

# **FOUNDATION OF DIGITAL BUSINESS**

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**Week 03**

**Lecture11**

## **Lecture 11: Building Digital Capabilities**

Good morning. Now, the last section of this module, namely building digital mastery and transformation roadmap, I will be talking about how to build digital capabilities. So, I will just continue with where I left off in the last class on building digital mastery, and then we will talk about something called disruptive innovation. Now, you had seen this in the previous class: digital masters, we are saying, have some common DNA, common digital DNA. And we will talk about what those common things are and how they make strategic decisions on where to excel with their digital capabilities. So, that is the leadership part—the decision part, the strategic decision.

They focus investments on where they choose to excel digitally. And also, they combine the digital capabilities to exploit the synergies. First, you focus your investments on where they choose to excel digitally. So, you have to identify which area to invest in, and then you combine that capability—once you have invested—to exploit the synergies of the various technologies you have implemented. Let us take Burberry, for example.

They were focusing on customer experience and the experience of the younger generation customers—Gen X, Gen Y, and Gen Z. So, they have both in-store and online. So, they went online. Then, they went to social media and mobile channels. That was their way of excelling in their digital capabilities. So, with unified processes and integrated data, of course, as the backend—the output of all this effort.

So, you have a unified process, and then you generate lot of data with all these social media and mobile channel experience. If you take Asian paints, they went for process excellence. And they went for supply chain integration by implementing the softwares I told you about ERP and then supply chain management optimization. And then

centralized ordering the call center type operation where they were first to one of the first companies to introduce on this call center type operation I said the back in late 90s early 2000.

And then which resulted in we were meant for again customer experience and resulted in new business models. So, there again also it is a there you have a unified process and then of course, you are generating creating lot of data in the process in the margin. Now if you take a third one, Caesars is a casino company in Las Vegas. So you know Las Vegas is a biggest entertainment city in US, one of the biggest in the world probably. So what they wanted to do is develop expertise on analytical capabilities.

Why analytical capabilities? Because they are into the business of gambling. So they need to know that who is smart, who is winning or somebody. So, that end of the day they should not lose because if the winner takes everything then they will lose, but they also need to make money because they are in the business. So, they do extensive analysis to study the patterns, the playing patterns and from the patterns now they can predict.

Based on analytics, which of these patterns or styles will lead to a win, a loss, or whatever, or how much win, etc. So, all of that for these analytical capabilities—they invested in digital technologies like personalized customer experience, online casinos, and on-premise casinos. So, the on-premise casinos are what we have in Las Vegas, and then they also went online because then you can get a much bigger market, as the whole world becomes your market with online casinos. And there, you can use extensive analytical experience to—whatever event—I do not want to use words like tricking the customer or whatever, etcetera. But they have to be a successful company in the sense that they have to make money and profit. So, when they make a profit, many of their customers have to lose money.

So, in gambling, some win and some lose. Now, how do you start driving the digital transformation? So, the first action is to frame the challenge. What is the digital challenge? What is my digital challenge?

So, where am I? So, I have to do my 'as is' study to find out the state of things. So, it is called 'as is,' and then when we change, we call it 'to be.' So, what do I want to be? So, 'as is' process and a 'to be' process.

When you frame the digital challenge, you understand first the impact, then you assess your digital maturity and then you develop vision and align around it. So, you have to

first understand what the impact of all these changes can be or is going to be. Then you have to assess what is your maturity level, the organizations digital maturity level and then you have to correspondingly develop your vision and then you have to align yourself around that vision. The next step is focusing on the investment.

So, you have to build a digital roadmap, what technologies or processes to invest, what to do and step by step by step, it just happen does not happen just like that. So, you have to plan, build an investment case. When you have to invest something there has to be case for that, business case for that, if I investing what is the benefit I am going to get and what will be my ROI return on the investment. Because the finance person, the CFO will ask the first question, what is this investment for? Is it going to make money?

And what will be the return on investment? So those answers must be also be ready. And then you set up a governance model because you have to manage the whole thing. Why do you need the governance model? Because once they are in place all that changes has to be managed that includes change management, the cultural change.

