Designing Work Organization
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Lecture-37
The Strategic value of Information Technology

On the strategic value of information technology, we will be talking about the what is the strategic value What are the different approaches are there and along with this is that is strengthening the employees coordination and efficiency, what are these intranets and the knowledge management practices are there in the organizations. How we can go for the social networking and enterprise response planning, which is a buzz word nowadays and strategic approach: the strengthening the coordination with the external partners, then the integrated enterprises and the customer relationships are there. As usual, we will be discussing the case study, research papers, book recommendations and references are there. So, the technology you use impress no one the experience you create with it is everything. So, therefore, it is a mechanism or a tool is there the technology is a tool and the man behind the technology he gets that experience and that makes the difference. So, strategic approach is strengthening employee coordination and efficiency following the use of information systems for managerial decision-making and control.

 So, IT has evolved further as a strategic tool for both increasing the internal coordination and the efficiency and enhancing the coordination with the customers and the external partners. The primary IT applications for these increasing and internal coordination and efficiency are the intranet knowledge management, social networking and ERP is there. So, we will start with the networking. So, which links the people and departments within a particular building or across a corporate office.

 So, enabling them to share information and cooperate on projects and important strategic tool for many companies. For example, the network electronic medical records system links employees of these hospitals of the partners, healthcare system, the largest hospital network in New England with the office of the more than 4000 physicians with admitting privileges are there. Our prevalent form of corporate networking is an intranet a private company-wide information system that uses the communications protocol and the standards of the internet but is accessible only to people within the company is there. In the intranet in addition having these systems as part of this intranet means new features and applications can easily be added and the access through a standard browser. Intranets can improve internal communications and unlock hidden information.

 They enable employees to keep in touch with what is going on around the organization

quickly and easily find information they need. They share the ideas and the work or the projects collaboratively what has been done by the different partners. To view these files and information, users simply navigate the site with a standard web browser and clicking links. Today most companies with the intranets have moved their management information system and executive information systems over to the internet. So, they are accessible to anyone who needs them.

Now, how are the internet used? Organizations use internets in a variety of ways depending on their needs. These include the central repository. Internets becomes the main repository where the important information and the company data are stored. The collaborations are these internal networks provide a way to share information that makes it easier for employees to work together. Personalization intranets provide the personalized content to employees based on their role within the company.

Now, communication they make the employees directories, company news and organization charts readily available improving the internal corporate communication. Easy access to information is the intranets provide a very easy access to information about company policies, benefits and the updates are there. Social elements, social media features let employees create an account post content and status alerts and the browser news field. So, project management to do lists employee directions, status updates and the other resources and users in the project management. Automation, so intranet streamline everyday activity by helping to automate the repeatable tasks are there.

So, what are the advantages of the intranet? So, improved communication, information sharing and collaborations within a business, simplified records management, streamlined tracking of the request is there, a testing environment for the new ideas before they are implemented on a company's web page. Improved corporate culture that focuses on employees and encourages the participation and the interaction and a favorable return on investment from the low implementation and the operating costs are there. So, what are the disadvantages of an intranet? Low user participation rates can result in a lack of the content, communication and the documents needed to make the intranet beneficial. The high cost of the personal leads to the inadequate support for intranet users. As a result, when software bugs or the other issues arise problems are not resolving quickly.

The network must be managed with regular inspections and maintenance checks to ensure it is the turning properly and the content is fresh and relevant. A lack of proper ownership or the ownership being disturbed among the groups complicates the network responsibilities and the management is there. A lack of the mobile device and the remote support creates a problem including the limiting the ability of the remote workers to

access the information on the intranet. So, what are the intranet based practices are there? So, intranets were developed around the same time as the internet and evolved alongside it. Some best practices for an internet strategy is a modern digital workplace including the   multichannel   approach   is   there.

A modern internet should incorporate other team collaboration tools inside the main internet application. It should centrally in disparate applications which may include collaboration and communication tools, tools for the virtual conferences and the line of the business applications. The second is that is the optimize for the remote work. Many other intranet platforms were not optimized for the mobile remote workers. Internet application should be easy to access without the use of the corporate desktop or the laptop   PC.

