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INTRANET AND ITS SUPPORT TO ELECTRONIC BUSINESS

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I. **Introduction**

Intranet

The term *Intranet* refers to a corporate or private network of computers, that share part/parts of the organizations operations and information with employees. By using secure network connections and specific internet protocols. In certain situations, the term refers to only the most visible service, the organizations internal website. The same concept is used to build an intranet, using technology to run clients and servers on the same internet protocol suite. Common internet protocols as HTTP and FTP are commonly used. Often, there are attempts to use internet technologies to accommodate new interfaces to corporate "legacy" data and information systems.

Additionally, a I*ntranet* can be understood as a "private" version of the organizations own internet. Or seen as a version of the internet confined to an organization.

Electronic Business

The term E-business (electronic business), is derived from terms such as "e-mail" and "e-commerce". E-business is the conduct of business communication on the internet. Buying, selling and servicing customers while collaborating with business partners through the internet. The first company to use the term "E-business" was *IBM*, when launching a thematic campaign based on the term.

Companies use the world wide web to purchase parts and supplies, networking with other companies and collaborating on sales promotions. Sharing common knowledge and research, exploiting the availability and convenience of the reach of the internet. Internet giant *Amazon.com*, known for their book sales, is one example of a successful E-business.

Today, major corporations are rethinking E-business due to potential security risks and culture that has the capability to use it.

A new trend is taking place on the internet, a more direct selling or e-tailing method using computer-related equipment and software. *Dell Computer* being the first to report sales in the millions, using internet e-sales. Significant to the travel industry, bookings are now made directly

or indirectly as a result of the web. Boosting travel and transportation sales immensely, a travel agent is no longer needed at this point. Custom or unique goods are considered great business prospects for the future.

With security built into most of today's browsers, and digital certificates now available from *Verisign,* Individuals can become certified issuers. Putting most of the concern about conducting business on the internet, in the past. Accelerating e-business in all markets everywhere, throughout the world.

IBM considers the development of Intranets and Extranets to be a large part of e-business. E-business can include e-service, which is the provision of services and tasks over the internet, by the application service providers. Otherwise known as the term ASP. (1) (http://searchcio.techtarget.com/definition/e-business) Nelson, T. (n.d.). Retrieved from http://searchcio.techtarget.com/definition/e-business

Extranet

Private networks that use internet protocols are called Extranets. They work by using network connectivity, and public telecommunication systems to share parts of organizations information. Actions and operations are then conducted with suppliers/vendors, partners, customers and other businesses. An extranet can be viewed as a part of a company's intranet, that is extended to users outside the company (e.g. normally over the internet). It has also been described as a "state of mind" in which the internet is perceived. A way to do business with a pre-approved set of companies, business- to- business or B2B. In isolation from all other internet users. In contrast, business-to-consumer or B2C involves known server(s) of one or more companies. Communicating with previously unknown consumer users. (2) {Martinez, D. (n.d.). Retrieved from http://searchenterprisewan.techtarget.com/definition/extranet}

Furthermore, an extranet can be understood to be a private intranet mapped onto the internet or another transmission system not accessible to the public. Managed by more than one company's administrator(s). For example, military networks of different security levels may map onto a common military radio transmission systems, that never connect to the internet. Any private network mapped onto a public one, is a virtual private network or VPN. In contrast, an intranet is a VPN under the control of a single company's administrator(s).

II. **Body**

Advantages of Intranet

1.*Workforce productivity*: Intranets can help public. and view information faster, while using applications relevant to their roles and responsibilities. Web browser interfaces such as Internet Explorer, Firefox and Google Chrome. Users can access data held in any database within the organization. Subject to security provisions, users can access the available data anytime, from anywhere within the company/organization. Increasing the employees ability to perform jobs faster, more efficient and accurately. Confident with secure information, constantly improving services provided to users.

2.*Time*: Intranets allow organizations to make more information available to employees on a "pull" basis (i.e.. employees can link to relevant information at any time) rather than being deluged by large volumes of information. This comes in handy when spur of the moment meetings come up, needing the most current information available.