So, all of these things have to be managed through proper governance to ensure that all your employees are aligned with your digital vision and the overall program of this digital transformation. So, that is ensured through a proper governance model. The next stage is Stage 3, which is engaging the organization. Engaging the organization means you have to now bring everybody into the action. Signal the change—that is, inform everybody that yes, we are going for a big change. Mobilize at scale.

So, you have to get everybody onboarded in the sense that when you do mobilization, the first thing is training. Then, your employees will ask, 'How do I use this technology?' So, I need to be trained. Therefore, you have to train, educate, and train. Evolve the culture and adapt work practices.

So, you have to now bring in this culture of using digital technology. Think digital—think for every solution. First, ask: 'Can I have a digital solution for this?' or 'With all this technology, can this solve my new problem?' So, that is what is meant by thinking digital and adapting all the work practices that go with digital technology because the way you work will change. Obviously, it will change now. You are always working like previously—if you go to a bank, there is a teller person sitting at a counter or the clerk sitting across the counter. They will ask you what it is, etcetera, then they will do something, but everything happens on a computer.

So, whatever you ask, the first thing they do is type on the computer, and they will give you an answer, etc. Nothing is registered in any files, books, or papers anywhere to be seen or used by anybody. So, that is a change in the work culture. And the last part is to sustain. Once you have made the investment, and engaged, now you have to maintain that.

So now you have to build your capabilities because it initially started just to educate them and mobilize at scale, but now we have to build up the capabilities. Align incentives and rewards, and measure, monitor, and iterate. Incentives and rewards because you want your employees to use this and continue using this and actually love using it. So you have to incentivize and give some rewards so that people are motivated. this change, they are motivated to accept this change. After all it is all people, you are managing people, so people have to be incentivized in whatever way,

there could be various methods of incentivization, I will not discuss this, that is part of HR, but they have just to be done. And measure, monitor, and iterate. Measure means any change you do, any transformation has to be tracked against a KPI. So, you have matrix, did I achieve this, did I achieve this matrix, this was my targets, was it achieved, so much cost savings, so much whatever, so much efficiency, so much productivity, so much CSAT, customer satisfaction. So, everything you do will have to have a metric, and you have to measure against that metric, track those metrics, and find out whether you are achieving them or not.

And iteration is again about trying. You have to experiment, use the agile method—it is an iterative method—so you keep trying, getting results, failing, taking risks, and then coming back to try again. The DNA of digital masters, what is their DNA? The what and the how. What are the technologies? Using digital technology to transform the customer experience. operational processes and business models. So, this should be the DNA of digital masters the what part the digital technology part and the how part the leadership part

successful transformation depends as much on how firms manage digital transformation then solely on implementing new technology. So, how you manage the transformation not just technology if you just have technology you will not you will probably fail. So, this side you have your digital capability and this side you have like your leadership capability. What are the building blocks of digital capability? Now, we are talking about

the digital capability not the leadership, digital capability what all could be the building blocks.

So, I am just breaking it up at the next lower level. So, you have to think in these three blocks customer experience, operations and business model. So, customer experience is involved with customer understanding, top line growth, customer touch points. So, digital has informed and amplified customer expectations because of introducing whenever you introduce something new digital etcetera customer comes closer they are more reachable. So, their expectation level is also increased. it has got amplified so now they have more expectations from you quicker response for example 24 by 7 service for example middle of the night

I am not going to do any net banking transactions so can I get a support is there a chat bot from the operation side is the process digitization this mostly internal focusing worker enablement and performance management so digital is improving traditional constraints in the operations. So, they are making it like sort of easier, I mean things can be much easier, faster, single point of truth, you do not have to duplicate a data entry multiple times just once entered means it is final, then you can see reports anytime, anywhere, real time basis. So, that is quicker information, so that is one of the very strong points of any digital transformation, when it do ERP or the softwares, as soon as the transaction is finished

The reports are available, the outcome is available to everybody or whosoever needs it on a real time basis and wherever you are located. So, you might be a salesman in the field, but you quickly need an information about some latest order or whether the order has been shipped to your customer, you have got your customer, the customer was how come my order has not yet come, when will it come. So, instead of trying to call up somebody find out etcetera you can login to your system through your handle device for example a tab get into your ERP system and find out and tell you this was shipped yesterday it will come tomorrow. So, that information you can give to your customer on the fly using your handle device which is connected through internet to your central server your central ERP system.

