Knowledge Management
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Lecture – 25
Prototyping and Deployment (Contd.)

Okay so what we have been discussing is so far is, how we are going to deploy the KM system, so one thing that we have noticed that we need to create it and then start it and deploying at one part or unit of the system and see whether benefits and then extended to other part, that is what is known as incremental approach.

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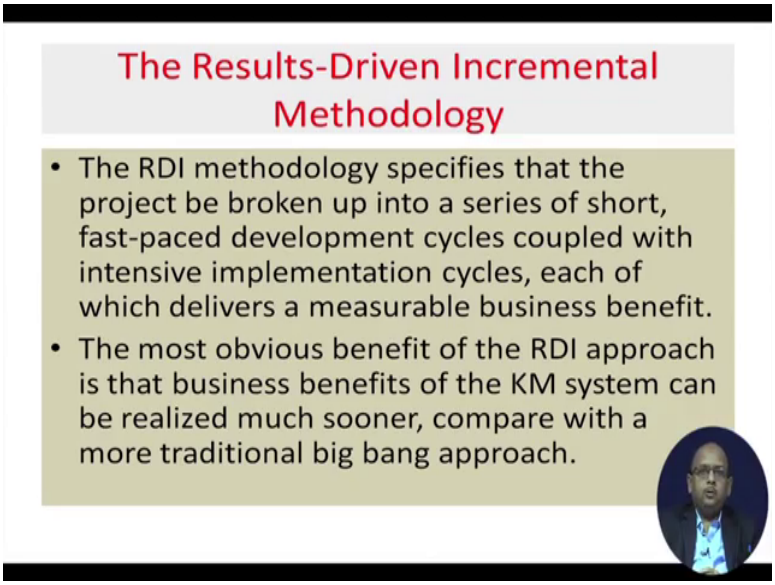

In contrast to incremental approach, we have another approach that is known as big bang approach that is where you were to implement that KM system in the entire organization in one go and both of them have their own associated costs and benefits right. Now what we are going to discuss in detail a similar result prevailing sentiment so we have to see whether incremental methodologies, we have to see whether incremental methodologies is good or big bang approaches, If you look at incremental methodologies it is a result revenues from that our success of one part leads to implementation.

And deployment of the KM system to other part of the organization, so what actually happens in the result revenue incremental with and that is commonly known as RDI methodology is that a KM project is broken into smaller projects, small, small projects, multiple projects for each KM project will be having and ‘n’ number of models depending upon the project

required, so these modules are basically a series of short, fast phase in development, so you take up its own cycling before you feel successful any move to the next cycle right.

So what do you try to implement the one part of the system and then based on success okay and see that whether it is going to deliver benefits to the organization then you move to the next system, the benefit of this kind of approach is that you can really see and recognize and notice the benefits that you are going to derive out of the KM system which is being implemented in one part of organization, if you are going to compare it with big bang approach the problem is that when you are going to implement it at the organization level, enterprise level then probably you will not be able to see that the benefits are coming from where and the costs associated with which one..

Which part is successful with part is not because it is not clear if it is giving you integrated itself into great result you do not able to find out which part is functioning well, which part or which unit department is able to make use of that system to be effective and productive and which part unit of the system is not able to make use of the system, if you are for integrated measurement is not good and that is why it is always better to go for the RDI and incremental approach that is where you are able to realize the benefits of the KM system deployment in one part as a pilot project.

Look at the benefits and then you move on and implement it to another part of the system and that is why result revenue incremental methodologies always better.

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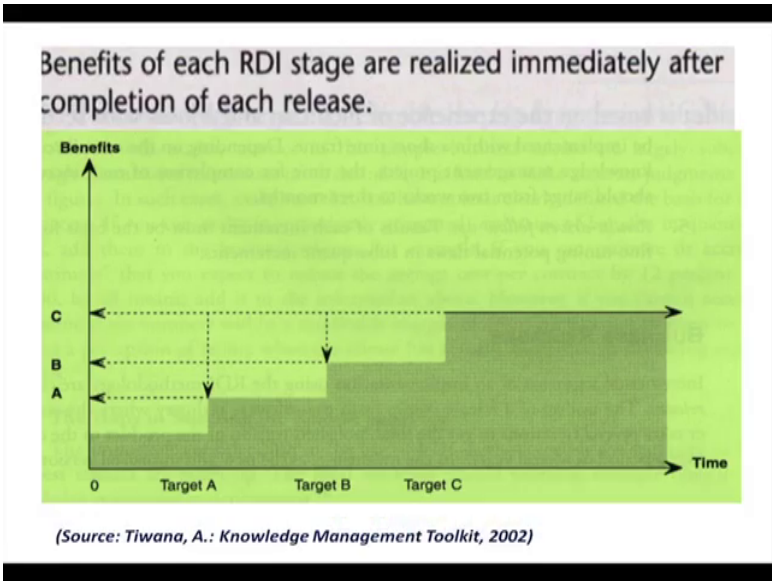

Look at this what happens in big bang approach what will we try to apply to all the targets together, now this is target one, what with it we applied okay, it got successful implemented into the other part in the timeframe, looked into the benefits, benefit is gone up, we have tried to implement other part of the system the benefits increased then we will do the hard part then accordingly then move to target DNA rates of.