It should let remote workers access resources without having to be the online constantly. Modern user experience to ensure user participants intranet platforms should be engaging. They often resemble the consumer applications that put a focus on ease of use and the user experience. A smart homepage that users can customize is a plus. Regularly posting the fresh content and boost the user engagement and it becomes a regular engagement   and   fosters   a   sense   of   community.

Intranets can be used to create smaller groups within a company based on the employee interest. So, these are certain examples of the internet are there, Axero, Facebook workplace, Happeo, HCL connections, HyperOffice Atlas, Jostle, Microsoft SharePoint, and Microsoft Yammer. Similarly, the passageways Onsemble, samepage, simpplr, staffbase, workvivo and the Zoho Connect is there. Now, we will talk about the second dimension and that is about the knowledge management. Knowledge management refers to the efforts to systematically find the organize and make available to companys' intellectual capital and to foster a culture of continuous learning and knowledge sharing.

The company's intellectual capital is some of the knowledge, experience, understanding, relationships, processes, innovations and the discoveries. Companies need ways to transfer both codified knowledge and tacit knowledge across the organization. Tacit knowledge on the other hand they often find difficult to put into words tacit knowledge is based on personal experience, the rule of terms, intuitions, and judgment. This type of knowledge is typically acquired through experience and it is an intuitive understood. As a result, it is challenging to articulate and codify making it difficult to transfer the this information   to   the   other   individuals.

Examples of the tacit knowledge can include language, facial recognition or leadership skills are there. It includes the professional know-how and expertise, individuals insight,

and experience and creative solutions that are difficult to communicate and pass on to others. As much as 80 percent of an organization's valuable knowledge may be fact tacit knowledge and is not easily captured and transferred because the tacit knowledge which has been developed by the employees that depend on the individual and it is actually that it is the intangible the capacity is there. So therefore, in that case, it is very becoming very difficult to capture the tacit knowledge. Explicit knowledge is already there on the basis of this documentation is there and that has been the express and different symbols are   there.

So, therefore, in that organization because this is also related to the employees, the retaining the employees at the workplace is there because the employees turnover will increase and as the employees leave the organization, this tacit knowledge goes with him. So this particular these knowledge base which is when the tacit knowledge which has to be captured by the organization and the store into the repository so that even the employee leaves later on this knowledge can be used by the rest of the employees. While some literature equivocates the implicit knowledge to tacit knowledge, some economics break out the type separately, expressing that the definition of tacit knowledge is more nuanced. While tacit knowledge is difficult to codify, implicit knowledge does not necessarily have this problem and instead the implicit or the explicit information have yet to be documented. It tends to the exist within processes and it can be   referred   to   as   a   know   how   knowledge   is   there.

Out of the two approaches to the knowledge management, the first approach deals with the primary with the collection and the sharing of the codified knowledge largely through the use of the sophisticated IT systems. Codified knowledge may include intellectual properties such as the partners and the licenses, work processes such as the policies and procedures, specific information on customers, market, suppliers or the competitors. This competitive intelligence reports benchmark data and so forth is there. So codified knowledge is formal systematic knowledge that can be articulated, written down and passed on to the others in documents, rules or general instructions. Explicit knowledge is captured within the various document types such as manual reports and guides allowing organizations   to   easily   share   knowledge   across   teams.

This type of knowledge perhaps the most well-known and examples of it include the knowledge assets such as databases with the white papers and the case studies are there. So, therefore, whenever the employee is working in an organization and when he expresses explicitly his knowledge he converted into this particular database and the database is placed into the repositories are there. This form of the knowledge is important to retain intellectual capital within an organization as well as the facilitate successful knowledge transfer to the new employees are concerned. Whenever we are

talking about intellectual capital, so intellectual capital basically is giving you the human capital, customer capital and organizational capital. Here when we talk about human capital, human capital gives you knowledge and skills.

