아시아 관점에서의 한국 경영과 관리

05차시

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김윤정

[00:03] We're going to talk about one of the very successful company, not only in Korea, but I think in Asia, Samsung Electronics.

[00:14] So, we will see how they became so successful.

[00:20] What kind of business strategies they have been pursing to become so competitive in their fields, right?

[00:30] Now, before we move into more detail things, maybe we can take a look at their overall standing in terms of the finance.

[00:42] But, here this is kind of the reasons why we probably need to study about these companies.

[00:55] They have been, they used to be market follower in IT sectors, electronics industry for long period time and suddenly their position has changed.

[01:09] They became leader, market leaders, more detail, more specifically technology leaders.

[01:20] They used to follow Japanese firms, NEC, HITACHI, Sony, some how they able to develop new technology ahead of Japanese companies.

[01:35] When was it?

[01:38] It was about 1992.

[01:40] We are talking about semiconductor industry particular.

[01:44] What happened during that time?

[01:48] What has been in their follow up strategies?

[01:09] That, we will look at.

[01:54] Another interesting turning points would be they became also dominants competitor in other industry, such as cellular phone.

[02:07] One of their main cellular phone marketing companies in the world to today.

[02:12] So I think their position has been changed from leader's position to dominant position and I will explain what, I mean by dominant position shortly.

[02:30] So we will look at their technology strategies, marketing strategies, design strategies, production strategies, and so forth, okay?

[02:41] Question to you, which company is the largest in Asia today in terms of sales volume?

[02:54] Toyota?, good guess!

[02:56] Yes, Toyota is one of the largest companies in Asia, one of the largest companies in the world, right?

[03:04] Their sales volume is about two hundred twenty billion dollars a year.

[03:11] In case of Samsung, their sales volume, annual sales volume is about hundred thirty four billion dollars.

[03:21] Hundred thirty four billions such huge volume.

[03:25] Toyota is obviously much much larger than Samsung Electronics, but actually in terms of sales volume the largest company in Asia is located in China.

[03:40] I'm sure Chinese student would know Sinopec.

[03:45] Sinopec, China National Petroleum is a huge company.

[03:51] How about the, what is it, the power generation company, State Grief(?중국기업이름), number three company in China and Toyota, Toyota is number four in Asia, and Japan Post Holding is number five.

[03:18] This is number six company in Asia, Samsung Electronics.

[04:25] Now, if you look at the figures in 2009 and 2010, is a big jump.

[04:33] It used to be hundred nine billion dollars sale in 2009.

[04:38] And, in one year, their sales volume increase substantially to 134.

[04:47] So it's fast growing company, fast growing company obviously.

[04:56] HP, have you ever heard of the company, HP Hewlett-Packard?

[05:00] Hewlett-Packard used to be larger than Samsung Electronics in sales volume and year 2010 Samsung Electronics took over HP.

[05:17] And Samgsung Electronics is now ranked twenty two in Fortune five hundred global list, twenty two, and I mentioned number six in Asia.

[05:31] But, notice, their profit, the profit is about 13.6 billion dollar.

[05:42] So what would be of ROI, Return on Investment, roughly speaking?

[05:50] 10%.

[05:51] If you look at any company which has more than 10% of ROI, that is highly successful profitable company, especially manufacturing sectors.

[06:04] Not many companies can achieve that high level of ROI.

[06:10] Two digit ROI would be considered very high.

[06:14] Now there is interesting relationship.

[06:17] Normally, when the company is growing fast, profitability tends to suffer because they have to invest a lot to grow, so profit is not increasing any longer.

[06:31] But if you look at this company, company is growing, and, at the same time, their profit is also growing fast.

[06:42] Very unusual case, very unusual case.

[06:45] And that's why we may call this, very successful company.

[06:50] Growing fast and making lots of money at the same time.

[06:59] Who would be immediate competitor to Samsung and cellular phone business?

[07:07] Apple, right?, Apple.

[07:10] What would be the size of Apple?

[07:12] Apple, the sales volume for Apple is about 65 billion.

[07:19] So, roughly one half of Samsung Electronics.

[07:24] However, they are making more profit, they are making nineteen billion dollars profit, is about 21% of ROI, huge ROI.

[07:38] Another interesting company in the US, Microsoft.

[07:42] Their revenue level is about same range, 65 billion dollars, and their ROI is almost 20 billion dollar, thirty percent ROI, so those two companies are led exception I guess, Microsoft and Apple.

[08:04] But, other than those, this is still very highly regarded company, very profitable company.

[08:16] Anyway, it was founded about 40 years ago in 1969 as home appliance producer as we will see, but it…. Group steadily they became one of the major OEM exporters in Korea and they diversify into new business, semiconductors in 1983.

[08:49] They used to make home appliances, refrigerator, TV, but now they are making microchips in 1987.

[09:01] And these are their main business, somehow the last line is not shown.

[09:08] Their four main business areas, the first business would be digital media, and home appliances.

[09:17] This is kind of big chunk, chunk of their business, more than one third, 37% of revenue is generated from this business.

[09:31] How about telecommunication?

[09:33] The cellular phone

[09:35] Telecommunication business is also huge about one quarter, 23%.

[09:44] LCD and LED business, right?, account for 17%.

[09:52] What would be the next?

[09:54] Semiconductor, semiconductor business is also huge, 20%, so that is kind of their product portfolio.