3.*Communication*: Intranets can serve as powerful tools for communication within an organization. From a communication standpoint, Intranets are useful to communicate tactical initiatives that have global reach. The type of information to be conveyed is the purpose, the goal, e driving force, the results to date and whom to speak to for more information. By communicating this information on the intranet, all staff can access the initiative and stay current with the progress and tactical focus of the organization.

1. *Web Publishing*: Corporate knowledge is easily maintained and reached, using hypermedia and Web technologies. Some examples include: employee manuals, benefit documents, company policies and common training policies. Most of these types of files can be reached using common applications as Acrobat files, Flash files, and CGI applications. Allowing each business unit to update/input data on the document therefore, the most current information is always accessible. Available to all employees sharing the intranet within the organization.
2. *Business Operations & Management:* Intranets are also used as platforms for developing and deploying applications to support business operations and decisions throughout the enterprise.
3. *Cost*-Effective: Users can view information and data via web-browser rather than maintaining physical documents such as procedure manuals, internal phone lists and requisition forms.
4. *Promote Common Corporate Culture:* Every user is viewing the same information within the intranet.
5. *Enhance Collaboration:* With information easily accessible by all authorized users, teamwork is enabled.
6. *Cross*-Platform Capability: Standards-compliant web-browsers are available for Windows, Mac and *NIX. (3) (n.d.). Retrieved from http://www.intoweb.com/articles/article1.php
7. *Promote Common Corporate Culture:* Every user is viewing the same information within the intranet.

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9. *Cross*-Platform Capability: Standards-compliant web-browsers are available for Windows, Mac and *NIX. (3) (n.d.). Retrieved from http://www.intoweb.com/articles/article1.php

III. **Disadvantages of Intranet:**

1. Inappropriate or incorrect information can be posted on an intranet, reducing credibility and effectiveness.
2. In a developed and highly interactive intranet there is freedom to post abusive and possibly illegal materials. There are protocols put into place to ensure this freedom is not taken advantage of for corporate gain. Having these controls in place, meet the organizations legal and moral responsibilities.
3. The need for expertise in the field to administer and develop intranet information within the organization
4. Security of the intranet can become an issue. Some users may post sensitive information which appears to another user. Furthermore, in an industry with high turnover the potential to acquire sensitive information for future gain at a competing company.
5. With multiple users, information overload can occur, if not controlled well

IV**. Planning And Creating A Intranet**

Organizations spend a considerable number of resources, planning and building the intranet system. It is strategically important to the organizations success, some of the planning would include steps as:

- Choosing the organizations goal or what they hope to achieve from the intranet
- Delegating the persons or department in control of the technology and implementation
- Choosing a duration for the existing system to be phased out/replaced
- Methods of security for the organizations intranet system
- Discuss and implement any legalities or other constraints
- Choose the level of interactivity (e.g. wikis, on-line forms) desired
- Will new data entry/update of existing data be centrally controlled or delegated out

In addition, to the hardware and software decisions, participation issues and features are to be supported. Systems that must be put into place for legalities, and to protect the organization, from those that may want to cause harm. Organizations must educate employees, abiding by strict guidelines with consequences for violating the systems. These systems include:

- Content Management Systems
- Ethics Systems

- Harassment Clauses
- Confidentiality Clauses

The implementation includes these steps:

1. User involvement to identify user's information needs
2. Setting up web servers with current hardware and software
3. Setting up web server access using a TCP/IP network
4. Installing the user programs on all required computers
5. Creating a homepage to host the content
6. Testing and promoting the use of the intranet with user involvement

V. **The Cost**

(6) (n.d.). Retrieved from http://www.dciexpo.com/news/archives/intranet.htm

Many small businesses can benefit from Intranets however, there are costs to consider. "An intranet system set-up can run anywhere from a few thousand dollars to a few million". "These costs include Web developers and high-quality indexing software", according to Intuitive Systems.

For a modest start a server, server software; which most is available free on the internet, a browser; such as Netscape Navigator or Microsoft Explorer, and some expertise with HTML or Web authoring software. No one has to spend a lives fortune to get started, there are many sources of help to get started.

The benefits of having these accesses are tremendous in their own right, although you do not need to have it. A basic network infrastructure is needed, so that employee PCs can link to each other. Additionally, "if companies do not already have LAN and Wan, additional costs should be set aside to build this infrastructure", according to Intuitive Systems.