So, here is this particular human capital that will be giving you this particular knowledge and skills of the employees and this knowledge and skills the employees will decide that for example, if we take the two organizations suppose TCS and Infosys. Now both the organizations are measuring their human capital and that is the measurement style of the organizations are the what is the knowledge level that is the employees are having and similarly that is about the skills are there that is how many of them are scaled, semi-scaled, or unskilled, and if they are scaled what is the level of their skills. So, therefore, in that case when we talk about these aspects of human capital, then this is becoming the important customer capital is about customer innovations, customer capacities, and customer reputations. So, this will be related to the custom capital. Organizational capital is related to the this particular here organizational capital will give you this particular aspect of this the infrastructure.

So, in the organization what type of the assets are there and that will be create the organizational capital is there. For any organization it is very very important that within what type of this the intellectual capital is the organization is having and whenever allowing this knowledge across the team the sharing of this knowledge and perhaps the most well known example. So, here it will be about is how you are making the transfer of this knowledge. Now this knowledge and skills of these employees which is the intellectual capital is there. Now you want to convert this intellectual capital in into the assets of the organization and here to correct this it is necessary that is the you are making this capital in intellectual capital by developing providing the training programs, providing the next level of knowledge and the skills are there and then when you are developing this type of the new knowledge and skills then definitely you are creating these human capital is there.

Now, this the second approach focus on leveraging the individual expertise and know how that is a tacit knowledge by connecting the people face to face or through the interactive media is there. Here it is very important that is the now for the an organization it is not the only the performance in employees doing it is the potential and that potential is creating this particular tacit knowledge. To create this tacit knowledge it is becoming important to connect the people that is the they are capturing each other's the tacit knowledge is there. So, tacit knowledge includes the professional know how that is the two people are there and they are having the problems. Now the one is very easily able to solve that particular problem and the other person finds difficulty to solve that particular problem.

So therefore, this ability to solve the problem which is unprecedented which is new and then the one person is able to solve and other is not that is know how. So individuals insights in the creativity and the personal experiences and the intuitions are there. With this approach the managers concentrate on developing personal networks that link people together for the sharing of the tacit knowledge. The organization uses IT system primarily for facilitating conversation and person to person sharing of the experiences insight and the ideas are there. The knowledge management process effective knowledge system typically goes through three main steps are there knowledge creation, knowledge storage and knowledge distribution.

So this knowledge first we will go by the knowledge creation. So during this step organizations identify and document any existing of new knowledge they want to circulate across the company. So here as I mentioned that is this creation, creation of knowledge and this creation of knowledge will be important whenever we are talking about this particular aspect that is the how we are going to create this knowledge by capturing identifying and then identify the knowledge and then the documentation is there knowledge is there. So therefore, this tacit to explicit that is a document is there. So identifying and document tacit to the explicit is there and then this when you are converting this which is not has been tapped earlier.

So now you are tapping this particular knowledge this is an art which is a skills which the employee is having which has not been expressed at the workplace under documentations. But as soon as you convert into the documentation and this is becomes the big asset for the organization. So, submission is this that is the whenever you are talking about this particular knowledge creation please focus more and more on this particular knowledge that is the you are having. So when you are having this particular knowledge of this knowledge creation naturally you will be able to convert this particular knowledge and make your organization reach is there. So, these assets creation is the actually the knowledge creation is there.

Here one thing is very important that whatever the knowledge is created that it is to be properly stored. If it is not properly stored then in that case you will find that is the you will not be able to use that knowledge when the time will be required. Like we what we do we create the documents and the file is created, but the time file should be available at the right time. So, this is a soft file. So, during this stage an information technology system is typically used to host organizational knowledge for the distribution information may need to be formatted in a particular way to meet the requirements of that repository is there.

So, in this final stage processes to the shared knowledge are the communicated broadly across the organization. The rate in which the information spreads will vary depending on organization culture and these companies that encourages and devour this behavior will certainly have a competitive advantage over other ones in their industry is concerned. So, document management system act as a centralized storage system for digital documents such as the PDFs, images and the word processing files. These systems enhance employee workflows for enabling easy retrieval of documents such as the lessons learned. So, content management system or applications which manage web content where end users can edit and publish content.

