ISB - Product Management

Week 12: Managing Product Performance and Metrics

Video 1: Module Overview

Welcome to the 11th module for Product Development and Management. We are now going to focus on Managing Product Performance and Managing Performance Metrics. The agenda and the learning objectives are pretty busy for this module. We are going to do a quick review on Brand Value, a quick review on How to Manage and Acquire Customers and How to Retain Customers, then we're going to move into Learning how to measure value created by marketing activities. And the company we're going to focus on is Dell Computers. And we'll look at their model and see how it is amazingly fluid in creating revenue. But we are going to look at the limitations of short term metrics While Dell does very well on short term metrics, there's a need to pivot to growth, for example, and in that process, we're going to look at and understand the use of ROMI, which is Return on Marketing Investment.

We're going to look at economic value added, and net present value of future revenues that are being generated by marketing strategies. It's important to understand which one’s work, when, and when they do not work. We will then look at estimating the lifetime value of customers by looking at e-trade. We had started on this conversation a little bit earlier, but I want to go into a little bit more depth in measuring lifetime value of customers. Then our focus is going to shift to managing B2B customers and managing distributors, who are also B2B customers. And we're going to look at the need sometimes to fire a customer. We talk about how customers might get rid of you. We should also be looking at how we might want to get rid of certain customers. Then we're going to move to a favorite company of mine called Microban. It's a small company, but it’s no longer small. It's a German company, but we're going to look at Microban in terms of how they use an understanding of value created to better negotiate business deals. It's a very good example of what these guys do. We going to then look at growth and resilience, and the use of platforms. Today... And these days, we're talking a lot about platforms: product platforms, customer platforms, brand platforms.

So, we'll be looking at platforms and how they can help us manage growth, while at the same time helping us manage risk. We're going to then look at some examples of product-centric and customer-centric platforms, we’re going to look at Intel and Qualcomm in the context of product centric platforms, and we're going to look at Microsoft and, you know, which we talked about earlier for customer-centric brand platforms. The final focus in this session, is going to be looking at Value Creation and Value Appropriation, and we're going to look at a company called Zara, which is a retailer, but it acts like Toyota when it comes to flexible manufacturing. So, long agenda today, and so get your pen and paper out, and we will go through these, one at a time.

Video 2: Review and Reiteration – Integrative Perspective – Product/Brand Positioning, Pricing and Distribution

I want to quickly review some frameworks that we developed in the earlier module, in particular, looking at the brand positioning relative to pricing and distribution. This is just a recall, so I'm going to go through it very quickly. Number one, you might remember this chart, where we taught that the role of marketing was to de-commoditise the market if we don't want to operate in commodity markets. And we said we're going to do it in multiple ways.

One is we want to start focusing on cash flow and not revenues; we need to take care of the cost of goods sold as well. Then we talked about how Segmentation and Differentiation were essential in helping us, restrict, create those competitive barriers in the marketplace and that the brands were proof that those barriers to competition had been generated. And in that particular context, I had mentioned the role of brands in generating pricing power. I think it's important to remember that, because we don't build brands for the heck of it, we build brands in order to be able to compete in the marketplace. And it is the brand's strength, the customer trust in us, that is providing us the power to price and to appropriate value from the marketplace.

You may also remember how we talked about the fact that a lot of brand value is really intangible. It is based on the experience and the trust, rather than the functional attributes, product properties that competition can copy. In that context, we looked at, for example, how BlackBerry was dominant once upon a time, and that pole position has been taken over by iPhone, and to some extent Samsung. But what these market imperfections allow us to do, is to enable us to extract value from the marketplace in terms of higher prices, perhaps higher market share. But importantly, it is this trust and positive customer experience that also protects us from competition. If we are late to market with a new technology, with the new product feature, then the loyal customers are willing to wait for a bit for us to come up with the right answer.

We also looked at it in the context of automobiles, and we also looked at it in the context of shoes. So, this is pretty universal. It is not just related to consumer packaged goods; it's across the board. In that particular context, we talked about the pricing power being reflected in the price premium, the lower cost of distribution, higher loyalty, therefore, lower customer churn, lower marketing costs because of higher productivity and indeed our ability to penetrate the market faster. Therefore, the brand actually represents a very good mechanism for us, not only to grow profits, but also to protect us from competition, to protect us from other people in the supply chain. But importantly, it is a symbol of value, and today we can actually measure brand value, as we saw in the last module.

What I do want to talk about now, is really looking at - what are the marketing activities that I use to generate brand equity? So, if we rely on things like advertising, we rely on brand investments that we make in distribution and in customer service, and what we want to do is to create the brand strength which is going to be reflected in things like customer awareness, it's going to be reflected on their predisposition, their perceptions towards the brand, it is going to be reflected in the loyalty, and indeed it's going to be reflected in the advocacy, the support of our brand. And you may be familiar with a very often used term called 'net promoter score', which is simply the net difference between people who would refer your brand versus those who would not. And the higher the net promoter score, the greater is the advocacy for your brand.

The second thing we're going to look at, is that once you build the brand strength, you need to leverage it. How do we leverage it? We leverage it and sometimes in price promotions. But remember, I talked about last time, too many price promotions are going to destroy your brand. So, you make the customers very price sensitive by teaching them to focus on pricing. So, what we do want to do, is to use that to generate our presence in the marketplace if we want to get the distribution. And what we want to do, is to use price promotions and our distribution presence because of the brand, in order to create a larger share of the wallet, in order to be able to extract the price premium, a share premium and so on.

Now, all this is going to be reflected in financial performance, which is the focus of this session. The financial performance will be in terms of profitability, return on assets, return on marketing investment, return on investments. Also, we're going to be looking at cash flow. To me, money matters, and so we're going to look at cash flow and rather than ratios-- Ratios can be somewhat misleading, once in a while. We're then going to also start focusing on what makes those cash flows vulnerable to competition. And we are then going to focus subsequently on how do these financial metrics feed into creating shareholder value, which is the stock price, looking at how customer loyalty is linked to something called the price-earnings ratio.

So, the higher the loyalty, the greater the assurance of future cash flows. The higher it tends to be the ratio of the stock price to the earnings. There's more trust; there's higher evaluation. Same thing with the price to book ratio. And in general, what we are going to be doing, is we're looking at measuring the brand value. We took a crack at this last time; we're saying that the brand value is going to be equal to the incremental earnings brought to the table by the brand, multiplied by the value that is created through the price-earnings multiple. So, what are the earnings? And what is the value of those earnings in the stock market? So, this is what we're going to do when we focus on the brand. We will also be looking at the flip side of the brand, which is the customer; the customer lifetime value, and I'll come to that in a minute.

Video 3: Customer Acquisition and Retention

I'm going to now recall and reinforce the framework that we used last time for customer acquisition and retention. It's a very complete framework, and there are other people who are running around and creating some subsets of it. And I'll give you an example of that.

Now, if you recall, last time we talked about the sales funnel, and on that, we superimposed the repurchase cycle. So, it's the user experience and the re-evaluation that is bringing the customer back into the sales funnel. So, this is really; think of it as a lasso, we want to capture the customer, but then we don't want to lose that customer.

In this context, we looked at, if you recall, how Capital One used the process, starting from advertising to customer engagement, to the transaction, to acquiring information about the customer and using that information for customer retention as well, but also for fine-tuning the marketing strategies and the customer approach. So, we talked about that in some length.

Now, there are other frameworks that are very popular. So, for example, there's a framework that talks about the need to acquire a customer, it talks about customer acquisition and then it says, "Okay, let's also activate that customer." We want to acquire a customer, but we also want the customer to make purchases more frequently, or to interact more frequently. So, we will be-- We should be looking at activation. Another thing that we talked about earlier, and that its being talked about by other people, is retention. So, now we have three letters, A-A-R. We got Acquisition, we got Activation, we got Retention, and then there's another one, which is referral or advocacy that we've talked about. And the final aspect of this is really related to Revenue Management. So, people will talk about something called the AARRR framework, but it is merely a subset of what we had already talked about. The important thing is to focus on the customer, to give them a reason why they should do business with us and not with somebody else. We need to get them to interact. We need to get them to continue to interact with us, which is frequency of interactions, that's reflected in retention.

We, of course, need all of this to occur at a level where we're actually making money and not giving the product away. And finally, we just do want to make sure that we get the referral business, because the strongest selling point is very often, the word-of-mouth advertising. It is rarely the advertising that you'll see on the internet or on the airways; it is the strength of the referrals that often matter in the marketplace. So, this is the AARRR framework. It's the subset of the framework that we had talked about earlier in the context of Capital One.

Video 4: Engineering Profits at Dell

All right, I'm now going to focus on engineering profits at Dell. This was actually a very big learning experience for me. In 1998, I had the pleasure of co-teaching a class on assessing the financial value of strategies, and I had two partners in-crime. One was a professor in finance. His name was John Martin, and the other was a person called Tom Meredith, who was then the Chief Financial Officer at Dell. And so, the three of us got together, and we learned a lot from each other.