Each stage of the RDI is really actually you can see the kind of benefit that will and after completion of each sale you can work the next but provided if you implement it to the entire organization and then you are not sure which part is giving benefit with party department and at this safe if you find that there certain issues that need to be resolved, then you do not move breakfast is unless the success under the stage so the other benefits of moving at incremental approach.

So that you are able to see whether you are getting benefits at this safe and then you extend the next part in the new way while extending it in a timeframe in this safe if timeframe you can also see the benefits moving up that the right and that is why we would is always good to adopt a RDI methodology right.

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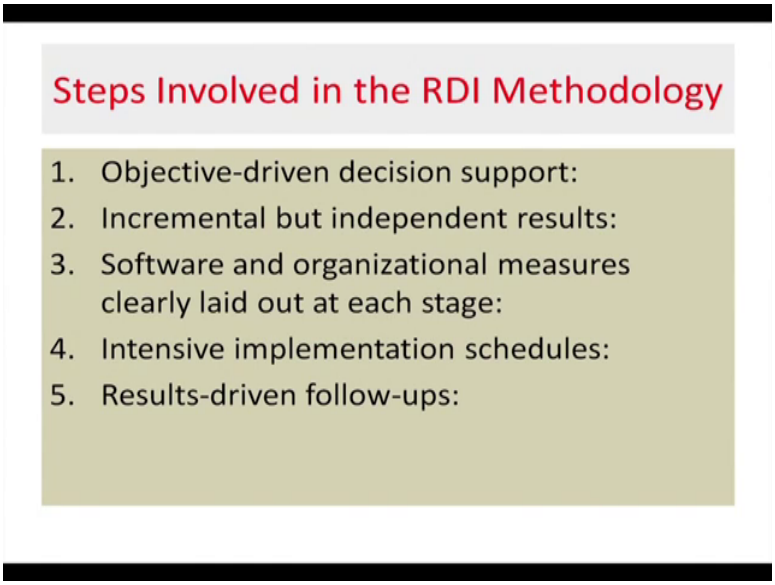

Then what is that step that is involved in this kind of the other, these are five different approaches that need to follow that is objective driven decision support incremental, but independent results you also need to see that after major are clearly laid out it is case the intensive agreement to IT justice results driven, all were right. Look at this figure what I am talking about is an look at the characteristics objective driven decision support.

It means at this stage what happens you have certain objectives in terms of the kind of benefits that you will get you implement in the system and right similarly worded incremental but were looking for independent results provide this it is independent, one particular unit department of function is being affected though it is interconnected, but it is not implement another part that was at one time, so inconceivable it is independent but though it is integrated but it is independent.

So the benefits I still measured ambit is beneficial and find that it is working with them to try to integrate and extend it to the other similarly was only to see that yes another requirements in terms of software and however measure the benefits, because the kind of benefit that you will do with their different compared to a example if it is R and D server to see the number of patents number other innovations in terms of product and process that is made.

But a very extended to the production apartment enough to see whether these features have been incorporated in the products and services right, so than the majors of benefits are going to very different places right at and the kind of stiff software support that required, so here in the production department to require different kind of software support here you are requiring a different kind of software support.

I would then intensive implementation to once you have limited it to the experience successful then you move to the next, estate and when configuration you see that all these other lessons that have learned, the feedback better is incorporated and at the same time you have a fixed time figure, because our neighborhood beta time and cast: that is to be kept in mind is with a pussy that within the fixed indole were able to see that it is completed.

So that were able to the next stage in the given time frame because in order to double up or have a KM system for the organization, at the enterprise level for the entire project to have fixed time to cite this level you have to see that it is implemented at the entire right. So exactly about intensive implementation do not be secured at about that you need to see that the entire organizers will benefit entries implemented across departments in it is would at the enterprise level within a given time.

And then we have to see that results driven follow, so you need to follow it up at each step what is happening before moving to the next stage and that is valuable to see that how we are moving up the process with your vegan implement this RDI methodology right.

