



Creating a new market through Value Innovation on the foundation of Six Sigma

About thirty projects are currently running at the VIP (Value Innovation Programme) Center. All of them are core assignments that would shape Samsung's future. Out of the 300 people working at the Center, 70 are from different business units of Samsung, ranging from technology, marketing and design to production, logistics and service. Their business expertise is very different, but their goal is the same - to create new products that are not yet in existing markets by employing Value Innovation.

Last year, 82 new products were introduced to the market using the VI Center's certification process. This year, 2000 people are participating in 90 assignments.

The performance of VI is proven by the following figures. Last year, the Digital Media unit launched 40 new products using the VI process and its first quarter profits were 50 times higher than that of the same period the previous year.

VI was first introduced in Samsung at the end of 1998, but for some

Begin the Era of Value Innovation III - Case study: Samsung Electronics VI <VIP Center at Samsung's Suwon site> Although the building's appearance is like an old dormitory remodeled, access to Samsung's VIP (Value Innovation Program) center is very tightly controlled, as many top-secret projects are under way.

time, VI remained overshadowed by Six Sigma, a management innovation tool that dominated the minds of the executives of most of the group affiliate companies.

VI caught people's attention as a core methodology to create new markets as of 2000, when the foundation for high quality production was established through the Six Sigma activities.

From 2002, the scope of VI tools was expanded. For example, as for the development of the "strategic products group," VI tools, such as the "Strategy Canvas," were ordered to be applied prior to investment in and commercialization of a

new product. The "big hit" products such as the Anycall handset, DVD combo, PAVV and the SenseQ, and laser printer were introduced after obtaining the VIP Center's certificate of evaluation. Today, commercialization of all products, except for semi-conductor products, must pass the VIP Center's certification in the conceptual and planning stage.

Lee Dongjin, head of VIP Center, says, "VI is a methodology, used in combination with the quality production capability built through Six Sigma, to create new markets. As a result, Samsung Electronics' profitability will continue to increase." Recently, under CTO Lim Hyung Kyu's instructions, the VIP Center is driving forward its plans to extend its application to the semi-conductor business unit as well. Once achieved, Samsung Electronics will become the largest company to use the Value Innovation methodology in the world, implementing the VI strategy throughout all of its product groups.

Discard products without innovative value from the development stage

Samsung Electronics Suwon Compound. Although its area covers 360,000 pyung, one can rarely find any blue-collar workers there. It seems that most of the production lines have been moved to provincial regions or abroad since the late 1990's.

R&D Centers have filled up the empty space left behind by production lines. Next to the 27-storey IT research Center building, a 35-storey building is currently under construction. Scheduled to open

next year, this building will be the Digital Media Institute. The Suwon compound where white goods and computers used to be manufactured is now turning into a cutting-edge hi-

Vision to Develop the "World's First Products"

tech R&D site. Such a change can also be felt at the VIP Center located in the eastern part of the compound. Entering the Center, one can first see people walking in and out in a

I. A look at the VI Site

Value Innovation is a methodology for discovering new values that even the customers themselves have not recognized. This is the reason why Samsung Electronics, already a world-class company, has been paying attention to the Theory of Value Innovation.

Samsung Electronics not only embraced but also meticulously developed and applied to its product development this Theory of Value Innovation co-founded by Professors W. Chan Kim and Renee Mauborgne.

Today, Value Innovation is so well

hurry, holding sheets of paper that look like blueprints. They are engineers dispatched from different business units.

Why did the engineers, who are supposed to devote their time to developing products, come to the Center? An unexpected explanation is given, "To focus more efficiently on their primary role of R&D." They are involved in projects for conceptualizing and developing new products through Cross Functional Teams (CFT), which consist of people from different units such as marketing, design and production. Those projects are very important and classified within the company as first and second rate projects. The first rate projects are those that have yet to be developed worldwide, and the second rate projects