[10:05] So, how would you characterized their product portfolio?

[10:16] One, two, three, four, some products tends to be finished goods, some products semi finished goods or part.

[10:30] Now, which one would be considered as finished business, finished goods business out of these four?

[10:40] How about this?

[10:42] This is finished goods, finished consumer goods, TV.

[10:47] How about telecommunications, cellular phone, yes, finished consumer goods.

[10:52] How about this, LCD?

[10:55] Intermediate goods, right?, intermediate goods.

[10:58] Semiconductors, also parts intermediate goods.

[11:02] So, they have very nice balance between consumer goods and industrial goods.

[11:10] Another characteristics for Samsung business would be these all business areas are closely interrelated.

[11:21] Now, to make cellular phone, they need microchips, right?, semiconductors.

[11:28] They need small LCD panel, right?

[11:35] So this division may supply their product to telecommunication division to make a cellular phone.

[11:42] And of course this, the TV, large screen TV, flat screen TV, they need big LCD panel as well.

[11:53] So it's very close business.

[11:56] It's very unusual business portfolio.

[11:59] If you look at their competitors, like Sony.

[12:03] They tend to focus mainly on finished goods and also they tend to diversify into different business areas.

[12:13] Now, all these four business areas would be considered IT factors, right?

[12:19] As I will show you, if you look at Sony, somewhat unrelated business areas are included.

[12:31] So, even though their sales volume is huge, if you look at their business portfolio, it's pretty much focused.

[12:39] Focused business [?12:42 flattish] related diversification.

[12:46] That's I think one of the interesting characteristics of overall corporate strategies.

[12:53] Now, this would be kind of history, short history of Samsung Electronics and showing us kind of evolution of Samsung Electronics overtime.

[13:10] So, this maybe the beginning stage as I mentioned, they started out as a small exporter in 1979, selling home appliance goods.

[13:24] This maybe another stage, international firm stage, maybe global firm stage.

[13:31] Now, in the first stage, how would you characterize their business strategy in early 1970's and maybe up to 1982.

[13:47] What are their business strategies?

[13:53] How did they make money mostly?

[13:58] Do they rely on domestic market?

[14:04] Or other overseas market?

[14:10] They tend to rely on overseas market, not Korean market, why not, why not Korean market at that time?

[14:21] As you can guess the size of domestic market is rather limited.

[14:27] Much, much smaller than today obviously.

[14:30] And they need, needed to grow and there was more growth opportunities available outside Korea and that's why if you can see, after two years of establishment they started to export right away.

[14:48] So, they very much interested in exporting.

[14:51] This is kind of matter of living or death.

[14:57] You have to go outside to grow.

[14:59] That's kind of mentality was there in Samsung Electronics.

[15:03] Like other big Korean chaebols.

[15:07] Now, which overseas market did they expert to mostly?

[15:17] All of the world?

[15:22] Mostly, United States, initially, and later Europe.

[15:28] So, they tended focus on advanced countries.

[15:32] Why not LDCs?

[15:36] Why not other countries like a Latin America?

[15:46] I think their business strategies would be kind a focus strategies.

[15:52] They are focusing on low-end home appliance product in a few advanced countries.

[15:59] Maybe they targeting low, low-end segment.

[16:04] Price sensitive segment.

[16:07] Because their products were not competitive overall, so price maybe the only way they could compete with Japanese or Europeans make.

[16:18] So, they, I think their strategy would be characterized as focus strategies for growth.

[16:28] So, that's it.

[16:29] Very simple business strategy.

[16:31] But, as time goes their business strategies are changed slowly.

[16:39] And one of the biggest change would be that's diversification into semiconductors in 1983.

[16:50] And actually when they entered this new market, many people, many industry analysts, they predicted this diversification would end of big failure.

[17:05] It mainly look like a gambling for them.

[17:08] Why?

[17:09] Going into semiconductors.

[17:12] You need two things at least.

[17:15] Number one, you need to have some base technology to survive in semiconductors which Samsung did not have.

[17:25] Secondly, you need to have very stable supply of capital investment to survive in semiconductors.

[17:34] So, many industry, no, the analysts, they thought Samsung probably would not have enough capital to survive in this very competitive market and maybe in just three for four years later, they may fail.

[17:52] However, that was not the case.

[17:55] Yes, go ahead.

[18:00] Why do we need so much capital?

[18:03] The question was “Why they need so much capital in semiconductor industry at that time?”

[18:11] And she told us that it requires huge investment at least one billion dollars to set up one production line and also the company needs continue investment in Research and development to upgrade the product, right?

[18:29] So, in a way, this is very risky decision.

[18:34] And, forth after struggling a few more years and with luck, they became the first company who, which introduce new generation of chips, so they became officially technology leader in 1992 ahead of Japanese competitors.

[18:56] But, it’s interesting to see in two years 1994, they decided to move into another important business, another diversification, cellular phone.

[19:10] Normally, when the company, you know, they achieved a big thing, they tend to be, they tend to become complacent and they tend to enjoy themselves for while.

[19:25] But, if you look at their strategic pattern, this is not the case in Samsung.

[19:32] They achieved, they made a big achievement, but still they kept going for next goal.

[19:40] That's kind of very interesting part of their growth strategy.

[19:46] So, diversification, at least two important business areas, and also they became technology leaders.

[19:57] What about the next stage?