But what I learned from Tom Meredith is three things: One is technology is like bananas. Bananas, when they are a week old you got to throw them away. Technology, perhaps if it's a year old you need to throw it away. The second thing I learned is that risk and uncertainty are not bad. Actually, risk and uncertainty, create anxiety in everybody, including your competitors. So, the key is, if you can manage risk and uncertainty better than your competition on average. That's what makes you come out ahead.

So, that's the second thing I learned.

And the third thing that I picked up is that information, and analysis of that information are very instrumental in helping us manage efficiency. So, with that, let me talk about what was the Dell business model and what is frankly a very good model even today. And what Dell was doing at that point in time was they were combining or they were matching the product flow in one direction with the information flow in the other direction. So, for example, when a consumer ordered a particular PC configuration requiring a certain hard drive, requiring a certain processor; that information was immediately passed by Dell to the suppliers. This enabled the suppliers to minimise the inventory that would be required. And this enabled Dell to do something called Vendor-Management Inventory. What was that? They told the suppliers that, "Look. We want you to keep the inventory on our premises so it is ready for us when we need it." And if we do that, the higher the quality of your products and the better is your management of inventory. The greater will be the share of sales that we will pass that way.

So, direct flow is the product flowing one-way, flexible manufacturing. Information flow, the other way. Now, what was the Dell model? Several components came to it. One was, it was more of a demand chain than a supply chain. Why? Because it's the information from the customer that was really managing the supply chain process. So, it was demand running the chain. The second part of it was that Dell was analysing what were the popular configurations which screen size, which battery life, etc. And what they were doing was they were analysing what was already selling well and then they would advertise and promote that same configuration. So, while they talked about flexible manufacturing made to order, a large percentage of the manufacturing was actually made to plan. Meaning they had 80-90% of the product already preconfigured and then they added certain modules to finish off what you needed.

This by the way is very similar to the strategy used by a company called Benetton when it came to apparel. They would finish the product, for example, and they would colour the apparel at the last minute depending on what was popular and what wasn't popular. Similar kind of strategy being used by Dell. Dell was also exceptional when it came to minimising working capital. How? By the time they got the order and the credit card was processed, they already had the money in hand. So, the receivables were down to zero very quickly. And because they were doing Vendor-Management Inventory, they did not have to keep much inventory on hand. So, at that point in time, I recall Dell had a five-day inventory compared to Hewlett Packard's 55 days. Now what does this mean? If you think of 55 days compared to five, that difference is about 50 days, and that divided by seven is about seven weeks. Fifty days is about seven weeks. Now, think of technology. If I had my phone with me right now, basically my Samsung 8+, I think that's what it is, is about two years old. I can buy it for about $149 today, and I believe my wife paid $800 for it. So roughly, 80% of the value has depreciated over two years. That's about 40% per year and 40% divided by 52 weeks is approximately 0.8% per week.

Now you take that 0.8% and you multiply it by seven weeks, and you have a margin advantage of 5.6% before the game has even started. And this was the advantage that Dell had. What they were also doing was minimising the investment required. Why do something when somebody else can do it more efficiently? So, they were outsourcing things that somebody could do more efficiently and bringing them in as a business partner. And finally, what they were also doing was they were selling extended warranties. So, rather than a one year warranty, if you paid $99 for a three year warranty, that $99 went directly to the bottom line at Dell unless there was product failure And what that meant was quality had to be very high if you were promising an extended warranty.

Now, one thing was also important is that Dell was never in a hurry to enter the market. What they wanted was the market to develop, then bring in the process model and build up volume very quickly. So, what they were interested is in time:volume. Now, all this was combined with price experimentation, playing around with prices on Mondays vs Fridays, morning vs evenings to understand the sensitivity of the market to that. And they were also working hard and making sure they had multiple suppliers for the same product, for the same components. So, they could get the suppliers to compete against each other and help bring the cost down. Now, what this was reflected in is what is called the Asset Efficiency or a Cash Conversion Cycle model. It had two components. One component was: how do we minimise the working capital required per dollar of revenue? And the second part was: how do we minimise the fixed investment required per dollar of revenue?

Now, the importance of these two dimensions will become very apparent in just a minute. What this was doing is bringing down the working capital requirement. For example, through Vendor-Management Inventory, and at the same time by outsourcing, they were minimising the investment required. Now, what this led to is a situation where Dell was actually operating on a negative working capital requirement. What was that? They did not need to borrow money for the business to grow. They were relying on their old profits for them to grow. Now, when I contrast this model, which was very efficient compared to what was happening with their competitor Hewlett Packard, Dell was managing everything. Hewlett Packard at that time had outsourced the entire supply chain to a company called Ingram Micro.

Now, when you outsource the supply chain, you don't have control over it. If we look at what all of this means in this centuries old DuPont Model that we still use today-- I believe it was developed around 1917, and 104 years later, we are still using it. What was this model and how does the Dell model fit into that? So, one of the things that Dell was doing was made to order, built to order. I want you to notice the colour configurations. What was this doing? The made to order was helping you reduce the inventory and accounts receivable, and therefore, the current assets.

The second element of the strategy if you recall was outsource and this is the blue blocks and it is helping you reduce the expenses and fixed expenses and also the fixed assets. A third element of the strategy was enhanced revenue through a longer service contract and that is reflected in the green boxes out here. It allowed them to increase the gross margin and the operating margin. And the final element was they wanted to minimise the time to volume. They wanted to build up the volume very quickly to enhance the turnover, and that is again reflected in the pink boxes out here. Now what you will notice is Dell had worked out, as an example, a net margin of 8% which was relatively high in that industry because all the competitors were killing each other.

So, net margin of 8% was actually high in that industry, and their turnover was 10X. Now what did that mean? That 8% margin turned over 10 times, led to a return on assets of 80%. And that with financial leverage, led to a return of equity of 180%. So, this financial performance was actually reverse engineered. They said, "If we are to get to 180%, how are we going to get there?" And for about 12 years in a row, Dell was able to promise and deliver to Wall Street through this model and through fine tuning this model, and it's an amazing testimony to the execution capability of Dell.

Video 5: Limitations of Efficiency Metrics

You probably noticed certain amount of pride, that I had in talking about the Dell model. And, we used that in class at the University of Texas at that point of time. And my students still tell me, that was probably one of the most memorable classes they had. Why? Because they got three professors for the price of one and all of us John Martin, Tom Meredith and myself, were often at odds with each other. We were going in the same direction, but we didn't necessarily agree with the metrics. So, it's very good learning experience but I also want to point out, that when you're focusing on short term performance, there are certain limitations. What are some of these limitations?

The benefits were, basically that they were able to rely on a B2B market. Their customers were an asset. They had fine-tuned, their manufacturing capability to be able to manage the margins and the turnover. They were pretty much acting like a retailer. Their computer was like a retail store, with all the different components kind of selling on it. Very brilliant, on the process management side and what was the mindset? The mindset was really based on efficiency and not on early growth; steady growth and efficiency. And they wanted to be able to reproduce those results over a period of time.

So, that worked very well and however, a few years later, in the early 2000s, around 2005 and 2006, they ran into trouble. Why? Because the market had changed. It has changed in a variety of ways. Number one, it had shifted from North America to Europe and then to Asia, meaning China and India, the emerging markets. The second, is the market had shifted from largely B2B to a business to consumer markets were design and flourish, etc., seemed to matter. The third problem was, they ran into a quality issue. The battery started overheating and because of that, they had to exchange the computers. Now, just remember, if your margin is 8% and you take one computer back because of overheating or whatever the reason is, you've now got to sell 12 computers at the 8% margin, to compensate for the one computer that you've taken back.

So, it's because of that around 2006, Dell ran into a lot of problems because of quality issues, because of the change in the market. And this allowed companies like Lenovo and Hewlett Packard and Acer and Apple to get back into a position of strength. Dell has recovered since then, but it's important to notice that around that time period when Dell was suffering, this is what Apple looked like. There used to be some people saying that, "You can have any colour Dell you want, as long as it's charcoal grey." You might remember the comment that Henry Ford made saying, "You can have any colour car you want, as long as its black." So, the joke was going around, " Oh, you can get the charcoal grey Dell, but you could also think differently and get the Apple." Now, if you looked at the stock market performance, around that time period early 2000s, you see that Dell was blown away by Apple. But keep in mind out here, lot of this growth in Apple is actually because of the iPhone, not because of the Mac.

So, what are some of the limitations? One limitation is reflected in the comment by Einstein, "Not everything that counts can be counted and not everything that can be counted really matters." What do I mean by that? If we looked at the time when I was finishing my Ph.D, 1978. At that point in time, 95% of the value of companies was on the balance sheet. Then about 25 years went by, and it's still true today that, about 75% of the value is not on the balance sheet. So, the stock price to accounting book value ratio is running roughly 4:1. So a lot of value is not on the balance sheet. So, the question is: Would you get onto a plane, when the moment you were walking up the ramp, the pilot said, "Well, you know, you might want to reconsider this, 75% of my instruments are not working, but never mind. I'm a very experienced pilot. I've flown for 25 years and I've never crashed." How many of us want to continue that flight?

