Difference between internet intranet and extranet examples



Together with the Internet, their innovative implementations were able to provide competitive advantage for a company. The Internet, Intranet and Extranet collectively have dramatically affected business. A growing number of corporations believe in the technology's potential to lower cost. Add value, improve productivity and create new business opportunities (The Economist Intelligence unit 2001). So much has been written about the Internet, Intranet and Extranet. What exactly are they?

Business value of internet intranet and extranet

What are their impacts on current business practices and activities? This report seeks to address these questions in the Trading Process Network. A business tool that Integrates the Internet, Intranet and Extranet technologies, First, he report introduces the Internet, Intranet and Extranet. Then, it goes on to provide a brief description of the Trading Process Network. Subsequently, the study proceeds to critically review the positive and negative Impacts of the Trading Process Network on current business practices and activities.

The Internet The Internet is a dynamic group of computer networks that interconnect computers around the globe (Comer 1997). It is a network of networks thus a powerful form of information and communication technology. Figure 2 illustrates the Internet setup. (source: GE Lighting, www. Slighting. Com) Figure 2: The Internet network Computers linking to the Internet communicate by using a common Internet protocol o disseminate information across computers (Cambial 1995). Users of the

Internet can communicate electronically, retrieve information and interact with other computers.

Therefore, Cambial (1995) said that the Internet is basically used for:

- Electronic mail and news services
- File transfer to and from remote computers
- World Wide Web
- Telnet the ability to use remote computers

The World Wide Web is the information space for storing and retrieving hypertext documents on the Internet through a unique addressing scheme (Escaper & Volley 2002). Often, the Internet is known as the World Wide Web or Information Superhighway because of its superior information reservoir.

Any information placed on public web servers can be viewed by anyone with Web access using a browser such as Netscape Navigator or Microsoft Internet Explorer (Bullock et al. 1997). The Intranet. The Intranet is an internal corporate communication networks riding on the transmission control protocol / internet protocol (TCP/IP) (Suspicious 1997). Figure 3: The Intranet network It is designed for staff use only and does not to allow outsiders access. The intranet hooks into corporate databases giving the individual users access to all this data Competed n. . In Knowledgeable 2002). Although the Intranet still allows company employees access to the Internet, outsiders are prevented from entering the internal corporate sites by security features (see Figure 3). The Extranet. An extranet is an extension of the Intranet that is partially accessible to authorized distributors, suppliers, customers and business partners (Long and Long 2005). Simply,

an extranet is set up on the same TCP/IP network as the Intranet which allows outsiders access to that same internal corporate information (Bullock et al. 997). Refer to Figure 4. Figure 4: The Extranet network Like a "private" business club, the extranet centralists business transaction by using the same user-friendly technology that has made the Internet a global network. Its "members" can include companies of all sizes located in virtually every corner of the world (GE Information Services 1999). The Hierarchy. The Internet is the conceptual incubator of both intranets and extranets, and universal connectivity has liberated corporate communications practices (Franklin Jar. 1997).

Though they are all Internet and Web based technologies, there are differences between them such as:

- The type of information each are designed to disseminate
- The targeted group of people allow to access the information

Security Table 1 below compares some of the common differences: Information Type Targeted Group Security Internet general general public lacking Intranet corporate employee moderate Table 1 : Common differences between Internet and Web based technologies Wailing (1998, p. 1) appropriately summed up the differences with this statement: First there was the Internet, which is available for everyone to use.

Then businesses got smart and started developing their own intranets that used the same friendly Web interface but put up firewalls so that only employees could see the information on the site. Finally, the extranet was created. It finds itself somewhere in between. There's still a firewall, but you

allow only selected outsiders, such as business partners and customers, inside. Following the differences, the structural hierarchy can actually be illustrated as shown in Figure 5 below: (source: Bullock et al. 997) Figure 5: The Internet hierarchy The Internet, the World Wide Web and Internet-based technologies such as intranets and extranets provide global links to a business's customers and suppliers. This allows electronic commerce (ecommerce) applications (Escaper & Volley 2002). Phil Gibson, director of interactive marketing at National Semiconductor, is blunt about the importance of the Internet, Intranet and Extranet to the applications when he said, "Without all the nets, you Just can't do that." (Franklin Jar. 1997).

THE TRADING PROCESS NETWORK.

The Trading Process Network (TAP) is a technology that integrates the Internet, Intranet and Extranet into a package to revolutionist the way business is done. It is pioneered by General Electric (GE), a well diversified company with business in genealogy (aircraft engine, plastics, power generators and consumer electronics) and services (financial services, television broadcasting and medical and science services) (General Electric 2004). (source: General Electric, wry. GE. Com) Gee's leadership in management has long been recognized and progressive.

Many of its successful business portfolio management, strategic planning, quality initiatives, employee empowerment and business process reengineering are business models for companies worldwide (1997). Internet. He told the MR. Today magazine (Arnold 2001, p. 1) that: It's like any big change. You can look at it in one of two ways: as an opportunity or

as something to fear. You have to have a certain amount of fear to see the opportunities. The Internet is all about getting information from its source to the user without intermediaries.

