

INFOSYS TECHNOLOGIES LIMITED

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CORPORATE PARTICIPANTS

BG Srinivas

Infosys Technologies – Head – Manufacturing and Member – Executive Council

BG Srinivas

Good morning. In the next 30 minutes, I would spend time focusing on what we call Smarter Organizations. Just to step back before we get into the topic itself, one must be wondering what this is about. Is it not historically good organizations should be doing this in the first place, working smarter? This is something which comes to one's mind but more importantly I just want to reflect on what has been happening in the last 2 years and I think most of you have been more glued on to those events than me. From Infosys' perspective, we have also been watching what has been happening in the marketplace in the last 2 years from very close quarters working with our clients globally and since most of our clients have a global presence (we work with global 2000 accounts across US, Europe and Rest of the World), working with our clients in the last 2 years has given us a lot of insight to the challenges our clients have been facing in the last 2 years. This cuts across sectors - banking and capital markets, manufacturing, energy & utilities, pharma, teleco. We have seen what has happened in the last few years impact different sectors differently. At the same time we have seen almost all sectors have been impacted. Relatively we can say that some sectors have been more impacted than the others but one thing is clear that businesses have become so interdependent. Not only we have seen in business, but also across in different parts of the world, supply chain complexity has increased. Organizations have to depend on supply chain which extends across different geographies. At the same time the responsiveness of organizations to the downturn, very few organizations have been able to withstand the challenge. Most of them have been impacted. Now are seeing signs of stability and recovery, but by and large it is fair to say that it caught most organizations unaware and even those who were getting ready to prepare for this downturn, could not grapple with the speed and velocity of the change. In that context also, we have seen technology also becoming much more pervasive in the way organizations run their business and also the fact that technology and technology related services have evolved into a new paradigm. In that context we believe that what is happening today is very important and in that context from an Infosys perspective, we are making investments in addressing some of these challenges for our clients.

Safe Harbor, most of you are aware what it means. I will not run too much in that. Let us focus on what has happened in the last few years and more importantly from the organization's perspective, how challenging it is becoming for organizations to deal with rapid change. More importantly, organizations have become global which also means that in many ways they are finding it difficult to move with speed. Agility is becoming the single most important word for organizations to respond to the changes happening in their environment. In that context, there are 3 clear dimensions. Increasing complexities within the organization with respect to the processes, the systems and even their organization structure. In good times most organizations rapidly grew and expanded into emerging markets, expanding into markets beyond their home countries and also many of them did grow by acquisitions. In the context of the slowdown, they found it extremely difficult to manage things.

The second part, which is equally important is workplace dynamics. We have seen clearly from closed quarters, organizations talents by ageing workforce, retention of knowledge; and more importantly in the new world, a distributed workforce. No longer the workforce operates out of a single location. While some of this is not necessarily very new, but it is definitely acquiring increasing important in the current context where organization are grappling with these things.

The third part is the velocity of change itself. This has caught many organizations unawares and we have seen that as organizations grappled with falling demand, a very few organizations were able to meet that challenge with reduction in cost. The speed with which the organizations were able to take our costs was in no way near the rapid fall in demand.

In the current context while the organizations have grown beyond their geographical boundaries, their comfort zones; organizations have expanded across different geographies and in different cultures and also acquiring new businesses, so fundamentally not core to their own business.

Those were the good times. Increasing complexities in terms of running different natures of business, different geographies, different cultures, workforce dynamics, the advent of new generation and dealings with the challenges of what the new generation is more exposed to, the challenges of social media and the availability of information to employees and other stakeholders. Sometimes even organizations are not able to disseminate information in a timely manner. In this context, we believe that organizations should be agile _____. In the last two years organizations feel that as they come out of the downturn, _____. They don't necessarily want to get stuck with the challenges of the past, they are trying to reinvent themselves, they are trying to leverage the technologies to make their processes much more robust. _____

_____ great organizations did land up when they rolled out their ERP systems. How quickly can we modernize systems and how quickly can we move to the new paradigm of virtualization? These are areas the organizations are investing in today.

