Question Paper Integrated Case Studies-I (MB371): July 2008

Case Study (100 Marks)

- This section consists of questions with serial number 1 5.
- Answer all questions.
- Marks are indicated against each question.

Read the case carefully and answer the following questions:

1. 'Culture plays an important role in an organization's ultimate success. There are many ways for shaping culture; culture that results from the ongoing interplay between several variables.' Discuss the reasons for the organizational culture change at Whirlpool and the importance of innovation for an organization like Whirlpool. Also discuss in general and in context of Whirlpool the variables/factors that play an important role in shaping an innovation-friendly organizational culture.

<ANSWER>

2. 'Leadership is crucial to innovation.' Critically analyze the role of the leadership and commitment of the top management in the change initiatives at Whirlpool. How can leaders take a proactive role in crafting an organizational culture that fosters sustainable innovation? What according to you are the traits of a creative and innovative leader?

<ANSWER>

3. 'As opposed to using the traditional approach of innovation where ideas come from a few at the top, Whirlpool followed the approach of democratic innovation.' In your opinion, what are the pros and cons of the democratic approach to innovation in any organization? Also explain the initiatives taken by Whitwam to encourage employee

<ANSWER>

participation in contributing innovative ideas.

4. 'Innovation is dependent upon companies developing effective Knowledge Management (KM) internally as well as through external interaction.' What do you understand by the term KM and how do you think a company can effectively put in place an

<ANSWER>

(KM) internally as well as through external interaction.' What do you understand by the term KM and how do you think a company can effectively put in place an implementation process for KM? Also, analyze Whirlpool's knowledge management initiatives for innovation management.

(17 marks)

(25 marks)

(18 marks)

(20 marks)

5. Building a new core competency requires a lot of effort. In Whirlpool's case, employees needed to be trained on how to develop an innovation mindset and this mindset had to spread throughout the organization. Analyze the role of the external consultants and the in-house coach/mentors in embedding innovation as a core competency at Whirlpool.

<ANSWER>

INNOVATION AT WHIRLPOOL: CREATING A NEW COMPETENCY

"You begin to see the magnitude of infrastructure that has to change to support it (plans to reinvent the corporate culture to embed innovation as a core competency). And remember, we weren't adding on to a core competency. We were creating

one that didn't exist." [1]

- Nancy T. Snyder, vice-president of leadership and strategic competency development at Whirlpool Corp. in 2004

"Plenty of other companies are taking notice of Whirlpool's success. Over the past few months, the company has hosted delegations from Hewlett-Packard, Nokia and Procter & Gamble - all eager to benchmark their own innovation program.

against Whirlpool's."

- BusinessWeek in 2000

INNOVATION FUELS GROWTH

On April 25, 2006, Whirlpool Corporation (Whirlpool) reported net sales of US\$3.5 billion for the first quarter of 2006, 10% compared to the corresponding period of the previous year. Its net earnings during that period stood at US\$1 million, up 37% over the first quarter of 2005. These sales and earnings figures for the first quarter of 2006 were t

highest Whirlpool had recorded in its earnings history. It was also the 19th consecutive quarter of year-over-year increa in sales revenues for the company.

Analysts attributed this increase to the strong worldwide demand from customers and channel partners for the company innovative products. Commenting on the company's Q1 2006 results, Jeff M. Fettig (Fettig), Whirlpool's chairman at CEO, said, "Our first-quarter results reflect solid performance by all regional businesses, strong earnings momentu generated from innovation, productivity, and leverage from our global operating platform." [4]

Whirlpool had come a long way from where it had been in the late 1990s when it was faced with stagnation in revenue profits, market share, as well as share price. According to analysts, this was a direct result of the stagnation in its produ line caused by very little attention being paid to innovation. In 2000, David R. Whitwam (Whitwam), chairman and CE of Whirlpool, initiated major efforts to bring about a change in the company's corporate culture and embed innovation as core competency. Analysts felt that these efforts, which were later carried forward by his successor Fettig, had borne fru judging by the consistent growth in Whirlpool's revenues since 2002 (Refer Table I for Whirlpool's revenues from 1998 2005 and Table II for its key financials).

