Understanding Incubation and Entrepreneurship
Prof. B. K. Chakravarthy
Department of Engineering Design
Indian Institute of Technology, Bombay

Entrepreneurship and Management, IIT Hyderabad
Module - 09
Entrepreneurship Ecosystem in IITH
Lecture - 21
Entrepreneurship Plan to action

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Prof. Nakul Parameswar

Entrepreneurship and
Management, IIT Hyderabad

Ph.D : IIT Delhi

Research Interest
- Dynamics in strategic alliances
- Competitive strategy
- Start-up management

We will go on.

Thank you professor.

To Dr. Nakul for his you know, we were asking him to show some you know very interesting case studies around the world also on little bit of on strategy and how design and strategy can go hand in hand in understanding the entrepreneurship ecosystem.

Thank you very much Professor Chakravarthy and since you asked me to introduce I did my PhD from IIT Delhi prior to that I have worked in a fin corporate for year and a half. After my PhD I primarily work on strategic management that too on corporate strategy I work on joint ventures alliances, mergers and acquisitions. And over the last three years I have been affiliated to few organizations, wherein entrepreneurship happens to be an important domain.

And I gradually started looking at how can we merge strategic management concepts to entrepreneurship concepts, and that is how I happened to be here. And when you look at entrepreneurship and strategy, it the terms are very very widely used vividly used and people may or may not be understanding the real meaning.

So, I was focusing on the discussion of Professor Surya Professor Renu and Professor Ganesh and they all almost emphasized the fact that, there is a importance of taking your idea and making the reality and looking at the commercial success of it. Commercial plus social as we are also looking at social aspects to be fulfilled.

Turning **Idea** into **Action**

So, when you actually try to turn an idea into a action rather your plan to into an action you are actually dealing with integrative summative kind of a theme, which primarily connects to strategic management.

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Student projects

Team 1:
Supporting visually challenged for Financial Transaction

Team 2:
VR to relieve stress and relax

Team 3:
Mindfulness based stress reduction

Team 4:
Developing Motor Skills in Kids of 6-12 years age

Team 5:
Teaching mathematical concepts through gamification

Team 6:
Interactive eating experience for toddlers

Team 7:
Backpacks to be more fun and engaging

Team 8:
VR learning modules

So, I was basically going through the different ideas of the different teams, and I realized that the huge potential that exists in each of the idea, but at this stage you might be planning.

But, eventually when you want to take it forward and ensure that the plan is put into action and you are able to leverage the value out of it that is where the real challenges come. And Professor Chakravarthy had requested me that if I can discuss few examples of established organizations that we see now, and what was their case during their initial stage what was the what was the scenario during the start up stage. So, I thought let me bring up the perspective right away, right.

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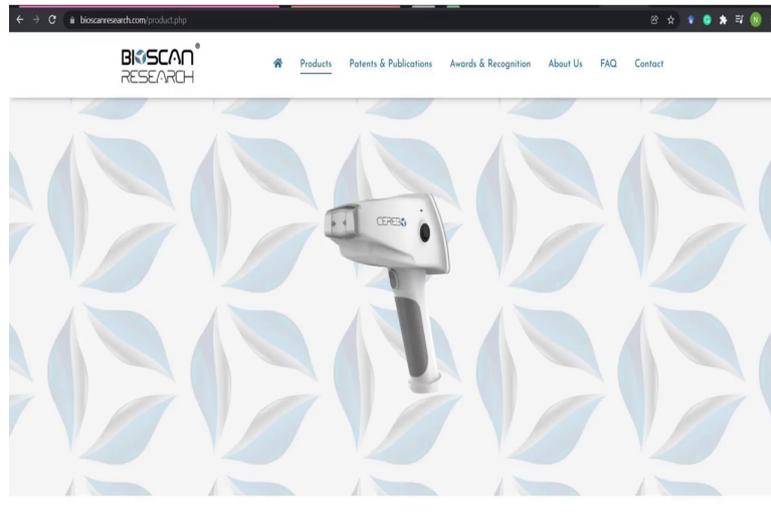
There is an organization known as Cerebro. How many of you know this, anybody who knows this organization? Rather the organization name was Bioscan, which is trying to create a product in the health care set up. And you know whom they challenging? They are challenging CT scan machine manufactures.

Now, if I want to take a much simpler example, let me start with an example on Sid's Farm. How many of you know this organization? It is a Hyderabad Secunderabad based firm. Anybody knows this organization? It is not a tech startup business ok, a very fascinating organization to look up to. This organization deals with organic dairy products, and they are just limiting their operations only to Hyderabad and Secunderabad.

And they hire people from across the country like the top B-Schooled, top dairy institutes so on and so forth. Now as an organization the founders of this firm would have taken a conscious decision to restrict their them self to only Hyderabad and Secunderabad. And if you look at their competitor set they are competing with all dairy heavyweights right.

The heavyweight could be regional, the heavyweight could be national, it can be even international also. Now as an organization, you have a very pious idea saying that you are

looking at providing organic dairy products within Secunderabad and Hyderabad. The moment you restrict yourself, you are able to look at focusing your resources, ensuring that your resources create value in that specific market.

Now, if I go back to the teams ideas right the moment you are saying VR to relieve stress and relax, I am just arbitrary taking a few names out here. So, if the moment you are saying I am we are going to look at VR to help you release stress and relax. Now, this is the initial stage for all of you to contemplate here, but you need to graduate to a level wherein you say for whom, which market are you targeting right, which market then would get into marketing conflicts, which segment, which target, what is the position that you want to create.

So, eventually you would have to build an understanding about, how are you taking the plan putting it into the action. Let us take another example.

