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**IBS Center for Management Research**

## **Samsung Electronics: Success by Design**

*This case was written by **Sachin Govind**, under the direction of **S.S.George**, IBS Center for Management Research. It was compiled from published sources, and is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.*

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## Samsung Electronics: Success by Design

*“An enterprise’s most vital assets lie in its design and other creative capacities. I believe that the ultimate winners of the 21<sup>st</sup> century will be determined by these skills.”<sup>1</sup>*

**- Kun-Hee Lee, chairman, Samsung Corp., in 2006.**

*“We want to be the Mercedes of home electronics.”<sup>2</sup>*

**- Yun Jong Yong, chief executive, Samsung, in 2004.**

*“Good design is not simply about aesthetics or making a product easier to use. It’s a central part of the business process, adding value to products and services and creating new markets.”<sup>3</sup>*

**- Tony Blair, prime minister, UK.**

### INTRODUCTION

In the 2006 IDEA (Industrial Design Excellence Awards)<sup>4</sup> competition, Korea-based Samsung Electronics Co. Ltd. (Samsung) won a gold (for a touch messenger<sup>5</sup>) and two silver (for a portable digital projector and a digital presenter) awards. With these wins, Samsung held on to its number one position as the company that had won the most IDEAs in the last five years.

Samsung had made the decision to adopt design as a source of competitive advantage in the 1990s. Earlier, the company’s products had been uninspiring and undifferentiated. In the early 1990s, the Group chairman, Kun-Hee Lee (Lee), initiated Samsung’s transformation from a low-end OEM<sup>6</sup> into a world-class electronics company. Sharpening the company’s design skills was a significant part of the initiative. However, this required major changes in culture, processes, and systems within the company.

The decade-long initiative proved to be successful and Samsung came to be perceived as a company with an exciting product portfolio. The IDEAs and numerous other awards that Samsung won in the 2000s reaffirmed the company’s newly-acquired design prowess. With stylish products in its portfolio, the company was able to record higher sales and higher profits. Interbrand<sup>7</sup>, a leading branding consultancy firm, named Samsung as one of the fastest growing brands in its 2005 brand survey. The top management attributed the company’s success to a great extent to its new design capabilities.

<sup>1</sup> Luke W., “Design vision: In Korea,” www.lukew.com, February 19, 2006.

<sup>2</sup> David Rocks and Moon Ihlwan, “Samsung design,” www.businessweek.com, November 29, 2004

<sup>3</sup> Roberto Verganti, “Managing design-driven innovation for competitive advantage,” www.innozone.dk, 2006.

<sup>4</sup> IDEAs, sponsored by BusinessWeek, are given away each year to the best industrial designs from across the world. The entries are judged by Industrial Designers Society of America (IDSA) and the results are published in BusinessWeek.

<sup>5</sup> A touch messenger helps the visually impaired to send and receive text messages.

<sup>6</sup> OEM or Original Equipment Manufacturer refers to an entity that manufactures products which are then sold by other companies under their brands.

<sup>7</sup> Interbrand Corp. was established in 1974 in London. Its services include brand research, brand valuation, brand strategy, naming and verbal identity, brand design, internal brand alignment, integrated marketing, digital brand management, and brand protection.

However, as of 2006, several small and big companies were following in Samsung's footsteps, and hiring design houses and consultancies to improve their product designs. It seemed that in the future, design itself was in danger of being commoditized.

## BACKGROUND NOTE

The Samsung Group was founded by Byung-Chull Lee (Byung) in 1938, in Taegu, Korea, as an exporter of dried fish, vegetables, and fruits. Byung later established flour mills under the Samsung name (Korean for three stars). He also produced confectionery machines in this period (*Refer Exhibit I for the companies under the Samsung Group as of 2006*).

In 1951, Samsung Moolsan, a holding company, was established, which later became Samsung Corp. In 1953, Cheil Sugar Manufacturing Co. was set up, which later became an independent company. In 1958, Samsung acquired Ankuk Fire and Marine Insurance (later renamed Samsung Fire and Marine Insurance) and DongBang Life Insurance in 1963 (later renamed Samsung Life Insurance). In 1966, the Group founded Joong-Ang Development, an entertainment (theme parks) and services company, which was later renamed Samsung Everland.

In 1969, Samsung Electronics Manufacturing Co. (SEMC) was incorporated. In the 1970s, the Samsung Group forayed into the shipbuilding, chemical, and petrochemical industries. In 1974, the Group<sup>8</sup> acquired a 50% stake in Korea Semiconductor Co., a joint venture between Korea Engineering & Manufacturing Co. and Integrated Circuit International. SEMC started exporting its products in the 1970s. In 1978, the Group's electronics exports crossed the 100 billion won mark.