VI. **The Uses of Intranet in Electronic Business**

Messaging

While the technology is extraordinarily complex, most users do not bother with the details. In practice, you can simply concentrate on the process of communications. Which boil down to: messaging, file transfer, and on-line information retrieval.

Let's start with the most basic of them all-messaging. Many large organizations have their own electronic messaging or "e-mail" networks. Additionally, any computer user that may want messaging capabilities, can sign up with a public messaging network like MCI Mail or Google Mail and use ordinary telephone lines to accomplish the same thing.

Networked

Once your system is outfitted you are ready for communication, when a messaging network is available to you. Putting you in contact with people all over the world. You can prepare or compose your messages in advance, or enter them directly from the keyboard to the e-mail network. To send, your computer simply contacts the e-mail networks and forwards the message tagged to the intended recipient. The delivery will transfer when the recipient signs onto the network, they are advised there is a message waiting. Some networks will print and send your messages by local mail.

E-mail Messaging

E-mail messaging gives your business a competitive edge. It allows you to quickly, and accurately keep all your employees/customers current on offers, promotions, and opportunities. Taking only minutes to compose and send. You will never have to leave your name and number with a secretary again. The message is available to the recipient within a few seconds, after you send it. E-mail saves paper, and sending out a mass message as easy as sending one. In fact, several publishing companies are now e-mailing time-critical newsletters to several thousands of subscribers every week.

File Transfers

Messaging is just a special form of computerized file transfer. Except, file transfer is accomplished through one computer to another vs. more than one at a time. File transfer is the simple process of copying one file, from one computer, to another. The only difficulty with file transfer is that some do not transfer with the original text. These files are: word processing documents, electronic spreadsheets, and graphic images. Some contain characters that require da*ta transfer protocol*. There are many "data transfer protocols" in common use today. It does not matter which one is used, since the computers sending and receiving agree on the transfer.

The data transfer protocol adds a layer of encoding to the file transfer process, verifying each group of characters in the file is received correctly.

File transfers are the most efficient way to work-at-home offices and representatives, in touch with the home office. For example, if all offices fill out a standard spreadsheet, with daily or weekly sales, it can quickly transfer to a home office. Consolidating all company data, to provide one up-to-date spreadsheet for the company. File transfer also allows users to attach and add to documents, far more efficiently than a face to face meeting. Shifting databases allows analysts to make forecasts from the recent and completed data.

On-line Retrieval

On-line data retrieval is potentially the most profitable use of computer communications. There are several thousands of databases of information available, for any communicating computer to search and copy from. The information can range from detailed technical data, registered patents, to simple general business information. You can find government procurement invitations, daily stock quotes and investment analysis. Dun & Bradstreet's provide summaries on over 1,000,000 corporations.

You can also tap into daily newspapers, yellow pages, TRW credit data, and Harvard business review. The possibilities are endless, for on-line data retrieval in these times and ages. However, take a moment to imagine the endless possibilities if you could identify your competitions marketing tactics.

You can research and target your customers immediate and future needs, reach hundreds of potential new customers, and compare suppliers pricing trends. Just by landing one new customer, you can offset the costs of the new system hardware. Each step that is taken to up-grade your system, puts money back into your organization. You may not see a immediate change, gradually the system will pay for itself, with new customers and business. Constantly staying ahead of competitors with new marketing techniques, engaging customers/employees to be user friendly.

VII. Harnessing The Intranet As A Tool

A Decision Making Tool-The intranet links together all information within the organization. You can also look at pre-determined information. By using interactive forms or report writers, to prune and graft the information to analyze market and business trends. Then by sharing the information results with colleagues, clients, and partners you can modify your business decisions accordingly.

Learning Organization Tool-By pulling instant information/data, decision makers can quickly analyze processes, opportunities, and business goals much faster. When it comes to team building, training can be incorporated right into the system keeping your organizations records safe. Team building software will be up-dated from time to time, encouraging employees to keep in communication with fun programs and learning skill sets.

A Complete Communication Tool-Imagine integrating all corporate communications, department communications, and group or individual communications into one place. A table of contents, so to speak of daily, weekly communications within an organization. Qualified users as: executives, human resources, marketing & sales, finance and operations employees can share the data.

