

FOUNDATION OF DIGITAL BUSINESS

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Week 03

Lecture15

Lecture 15: Developing a Roadmap for Digital Transformation – A Microsoft story

Good morning. So, this is my last topic in this module Building Digital Mastery and Transformation Roadmap. This is a story about Microsoft the Digital Transformation Roadmap. Why I selected this story for this session is that as you know the Microsoft is a very giant biggest one of the biggest software IT company in the world, but they also had to undergo a digital transformation.

So, that is what is interesting. It is an IT company, the software company very large, the largest software company in the world. They do not make any hardware, but they also had to undergo a kind of a digital transformation journey. So, this will help you understand how to do the journey and why such even an IT software company also needs to go digital way. So, what is the difference between a digital

company and a IT company, for example. All IT companies are partly digital company no doubt, but that is not the digital way of doing business is something different and this same model can be replicated by any other conventional company as well. It is story about Microsoft story it will be I will be not talking about any of the products also although there some other products will be mentioned here, but this is not for their products or talking about the products at all. It is just about how Microsoft use their software products to go through this journey.

You can just think about yourself. You have certain products. How can I or you use them for embarking on this digital road? Take a look at the digital transformation Microsoft started with: creating a more personal approach. Mark these words: creating. They have a personal company, creating a more personal company. Building an intelligent cloud platform. So, Microsoft decided that they needed a cloud.

It is called Azure. Building an intelligent cloud platform and then reinventing productivity and business processes. Reinventing productivity and business processes for their customers. So, these are the domains they identified: engage your customers, empower your employees, optimize your operations, and transform your products. So, if you look at it, this is again very customer-centric. What Microsoft is doing is telling that not only for themselves,

they want to help their customers also to undergo digital transformation. They are transforming their products, optimizing their operations internally, empowering their employees, and then engaging the customers in a better way. So, this is the vision for digital transformation. Imagine if you could, whether you are Microsoft or anybody else, if you could. Engage your customers—that is, deliver personalized, rich, connected experiences in journeys your customer chooses.

Maybe you are making car or whatever, so can I think deliver personalized rich connected experience. Empower your employees, keep up with a fast moving customers, efficiently collaborating to anticipate and meet customer demands, because customer demands are changing. Their behavior is changing, they want things fast. So, can my employees cope up with this requirement other my employees educated, trained, equipped and geared up to meet this a customer expectation. Optimize your operations.

So, increase the flow of information across your entire business operations, better manage resources and keep your business process synchronized across all boundaries, so that So, employees can respond to customer requirements fast. When you use say ERP type of software enterprise resource planning an example is ACP, which is a software which is used across the organization for across all functions from finance to marketing to manufacturing to purchase to HR to maintenance everything and everybody is connected with the same they are working transaction on the same platform same software. Anybody needs any information is available real time basis and it does not matter where you are physically located it could be in any country it could be multinational organization.

Or you can have operations not only in India outside India. But if you are connected with that one software ERP everybody can get any information, so that you can respond to your customer salesman on the field and customers and query and if he is connected through his handle device may be a tab or his phone with his database server he can immediately respond and give the answer to the customer query. So that is what keeps the

customer engaged that whenever I have a query I get a information promptly. Transform your products, expand the reach of your business using digital channels, anticipate customer need, understand how your products are used and quickly develop and improve products and services.

Logical, reasonable, and obvious, but the point here is that you have to expand the reach. So, whatever reach you have, expand it, make it more powerful, and give it more traction using digital technology. The business drivers for digital transformation Increasing customer demand for personalized experiences, increased disruption from new business models, and a faster pace of customer and market change. Increasing pressure to deliver more value at a lower cost and increasing pressure to manage complex supply chains.

All of these are the business drivers of today. They are making you think or forcing you to change. So, that is what transformation is all about. So, this is driving the transformation. Why do I need to transform?