In February 1984, SEMC was renamed as Samsung Electronics. In the mid-1980s, the Samsung Group began to concentrate on R&D activities. In 1986, the Samsung Economic Research Institute (SERI) (which later became an independent entity) was set up, while the Samsung Advanced Institute of Technology (SAIT) was set up in 1987. The SAIT R&D center helped the Group enter other technology-intensive industries in later years.

Byung passed away on November 19, 1987, after having managed the Group for almost fifty years. After Byung's death, his son Kun-Hee Lee (Lee) became chairman of the Group. In 1988, on the 50<sup>th</sup> anniversary of the Group's founding, Lee announced the "Second Foundation" of the company, with the aim of directing the Group toward becoming a modern world-class corporation.

The 1990s saw a series of technological innovations at Samsung. The company developed the world's first 16M DRAM<sup>9</sup> in 1990, a 10.4 inch TFT-LCD<sup>10</sup> panel in 1992, the world's first 64M DRAM in 1992, an ultra-light 100g mobile phone, a digital video recorder (DVD-R), the world's first 8mm VCR in 1993, and the world's first 4X (four power) zoom camera in 1994. In 1995, it developed real-time MPEG-III technology and a 22-inch TFT-LCD panel. In 1996, it developed a 1 GB DRAM and in 1999, a 1 Gigabit flash memory prototype and a 24-inch TFT-LCD panel. Samsung's technological innovations continued in the 2000s as well.

By 2006, Samsung had grown to become a leading player in the semiconductor, telecommunication, digital media, and digital convergence technologies. The company earned revenues of US\$ 56.7 billion and a net income of US\$ 7.5 billion (in 2005). It employed 113,600 people in 90 offices in 48 countries. It was estimated to be the largest manufacturer of memory chips, TFT-LCDs, color TVs, and color monitors in the world.

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<sup>8</sup> Unlike most other industrial conglomerates, the Samsung Group does not have a holding company and is more like a web of companies, subsidiaries, and affiliates, where each entity owns shares in other companies in the Group. In 2006, the Korean Fair Trade Commission, Korea's top trade regulator, criticized Samsung for its corporate structure and asked it to create a holding company.

<sup>9</sup> DRAM or Dynamic Random Access Memory is a type of RAM (the primary storage in a computer) that stores each bit of data in a separate capacitor.

<sup>10</sup> Thin-Film Transistor LCDs are a variant of Liquid Crystal Displays (LCD). They are believed to be an improvement over ordinary LCDs.

## SAMSUNG'S FOCUS ON DESIGN INNOVATION

Samsung's journey toward design excellence started in 1993. That year, Lee reportedly visited an electronics store in Los Angeles, USA. He noticed, to his dismay, that the Samsung products on display looked unattractive, while the products of Sony and some other companies looked much more appealing. He found too that the sales personnel at the store were themselves ignoring the Samsung products. Lee realized that Samsung was paying too much attention to volumes and the cost of production, while ignoring customer value. He recognized that in order to survive, Samsung would have to make high quality, exciting products. Lee said, "...having taken responsibility for the management of the group for five years, I have come to realize that Samsung has reached a turning point where it simply has to change. We are not yet adapting ourselves to the new economic environment. Our management is still maintaining a policy that puts priority on quantity rather than quality. We have to change if we are to survive. That is our only chance."<sup>11</sup>

Lee came to the conclusion that apart from using cutting-edge technology, Samsung could create value through design. He then communicated his vision for Samsung and the role that design would play in the future, to his managers.

Lee was not sure, however, whether his designers were capable of delivering designs that would appeal to a global audience. Therefore, he hired a Japanese design consultant to evaluate Samsung's designers. The consultant came to the conclusion that the designers were top notch; the problem lay in the processes and systems in place. As a first step, Samsung's design center at Suwon, a small town, was shifted to Seoul.

In 1994, Lee announced major plans to secure a new competitive advantage for Samsung through design innovation. Samsung set aside US\$ 126 million for its design initiatives till 2000.

Soon, Lee sent a group of 17 designers from Samsung to the Art Center College of Design (ACCD)<sup>12</sup>, Pasadena, California, to broaden their ideas about design. Samsung later engaged the services of Gordon Bruce (Bruce) and James Miho (Miho), design consultants and members of the faculty at the ACCD. The design consultants helped establish a design school – Innovative Design Lab of Samsung (IDS) – close to the company's headquarters in Seoul, to train the designers. Around US\$ 10 million were spent on setting up the eight-storied design lab.

Samsung's determination to excel in design inspired the government of South Korea to announce the beginning of a 'Design Era' in the country, in an effort to encourage businesses to recognize the importance of design and use it as a competitive advantage.