[19:59] Right after the financial crisis, we know the financial crisis in 1998.

[20:08] So right after the financial crisis, Samsung Electronics, they streamlined their business and actually Samsung group, they gave up one important business,

[20:20] Which is automobile manufacturing industry.

[20:22] And they further focused their resources on this electronics business.

[20:28] So, as a result, they became much much stronger in international markets.

[20:36] What would be kind of their business goal [at] this stage?

[20:45] That's.. they wanted to become [a] clear market leader.

[20:50] They are not satisfied with the technology leader status.

[20:55] They also wanted to be market leaders.

[20:58] And that's why they built up their brand image by investing a lot in sports marketing.

[21:05] Advertising, public relations, and so forth.

[21:10] And we will talk about more in detail how they attained the status [as] market leaders shortly.

[21:17] So these are kind of pattern of the last 30 or 40 years.

[21:35] Now, this table shows us very interesting insight [on] how they are doing relative to their competitors.

[21:49] I looked at all the major IT companies in both countries, Korea and Japan,

[22:00] And as we can see, there are two Korean companies, Samsung and LG,

[22:08] And there are 11 Japanese companies and I'm sure some of these are quite familiar to you.

[22:15] Panasonic, Hitachi, Toshiba, SONY, Mitsubishi, Canon and so forth.

[22:22] The second column shows us the revenue of each company.

[22:29] And as we saw in 2010, revenue for Samsung Electronics was around $134 billion,

[22:38] And the Ricoh, [a] Japanese company, their sales volume is about $20 to 22 billion.

[22:50] So, this volume is about 16, if I remember correctly, about 16 or 15 percent of total revenue of these 13 companies.

[23:05] How about this side? The profit?

[23:08] They were making almost $14 billion and as you can see here many Japanese companies are losing.

[23:18] Especially 2009. Many Japanese companies [are] losing.

[23:23] And [in] 2010, Sony and NEC were also losing their money.

[23:29] In case of Sony, they lost 3 billion dollars.

[23:33] So [it] looks like Sony is in big trouble these days.

[23:36] So if you add all these profits of remaining 12 companies, it comes around 12 billion dollars.

[23:48] So still, Samsung's profit is higher than profit of those 12 companies combined.

[23:57] And that's why I would say Samsung is in dominant position, not just leader but dominant position in the market.

[24:11] Another interesting piece of information, as we can see,

[24:18] This story kind of surprised many Japanese when this information was released in Japanese newspaper in 2009, I guess.

[24:32] So, as you can see, these are all Japanese companies.

[24:37] And their profit in 2009, 3rd quarter, perhaps, was about 151 billion yen

[24:50] Whereas Samsung alone their profit was more than 326 billion yen.

[24:57] So many Japanese were surprised.

[24:59] How come Samsung, which used to be follower of Toshiba, became so successful?

[25:06] So many industry analysts began to look at what strategic differences they may have relative to other Japanese companies

[25:16] Such as Sony, which [is] still struggling.

[25:21] So these are some of the comparisons between Sony and Samsung Electronics.

[25:30] Now, what went wrong with Sony?

[25:33] Sony is a great company, used to be a great company I guess,

[25:39] They have all kinds of success story like the Walkman, probably you don't know what that means,

[25:45] The Walkman, when I was young like your age, we were kind of fascinated with Walkman.

[25:54] The first company to introduce Walkman in the market, right?

[26:00] They invented all kinds of new gadget[s].

[26:05] Market perceived [it] as the market leader.

[26:08] But somehow after 1990s and 2000, they lost their position. Why?

[26:17] These are some of the possible answers.

[26:21] Number one factor, Sony tends to be too much domestic market oriented; Japanese market oriented

[26:31] Whereas Samsung Electronics, as I mentioned, [is] very aggressive in overseas market.

[26:37] But if you look at Japanese market, Japanese market is not growing much since 1990.

[26:46] And actually some of the market has been shrinking.

[26:51] So that's why Sony could not grow.

[26:54] They focused on too much on not-growing domestic market.

[27:01] Another important reason, Sony has gained the market leader position and they enjoyed that position, and then what?

[27:14] They became complacent. We are number one.

[27:18] Nobody beats us.

[27:21] So somehow they did not put enough effort in research and development.

[27:27] They did not care much about their brand image.

[27:31] And they tried to diversify to non-related business areas

[27:39] And [made] kind of strategic mistake, compared to Samsung.

[27:48] So “Number one Symptom”.

[27:50] I guess if Samsung have similar symptom, they may probably have the same pattern.

[28:01] They may be outcompeted by Chinese competitors.

[28:07] So we will see what’s going to happen in next 10 years to Samsung.

[28:13] Will they still maintain their leader's dominant position?

[28:18] Or would they be outcompeted? A big question.

[28:23] But the.. one thing quite clear is it's easy to be complacent and that's not good, as we saw in Sony's case.

[28:33] Another very interesting difference between Sony and Samsung Electronics.

[28:39] Most of Sony CEOs, they used to be engineers.

[28:47] People who graduated from engineering school.

[28:50] Now what kind of common characteristics for engineers as opposed to somebody who graduated from, let's say, business school?

[29:01] Engineers, they love to develop new technology.

[29:09] But the problem with engineers would be, they lack the market focus.

[29:15] They're making new technologies for technology purpose

[29:23] Which may not be that appropriate to market demand.

[29:29] So Sony in a way is a technology, or engineer-led company.

