true for corporate intranets. Goal of this is to examine whether the removal of this read-only limitation can facilitate knowledge sharing. Intranet Application implements many features, which are useful for any organization or corporate for their betterment.

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