### DESIGN PHILOSOPHY

The Japanese consultants who had initially evaluated Samsung's design team had also suggested that the company should incorporate Korean values in its designs. However, Samsung found it difficult to arrive at a uniquely Korean identity. Company officials were asked to travel the length and breadth of the country in search of places and objects which could represent Korea. Eventually, it was believed that Lee himself chose Seokguram, a remote mountain cave that housed an 8<sup>th</sup> century Buddha, and the phrase 'Balance of Reason and Feeling' as the design philosophy for Samsung's product design and graphic communications (*Refer Exhibit II for a graphic representation of 'balance of reason and feeling'*). "It is very Oriental — not black and white, but a balance of things. It states that we will meet the emotional needs of our customers with the technological solutions we have,"<sup>13</sup> said Hyun-joo Song, executive in charge of design identity.

<sup>11</sup> Les Echos, "Samsung challenges Sony's stronghold", www.samsung.com, March 12, 2002.

<sup>12</sup> The ACCD was established in 1930 in Los Angeles by Edward A. Adams. It offers undergraduate programs in advertising, environmental design, film, fine art media, graphic design, illustration, photography and imaging, product design, and transportation design, and graduate programs in film, art and industrial design.

<sup>13</sup> Frank Rose, "Seoul machine," www.wired.com, May, 2005.

“Reason and feeling are opposites, but they are essential to each other. In design terms, ‘reason’ is rational, sharp-edged, and very geometric. ‘Feeling’ is soft and organic – it makes an emotional connection with the user. Taken together, reason and feeling give us a way to frame our design identity, which is always evolving,”<sup>14</sup> said Sangyeon Lee, head of Samsung’s San Francisco design studio.

The Reason and Feeling approach was to have six “guiding principles” such as “to balance consistency with variety”, “harmonize with the environment”, “design for experience”, etc. Every Samsung product was to have consistent characteristics and a common “design language” which were to provide real as well as emotional benefits to customers. All products were required to have outstanding features and high levels of convenience.

## DESIGN STRATEGY

Samsung’s design strategy involved several initiatives. To begin with, the company decided to create a global brand identity. Therefore, in 1993, the Samsung ‘wordmark’<sup>15</sup> was launched<sup>16</sup> (*See Exhibit III for the Samsung wordmark*), and later in 1999, Samsung began implementing a global brand communication strategy.

In an effort to communicate the importance of design, Lee declared 1996 as the “Year of Design Revolution” for the Samsung Group. The same year, Samsung engaged Tom Hardy<sup>17</sup> as the Corporate Design Advisor to guide its efforts in improving its design capabilities.

In order to maintain high levels of creativity, Samsung began sending its more experienced designers to work abroad in diverse industries such as furniture, cosmetics, and fashion for periods ranging from six months to two years. This enabled the designers to think out-of-the-box. On their return, they were encouraged to share their experiences with other designers so that the knowledge could spread across the company. Around 20 designers were sent on such programs every year.

In 2001, Samsung inaugurated the new Design Management Center at Seoul. In 2003, Samsung opened a usability lab in Seoul where engineers, designers, specialists from the social sciences, and consumers tested everything right from taking the products out of their boxes to the icons and menus on screens. Findings from such observational research were used to help the designers improve their designs.

Samsung created world-class design infrastructure, including design labs and research centers, to improve its design capabilities. In an effort to get a global perspective and secure talent from different cultural backgrounds, it established design centers in the US (San Francisco, Los Angeles), the UK (London), Italy (Milan), Japan (Tokyo), and China (Shanghai). In addition, it improved its facilities at the Corporate Design Center in its home country.

## BRINGING CULTURAL CHANGES

Although Samsung had no problems in funding and creating the design infrastructure, it faced a more difficult task in convincing the rank and file at the company that design was necessary for survival and growth. Most of the employees were more concerned about costs and volumes than design. “Samsung was a technology company whose management thinking came out of exporting rice,” said Bruce, “There was no design involved. It was all about keeping the price down and outselling the other guy.”<sup>18</sup>

<sup>14</sup> Bill Breen, “The Seoul of design,” [www.fastcompany.com](http://www.fastcompany.com), December 2005.

<sup>15</sup> The new ‘wordmark’ replaced individual logos for over 44 brands across the Samsung Group’s businesses.

<sup>16</sup> Lee had engaged the services of Lippincott & Margulies, world-renowned brand consultants, in the early 1990s to develop the wordmark.

<sup>17</sup> Tom Hardy, a well-known design consultant, served as corporate design advisor at Samsung between 1996 and 2003.

<sup>18</sup> Bill Breen, “The Seoul of design,” [www.fastcompany.com](http://www.fastcompany.com), December 2005.

Consequently, when Lee communicated his design vision to his managers, most of them were clueless as to what their chairman meant. “Most of us didn’t understand what he was talking about,”<sup>19</sup> said Kook-hyun Chung, senior vice president, Corporate Design Center, Samsung. Therefore, efforts were made to first create a design-friendly culture at Samsung. The IDS was to be a major part of that effort.