[29:35] You need balance.

[29:38] You need to have a good group of engineers, but at the same time, your company needs to have a good marketer to be successful in the market.

[29:49] So that's I think another interesting difference between Sony and Samsung Electronics.

[29:58] So, what happened over time?

[30:02] Even though Sony was established much much earlier than Samsung Electronics, they were outcompeted in terms of market value, or sales, brand value,

[30:14] In terms of [the] number of TVs they sell, and brand value, eventually.

[30:26] So that's what happened recently.

[30:30] This one shows us their business portfolio as we briefly looked at,

[30:37] So [in] 2010 about 20% from semiconductor business, 17% LCD, telecommunication 23%, and 37% digital media and home appliance.

[30:54] Let me ask you [a] very simple question.

[30:58] Out of this four business areas, where do they get a lot of profit?

[31:08] Which business would be very profitable to Samsung Electronics out of these four?

[31:17] Any guess?

[31:25] Semiconductors? Good guess.

[31:30] About 53% of their profit is generated from this business.

[31:37] [This is] a very important business for Samsung Electronics.

[31:41] Semiconductors.

[31:43] That's why they are still making big investments to upgrade their semiconductor factories.

[31:52] They want to be more competitive.

[31:55] Quite interesting enough, only 3 percent of their profit is generated from this business.

[32:09] So we may say digital media, home appliance tends to be a bit declining business in case of Samsung Electronics.

[32:20] And I suspect many Chinese companies would be very strong, immediate competitor in this business.

[32:29] And they are coming.

[32:31] Some maybe Indian companies are coming in this area

[32:36] and Samsung, or LG electronics, they don't make any huge profit any longer in this business.

[32:45] For telecommunication, which is cellular phone, about 25% of profit is generated here.

[32:59] So there may be different level of profitability depending on type of business.

[33:07] Now, I've been talking about Sony, let's take a look at Sony's business.

[33:15] What kind of business are they in today?

[33:20] So these are kind of rough grouping[s] of their main business.

[33:26] So the largest business they are in would be TV business, home appliance,

[33:33] and as we[I] mentioned, home appliance is a not really profitable business for Sony, for Samsung Electronics but still [has a] very high portion.

[33:45] Audio/video division, digital imaging, you may have a Sony camera,

[33:52] Personal mobile product, the PC, game, professional solution, semiconductors, component, pictures, music, financial service and others.

[34:08] Financial services. It accounts for more than 10%.

[34:14] And I am not quite sure how this business well fit[s] to their overall business.

[34:24] We don't see much fit between this and the rest of other businesses.

[34:30] Same is true to pictures and music.

[34:35] Maybe related indirectly, but not directly to semiconductors or IT sector.

[34:45] So we would say Sony's business tends to be much much diversified.

[34:52] And that's why they have problem these days.

[34:54] Many of these businesses are not growing and they are focused on their domestic market.

[35:10] One more slide before we take a break.

[35:14] In terms of market portfolio, where do they generate sales?

[35:27] As you can see, 83% of Samsung business is generated overseas.

[35:35] Only 17% of their business would be in Korea.

[35:40] So like 28% in America, which would include north, central, south America

[35:49] and 23% from Europe and 16% Asia/Oceania and another 16% from China.

[36:01] So how would you characterize Samsung's business in terms of market portfolio?

[36:10] "Regionally balanced."

[36:14] Europe, America, Asia, China, domestic market.

[36:19] And this is what [a] global company should be.

[36:24] A global company ideally should have regional balance in their sales

[36:29] rather than focusing on just one or two market.

[36:38] Okay. Questions so far?

[36:44] All right. Then shall we take a break?

[36:48] All right. So, let's talk about more detailed business strategies such as technology production marketing.

[37:00] Number one, technology strategy.

[37:05] So one key issue would be "How come Samsung Electronics [was] able to acquire technological capabilities in a fairly short period of time?"

[37:23] What are the magic formula? We would like to know.

[37:29] Probably we need to learn their technology learning process

[37:35] and also their R&D strategy.

[37:40] In order to learn, before we understand their technology learning process,

[37:45] let's think about basic concept about technological capabilities, about technological learning.

[37:55] Now this is just one way to define the concept of technological capabilities.

[38:03] What is it?

[38:04] Basically, it refers to the firm's ability to assimilate, to modify, to enhance existing technology.

[38:17] That's it.

[38:20] And it helps a company to improve production technologies or product technology, or even process technology

[38:32] through technological capabilities.

[38:35] And technological learning may be a kind of dynamic process or acquiring this technological capability. The dynamic process.

[38:48] And I think there are two important factors affecting this dynamic process at least.

[38:56] Number one, your prior knowledge about certain technology in a certain field.

[39:04] If you have very high level of prior knowledge, let's say in semiconductors.

[39:10] You may be able to acquire new technology much much faster, much more efficiently than other competitors

[39:19] who may have lower level of prior knowledge.

[39:23] So prior knowledge would be very important.

[39:26] So this is my favorite example.

[39:29] Think about an elementary school student and a college student who would like to learn physics and mathematics.

[39:41] Who would be learning faster?

[39:44] And obviously the college student would learn faster the physics or mathematics.

[39:49] Why? They may have higher prior knowledge level compared [to] the elementary school student.

[39:58] Another important factor determining this dynamic process would be your effort.