When it comes to structure, historically the debate has been whether it is better to be centralized or decentralized. In the last 2 years we have seen as the slowdown hit organizations, they went through the consolidation phase and most organizations did pull back and then they started to centralize certain decision making. That is something we have seen in very close quarters when we with our clients, decisions which were taken at a very grass root level, at director's level in the IT organizations; in the last two years the decisions made has definitely moved upwards. As the organizations come out of recession, should the organizations relook at how they should go about letting go, how they should go about decentralization. This is an area organizations are grappling with and there is a new paradigm which has also been tested in few organizations what one calls as networked organizations where it is a little bit of hybrid and then they are supposed to work seamlessly. Historically the networked organizations found it difficult to operate because again there is no supporting IT system. In today's world, that has changed. Today you have so many collaborative technologies which will support organization structures and then make it flexible for companies to really reconfigure their org-structures to become more responsive to the market place.

So in these three areas if you look at from a business opportunity perspective, what Infosys is doing is studying these challenges our client organizations are going through and investing in areas where we believe we can make a difference.

I will touch upon two case studies which are listed here. One of the European chemical infrastructure manufacturing company based in Europe. This company had challenges, which I did speak about a little earlier. They grew through acquisition. They have eight regional centers and when they grew both organically and through acquisitions, they landed up with such a complex infrastructure internally, they found it extremely difficult. If you look at how their inventory is managed, how their supply chain is managed, they were not able to clearly fulfill demand because their forecasting systems were not giving them the visibility across their supply chain. We came out with a blueprint, we have a global template-based approach to deploy ERP systems through a process which actually harmonizes the business process as an integral part of the rollout. Upfront, we needed to debate with the client organization to make sure that when we configure this, it not only meets the current needs but also is configured in a manner, which can respond to future changes when organizations acquire further companies or even in some cases we have seen organizations breakout certain components of their organization and fill-in. Even in that context we have been able to put in this template-based approach where today after deployment, (almost 70% of the deployment is complete), the organization has already started to see benefits of better visibility, better ability to sense the demand and their customer fulfillment time has reduced. The responsiveness to their client organizations has increased. This is something, which we believe that as organizations further relook into their current IT systems and landscape, we will be able to respond with our modular and global template-based approach to deploy their IT systems.

While this is just a representative case study there is another case study, which I also want to relate to. This is about an automotive company based in Germany who went through a similar process of standardization. They found it extremely challenging to implement that in Europe, their home market, Europe. So the pilot which actually happened, happened in the Asia-Pacific region. We again used a template-based approach to standardize their processes for the APAC region across 14 countries, favorable to harmonize the business process and rollout their IT systems. Subsequently having seen that as a proof of success, they were able to implement that in Europe and today the Europe implementation is also complete.

The second one case study is on a logistics company. This is a European company where we were able to bring in a very high degree of visibility and automate several processes in their distributed supply chain. The benefits were incredible. The percentage what you see there is real - 95% reduction. This is about not only deploying systems but more importantly, redesigning processes and making it much more configurable, bringing in much more transparency through their supply chain and deploying systems through which clients have seen better benefits. As Kris was mentioning in the earlier conversation, in today's world investments are being questioned several times. Organizations are thinking twice, thrice before they make investment and everybody is looking for business benefits and unless we are able to quantify those business benefits upfront and build a business case, many times we do help our client build this business case so that they get those investments. We also leverage our intellectual property which is a Value Realization model to help our client's build this business case upfront when they seek investment.

Let me move on to the next paradigm. We were talking about organization's ability to adapt. Here again, it is very difficult to predict what is happening all the time in terms of the demand. We have seen lots of systems historically have always been in place on how to increase the accuracy of your forecasting. While those investments will continue, we are also seeing companies looking for early warning systems even before the event has occurred, can than they start predicting what the potential implications are. We are also looking at companies investing in what we call real-time information sensing which could be sensing the information from not necessarily data which is available within the company, but also unstructured data which is available on the internet. There are opinions, there are blogs, there is lot of social media where lot of information is available and not all of that can be used. Organizations are making investment into these and one industry which is taking a lead in this is the retail sector which is trying to understand the consumer behavior. As these investments continue and these organizations grapple with how do we predict demand, it is also important to understand what organizations are trying to do with that information which they get through this kind of simulation. There is a lot of investment going into systems which can give the businesses real-time information on decision support. One thing is looking at this information, second thing is how does this information help clients stimulate scenarios which can given them multiple alternatives, whether they can configure their business processes to meet those kind of varying demands.