Initially, the ACCD curriculum was to be used at the IDS. However, Bruce and Miho, who were brought in to develop Samsung’s design capabilities, soon realized that the curriculum just did not suit the culture at Samsung.

Bruce and Miho found that they were up against deeply held cultural beliefs. South Korea, despite its capitalistic economy, was essentially an oriental culture and employees at Samsung held strong Confucian beliefs<sup>20</sup>. Fostering creativity required breaking away from some of the traditions and behavior patterns. For example, South Koreans, like people belonging to other oriental cultures, respected their elders and teachers and dared not question them. However, at the IDS, designers were encouraged to question their superiors and express their opinions. All employees were encouraged to speak their mind, irrespective of their age or position. Bruce said, “In the beginning of the program, designers cared a lot about their positions (like assistant designer, designer, senior designer, or principal designer) and were unable to discuss their ideas with those in other positions. However, as they went through the IDS program, they opened their minds to others and changed their attitudes.”<sup>21</sup> Also, in another departure from convention, there was no dress code at the IDS. The trainees were also paid their usual salary while they attended full-time classes six days a week on subjects as varied as engineering, marketing, and design.

The consultants also noted that though the designers were expected to design products for international markets, most of them had never traveled outside Korea. “To understand who you are, you need to get out of your environment,”<sup>22</sup> pointed out Bruce. Therefore, Bruce and Miho took the designers on a worldwide tour in an effort to expose them to various cultures and thus expand their horizons. The team visited Egypt, India, Italy, Greece, USA, and the UK.

From the fourth year onward, marketers and engineers also started attending one-year programs at the IDS along with designers, so that communication and understanding between the different functional groups would improve.

## SYSTEMIC AND PROCESS CHANGES

Samsung redesigned its systems and processes to improve the design delivery process. First, the company modified its product creation process. Samsung earlier was an engineering-driven company and there was very little interaction between the company’s engineers, marketers, and designers. The designers only took orders from engineers and product planners. However, this arrangement was done away with, and designers began to enjoy as much, if not more, authority as engineers and marketers. Collaboration between different departments became a key aspect of new product development.

All designers at the Corporate Design Center worked in a common four-storied design lab, in large open halls, with hardly any segregation. For example, designers in the consumer electronics and computer products division worked alongside appliance and mobile handset designers. The design department also started a ‘design bank’, where designers saved designs so that they could be used later.

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<sup>19</sup> Frank Rose, “Seoul machine,” [www.wired.com](http://www.wired.com), May, 2005.

<sup>20</sup> Confucianism refers to a system of thinking based on teachings of Kong Fuzi (popularly known as Confucius), a sage and a philosopher, who lived between 551 and 479 BC in China.

<sup>21</sup> “Samsung’s lessons in design,” [www.cdf.org](http://www.cdf.org), September 2001.

<sup>22</sup> “Samsung’s lessons in design,” [www.cdf.org](http://www.cdf.org), September 2001.

Samsung also began holding design meetings on a regular basis where the heads of all business units assessed new products and evaluated their designs. In 2004, the company created a new position — Chief Design Officer. This was done to give greater voice to the design department and to ensure that the senior management had closer ties to design.

From 2000, Samsung increased its design budget by 20 to 30 percent annually. It also doubled the number of its design staff from 230 in 2000 to 470 in 2006, adding 120 designers in 2005-06 alone.

## SAMSUNG'S DESIGN SUCCESSES

Samsung had a string of design successes in the 2000s. For example, the Syncmaster series of LCD monitors was lauded for its simple design and went on to win several awards.

In the 2000s, LCD TVs and Plasma TVs were gaining in popularity, while the popularity of the much bulkier projection TVs was waning. Therefore, Samsung's design team started work on developing a slim projection TV based on digital light processing (DLP)<sup>23</sup> technology. The result was the highly acclaimed HLP series of DLP TVs, which had the processing engine standing upright and functioning as a pedestal base. The HL-P5685W, a 56-inch high-definition DLP TV, (*Refer Exhibit IV for a photograph of the model*) was particularly successful. Samsung also designed a DVD player and a home theater system to go with this model. With the HLP series, Samsung became the number one DLP TV brand in the US.

Samsung was also one of the best-selling brands in large high-end TVs (other than DLP TVs) in the US, a position which it managed to achieve primarily due to its emphasis on design. The Samsung Bordeaux LCD TVs, whose design was inspired by wine glasses, were a huge hit in the US and in Europe.

In an affirmation of its design prowess, Samsung began to be a regular fixture in the annual lists of IDEA winners. In 1997, it was ranked 15<sup>th</sup> in the list, but by 2001, along with Apple Computers, it had moved to first place, a position it continued to hold even in 2006 (*See Exhibit V for the list of IDEA winners*). Through the 2000s, Samsung won several awards (*Refer Exhibit VI for a list of some of the awards won by Samsung*).