Why do I need to go digital? Why do I need to change? So, this is leading to focus areas for executives. Increase sales, customer acquisition, retention, and satisfaction. Better predict potential buyers and new product outcomes.

Increase design and engineering productivity, identify and implement manufacturing efficiencies and improve production output and quality. So, these are all the focus areas which the executives need to have, so that you know can execute this business drivers make them successful. And all of these you expect kind of business benefit which are. improved marketing and sales effectiveness, increased market share, improved perceived service, improved speed to market and reduction in operating costs. So, these are again very standard business benefits, you need to reduce cost so that you make more profit, then you have to be fast so that you can be competitive and you can be better than your

competitors etcetera and you can increase your market share if you are perceived as a better service, better product etcetera. The capability model for digital transformation again for the four domains engaging a customer, empowering employees, optimizing operations and transforming products, digital advertising and customer life cycle management. So, these are your requirement tools which you will need to use for achieving your digital transformation capability. Customer data management and analytics. Online and mobile commerce, tech enabled stores, omnichannel experience, customer service automation.

So, many of these things I have discussed touched upon in my previous sessions. I will not go on explaining one by one each of them because you are aware and these are very kind of self-explanatory online and mobile commerce. By selling not only will be a store physical store, but I can go online and I can do mobility empower your employees, digital talent management and developments, everybody needs to learn, be retrained, am I AI literate, am I digital literate, whatever it means, but you have to do something, you have to hire somebody, trainers, HR, these are all available in the market today,

You can do some basic AI training and things like that. They can start getting a liking for these digital or AI products, not an award set for them. So, you have to educate them so that they should not feel, you know, as a barrier that is difficult to overcome. You have to break that fear factor. Employee mobility, productivity, and collaboration. Collaborating with your customers, tech-enabled employee engagement.

So, these are all to do with your employees from your operations perspective: data-driven supply chain and logistics. Use your data to improve your supply chain and logistics. Make them more efficient. Digital equipment management, intelligent process and quality control, and digitized front-line and back-office operations. Bring in as much as possible all these digital apps and technologies and software which employees can use to speed up, like the entire banking process, for example. I mean, speed it up to that extent because everything is because of technology.

You can do net banking, you can transfer money via NPS in a second—in a few seconds, I can transfer money from one person to another. These are all fantastic features which have been given to us, thanks to technology. So, that is what we are discussing here. Utilize technology to change your processes and then keep your customers obviously happy and engaged. Transform your products. Research and ideation, product development, product launch.

just last session the last slide was all about design thinking maybe you can use something like that design thinking methods to work on these areas transform your products. Engage your customers that is the first domain. Imagine if you could enable customers to connect with the business in ways that they choose and deliver personalized experiences anywhere anytime. This is what your vision is that is what you imagine if they could etcetera. Now, this take a look at this interesting diagram this is of course, this is the Microsoft story, but it is all about anybody can use it quite generic.

So, how it starts? You learn of a product and service via the social media. These are all various social media platform you come to know of it. Good products, good services, and recommendation. Then you browse on the web stores try to find it out may be Amazon or wherever you many other sites are there you are browsing for that product

And then do you research online about the product and the service, you do some research once again says that what are the feedbacks, what customers are saying, what others are saying, review feedbacks, what are the service features capabilities etcetera. You do some background research and you compare maybe if you are buying a mobile phone present compare between mobile phones etcetera do something etcetera. And then you select the experience, what you identify what to buy and then you make the online and then you start using it.

Now you get a multi-channel personalized experience because with that for example, with that phone now you can connect to various features, software, platforms etcetera. Now you have some problem and you proactively identify an information of issues. So, you get a FAQ type of things service facility which you have done research earlier from the product and you know that if I have some issues that I can you know do what etcetera. And then actually you encounter a problem or a question you have a doubt or you want to clarify something or you have a problem whatever. What you do you explore the solutions online.