The third thing is also designing processes for things which they can actually configure. We have seen investments going into BI (Business Intelligence) in the last several years but it is still to reach its maturity in terms of organization's ability to leverage this wholeheartedly. Within Infosys, we are helping clients set up concept centres, we are helping clients setup Centers of Excellence where client organizations, the end users, the business community themselves can reconfigure businesses, business processes so that they can fine tune the urgent needs to the market place in real-time. They are not dependent on IT organizations to make these changes.

The third dimension which is equally important and this is something I was referring to what is happening at the work place, the ageing profile of the workforce in the mature markets both US and Europe. The fact that information-sharing, learning is becoming central to organization's sustainability whether it is the knowledge hidden within the organization, tap the knowledge which is available with individual and more importantly as organizations invest more and more on the

innovation front, how can organizations leverage the information and knowledge available within the enterprise. More importantly in today's world, organizations are looking at how we can collaborate continuously with clients and consumers on one hand and partners on the other hand. The ecosystem for the enterprise has gone beyond just the enterprise, not just in terms of supply chain management but in terms of investments into R&D, investments into learning, investments into collaboration. Today it is possible to do that because the collaborative work bench is available. There are organizations which provide this data. There are organizations which host these platforms. In fact Infosys has built some of these platforms. iEngage is one such platform which we have already built. This is Infosys Intellectual Property, this is a hosted platform where clients can simply subscribe to this platform and use that to collaborate in real-time across their extended enterprise. This is something which will be talked more on how the consumer is becoming ever more demanding in today's world, what we call the Digital Consumers and in that context organizations are reaching beyond their immediate customers to understand the end consumer behavior. You will see also what is happening in terms of investment within the retail sector, within the manufacturing sector which client organizations are making to understand consumer behavior.

We are also seeing investments on the R&D. We have couple of case studies where pharma companies are investing in collaborative scientific work bench. You see one such example there, a biotechnology company doing that and trying to see that when innovation is happening within the organization, how can they leverage the distributed workforce they have. Today such workbenches are clearly available for organizations to engage with.

This slide talks about the investments Infosys has made and the solutions which we already have. Most of them have already been deployed. Some of them are in the pilot stage. In each one of these areas as organizations are compelled to simplify their processes, systems, and structures, ability to predict, ability to sense, ability to configure processes, again we have a solution sets. The last one talks about how collaboration is increasing across the extended enterprise and what organizations are doing in leveraging systems to actually collaborate in real-time. These are clear distinct examples. These are investments which Infosys has already made in the last two years and we are seeing results already as clients look at more and more investments into technology to help them reshape, reconfigure and get ready in building tomorrow's enterprise.

With that I would like to pause here and open the floor for discussion. Thank you.

Unknown Speaker
(Inaudible)

BG Srinivas

We talked about template-based approach. When the ERP systems got rolled out 15 years ago, it was more a transactional system and it addressed all the business processes within the client organization. Subsequently, the software package vendors did configure some of the systems through the industry vertical. So we already saw a verticalization of the system to make sure you do not have one monolithic ERP system which is so generic. That second stage of verticalization has already happened but still when it comes to implementation, it takes a different dimension because even within a sector, let us take a retail company or a manufacturing company, even though there is a specific template within the package vendor suite whether it is Oracle or SAP or Peoplesoft to suit that vertical, the challenges have been how much standardization you can drive using that one single template of one package. While implementation happened, everybody had this grand vision that 80%-90% are the processes which are already available on the ERP package, rest 10% can be customized. In reality when they implemented, it did not happen that way. They were forced to customize much more because they have to meet the regional needs.

Each business group within the enterprise demanded that their business was doing something distinct. They wanted to have a variant and that happened. It also created a massive org-change process for organizations to drive any high degree of standardization. At the same time organizations went about making acquisitions and they landed up with additional systems. So that being the scene, how in today's world do we reconfigure this and then standardize? When I say standardize, I mean standardization close to 80%. For each specific package we have come out with a template. It is a framework where we build and simulate the business process to suit a particular client organization. It also involves a lot of buy-in from the business person, again the same challenge, the different processes, different business segment and different geographies make demand. As you try and put stuff into the template and then standardize, as you continue your implementation, typically these global rollouts take two to three years, how do you make sure the template itself remains sacrosanct? How would you ensure that when you come out with additional changes, the core of the template is not touched? That is our core IP. In the sense that we have built up templates where we have internal tools which can monitor any changes any part of the organization is making on the core template and then we have put in a governance mechanism to prevent that from happening. There has to be a very structured change process one has to go through in making any changes in the template. At the same time as new countries get added to the template, there will be local customization, local compliance, local regulatory part which has to be implemented. That is again tracked separately. That structured process of using a template-based approach for rollout is something we have done and then while I share two examples this is something proactively we pitch to all client organizations which are re-looking at re-implementing their current ERP landscape. Last two years while of course the IT funding was relatively challenged but organizations had already set in motion the process for consolidation because they did not want to continue with several processes and they did not want to support several IT systems. That process is on and it will continue for the next 2-3 years for the organization to reshape.