[40:04] Your intensity of the effort. How many hours do you put to upgrade your technology?

[40:12] That will determine the outcome.

[40:16] How many manpowers do you invest to upgrade the technology?

[40:23] Think about 2 different companies.

[40:26] One company may have R&D department with 1,000 scientists.

[40:34] The other company, their R&D department, there are only 12 scientists.

[40:41] Who's going to learn faster?

[40:45] We can identify which company may be able to learn faster.

[40:51] So at least I think there are 2 factors affecting this process.

[40:56] Now, first of all, prior knowledge.

[41:03] Knowledge could be either…. [you're] a business major student right?

[41:15] Now if you learn business accounting finance do you think you're going to be a great business man or business woman?

[41:26] If you run your own business … you hope?

[41:34] I don't think there's not much co-relation between the knowledge you have and the actual performance in business and I know some cases where finance professors they invested their money in stock market and they lost money.

[41:52] That happens.

[41:54] I may be able to give them the strategic recommendation to the company but if I were in a position to make decisions, I may end up making wrong decisions.

[42:07] Why?

[42:09] I may have explicit knowledge, I may have explicit knowledge how to run business, how to tackle marketing program right?

[42:23] Explicit knowledge, but I don't have much of this tacit knowledge.

[42:30] So do you see the difference between explicit versus tacit knowledge?

[42:37] Now to learn about business you can read all kinds of textbook marketing management textbook, financial accounting textbook, you can read those textbooks maybe in one month intensely and you can have pretty good understanding about overall business that you could do.

[42:58] But if you were asked to run a business, that's a different story because you don't have this tacit knowledge.

[43:08] Explicit knowledge is codified maybe written in manual written in textbook, written in the book.

[43:17] So if you want to learn let's say Toyota's famous just in time production system, you may be able to learn jet system by reading book, reading business periodicals.

[43:32] But if you asked to duplicate JIT system in somebody else's factory that's a different story because you don't have tacit knowledge about JIT system.

[43:44] Now who has that tacit knowledge about JIT system just in time system, who has it?

[43:56] Japanese engineers who've been working Toyota factory for more than ten years or fifteen years.

[44:05] They know how to do it, how to deal with all kinds of problems.

[44:10] So mostly I think tacit knowledge is deeply rooted in our mind so the

only way you can learn this tacit knowledge would be through practice, imitation trial error or training.

[44:29] It takes time, it can not be done overnight, impossible.

[44:35] You may be able to accumulate this knowledge quickly very shortly in time.

[44:42] So to upgrade your technology, to learn new technology you need both, you need both tacit and explicit knowledge all right?

[44:57] Now energy of effort is quite clear you can easily understand what that means.

[45:04] Basically it refers to how much how many manpowers or energy you put to upgrade your technology that will determine your intensive energy of effort.

[45:17] So in case of Samsung Electronics how they were able to acquire tacit or explicit knowledge.

[45:28] Now remember 1983 they decided to move into semi conductor business and they didn't have any base technology base knowledge whatsoever and they need both tacit and explicit knowledge.

[45:44] What are their strategies?

[45:47] Now if you don't have any base technology in a new business, what would you do?

[45:54] What would be typical way?

[45:57] You may approach a company who has it, so you may ask for license in agreement just following their technology in exchange of license in the loyalty.

[46:15] So that's the case in Samsung in early 1980's.

[46:19] So they approached anything Japanese company they approach Toshiba many Japanese companies whether they would be willing to share their technology with Samsung

[46:35] What happen as you can guess all of the Japanese companies politely rejected their idea of sharing technologies.

[46:45] They were worried about Samsung Electronics down the road, so Samsung could not get any help from Japanese partners.

[46:58] So now they have to find out new source of technology so they went into US and it was not easy to find a good partner technology partner either in the US or they started in the US IT technology market for at least six months and luckily they found out what company who could share their base technology.

[47:29] And their name was Micron Technology.

[47:34] Micron Technology is now is a big company in the US in semi-conductors but at that time Micron Technology is one of the small venture type companies.

[47:46] Now if you think about venture type companies, they may have technologies but they lack resources financial resources.

[47:57] They're always worried about cash flow issues.

[47:59] So I guess Samsung they provided enough cash flow to Micron Technology and in return they could get access to the base technology.

[48:09] That was the beginning, that was how Samsung Electronics could get access to explicit knowledge.

[48:20] The licensing from the license in manual can get explicit knowledge but that does not guarantee that Samsung would get implicit knowledge automatically so they do to get implicit knowledge.

[48:40] They set up two big R&D lab one in Korea, Suwon another one in Silicon Valley and CEO at that time, they tried to those two R&D lab to compete internally.

[49:04] The CEO provided same project same deadline and let them to compete and then what happened?

[49:14] Most scientists in each lab, they were fearfully competing with each other.

[49:20] They don't go home on weekdays, especially people in Suwon.

[49:26] The R&D engineers in Silicon Valley mostly they are Korean American or American citizens who were trained in another American company so they may have probably higher base technology, higher you know explicit knowledge while as in here Korean engineers at that time they did not have much prior knowledge.

[49:54] So the only thing they can do would be put more time.

[50:00] That's why they sacrificed their personal time, they wouldn't go home for the weekdays, they stayed there, they slept there right for 3 days 4 days.

[50:11] And that's the way they were able to catch up.

[50:15] The more intensity more intense effort.