There are commonly confused with the document management system, but these the content management systems can support other media types such as the audio and video. Types are the private networks that exist thus only within an organization and which enable the sharing of these enablement tools and the processes within internet stakeholders. While they can be time consuming and costly to maintain and they provide a number of the groupware services such as the internet directories and the search with the facilitated collaborations are there. Wikis can be a popular knowledge management tool given by given units of user and they made it easy to upload and edit information. But this case can lead to the concern about the misinformation as the workers may update them with the incorrect or the outdated information.

So, aggregate the data from the different sources into a single central consistent data store to support data analysis, data mining, artificial intelligence and machine learning. Data is exerted from these repositories so that the companies can derive insights empowering employees to make the data driven decisions. Social network a recent approach that holds the promise for the more effective sharing of tacit knowledge is the use of the social media including the corporate social networking and other social technology tools such as the blogs and the wikis. So, a blog is a running way blog that allows an individual to post opinion and ideas about the work projects and the processes. In addition, the macro logging server Twitter is increasingly being used by the companies as a first way to solve the problems are there.

People can send a question and quickly get responses from all over the organization or from the outsiders. Wiki is a smaller is a blog and uses the software to create a website that allows people to create a share and edit content through a browser based interface. Rather than the simply sharing the opinions and ideas as with the blog, wikis are the free form allowing people to edit what they find on the site and the ad content. Social networking is an extension of blogs and wikis. So social networking sites and unprecedented peer to peer communication channel where the people interact in an online community sharing personal and the professional information and provide the

photos producing and sharing at all sort of the ideas and the opinions   are there.

  Because of the popularity of the Facebook in people's personal lives, the most employees are comfortable with the idea of those following and communicating with their colleagues online. Using social network for a business enables the people to easily connect with one another across the organizational and the geographical boundaries based on the professional relationships, share the interests, problems or the other criteria. Many organizations from the small entrepreneur firms and the nonprofit agencies to huge corporations are experimenting with the using social media for the business purposes. So now we will talk about the ERP. Another approach to information and the knowledge management pulls together various types of the information, see how decisions and actions in one part of the organization affect the   other parts of the firm.

  Many companies are using the broader scale information systems that take a comprehensive view of the organization's activities. These enterprise resource planning systems collect, process and provide information about a company's entire enterprise including order processing, product design, purchasing, inventory   manufacturing, distribution, human resource systems and receipt of the payments and the forecasting of the future demand. ERP systems can be expensive and difficult to implement, but when applied successfully an ERP can serve as the backbone for an organization by integrating and optimizing all the various businesses across the entire firm. In addition, because the system integrates data about all aspects of operations, managers and employees at all levels can see how decisions and actions in one part of the organization affect the other parts using the information that can be used to make these better decisions. ERP can provide the kind of the information furnished by the transaction processing systems as well as that provided by the information reporting systems, decision support systems or the   executive   information   systems   are   there.

  The key is that that is the ERP views all of the systems together to people can see the big picture and quickly helping the organization to the smarter and more effective. More recently, ERP has incorporated tools for the supply chain management so that the coordination across the organizational boundaries is strengthened as well. Here you find that is this ERP a process used by the companies to manage and integrate the important parts of their businesses. Often via software to the connect planning, purchasing, inventory, sales, marketing, finance, human resource and the more are there. So, all functional areas in the ERP they are integrated and when they are integrated it becomes the   prompt   action   for   the   any   decisions   are   to   be   taken.

  What are the features and benefits of ERP? So, cost saving and improved the ROI efficiency,   increased productivity and efficiency as a result from the integration and

automation that ERP software provides. So, improve the business insights, improve the decision making with a single integrated source of truth in the real time data is there, manage the regulatory compliances, manage and monitor compliances with regular standards and even set up the alerts for the new compliances are there. Mitigate and reduce risk, automate core business operations, manual task and the reporting is there and reduce from the human errors and free of employee time and resources. Enhance the collaboration, breakdown communication barriers for the efficient collaboration and coordination to improve the job efficiency. Improve supply chain and distribution network   reliability.