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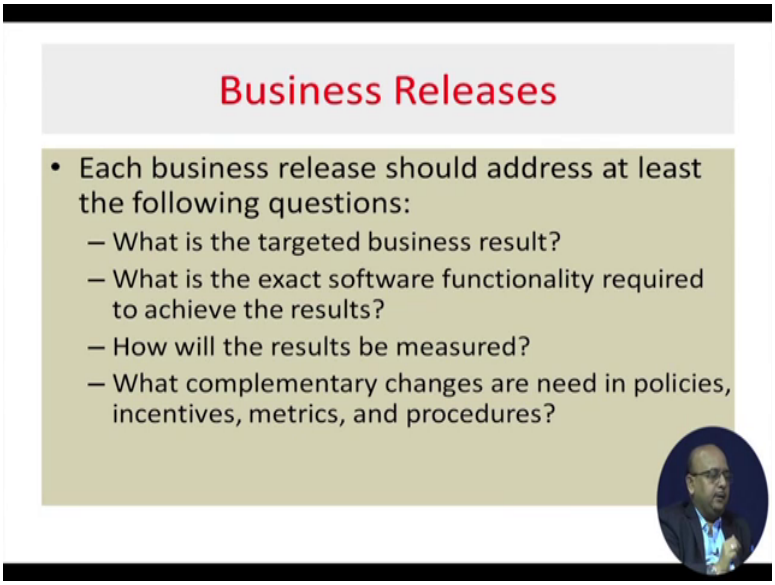

Now business releases, what are the business releases? so business releases, what are the benefits that will derive out flatly in every state where pushing that button the targeted businesses say for a example again, I am coming to the same picture targeting one particular department really tried a private and business with the results that want with and with regimental quantitative and qualitative.

And you also need to see that how to measure the benefits of these are from the issue that the developing and modelling lacks of the functionalities required to achieve, so you pursue a particular software support in terms of IT is required and how the results are limited right. However measure the result that is with you by the R and D section, how the measures of that is with you by the production apartment at different time periods and how to measure the results suggest with you by the multiple the marketing rights.

The majors for these departments are going to very depending upon the functionalities right and uncompromising changes are needed in policies incentives metrics and procedures of agreement resent is that how to see the club in measuring are the functioning of functionalities, acai web are changes and the metrics and the evaluations of the market department of production apartment of say R and D department and different way.

What kind of changes you want to bring about our changes in the majors to evaluate the success of KM system at different time periods in the across departments right and however to link into the incentives, for example of marketing departments have employed this KM system had been benefited a with more sales are going to link it with incentives or not. Do not the link it with incentives the marketing people will think that it is not worth doing.

Because it is not linked with the river to any item that is made it is not going to successful unless you are going to link into the rewards of the to bring about certain change in the reward system policies, the wages we evaluated the way things to be done after the implementation of the KM systems from the issues that need to be looked into and that is why you need to make complimentary changes with the successes that people made.

Once the KM system is introduced in terms of incentives, the way that is we evaluated the way things are being done by the them and how that the processes, are the procedures that is followed by them in doing certain activities has to be changed right, that is about business releases.

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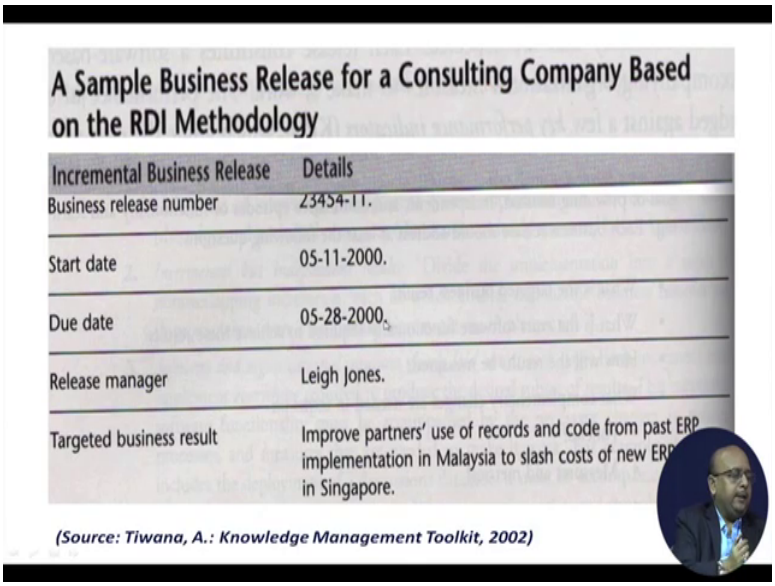

See this is an example that is given here, so it has a number it has a date when is going to be complicated in who is willing to be responsible for that one of the target business results and what the benefits that want to keep saying unto you ever for a that is ERP system and then this is going to help you to pass the slice the cost of the system okay, so in that way you are going to see that when you are on for business releases as business releases means that in what way went to affect the beach is art at one of the business in terms of benefits IT.

How to measure it and not in a fuser unit to bring about in the system and processes of law is right.

