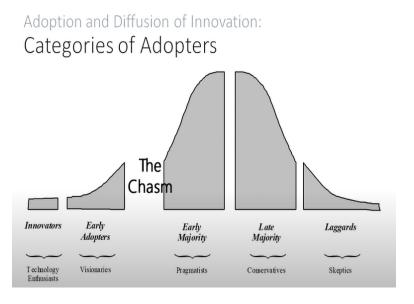
BUSINESS MARKETING - TECHNOLOGY FOCUS

Prof. Jayanta Chatterjee Department of Management Indian Institute of Technology, Kanpur

Lecture 11: Crossing the Chasm

Hello, welcome back to our continuing session on B2B marketing with a technology focus, B2B marketing, business marketing, industrial marketing for technology dominant, technology enriched goods and services.



I am Jayanta Chatterjee from IIT Kanpur and If you recall in the last session, we discussed in details about the product life cycle in the business to business market perspective. During the discussion, I had mentioned that the product life cycle or PLC graph, the model, usually we depict with a continuous line. But as you see on your screen now, in reality or as we have found through the subsequent research that it is not exactly a continuous graph. There are gaps which appear if you do not take care and your product can fall through that crack.

So that crack is also called here chasm. So there are books like Crossing the Chasm written by Moore or there are various other concepts like the chasm marketing and so on. We are borrowing from all those discussions for today's session. So the chasm basically

means that the market or rather the buyers, their perspectives depending on the dominant group of buyers at each stage of the product life cycle, changes come up. And if you are not sensitive to those changes, if you do not care in your product marketing, in your strategy, if you are not sensitive to those changes, then you might fail.

So there are many examples actually where products succeeded well, the initial buyers responded to the product launch. But at certain point of time, the sales certainly started to decline and the product actually kind of failed. Like for example, many will not remember, but there was a product called Newton from Apple, which possibly was ahead of its time. So the tech savvy people, the few innovators, they liked the product. But the product did not become mainstream.

Many years later, that same product upgraded, modified, features added and features deleted. And due to technological changes or technological advancements, the product became lighter, smaller, more portable and became highly successful as what was it called the predecessor to iPhone. And also the launch of iTunes made the whole proposition very attractive. So, the products can be ahead of time, products can be quite late in its appearance, the product may not evolve very well and for all those reasons the product might actually collapse. So, if you see on this graph that is on your screen, the first group of people who are our early responders to the marketing proposition are the innovators and then closely followed by the early adopters.

From the mathematics of this graph, we can say that the innovators are about 2.5% of the total population of possible buyers and the early adopters are about 13.5%. So, if a product is technologically attractive, if a product is kind of coming with lots of bells and whistles, then you can get about 15-16% of the total possible market or as we call total available market. The next really big chunk, the mainstream market, is the early majority, which is about 34-35%, and followed by the late majority, another 34-35%. So you see 68-70% of the market potential is in the early majority and late majority.

So, until and unless you get good response from this type of market, the majority market, the mainstream market, your product really would not be considered to be successful.

You will not actually often recover your developmental expenses if it is a high-tech product, if it is a technology dominant product.

Adoption and Diffusion of Innovation: Categories of Adopters

Innovators: Technology Enthusiasts

- Motivated by idea of being a change agent
- Develop make-shift solutions
- Willing to alpha/beta test and work with technical personnel
- Tolerant of initial problems
- First customers (**not** typical customers)
- Importance: They are the gatekeeper to the next group of adopters

So, if you therefore now kind of go through quickly some of the points that we discussed in the previous sessions, but we will just take couple of slides to focus on that who are the innovators. The innovators are motivated by the idea of leading a change, being a change agent. They can deal with if it is a technologically advanced products.

They are happy they can accept a makeshift solution. So, often technology enhanced products or technology dominant products look towards these types of customers. We call them alpha beta customers. So, this alpha beta test, the early stage of testing in the real life is done through the innovators. They are tolerant of initial problems.

In fact, they may be your troubleshooter. They may actually help your problem solving at the early stage. They may help you to take care of the bugs at the early stage and help you quickly to come to the more developed, more trouble-free product.