The second part to remember, is that if you're going on a curvy road, if the future is uncertain, would do you want to drive forward, by looking backwards? So, these are the two major considerations that we should worry about. Do we want to be looking at the future retrospectively? Will the past be repeated in the future? The two other elements that are also critical: one is: What is the depreciation schedule for customers and brands? I ask this, tongue in cheek, because we know that brand investments, marketing investments are really regarded as expenses; which means the depreciation schedule is one year. You've got to pay for it in one year. Is that fair? Because you don't lose your customers in one year. If there's going to be an asset that is with you for a while, you should advertise it, over the expected life of the customer.

Finally: Are we managing these ratios, return on investment, return on assets? One way to manage it is, when the returns aren't good, you kill your assets. So, return on assets start looking better. So, was it better to really manage the cash flow or is it better to manage those assets? The final element where these short- term metrics are dangerous is because they sacrifice future opportunities at the altar. And this is a very big problem because when we look at mature markets, they have higher margins, they have higher turnover compared to new product opportunities, where the margins are lower, the turnover is lower and in addition, you got to pump in more money to build the market, to acquire the customers. So, we can look at it market after market.

But if I look at mobility market, what we see is the has-beens are people who are protecting the past like Nokia and Motorola, and the future is reflected in Apple and Android and Samsung. So, the important thing is once again, instead of thinking the glass is half empty or getting empty because of competition, we should think of it as half full and what we need to do to fill-up the glass? And from my view point, I just want to make two comments. One is: No pain, no gain. The second is: You cannot save your way to greatness. And those companies that are focusing on ensuring short term profitability and sacrificing the future at the altar, they really ought to look at the second comment, "You cannot save your way to greatness."

Video 6: Performance Metrics: ROMI, EVA and NPV

We will now talk very briefly about three metrics: One is ROMI, Return on Marketing Investment. This is the one that's probably used more often. More important one, according to me anyway, is Economic Value Added which is looking at cash flows. Net, the cost of the assets that are used in creating the cash flows. And the third one, Net Present Value, is actually looking at the value of future earnings rather than the current earnings. And that I think that is more relevant when we are making investments for the future, not just managing short term performance. If you recall, we had earlier talked about something called the Marketing Dashboard, where the logic was that we make certain investments, certain expenses on the left-hand side in things like advertising, channel support, etc. And then, the other part of the marketing strategy is really reflected in value extraction, which is coming through pricing.

So, when we do those things on the left like advertising and channel support, it results in certain intermediate benefits that we get. It'll be things like consumer loyalty, consumer preferences, the support from the channel, the availability of the product, that is, and through market coverage. Now, when we do all of that, the price is going to impact the revenue that we generate through market size and through sales. And from that revenue, when we subtract the cost of goods sold, it is leaving us the margin. And we then operate with the net margin, which is revenue minus cost of goods sold. What are the ratios, etc, that we create with it are going to be reflected in return on assets, Return on Marketing Investments and so on.

So, let me take you through this notion of Return on Marketing Investments. Again, this is a chart we had used earlier to show that sales and market share were really a function of the brand strength. There were also a function of advertising, price promotions, the channel support and so on. And you might recall that in this, we're looking at the value over time, and the purple area is reflected in the strength of the brand. Now if we see a lot of variation because the competition is not silent. So, in those time periods when the competition is on the offensive, maybe our brand is on the defensive, so that's why you see the spikes. Then we have the impact of trade promotions in green, the impact of consumer promotions in yellow and the impact of advertising in blue. Now, what does this mean?

If you're an analyst, if you're a brand manager and you're looking at this kind of output, you might conclude that the yellow part is more dominant, meaning consumer promotions are having the greatest impact on sale, followed by trade promotions followed by advertising. And if you were trying to get your quarterly bonus, what you might do is, you might spend more money on consumer promotions, followed by trade promotions and the least money on advertising. Now it turns out advertising is what you need to do to build the brand strength. The price promotions are eroding your brand strength. Why? Because they are training the consumer to pay attention to price. So, what you do in the short run may come back and hurt your long-term performance, such as actually the brand.

Let's take it to what it means in terms of ROMI. What are we doing in ROMI? We're saying, "Okay. We're going to make a marketing investment, let's say price promotion. That is going to lead to a certain incremental revenue. From that incremental revenue, we need to subtract the cost of goods sold, labour material, so on and so forth. And that gives us the contribution margin. From that, we subtract the marketing investment that we just made and that then leaves you the net return, the net contribution." So, let's take it through an example. So, let's say we spent 10 million on marketing, and that led to an increase in sales of 20 million. Cost of goods sold were four million, leaving us a net gross margin of 16 million. From that we subtracted the marketing investment we just made, leaving us a net return of six. Now that net return of six was on the basis of 10 that we had invested in marketing. So, the return on marketing would be 6/10 or 60%.

So, this is a quick and dirty example of how we can calculate what is the return on things like trade promotions, consumer promotions and advertising. And another way to kind of look at it and saying that, ROMI is looking at the incremental revenue minus cost divided by the incremental marketing investments. It comes back to the ROI kind of formula that we saw earlier in the course, and what we're doing is, we are signaling, we are focusing on the marketing investments, and we're doing an incremental analysis. Now, the problem out here is, again an issue that I just raised, which is: What is the depreciation schedule for marketing investments? Out here, we are treating it as one year. However, if you use these promotions to build your market share and to build your customer acquisitions, they're not going to disappear in one year. So, what you really need to do is you need to amortise them. You need to pay for them over the expected life of that marketing asset. So, this is the kind of adjustment I would do to Return on Marketing Investments.

That takes us to a second measure that I wanted to talk about, which is Economic Value Added. Now, what is Economic Value Added? It is saying, "It is revenue minus costs, minus the cost of the assets that we used." So WACC here, is the Weighted Average Cost of Capital. So, if our revenue was 20 million, like in the previous example and after we subtracted all the costs it left us with a return on six, what we're saying is from that six million, we need to subtract the cost of the assets. So, typically, the weighted average cost of capital is going to depend on the strength of the company, and it'll vary by industry. But what we're doing different in Economic value added, is we're saying, "Let us worry about making money and not worry about managing ratios."

So, instead of managing the ratio of return to marketing investment, let's look at how much money is left in our pockets after we've paid for that marketing investment. So that is the difference in logic. The final thing that I wanted to talk about is Net Present Value. Supposing we were looking at a product launch, and what we expected over a five year period was these cash flows: 1.2 million in the end of the first year, 7.1 million in the 5th year. What the finance colleagues do is they'll say, "Let's take that last year - 7.1 million, and let's assume it's going to continue in perpetuity. And at the 9% cost of money, that 7.1 million is actually worth almost 79 million." So, what we then do in Net Present Value is we discount it back to the present and 79 million, six years and thereafter is worth only 51 million, and that 4.5 million in the fourth year is worth only 3.3 million so on. What we then do is we add these things and you'll see that the added value of all of these comes to be about 64 million. Now if we were to make an investment, let's say an electronic e-channel or it could have been increasing distribution in a new country and going into new geographical market. What are we doing in effect? We expect, number one, to serve a larger market through any channel. But we also expect to penetrate the market faster. That the appropriate marketing research may have led to a cash flow distribution that looks like this new line, which is in black.

Then we look at the present value of these new cash flows with the e-channel investment, that number comes out to be about 89 million. So, through a 10 million investment, you've now taken the value from 64 million to 89 million. So, it's a 25 million return on a 10 million investment, and this is a lot more palatable. The message I want to give is that, if your marketing is going to have a long term impact, why are we measuring its impact on a quarterly basis or an annual basis? We need to give it a fair shot. Again, emphasising, ROMI is better than not doing anything. Economic Value Added is a better measure because talking about cash flow not ratios. And finally, Net Present Value, if you can estimate it, it's even better, because it is talking about what the future brings to us. Now, a lot of people have difficulty doing this last analysis because the future is hard to estimate. But just because something is hard to estimate doesn't mean you shouldn't estimate it at all. Because if you don't do it, you're not giving the future a fair shot.

Video 7: Financial Service Brands and Customer Lifetime Value

Shifting from managing brands to managing customers, I now want to focus on a very popular concept these days called Customer Lifetime Value. Again, this has a history. I started tinkering with this concept in the mid '90s. And I'll show you some very quick and effective mechanisms by which you can estimate this. I'm going to bring up an example that we've talked about before, and then we're going to see how we can take it to higher levels. If you recall, we talked about E-Trade, and we talked about the fact that E-Trade spent about $400 million to acquire 2.2 million customers. The target was two, they got to 2.2 million customers.

And what they were doing was they were cross-selling mutual funds, stocks and bonds, later on, E-Loans, automotive loans, mortgage loans, so on and so forth. So, a lot of cross-selling activity. In the example that I gave you, they spent 400 million to acquire two million customers, so that the acquisition cost is about 200 per customer. Now, what is the benefit? I've laid out some of the benefits out here, and the benefits were that for the stock trading, it was roughly nine trades at $16 a trade that gave you $144. The margin account, the money you borrowed to buy stocks sometimes that was netting you about 120 per customer. Our credit card was at 30% likelihood that you'd be able to convince the customer to use your credit card at $60 per year. That was $18 and so on. So, the benefit was $308, and your customer retention cost was 20. So, that left you 288. So, if you spend 200, you got 288. And is that a good deal? Some people say, "Well, maybe not." Why? Because there's a lot of uncertainty related to that $288 net. Well, maybe that's the case, but it's also not taking into account that this customer is not vanishing, immediately. And therefore, it's important to consider: what is the lifetime value of the customer, not the value of this customer this year.