So, information is available at your fingertip anywhere, if you are connected. You can place orders if you receive from a retailer for example, you are a retail sales person, you can go to a retail shop and they said I need this, this, this and then your handle device you can move those orders and if it is connected into internet it will go to a server

immediately and if you are in a very remote place for example, in a rural area where there is no connectivity or the air tail or whatever mobile operators are not there. So, when you come back to a hotel in the evening or to the nearest town and you log in immediately all the information flows to your central server to the ERP.

So, the information flows the order booking goes gets into your system manufacturing system. So, that is how digitalization operation helps. It transforms the way the business runs and everything becomes real time, online and a single point of data entry. Just you enter it once, you do not have to repeat it anywhere else. Once that salesman does that, job is done.

Then entire rest of the thing from planning to manufacturing to sales, booking, everything will be done based on whatever he has entered. Talking about business model, so it is now digitally modified business. And also you can have some new digital businesses like Asian Paint Story that selling a service solution not just painting but a painting service solution and then digital globalization. Models can reorder value chains and create new opportunities that is what Asian Paint That is what Nike did, that is what your Caesars did for example the gambling company, you go online.

So you are running a big centre in Las Vegas but with huge customer base but if you go online that customer base can be multiplied in times. So you can thanks to digital technology and new business models. He can go from for example, an automobile company today which is manufacturing and selling cars say a Maruti for example, let us take Maruti, it sells cars. But tomorrow Maruti can go on a rental basis that you do not buy my car, you take it on rent and use it as a commercial vehicle for example, taxis, Uber can take Maruti cars on rent. So, Uber also does not buy a car, it does not want to buy a car.

So, Manutee tells him he does not have to buy a car; he can use my car and rent it, paying me a monthly fee or per kilometer or per day—whatever mode of revenue. So, these automobile companies can become service companies. If you take IRCTC, IRCTC is the Indian Railways Catering and Tourism Company. From that railway catering, it has become one of the largest e-commerce sites for ticket booking. So, millions of tickets are booked on the IRCTC site every day in India.

Now, in addition to that, they have expanded into other services, extended services like package tourism, point-to-point drop—maybe once you reach a station, they will take your baggage and drop you at the hotel. So, all those services they have started, thanks to

digital technology, because they have the platform. So, if I have booked a ticket—say, I am going to Bombay—then I can further book a taxi or car pickup from Bombay station to wherever I want to go. Or I can take a package trip, like Char Dham or whatever.

So, they will take me to various tourist places. So, they have become travel operators—from just railway ticket booking, they are now full-fledged tourism operators. So, that is how opportunities are opening up for existing companies in a big way. Four interventions that together change the customer value equation. Customer experience design from the outside in, which means a forensic understanding of customer behavior and segmented journeys.

So, since the customer is not coming closer, you have given him the access to a platform or a social media or a chatbot. So, the customer can give his feedback directly to you and online real time as soon as it does it comes to you shortest possible time. So, the Zara case if you compare Zara case Zara story fashion the Zara is getting the customer feedback from physically. At the stores because the stores man person is talking to the customers and then at the end of the day he is feeding it in his computer and once he does that then only it goes to the design department.

So that there is a time lag whatever hours of the days because he can do all that at the days end otherwise he is busy selling. But in this case if you give it the customer access to your platform through social media or any other device or tool could be a chatbot. So, you can get things faster. So, design customer experience for the outside in, then you increase the reach and engagement with smart digital investment. So, you have new digital channels and reach and engage where it matters.

So, this is what I was actually talking about. So, you have new digital channels. You are giving access various channels to the customer. That could be Facebook, could be any other social media platform, Instagram, Twitter or X or even directly to your portal. You can give access to the data or you can have a chatbot.

Plus, put customer data at the heart of the experience. So, make the customer experience and personalization more scientific, harvest and enrich data. So, this is from the data you are capturing through various means: the actual purchase, maybe online transactions, online web surfing—every data point gets captured. And then it's up to you to utilize that, do your analytics, run your analytics engine for all this data, so that you can make the customer experience and personalization more scientific. So, it is more data-based. So, you know what the customer likes and dislikes.