They have maybe chatbots, so they have maybe some do it yourself type of feature and FAQs etcetera. You ask questions, they give prompt answers etcetera. You may get satisfied or you may not get satisfied with the answer. Or you can alternatively find and consult with an expert online or also can you go to their if they have a physical service center etcetera. But other the two options either if it is a product and mobile phone for example, you go to the service center or you can also talk to an expert on the online consultation.

So, you contact customer service or raise a satisfaction issue online. You can do the things you are all everything you are doing sitting at home you have raising and satisfaction issue. The result in the problem either at the store or online. If you have store facility if you had been there the problem is resolved here otherwise it gets resolved online. And then you secure a loyalty of the customer through some offer, because the customer may be had a problem and you could solve it or whatever depending on the problem,

you can give a loyalty offer to your customer, just to keep you happy. The customer then is asked to share the experience and ratings, they are asked to give a feedback. How was the experience? Star 1, 5 star, 4 star or whatever star rating, then you can write something the various ways taking the feedback after you do any banking transaction usually when you come out they will ask you can you rate us now. So, you ask for rating or a taxi ride or everywhere we are asked to give ratings for example, that is your one of your experience feedbacks.

Then you monitor performance of the product anywhere anytime and use for the product roadmap. In this way because many customers are facing problems or raising issues or challenge or questions and you are online. You are able to monitor the performance of the product anywhere anytime and use it for your product roadmap because all these feedbacks will help you to assess your product and make whatever changes needs to be made. So, enhancement repeat or new purchase is powered by the ecosystem because you are also continuously improving etcetera customer also sees there is an enhancement. The your repeat or new purchase will can get influenced by whatever service etcetera

you had received or attention had received for your problem resolution etcetera and of course, your experience of using the product itself. So, all of this combined will give you finally, this. This sums up in general a customer journey map for a digital business. Engaging customers, so what is the solution story? Understand product use, customer sentiment and brand perception, gain insight into customer preferences and then try to market across multiple channels.

The market and sell products journey, you can use social media, you can use mass media, you can use devices, you can use the web, all of these can be used for marketing and selling a digital product. Then you move your customers through the decision-making process, helping and guiding them. To enable them to make a purchase. You can provide them with services like your cloud-based service. They can reach the cloud, meaning they can access that service facility anytime, from anywhere.

You have data telemetry measurements, social and market data, and various other data collected from the customer. You are giving the customer a 360-degree view and a personalized experience using various digital technologies, some of which we will discuss in the next few slides. How you provide them with a personalized experience helps them make decisions, targets your marketing, and allows you to develop new offers. All of these technologies are used to help your customer decide to buy, so you can

offer them new products and strategies to sell those products. And finally, you conduct responsive, agile, and effective campaigns.

Campaigns are carried out to increase sales, engage customers, and offer desirable services, and you can run these campaigns through multiple channels. Various digital platforms can be used to run such campaigns to engage your customers. An example here is Volvo, a famous car manufacturer. It is reimagining the car-buying experience—the traditional dealer showroom visit—by completely changing it. They are bringing digital elements to life for car buying, engaging and informing customers while helping them understand features and options.

What are they using? They are using advanced VR technology. We have talked about virtual reality. You can see the customer wearing this VR lens, and he can visualize the car physically even though it is not here. But you can be part of the car and see all dimensions of the car from different views—top, inside, outside, bottom, everywhere.