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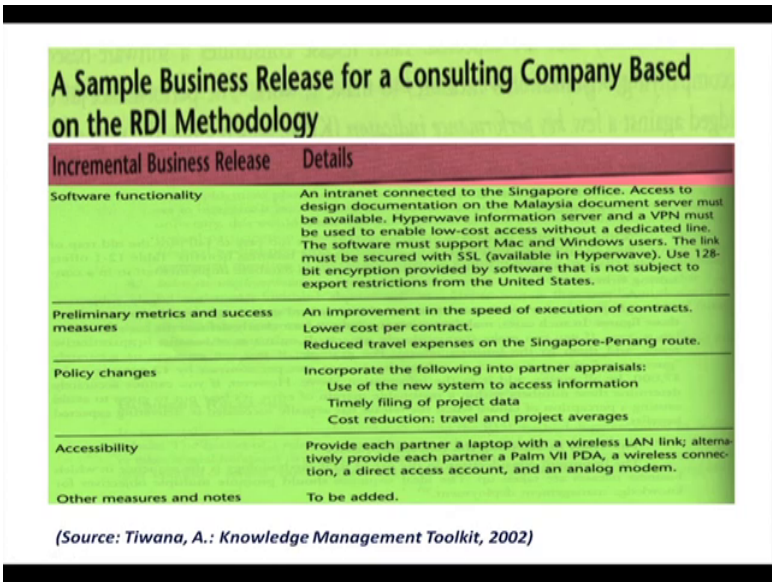

A Sample Business Release for a Consulting Company Based on the RDI Methodology

Incremental Business Release	Details
Software functionality	An intranet connected to the Singapore office. Access to design documentation on the Malaysia document server must be available. Hyperwave information server and a VPN must be used to enable low-cost access without a dedicated line. The software must support Mac and Windows users. The link must be secured with SSL (available in Hyperwave). Use 128-bit encyrption provided by software that is not subject to export restrictions from the United States.
Preliminary metrics and success measures	An improvement in the speed of execution of contracts. Lower cost per contract. Reduced travel expenses on the Singapore-Penang route.
Policy changes	Incorporate the following into partner appraisals: Use of the new system to access information Timely filing of project data Cost reduction: travel and project averages
Accessibility	Provide each partner a laptop with a wireless LAN link; alternatively provide each partner a Palm VII PDA, a wireless connection, a direct access account, and an analog modem.
Other measures and notes	To be added.

(Source: Tiwana, A.: Knowledge Management Toolkit, 2002)

See so what then of software functionalities the metrics of success, visual policy changes, accessibility, how to make certain changes like as a polar Infrared connected to Singapore office have to be connected with Malaysian office we need are members of a virtual private networks okay. It should support both kind of my closures as well window users of the system requirements get that back about the metrics of success, how well told see the improvement brief speed of infusion of their contracts will them to lower cost per contracts.

With the cost to reduce travel extensively was our Singapore and your travel from Singapore to Malaysia and if it is connected well delivered to the flood of fast in travelogue is an offence on behalf of the benefits that are going to measure of an organization of policy changes will make it making the system, then are how to have access to the system subcontinent that about our KM system and double up on those issues are available apart in that interval of the two.

And but other measures want to have into the past quality, efficiency, productivity, that one day.

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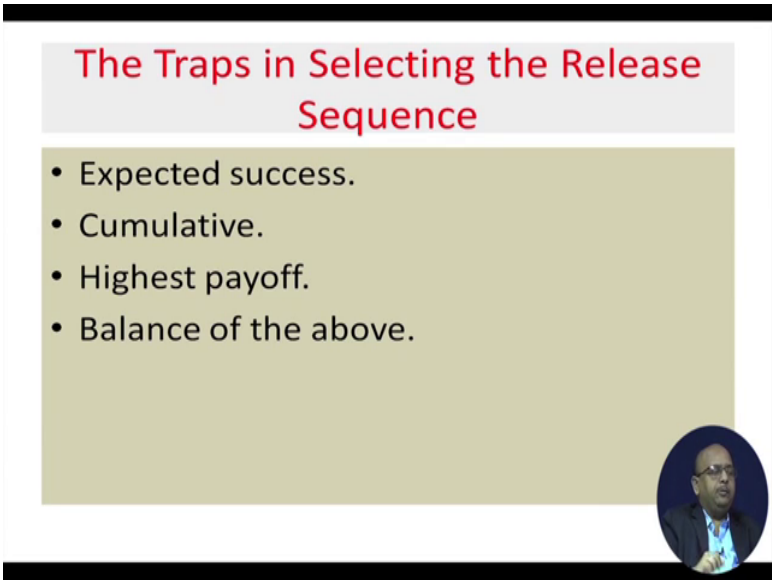

Now but will discuss ultimate lace of the traps and selecting the release sequence which one you want to wish what benefits want to have a first and the benefits want to have second of these are some of the importance and benefits the expected successfully KM system, but the outcomes you want to achieve out the say that when I whether the successor intervene monetary terms, so that is two and five that the cumulative effect of different system that will have one by one.

Then which system is going to create highest the maximum payoff or whether to have as a balance between successes and pay up and both qualitative and quantitative, so these are some of the issues that need to be looked, okay.