The customer always feels happy when you go and say, 'Okay, I know you like a red shirt,' and things like that. So, you say, 'Wow, they know what I like or dislike.' And you should try to harvest and enrich your data. So, try to collect customer data as much as possible, whatever it is. Get feedback, ask for feedback, monitor the transactions, and things like that.

Then, seamlessly mesh the digital and physical experience. So, old and new both matter in omni-channel integration. So, omni-channel integration and old and new matter. One example I gave you was Walmart. So, Walmart is a very traditional giant supermarket, the biggest in the world. And then, seeing the onslaught and threat from these e-commerce companies, they started their e-commerce.

So, you become omnichannel like Burberry. Burberry traditionally has stores all over the place—in airports, towns, and cities in Europe. Burberry is very popular and famous, but they went online as well to impress the younger generation and also make it more easily available, like Amazon. You sit at home and order things, and they come. So, nothing can be easier, better, or more convenient than that. I am not talking about Covid times; today is also beyond Covid. We have gotten so used to it that, for example, Blinkit—we want to order and get things in 10 or 15 minutes. Whatever this quick economy is—good or bad—it is here. So, every company is thinking of this omnichannel approach: 'Let me go digital as well.'

I may have a store; I will maintain my store and not kill it. But I want to increase my business through additional growth via digital channels because both old and new matter. So, the combination of all these four is the four types of interventions that together will change the customer value equation. On the data side, you can see how we can monetize different channels and give better value to the customer. So, data is one thing you can use to monetize many of your activities, and those can become additional sources of revenue—like the classic example of MasterCard. There are huge amounts of data, with millions of credit card transactions happening every day across the world.

Many of these credit card transactions are not honored; they involve defaulters, delays, high-value transactions, low-value transactions, and more. So, all that data is being used by MasterCard, and they are monetizing it by utilizing it to improve their developing apps on cybersecurity, digital identity of people, and selling those apps to companies—let's say, under a new line of business. Since there are people involved, people have egos.

So, that is what the CEO's job is—to manage the egos of both sides so that they can work together.

So, that is one of the transformation challenges—the change management aspect that the CEO has to manage. Now, there is another topic. The last point in this presentation was the disruption strategy that happens. There is a statement by Brian Chesky, CEO of Airbnb, who says that we are living in a world where people can become businesses in 60 seconds. But today, the thing is that you can start a business with very little because of cloud technology and the internet. So, with a computer, internet, and cloud, you can start any IT business and also scale it.

So, there is a famous book by Professor Clayton Christensen of Harvard, who talks about something called the blue ocean strategy. The blue ocean strategy is where new companies can suddenly emerge and disrupt an existing company with an unknown business model which was never there. The examples, again, classics are Airbnb and eBay. Nobody had known of such a business model before, and they just suddenly came and became so successful. So, what they do is they eliminate, raise, create, and reduce.

So, they eliminate factors that the industry has long competed on. These should be eliminated. Some of the old things they need to eliminate, they raise the factors which should be raised well above the industry standards, and they create factors which should be created that the industry has never offered. So, there are things which were not there—the facilities or services—and they reduce factors which should be reduced well below the industry standards. So, I will talk more about it in future slides about this Blue Ocean Strategy.

So, the idea generation of the Christensen theory of disruptive innovation is if you see this graph—the product performance with time. So, the incumbents—existing companies—are sustaining; they are doing very well. But this new trend comes suddenly and works in the lower segment of the market. They do not go upstream, but the high end they stick to mainstream and low end, and they also move in very fast, disrupting the existing players. And how do they work? Since all of us now know how Airbnb, Uber, these companies work—Tesla, Philips, and Amazon—I will just quickly run through. These players target existing industries by offering an alternative that appeals to an ever-growing market.

First, you have to build a platform. Again, it starts with a platform. So that everybody can join easily. Like if you take Airbnb—the house owner and the traveler. If you take Uber—the taxi driver and the taxi user, the customer.

And it can be quickly rolled out due to the network effect. And in the wink of an eye, new companies with a turnover of billions suddenly arise, mowing down many of the existing industrial sectors. Suddenly, very fast, Airbnb became a huge challenge to the existing hotel industry, and same with Uber—they move in very fast. So, that is why it is called something like a blue ocean strategy, because there was nothing existing—no one even thought about it—but suddenly it comes, and then in a very short time, maybe 6 or 1 year, everybody is using it. Creating customer experience.