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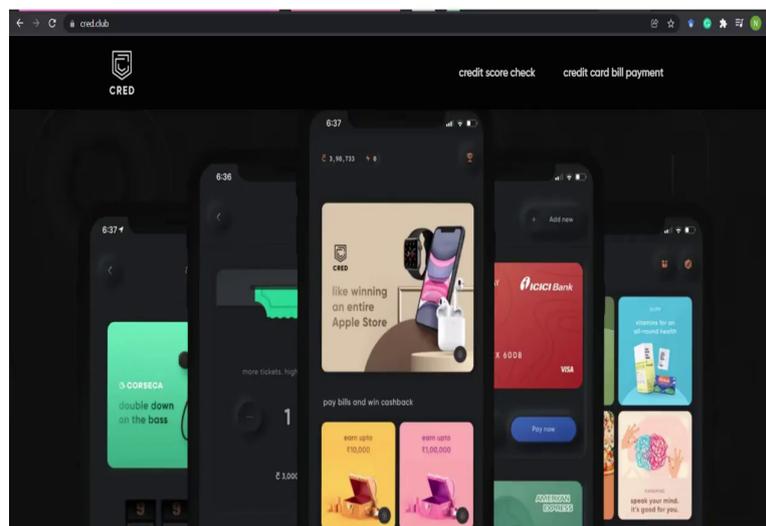
How many of you know this organization CRED? People who watch IPL would surely have come across multiple ads by CRED; they are helping you settle credit card bills. But how do they earn money? Is it that just they are providing a mechanism to help you settle the bills or they are looking at a eventual opportunity that they want to capture?

How many of you know that there is a membership requirement, there is a members their club known as CREDs Club? If you want to eventually get into CRED app and start using their facility to settle your credit card bills, your CIBIL score should be above 700. But, the moment you have this classification of the customers group you are engaging with those people who have the highest credit rating in the country.

And eventually, you would see how is CRED Kunal Shah going to use this market, going to use this audience to create value not only by helping you pay your credit card bills, but also creating a ecosystem for E-commerce within the application. Not only that if you look at commentaries on this organization people are looking at CRED becoming an important consideration, maybe ten years down the line five years down the line to actually play an important role in determining whether that person should be provided a loan or not.

Now, what are you saying, are they going to replace brand banks credit department? So, look at the look at the onset of the idea and there it has been actually taken forward. So, you all have immensely potential ideas, I was looking at another idea and I was fascinated, if I had an opportunity to play Pallanguli, if I am pronouncing it correctly or Chaturanga. I would learn to say some skills during my childhood that those skills would have been retained by me forever.

There is an organization I do not know which team is it, I do not exactly recollect the team. It is trying to recreate or pull out games which have been forgotten and trying to develop it further. So.

Yeah, it is team 5 yeah. Team 5 Apoorva, Vaishali and all yeah.

Team 5, ok. So, when I look at those ideas it is an immensely potential idea, but the challenge will be when you approach an education institution, they would ask you ok what do I gain. You might be creating value, you might be creating value to my stakeholder also which might (Refer Time: 07:36) students, but what do I gain? What do you gain right? What do your suppliers gain? What do your complements gain?

When we are actually planning for a start up or an entrepreneur venture, we need to look at it holistically. What you are right now doing is perfect for this time period, but the moment you want to take it forward, things would become much more complicated, things will become much more challenging, you will be constrained for resources that is where we have to (Refer Time: 08:08) of incubation centre and accelerator programme support by government and other entities, support from academics, support from faculty members, departments do come up.

Let me go to the third example. How many of you know this organization known as Organiko?

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So, what they are trying to do is, they are trying to create cosmetic products from donkey's milk right. So, I met this organizations founder in earlier organization that I was working, and her emphasis I think the founders name is Pooja. Her emphasis totally on helping donkey rearers, people who own donkeys to actually know the value of the products which could be created from donkey's milk and in that process she is also trying to create economic value for her own self.

Their products are listed in all E-commerce platforms right, there is a technology involved in it in converting or in putting into use donkeys milk, creating a cosmetic product out of it. And the price value for this is very high right, if you look at the audience that they are targeting it is like celebrities, people who are conscious about their looks, they are looking at providing aging solutions so on and so forth, but you know how did they start the idea?

The conceptualization of the idea was Pooja was interacting with donkey rearers right who primarily provides support to construction right, if you are local construction if you see houses getting built in say rural areas, usually the load would be put on the donkey. Majority of the people who owned these donkeys did not know that the there is a immense value for donkeys milk.

From there they identified a potential problem which they can tackle using the milk from donkeys and provide value back to the farmers.

Rearers.

Or the cattle rearers. Now, again connecting back to the teams and their ideas, I realize that all these 8 teams have really path breaking ideas. The whole intent is that these 8 teams can come out with viable proposition and we can actually see an organization coming out from these 8 teams. So, you should be able to foresee what are you going to face in future. Now, I will go to much more specific examples, which are maybe I will come from the world perspective and then I will come down to India.

Integrative

Summative

Interdisciplinary

Break the Shell

Illustration by Anthony Van Lam
http://www.artshine.com.au/2012/06/tales-my-mu
m-told-metale-12-frog-in.html

When you are looking at turning ideas into action, you need to break the shell. The shell is usually the limited thinking capabilities limited thought that we all have right, and if I can say in Hindi, it is like saying [FL] right, people who understand Hindi would be able to relate, like we are all like a frog stuck inside a well. We know the well, we know the peripheral area within which we are stuck in, but we want to actually take this idea in, put it into action you need to look at the bigger picture.

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You need to be focused on your context, but at the same time you should be able to extrapolate your thought and see what is it that you are likely going to face when you are going to take it forward.

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Let me give you an example. How many of you have played Mario as a game?

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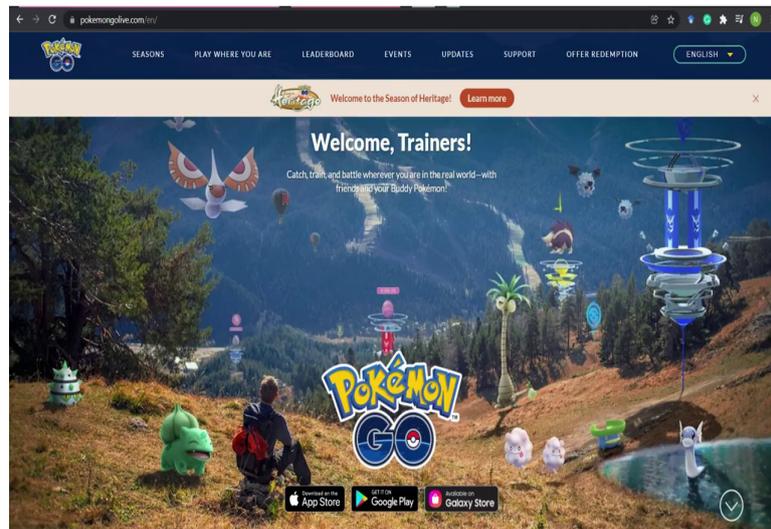

Or recent example, Pokemon GO as a game?