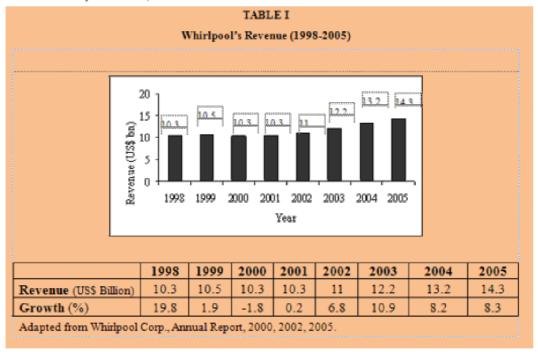


TABLE II

Whirlpool's Key Financials						
	2005	2004	2003	2002	Growth	Growth
	(US\$ Million, except per share data)			2005-2004 (%)	2004-2003 (%)	
Net sales	14,317	13,220	12,176	11,016	8.3	8.6
Net earnings	422	406	414	-394	3.9	-1.9
Net earnings per share	6.19	5.90	5.91	-5.68	4.9	-0.2
on a diluted basis						
Stockholders' equity	1,745	1,606	1,301	739	8.7	23.4
Total assets	8,248	8,181	7,361	6,631	0.8	11.1

Source: Whirlpool Corp., Annual Report, 2005.

BACKGROUND NOTE

In 1911, three brothers — Frederick, Louis, and Emory Upton – set up a company, Upton Machine Corporation (Upton)

St. Josephs, Michigan, USA. The company produced electric motor-driven wringer washers. Upton later went on become Whirlpool.

Upton got its first major order for 100 washers from Federal Electric. However, when the machines were put to wor there was a recurring problem – a cast-iron gear in the washer failed to function. The company's General Manager, Lou Upton, offered to repair all the gears free of cost, although he could hardly afford it then. Impressed with the company ethical standards, Federal Electric not only agreed to repair the machines themselves, but also ordered an additional 10 washers.

[7]

In 1916, Upton entered into a partnership with Sears, Roebuck and Co (Sears) under which Sears marketed the washe manufactured by Upton under the brand name 'Allen'. Sears sold two models of washers — one for US\$54.75 and anoth deluxe model for US\$95. The partnership turned out to be a huge success and the demand for the washers exceed supply.

By 1925, Upton had become the exclusive supplier of electric and gasoline powered washing machines for Sears. In 192 Upton merged with Nineteen Hundred Corp. (Nineteen Hundred) of New York, USA. By 1936, Nineteen Hundred begaentering global markets, and sold its washers in Europe and Asia.

In 1948, Nineteen Hundred marketed an automatic washer under the Whirlpool brand. (Refer to Exhibit I for Whirlpool logo). With this, the company had dual distribution – one line of products marketed by Sears and the other by Nineteen Hundred. In 1950, Nineteen Hundred officially changed its name to Whirlpool. Whirlpool expanded its product range include automatic dryers, refrigerators, and air-conditioners. To keep pace with the competition it faced, Whirlpool decide to spread out its manufacturing facilities around the globe. It acquired a spare parts facility in LaPorte (Indiana), refrigeration plant in Evansville (Indiana), and a dryer production plant in Marion (Ohio). In 1951, it merged with Clyc Porcelain Steel Company (Ohio) to create the world's largest washer manufacturing unit.

The Appliance Buyers Credit Corporation (which was later known as Whirlpool Financial Corporation) was set up t Whirlpool in 1957 to provide credit to customers who wanted to buy the appliances (these services were eventual

discontinued in 1997). In 1958, it invested in Brasmotor S.A. , for an equity stake in the Brazilian appliance market.

By the mid-1960s, Whirlpool had become one of the well-established brands in North America. In the 1970s, the comparestablished Cool Line (later known as Customer Interaction Center), a toll-free consumer service support line, which gar

customers direct 24-hour access to the company. During the same period, Whirlpool acquired the Ft. Smith refrigeration plants in Arkansas, as well as an equity interest in the Canadian appliance manufacturer, Inglis Ltd. In 1968, the company's annual revenues touched US\$1 billion for the first time.

In the 1980s, Whirlpool expanded into markets in Europe, Mexico, India, Canada, China, South Africa, Argentina, at Brazil. In 1987, Whirlpool and Sundaram-Clayton of India formed TVS Whirlpool Limited to make compact washers f the Indian market (Whirlpool Corporation acquired majority ownership in 1994). Later, the company built a manufacturin

plant in Pondicherry, India. In 1989, Whirlpool and N.V. Philips of the Netherlands formed a joint venture calle Whirlpool Europe B.V., to manufacture and market appliances in Europe. Whirlpool became the sole owner of the ventu two years later.