Adoption and Diffusion of Innovation: Categories of Adopters

Early Adopters: Visionaries

- Want to revolutionize competitive rules in their industry
- Attracted by high-risk/high-reward projects
- Not necessarily price sensitive
- Demand customized solutions, intensive tech support
- Product form competition (between categories of solutions)
- Communicate horizontally- across industry boundaries

So, remember that though they are the first customers, they are not necessarily the mainstream customers because of these nature of their characteristics that they are more tolerant, they actually are almost like your co-developer. So, in this perspective, early adopters, the next block, they are also visionaries.

They also want to lead the change. They want to revolutionize the competition. They want to adopt latest technology, the cutting edge technology to give them an edge in the marketplace. So they are looking for some ingredients that will make their productivity superior than their competitors.

And they are also therefore a little bit more tolerant. They are not as tolerant as the innovators with faults or with bugs, but they are also, they are accommodative. And they are not very price sensitive as we will see the majority market will be. So, in these two stages, the innovators and the early adopters, you know, strategy. What is important is the product feature. So, this is what we call product leadership oriented marketing strategy at this stage.

This we have discussed earlier in short in the previous session. And the early adopters also give you very valuable data. They give a lot of good inputs to the marketer with respect to competitive products and a very very important factor or characteristic of the early adopters are that they are very prolific communicators and they communicate

horizontally means they communicate to the like if it is a cement company which is an early adopter type that means they are actually always looking for the new technology to give them some edge in the very traditional industry like cement, they will be communicating profusely about their achievements due to new technologies and therefore they in a way influence other players in the market, the mainstream market in that kind of industry.

And so they are your gateway. So unless you are successful with the early adopters, you will not be actually getting into the mainstream market. But as we will see, that the early majority is the early part of the mainstream market are buyers who are very pragmatists. That means they are not very happy with or they are not very amenable to revolutionary changes as are the innovators or the early adopters. They believe in a little steady evolutionary change.

They do not want lot of disruptions in the way they are currently working. So, you have to, I will show you a very important slide that adaptability with the previous status, that means blending with what is going on becomes very important to the pragmatists or the ugly majority. So, they want proven applications, they want reference and that is why the early adopters are very important because they provide that reference, that sense of comfort to the pragmatist buyers in the early majority market. Trust is very important for the comfort that nothing will go wrong, their operations will not be disrupted. These are these kind of references which help to build the trust is very important for the early majority market.

And again for that we are dependent on the early adopters. The late majority, the second part of the hump, you know, the 34% on the left side hump and 34% on the right side hump in the initial graph that you saw, the bell-shaped graph. In those two blocks, the late majority, they are conservatives. They are risk averse. They are more risk averse than the early majority.

That means really at this stage, you are definitely not looking at revolution. You are looking at evolutionary change and that too slower evolution compared to the even early majority. At this stage, the market is very price sensitive, which means as strategy, your

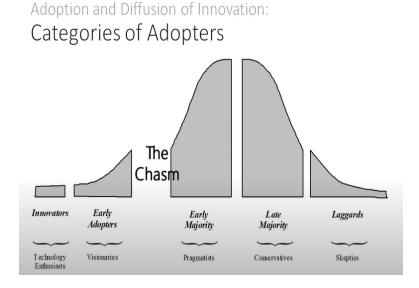
as a marketer your strategy will have to shift from product dominant strategy to cost product feature dominant strategy to cost based strategy to the lower cost to the lowest cost is your strategic goal at this stage to be the best competitor to have the best maneuverability with respect to pricing. And they have to be motivated, cajoled to make changes.

Adoption and Diffusion of Innovation: Categories of Adopters

Late Majority: Conservatives

- Risk averse, technology shy
- Very price sensitive
- Require completely preassembled, "bulletproof" solutions
- Motivated only by need to keep up with competitors in their industry
- Rely on single, trusted advisor

Usually their competitors provide that nudge. And they are also very amenable to advisory inputs. So the consultants at this stage play often a very key role in the buyer decision-making process.



So, going back to the graph therefore, this original graph, this gap between the early adopter and the early majority which we just now discussed is called the chasm. This is where the Moore's original research focused on.