Yeah.

So, is not this an organization which is looking at design aspects, plus technology aspects, packaging it into a console, giving you a device which can be connected to a TV and their audio visual and people are entertained. But how many of you know that this organization was actually trying to recreate the video game industry in the world?

It was until Nintendo came into picture, the games that we played were arcade games. You go to a shop, there will be big units put up, you put in a coin there you put you pay money get the token put in the coin then you play right, such models also exist even now.

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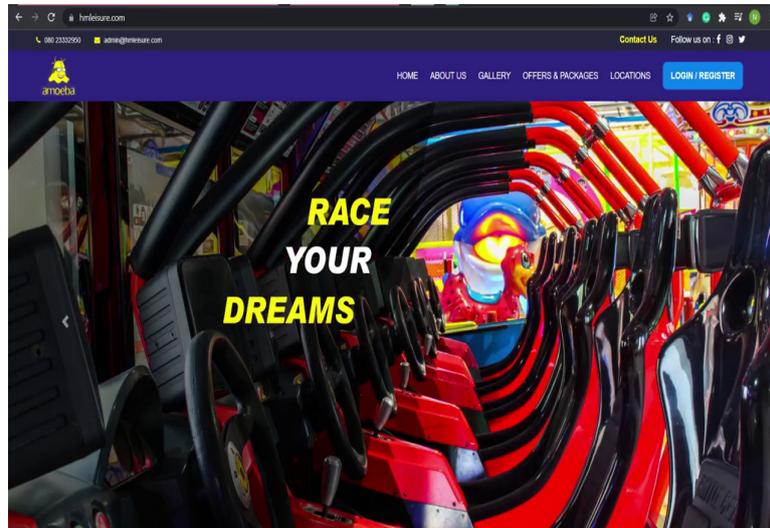
Like there is a very famous gaming arcade known as Amoeba in Bangalore right, where you go and engage yourself in a location which is meant for gaming.

Nintendo®

This organization based out of Japan started in 1889, it was actually into building arcade games. At one point of time, the founding team it is a family owned organization. The founding team realized that we are not going to sustain ourself only looking at providing arcade games forever, we need to see how we can leap the (Refer Time: 12:56), we need to leap the curve and see can we be the first ones to create a new industry altogether within we do, amazing idea right.
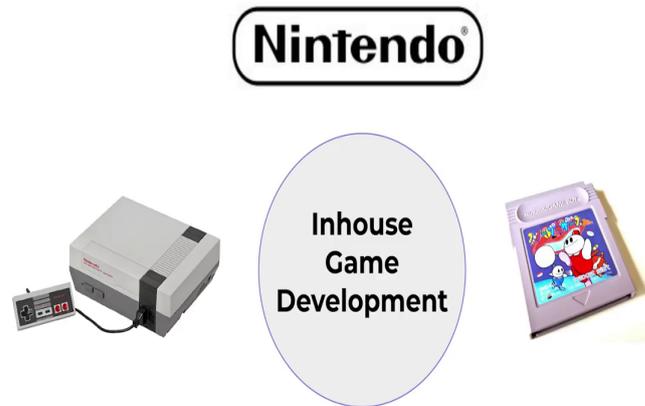
At that point of time 1980s, 1970s nobody would have thought about such a proposition.

But then when they tried to conceptualize, they were ready to come up with the first kit by themself.

They also developed the console; they developed the cartridge which you put on the console to play the game. They were able to put the tech part, ensured that they find the right clientele you know they did not have a direct to consumer model.

They went to Walmart Kmart. Now, if you as a startup, you engage with Walmart, Kmart they will have much higher bargaining power than you right. Forget your idea getting into action without getting their support because, you will not able to reach out to the customers. Now, what they did is initially they came out with a few games by themself, but lately realized that we should not be into the game development sphere.

We should have a dedicated set of organizations, which will develop game for us.

Now, the moment you are looking at a scenario where you are expecting that an organization will develop games for you, you are actually creating a market for Nintendo's consoles and the games will be provided by external entity. Now, fast forward yourselves from their initial stage of developing arcade games to their thought of developing video games to further their thought that we should be a reigning king, we should be like the controlling unit of this video game industry in the country that is US at that time. And then you will see how we can leverage value. You know what they did?
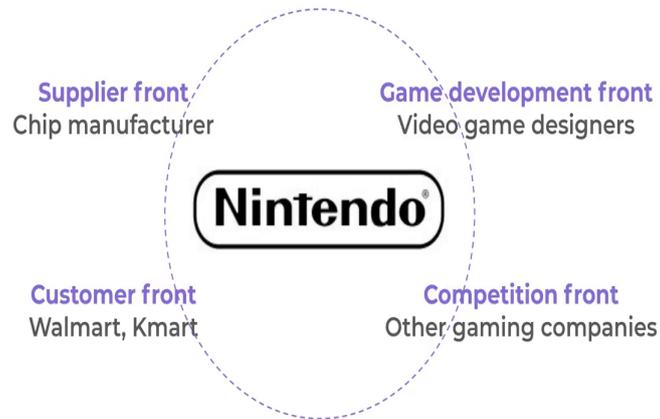
Nintendo®

Technical capabilities + **Managerial** capabilities

They looked at technical capabilities and managerial capabilities simultaneously.

And they realized the fact that they cannot make sense in the world, without engaging with Walmart, Kmart on one hand. They cannot make sense in the world without engaging with chip manufacturers on the other hand as suppliers, they cannot exist in the world without having game developers, also they cannot exist in the world without having substitutes, without having competition and they engaged with each of them individually.