The other one I did not talk much is about what Kris also did mention the fact that while Cloud computing is something that is still taking off but we are already making big bets on that. We believe that the Cloud and Cloud plus IT Services is going to change the landscape of how IT services will be delivered. For the client organization, it gives them enormous amount of flexibility. In many ways, it is tapping into services on demand. There was a time when organizations could do this for their hardware infrastructure, virtualization, now it is moving to software, it is moving to business applications. More and more the organizations move over their applications on to the Cloud, it gives them the flexibility to configure, it gives them the flexibility to add-on or let go depending on the business needs and they are not necessarily stuck with the high fixed cost of hardware, software, infrastructure, high capital cost. It gives them variability on their expenses but reduces fixed cost which is what the client organizations want. Most of them do not want to reinvent the mistakes of the past and then locking in to a cost structure which is not flexible. When the demand fell, most organizations could not keep up their cost-cutting measures in line with the business demand fall and that is where we believe offering services on cloud or offering services on-demand is going to take off. We have made again investments in building such platforms, we have a Procure-to-pay platform which runs on SAP. We have invested in that the hosted offering. We offer services along with that. The other one is Order-To-Cash; the third one is HR platform and the fourth one is the collaborative workbench, social commerce. These are four platforms already in the market place.

Unknown Speaker

_____ When the customers will be accessing the same product or same services at the same time, now how are you going to price these service?

BG Srinivas

See this is still evolving. At the same time there is a mechanism by which we can price. For example for our own hosted platform where we expect multiple clients to be using the services, within that if you break it down to the cost elements, there is a certain fixed cost, which is the hardware, the license and there is a transaction which occurs. The transaction could be triggered by work packet or for every transaction you can price. What we do is, we classify those transactions and work packets into medium, complex and simple and you can price it. Or what we typically do is run the processes for a couple of months, quantify that and then analyze how the business pans out in terms of each of these transactions and then start pricing. Once you enter the steady state of running this business for some time, you can switch over. For example in some times what we have done is the initial period, we run on Time & Material and then switch over to transaction-based pricing. Same thing is applicable for cloud. But cloud in its fullest form is not fully ready. There is a partner ecosystem which comes together, you have the data center, you have the software vendors, the hardware vendors and system integrators. Sometimes you have private clouds, public clouds. In all of this, what organizations do internally, will have to be extended to the partner ecosystem and then the pricing mechanism will happen. I will give another example though it is necessarily not just cloud but the transaction-based pricing which at Infosys we have positioned this as a New Engagement Model. We have a partnership with one of the US service providers where we won this large deal which was focused on infrastructure management services. It is a partnership model but the transaction with the client is based on work packet and some actual transaction. It is not Time & Material but in the same thing we have back-to-back arrangement with our vendor partner who is actually executing field service. This is already in place. This is working for the last 4 months. We will hit the steady state in another two months. It is a three-year contract. As the cloud plus IT services around the cloud is evolving, the pricing mechanism will also evolve. But it is possible to do and we have already started that in terms of pricing. This is a win-win situation. As more and more clients come on this (it is like shared service concept), your price for transaction reduces as volume increases and that you can pass on to your client. It will help you become more competitive. In the long run, it is beneficial to both parties.

Unknown Speaker:**B.G. Srinivas**

Ideal world, yes that should happen unless there is no other disruption happening. That's the idea. More importantly, flexibility. As demand goes up and down, your expenses are linked to that, you are not stuck with a huge fixed cost. One is price per transaction is going to go down as volumes increase, the second thing is the fixed cost becomes extremely minimal. So you have dual benefit with that model.