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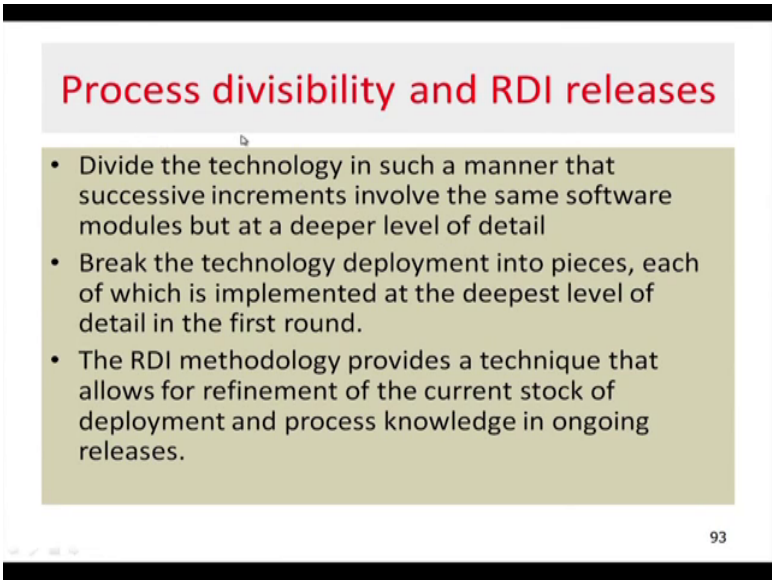

Now other issues is process divisibility and RDI released, however to look into both the technology part and the non-technology part, see whenever to improvement the technology and implementing the system to other part) of software would be required right freely joined by the kind of technology that would be required in successive improvements will earn view the other software are far I improved version of the software.

So that the technology deployment can also be broken into pieces and anyone to see that each is implant employed at different levels and move from surface level of the depending among the required right. So and this was only also provides and allows for refinement of the current deployment but would deploy an process knowledge, and RDI releases. At each when moving from one department to one target while the target of implementing KM system.

And if you have a feedback loop system which helps you to modify the system and you hope of being better and better, in terms of stocking or the process knowledge that is stocked by you, a different level and the kind of KM system that do not have and ultimately when you go far a integrated enterprise level system, it is going to a much better system that will earlier thought off.

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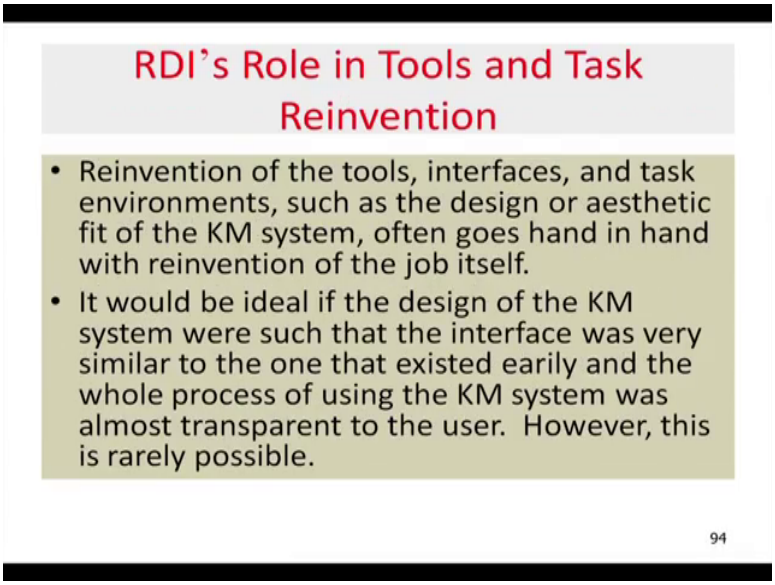

Now we are that enough to see RDI's role of tools and tasks, reinvention of tools interface a staff right, but whatever however what are aesthetic design of the KM system also going to fit in with a different kind of in this different end of environmental and whether it is going to reinvent the job itself or not far above the value of the way you have been doing certain, whether the KM access on the information that will have is going to change the way the look.

Say that the design of the KM system and the kind of interface that you have is going to really help you to see that the entire process of losing KM system is transparent, so that each and everyone gets the right.