Customer

Substitutes | Startup idea | Complements
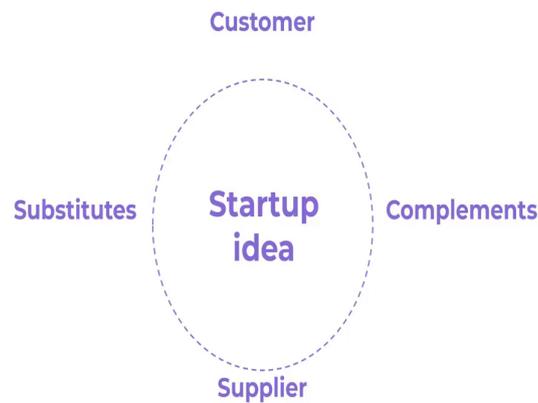
Supplier

Now, why am I getting into the details? Each of your idea will have a complex relationship with four set of people; the customer, your suppliers, your complements and your substitutes.

How many of you understand the term complements? Can tell someone explain me what is complements? It means that your product, your service, your offering will have certain products, certain services, certain offerings which go in tandem right. You have automobile for putting automobile into use you need.

A fuel, if you want to make tea you need milk, if you want milk with added tea right that is a complement, but at the same time tea and milk could be substitutes also right. If tea is not available if milk is available, I can go ahead and have it, tea can have a

substitute in water also right. So, we all need to understand that, we are all engaging with four set of people right as individuals, as organizations.

One is customers, the other is suppliers, substitute, complements. Like look at this session. I have complements people who spoke before me right. There is an opportunity that have been created by Professor Chakravarthy right, you are all there you are all stakeholders. I will not call you as customer, you are more like a students right, term customers will not be perfect for you. So, I have an ecosystem which is created. Now, I have been given this opportunity to play along with the ecosystem.

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Nintendo similarly was in the same preposition. Excellent idea to create home based entertainment products, they develop their prototypes, they came out with the games, they approached the customers, Walmart, Kmart and others. Now, do you think that Walmart will

agree to the terms of Nintendo? Initially their customers arm twisted Nintendo saying that you are a start up, I do not know what is the market existing for you.

I will give you space but I should get 70 percent commission. If your product is 100 rupees, I need to gain 70 rupees. Nintendo was like ok, its fine no problem, when the right time comes we will turn the table. But this thought of turning the tables is not stuck at that moment, you would have to preplan this, you would have to see through different scenarios of how would the plan actually fair in different scenarios and can you think about viable mechanisms to ensure that you create more value.

Let us go to the other side of supplier. Now, if Nintendo uses high end technological components in their products, in their consoles or in their cartridge obviously, the supplier will demand a huge value right. If Nintendo happen to be in 2021 thinking about a startup, if I approach Intel and say that I want Hi-Fi chips. Intel would say boss yes, I will give you, but I need a huge value for it. Now, would I be able to factor in that value within my price, question mark.

And at that time they were actually trying to create a new industry. So, if your prices are not kept low, people do not buy it for the first time to experience it. What they did? They approached an organization, which was dealing with an obsolete technology. And they were fine with developing games which can run on that chip and they bypass the value that the supplier would have taken away from them, the story does not end here.

When they initially started out, started to roll out games in US, they made a point that Walmart, Kmart and others other retail stores in US, provided them enough shell space and ensured that they did a wide marketing using word of mouth. Now, who would be the world of mouth? Gaming enthusiasm. People who are stuck in say arcades playing games inside arcades.

These organizations caught up them, provided them free console, provided them free environment, ecosystem to play experience into those game and then spread the word. Now, the moment this word was spread out, people realized that why should we go and wait in front of the arcade?

Cannot we have our own gaming consoles and cartridges through which we can play the game? People gradually start buying this games and that is when Nintendo turned the tables. How did they turn the table? When people started buying Nintendo games, there was a term given to this known as Nintendo Mania, you can check this one on the net right. It was a situation wherein each household had more than one gaming consoles of Nintendo.

At that time Nintendo realized that Walmart, Kmart and others were actually coming to Nintendo and asking them for more supplies, assume a number if all of them together are asking for say 5 million units. Nintendo burned its own assets.
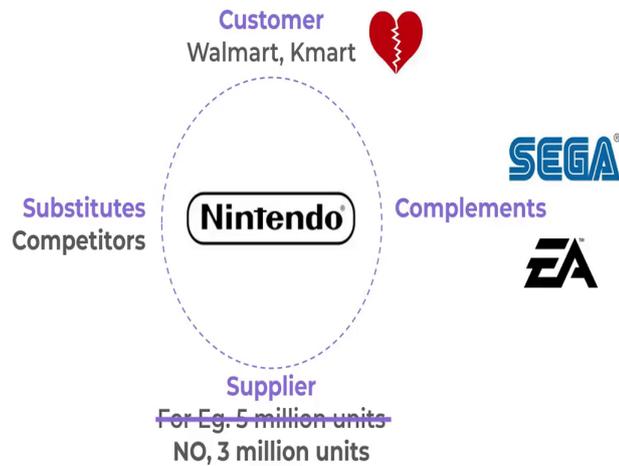
Rather supplying all of the 5 million they short supplied Walmart, Kmart and others. Now people can argue whether its ethical unethical that is a separate story, where you are looking at a business scenario. And they short supplied Walmart, Kmart and Target and made them actually reduce their bargaining power so that they can get hold of whatever supplies Nintendo is providing.

On top of it when the games gained acceptance organization like SEGA right I am sure people might be knowing this organization. Electronic Arts which are EA, who were trying to conceptualize games to compete against Nintendo said that we are not interested in developing a substitute for Nintendo rather we are interested in developing games for Nintendo. Why?

There are already pre existing consoles that are available, that are being sold by Nintendo, there is a market for Nintendo console which has already been set. Now, can I develop games which can work on this console? And Nintendo realized that there were huge potential in how you interact with the competitor. So, Nintendo came out with Nintendos seal of quality saying that, we will manufacture the games, you need to give us the games.

We will validate it, we will rectify it, we will ensure that it meets the quality of Nintendo then only we will allow you to go ahead and sell these games plus you have limitation in the number of title that you can come up. Now, why am I telling you this whole story? This whole story is to emphasize on the fact that the moment you realize that your idea has potential please start looking beyond the usual right.