So, with that, let me take you through some rather simple arithmetic and, unfortunately, calculus for those of you who hate calculus. This is what we do. Before you can discount the money that you make from a customer, you've got to make sure there are customers around. Now, supposing we were looking at a customer defection rate of D: D% were defecting every year. So, if you started with 100 customers, you had 100 multiplied by one minus D left. So, if a defection rate was 10%, you start with 100 customers; next year, you got 90. The following year, you've got 90% of 90, which is 81 and so on. And that is reflected in this curve. And what this curve is saying is that the expected value, is described by this curve e to the power of -dt, where D is your defection rate and T is time. Similarly, when we look at the present value of money of an annuity, if your cost of capital is K, then money a year from now is not worth the same thing as money today. So, what you're doing is you're discounting it at your cost of capital K. Now, you can only discount money that has been made. So, you got to multiply these two curves. And unfortunately, the multiplied curve is coming down at a rate that is faster than either of these two curves. So, it's coming down at the rate of K, which is your cost of capital, plus D, which is your defection rate. And what it leads to is something that would be the annuity value, that is reflected in 1/K+D. And so, this is a metric that is saying, how valuable is that $1 per year.

So, if your cost of money is 10 and the defection rate is five, then $1 per year is 1/0.1 + 0.5. That's what it results into. So, out here, I've given you a little bit of chart and this chart I've used in management training. So, let me take you through some numbers out here. Supposing our customer retention rate is 90% which means our defection rate is 10%, our cost of money is also a very simple10%. So, what is the valuation metrics? 1/K+D. So, it is 1/0.1+0.1 which is 1/0.2. So, the evaluation metric is five. Now, supposing we were able to increase our customer retention rate from 90% to 95%. What does it mean? The valuation metric is 1/0.1 + 0.5, which is 1/ 0.15, and that is the ratio of 6.7.

Here's the catch though, that increase to 6.7 from five is an increase of 1.7 divided by five. So, it's a 34% increase in value due to a 5% increase in customer retention rate. So, this is a quick way in which you can estimate what is the impact of that 1% increase in retention rate? Normally, we don't think of it this way, but when we think of the long-term value of the customer, in this example, it shows that your customer retention rate going from 90% to 95% is building 34% in terms of value of the company. Now, all this is reflected in a measure called CLV, which is looking at: what is the value that we're getting from a transaction? What are the number of transactions, the frequency of transactions? And then how long is the customer going to be with us? When you multiply these variables through, you get something called the Customer Lifetime Value.

Now, there is much more complicated ways of you doing it. You can actually do this analysis per customer. For a banking customer, I can definitely do it by looking at all the banking records. I can calculate a very precise value for the customer. But this is the back of the envelope way in which you can do the analysis. Now, one way in which we can use this analysis going forward is to look at YONO. YONO is something we talked about during a previous session, and the idea is YONO very similar to E-Trade in terms of the scope. And in addition to cross-selling to your Business to Consumer customer, you can also sell to the B2B customer. So, this is a good exercise for you to use your mental electrons, and we will lay out the scope of doing this as an assignment for you to work on.

Video 8: Managing Strategic Customers and Distributors, Competition, Solutions and Bundling

We will now focus on Managing Strategic Customers and Distributors. So, this is mostly in the B2B setting, and I also want to talk about how to manage customer, what is called customer solutions and how do we bundle products and services and in terms of extracting value. So, we've got quite a few good examples out here to pay attention to, in terms of what to do and what not to do. Now, typically if we're looking at a distributor, what are we doing? We have a published price for a product, and then what we end up by doing is negotiating with the buyer. And that is going to typically include some sort of order sized discount. If they're going to buy more, they want a larger discount. Then they're going to come back and say, "Well you know, the competition is willing to give me 12%, you're only offering me 9%." So, they'll try to get you to match the competitive discount. Then there are all kinds of terms and conditions: Another 2% off if paid in 30 days, and there will be an annual bonus, some discount for cooperative advertising. So, something that is listed at 100 may actually be sold for 80, net net of everything.

Now, there will be some people who are paying 85 and there will be some people who are paying 70. So, it's not that it's 80 for everybody. And the bigger your customer, the more negotiation power they have, the more discounting will occur. So, whether it is Amazon as a customer or Big Bazaar, which is a store chain in India. You will find that they will be negotiating very hard. So, the question that we may ask is, "Do discounts vary across key accounts?" The answer is definitely yes. It depends on how much information they have and how much they're willing to negotiate with you. The second aspect is how do we manage? Do we actually manage the bias, or do we just give in? What are some ways in which we could possibly manage them?

All right, so I want to take you through a typical cycle. The cycle will be: We start with a client in this green spot. The diagonal is showing the point where the net price is the same as cost of serving the customer. So, above the diagonal we make money, below the diagonal we lose money. So, that's where we start. Hopefully, over a period of time, we make the customers more profitable to deal with. But the customers, the larger ones or some of the larger ones, some of the more powerful ones will negotiate you down to a position, possibly where you're losing money. And the question is: What do we do and when does this happen?

So, if you do the analysis of your own key customers, key accounts, you will manage to find out that these are strategic customers. These are large customers. These are customers who order today and want to delivered it yesterday. And they're buying in smaller quantities, so they're not very efficient in the buying process. So, what are some things that we could do with these customers? One is we could say, "All right, we're going to bundle multiple products so we can try to move them above the line. The second is, we're going to unbundle it, so we can get rid of the costlier items. So, we can start looking at those items which were expensive and not giving them away for free. Now, in order to do all of this, what you need is information.

And of course, you have the combined strategy of increasing value, which is some combination of bundling and unbundling that is possible. Now, one thing that I recommend to people is to do what Infosys did around the 1995 era. At that point in time, they had one key account, and that was General Electric. And GE, I believe, accounted for as much as 25% of Infosys' revenue. Now every year, GE would come and negotiate the price down and the senior management at Infosys decided at one point in time that if we keep cutting the price, we will have to cut the quality of services. And if we cut the quality of services and if something goes wrong, our reputation will be ruined. So therefore, it is better to tell General Electric, "Sorry, we can't serve you anymore. In fact, we will help you find another vendor who might possibly do this for you." So, they went through the exercise of firing a customer today.

Now, this has been done in other instances as well. But, in order for you to walk away from a customer or to renegotiate your contract with the customer, you need the information. You need to have options, including the option of not having that customer. But it makes it easier to say goodbye to a customer, if you have other customers lined up. So, that is what I mean by options. And the third thing finally is just you have to take a deep breath, you may use your guts to say, "All right, I'm just going to do it." So, this is typically what needs to be done managing the negotiations.

Another example, that I ran into was 3M company, and this was related to magnetic tapes, for those of you old enough to remember magnetic tapes. The key customer to 3M for magnetic tapes was Disney. Every quarter, every year they would go to Disney, trying to get a 1 or 2% price increase. They always came back with a half or 1% price decrease. You compound it over several years and on a already thin margin product, your margins are getting close to zero and negative.

So, 3M, after a lot of heartache decided, they were going to tell Disney that we can't serve you anymore. So, they go to Disney and said, "Look, this product is not very profitable. Why don't you line up another supplier and so we can bow out?" So, what is the response from Disney? "Oh, no, no. You can't do that." "Why can't we do it? We are not in the business of losing money." "Oh no, we've never had a problem with you. Never been a quality issue. And when we had a huge success with The Lion King and we needed extra product, you're the only guys that delivered. What do we need to do to keep you in business?" So, here's the same company that was negotiating price cuts, now is saying, "Can I can pay you more for you to stay in business?" Moral of the story is that we tend to focus on product costs. We do not focus on the value that we are creating through intangible fair customer service. So, that needs to be brought back into your equation as well.

A good way to look at managing customers is really reflected in the volatility and vulnerability in your cash flows. One company I've worked with in the past is a Finnish company called Outokumpu They make specialty steel. They have two types of customers: One customer, as they call relationship customers. And what are these customers, will be companies like Volkswagen that are buying lots of steel, companies that make home appliances and also companies in food manufacturing that need a lot of stainless steel. So, what happens is that when there's a downturn in the market, let's say automotive market, and Volkswagen starts buying less, these guys keep the steel mills running because it is too expensive to shut down a steel mill. Inventory piles up, and then they have to sell it to transactional customers, meaning distributors. When the market picks up, those transactional customers are now out there competing with you. So, what the company decided was that in order to reduce the variability in sales, they wanted to replace transactional customers with relational customers. And indeed, they were able to do that over a two year period.