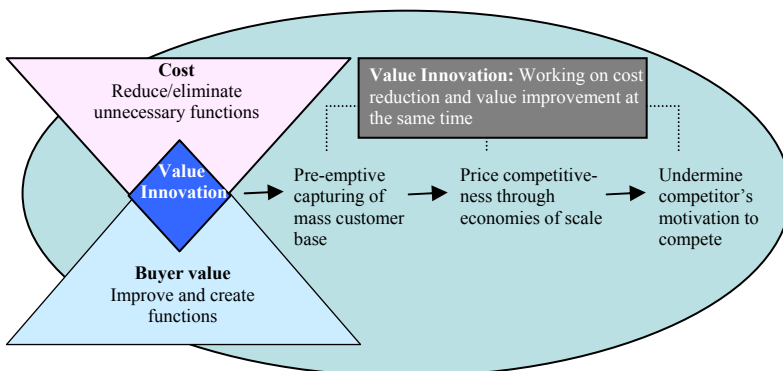
are focused on vastly improving the functions of existing products. The future of Samsung Electronics' depends on both types of projects.

Last year the VIP Center carried out 82 projects involving about 1800 people. Many 'hit products' came out of this: the explosively popular cellular handset with built-in camera, the laptop computer, color laser printer, DVD player, projection TV, LCD monitor, two-door refrigerator, air purifier, and the CDRW. This year, over 90 projects are scheduled to be conducted. In the VIP Center, remodeled from three five-storey dormitory buildings, there are 20 project rooms. K.H. Cheong, general manager who guided us at the Center said, "The projects that are expected to be a big hit are being carried out under high security".

rooted in Samsung, that the managers use the "Strategy Canvas," a core VI tool, to make decisions on which products to commercialize or invest in. Since Samsung's Value Innovation project has proceeded secretly until now, the existence of the VIP Center was not known to most of Samsung group's subsidiaries nor to the employees of Samsung Electronics.

As the first ever media coverage of Samsung's Value Innovation activity, the Korea Economic Daily's Value Innovation Institute unveils the Samsung VIP Center, its background behind introducing the Value Innovation strategy, as well as implementation examples.

Samsung Electronics Value Innovation Conceptual Chart

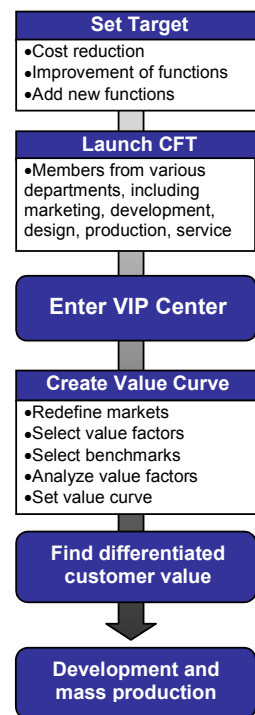


Best talents from each business unit in cooperation to carry out top secret projects at VIP Center

In Room 3220, the development of the next generation color laser printer is under way. One can feel the tension in this project room. It seems that there are different points of view among team workers. The point of discussion is how to modify the design. There are strikingly different opinions among C.Y. Han (digital printing business unit) in charge of development, H.S. Chun (design management Center) in charge of quality and three other counterparts. Designer Chun insists

that they have to pay attention to minute details of unseen surfaces such as the bottom surface of the printer. Mr. Han, the chief researcher, disagrees with him, saying that if they do so, not only will the development costs be high but the designing itself too will become too difficult. Such is a direct confrontation between these two professional opponents with different roles and responsibilities as a designer and developer. The discussion lasts about a half an hour. After

Samsung Electronics Value Innovation Flowchart



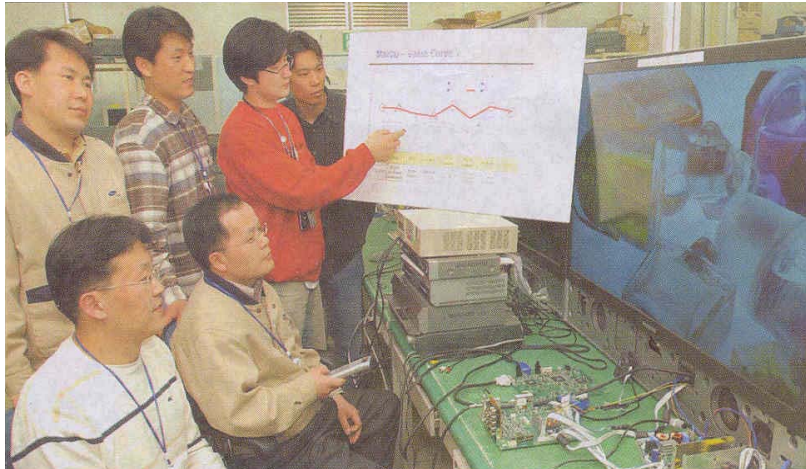
drawing the Strategy Canvas – one of the VI core tools – designer Chun wins the battle. His argument against his opponent Han was simple, that his suggestion would offer greater value to customers.