[50:21] They have the same goal so initially R&D lab in Silicon Valley seemed to win but over time these people in Suwon area they were able to catch up.

[50:39] During that process your implicit knowledge based will be expanded.

[50:49] S51 10o if I summarize their R&D strategy this both into a R&D and external licensing intensibly and the CEO has very strong commitment in this technology strategy.

[51:10] So one example like I don't know whether this is true story or not at one point of time Samsung Electronics, they wanted to hire Korean American who has lot of experience in American semi-conductors kind of company.

[51:28] And the CEO asks this guy to come over to Seoul and he gave blank check, you know what that mean, blank check?

[51:44] So looks like Samsung management was so serious about getting high clever scientists at that early stage and of course I guess Samsung engineers I'm talking about some time late 1980s made Samsung engineers.

[52:08] So they were looking they invite not only for their own company but also for their own country, the Korea.

[52:16] This is the way we should build up our semi-conductor industry.

[52:21] So nationalism I think played certain role in the early stage and Samsung clearly took advantage you know both sentiments.

[52:33] So that's they strategy before 1992 but what happened after they became leader?

[52:47] They tried many things at the same time for example of course they expanded their internal R&D facility with internal R&D organization and also they expanded the lightly collaboration, technology collaboration with other competitors such as Japanese companies such as Sony, Toshiba even today.

[53:16] Why do you think those Japanese companies are willing to have collaboration with Samsung, why?

[53:28] What are there kind of benefit they are looking at?

[53:36] To develop a new type of product, new type of small chip it requires huge R&D investment, so if you could share with somebody else you may be able to reduce the initial investment cost.

[53:55] You may be able to reduce the initial business risk substantially.

[54:00] So it's kind of a win-win situation.

[54:04] That's why the partners are willing to cooperate with Samsung.

[54:10] Also in the past, they used to rely on mostly two countries Japan and the United States and now they wanted to diversify sources of technology learning.

[54:27] Europe even Russia maybe India, so many different sources.

[54:31] So if you have multiple sources of learning, the technology learning process would be faster and would be more effective.

[54:40] What about this, close working relationship with suppliers?

[54:47] You have suppliers, many suppliers and you can let them to participate in the early stage of technological development that would help.

[54:58] It's kind of a win-win situation right?

[55:04] Another I think interesting factor would be this which we will talk about

later.

[55:11] Very aggressive investment in capital investment new production line every year and that would speed up technologic learning process.

[55:26] They tried many things since then.

[55:35] How about R&D?

[55:37] So far we looked at their technologic learning process.

[55:43] Maybe we can also take a look at R&D strategy although both aspects are interrelated right R&D strategy.

[55:54] What are the key features of their R&D?

[55:57] Number one, massive spending in R&D.

[56:02] How much did they spend in R&D, as you can see it's almost 10 percent of their revenue.

[56:12] It's kind of something unheard of in this industry.

[56:18] Many competitors are of course investing a lot but not that much, 10 percent of R&D, you know it's really big big investment.

[56:30] How they are able to spend this amount of money on R&D?

[56:35] Because CEO was very serious about his business, CEO commitment, that's why his company investing this.

[56:47] May be very risky taking approach, they knew that but they thought it would be the only way they can be competitive relative to other companies.

[56:57] They can keep distance from other competitors technology wise.

[57:08] So for example in telecommunication division making cellular phones, do you know how many employees they have overall Samsung Electronics?

[57:22] Maybe Korean students would know.

[57:26] The hint, the largest employer in Korea today except probably some public organizations.

[57:39] According to one statistics I read about they employed about 92 thousand Koreans.

[57:51] They may have probably similar number of employees overseas, I don't know how many but only in Korea 92 thousand.

[58:03] Huge organization right?

[58:07] 92 thousand people in four business areas.

[58:12] How much do they earn average, it might be interesting knowing how much is the average salary for Samsung employees.

[58:23] Anybody could guess?

[58:26] I'm sure the company would pay well employees according to one newspaper I read the average salary for Samsung employee about close to 1 euk won which is about 95 thousand dollars.

[58:49] That's a lot of money, they have a lot of many blue color workers still the average salary is 95 thousand dollars.

[58:59] So if you are looking for money, big money this company would be good to work for especially if you are lucky enough to one of their few directors.

[59:16] Yesterday I read a newspaper interesting, the average salary for Samsung director probably the registered director would be 60 euk about 6 million per year.

[59:44] That's a lot of money right?

[59:37] If you want to be one of their directors you should be very rich, but anyway about 15 thousand people are working in this division, telecommunication division, 15 thousand right?

[59:55] Now 50 percent of those 15 thousand people are basically engineers and scientists.

[60:05] Their role is to upgrade the design of cellular so that's why massive investment in R&D organization, that's one of the typical R&D strategy.

[60:21] Now they are making huge profit, they are making huge investment so the actual dividend shareholders would get is not that much but nobody complains about that, because Samsung Electronics, they believe that Samsung Electronics is making good investment for the future so far.

[60:48] Another interesting strategy in terms of R&D they created a position called Chief Patent Officer co centralized all the technological access under his office or her office.

[61:08] In the past all this activities are kind of decentralized to each divisional head, now it's centralized so they can more effectively deal with the R&D issues.

[1:01:29] all right. now let's move to production strategies.

[1:01:38] So far we've talked about technology. What about production? What kind of production strategy they have dealt with?