So, use the demand driven MRP to forecast supply and demand and prepare for fluxes in orders and supply chain. Scalability, so consistent infrastructures for the streamlined operations can grow as your business grows. Optimize the customer and the partner management is there. So, service customer relationship management as well as the partner and supplier management will might from the seamless shared information is there.

This is the example of the ERP network. For example, the sales, marketing, procurement, planning, then the human resource, inventory, accounting and supply chain. Here everything is integrated and as a result of which suppose any particular information is required related to the sales by this accounting department, then immediately through this ERP this information will be there or there is any information related to the supply chain is there, then definitely in that case the procurement will be there and the planning will be also getting held by this particular function is there. So, all divisions are interconnected into the ERP is there. Strategic approach of the IT, strengthening the coordination with the external partners. So, external applications of the IT for the strengthening these coordination with the customer, suppliers, partners include systems for the supply chain management and the integrated enterprise tools for the enhancing the customer relationship and the business organizational design.

One basic approach is to extend the corporate, the intranet to include the customers and the partners are there. Any extranet is any external communication system that uses the internet and is shared by two or more organizations. Each organization moves a certain data outside of its these private internet, but makes the data available only to the to the other companies sharing the internet is there. External plays a critical role in the today's integrated enterprise. The integrated enterprise is an organization that uses the advanced IT to enable close coordination within the company as well as with the suppliers, customers   and   the   partners.

An important aspect of the integrated enterprise is using the supply chain management

system, which manage the sequence of the suppliers and the purchasers covering all stages of processing from the obtaining raw materials to distributing the finished goods consumers. So, these integrated enterprise information linkages applying supply chain management systems enables organization to achieve the right balances of the low inventory levels and the customer repositories are there, this is there. So, by establishing the electronic linkages between the organization and the key partners for the sharing and exchange of data, the integrated enterprise creates a seamless internet integrated the stretching that form and consumers to raw materials suppliers are there. So, these horizontal relationship purpose of integrating the supply chain is for the everyone to work closely together moving in the lock step to meet the customers product and the time demands. So, Honeywell Garrett the engine boosting system which makes turbo charges for cars, trucks and light aircrafts uses an extranet to give the suppliers access to the inventory and production data so that they can respond rapidly to the manufacturers need for the parts are there.

Honeywell is also working with the customers such as the Ford and Volkswagen to integrate their systems to the company and will have the better information about the turbocharger demand from the customer as well. So, our goal says the Honeywell's Paul Hopkins it is a seamless value chain connectivity from customer demands to the suppliers. Another organization that has made the suppliers use of the technology to forge and internal horizontal relationship is the corrugated suppliers are there. So, corrugated supply system in action is box manufacturer suppliers and the customers they are integrated and linked so that the the goods can be provided to the customers are there. In the customer relationship here we find that is the many organizations including the Ford Motor Company and Haraj and Terman, McDonald's, Petco and AT&T have hired the social media and directors that are the charge of a blend of activities such as the marketing and promotions, customer service and the support are there.

These customer relationship managers responding to the one survey and technologies to improve the customer services are there. For example, Dr. Pepper has built a Facebook fan base of the 8.5 million people and the managers put out the two messages a day on the company's far pages and then the nine to data to see what data are happening. So, social networks and blogs are the particularly and that is the people customer facing technologies in 2011 and 65 percent of the business survey are having a company blog to the communicate with the customers up to from the 48 percent in the 2009 is there.

This is a case study of the Volkswagen, please go through this case study, it will give you the insight that is the how this ERP and knowledge sharing practices are there. This is the research paper, strategic and electronic commerce adoption among the small and medium sized enterprise in a transition economy is there. This paper will be also help to

understand that is the how these ERP and other systems study, how they are working and the impact of the perception of the e-commerce on the adoption is there. This is a book recommendation assessing the strategic value of information technology, which will be giving you the idea about the strategic role of IT on the company and especially those who are the active in the insurance sector are there. This will the books findings that will be help and to go further into the details you can make these references and with these references you will get the knowledge in detail about that is the how these knowledge creation, storage, ERP and the intranet they are working for the efficiency of the organization is there. Thank you. Thank you.