If we look at customers, we look at suppliers for sure, at times we forget complements and substitutes right. We usually use the words competitors in place of substitutes. Competitors are has a very negative connotation, the moment you say competitor you leave out all opportunities to collaborate with that organization, substitute is more subtle right, its more open to having some kind of a collaboration right.

Now, if I go back by Nintendo's approach right from the start to look at the whole ambit of interaction that they may enter into, they were able to create their presence felt in the initial days in the video game industry.

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SEGA
**16 bit gaming
market**

Nintendo
**8 bit gaming
market**

And that was just limited to 8 bit market. There is another organization which looked at Nintendo and said ok, this organization is already there in 8 bit market. Now, even if I am

interested in developing a game I should not go to the stronghold of Nintendo. So, what should I do?

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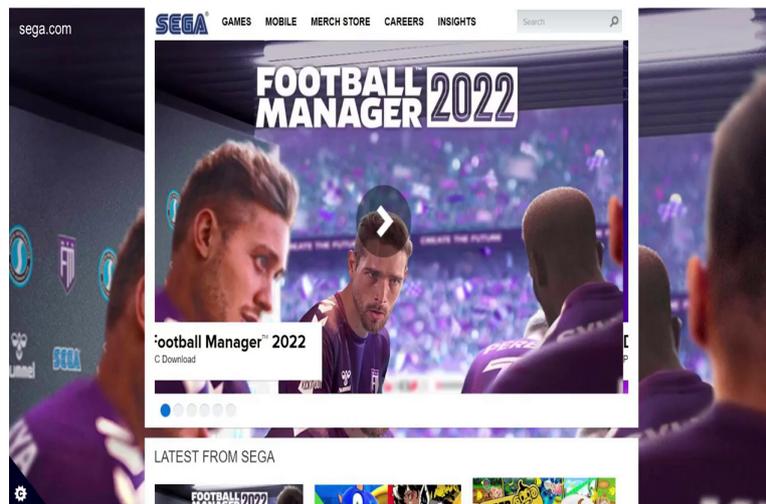
The organization was SEGA in this game. They took the gaming industry to the next level to the 16 bit. By taking the game to the next level, Nintendo was facing the problem. In that should we cannibalize our existing consoles and cartridges or should we allow compatibility?

Should the 8 bit game console be available to play 16 bit games also? Now, you might face this problem also right. And after 8 bit games Nintendo went into a deep slumber, after thirty years they came out with Pokemon, until then they were in the back drop, they were developing games for SEGA, EA and others. Again a learning for all of us.

We should be ready to undertake strategic retreats, we should be ready to take the blows and go back and see ok if I am not there in the front end market can I provide support to the existing organization.

Let us go to another example DELL. We have all used DELL and they were the pioneers in providing customization facility.

DELL

Major Players	USP	Challenges
IBM HP Compaq Apple, etc.	Customization facility	• Inventory of components? • Turnaround time? • Cost of customization? • Customers? • Establishing standards or Adopting standards? • Direct model or retail model?

Now, at that time major players like IBM, HP, Compaq, Apple many others and Michael Dell right who was just passing out from his undergrad degree I think, realize that there is a huge potential in providing customization letting the customer, letting the people choose what is the ingredient that should make up the system that should make up the PCs amazing idea.

But he faced n number of challenges, I have listed from six challenges of his. First one is being a start up do I hold inventory or do I get into a contract with the supplier saying that whenever I place an order for x I should get it. Now, what kind of customization would we available to provide them? I might be requiring a AMB chip, you might be requiring a Intel chip; that means, DELL should have should be open to approach both these supplier beforehand.

Do you maintain inventory or is it that you are saying ok, the moment I place an order with Intel they are ready to give the chips? Challenge excellent challenge looking at customization. Even now DELL faces this challenge.

What they did is they went and located their own factories, their own assembling units right beside their suppliers unit so that they can minimize the transportation time. Second for the initial orders to their supplier they gave a huge order and it was not for stocking in their unit.

It was not for meant for stocking in their manufacturing part. Dell initially went to business organizations. When I say business organizations one of them being a very big retailing unit in US, and said that we are ready to provide you whatever customized software and hardware you require within this system, but you should allow us to replace all the existing systems in your daily stock.

And this retailer this owner of the retailer said that ok, I need ten customizations in hardware I need few customization in the software. And Dell went beyond their reach to provide for the requirements of their customers so that they get a huge order at first taking this order they can approach their suppliers.

Now, the moment you give a big order in the initial day, you will have a fruitful relationship in future also. You are paving the path for a cordial relation, mutual relation in future. Now the challenge for Dell at that point of time, I am sure you must have run pillar to post to get a huge order.

It is not the case that he went to the first organization and he got a huge order, but that helped him define the customers. Now, if I go back to the teams how do you define your customer? Very important aspect to think right now. If the definition of your customer is wrong the whole idea will fall down. Now, when customization facility was provided by Dell in the initial days they did not provide to retail customers, it was not provided to us. Dell provides customization facility now to us right.

I think after 2000 they have opened it to individuals. They realize that if I am entering the space of customization as a provision I need to ensure that I get sufficient number of pieces, sufficient number of volume before I can provide the customization.

So, they went to government agency, they went to organizations and started replacing the existing inventory. Now by doing so, by defining your customers in that way, you are bypassing IBM, HP, Compaq, Apples customable which are primarily retail customers. And in the segment wherein Dell was playing its game the prominent player was IBM.

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So, you are actually competing with a subset of the competitors that you might be initially thinking that you are actually going to compete with. Now, if I ask the team which was developing games, are you going to compete with LEGO? Important question for you to

answer. Are you going to compete with Funskool? Another important question to answer. Are you going to compete with local toy manufacturers game manufacturers?

Are you going to compete with EduCom? They are also providing say smart classroom based gaming facilities. So, you how do you define your customers will have an effect on how are you going to strategize if I can use this word now right? What is the cost of customization? Again it boils down to the number. Are you going to establish a standard or are you adopting a standard? At that point of time there was a standard known as Wintel windows with Intel chips.

There was another standard by Apple, these were the prominent two standards within the PC or the computing industry. They said that they are open to adopting both and over a period of time they identified the best standard that fits in for their customization proposition. Another question, how do you approach the customers, am I going to have a direct model or am I going to have a retailing model? Retailing model means having a store, wherein your laptops your PCs are being sold.