[1:01:50] Well, number one production strategy for them would be again, massive investment in the factory.

[1:01:58] Look at that number. This semiconductor business requires huge investments on a continued basis.

[1:02:09] So normally, an industry average would be about 20%. 20% of the revenue need to be spent on the factory to upgrade machines and set up new production line.

[1:02:24] In case of Samsung, they invest almost double. 40% of their revenue is spent to upgrade the production system.

[1:02:35] And that's why their production system would be very efficient.

[1:02:44] They used to have a very sophisticated equipment and that's why the productivity kept rising and rising. Because of the massive investment.

[1:02:57] For some big projects like LCD factory, sometimes they have a joint venture with partners like Sony.

[1:03:09] So that they could reduce initial investment amount, they could reduce the business risk.

[1:03:18] Another interesting strategy… If you like TOYOTA, just in time production system, they try to reduce the production cycle as to minimum time require(ment).

[1:03:37] Why this strategy would make sense on semi-conductors?

[1:03:44] They are interested in characteristic. (semi-conductors.)

[1:03:47] The price for microchips is continuously decline over time.

[1:03:56] In that situation, you'd better have quick production, turn over.

[1:04:04] That would make a big difference.

[1:04:07] That's why Samsung try to minimize the production cycle.

[1:04:18] Another interesting production strategy for them would be this… Synchronizing R & D and Production.

[1:04:27] What it is?

[1:04:30] In case of semi-conductive business, there are at least three distinctive stages.

[1:04:37] For example…

[1:04:43] First stage would be… you should come up with new technology through R&D… through R&D effort, you can come up with a new product, new generation of chip, more efficient chip.

[1:05:00] And then, you can start to… you can produce on a trial bases before you get into mass production and once you have full confidence on actual production, then you invest production line and try to add mass production system. Right?

[1:05:31] So at least three distinctive stages.

[1:05:35] In case of Samsung Electronics, they try to collect these three stages… maybe two stages.

[1:05:47] Some kind of overlap, synchronizing different stages.

[1:05:54] Now what would be the motivation for synchronizing different stages?

[1:06:06] Speed, speed of production.

[1:06:10] You can reduce the time require(ment) from stage one to stage three.

[1:06:14] Normally, It may take… let's say "one year", stage here… maybe another one year, so it may end of taking three years, normally.

[1:06:26] But if you collect like this, you should be able to get mass production within two years instead of three years.

[1:06:38] It's a kind of compressed strategy.

[1:06:44] So in a way, they are competing with time, right?

[1:06:51] The time is very critical in this business.

[1:06:57] That's their strategy in terms of production and very effective (strategy).

[1:07:01] What would be disadvantage of this kind of compressed strategy?

[1:07:15] Maybe very risk-taking approach.

[1:07:20] Relative to this approach, risk-taking approach and they took risk.

[1:07:27] So far, that strategy works out pretty well, but there is no guarantee that this strategy would be superior to this approach.

[1:07:43] Another matter relating to production would be this, Internal sourcing.

[1:07:52] As I mentioned, probably one-third of Samsung production would be for internal sourcing.

[1:08:02] Many LCDs would be supplied to other Samsung divisions.

[1:08:09] Many semi-conductors need to be supplied to telecommunication divisions or digital-media divisions.

[1:08:19] So if you have huge internal sourcing needs, you could take more aggressive approach, Right?

[1:08:30] Internal demand is pretty much guaranteed market.

[1:08:32] And that's why you can take risky approach.

[1:08:41] But if you don't have this...(internal demand), it would be really risky.

[1:08:47] And this is something which differentiate Samsung from rest of others.

[1:08:55] If you look at Sony… For example, Apple, Apple may have better idea about design, but they don't have their own production system.

[1:09:05] They have to rely on not only Samsung, but also Taiwanese ?(1:09:10) and Chinese ?(1:09:14).

[1:09:16] So to deliver your product to the market, Apple took longer (time) than Samsung.

[1:09:25] That's another advantage from Samsung ?(1:09::28).

[1:09:29] You have your own facilities to make products that part.

[1:09:38] Alright.

[1:09:43] We can move on… Brand Strategy.

[1:09:50] Look that marketing aspect that the Brand… aspect here. And remember? When I showed you kind of big table, three stage big table as a first part?

[1:10:06] Especially in the third stage, global form stage, one of the primary goals for Samsung Electronics was to become a market leader as oppose to technology leader.

[1:10:18] To become market leader, you should have strong brand.

[1:10:23] Now Samsung has strong brand.

[1:10:25] But what happened in mid 1990s when they did not build the strong brand image?

[1:10:32] What kind of strategy did they take at that time?

[1:10:40] It would be interesting to know.

[1:10:42] Number one strategy, to have strong brand image was to develop what they called Global brand, Universal global brand instead of having many small brand, regional brand.

[1:11:00] They used to have many small regional brand here and there and they try to integrate those and they actually scrap some of the regional brands and instead, they created very strong global brand which is Samsung.

[1:11:17] So they want to have Master Brand.

[1:11:21] That was mid 1990s, 1996.

[1:11:25] That was kind of studying point (to) grow to global market.

[1:11:34] And then what, the company created global brand management committee where they can monitor the brand image maybe month by month, and

they can figure out what effort need to be addressed to boost the brand image under the chairman.