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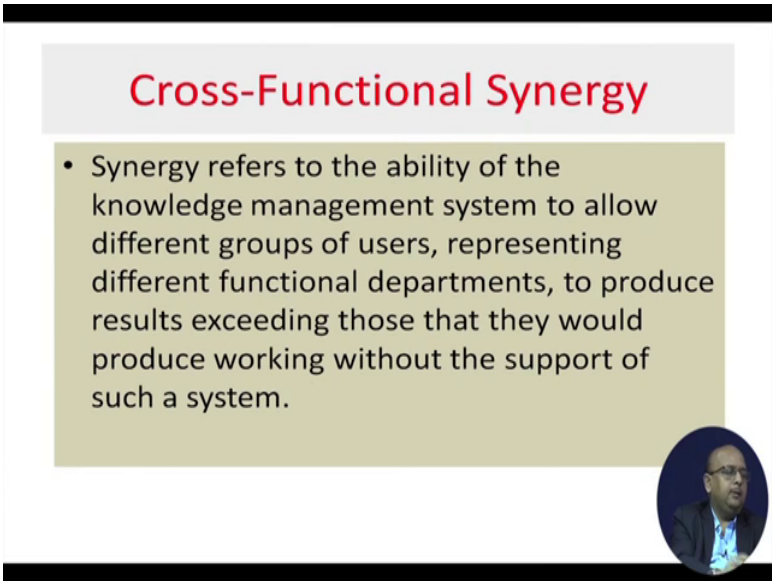

Then moving to the next part across functional synergy and is this cross functional synergy imparting was a moving from one function to other function, so the example that I given that you are moving from HR and into production, to marketing to HR, Finance, these are different functional domains right, require different kind of expertise, knowledge base and so you need to create synergy.

So that the knowledge created in one department can be used by other, not only that synergy in the knowledge that is created between the departments is useful to all the departments but also the issue of accesses there, you also need to see that the requirement of the department is met again, so you need to create a better synergy between various departments and how the synergies to be created.

In a different group of user selected the requirement of the HR department with different formula marketing department, the requirement of the Finance department will be different comparable to the production department, so how to create the synergy because ultimately, see you have perceived that how far you have been able to co-ordinate and integrate the activities of various departments vertically and horizontally both.

So you have to see that been successful in integrating the activities, we create better synergy and have not been able to create vertical identifier and horizontal integration and co-ordination across departments and functions very good, very difficult for you to go far this kind and that is why you need to create a this cross function synergy, say for example is the HR department job is to provide manpower to different departments right.

So the quality of innovations depends upon the quality of the people right, that this is truly recruited by HR department, so the HR department has to create synergy with the HR requirement and meet the requirement of the R and D department right, not only are in part with any department because it is the responsibility of the HR department to supply talented people across departments right.

Who can do the right, so they have to align their activities with different functional areas, marketing department has to align their activities with the production, production department has to either activities depending on the kind of R and D that is happening in, so based on R and D in terms of production processes that is to be incorporated by the production department so they have to align their activities based on the innovation that is made by the R and D department right.

Similarly marketing department has to sell those so they had to align their activities based on what is being produced in terms of goods and services and that is valuable to create better so when it comes to creating synergy across departments, you have to see how a knowledge management system is going to help in the process, the knowledge manual system even to help in the process that you have a system which is going to allow different group of users available.

Marketing, HR, belong to any another department to produce results that is not only useful for you, but also to other departments and so that only the production department know the what is done by R and D department, is being done by the way have access that HR departments know what enough requirement of people by the different department. Marketing department knows what is being produced by HR department.

So you have to that it is the KM system need to create a synergy which went to allow different groups of users representing different functional departments to produce results

exceeding those that do not produce working without the support of system. Because you have access to information across by our articles or one department which would be useful and that I knowledge to your work and that is however going to be creating more synergy in the process right, is what we call cross functional synergy.

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Now in terms of collaborating across departments you have to see that how this KM system that will design helps you in corroborating because collaboration is something that is very complex in nature was unique, to collaborate at different levels, you need to collaborate at departments, across units, across people, within departments, so the level of our this cooperation becomes more and, more and more complex of a depending upon the number of departments you have.

Number of units that you have, so this level of complexity has to be figured into the design of the KM system that how that KM system will is going to take care of this kind of these complicit is and how it is going to allow access in a complex environment right, so some of the competitive like the logistical complexities, how they would be connected. So what enough software requirements we have?

What kind of environment we have, say a support system in terms of IT Internet and other things are going to be there, how they would be connected? but access they will how they will have access to information and so this logistics need to be taken care through IT system than technological complicity, what kind of software and hardware integration required for

this kind of purpose, then organizational complicity in terms of systems, processes, procedure that is to follow across departments.

And how to integrate this and then environmental complexity that the kind of environment which were operating how complex it is and whether you are able to scan and get the information from the environment to make use of it when it comes to organizational advantage, right otherwise whatever you want to do in the knowledge management, those are not benefit you because you do not get any advantage are you unable to compete with others.

So this environmental complexity helps you to scan an environment, find out what needs to be done to cope with the challenges of the environment depending upon the complexity in the environment and how certain or uncertain the environment is and then based on these, to say whether we are going to be successful or not, right. This is about the complexity of the collaboration, so various level of complexity need to looked into when you are going to design a KM system.

So that a problem related to logistics technology, systems and processors and environment is taken care, if were not able to take up this problem, that KM system will not provide a better synergy and the kind of cooperation that unexpected was department functions and it is among them and the problem is there.