Now, look at the way Dell has channelized its energy over the past thirty years, you will realize that they took each step cautiously. All of you would have great ambitions of turning around your start up into a multimillion dollar unicorn, but is it the case that you are looking at a unicorn from day one or is it that you are ready to toil hard spend time look at the aspects of how are you going to manage your organization is important to think.

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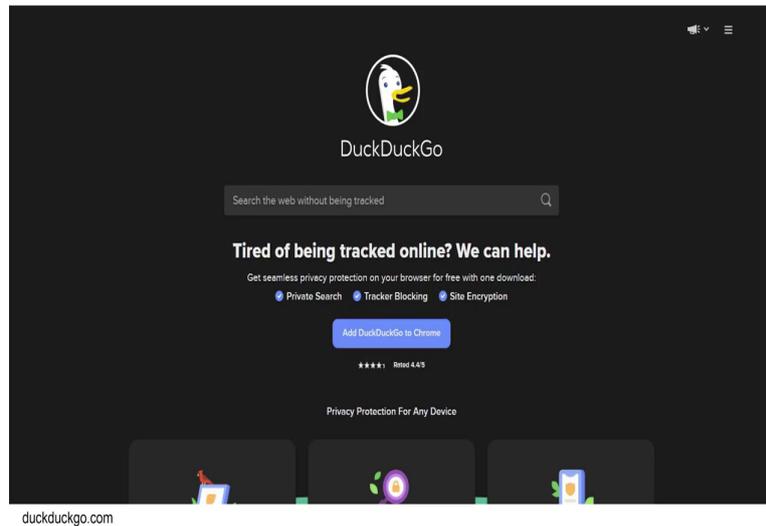
duckduckgo.com

How many of you know this organization DuckDuckGo? I am used to asking this question.

Student: Yes.

Anybody yes.

Student: Yes.

What do they do Ms. Ria can you tell me?

Student: They assure the customer of better privacy and that there bread crumbs will not be tracked by Google.

Ok. Good, excellent, can you see this image? They had the audacity. I can actually say the word audacity. They had the audacity to put this billboard in front of Google's office right. The founder Gabriel Weinberg, knows that the market share is around less than a percentage less than half a percentage, and its 0.24 percentage in 2017, but still they give run off money to Google right. You look at you type in Google's important competitors you will find report by Google which mentions DuckDuckGo by name.

Saying that they are actually giving them a stiff competition looking at only one aspect, that is privacy. And the idea of the story is that they utilized Google services in the backend and if you look at Gabriel Weinberg now, he is being challenged by the question whether he should continue with privacy focused or should he go the Google way. Because the moment you say I provide maps though DuckDuckGo does not have a map.

I think it does not even have a news because the moment you say new cell service you are going to look at the preferences how will you track the preferences you will track my Google search my search. At this juncture they realize that they are fine with this 0.24 percentage in search engine industry and Google has almost like 70-71 percentage and there are n number of players in between them.

Now, do you look at DuckDuckGo and say that it is a worthless idea; absolutely not. They are now channelizing their energy to get into organizations which pay attention to privacy so that they become the tagged search engine without different organization and one of such organization is into R and D right defence R and D they also have they also need to search something right. Now, they are looking at how can they combine Google Scholar right within DuckDuckGo.

And for that they have gone with the white flag to Google and said that, boss we want to see how we can complement each other. We are substitutes perfectly fine, but can we change the lens that we are using and identify an opportunity where we can complement with each other?
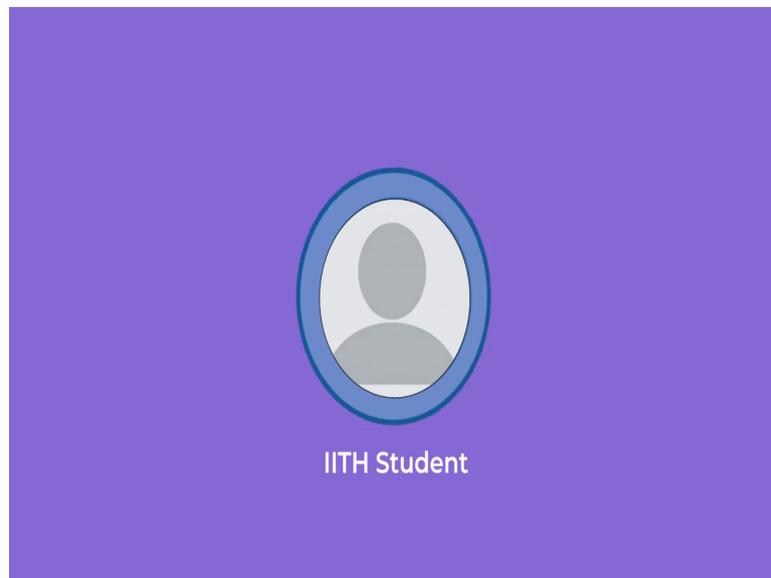
IITH Student

Student: Sorry to interrupt you but.

Yeah.

Student: I still wanted to ask like how does this work; you know you collaborating with your biggest competitor. I just want to understand how does the dynamic work here?

Excellent question. I think I was going to answer that question through a current contemporary example. If you look at Indian airline industry we all know that Indigo, GoAir, SpiceJet, Air India all these airlines compete with each other. Can someone tell me a scenario where they collaborate with each other? And this is usually a newspaper article the outcome of that collaboration comes up in the newspaper think.

Any thoughts on how Indigo, SpicJet. So, we look at from the customer side right and we look at that as options. Indigo is there, SpiceJet is there, GoAir is there. Change the lens who are their suppliers Airbus and Boeing right. Now do you think that Indigo, SpicJet individually goes to Boeing and Airbus with their small number of aircraft requirements? Or would they cumulate their requirements go as a unit sit in front of Boeing and have a negotiation where they will get a better deal?

Why did I say that it is a newspaper item? Primarily because whenever there is a delivery by Airbus or Boeing, the newspaper article would say that Airbus has delivered x number of aircraft out of which few will go to Indigo few will go to SpiceJet few will go to Air India. Now if I were to answer Akansha's question, you look at the potential. Now why do you why do you want to collaborate with another airline with the substitute?