The challenge is to create a more immersive car-buying experience to help customers choose and configure a vehicle. It literally feels like you are sitting in the driver's seat, with the steering wheel in front of you, the dashboard—everything you can see or hear in front of you. That is the sort of feeling you will get when you use this technology. Differentiate the Volvo brand, highlight innovation, and keep up with customer expectations. The strategy they are following is using something called HoloLens VR, which is again a Microsoft product—the software part VR—to create an augmented reality interface for customers, helping them learn about and configure the cars in three dimensions. So, you can also help them change a little—I want this, I prefer that—whatever is permissible, doable, etc. But basically, you will give them an experience

an all-round experience about the car—sitting in the front seat, back seat, opening the bonnet or trunk, going below, seeing from below, etc.—everything. The results are building a reputation as an innovative and customer-focused company, increased sales, and faster time to market for a more immersive experience. So, you do not have to stock physically. The cars in your showroom—maybe you can keep one or two—that is fine, but you can give them all the detailed exposure through this technology. Volvo is a human-centric company—that is the core focus of everything they have done in terms of products they develop, but also in the way they interact with the

customers. This is the chairman's statement from the CEO. Moving on, we will talk about empowering employees. Teams can communicate and collaborate with detailers,

agencies, manufacturers and departments throughout the company, develop modern campaigns including automation, content tracking and social marketing. So, what you do is you are organizing work. All your employees, appointments, files, calls, tasks, phones, organizing work, schedule priorities, they are using various again it is not mentioned here, I will not mention Microsoft tools for doing the daily work, it could be office.

For example, but still I will not try to name any of these products and then they evaluate, collaborate and plan to gain insight from customer and market analysis. You are doing all your data analysis using data analytical tools, Microsoft tools to getting all the insights about your customers and markets and then you can collaborate with other departments manufacturer. and agencies using various cloud based platforms or virtual meeting space like Metaverse for example, is one of the tools which you can use for having virtual meeting and cloud based lot of technologies available platforms are available for various online meetings. You can do your collaboration with other departments and manufacturing, etcetera, and then you take action you communicate. So, you refine campaigns develop new products and shift investments again you are using multiple Microsoft tools for this purpose.

Once you have the data once you have the insights and then you discuss have your collaboration then you can finally, it is the outcome you can communicate finally, come to conclusion. This is my change or whatever advice or new way of doing things. So, this is how you are employing your employees again here as I will repeat I will tell you these are all Microsoft tools which they are talking about, but I have removed the names because I do not want to this is not an advertisement for Microsoft, but all you need to know is that you can have use different tools after need different IT tools for this purpose. Optimizing your operations. You could broadly share information throughout the business with agility and better coordination.

It is all about sharing information. Now, this diagram also again looks picture looks a bit you know complex, but it is do not look at it that way. Here like more personal computing. Here I have added some devices, so that it helps you to understand the Microsoft tools again. In the Cortana, Windows 10, we know about Windows devices, HoloLens, HoloLens was the one Volvo is using, the Band and the Xbox etcetera.

These are all your personal devices, the surface of you are using. And this is your productivity clouds, your productivity tools, again these are again Microsoft product names Power BI, Office 365, Skype, etcetera, etcetera, but can ignore the names. You are

using these tools to improve collaboration and to improve your outcomes. Similarly, from the customer side you can use these tools for the productivity cloud to secure remote collaboration, secure knowledge management, if you are working with your customers also as a part of your development process. So, you can give them access to some of these tools to help you and for them to contribute to your product development.

And then we have something called we are calling it as an intelligent cloud nothing, but the cloud itself the Azure machine learning Microsoft engagement data lake etcetera. So, these are all where the data is getting processed through various AI and analytical tools that is all it is doing it is in the cloud. We will not get into this tool details it is not made. So, all your customers Through the social media interactions is getting captured here the social sentiment coming here.

So, whatever you are the people are talking on the social media all unstructured data is getting into the Microsoft cloud and then even your operations supply chain etcetera all such supplier data everything is coming to this cloud where you are doing all you are running your analytical engine. And, then you are getting insights various insights plant and equipment insights, employee experience insight, application usage insight, supply chain insight, workforce insights, operational insight, product usage insight and customer experience insight. So, you need all of these insights. You need all employees, management, or executive they need it to optimize your. So, it starts from here the customers whatever they are saying, talking, etcetera,

and then the whole supply chain how it is moving things are going, etcetera any problem any issues all data getting captured here, getting analyzed through the analytical engines various analytical engines and outcome is finally all this. So, once you have achieved this operations through entire using of all such digital tools and technology, you are truly a digitally transformed organization. Transform your product, imagine if you could use many channels to expand the reach business better understanding how customers use your products and innovate quickly. Product transformation approach, so you have people at one side and the experience on the other side.