In August 2005, BusinessWeek/Interbrand placed Samsung at the 20<sup>th</sup> position in terms of brand value in their Top 100 Global Brands survey. In that year, the Samsung brand had recorded a 186% increase in value over the previous year. In contrast, Samsung's rival Sony had seen a 16% drop in brand value and was ranked behind Samsung, in the 28<sup>th</sup> position.

## Convergence Products

In addition to providing great-looking products, Samsung's designers also strove to offer 'real' benefits to consumers. For instance, Samsung launched several hybrid products (or digital convergence<sup>24</sup> products) that combined the features of two or more products, thus providing greater convenience to customers. In fact, Samsung's vision was to "lead the digital convergence revolution"<sup>25</sup>, and design was to be a significant contributor to achieving this (*Refer Exhibit VII for photographs of some convergence products from Samsung*).

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<sup>23</sup> DLP technology was originally developed at Texas Instruments in 1987. In this technology, the image is created by microscopically small mirrors placed in a matrix on a semiconductor chip. Each mirror represents one pixel.

<sup>24</sup> Digital convergence refers to the merging of technologies of three industries – Computer (hardware & software), Electronics, and Telecommunications.

<sup>25</sup> According to [www.samsung.com](http://www.samsung.com).

Samsung launched 5 mega pixel and 7 mega pixel camera phones in 2005, followed by a 10 mega pixel camera in 2006. These models combined a full-feature digital camera with a mobile phone. It also launched the i730, a mobile phone that could be used to read and send e-mail and browse the Internet. In mid-2006, Samsung launched the SGH-i310, a mobile phone with 8 GB of storage capacity — enough to store around 2,000 MP3 files. The Samsung Extiva, a DVD player that could also play video games, the X series notebook computers that doubled as mobile TVs and yet were thin and light enough to be carried around in a handbag, and Zipel, a refrigerator that had a digital photo album and a TV receiver, were some of the other innovative products developed by Samsung.

## CRITICISM

Some critics commented that even if Samsung's design capabilities had improved greatly, the company still lacked a coherent design. "Samsung has improved, but I don't see an identity in their design that really speaks to consumers,"<sup>26</sup> said Jim Wicks, vice-president (in charge of designing cell phones), Motorola Inc. According to some other critics, the company still did not have the design culture of Apple Computer Corp., or the breadth and depth in design that Sony possessed.

In spite of the improvements in the design process, the design of some of the products that Samsung introduced was still poor. For example, the Samsung Q1, a tablet PC launched in 2006, was panned by critics for its lack of features, small screen, and high price. One critic had this to say: "With no DVD drive, keyboard, or decent sized screen, and just over two hours' battery life, one wonders what applications the Samsung Q1 hopes to address that aren't already being handled. Reading online newspapers perhaps? I doubt whether being able to download newspapers and read them on a seven inch screen will do it for people who are being asked to shell out \$1100."<sup>27</sup>

Another recurring criticism was that some of the high-design products were unrealistically priced. Critics said that the company was trying to exact prices that were more than the designs deserved. For instance, the 102" plasma TV launched in 2006 was priced at US\$ 80,000 (*Refer Exhibit VIII for a photograph of the 'world's largest'<sup>28</sup> plasma TV*).

Some of Samsung's products were also criticized for their poor user interface. However in 2004, Samsung had announced that it would pay greater attention to this aspect in its designs. Choi said, "In the past, physical design was our focal point. In the future, the user interface will be emphasized more."<sup>29</sup>

In May 2006, Samsung was faced with an embarrassing situation when two of its mobile phone models in the Skin series, the SPH-V8900 and the SCH-V890, were found to have icons similar to that of Apple and Microsoft products. Samsung quickly withdrew the models from the market. "There were a few mistakes while we were developing the new product. We have already fixed the designs and I believe that the old models are not being sold in the market any more,"<sup>30</sup> explained the chief of Corporate Design Center, Samsung. Although the withdrawal was swift, the incident showed that Samsung had much ground to cover before it can be called a design icon.

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<sup>26</sup> David Rocks and Moon Ihlwan, "Samsung design," www.businessweek.com, November 29, 2004.

<sup>27</sup> Stan Beer, "Samsung misses the mark with Q1 Origami," www.itwire.com, May 07, 2006.

<sup>28</sup> In 2006, Matsushita Electronics claimed that it produced a larger plasma screen (103 inches).

<sup>29</sup> David Rocks and Moon Ihlwan, "Samsung design," www.businessweek.com, November 29, 2004.

<sup>30</sup> Simon Burns, "Samsung admits to copying handset icons," www.vnunet.com, May 08, 2006.