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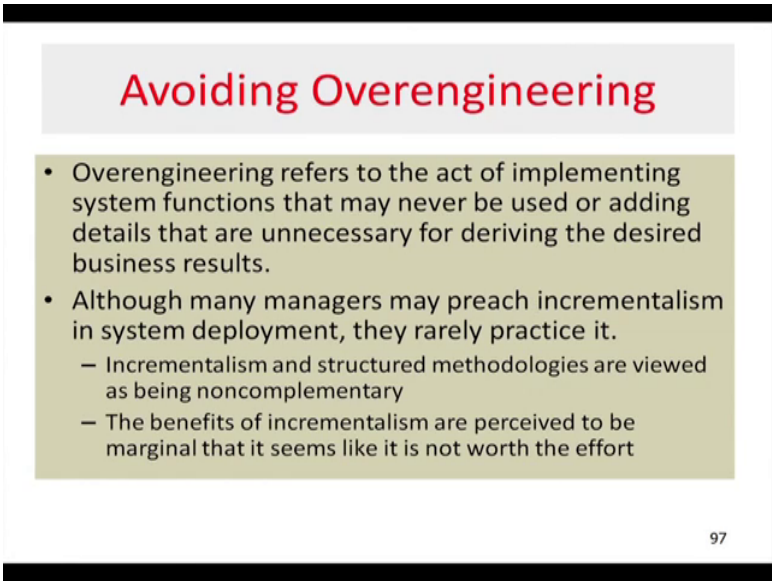

And do not depend too much on technology or act of implementing exists functional that whenever we use riding detail that unnecessary deriving the desired business leadership

means that you make sure that the system is such, so that the it does have thus have only relevant things are you do not make a system so complex I do not add formatting from the system which is not going to be used by the people.

And because it is not related or not link to the desired businesses as you can see that the what basic layer and happiness that manages want to implement the system, but they do not want to make use of that system right, many cases for example we get the systems that we rarely get software's, hardware is within that way things are going to be useful, but was fielded but after that is about to find acknowledges artists.

So what we need looking at it that whatever system while the one we are going to have it is useful it is relevant for the world to make of and that is the responsible of the managers, it is otherwise what will happen, you have so many things at your disposal but you are not going to make as not won the makers of it is arguable to derive any kind of business results of right, so what will it look like that both the structured methodology and incremental methodologies should be treated as non-complimentary than a complimentary.

But I meant to say is that when want to use incremental approach the idea is very simple, in an incremental approach what happens you try to deploy a KM system in one part of the organization, look at the benefits of that system how well it is used, one of the businesses of that will drive the kind of technologies supports human resources are available within a given time and you find that it is successful then you extended to other parts of the system you go through the same process.

And I analyses, designed, develop and then applied to the next part system, once you are sure of the success you look at that tangible and intangible benefits of the system deployment at the next stage, then move to the third stage and that is how you move up and then to have a integrated enterprise services. Now compared to incremental system if you are going to have a big bang or structured system available to have the entire system at one go it is entirely different.

Because, the cost, benefits and a few that are associated with that big bang approaches the compare different compared to the incremental, now what we have is a that whatever system is more feasible, now if you look at the literature, it says that other surveys that have been

done that it is always better to go far incremental approach, because success at one point of time helps you to move to the next stage.

But supported for adopting it to the entire operation then probably there are certainly initial if it is not resolved related to possible time and cost, overruns residual, integrated systems not never know which group participants successfully using the KM system, which part is not losing at all, so many things at the same time then probably you are confused to, so these are the issues around which comes out and that is why it is not primitive connected that okay.

Once who go for incremental approach you have enterprise integrates system and it is become in becoming a very structured system no it is not, because you have tried and tested and then went for a enterprise service. Now the only disadvantage is that in incremental system what happens the benefits are perceived as marginal, because you are looking at only one so you know that is part you have not used the KM system are deployed and then it has been used and found that if it is successful.

And based on that the results if you think that operates was going for a new move to the next a few thing that it is not worth the effort than you do not need, so that one of the disadvantages which you may have depending on the kind of project that said okay and the kind of department you have selected. So it is very important that when you are selecting a particular department or unit for the pilot project, you follow certain criteria and make sure that it is successful, so that you can move to the next stage.