Do start with say design thinking, then telemetry is all about measuring and getting data, visualization, analyze and then action. So, design thinking I had shown you one slide in the previous class. It is basically another way of you know saying that is get oriented. So, that is the empathy part get oriented try to get the user story, then you frame basically you design and then you ideate.

So, there also we were talking about ideation. You develop a prototype, the minimal viable prototype or a product, and then optimize. Basically, the prototype has to be given to the customers for testing, and once you test, then you optimize. In telemetry, we are talking about gathering data. App telemetry: your various sources of data you have to collect are through your apps, through sensors, through people, and through business.

You can use a lot of tools; one of them is Azure, IoT, etc., which are Microsoft tools, etc., to get all of this data captured. Various sources of data: you have sensors. Sensors are collecting data, and then you are gathering the data. And many apps—people are using apps—you are getting data through the apps. Then, people—also unstructured data from social media, etc.—people are talking, discussing, etc. That is your people telemetry, people data. And at the business level, there are also various communications going around—messages, emails, and various other tracks of information—which will give you business telemetry, business data. Visualization is key to understanding things.

So, that starts with your knowledge. So, you prototype and test, then you visualize the data and get your context from the usage data, and then you provide feedback. You can use various Microsoft tools like Power BI. We will not talk about the tools. Visualization is one of the best ways to understand the whole data part.

Data has to be converted to information. Once you have an information then you display that if you visualize that to put it up in various charts forms etcetera pie charts etcetera from which you can get a better meaning of the data. The whole idea is that I have the data I have converted that into some useful knowledge information, and from the information I want to convert it into my knowledge. So, I use visualization for that purpose because we see pictures, we understand better things from pictures rather than words or text.

A picture speaks a thousand words it is a common saying so, which is very true. Pictures and videos gives us much better messages than reading a running text. Convert any tables etcetera data to a visualized format to help you understand easier and better. Action is the innovation part, the productive use. You recommend the knowledge, provide recommend something and then you provide a context,

then preempt future needs and act on behalf. So, you basically you have to be faster to the market is all what it means. So, after all of these net result is how quickly I can launch a product before somebody else does. So, this is my concluding slide here, the building blocks of digital transformation got it from a Capgemini report, so referring that. Again

they are talking about these three verticals, customer experience, operational process and business model.

In part of the domains under each of these will be customer understanding, top-line growth, and customer touchpoints. For operational processes, process digitalization, worker enablement, and performance management, For the business model, it is digitally modified business—the thing I was talking about for most of this explanation of the Microsoft story. To help you understand how they modified the digitally transformed business. If you remember these last two slides, the cloud's new digital business, and then digital globalization, enterprise integration, redistribution, decision authority,

and shared digital services and the digital capabilities here cut across these are your capabilities: unified data process, analytical capability, business and IT integration, and solution delivery. For each of these topics, I mean, we have—I am talking about in general in various most of the sessions something else. Let me just call it. I think if you read each of them one by one, you will understand, or you can also search for that information because this is too detailed. It will take a long time if I go explaining each of these bullet points. Like analytics-based segmentation for you. Fine. That is now. We have now probably understood the importance of analytics.

And how it can be used to get—once you get an insight, the whole purpose comes from the insight, like showing the various customer insights. From the customer insights, maybe you can help me segment customers into different cohorts or groups. With that, I come to the end of this module, and I hope you have understood that. You can read the book on Digital Transformation Roadmap by David Rogers, the book I have referred to here extensively to get more information. Thank you very much.