Priya Rohira

_____ large transformation deals especially versus the incumbents like IBM and Accenture and in addition to retail, which verticals do you think are taking a lead and the third one is what is the typical duration of these assignments, ranging from say 6 months and what could be for global rollouts which could run in to three to four years?

B.G. Srinivas

Let me try and can recollect the questions in the same order. One is yes in terms of large business transformation programs, we are competing with global system integrators head on. In Europe, we are also competing with large European majors. The fact is, today we are not only competing, we are winning these deals. We are not winning all the deals, but we are winning these deals even though we compete with them. In many ways we are the only player who is competing from an offshore perspective in some of these deals. The typical duration of these programs run anywhere between 2-3 years depending on the client organization, how global is the rollout. Third thing is, in many ways why are we winning? When we win these deals, business transformation deals are not necessarily won on price because it is a massive change initiative within the organization. They want to make sure that the chosen partner has the ability to deliver on that. Driving the change itself is a massive thing. The kinds of benefits they see when they work with Infosys, apart from the fact that we have a global template-based approach, we have the Value Realization Model, the impact framework where they are able to measure business case and measure this throughout the implementation and quantify the benefits. Third thing is the tools and accelerators which will help reduce the cycle time of this deployment and make it much more productive because it is very normal for these transformation programs to go through challenging times and it has been proven in the past. It is not something new. All this plus the fact that we have excellent case studies where clients who have been through this journey with us, have endorsed us as an organization and they have no hesitancy in referring us. Some of these have been the reasons why we have been winning. As we continue to win the deals, we know that we have to increase building capability and that is why there is a significant move to increase our capability in consulting and package implementation and investments are happening as we speak to enhance both in terms of capability and capacity.

Unknown Speaker:**B.G. Srinivas**

We have seen in retail, CPG companies, manufacturing, Energy & Utilities and pharma. Services is another sector which is also embracing this change.

Unknown Speaker:

I am just having this doubt between this shared services concept and cloud computing? Shared services is what we began a couple of years ago, is there any major difference or how do you differentiate between the two?

B.G. Srinivas

In some ways there are similarities, there is no doubt. When we talk about cloud computing, we talk of sharing of resources in many ways. You have common infrastructure, common software, common applications and many clients tapping in to that on-demand or even within the client organization based on the business cycles. Conceptually you can say it is a shared service but also 5-10 years ago, technology was not so mature to offer applications on the cloud. Today that infrastructure is available, including the fact that it will become affordable and the fact that even when organizations wanted to configure things, these technologies were not available. Today

everybody is investing - software vendors, hardware vendors, product vendors, system integrators and so we believe that it will take off. Also there is a significant business need. There is clear demand from the business that they do not want to get locked in with high fixed costs. It is as simple as that. One can give it a twist and say does it also play in to sustainability, yes? That means you are making sure there is optimization of resources across the entire gamut of hardware, software applications why should you consume more power, why should we have something more than what we need just to cater to some peak demand? It is not required. Let us have an infrastructure which can actually make sure that is balanced and very difficult to balance within enterprise. The best thing is to put in a Cloud where then you have a larger participation of other organizations that can participate.

Unknown Speaker

If I am a client in the US and if I tap into this, where will I tap? Will I tap into Infosys Bangalore, is it like that ?

B.G. Srinivas

The infrastructure can be anywhere. In many ways cloud has made borders meaningless. The data center or application can be anywhere. It does not matter. It is seamless. You will not even notice the difference. Of course it will still have to be hosted in a secure environment. All the security has to be taken care of, there is no doubt. Some of the data, depending on what is the requirement, for example in the European Union there are certain things which physically the data cannot go out of the Euro zone. You have to make sure those concerns are also addressed.

Unknown Speaker**B.G. Srinivas**

In a steady state if we are able to really take everything on to the clouds, my estimate is at least 30%.