But later on our research has shown that these cracks can happen at each one of these blocks That means crack can even happen between early majority and late majority. Less, but it happens. And then at the late majority stage, as we discussed even in the PLC, there are shakeouts in that market. So some people may actually quit the market.

And so the number of players become smaller. So, in the laggards type of buyers, they actually deal with lesser number of marketers as we discussed in the previous session. So, we have discussed that therefore the nature of these main blocks of buyers.

Adoption and Diffusion of Innovation

TARGET INNOVATORS OR MAJORITY?

- Target the majority when:
 - · Word of mouth effects are low
 - Consumer products industries (vs. B2B)
 - Low ratio of innovators to majority users
 - Profit margins decline slowly with time
 - Long time period for market acceptance

The last one is laggard and we will talk about it. The laggards are about 16%. So, that is also not an insignificant part of the market. So, the end of life, end of the PLC strategies are also quite interesting. Some people harvest good amount of revenue and profit at that stage. But anyway, that is not our today's discussion.

We will talk about it maybe at a later session. Today we are discussing more about the chasm that appears between early adopters and early majority and how to handle the crossing over strategy of the chasm. So, sometimes at the early stage of a product market

development, particularly in the technology market, you saw that the nature of the early adopters are different from the buyers who are the early majority. And so, your challenge will be that should you target the majority market, should you wait to introduce your product line till that the market has evolved towards the early majority stage. That means, do you want to be a follower rather than a pioneer.

So, that will depend as we have now found our later research is that industries where word of mouth effects are low. You know, for example, the metal market, the steel, for example, for many years, the production technology of steel remained more or less very static. So or in cement, the production technology, the whole industry process remained very stable and static. But then came new technologies and like continuous casting or like pre-calcination in cement and at that stage what happened was the industry got shaken up and the leaders in the industry who were like the early adopters known for their technological finesse, they created a lot of buzz or word of mouth in the market.

So, at the stage where there is this buzz or the word of mouth effects are strong, you can actually go to the earlier stage. You can become a pioneer or an early follower. But if the word of mouth effects are low, and also in consumer industries as opposed to B2B, you will target the majority market. So because in that kind of market, the ratio between innovators and majority users, the ratio for the introductory stage is very slim.

So, which means that there are more numbers in the majority stage than in the early stage, which is not the case in B2B, the main session that we are handling in this course. Here, there may be more emphasis on innovation, there may be more number of players who will influence the other players in the industry, the word of mouth effect is high. So, usually therefore, in this kind of market in the B2B market. There is definitely a premium for innovation, it is gainful to be an early mover into the marketplace.

So, therefore you have to understand the early adopters and that is why it becomes more important for you to understand the nature of the chasm in the technology focused B2B market. Because you are more likely to be initially very successful and then fail suddenly if you are not careful about the chasm.

Adoption and Diffusion of Innovation

What is "THE CHASM"?

- Present in high-tech environments
- Gap between early market and mainstream market—
 - · Visionaries vs. Pragmatists
 - Visionary market is saturated, and mainstream not yet ready to buy
 - Marketing that was successful with visionaries simply is not effective with pragmatists

So, chasm is therefore as we discussed just now the gap between the early market and the mainstream market and the strategy or the main challenge is to deal with visionaries and then graduate into the pragmatists. So, the visionaries are different from the pragmatists and how to go from one to the other is the challenge of the chasm.

And if the first 15-16 percent of the market gets saturated that means suppose you are very successful in the innovator and early adopter market. But you have not handled the chasm strategy well, then the mainstream market may not buy and your product will fail.

Adoption and Diffusion of Innovation

Visionaries vs. Pragmatists

- Visionaries
 - Adventurous
 - Think/spend big
 - Want to be first in implementing new ideas in their industries
 - Think pragmatists are pedestrian

- Pragmatists
 - Prudent; stay within zone of "reasonable," and within budget
 - Make slow, steady progress
 - Think visionaries are dangerous

These two groups want no part of each other!

So, what are the key differences between the visionaries and pragmatists? I mean we discussed it just now, but I will just summarize it in this particular slide. That visionaries are adventurous, they are experimenters, adventurous may be a strong word but I would say they are explorers, they are experimenters, they are ready to try out new technologies, new processes to give them a competitive edge.