The acquisitions helped Whirlpool gain access to markets around the world. The company hoped that the acquisition would give it the resources and scale to compete in global markets. It realized that it could obtain a major competitive advantage by leveraging on its global reach. Whirlpool aimed at integrating all its regional subsidiaries through it common systems, thus speeding up product development, making purchases cost-effective, and improving the manufacturing process as a whole.

In 1993, Whirlpool won the US\$30 million Super Efficient Refrigerator Program (SERP) challenge. The Whirlpo SERP refrigerator was found to have better energy efficiency levels than any other refrigerator in the market.

By the 2000s, Whirlpool had become a well-established brand in the worldwide appliance market. It remained the princip supplier of major home appliances to Sears under the Kenmore brand name. Due to the large number of joint ventures had entered into, Whirlpool also sold appliances under other brand names like KitchenAid, Roper, Inglis, Acros, and Crol in North America; Supermatic, Brastemp, Consul, Embraco, Eslabon de Lujo, and Semer in Latin America; Bauknecl Ignis, and Laden in Europe and Asia; and KIC in South Africa.

In September 2002, Whirlpool decided to use e-commerce to improve its services and launched a program called e-Partn that allowed customers to purchase products online. The program provided customers with information on pricing, produ specifications, product availability, delivery and installation, on its website.

As of April 2006, Whirlpool was the largest home appliance maker in the US. Globally, it was the second largest hon [12]

appliance maker, after AB Electrolux . Whirlpool had about 68,000 employees worldwide and manufactured applianc under a number of brand names.

NEED FOR A CHANGE IN CORPORATE CULTURE

By the late 1999, the top management at Whirlpool found itself unable to drive growth in its businesses. The company revenues, profits, and market share were stagnant. And this, despite the fact that Whirlpool had adopted various operation initiatives to cut costs and achieve economies of scale in its operations. In December 2000, Whirlpool announced that would cut 10% of its international workforce and initiate restructuring of its global operations.

The situation was particularly upsetting for Whitwam, who had transformed Whirlpool into a global company under h

decade long leadership. He said, "Despite our aggressive actions during the last several months, we continue to faindustry and economic conditions that have led to intensified price competition, rising material costs, and slowing declining demand. Appliance-industry shipment declines in North America and a broad industry slowdown in Europe har [13]

been far more pronounced than previously forecast."

On further analysis, Whitwam found that the prices of Whirlpool's major products were declining at an average rate 3.4% per annum and were almost reduced to being commodities. Whitwam put the situation Whirlpool faced perspective when he said, "I go into an appliance store. Now, I have pretty good eyes. I stand 40 feet away from a line washers, and I can't pick ours out. They all look alike. They all have decent quality. They all have the same price poir [14]

It's a sea of white."

Whitwam soon realized that in its effort to increase efficiency in the operating plants and distribution channels, the company had overlooked the need for launching innovative products. Though Whirlpool's products were durable, it with difficult to differentiate them from competitor products. The management had also looked at price as the only way differentiate its products. The focus of the research and engineering (R&E) technicians at Whirlpool was on lowering cost or improving performance through minor product enhancements. In fact, all through the 1990s, the company had focus on having quality and cost reduction as its core competency.

Whitwam realized that the industry itself was stagnating. He also saw that it was imperative to bring about a sea change Whirlpool's corporate culture. He felt that if Whirlpool did not change, the company would have to resign itself to a futu of slow growth in revenues and diminishing margins due to price wars. "This is a stalemated industry. It's not fun sluggir

it out every day for incremental gains," he said.

INNOVATION AS A CORE COMPETENCY

Whitwam believed that only innovative products could command premium prices and build customer loyalty. I emphasized the need to develop a culture that would spur Whirlpool's growth through consumer-focused innovation. Th would be a part of the company's competitive strategy. In fact, Whitwam wanted to make innovation a core competency Whirlpool. Moreover, he did not want creativity to be limited to a few people in the organization; he wanted all tl employees to be creative. Nancy T Snyder (Snyder), vice president of leadership and strategic competency development Whirlpool, explained, "We had this internal market of people we weren't tapping into. We wanted to get rid of the 'gre

man' theory that only one person -- the CEO or people close to him -- is responsible for innovation." Many analys and consultants felt that this was easier said than done. Snyder recalled, "We talked to every major consulting firm in the center of the ce

world. And all of them said 'Don't bother. Innovation comes from a few at the top.'"

The practical aspect of such an initiative was also overwhelming. Whirlpool had to first figure out what it meant linnovation, how to measure success or failure, and how to inculcate creativity in its people.