The new measurement is how fast information gets from its origin to users and how much unproductive data gathering, expediting, tracking orders and the like can be eliminated. Seeing reality today means accepting the fact that e-business is here. It's not coming. It's not the thing of the future. It's here. The challenge is to resolve issues in the context of the new Internet reality. Tentativeness in action can mean being cut out of markets, perhaps not by traditional competitors but by companies never heard of 24 months ago.

Gee's challenge is to leverage the Internet technology as a strategic weapon at a corporate level to change its business practices and activities. It started developing the TAP in 1995 as Just an internal GE Intranet using an Oracles. 2 database server with a Netscape Communications commerce server and custom software developed by GE. One year later, it developed to include the Extranet. Full integration with the Internet occurred in 1998 when GE, Thomas Publishing Company and Oracle together created a data registry accessible via the web to search out suppliers of such goods or services.

The database lists over 60, 000 products from about 6, 000 vendors and it took six IT people three months to create (1997; 1998; Lanthanum 1996; 1997; n. D.). Figure 6 shows a typical TAP concept. (source: Bullock et al 1997) Figure 6: A typical Trading Process Network model. Basically, the TAP allows GE to call for tenders and manages bids from suppliers around the

world via the web. Using the TAP Intranet software and other standard office applications, GE creates a set of tender documents with a response form.

GE then searched the TAP Internet database for suppliers and decides whom it would like to receive a quotation. The tender documentation is forwarded to the list of prospective suppliers through the TAP Extranet. Suppliers who are interested in bidding began to download the call for tender and passed back to the TAP upon completion. GE may then access and evaluate them anytime (n. D.). The TAP is so successful that many corporations wasted no time in emulating Gee's initiative by creating their own version of the TAP. Today, many corporations have implemented the TAP system in one form or another.

For example, Tests developed he Tests Information Exchange that linked the retailer with all its suppliers to Presently, GE is also commercially offering its TAP technology comprehensively to companies around the world (n. D.). Its global implementation has impacted business practices and activities which shall be discussed shortly.

4. POSITIVE IMPACT OF THE TAP ON BUSINESS.

Since the TAP is a collaboration of the three web-based technologies, it is essential to critically review the positive impact of the three technologies on current business practices and activities separately.

Many of the evidences presented here are taken room the impact on Gee's business practices and activities. This is because as the world most admired company (General Electric 2004), Gee's business practices and activities has

been acknowledged and adopted globally as role models. The TAP Internet Impact. As an Internet solution to conduct business electronically and simplify business processes like purchasing, selling and marketing, the TAP impacts business practices and activities in many ways (http://www. Among. Waistcoat. AC. NZ/depth/mans/courses/ 456/cases/gees. HTML> n. D.).

Some of these impacts are listed on the Computing Insights website (, n. D.): Instantaneous Communication. The Internet establishes immediate communication between companies and their prospects, customers, and employees without waiting and down time. It is a very fast and efficient method of communication, with messages arriving anywhere in the world in a matter of seconds (Chapel & Volley 2002). By taking advantage of this the TAP enables GE to evaluate suppliers' bids and award within the same day and orders may start arriving to the supplier within 24 hours (1997).

Speed in dispatching specialized information enhances service relationship thus providing superior service (Shamble 1995). Global Access. The worldwide reach of the Internet opens the door to unlimited business opportunities by instantly placing it in any office or any home. Business websites are doors to businesses that never close. Information about products and services are accessible anytime. The web is ideal for providing whole year round self-services (1998). GE Lighting's 46 plants around the world procure materials and parts from more than this list.

With only a set of catalogues and documents GE Lighting obtained multiple feedbacks instantaneously (1997). Furthermore, the TAP provides global access to Gary Reindeer, CIO of GE to monitor Gee's session operations once

every 15 minutes across the company's 13 different businesses around the globe with different time zones (Landlord 2002).

Instantaneous Customization The Internet keeps businesses in the fast lane by offering goods and services in real time thus providing individual company the ability to tailor to the needs of customers.

According to Bureau et al. (n. D.), Dell Computer implemented an online supply chain management application which is somewhat similar to the TAP to help its component suppliers increase the accuracy of their forecasts by providing them access to direct customer order information. This way Dell's suppliers can customized their products to Dell customers' needs. Franz (2000, p. 2) provided another example from GE Aircraft Engines: GE Aircraft Engines maintenance and overhaul market frequently requires decision on retention, rebuilding or discarding a worn part.

Previously, the worn part was sent to the customer to be evaluated or the repairs had to wait until a customer's representative could inspect it at GE, often taking many days. Today, a new customized part can be graphically transmitted over the TAP and quickly evaluated by the customer before installation. New Distribution Channels. The Internet can rapidly reduce the "time to market" for new products because direct distribution shortens the path to markets. Electronic commerce can be used to find the best deal from distributors in terms of time and cost (Chapel & Volley 2002).