And they are often not so concerned about pricing. They are in that sense more free spenders because they believe in the philosophy that you spend a little and reap a bigger harvest. So they are prepared to invest in technology or advanced techniques. So, if you want to be the first in implementing new ideas in your industry, that means the companies who first adopted say the pre-calcination technology in cement, they were kind of the visionaries in that industry. They influenced as other players in the cement market saw the big advantage coming from this new technology and the new kind of kiln which were therefore much bigger than the previous kilns.

So the cement capacity, cement plant capacity moved from 1250 tons per day to very quickly to 3000, 6000 tons per day. So, 1 million ton cement plants, 2 million ton cement plants came up. The advanced players or the first movers in that kind of big growth. To them those smaller previous stable cement plants appeared to be very pedestrian and compared to what they were doing. So, these kind of companies are usually the visionaries are very proud of their technological capability and their ability to absorb new techniques. As opposed to that, the pragmatists, they are very prudent.

They want to stay in the safe zone. They are very conscious about budget. They will not make daring investments. So, in Indian industry, for example, companies like Reliance, have often been considered to be visionary. The companies like Ambuja Cement have been considered to be very visionary.

The companies like Tata Steel have been considered as visionaries compared to other steel plants. But then successes of these companies have created an aura that have inspired of course many subsequent companies, even smaller companies to be more visionary.

Adoption and Diffusion of Innovation

Early Market Strategies:

Marketing to Visionaries

- High level of customized tech support → costly
 - · Initial revenue is low
- Products sometimes released too early
- Firm's goal: Establish reputation
- · Exciting time!
 - Engineering drives, brilliance is rewarded.
 - Focus on developing the best possible solution

So, with this summary of visionaries versus pragmatists, we can therefore look at how to market to the visionaries. To marketing to the visionaries who are prepared to be a bit more fault tolerant, who are prepared to help you debug your early product, the need of technical support or technical interaction between these early adopters, innovators and marketer company need to be quite intense, need to be quite frequent.

So, a high level is of support is necessary which makes it costly. So, the initial revenue that means both revenue as we discussed by the very nature of the graph, the innovators and early adopters together represent about 16% of the market. So, the revenue is usually small compared to what it could be if you were in the majority market, because as you saw the majority markets, there was 68% of the total potential. And, the initial margins are also low because of the intense support that is necessary.

So, here the marketing goal is to establish your brand. The marketing goal is to establish reputation. Now this is not actually just a full hardy move. If you create a strong brand based on your technological prowess, that ultimately will help you in your pricing strategy in the mainstream market. We will discuss the importance of brand building in the technology focused B2B market and how that ultimately results in better pricing strategy in the subsequent sessions.

But at this time I will therefore try to emphasize that product feature, engineering excellence, performance of the product and its brilliance, these are important aspects of marketing to the visionaries. So, here you are focused on the best solution, the features are dominant and as we discussed that in the pragmatic stage, cost is very important.

Adoption and Diffusion of Innovation

The Chasm

- Firm takes on more visionaries than it can handle
- · Pragmatists are not yet ready to buy
 - · Visionaries are not a credible resource
- · Early market becomes saturated
 - · Revenue growth tapers off or declines
- Key personnel become disillusioned
- · Venture capital well begins to runs dry

Goal: get out of the chasm ASAP!

To be the lowest cost producer is your key strategy. So the strategy shifts from product focus to cost focus. So therefore, the chasm is this gap between the early adopters and early majority from the explorers to the pragmatists.

So, the chasm crossing means that you have to be able to go from this one group of buyers and before that early market saturates to be liked and to be adopted by the early majority part of the early majority market. And before the market becomes disillusioned from an excitement, you have to create a promise of stable performance. So, you see, to be appealing to the early adopters, you have to be exciting. To be appealing to the early majority, the pragmatist buyers, you have to be stable, you have to be dependable, you have to create the promise of trouble-free service.

So, therefore, crossing the chasm means marketing strategies that lead to success in selling to the visionaries onwards to the early majority.