[1:11:58] So again, this is really serious business for Samsung Electronics at that time because the chairman is the Lee-Kun Hee, Mister Lee, when he visited U.S market, he was so disappointed to find many Samsung brand TVs were located bottom shelf of K-mart Sears.

[1:12:24] K-mart Sears would be considered as low-end channels and even then, Samsung Brand TVs were located back side of bottom shelf.

[1:12:36] So furious, how come my product are sit so poorly by U.S consumer, U.S channels.

[1:12:48] That was kind of big turning point.

[1:12:51] This is what they did.

[1:12:53] So to improve brand image, of course, the company has to take many initiative thing and communication aspect, or design aspect and global marketing strategy aspect.

[1:13:09] So let's try to look at one by one briefly.

[1:13:15] Communication… How they could have good communication with their end users, consumers, global consumers?

[1:13:30] The first thing they try to change would be… actually they try to do was to increase awareness.

[1:13:40] Not many people did not know the name Samsung.

[1:13:46] This global brand recently started and that's why not many people especially Europe, maybe some part of America, they never heard of Samsung and they thought this could be just another Japanese brand.

[1:14:03] So they spend a lot of money to increase awareness.

[1:14:09] That's the initial goal. So some of the strategies they used for example, they try to link the name Samsung to music, maybe the movie, Hollywood movie to improve awareness.

[1:14:31] Another aspects of very important target to have better communication would be channel members, the retailer.

[1:14:40] So they want to have better relation, high-end channels such as Best Buy in the United States and Circuit City, of course, this is I think when bankrupted couple of years ago.

[1:14:56] But it used to be one of the good channels for IT product TV appliance, computer, notebook and like that.

[1:15:05] So they try to keep distance from low-end channels and instead, they want to have better relation to high-end channels.

[1:15:17] That's the big change of Samsung.

[1:15:21] Another important strategy to build up their brand image would be heavy reliance on non-media advertising like the sport marketing.

[1:15:38] So if you look at major sport events these days like soccer, world soccer cup, Olympics, maybe the world ski tournament, whatever, yachts tournament.

[1:15:53] You may see the name of Samsung somewhere in the TV.

[1:15:58] They only try to support this global sport events as well as local sport events.

[1:16:07] For example, in India, obviously Indian people, they love to watch Cricket game, so probably they may sponsor a lot of money to support local Cricket tournament.

[1:16:22] Sport marketing, I think it was very important part of their overall PR strategies.

[1:16:30] And that strategy would make sense because who would be their target for cellular phone, home appliances, who would be their target?

[1:16:44] Especially cellular phone, notebook, cameras, camcorder, digital cameras, the target market would be young people.

[1:16:55] And young people watch sport game a lot. That make sense.

[1:17:02] Eventually, brand value increases eventually.

[1:17:07] Design strategy… What do they do to improve design?

[1:17:13] Traditionally when we talk about the design, it refers to just look of the product.

[1:17:23] But now they try to incoperate other concepts to build up a design not only look but also color, sound, feeling of quality, many things to provide better design.

[1:17:42] Another interesting strategy… They created new position, Chief Design Officer(CDO) on the chairman.

[1:17:51] Who could consolidate all design functions of Samsung Electronics?

[1:18:01] Similar strategy as we saw in technology.

[1:18:04] They set up several design center all over the world and let several centers to compete to come up with better design.

[1:18:15] And very popular strategy, internal competition seems to very popular strategy for Samsung Electronics.

[1:18:28] Global marketing strategy… now, remember when we talked about Sony?

[1:18:35] Sony was basically engineering oriented company.

[1:18:41] Samsung used to be similar to Sony, a lot of key positions were dominated by engineers not (by) many good marketers.

[1:18:52] So now they want to be market leader, so what did they do?

[1:18:58] They hired marketing expert from outside which is very unusual for Samsung Electronics, but they did.

[1:19:08] That was 1999, guy name called Eric, as you can see he is Korean-American, he was born in Korea immigrated to U.S, educated in U.S, very prominent marketing person, he went to different companies include P&G and the marketing company.

[1:19:36] Anyway, we was recruited. Two things he wanted to do.

[1:19:45] First one would be… He try to simplify advertising agencies.

[1:19:53] In the past, they have more than 55 local agencies.

[1:19:57] If you have too many local agencies, it's hard to get uniform brand image, uniform advertising campaign so he tried to simplify advertising agencies.

[1:20:13] Second is… He try to focus on flagship product.

[1:20:21] Samsung Electronics probably may have produced so many different kinds of products.

[1:20:27] Now he try to focus on high-end product. What would be hign-end product?

[1:20:34] Cellular phone, high definition TV, flat-screen TV… So he focused to exact point on a few product categories.

[1:20:44] Thirdly, he focused on high-end channels, high-end market channels… Best Buy, Circuit City and just gave up business with Sears, Wall-mart.

[1:21:06] And it sounds very easy decision but at the time of decision, I think this would be very risky decision.

[1:21:13] You have good business with Wall-mart so far.

[1:21:17] Now you try to give up that business.

[1:21:21] It's a big decision, but he thought that was the way the company should go… move to high-end channels.

[1:21:30] That's big change… mid 1990s.

[1:21:35] So I think probably this is nice way to summarize the marketing strategies focus on flagship product, focus on high-end channels and built Samsung's image there and innovate with new design, new product, new technology and that is kind of pattern they try to achieve.

[1:22:04] Alright.