Initially, Whirlpool had trouble deciding on its definition of innovation. The top management decided that any idea had meet three criteria to be innovative – it had to create a competitive advantage, it had to be unique and differentiating, and had to create shareholder value. However, after working for about three years on those metrics, the management realizathat these criteria alone would not be sufficient. "It's hard for any one thing to create a competitive advantage by itself at be sustainable. You have to stay ahead of the competition. If you have a cadence of innovations that keeps a product free and always improving — a migration path — that makes it sustainable. So now we say if we're going to put any money an innovation project, it has to sit on a migration path, it has to be something that the customer really wants, and it's got

return an above-average profit," explained Snyder. Gradually, Whirlpool developed its 'consumer-driven innovation model' that recognized three areas for innovation – new products, marketable innovations and product replacements (Ref to Exhibit II for Whirlpool's consumer-driven innovation model).

Measuring the results was equally difficult. Linking the results of an innovation to revenues was another problem. The management at Whirlpool also had to consider: What should be the measure of success or failure: the number employees trained in innovation or the revenue generated from innovation? What should be the goal for revenue generated from innovation in a year: should it be US\$500 million, or should it be US\$1 billion?

There was also the aspect of training the employees in creativity, giving them access to expertise and small amounts seed funding, the freedom to work on their ideas, and a way to share information. In short, Whirlpool needed to set up formal framework to bring about a culture change and supporting infrastructure like IT to support this change initiativ Another challenging aspect was that everything had to be built up from scratch.

The first challenge was to create a knowledge management (KM) culture and system. "One of the biggest challenges developing innovation skills with knowledge management was the needed change in culture. Connecting people with tl

need to know to people who have the knowledge or to the knowledge in the KM system is essential," recalled C Urban, lead director of global e-enabled organization services for Whirlpool.

At that time, some analysts felt that Whitwam's views were too radical and that focusing on these ventures, which we unfamiliar to Whirlpool, could distract the company from focusing on its strength in manufacturing efficiency. This cou lead to a loss of its competitive edge, they said. With regard to Whirlpool's new initiative, Lee J. Krajewski, management-strategy professor at Notre Dame University's Mendoza Business College, said, "You don't want to mess to the competitive of the

what you're good at."

LAYING THE FOUNDATION

In late 1999, Whitwam started the innovation initiative by inviting ideas from all the employees. He felt that a direct call employees was needed to ensure that no brilliant ideas got lost in the corporate hierarchy. In order to bring out creativideas, 25 employees from the company's European arm were released from their routine job and sent to Whirlpool European headquarters at Comerio, Italy, for one year. Their sole assignment was to brainstorm and come out with ide regarding new products or services that would truly differentiate Whirlpool's offerings from those of its rivals. However the results of this effort proved disappointing; the ideas either did not fit in with Whirlpool's line of business or did not match its strengths. For instance, the group came out with a proposal for an Internet business that would enable people race one another over the Web on stationary bikes – an impractical idea that had nothing to do with its line of busines then

Whitwam realized that bringing out innovative ideas required much more than merely asking people to come out wi ideas. He decided that the company had asked for too much of its employees too soon, and that there was a need for a mo structured approach. Whitwam believed that the corporate culture could be changed only if all its employees took up to challenge rather than being driven by a chosen few. For this, in August 1999, Whitwam created a new position, director strategy deployment, and appointed Snyder to that post. Snyder, who had a doctorate in organizational behavior fro George Washington University, had worked with Whirlpool since 1986. She was given the responsibility to turn the peop at Whirlpool into innovators.

Initially, not many consultants were enthused by Whirlpool's democratic innovation agenda. However, Gary Ham

(Hamel), a world-renowned author and Chairman and CEO of Strategos , told them that a democratic innovation process could be enabled by technology. In early 2000, consultants from Strategos trained 75 employees -- core group brought together from Whirlpool's global operations -- in innovation. The groups of trainees were heterogeneous at represented people from different regions and almost every job classification i.e., vice-president, engineer, factory han etc.

In an intensive "discovery" phase spread out over six months, the core groups tried to identify both core business and ne business growth opportunities. Ten consultants from Strategos trained these groups (comprising 25 members groups according to the region) for up to a year at the company's facilities in the US, Brazil, and Italy. The members of the co groups were relieved from all other duties. The consultants sought to break the barriers of orthodoxy and train the peop on how to "ideate" i.e. think differently, explore for new learning, and then use their new perspectives to generate ne ideas, and enhance existing ideas, concepts, or products. The group learned how to frame and flesh out the ideas down the level of action.