The TAP is a secure electronic commerce environment that supports the business-to- business buying and selling of goods and services. It provides GE the ability to find new distributors based upon the database records (n. https://assignbuster.com/difference-between-internet-intranet-and-extranet-examples/

D.). Home Depot is one such distributor when it set up a TAP form of Internet application hat enables GE appliances purchased at Home Depot to be delivered directly to consumers' homes from the nearest GE warehouse (Bureau et al. N. D.). * E-Shopping that enables users to browse, review, select and purchase products instantly.

It is a revolutionary business tool, guaranteed to attract new, webknowledgeable customers who buy everything online (Chapel & Volley 2002). This is the Tap's primary solution where the TAP Marketplace provides purchasing professionals access to a searchable catalogue of GE goods and services including pricing and contract terms in a standardized format (Mark 2001). The TAP Intranet Impact. By allowing company staff exclusive access to corporate information electronically, the TAP Intranet positively impacts current business practices and activities. Some of these impacts are mentioned in the Apologia website (Apologia n. .): * Increase productivity. The Intranet has the ability to increase staff productivity. According to the Apologia website, many companies have invested in intranets to boost productivity and encourage knowledge sharing. "It's to have tools aimed at productivity, at letting employees do their Jobs better and ore efficiently," says Pam Hickman, e-business public relations manager and manager of GE (USA Today (Tech Report) 2001). Bill Snood, a sales manager at GE Energy Services in Canada said his TAP Intranet sales portal home page is the gateway to all the applications that he has.

Anthems (2003, p. 2) reported Snood as saying: Before I used to go from one application to another to search for things randomly and each required a separate sign-on and password. The new portal has made multitasking much https://assignbuster.com/difference-between-internet-intranet-and-extranet-examples/

more efficient and has increased face time with customers. In May 2001, IBM launched its TAP offshoot known as the Workload where its 52, 600 employees worldwide convened online to swap ideas on how to work faster without undermining quality (Fast Company 2001 in Apologia n. D.).*

Reduced paperwork.

When employees communicate through the Intranet they effectively reduce the amount of paperwork required such as internal memos, invoices and printed company newsletters. Forbes (2001 in Apologia n. D.) reported that GE processed 3. 1 million paper invoices in 2000. Today, half of those invoices are processed digitally. John Rice, the chief executive of GE Transportation system, confirmed this fact when go away (GE Transportation System 2000). More informed/empowered employees. There are many types of competitive or business intelligence information that can be included on an Intranet.

Users can easily navigate and locate this information using the point-and-click hyperlink technology (Lanthanum 1996) to be informed and empowered. General Electric uses the TAP to manage its business intelligence by keeping its globally dispersed workforce informed. In a survey by the Society for Human Resource Management, more than 85% said the intranet is useful for disseminating information (USA Today (Tech Report) 2001) Suspicious (1997, p.) found out that the information available in the TAP are: Annual report of the company, financial data and business information designed to allow employees to manage their own investments.

In addition, GE provides employees direct access to the GE travel centre which allows them to schedule their own business trips. * Savings in expenditure. Companies exploit the inexpensive Intranet web technology for in-house applications. Since the web applications use only a single browser, training is less. Moreover, implementation costs are considerably low due to a single interface, rotator and middleware architecture (Lanthanum 1996). In a 1997 survey, American Express discovered the magnitude of the savings (Fast Company 2001 in Apologia n. .): It was found that at a typical company where paper still predominated, the average cost of handling a single expense account was #36 or more. After switching to a similar TAP approach the cost reduced to as little as \$8 per account. * Connects users across disparate platforms. The TAP Intranet is a new dynamic client/server application development platform for corporate applications that uses open standards such as TCP/IP, HTTP, HTML, CGI, ODBC and Java to connect heterogeneous database (Lanthanum 1996).

Venin Raw, an IT leader in GE Power Systems, said that the TAP sales portal software has an open architecture and is flexible, making it especially easy to connect all the different platforms (Anthems 2003). Year, 10 million visitors a week used it: By connecting all its disparate platforms through the TAP, GE employees can now create personalized pages, read industry-specific news or check the weather. They also can download tax forms and review benefits information. An online marketplace offers discounts on GE appliances, Dell computers and other products. The TAP Extranet Impact.

The Extranet technology is evolving rapidly to facilitate the many complex processes such as document sharing capabilities between companies. The https://assignbuster.com/difference-between-internet-intranet-and-extranet-examples/

future is in collaborative Extranets (GE Information Services 1999) resulting, as Bullock et al. (1997) investigated, the following positive impacts on current business practices and activities:

Share data and planning information interactively with suppliers. The TAP Extranet cuts down redundant ordering processes and share with suppliers the latest parts and design changes. This allows quicker response times to suppliers' problems and questions.