Unknown Speaker**B.G. Srinivas**

When you look at cost you have to also look at also inventory and carrying cost of resources

Unknown Speaker**B.G. Srinivas**

The entire ecosystem has to be ready. If you ask me if everything is ready and available, deployment could be in our view anywhere between 1.5-2 years. Also it depends on what you want to put on the cloud. There are again certain things we want to retain with the organization. Some part you want to put on to the cloud. If you look at what is happening in the ecosystem, even package vendors like SAP, Oracle they also have to figure out, while some of their offerings are being offered to smaller organizations on-demand but overall what is there for the large enterprises? There are no easy answers. You need to also look at those. How many organizations are ready to move out of their old IT landscape to a cloud, whether it is in the public cloud or private cloud it does not matter, but it is a big change. If you look at what happened 15-20 years

ago when organizations moved out of their legacy onto ERP platform, this is another big step. It will take some time. While we do believe strongly that this is an irreversible process because the benefits are there for everybody to see, ecosystem is there and everybody is making investment, it will take many years for most organizations to actually switch like we went through in the ERP systems. This will further mature. There will be challenges. You cannot discount that. People will raise concerns, people will be worried. It also means a lot of consolidation in the industry. You will have fewer clients to work with in the first place. It will create a disruption in the ecosystem. Everybody in the ecosystem will be impacted - the client organization, the software vendors, the hardware vendors, system integrators; everybody will be impacted.

Unknown Speaker

How will the IT budgets trend in the long term as compared to now?

B.G. Srinivas

It is a little too early to make those guesses because it depends on the rapidness to which organizations will move on to cloud. Obviously when you move more and more stuff on to the cloud you leave less fixed cost. The cost per transaction is going to come down. Your ability to do more with less will increase. How much will depend on how rapidly things will move out to cloud.

Unknown Speaker

Yes, just one more question. Regarding your cloud strategy how will your strategy be with regard to data centers? Will you be owning the data centers or will you be partnering, that is first. Secondly with regard to package templization, one would assume that if there is a scope for making a template or a standard an SAP or Oracle would already have made the template in their ERP package. So just struggling to understand what is the scope for making the template?

B.G. Srinivas

Okay, the first part of the question, in terms our own investments, the platforms which we have built they are hosted by Infosys. So that is internal. But in cases where data centers are required, we do have partners. We have partners in the US, Europe and we will expand this partnership to cover us through Rest of the World. So it is both. We are hosting our platforms. The second part of the question, you can label an SAP for automotive sector as a template, there is a standard set of processes and there are multiple options for the auto sector one can embrace and implement. But the template in itself addresses the requirements of the auto sector. But here when we talk about template, we are talking about template in a client organization where there are multiple systems, IT landscapes, there are multiple continuing needs. Most of the needs which have been historically implemented have been customized. Third, it is also a little bit ahead of the time because the more you need to specifically configure a template standard for a particular client organization, a standard SAP or Oracle will not necessarily address all the needs of an individual organization. It will address the needs of the sector and it continues to evolve as they come out with featured release. This is ahead of time in many ways when we build some of these templates and some of these add-ons. Sometimes we do build these add-ons which because later a part of the feature of the newer release on the package.

Second when we talk about a template-based approach, it is not just a template which is unique. It is also about all the tools, accelerators which are used to make sure there is a strong governance, to make sure the uniqueness of the template is retained through roll-outs and changes which happen. A complete framework is what Infosys comes out with. For example just to extend that, if one were to go from one version of package to another and upgrade, we have a tool which runs on the clients production system and compares the current configuration and the new version and comes out with what it takes, what are the changes, what does it take to move over to the new version, what are the business sources which are impacted, it also gives an estimate of time

required to migrate. It makes that whole change very predictive because most organizations basically, apart from the cost pressure they put off an upgrade because they have to go through the change process. It is not very predictive, ability to forecast and estimate what it costs and time, all this is difficult. That is where our tools come in. That is where how we are actually helping clients to take these decisions. Another example I can give you where our client was trying to modernize its legacy. The same challenges surfaced. It is a massive change a disruption which occurs in the IT organizations. So they look for partners who can help them migrate and then do it in a seamless manner. Fundamentally it does not impact the business as the migration happens. Number two, can they keep the cost of migration itself low because when they switch over to a new platform, they are already investing in buying those new licenses. They do not want additionally a huge cost just for transition to a new platform. How can we reduce cycle time, how can significant part of this work be done from a remote location, why should it be done in a high-cost location, do you have accelerators, how can you also quickly make sure that we do not carry the challenges or the pain of the past to future systems. There are a lot of redundancies which would have built in. There will be multiple applications doing the same job. So even the rationalization of the portfolio is done as a migration. You do not actually copy the mess on to a new system otherwise you would have landed up with a more extensive mess.

Okay thank you.