## DESIGN FOR A COMPETITIVE EDGE

Design can add value to even the most mundane object. In the case of consumer electronics, design has come to play a significant role. Earlier, most consumer electronics products were expensive and not within the reach of everyone. At that time, purchase decisions were primarily based on price, quality, and features. However, over time, products like TVs, home theater systems, and digital cameras became more affordable and within the reach of a vast majority of people. Quality was no longer a differentiator, and most brands offered similar products in terms of features and pricing. In this scenario, the most successful consumer electronics companies were those that recognized the importance of design. “At Sony, we assume all products of our competitors will have basically the same technology, price, performance, and features. Design is the only thing that differentiates one product from the other in the marketplace,”<sup>31</sup> said Norio Ohga, Chairman and CEO, Sony.

Seth Godin, a marketing expert, believed that design was the “single highest-leverage investment” that any business leader could make. “Of all the edges I know, embracing amazing design is the easiest, the fastest, and the one with the most assured return on investment,”<sup>32</sup> wrote Godin in an adaptation of his book, *Free Prize Inside (Refer Exhibit IX for a short note on how electronic companies can improve their design capabilities)*.

Good design also allowed Samsung to command a price premium. For example, its mobile phones had the highest average unit sale price (US\$ 215) in 2002<sup>33</sup> in their category. It was believed that the company was able to achieve this because its mobile phones featured a combination of cutting-edge technology and innovative design.

Yves Behar, a reputed industrial designer, believed that design bred customer loyalty. According to him, design could be used to create emotional bonds with customers. Samsung too was trying to connect with its customers by introducing products with appealing designs. In the first and second quarter of 2006, Samsung was the number one company in terms of worldwide TV sales (revenue). It was among the best-selling brands in Europe and North America, two of the most sophisticated markets in the world, in terms of technology and design (*Refer Exhibit X for worldwide sales (in %) of the top-selling brands*).

Industry observers hailed the Samsung chairman for his vision in using design to transform his company from just another electronics company into an innovator. “Lee foresaw that Samsung could wield design as a competitive weapon and use it to transform itself from an also-ran imitator to a world-class innovator,”<sup>34</sup> wrote Bill Breen, columnist, Fast Company.com.

However, looking at design trends and the fact that even smaller players were coming up with products with interesting designs, it seemed as though in the future, design would no longer be an adequate differentiator, as most products were expected to be well designed. As Walter Herbst, CEO, Herbst LaZar Bell, a product design firm, said, “Good design is not good enough any more.”<sup>35</sup>

## OUTLOOK

In September 2006, Samsung unveiled the Syncmaster 971P, an LCD monitor. The product was unique in the sense that it had a geometric shaped stand, unlike conventional LCD monitors (*See Exhibit XI for a photograph of the Syncmaster 971P*). The company claimed that the S-Shaped stand gave the monitor additional stability. The model came with a high glossy finish, with all the

<sup>31</sup> “Design – The new competitive difference,” www.agelessmarketing.typepad.com, July 18, 2005.

<sup>32</sup> John A. Byrne, “Welcome to the design revolution,” www.fastcompany.com, June 2004.

<sup>33</sup> According to Strategy Analytics, a US-based consumer survey firm. The figures for Nokia and Motorola were US\$ 148 and US \$155 respectively.

<sup>34</sup> Bill Breen, “The Seoul of design,” www.fastcompany.com, December 2005.

<sup>35</sup> “The power of design,” www.fastcompany.com, Issue 95, June 2005.

cables and buttons hidden from sight. “We focused on creating artistic value from the design of the new monitor, as well as maximizing functionality and user convenience. Samsung wants to go beyond design and sensitivity to realize artistic value, high-functionality, and maximum convenience in our products, to become the design icon in the global monitor market,”<sup>36</sup> said Yoon Ho Ha, senior vice president, Visual Display Division, Samsung.

At IFA 2006, Samsung partnered with European furniture and interior design companies Fritz Hansen (Denmark), Poliform and Gervasoni (both from Italy) and Tillberg Design (Sweden), to showcase its range of audio, video, and mobile products. The idea was to emphasize the design excellence of Samsung brand products. The project involved placing Samsung products in four different kinds of interiors – Scandinavian, Mediterranean, Contemporary European, and Oriental.

Samsung believed that to stay ahead of the competition, it had to not only introduce new designs but also continuously launch new products. For this, Samsung put together an elite CNB (Creating New Businesses) Group to identify long-term social and technological trends that could provide inputs for developing new product lines. The CNB Group consisted of a team of designers from different business units. The Group came up with “animated what-if films and 3-D mockups” which were shown to top executives for discussion and approval. “It is not about what is happening now. It is about imagining what our living environment will be like five or ten years down the road,”<sup>37</sup> said Ki-seol Koo, head of the CNB group.

In October 2006, Samsung reported net profits of 2.16 trillion won on sales of 15.22 trillion won for the third quarter of 2006-07 (*Refer Exhibit XII for Samsung’s financials between 2000 and 2005*).