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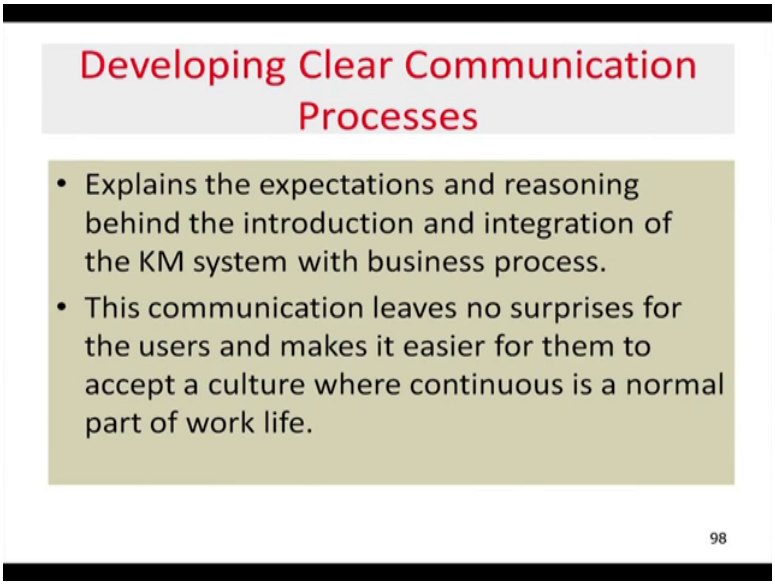

Then and the important issues related to communication okay, when you are going to introduce the KM system in an incremental approach from one department to and the department tell what are the expectations that you have from the department after implement in the KM system, but the result that were looking forward to first, second how this system is going to be integrated with the next set of system right, because ultimately you have different business processes which need to be integrated and each ministers are also interconnected with each other right.

So you cannot simply isolate particular system, so you are going to implement the isolation in one part but at the same time based on the benefits you are going to integrated with other art, to clearly communicate while want to implement against what are the expected benefits wonder what kind of results you want to achieve from the system, why want to implement so the people are stakeholders must know what are the benefits that how the to make use of it.

But other things that they need to do is and then once you communicated with then probably the users in the stakeholders find it very, very easy and they would go far adopting and they would accept a culture with will be becomes a normal process one part of the work life again because you know that I know is whether part of life and so they know that they need to continuously improve and innovate the systems and processes.

This kind of cultural developed in the organization, then it is a very easy and that is what people communicate it very clearly, at the we need to upgrade systems and processes and that is how KM system into helping fast to be more effective and beneficial in the long.

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And then we will also need to look at certain human barriers that are very, very bad move out of the human barriers, see the barriers may be related to look at the culture, the attitude and behavior of the employee's right. You also need to double up as system where you provide the leadership support, resource and also link to such behaviors with incentives right, so make sure that the technology that is designed for improving the system and process for better results is living with the incentives from the incentives are complimentary to achieve the results.

You can make it contingent because if you can feel that in a particular system KM is implemented again and it has got beneficial results then the stakeholders, the users are also benefited out of it, right, in terms promotions, merit, increase authorities and there has to be done so that they get motivated to make use of the system on a regular basis right, so they need to be compensated not only in the short term are also long-term so that whatever benefits are made by the organizers of the profit has to be shared.

So you need to create a reward structure that is very important similarly also need to bring about a change in the culture and attitude of the people to access new things, that is a very important and then all make sure that link the goals of the people with the goals of the organization, if going to make profit you are also benefited not only in the short term but also in the long term and that is how it is going to help both the people were working to work and they KM system out of which the individual as well organization benefited out of it.

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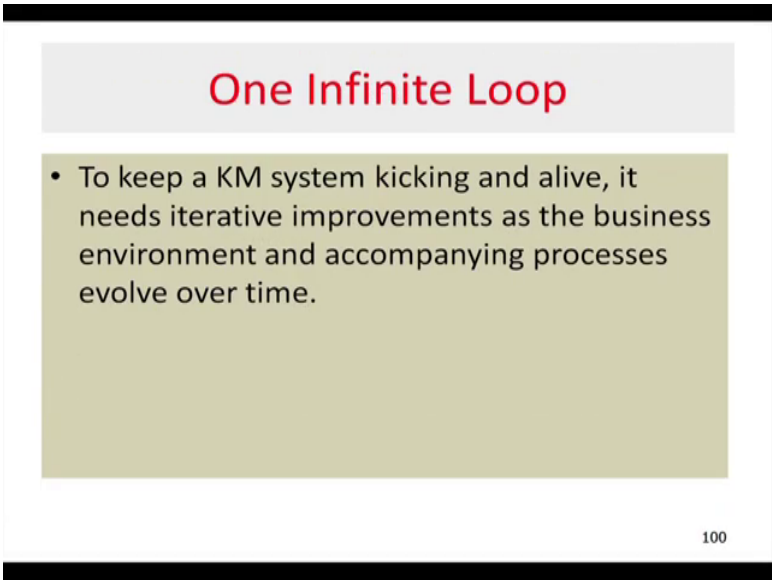

And one infinite loop in that case losses that KM system is dynamic, so you need to ensure that there is a continuous update an improvement in the system, because the changes are going to happen the business environment, so the processor also changing accordingly and you are going to feed new data into the system, so that KM system that is alive and it is not outdated, because an otherwise outdated and people start using it, thank you.