Primarily you are looking at the value that you can create by collaboration, look at another scenario like Covid vaccine majority of the pharma firms came together, basic lab came together and said can we invest together so that we divide the risks and they are also ready to divide the future return also. Now, in both these scenarios the stakes are very different in vaccines the stake is very different as compared to buying aircraft.

But both of it gives you an opportunity to actually think whether you want to take that step forward of collaboration or you only want to compete. I will give you another example, you have code sharing mechanism right. Vistara as code sharing with say Turkish airlines. Now Turkish airlines might be operating in the same route, Vistara might be operating in the same route, but why do you want to have a code sharing? So, that you do not miss out on customers.

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And there is a huge alliance of airlines known as Star Airlines, Air India is part of it right. There are there are couple more such alliances where competitors come together to collaborate. And the more I speak on this I will actually get in to joint venture space right, two automobile firms coming together Mahindra and say Renault. Why do they come together? Looking at Indian market.

Renault was interested in coming into Indian market and there were specific legal requirements that mandated that you need to form a venture with an Indian firm. So, when you look at an opportunity, then you see ok is it worthwhile to go and collaborate with the other organization.

In this case DuckDuckGo even if it strives for next few years to develop its own scholar like page it will not have the experience, it will not have the path that Google has travelled. So,

over a period of time Google has churned its search especially in Scholar which DuckDuckGo is interested in imbibing.

I do not know whether will DuckDuckGo will actually adopt Google Scholar or not, but they have approached them. And you might be competing and collaborating at the same time.

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Coopetition

There is a term known as Coopetition very widely used, you now see it in newspapers also. If you look at all these scenarios it is you are trying to turn your idea into action.

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cleansta.com

Come let us come to a science engineering based startup. Anybody heard this organization? It is it was in news also and it is widely being utilized by people now and if you focus on this news item you will get a fair bit of idea what they are trying to do. It is an IIT Delhi incubated start up right, primarily focusing on chemical or rather Chemical Engineering right. Pardon me if I say something wrong from science because I am not I am not an engineer right.

They primarily conceptualize certain components, certain chemicals which can help you cleanse without water.

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Huge potential right, but when they hit the market with this waterless body bath and water less shampoo you can go and visit their website, they realize that the usual public the general public is not the right audience for them. Why? The general public needs water; water is like a complement for cleanliness or hygiene. So, they approach a different set of customers altogether.

They approach different sector right if you are in Siachen, would even dare to touch water? No, you need a solution like this. And for the regular customers they are coming out with other solutions like car wash, like usually if you want to wash your car you need water. So, they have come out with a solution where you just spray that car wash, wipe it the car is fresh right. Its new, its clean, an excellent idea.

And I can draw parallel to such ideas to the 8 teams ideas. You have path breaking ideas. You should actually see how you can actually put them into action.

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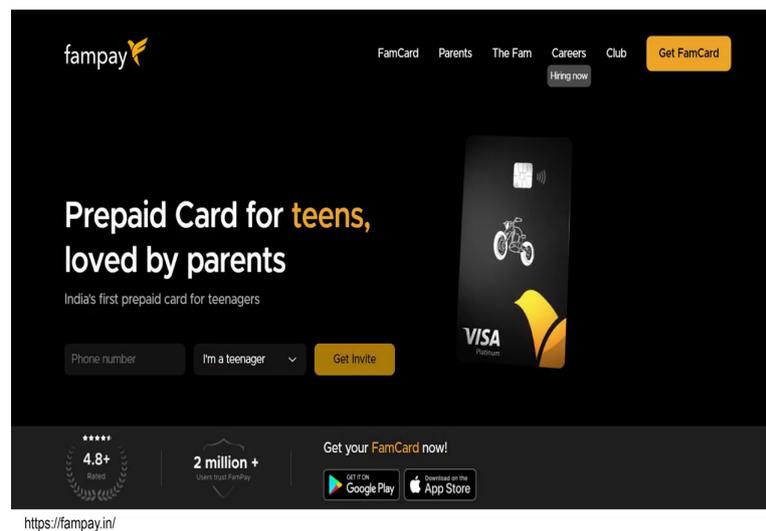
Another interesting example. It is started by teenagers right, I think they would have passed out college recently right. We all get pocket money right, kids get pocket money and usually the parents are worry about where does the pocket money being used. And if you give cash for kids usually they can misplace it.

They looked at the opportunity of banks not providing teenagers banking solutions, and they conceptualized an idea just looking at a card and it is a prepaid card. They approached a bank, a new age bank known as IDFC First collaborated with them, got the necessary permissions

to launch their product. Only they only have one product that is prepaid cards for teens and they have connected this card to an application in the parent's phone.

So, the parent can see where is the card being used? What are the transaction that kid is entering into? Right. I will request all of you to look at this organizations website, amazing idea right. If you ask me they will create value before banks actually get into the space and from banks point of view they are not even interested in getting into the space, because they are still dealing with the adult population.