Now, what is the benefit of stabilising your demand by changing your customer mix? What it does, it also stabilises your profit function, and that leads to an increase in your price earnings multiple. Now, this kind of thinking is very much reflected in what Mr. Jack Welch did in the 90s in General Electric. What did he do? He came out with this notion of customer solutions that everybody has now incorporated. Simmons practices it, Hewlett Packard practices it, Home Depot practices it. But what is the idea behind customer solutions? The idea behind customer solutions is - don't sell the product, sell the services that go along with it. So, it's not selling the x-ray machine, in selling the x-ray machine, the maintenance and the supplies and so on. So, in this mechanism, what the company was doing was big thing to look at: How do we get better utilisation of the service capacity? Now, think of air conditioners. When do air conditioners need servicing? It's going to be in the summers. Then what do we do with the service people? So, the idea was that we start using technology to do preventive maintenance. So, you do maintenance through the year, not only in the summers, and you get into a service contract with your customer to do that. Another element was to take advantage of synergies such as: what products and services go together, attached to it the consumables. And when you did all of this, what you were doing is possibly setting it up. So rather than selling the product, you're saying, "'m going to lease the product to you and you pay by x-ray instead of paying for the cost of the machine. Every time you use the machine, you pay us a usage fee, plus maybe an annual using fee. When you do that, a big benefit is it stabilises your cash flows. And what that typically means is that you get higher quality earnings, meaning these earnings are predictable.

They're based on a contract that you have signed and that results in couple of things. One is, your revenue growth, your risk comes down. Because your risk is coming down, your price earnings ratio is going up. So, with revenue going up, your earnings are going to go up, and at the same time, your price earnings ratio is going up. Now, this is reflected in what happened in General Electric. And what we see at GE is that during the 90s, the top line is the GE stock. Third from the bottom is an orange line, which is Siemens, which was the closest competitor. Now, what has happened on the left is that the earnings have increased. At the same time, the price earnings multiple has increased. And therefore, we see a quadratic growth in the stock price. Earnings going up, price earning is going up, Quadratic growth.

Video 9: Negotiating on Value Created

We were just talking about negotiating on value created. A very good example, is a company called Microban. I ran into a young lady. Her name is Kathy Hall, and she was the Chief Marketing Officer for Microban. And I'll tell you in five minutes I learnt more about negotiations from her than I learnt from professionals. What did I learn about Microban? And then we'll get to negotiations. Number 1: Microban, had the capability of building in antimicrobial properties in all kinds of products. So, you take a kitchen countertop, are you talking about bathroom tiling. The idea was: how do we get rid of bacteria? And they could embed those properties in tiles and in the caulking that is used to seal the tiles, and so on. And this is just an example of the kinds of companies that were their brand customers. Included companies like Craftsman tool, DuPont, DAP, which made caulks, Whirlpool, and we can go on and on. And they have about close to 400 customers, 400 brands that they partner with.

Now what they did was something very unusual. They would partner with only one partner, per use category. So, if they were partnering with somebody on refrigerators, they would partner only with that one company. The logic what they had was, "Look, we will co-develop these properties for you. We know bacteria management; you know refrigeration building. Let's get together and let's co-create the intellectual property. It'll be a joint patent that we will own. And we have had so much experience in selling anti-microbial products, that we will not only help develop the product, but we will also lay out the marketing plan. By the way, we've already done segmentation analysis and we know which kind of families are willing to pay for anti-bacterial control and how much they're willing to pay. So, we will work with you as a business partner, not merely a supplier of chemicals." So that was the value proposition.

What they were saying is they will provide you a turnkey solution and what we will help you with, is to improve your product quality. We will help you with differentiation, and we will indeed provide you the marketing plan. We've already done this analysis and we have come to you because we know that if we worked with you, you're the leading brand. And between us, we could make it happen So, our analysis shows that we should be able to increase your average price in the top segment by 10% and we'll be increasing sales by 5%. And that's going to bring in so much incremental cash flow. And our proposition is that we share the risks, but we also share the profits. So, what they're doing in effect is they're saying, "Look, we got a deal for you. We've got a solution for you and we have a deal for you. And by the way, if you're not interested, we're going to number two." So, this was the trump card I think, that they had come up with a solution. They were saying, "Look, if you don't know money, we don't make money, you don't pay out of your pocket. And at the end of it, if you're still not interested, we end the business of doing business. So, we're going to your competitor." And amazingly, their success rate has been very high.

And what Kathy Hall showed with some case studies how they improve the profitability at the company called DAP, D-A-P, and they make caulking for the bathroom tiles. And that shows that the same store sales went up significantly, in this example, by 17%. They also showed the case study with Emerson, where they were able to show that the sales for premium products increased by 10-30% depending on the premium product.

So, what they were doing is they were negotiating with information. But the important thing to remember is they had an option. They had the information and their option was that if the potential client was not interested, they were going to somebody else who was a competitor. And if you go back to what we talked about 3M, the option that 3M had was to close the product light and loud. Now these guys at Microban, are not closing anything down. They're just going to go to the next most valuable partner. And what they always did was they targeted the top one or two companies in every product category. So, by sitting on the back of the leading product, they were able to accelerate the market penetration very quickly.

Video 10: Zara: Fast Fashion

We will now focus on a company called Zara. Many of you know Zara as a fashion company, fashion retailer. And they're known for something called fast fashion because what they have done is they have built a platform for growth and resilience. While they're a fashion company, they've got huge investments that they made in infrastructure, in technology, in manufacturing technology and information systems and integrating the supply chain.

So, what is it that Zara does? They cover everything from design to sourcing, to distribution and retailing, to merchandising and managing the store operations. They're fully integrated. What they're doing at each level is they have a fairly large design team. They can do test markets, very quickly and get a new product out into the marketplace on the shelves, in less than three weeks. They are also very good in small-batch processing because what they learned is flexible manufacturing, like Dell, but they learnt it from Toyota. And so, they went to an automotive manufacturer to try to understand, how can they make things in small batches?

And how can we have flexible manufacturing in place? Their distribution is amazing. 48-hour delivery. The store manager picks up the phone or sends a message saying, "I need so many items in this particular colour of that particular design" And within 48 hours, the product is there. They also have something called search capacity. If a particular item is very popular, all the factories are integrated, and they can just run the same production in multiple factories, all at the same time, to meet the demand. So, they can meet the demand for 100 units. They can meet the demand for 100,000 units through automation.

Then they are really what we call a fast-cycle retailer, meaning, they keep the products on the shelves for 2, 3, 4 weeks. Other retailers have 4 cycles. You know winter, spring, summer and fall. These guys are replacing the products every three or four weeks. Now, what that means is they have much more variety and therefore that gives the customers an excuse to go shopping. You know, window shopping, if you will. And finally, they've parked themselves in very high-end store regions. So, customer walking out of a Gucci, wanders into a Zara, where the products are pretty much as good, but they are at a fraction of the price. So, this is the entire chain that they're managing and they have an upstream strategy which is based on automation. They have a downstream strategy that is based on merchandising and marketing. And what they've done is, they've done a great job in investing in both flexible manufacturing and information systems to integrate the upstream and the downstream strategy.

So, here's a result of what they've achieved. Their target market is upscale willing to offer, by a little bit of a premium, not a huge premium. And what they do is they're very quick to market because they have a large design team. So, their large design team allows them to do the test marketing and the speed to market is quick. They're also very good in using flexible manufacturing and information systems, as we've discussed, 48 hour delivery and also short life cycles. Finally, in terms of merchandising, and I've colour coded these because these are different processes taking place, but you'll see next to short life cycles, next to speed to market is a merchandising strategy called Scarcity Marketing.

What is Scarcity Marketing? You don't overload your shelves. If I am a customer and I'm waiting for a discount and I go two weeks later, it's gone. So, what they're doing is they're training you to buy now, as opposed to wait for a discount. When you look at these three colours: speed to marketing, scarcity marketing, short life cycles, they're coming from different processes, but they are integrated. This is what makes it very hard for the competition to copy Zara. Why? Because Zara is not outsourcing the product out of Bangladesh. They are making it right there in Spain or in Italy or in Germany. So, what Zara is doing, they've got a fully integrated chain, compared to, let's say, a competitor like H&M which does everything, except manufacturing is outsourced. Or Benetton, which does everything, except they franchise the retailing.

So, what are some of the benefits that you would expect? Well, one benefit is that, of course, you would expect lower inventory because of flexible manufacturing, just as we talked about in the context of Dell. What we also will see is a larger number of fashion cycles, therefore more variety. Lower risk because the inventory is pretty minimal. Fixed costs probably higher, because they put in the factory which are outsourced by the other people. Cost of goods sold, probably higher. It's a little bit higher because of small-batch processing. Turnover? Maybe lower, because what is turnover? Its sales divided by assets. They got much larger assets than the competition does. Inventory levels, we expect them to be lower.

Discounting, lower. Margins, probably higher. So, let's see what happens. When we look at their financials, we see they do little discounting. Therefore, the net discount's only about 3% compared to 10% for H&M. When we look at the gross margins is 46 compared to about 41.5 for H&M. The operating margins are indeed higher, at roughly 22 compared to 14. However, when we look at the net margin, the net margin includes the money that we've paid as interest for the equipment, etc., that went into the factory. We see that the numbers are more similar now, 10.5% compared to 9.5%. We go a step further and look at the turnover. The turnover is lower at Zara compared to H&M.