A Collaboration Tool- Intranet is easy to learn, easy to use and is a powerful tool for collaborating, project managing, and data collecting. A tool that empowers employees to put their best foot forward, proudly displaying quality products. Employees sharing sales tips, marketing messages,

customer service advice and frequently asked questions. Anyone who subscribes can access them.

A Experts Tool- Who knows their job the best in any organization? The individuals themselves, that perform them. Considered to be experts, sharing expertise and responsible for sharing it with others; so it can be understood. Linking with other experts in the field, adding depth and useful information into the workflow.

A Single Invention Tool-Employees are able to single out needed information, cutting and pasting the useful data into presentations, sales pitches, and marketing messages. To find one single piece of information, in a system as big as the world-wide web-is short of a miracle. Pinpointing the exact targeted words or key search, out of millions and millions of megabytes of information. Sending it back to your PC. Going from one single command to performing several tasks in seconds.

A 21st Century Telephone-The intranet is a tool, that has already become an utility in many companies, much like the telephone. By using it, you can collect data, transmit data and contact those within the organization. This is the digital era, no more opening up those paper yellow pages or dictionaries, just look on the internet. Instead of one single line, you millions of lines of information/data coming in. However, the telephone could only ever handle one conversation at a time.

Human Resource Tool-Intranet provides valuable data for all payroll and end of year tax reporting information. Book keeping never sounded so good. Each employee will have secure levels of information they can collect. Which also means any communication containing grips, harassment or work experiences will be accessible, as well. Start thinking about infrastructure policies, procedures, roles and responsibilities, before you personally communicate.

A Process Identification and Improvement Tool-Ever wondered how your sales cycle worked? Have you dreamed of a system that allows you to see where a transaction was within a sales cycle? Then you can make the appropriate moves or transactions needed. Tracking your sales and service records will provide you with valuable information, that can be used to improve your customer experience.

A Partnering Tool-It seems every company in the world has created at least one web page on the internet. Surely, if they have not yet they will be. The possibilities are endless for statistical data. You can find stats on: IDC, Dataquest, The Burton Group, Zona Research and lastly, the Forrester research Group. If you want a real taste of what the world is up to on the internet.

A Customer Tool-As well as partners, your customers have gone on-line as well. Describing their processes, services, products and even the competitions data can be found. Customers like to

give feedback, that is one way a organization can find out how they are doing. Providing tools for customers to give feedback, communicate with customer service, and engage in promotions is a valuable tool.

A ISO Tool-The intranet can satisfy most of your ISO 9000 requirements. First, you can provide all the information on-line in a single location. Secondly, you can identify processes and project contacts on-line. With everyone's access, the intranet becomes a singular source which enables many of the ISO requirements.

A Target Marketing Tool-Steve Finnegan, President of *The Huntington Group, Inc.* says " The elements of traditional business-to-business marketing and sales programs can be integrated within the web environment, to create target marketing, which attracts highly qualified customer/client prospects." "Which engages them in an ongoing product/service sales dialogued," The result is a more profitable, long-term customer/client relationship.

VIII. **Conclusion**

The Nielsen Norman Group, has just named *Ooredoo's "buzz" portal* has been named one of the world's top ten Intranets, in a new report by the leading research team. A global intranet that connects companies in Asia, the Middle East, and North Africa. Between the "buzz" portal honorees, were several successful companies and organizations including, the International Monetary Fund (IMF), Mayo Clinic and the ever famous National Geographic Society.

According to a press release on Jan. 12th, 2014, each organization was named to the list for their extraordinary efforts their Intranets provide their employees. As as the use of the social features to drive and encourage employees. Ooredoo's Intranet connects employees by the thousands, exploiting the sharing features and offering high-tech language support. Many top Intranet organizations deploy social features that engage the employees/users to participate in communication of some type.

Information technology is transforming the business world. The most successful companies are increasing the effectiveness of technology to manage data. With the information and data flowing throughout the organization.

Intranet is playing an important tool in business, tasks are completed more effectively and efficiently. Collaborations are quicker, reaching more targeted consumers or audiences. Making the intranet a long-term competitive advantage, becoming more popular in the future.

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