Adoption and Diffusion of Innovation

Crossing the Chasm

- Marketing strategies that lead to success in selling to visionaries hinder success in selling to pragmatists
- Look to new strategies necessary to reach the mainstream market
 - 1. Identify a beachhead
 - 2. Develop a whole product solution

And so remember that if you continue with the same strategy, then you will actually not succeed with the pragmatists because they are not looking for excitement. They are looking for stable performance. They are looking for security as opposed to the challenge of being the first. So how do you do that?

How do you do this, you know, have the cake and eat it too sort of thing? That means how do you manage the dichotomy to be two kinds of marketers at the same time. So, one of the things that Moore suggested and is often used even today, that means for the last 20-30 years, this has been a dominant approach to the high-tech technology dominant business market, is these two things that identify a beachhead and develop the whole product solution. These are the two key mantras of crossing the chasm.

Crossing the Chasm

1. Identify a beachhead: a single target market from which to pursue the mainstream market

A good beachhead:

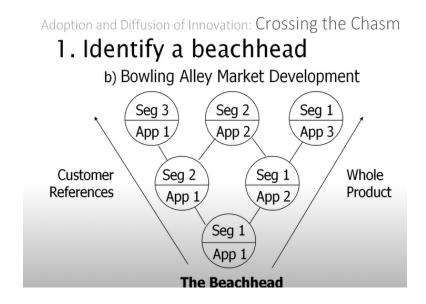
- a) Gives customers a compelling reason to buy based on the firm's capabilities
- b) Provides "adjacencies" to enter related segments
 - Bowling Alley Analogy (see next slide)

Now, what do you mean by identify a beachhead? This comes from the Second World War or any war for that matter. That means when you want to land on across usually a water body, an ocean for example, and you want to land on the area occupied by your enemy, then you do not attack the whole front at a time. The beachhead means, that means a smaller area, a narrower area, where your army will land and then of course it will rapidly proliferate and attack across many fronts and finally defeat the enemy on their own land.

Now, this beachhead is in the marketing sense here means a compelling reason for the customers to buy based on maybe the capability of the company. So you see, we are already dealing with some of the signals that we will be dealing in more detail in the brand building stage that you create, you shift from the promise of challenge to the promise of stable, safe, dependable operation. This is one nature of the beachhead that means this place where you have landed that means your focus from the product features from the product bells and whistles have now actually been narrowed on to the stability the dependability of the new technology.

And the other thing is that it has to also look at adjacencies. We will discuss it in a little bit more as we proceed. That adjacencies means that what you do at an early stage in one kind of a market, you have to be careful in selecting. You have to be strategic in selecting your early customers in the early majority and to ensure that they create the word of

mouth, they create the marquee reference, they create the influencing buzz that inspire more cautious players to adopt the new market, new technology in this kind of a market. So one of the other analogies that I will just now show you in the next slide is this bowling alley.



Bowling alley is a game which is very popular now across the world, possibly originated in U.S., where you have this 9 pins, you know this bell shaped, dumbbell shaped objects arranged and then you roll a ball and your strategy is to the ball should hit in such a way that it hits the first pin of this first object. And then it hits the other objects and all of them, the nine pins, they all collapse.

And that's the aim of the, so if your ball is properly rolled and it hits at the strategic point, then all the pins will collapse. But if it hits on the side, then some of the pins on this side will not fall. So you will get a lesser number of points. So bowling alley in this case as you see on this slide is that you have a winning landing, you have a winning beachhead landing with segment 1, application 1 but then it will go into one application two within the same industry, you are then influencing the buyer to apply your product.

So, I will give you an example. In cement industry, In the early 80s, almost 40-45 years back, new technologies came in like the pre-calcination, the much bigger double size, triple size, four times the size of the kiln because the pre-calcination made it possible to

make bigger kilns where whole cement process the calcination process which is the mainly the process that happens in a cement you know this rotating cylinder where fundamentally limestone you know gets so this calcination process where limestone coke and all these are churned together and ultimately the aim is to create maximum calcination.