Like they are still talking about financial inclusion of adults, forget teens. And there is a start up which says ok, I can conceptualize this, I can take this leap forward and look at only teens specific needs and they have a huge array of services that they are trying to conceptualize now beyond a pre paid cards.
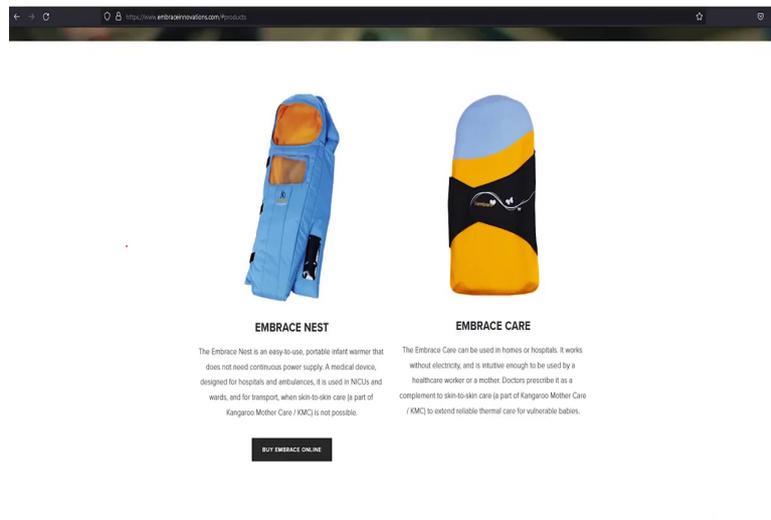
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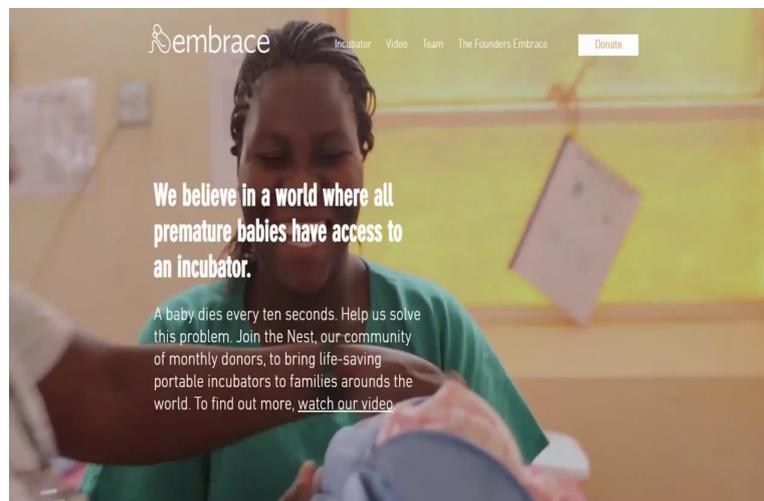
I want to end this with a design based science and technology idea.

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Can someone tell me what could be this Embrace Nest and Embrace Care? I am sure a few might be knowing this.

Student: It is like a sleeping bag.

Very close.

Ok.

But for whom?

But using that for whom, yeah correct.

Student: Babies.

Yeah.

Sleeping bag for babies ok. It is a sleeping bag for babies, but the utility is much beyond the sleeping bag.

Yeah it is in.

It is an incubator. So, it can replace an incubation device and.

With low cost.

Keep the baby.

Safe.

Supported right if they are prematurely born. Now compare the price, if you look at this website again a Stanford University start up, their problem statement was provide incubator solutions at 1 percent of the cost of a usual incubator. And if you look at the science part of it I think it contributes some 60-70 percentage utility of an incubator.

Very true.

Right, which market is it intended to, do they compete with mainstream incubators? No.

No.

Mainstream incubators organization actually look up to embrace and say I want you, I will fund you for supplying embrace maybe in Africa, maybe in say in least developed countries where there is a problem of incubators being adopted primarily because of limited economic capability of the parents.

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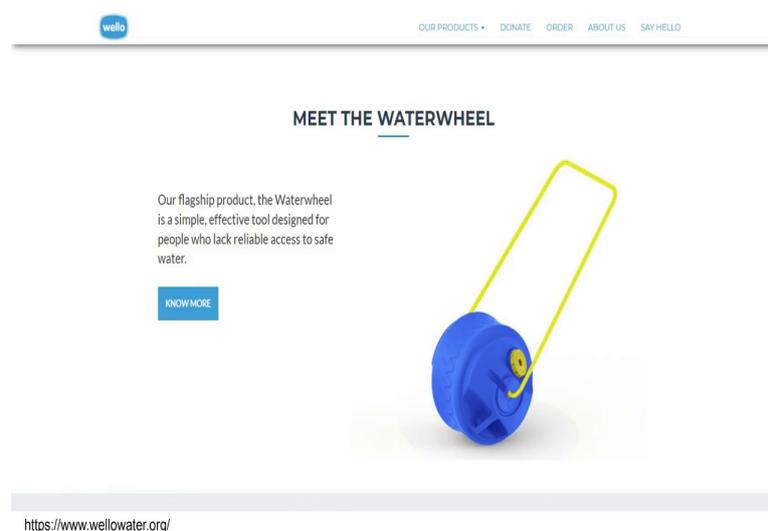
Another design they start up out of India. It is a sound potential outside India and you must have seen women carrying pots of water in their heads right, usually leading to health problems to them. An organization conceptualized this Wello and you do not need an adult to pull this a kids can pull this, primarily this design is kept in mind kids who can be sent to fetch water.

Amazing organization wherein they thought about how will the organization be adopted? How will the solution of the organization be adopted?

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Mitti Cool is another Mansukhbhai Patel.

Yeah.

Right, he competes with refrigerator manufacturers right and with we are the moment you are focusing on sustainability and other things, probably we will adopt Mitti Cools clay base fridge. The whole emphasis is that you need to look at things holistically right.
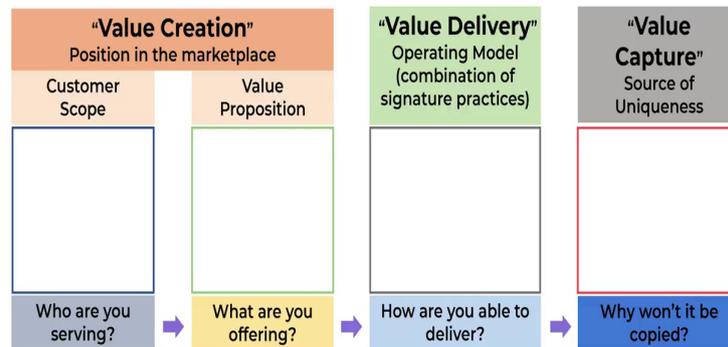
Integrative

Summative

Interdisciplinary

I will end here sir as an organization as a budding start up or an as a budding entrepreneur, start looking things integratively right. Look at how you summate different things, and be interdisciplinary like which you are already doing right. I hope I could give a flavour of strategic management.

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I will share the next slide with you right, it is just meant to help them with maybe the basic building blocks which can help them develop an organization.

Most welcome Nakul, it was wonderful that last slide was fabulous though and then very very grateful for taking cue from our projects and you know talking about it Nakul. Thank you so much and bye.

Thank you very much.

Yeah.

All the very best.