So how do you do it, this checklist? Put customer experience at the heart of your digital transformation. Design your customer experience from the outside in, means find out what the customer really wants, otherwise we give what we think we should give, it should be the other way, we should try to find out what the customer wants and then give that. So, put the customer experience at the heart of your digital transformation. Increase the reach and customer engagement where it matters through new digital challenge.

So, if to increase the reach means how do you do it? You create a platform. Once you create a platform through an app, anybody can access your platform and find out where you are located, whatever facility you are giving, everything you have to sell, it is available on the MyApp on the platform, through the platform. And anybody can reach that or get that from anywhere. Make data and analytics the lifeblood of your customer experience reinvention.

So, once you are in the business and everything is happening through your app, and because it is digital, all data gets captured. So now it is up to you how you want to use your analytics. So, make data and analytics the lifeblood of your customer experience. All that experience you are collecting. Use that data, do analytics, and try to find out more insights—are you missing out on something important that the customer wants, but you do not know?

So, will the analytics with the data give you such insights or information? Seamlessly mesh your digital and physical experiences in new ways. See, at the end of the day, you are running a taxi business; at the end of the day, you are running a hospitality or hotel business. So it is absolutely physical.

But the way it is being done, the way you are managing and governing everything is digital. So you have to merge seamlessly the digital world and the physical world. Keep on innovating; it is never over. Because that is the advantage of digital technology. You can go on adding various technologies and you can start up new businesses.

The whole set of data can give you an idea of how to utilize that. Every digital improvement in customer experience will open up new possibilities. Power of core operations. Free yourself from the old assumptions of the pre-digital age—I mean, whatever it means, the ideas you had 30 years back. Consider whether new digital technologies can help rethink processes, remove bottlenecks, and eliminate inefficiencies.

Can I use them to improve? Consider how each of the six levers may help you improve your operations. And a strong digital platform is essential for operational transformation. So, these are your six levers standardizing, empowering, controlling, innovating, orchestrating and unleashing. So, with these levers you can utilize your digital investment to improve your operations and bring out that operational transformation.

So, these are all standard terminologies which we know standardizing, empowering, controlling, innovating, orchestrating and unleashing. So, I will end, this is a very interesting topic. So, what I want to show you is some of the books I have given here, there are plenty of books, one can be textbook, others can be reference. These are Clayton Christian innovators dilemma, when new technologies cause great firms to fail, this is about the blue ocean strategy. Then creative destruction, why companies that are built to last underperform the market and how to successfully transform them.

Digital disruption, end of competitive advantage and in search of excellence, good to great, what really works and will to last. So, these are some very interesting books if you can find them you should try to read some of these. Some ethical challenges of digital transformation is which I have just quickly mentioned and we will do it later on as well. Data privacy and misuse, when you are handling data you have to be very very careful that way it is after all it is a customer's data. And it is sensitive, so if you should not misuse, should not sell your customers to somebody like famous story of Facebook with Cambridge analytic

which happened during the first election of Donald Trump and Hillary Clinton, so this was a big scam. And you can be liable for damages if you are misusing data, bias data bias data can give some wrong very wrong decision, data can may not be very clean, it can be very biased towards racism, gender, religion etcetera. So, you have to be very careful about that the biases you must notice them and remove them and inference models and algorithm, AI and ML depend on training data. And when we talk about AI and even later on we will see this training data how it influences the training. So the quality of data is influencing the quality of the output.

So more of that later when we do AI. And substituting human intuition. So, robots, AI is autonomous car, so the machines take the decision, the human intuition is missing. So, robots are good and autonomous cars are interesting, but there is a human angle to it. So, you have to be aware as a responsible person, as a responsible manager, and a responsible user; you should be aware of some of the pitfalls of going too digital or too automatic.

Unintentional use of technologies, for example, bitcoins are even illegal in many places, or 3D printing—3D printing for guns, etcetera. So, various technologies can always be misused because they can do many things, including bad things, like fake videos, for example. which is very common, fake videos, all these fake news floating around and morphing of characters, put somebody's head on somebody's body and all those things which can be done very easily nowadays with AI. So you have to be very extremely very careful about all these things. So, be conscious about these things, be responsible, be ethical—that is the message I wanted to end with in this section. Thank you very much.