Now, this calcination process got highly improved due to this new technology which was a new apparatus called precalciner and the precalciner therefore preprocessed the material before or the mixture before it got fed into the main kiln and made the whole process much more productive. Now, the precalciners wanted a little bit more automated process. So this programmable automation came into the picture. So, originally taking this example of the bowling alley, this beachhead was the pre-calciner and the kiln automation using the programmable electronic technology PLC programmable logic controller.

But then as it was successful then you quickly moved into the other areas like material handling, other material handling, the coal processing part of it, the coke part of it and programmable automation then covered the whole plant. So, that is the kind of thing. You first become successful in segment 1 application 1, then you move to segment 1 application 2. So, it is like going from the calcination and kiln area to the material handling area. But once you are successful in that material handling application, now material handling is a major operation, critical operation and huge operation in many other plants like steel plants.

So, the steel plants saw the success of the cement companies and they adopted then in their early stage programmable automation in the material handling area. Now from that They saw the success, they saw the advantages, they got the results and then they started applying it to maybe continuous casting, rolling and other critical areas. So, that is it you are successful in one segment in one kind of application move to another application in the same segment then take an application which is similar to the first segment first application that means say for example material handling you go to material handling from cement to steel and then to many other industries you progress.

So, you expand like this. This is why it is called the beachhead. You land at one particular very focused application in a focused industry and then you go into other applications and to other industries. So, you expand like this way instead of attacking a whole front, attacking a large number of applications at the same time, you start at one place and then rapidly move into many other applications in many other industries.

This is the whole approach to the beachhead strategy.

Adoption and Diffusion of Innovation: Crossing the Chasm

1. Identify a beachhead

- 1. Word of mouth relationship should exist betweer adjacent market segments
- 2. Quickly capture the beachhead
- Risks:
 - Focus on one segment could lead to being outflanked by competitors
 - Pursuing too many segments at outset without enough resources

So, you identify a beachhead industry is where word of mouth relationship that means the industry is very close to each other the industry you have to see the industry association is very well organized for example. But you have to be careful your speed of operation becomes very important just like in a war in the beachhead strategy you have to be able to quickly move your military resources across the beachhead and to other fronts. So, you have to be able to move like that.

So, in the same way here you have the speed is the the problem with the beachhead strategy if your speed is not superior then while you have been successful in material handling application in cement if your speed is not good then the material handling application in other industries might be captured by your competitors so that is something that you have to be careful in the beachhead strategy.

Adoption and Diffusion of Innovation

Crossing the Chasm

Develop the Whole Product

- Complete, end-to-end solution
- Defined within confines of a specific target market

Adjacencies are also determined by similarities in whole product needs.

Pragmatist market requires vendor responsibility for system integration

The other point is this develop the whole product. What does it mean? It means that as I mentioned a little while back, the visionaries or the early adopters are quite tolerant in the sense that if your product has bugs, they will work with you to solve those bugs because their main attraction is to be the first with technology.

They want to be the shining beacon to the whole industry and so therefore that fame is very important to them so that is why they are more tolerant, they will accept a minimum viable product as we call it which I discussed in great length in the previous session, the MVP. Not maybe fully developed product, but they will accept that, that they will accept that the color is not the best or the mechanical structure is not fully worked out or there are some software bugs which need to be handled at the time of commissioning.

These are acceptable to the early adopters or to the innovators but you have to have your entire product map that means you might have approached the early market with a minimum viable product but your designers, your whole team must be very conscious that this is not the end of the line. We have to do all these things before the product becomes the whole product.

That means it reaches all the promised areas in terms of its feature, performance, capabilities. So this complete end-to-end solution development or have the map in front of you and quickly be able to implement it is very important in this crossing the chasm

strategy. And while you are doing this, while you are doing all these developments, the landing point, that means as we discussed the programmable automation of the precalciners in the cement plant, there you must be very good. You must not have any flaws.

You must have quickly crossed that fault tolerant or acceptable, fault acceptable stage of the innovator. You have to be quickly moving to a very stable, very dependable performance. So you have to protect the specific target market performance dependability there and then you move into the following stage.

Adoption and Diffusion of Innovation

Crossing the Chasm

2. Develop the Whole Product (cont.)

- Utilizing Partnerships
- Advantages:
 - Each player provides a part of the whole product solution
 - Partners may drive further expansion

So, this developing the whole product also depends on developing partnerships because many technology enhanced products of today are not complete.