The VIP Center is not the only place where VI is being implemented. The Center has been operating VIP branches in 10 different business

units for two years, because they cannot handle all the requested assignments. Some VI specialists trained at the Center are working at the Audio-visual display business unit's own branch, some 10 minutes drive away: "In the past we were hurrying to imitate

Japanese companies like Sony or Panasonic, but innovative ideas have been pouring out since the introduction of VI."

"It's no coincidence that Samsung TV sets are selling for 1000 dollars more than Sony sets in the US market", said YC Moon, chief re-



Picture Samsung Electronics established VI as the "common language" by various measures, such as drawing "Strategy Canvas" a compulsory process during evaluation of investment plans. Looking at the strategy canvas, Video Display Team members are discussing the feasibility of commercializing a projection TV.

searcher in charge of developing DLP projection TV. "Whether it is making TV sets weigh much lighter by using plastic materials or adding entertainment features to make the

TV better adapted to changes in the PC environment, everything is a result of innovative ideas," explains Moon.

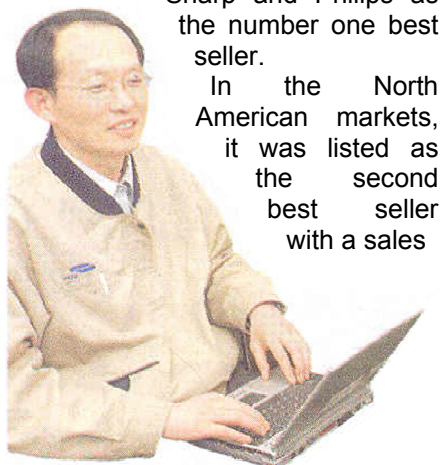
At sunset when we were about to leave this business unit, we ran into some CFT members returning to the VIP Center after dinner. The conversation we overheard was

about the direction for some product developments. They have been living on

the fifth floor of the dormitory at the Center for a couple of months now: The sun has gone down, but the 'flame of value innovation' for looking for new markets was burning bright.

Interview with Yun Soon Ahn, Chief researcher at the Audio-Visual Display Business Unit

Samsung Electronics' LCD TV is more popular in overseas markets than in the domestic one. In the European market, some 247,000 units were sold last year, overtaking Sharp and Philips as the number one best seller.



In the North American markets, it was listed as the second best seller with a sales

volume of 119,000. In particular, the success of the 40-inch units has led to

a shortage of supply. The 40-inch LCD TV, launched in December 2002, is one of the representative products that was developed at the VIP Center. Y.S. Ahn, the team captain of the project for four months from July that year, stressed, "Before learning about the theory of VI, we only tried to develop bigger LCD TVs than our competitors. We tended to focus on showing off our technological prowess. Now, we try to see things from a customers' viewpoint, down to the smallest and most trivial details. It was an opportunity to move away from the engineer's mindset of attaching too much importance to technology"

He took the LED power indicator light at the bottom of the TV screen as a good example. The LED power indicator is useful on a small-sized TV, but its utility is reduced in case of wide-screen TVs because of the longer distance between the viewer and the screen.

The project team added instead an

OSD (On Screen Display) function, which allows the user to check the TV's operating status from a distance by text displayed on the screen. This is a small feature, one that would easily have escaped them had they not seen it from a customer's viewpoint.

"While we were working on the project, we ate and slept at the Center for four months. We went home on the weekend to fetch clean clothes for the next week," said Ahn.

Top executives expressed a strong interest in the project. DaeJei Jin, Korea's current Minister of Information and Telecommunications and the former CEO of Samsung Electronics, and Jisung Choi, former Business Unit Head and current Managing Director of Digital Media Business, often paid surprise visits to the team on Sundays.

Ahn smiles, "It is worth having put in so much of our efforts to make the project work, as the 40-inch LCD TV is doing very well in the world market." ■