In November 2006, Samsung announced that it would launch a mobile convergence device that had the potential to take the place of notebook PCs. The SPH-P9000, as it would be named when launched in February 2007, was a PDA-based device that would use mobile WiMax technology for wireless Internet access. The device would be able to play MP3s and video-on-demand and would have features like a camera, a 5-inch LCD, a foldout keyboard, and a 30 GB hard drive.

Despite its emergence as a company with enviable design capabilities, some analysts wondered whether Samsung had staying power as far as launching high-design products was concerned. Nonetheless, Samsung’s newly acquired design skills had caught the attention of industry experts, the business press, and customers in developed as well as in developing countries.

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<sup>36</sup> “Samsung releases premium LCD monitor with iconic design,” [www.samsung.com](http://www.samsung.com), September 01, 2006.

<sup>37</sup> Frank Rose, “Seoul machine,” [www.wired.com](http://www.wired.com), May, 2005.

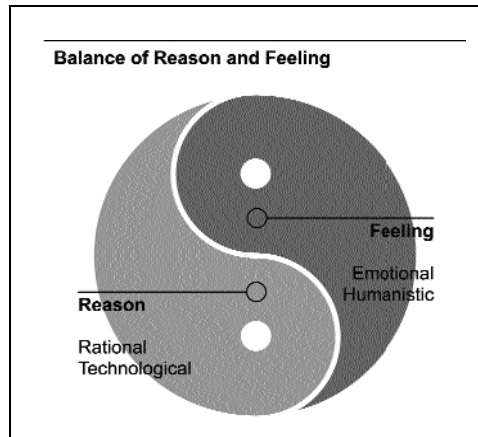
**Exhibit I**

**Samsung Group of Companies**

<b>S No</b>	<b>Company</b>	<b>Business</b>
1	Samsung SDI Co. Ltd.	Plasma display panels, cathode ray tubes, LCDs, rechargeable batteries, organic electro-luminescent displays, visual fluorescent displays, and touch panels.
2	Samsung Electro-mechanics Co. Ltd.	Chips, circuit boards, digital tuners, network modules, camera modules, LED, and optical modules.
3	Samsung Corning Co. Ltd.	Glass (for picture tubes of TVs and monitors), ITO-coated glass (for LCDs), rotary transformers, cerio nano powder, and PDP filter.
4	Samsung Corning Precision Glass Inc.	Substrate for TFT-LCDs.
5	Samsung SDS Co. Ltd.	Internet systems integration, outsourcing, e-biz consulting/IT training, ASP, business recovery service, hosting service, marketplace portal service, solution providing, venture incubation, etc.
6	Samsung Networks	Optical networks, Internet telephony, business telephony, IP contact center, SMS/MMS, digital conferencing service, web biz, home networking, etc.
7	Samsung Heavy Industries	Commercial ships, industrial ships & off-shore facilities, cruiser and ferries integrated navigation systems, material handling equipments, steel structure and bridges, and engineering & construction.
8	Samsung Techwin	Gas turbines, turbo machinery, aircraft engines, opto-electronic devices, military hardware, helicopter shuttle service, semiconductor lead frames.
9	Samsung Total Petrochemicals Co. Ltd.	Ethylene, propylene, butadiene, C4 raffinates, compounding resins, etc.
10	Samsung Petrochemical Co. Ltd.	Purified terephthalic acid
11	Samsung Fine Chemicals Co. Ltd.	Tetramethylammonium chloride, Barium titanate powder, dimethyl formamide (DMF), etc.
12	Samsung BP Chemicals Co. Ltd.	Acetic acid, vinyl acetate monomer, hydrogen
13	Samsung Life Insurance Co. Ltd.	Life insurance and real estate
14	Samsung Fire & Marine Insurance Co. Ltd.	Automobile insurance, fire and marine insurance, overseas travelers' insurance, etc.
15	Samsung Card Co. Ltd.	Credit card (issue and management), mail-order and on-line sales, insurance agent services, equipment lease, credit loans, security loans, discounting bills, and financing new technology business
16	Samsung Securities	Stock and bond brokerage, commercial paper, etc.
17	Samsung Investment Trust Management	Mutual fund, Investment trust, investment advisory services
18	Samsung Venture Investment	Investment in venture firms (infocomm, Internet, entertainment, etc)

Source: www.samsung.com.

**Exhibit II**  
**Samsung's Design Approach**



Source: "Global Design and Cultural Identity," *Innovation Summer 2002*.

**Exhibit III**  
**The Samsung Wordmark**



Source: [www.samsung.com](http://www.samsung.com).

**Exhibit IV**  
**Samsung DLP TV**



Source: [www.tv.about.com](http://www.tv.about.com).

**Exhibit V**

**Idea Winners between 2001 and 2005**

Corporate	(No. of Awards Won)					
	2001	2002	2003	2004	2005	5 year total
Samsung	3	5	3	5	3	19
Apple	3	5	2	4	3	17
IBM	5	3	3	2	2	15
Nike	4	1	2	2	4	13
HP	2	1	3	2	4	12
Philips	2	0	1	3	4	10

Source: www.businessweek.com.