So, when you multiply the margin by turnover, we see that H&M has a return of assets, which is now higher than the return on assets on Zara. So, here I was talking about this company doing great things. But when it comes to return on assets, it's not so hot. When we further look at leverage, financial leverage, we find the return on equity is still better at H&M. So, here's a fast fashion company making all these investments in IT and infrastructure, yet H&M has better short-term term metrics. However, when we look at the growth in stock price, Zara's stock was growing at 47% compound rate, compared to H&M growing at 8%. So, something is happening, guys. Short-term metrics, H&M wins. Long-term performance, Zara's out there with a mile. So, what's going on?

So, if you look at it more closely, and, on the Y-axis, we have a log-log scale, meaning it's non-linear. We see Inditex which is the company that owns the Zara brand and we see H&M. What is happening out here? We look more closely and we find that there several factors, which I'll summarise for you. What are the factors? Zara was growing in terms of both number of stores as well as revenue per store. So, the top line is growing faster.

Second, that top-line line growth was possible because of scalability. They could add five stores and one production unit. So, it was a very scalable operation. As the utilisation of the factories improved, so did the margin. So, the margin was growing. Finally, they were in a position to sustain their growth. Now, all of this is not captured in the DuPont model that we saw in the context of Dell and that we just saw a minute ago when we were talking about Zara compared to H&M.

So, what is missing out here is something that we need to worry about because the DuPont model, the short-term term performance model, doesn't take into account growth, and it does not take into account resilience, and both growth and risk, of course, matter. I'm now going to move to platforms and how platforms can help accelerate growth while helping us manage risk and we'll do it in the context of both customer platforms and product platforms.

Video 11: Managing Growth and Resilience: Value of Platforms as Options

There's been a lot of talk these last, I'd say, five years. Talking about platforms and everywhere from manufacturing platforms such as Toyota and Volkswagen, or it could be IT platforms, Amazon, so on, lot of conversation about platforms. The reason we need to worry about platforms is because they provide us an avenue for growth for modularised growth, as we saw in the case of Zara. They could add five stores and one manufacturing unit and they could grow systematically that way. And they also provide you a way to protect yourself, has superior performance characteristics compared to competition, therefore, they protect you from competition.

The nice paper, written titled: 'From Pipes to Platforms'. Pipe was a linear pipe with, like a supply chain manufacturer going directly to the end customer, as we saw in the case of Dell. But platforms are referring to where you can serve multiple customers or maybe multiple products using the same platform. So, it gives you granularity, it gives you modularity. Let me explain what I mean by modularity. You remember earlier on we talked about brands being strategic options and that up-tier brands were able to penetrate the market faster and that in fast-moving moving markets, one would take advantage of the time benefit, the time premium. But in slower markets, you might want to enter the market later and let somebody else take the risk of developing the opportunity based on a brand, based on our distribution strength, we will just move into the pole position later on. You might also recall that we talked very briefly about how Honda had a platform in the small engine technology, how multiple products are sitting on that same platform. Well, it's not just Honda or Apple or Google.

Let's look at other companies that may be using this as a platform. Perhaps the most visible example on the product platform side is Intel. Now, if you go back to Intel, they started with something called the 8086 chip. Then they moved to 286, 386, 486 and the Pentium, instead of being 586 was named as the Pentium, and there's a little bit of history behind that. And the company, Intel, renamed the platform as Pentium because they had signed some agreements based on the x86 architecture, and this allowed them to get away from the x86 terminology. Sorry, this was a sidestep, but let me get onto it. Now, what is the benefit of all of this? The benefit is that when you go from Generation X to Generation X+1 you're able to use the technology from the previous generation.

Therefore, the cost of developing the new generation is lower. And indeed, another competitor who doesn't have the previous generation is going to find it hard to compete with you. There's also, therefore, greater scope for differentiation because your money is going further, your investment, R&D money is going a little bit further. You also have modular designs, meaning that I could create a product by combining modules and so it's called modular because the same module can be used in multiple products. And we saw this in the case of Honda. Now, what is the net benefit of all of this? I will summarise this in a chart. And for product-centric platforms, the benefit is that you're able to reuse the technology, you are able to go down the experience curve faster.

So, therefore, your cost reductions in manufacturing are going to be faster. Because you're using modular designs, you can use the same inventory in multiple categories. So, the same battery, the same carburettor, etc., could be used in multiple products, in the case of Honda. The growth is coming because of scalability and because of the supply-side synergies. The speed is in time to market because we can outspend the competition, we've got six products supporting our technological investment. And the sustainability is because our product is better differentiated because we have outspent the competition in creating their differentiation. Our total cost of ownership, which is the cost of the product and associated services, is going to be lower, and that just makes it more sustainable. And the impact of all of this is pretty tangible. When I add up the previous rows, I got a pretty tangible measure of the benefits of a product platform. I want you to compare the Intel picture, and that Intel picture just as easily applies to cell phones.

So, if I took the Apple phones all the way from the model in 2007 to today's model, I don't even know how many models there are, but in this chart, it is saying 12 models over a 12-year period, almost one model per year. Now, let's move to another picture, which is Microsoft. What is it that we see different in this picture? In the previous picture it was a single product, the PC. That was the point of focus for Intel. For Microsoft, the point of focus is the customer. Let's acquire the customer. Let's sell them Word, then let's sell them Excel, then let's sell them Outlook, and over a period of time you keep up-selling and cross-selling. And the logic behind Microsoft business model is, let's grow the customer base, let's understand who they are, let's register them, let's analyse where they come from, what is their job requirement, etc. Then, let's figure out what services we can cross-sell to them.

So, for example, several of you might be using OneDrive to store your data, so that is an additional service that they were able to sell. And then they are doing E-marketing, they're doing automated upgrades. And with the automated upgrades they can keep the level of service higher. That helps them in customer retention. So, the story about Microsoft is, try them for free, but pay forever. All right, so this is a model. A similar model is, of course, being used by Google and the apps. And if you recall, we talked very briefly about YONO from the State Bank of India. They're using the same model, which is a customer platform model. Now, what is that doing? You will see Twitter, Facebook, we can go on and on. They are targeting you as the customer and they're trying to analyse what is it that you want, and Amazon will tell you that Alexa knows everything about you. What are the benefits of this now, from the financial viewpoint?

Just as we talked about the benefits for a product platform, the benefits from a customer platform such as for Microsoft or Google are very much similar, except they're on the demand side. Instead of modular designs for manufacturing and production, what you're doing now, is you're using the same sales and support, service support network. You are upselling and cross-selling instead of physical scalability. You're focusing on time to market for speed instead of time to, sorry, time to market penetration for speed compared to time to market in terms of design of the product. Your switching costs and customer loyalty is what is helping you sustain your position in the marketplace.

Unfortunately, these intangible benefits have not been documented very well and we have seen, for example, in the case of E-Trade. E-Trade also has a platform, right? We find the case of E-Trade, that you can take those intangible benefits and you can quantify them. So, the trick here is just as we quantify the benefits of a product platform, we should quantify the benefits of a customer platform. And that enables marketing investments. And once you understand the value that you have created, it makes it easier to move towards appropriating the value. So, remember, we started by saying value creation is important but value appropriation is also critical otherwise you're giving your business away for free. So, when we continue, we will continue with integration of value creation and value appropriation.

Video 12: Integrating Value Appropriation and Value Creation in Business Innovation

I've been talking about value appropriation and value creation for a long time. It's about time we actually did it. So, just to take you down the memory lane. In the very first module, I talked about the fact that different companies have different DNAs. We talked about Ford Motor Company. And Henry Ford said, "You can have any colour car you want as long as it's black." His motivation was really efficiency in the assembly line. But that same kind of focus we see today, in a company like Federal Express or the largest airline in India called IndiGo, very, very focused on efficiency.

Then we have companies such as Pfizer, or Intel, that were very focused on research and development as part of the DNA. And when we looked at brands like Apple or Coca-Cola, these are companies that were very customer-centric, very, very brand-oriented, with marketing was the kingpin. Now, we also talked about the fact that while in the past, the focus may have been on core competence, moving towards the future, companies don't have the luxury of saying that we will excel in one out of these three. Today, to succeed, you really have to focus on all of them. And these are the ambidextrous organisations that we talked about. Anyway, to summarise what we already talked about, you have to look at three possible processes for adding value. In a product innovation, related to product innovation is the supply and delivery, the supply chain aspects.

And related to that is customer-centricity, or customer connectivity, or branding, whatever you want to call it. So, these are three things that have to be done simultaneously. This is value creation. Now, value extraction is typically left in the hands of finance people, financial cash flows. Well, it need not be that mysterious, but almost two and a half decades ago, maybe three decades ago, I was working on a project, consulting project, where the Chief Financial Officer wanted to know if we implemented a particular strategy, what would be the impact on shareholder value? So, I read a fairly long book, 280 pages of finance. And at the end of it, I concluded that there were four drivers of shareholder value. What were the drivers? Basically, one, make more money.