Their value proposition is not full until and unless you have other partners. For example, iPhone success is also very much dependent on the iTunes performance or today after those iTunes days in today's world, the whole appeal of an Apple iPhone or for that matter any smartphone is a large number of application developers who made the value proposition in partnership a far more appealing than the standard phone of just talking. That's why today the data service on a phone has become so much more important and that has become so much more important competitive tool because with partners the data services create a prolific array of value proposition and that is the whole product.

So, you see the mobile phone is today really not exactly a phone which meant basically a voice communicator. The mobile phone is today a platform. It is a smart platform for keeping your diary, for keeping your address book, for keeping your what to do list. It is actually often a tool for quick check up on facts and figures.

So, until and unless you had partners like Google, your mobile phone company would not have been so successful as many of them are today. If they did not have the music service partners, then many of the propositions of the mobile phones would become lighter. So, that's why a powerful camera, a powerful music service, these are all partners that make it useful and that is the whole concept of developing the whole product.

Adoption and Diffusion of Innovation:

Continued Success

- Market to Conservatives
 - Make product simpler, cheaper, more reliable & convenient
 - This is not the time to add "wow" factors

So, to be successful therefore you have to market to the conservatives at this stage, You have to make the product simpler, cheaper as I said that you have to become a product focused competitor to a cost focused competitor and this is not the wow factor competition which is applicable to the early stage to the early adopters.

Adoption and Diffusion of Innovation:

Crossing the Chasm Summary

- The whole product is the critical success factor
- Until a high-tech firm has established itself in the mainstream market, it has not proven itself.
- To manage the mainstream market effectively, firm must work with partners in a disciplined fashion (that prioritizes partners)

Here the whole concept is dependability, stability and so on and so that is what you are doing that you are the whole product is becomes the critical success factor because of its multiple value propositions, the array of solutions coming with the main solution and so on. And as I mentioned that until and unless you have established yourself in the mainstream market, you have actually not been able to address almost 70% of the market. So this is essential. And to manage this mainstream market more effectively, you have to partner with many other value providers.

| Factors Affecting Customer Purchase Decision | |
|--|---|
| Relative advantage | The benefits of adopting the new technology compared to the costs and in relation to other alternatives |
| Compatibility | The extent to which adopting and using the innovation is based on existing ways of doing things and standard cultural norms |
| Complexity | The difficulty involved in using the new product |
| Trialability | The extent to which a new product can be tried on a limited basis |
| Ability to Communicate Product Benefits | The ease and clarity with which the benefits of owning and using the new product can be communicated to prospective customers |
| Observability | The extent that benefits of the new product are visible to everyone |

I will end today's session with an important concept which came from Rogers, research of Rogers that customers will not buy this evolution from the early stage to the early majority. You have to ensure also in addition this whole product concept which I was just now discussing or the beachhead and going ahead from the beachhead being able to attack the market in this fashion. You have to be always cautious about these factors that means you have to always clearly establish what is the relative advantage of the new technology, new product. So, compatibility with the earlier solution as it was going on that means this is not a disruption. Suddenly you do not have to throw away everything of the earlier plant.

So, we call this backward compatibility. So, if you come up with a new battery solution for the mobile phone or the phone camera combination, you have to ensure that it is, it can be utilized with the standard format of the phone. That means it suddenly cannot become this big. Because you have to still remember that it is going to be a handheld device. So complexity, it can be as complex as possible inside, but its interface, the user interface must be as simple as possible.

And that's why today you see a mobile phone or a smartphone is very complex inside, but even a child user can use it effectively that is the point which you are talking about. And the other points are trialability and observability that means we should be able to create lot of trials that means we should allow the customers to hold the new product in hand to experiment with the new product in their own plant and see observe the clear advantages.

So, I will come back to these particular, these relative advantage issues, the factors that affect the consumer, the customer purchase decision of new technology, new products, particularly in the B2B segment. So we discussed therefore in this session that how to go from innovator dominant, early adopter dominant market to the early majority mainstream market. We discussed about how to the chasm when it appears and why it appears and how to cross that chasm.

Thank you.