**Exhibit VI**

**Design Awards**

SNO	PRODUCT	AWARD
1	Touch Messenger	2006 IDEA – Gold
2	Portable Digital Projector	2006 IDEA – Silver
3	Pocket Imager (SP-P300MK)	2006 IDEA – Silver
4	Digital Presenter (Techwin UF 80)	2005 IDEA – Silver 2004 Chicago Athenaeum Good Design Award
5	Laptop (M40)	2005 IDEA – Silver
6	Miniket (SC-M110)	2005 IDEA – Bronze
7	LCD Monitor (Syncmaster 173P, 193P)	2004 IDEA – Gold
8	DLP Projection TV (85 series)	2004 IDEA – Silver
9	Microwave Oven (MD 1200)	2004 IDEA – Silver
10	Digital Media and Interfaces (Smart Screen)	2004 IDEA – Bronze
11	Digital Satellite Receiver (SFT- 7200)	2004 Chicago Athenaeum Good Design Award
12	LCD Monitor (Syncmaster 152T, 172T)	2003 IDEA – Silver
13	The Family Doctor	2002 IDEA – Gold
14	LCD Monitor (SyncMaster 241 MP)	2002 IDEA – Silver
15	Portable DVD Player (PADIS DVD – L100)	2002 IDEA – Silver
16	Mobile Printer System	2002 IDEA – Silver
17	Smart Cooker	2002 IDEA – Bronze
18	Modular TV concept	2001 IDEA – Bronze
19	Compact mobile phone concept	2001 IDEA – Bronze
20	Digital Camera concept (NEXCA SDC-2001)	2001 IDEA – Bronze
21	LCD Monitor (SyncMaster 150/170 MP)	2000 IDEA – Silver
22	Digital Still Camera (NEXCA SDC-80)	2000 IDEA – Silver

Source: www.idea.com.

## Exhibit VII Convergence Products

### 10 Megapixel Camera Phone



Source: [www.gizmodo.com](http://www.gizmodo.com).

### Watch Phone\*



\* Yet to be launched.

Source: [www.gsmarena.com](http://www.gsmarena.com).

### Extiva Nuon-Enabled<sup>38</sup> DVD Player



Source: [www.dvdreview.com](http://www.dvdreview.com).

<sup>38</sup> Nuon is a technology which allows additional features in a DVD player like CD-ROM readability.

### Exhibit VIII

#### The World's Largest Plasma TV



Source: [www.engadget.com](http://www.engadget.com).

### Exhibit IX

#### Improving Design Skills in the Electronics Industry

Consumer electronics is an industry where the competition is intense. It is also an industry where technological changes come in rapid succession. Therefore, companies need to keep upgrading their products to remain competitive. Apart from technology, they should look at design as a differentiator. A company could consider the following key activities to improve its design skills:

- Ascertain how advanced design capabilities can be acquired. Generally, it would need a substantial increase in the number of designers and an improvement in training facilities and processes.
- Evaluate the organizational structure and place design on the same level as other development teams.
- Analyze business processes and integrate them in such a way that all design activities (mechanical, electrical, software, etc.) are grouped and sequenced to reduce cycle time.
- Recognize the number of variants that can be derived from a single platform.
- Evaluate regularly the infrastructure in terms of tools and machinery. Incorporate the latest technology so as to improve productivity and capabilities.

These efforts would help a company achieve design excellence and be more responsive to market demands.

Source: Adapted from "Product Styling, The new competitive differentiator in electronics," [www.ibmconsulting.com](http://www.ibmconsulting.com).

**Exhibit X**

**Worldwide Sales (Revenue Percentage)**

Q2 Rank	Brand	Q2'06 share (%)	Q1'06 share (%)
1	Samsung	14.6	13.1
2	Sony	11.0	10.8
3	LG	9.8	8.1
4	Panasonic	9.5	7.2
5	Philips	8.6	8.8
	Others	46.6	52.0

Source: www.neasia.nikkeibp.com.

**Exhibit XI**

**The Syncmaster 971p**



Source: www.samsung.com.

**Exhibit XII**

**Samsung's Income Statement**

*In Billion KRW*

	2000	2001	2002	2003	2004	2005
<b>Sales</b>	34,284	32,380	39,813	43,582	57,632	57,458
<b>Gross Profit</b>	12,290	7,866	13,513	14,063	20,353	17,300
<b>Operating Profit</b>	7,435	2,295	7,478	7,193	12,017	8,060
<b>Income before Tax</b>	8,100	3,083	8,870	6,904	13,125	8,870
<b>Net Income</b>	6,015	2,947	7,052	5,959	10,787	7,640

Source: www.samsung.com.



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