So, don't you want to buy stocks of companies that make more money? Of course. The second principle I learned from that 280-page book was make money faster because a bird in hand is worth two in the bush tomorrow. The third element was, make sure it doesn't go away. And if I look at examples out here, we talked about Dell making more money. Everybody is probably tired of hearing how Apple makes it faster. And several times in this course, I've mentioned customer retention, and maybe Microsoft Windows is a poster child for customer retention. And then we have to worry about what are the investments we need to make? Is it in the brand? Is it in flexible manufacturing? Is it in IT systems? What are the investments that we have to make? And how can we tell the investors an appropriate story that we are making the right investments?

Now, what I would want to talk about is the project that got me started on this thing. And I went on a learning journey, and I'm going to take you guys through that same learning journey in one chart. It started with a project for Advanced Micro Devices that was based in Austin, Texas, where I was teaching, and Intel. Now, AMD, was always following Intel. Intel would do product development a year later, AMD had a similar chip, and they were basically saying, "We are just as good, only cheaper" Now that was the value proposition. Now, what they wanted to do was to have their own model of competing. So, let me contrast the Intel model, which is product differentiation R&D, heavy R&D. We do the differentiation. And the AMD model, which is very similar to the Dell model is 'how can we do it cheaply? How can we do it more cost-effectively?'

I also talked to companies such as Pfizer, which also believed in R&D, just as Intel. Talked to Samsung. They were interested in the rate of product innovation. How can we come up with more and more new products? I talked to Gillette, which was at that time an independent company. Today it is owned by Procter & Gamble. What did I learn from Gillette? They said, "Look, we need to keep innovating in order to protect ourselves in the marketplace. If we can out-invent somebody, then we are safer. And by the way, we don't tell everybody what we know. We know a lot about alloys, about alloy steel, which is what allows us to prove the product differentiation. But do not ask us for a factory tour because you ain't getting one." And then, I learned from Intel and Apple about investing in the future.

So, this is the story I'm getting from these guys. I talked to Unilever. Very, very invested in brands, just as Procter & Gamble. As was Porsche, and Porsche actually was investing significantly in the brand but also in the supply chain. They had become a major partner related to Volkswagen, which is now a sister company. Then I looked at Apple, looked at Charles Schwab, and these companies were interested in using technology to accelerate the market. So, what Charles Schwab was doing is they're going to use technology to bring the cost down. "We'll share some of the cost reductions with you, and hopefully we can get more of your business. And that is the way we're going to speed up in the marketplace." Apple had a similar story. Then we've just talked about Zara, so I'm not going to repeat what we just said.

We looked at the airline business, and the airline business was very focused on reducing risk through customer centricity. And the last company that I'll mention is one we've already talked about which is Microsoft. How they were investing in the future by not extracting money now. So, all these are different stories that you've heard. What was interesting is that all these stories fell into my three drivers of customer value, which is: better products, better supply chains, and better customer focus, better customer management. These are the three drivers of customer value, the three drivers of shareholder value; we're making more money, making it faster, making sure it didn't go away and making sure we have the right investments.

So, if I took those three by four and I superimpose it on the stories that I've just told you, what this gives us is provides us the framework. And we need this kind of a framework to integrate value creation, which is the columns with value appropriation that are the rows. Now, this model was generated over two decades ago, and it is as true today, as it was two and a half decades ago; why? Because it talks about the fundamental ways of value creation. It talks about the fundamental ways in which we can appropriate value. If I look at, for example, reducing volatility and vulnerability, reducing risk, they're many ways of skinning the cat. You can stay ahead of competition like Gillette, or you can have processes and turnarounds that are so much faster than anybody else, like Southwest Airlines or IndiGo; they rely on efficiency. Or you can put golden handcuffs on your customers, such as Singapore Airlines. They treat you very, very well. So, different ways in which you can reduce the risk.

Now when was the last time marketing people got blamed for reducing risk? But that's exactly what customer loyalty is. The biggest risk a company can have is the risk of losing your business, and that is the risk of losing your customers. To summarise what we just talked about. Very simply, we're saying, look three ways of creating value, four ways of extracting it. We can extract value through better margins and turnover, and that's a DuPont model. We can extract value through accelerated growth, we can extract model by de-risking the organisation or increasing the resilience, and we can generate value by appropriate investments. So, this is a very simple story to tell, and all of us in manufacturing and marketing and R&D, we have different roles to play in this metrics. I'm going to now take you through one company. I gave you multiple companies. I'm going to take you through one company, and what it means to them, and the company is Pfizer.

So, I interviewed some senior people at Pfizer, and I asked them, "What is the one thing that Pfizer really believes in that will determine your future?" And I knew in advance that for most pharmaceutical companies, the answer is going to be R&D which gives patents, which then allows them to have the cash flows. The answer I got was one word. And the one word was the 'Molecules'. So, is the molecules the patent? Then I said, "Well, if the molecule is so important, how come you're relying on other people's molecules to make money?" And what I was referring to was Pfizer purchasing a company called Warner-Lambert which owned a molecule called Lipitor. And Lipitor is the drug that we know is used to reduce cholesterol.

So, Pfizer said, "Yeah, you're right. We are one of the best companies when it comes to taking things to market. We've got an excellent sales team, and we know how to manage the research process with the Food and Drug Administration, so we can get the product into the market faster. And, by the way, Scandinavian companies and Japanese companies consider us the partner of choice. And indeed therefore, that is an advantage that we have. And by the way, that is reducing our risk." So, now they're saying that the Warner-Lambert like acquisitions is giving them a broader portfolio products. That is reducing the risk just as a stock portfolio has a lower risk compared to a single stock in that portfolio.

Conversation got to brands, and Pfizer has a big office, big central office in New York. When you walk into the building, it's almost half an acre on the ground floor, and in that half an acre, there's a garden, and in the middle of the garden, there's a small waterfall. So, I was asked, "Raj, did you see the waterfall?" I said, "No, I was worried about security, so I missed it." "No, no, no, what do you think we call it?" Well, I don't mean to be sexist, but what they were calling was that waterfall was Viagra Falls. Now, why was this company interested in branding? The old brand names in pharma companies are things you can't even pronounce. Well, the reason was that with branding, you can accelerate the rate of product acceptance. Also, through branding, you can hang onto your customers longer.

They were also doing a variety of things to accelerate the supply chain, and also trying to find ways in which they were able to get the products of the market faster, different delivery mechanism, injections versus inhalers, so on and so forth. What this company was not very interested in was efficiency; why? Because if you have a stock out, the pharmacist will give another drug which the doctor might order. Now, what I also learned was that for Pfizer, they were making huge investments in R&D, huge investments in manufacturing and supply chain, also upwards of $100 million when it came to branding, for products like Viagra. Now, as I was talking to Pfizer, I put their conversation into my framework. And I said, "Is this what your business model is?" And the answer was, "This is a very good way of looking at it." So, this really hasn't changed that much.

And if I summarise the key metrics, and they can all be found in to paper that is referenced at the bottom. This is a paper I published in 1999, it's saying, "Look for supply chain excellence, we have certain metrics just in time this and just in time that. In terms of product innovation, we have issues like time to market. When it comes to customer management, it's through price premium that people are willing to pay and therefore higher margins for branded goods. So, these are, I mean, I'm not going to repeat everything in this table. And in any case, it's a summarised table, to begin with. But the point that I want to make is that generally, the DuPont model is looking at the top row. If I look at what marketing people think of, it's the last column. And neither of these two pictures is complete. Looking at the top row is not complete; looking at the last column is not complete. Therefore, what I'm really suggesting is one ought to be looking at all the rows and including the investments that have to be made.

So, marketing is an investment, even though the accountants call it an expense. Now, when we do all of this, what we have to figure out is what is the value of investments that have been made for growth and resilience? What is the value of platforms? We stopped short at Zara earlier, saying that we could not use the DuPont model to explain why the valuation for Zara was greater than H&M. But we will come back to this model to talk about why Zara is doing a little bit better than H&M. When we consider acceleration and growth, and reduced risk and take into account the investments that Zara has made that H&M has not made.

Video 13: Value of Growth and Resilience

Let me now move to what I promised about explaining why Zara does so well. In the process, I will also talk a little bit about Nike and about Kodak. How Nike has prospered and Kodak hasn't. But let me stop at Zara. if I look at Zara's business model, and these are some of the benefits that Zara brought to the table, that I have put in my favourite three by four. So, if we look at the top row: In the middle column, we look at how Zara is able to enhance cash flows by having low inventory levels which reduces the cost. We also see that Zara is pretty good at managing the brand, and they do it through merchandising through the store windows very attractively displayed. And, of course, they do it through product quality and through differentiated products. For the first row, is what has taken care of by the DuPont model. Differentiated products will give you higher margins, branded goods will give you higher margins, better supply chain management will give you low inventories, etc. And therefore, lower cost structure.

What the DuPont model did not include, for example, is the second row. In the second row, we see that Zara has the ability to design products quickly, which means that they can get to market faster. Zara also has a very strong brand. They know how to do the merchandising, and they are going through multiple cycles, greater variety. They drive in more traffic into the store compared to the competitors, and therefore that gives them faster market penetration. They are also very resilient, and that they have been able to make their models such that it is hard for other people to copy. And this is where we were talking about how the demand chain was integrated with design and merchandising. So, people can copy one part, but they may not be able to copy other parts. The hard thing that it has been hard for people to copy is, frankly, the middle column, where Zara has an excellent supply chain that is integrated into design and customer centricity. Of course, Zara has also made investments in technology and in manufacturing. So, this is the overall business model. What the DuPont Model does is capture the top row. What it does not do is capture the value of growth and resilience, and it does not give due credit to the investments that Zara has made to enable the upper three rows. So, look at now Zara, they've made all these investments, and we've talked about why Zara would do better than H&M. But let's look at resilience in the context of COVID. What was the impact of COVID? Well, lot of stores were closed at Zara, but Zara was able to rebound online. So, they suffered in the physical environment, but they rebounded online.

So, let me talk about resilience in general. If you have a strong brand, your customer engagement enables you to resist, the turbulence that you find in the marketplace. Whether the turbulence is from competition or from technology or for in this case from COVID. Stronger brands are also able to recover faster. And finally, the strongest brands if they're able to leverage the new technology, can actually move to a stronger position than they were before the pandemic hit. Why? Because some businesses will go out of business. So, that business that has been lost by the companies that went bankrupt, and actually be captured by the survivors. So, you can actually reinvent and reimagine your new business.

Now, let's look at it in the context of Nike. Nike was able to do something called Direct to Customer. In the context of the pandemic, Nike has expanded its direct sales not only through Nike stores but online. Kodak was one company that was unable to adjust to turbulence, and we know, but they went out of business a few years ago. So, the Kodak moment remains just that - a Kodak moment.

Now, let's talk about Zara. This is a picture that shows the number of stores that were closed. The bar, the Y-axis is the number of stores, and you see around March and April and May of 2020 the number of stores that Zara that were closed. You also see the quick recovery. Now, what enabled them to recover was the flexible manufacturing. Other competitors did not have their flexible manufacturing, and in this case, they were able to do that. The other element that you'll see is towards the end of the time cycle here. You'll see a lot of fluctuations Now, what is happening is there's more uncertainty with wave two, wave three, etc., and in different countries.

So, not every country is facing the same picture. The picture in Italy is different from the picture in Germany, and so on. And what they were able to do during this time period is to manage that uncertainty by going online. And the estimate is that by 2022, Zara will be selling close to 25% of their products online. So, they were able to use the pandemic to actually shift the mix of channels that we're using to get to the customer. So, the pandemic actually became an opportunity for them because others have not been able to respond, just as quickly.

I'm going to move to one more example, and this is a company called Ashok Leyland, and they're major manufacturer of trucks in India. This company was doing quite well until three things happened. First thing was something called GST, Goods and Services Tax. So, India is like 29 states. When you cross over from one state to another, you have to pay a tax. Under GST, the tax went to the Centre, it was automatic and it got redistributed to the states. So, the trucks could keep rolling. When they went from one state to another, they did not have to stop at the border pay a tax before they could move on. So, they kept rolling. So, instead of eight hours per day for truck, you're now getting maybe 10 or 12.

Then became our technology GPS systems. What this was doing, it was enabling the truck owners to identify where the trucks were, and figure out in a pony express kind of fashion like Wells Fargo, run the truck from Point A to B with one driver. Now another driver takes over from B to C and so on. So, instead of getting 10 to 12 hours a day, they were now getting 16 to 18 hours a day. So, if instead of an original eight hours per day, you're now getting 16 hours per day. Obviously, the demand for trucks is going to go down by 50%. Now, on top of it, we got COVID, and that reduced the demand for logistics significantly. So, this company was in real trouble, on the manufacturing and supply chain side. Now, what happens if you're running a truck 16 hours a day, 18 hours a day? There are breakdowns.

So, what you lost in manufacturing and supply chain can be regained when it comes to services both for the product, which is the truck and the services related to the driver. So, this is exactly what the company did. They offered better services, repair services. They also started offering financial aid, etc., to the truck buyers. And as you can see, the company moved from manufacturing and supply chain to a focus on supply chain and customer centricity.

If I go back to the favourite chart of mine, this is where a Ashok Leyland was in terms of product innovation and supply chain focus. Because of the pandemic, because of technology changes and because of the goods and services tax, the company is now more focused on integrating supply chain with customer management. So, what we have to worry about in terms of sustainability is not only what are we doing today, but how are we going to change when the world changes on us?

Video 14: Course Summary

This brings us to our last segment, which is what is the lessons learnt in this module? Also, what did we learn through the course as well? Because this is the last module. I'm not going to go into great detail about all the 10 points that we have covered. But our focus really has been looking at ways in which we can look at the impact of marketing on efficiency. You saw it in the context of Dell, how they were able to integrate marketing with the information flow and the product flow. We talked about the value of measures such as Return On Marketing Investment or ROMI; we talked about economic value-added; we talked about NPV.

It's important to realise that these are contextual. If your benefits are going to be in the future, you have no option, but to try to estimate the net present value, because looking at the past isn't going to help you make decisions about the future. We can focus on the product or the brand; we can also focus on the customer, particularly in the services sector. Increasingly, a lot of the analysis is being done at the customer level, or at the segment level. So, when it comes to financial institutions, hospitality, meaning hotels, airlines, etc., you will see that a lot of marketing activity is targeted to the individual level. All you have to do is look at your now dormant frequent flyer programme, and you have not much activity.

And, I'm sure; correspondingly, the airlines are suffering because you and I are not very active. We also need to look at, how do we manage our relationships? There's a tendency across the sales and marketing people that I have run into where they give in to pressure from what are called strategic customers. There's no need to do that. You, as a vendor, are just as important to the customer as the customer is to you. And we talked about how Infosys walked away from General Electric, and we talked about how 3M was ready to walk away from Disney, when Disney said, "Please come back." So, you need to understand the value. This negotiation skill is important, and I recommend that you take a course in negotiations. My biggest learning, as you know, was from Kathy Hall at Microban.

We talked about platforms; platforms are a great way to think about modular designs and how you can build. Think of the platform as a foundation, and then the modules are the bricks that you build on it. So, you're building a structure on top of the platform, and that helps you with resilience, both on the product side, the software side and certainly on the services side. We finally ended up by closely integrating value creation and value appropriation. The case that we used was Zara, but we also talked about Pfizer. We also talked about a whole bunch of other products and services that fell within that umbrella. This particular framework is one way to think of what are business models. So that is now captured in this schematic. As a senior manager, you have to make decisions.

What are these decisions? What assets do we invest in? And what capabilities do we develop so we can use the assets? So, what are the assets? Assets could be infrastructure or factory, asset could be intellectual property as in the case of a patent, asset could be the brand, and asset could indeed be a set of customers. Then the question is, if I have developed those relationships, those assets, how do we use them? And this way, the process insights come in. Managing the supply chain process, managing the customer care process. When you do all of those things, what you have just done is create value for the customer. Now I put it in dark here, because I usually start from that box. Finance people usually will start on the top left, so I did not start from my natural position. But if you have created customer value, then you can appropriate value through profitability and through growth. And if you can do that consistently, it's going to help create shareholder value. If you create shareholder value, it makes equity money more available to you. People are investing, you can also borrow more easily, and that makes more resources available.

So, we're back to the resource allocation box. Now, the things on the right-hand side, are really what I would focus on in terms of value creation. One way to look at it is our strategic position in the marketplace is based on the assets that we own and our capability of using those assets. But I want to emphasise that, out here we have a situation where our deeds in the past, our knowledge from the past, is going to impact the cost structure. So, you can't just throw everything out of the window and start afresh. Greenfield projects are very hard when you have existing projects. So, cost structure is going to be impacted. The second part is that your go-to-market actions is going to depend on the strength of the assets, and the excellence of your processes. And that is then in an effect, going to determine the value you can or cannot deliver.

So, the right-hand side of this chart, I would label it as Value Creation and Development of Competitive Advantages. The left-hand side of the chart is focused on value, appropriation and investments. So, this is an overall summary, of business models, value creation balanced with value appropriation. To summarise what we have done in the course: we talked about product management, and we talked about it in the context of development, in the context of go-to-market strategies, but also through the eyes of the executive financial performance. We went through multiple modules. We started with looking at opportunity identification. We looked at idea and concept development. We looked at things like concept testing. We looked at design thinking. These are all things that we covered in the early modules. We also looked at providing service solutions.

We looked at how we could do segmentation and targeting because not everybody wanted the same solution. We then said, "All right, how do we position ourselves relative to the target market that we wanted to serve and relative to the competition?" That then led to a pricing power and the product line development. And we also talked about distribution, and we talked about managing our customers. We then started looking at, how do we manage it across the lifecycle? And our final focus was really on looking at the financials and the market performance. I hope this course has awakened a lot of thinking. I mean that we can't do everything in a book or in case studies. You all have the responsibility of saying, "What have I learnt? How do I put it to use in my job? But more importantly, how can I work with the people so I can communicate to them what has been learnt in this course?" Because your ability to implement these ideas is going to be only relevant if other people are also thinking in a similar manner.

So, you've got to bring other people to think along with you. These ideas - whether the segmentation and differentiation or it is customer solutions or performance metrics, they need to be shared, for you to be successful. Thank you for participating in this course, and I do hope I run into you in the physical environment one of these days. Thank you again.