Whirlpool also looked at other great innovators of that time for inspiration, such as P&G and the 3M Company . Ham

also introduced them to some innovative small companies such as Cemex SA de CV (Cemex). Cemex had a nov approach toward innovation such as setting up competitions, or encouraging employees to go online and post ideas, ar giving them a bonus if the idea moved forward.

Whitwam was very supportive of the initiative and was ready to give the needed time for the initiative to deliver result He allocated a budget of US\$45 million for innovation in 2000. People were given the liberty to ideate without at constraints in mind. He did not mind if good ideas did not come out of the process in the short term, as long as a got foundation was laid for a change in the corporate culture at Whirlpool. He also encouraged workers to go to their superio with new ideas. Besides, employees were given the liberty of communicating with Whitwam directly if their bosses we not supportive of the initiative.

In 2001, Whitwam increased the budget for innovation to US\$90 million and Snyder was promoted to the position of vipresident of leadership and strategic competency development.

BUILDING THE FRAMEWORK

While the core groups were being trained, Snyder focused on getting the rest of the company's global workforce involved in the initiative through the Internet and innovation fairs. Strategos helped Whirlpool to put the necessary infrastructure place and to use Information Technology (IT) to facilitate the objective. Whirlpool re-engineered management process that slowed down innovation and used IT to improve and accelerate the innovation chain from idea to final production Instead of going in for a few big projects, it encouraged many low-cost "stratlets" (also known as small strategies).

Snyder put a leadership team in place. The team included a global director of KM, three regional vice presidents innovation, and regional innovation boards (I-Boards) to set goals, allocate resources, and review ideas for fundin Executive I-boards in each region strove to keep the company's innovation pipeline full. They were responsible f

building innovation capability, identifying the next generation of innovation consultants (I-consultants), coordinatii innovation-related programs, and keeping innovation at the top of Whirlpool's corporate agenda. I-consultants were ful time staff that helped divisions adopt and implement innovation techniques. The I-consultants also facilitated individual groups, or business units to come up with new ideas and put these ideas into action.

Later, each major business unit also established an I-Board. Twenty-five people from each region were trained to serve in-house I-consultants and I-mentors. The I-mentors were people specially trained to facilitate innovation projects and he people with their ideas. I-consultants hired their own team of

I-mentors.

A knowledge management system called the Innovation E-Space was started which provided a course in innovation. started with the "fuzzy front end" of innovation where random insights were systematically generated and shared to spa ideas. If an employee had a concept, he could go to the knowledge management system and post the idea on a bullet board. The home page linked employees to all the tools and resources they needed, from insight libraries and innovation templates to I-mentors. According to Snyder, this provided an informal social system enabled by technology that works across the hierarchy level.

All the projects that were in the pipeline were listed on the I-Pipe on the website. The I-Pipe gave a dashboard view of the innovation pipeline adapted from Strategos. It tracked ideas from concept to scale-up and provided project details as we as the big picture, enabling management to focus on areas that needed attention. According to Hamel, the I-Pipe helps innovators to create strategy and top managers to edit it so as to fit the company's requirements. He also acknowledge that using IT to support innovation sessions was challenging. "Most times when you apply IT, you're trying to bring mo discipline. In innovation, you're also always trying to support serendipity and creativity — to use IT to dramatical

improve the odds of serendipity happening," he said.

The Innovation E-Space was cost-effective and did not require a big investment. On the front end, Whirlpool used a Lot

Notes-based intranet and added new capabilities using collaboration tools like QuickPlace and Sametime from Lotus

For the I-Pipe, the company built a platform on its SAP infrastructure using SAP's xApps for project resour management. Organizing tactical training was complemented by a significant amount of e-learning technology. Son

courses were put online using LearningSpace of IBM Mindspan Solutions. Using such self-paced courses freed to Whirlpool resources for assignment on other products and significantly reduced costs.

Whirlpool also hosted innovation fairs to felicitate inventors and encourage the flow of ideas. At these fairs, protemployees demonstrated their new designs and discussed their proposals.

Instead of waiting for employees to come out with ideas, the I-mentors helped employees reflect on customer need industry trends, and their own experience to come up with insights in formal innovation sessions. Hamel commented, "W

think of these insights as the Lego blocks of innovation. We go through a systematic process of generating insight [29]

creating grist for the mill."

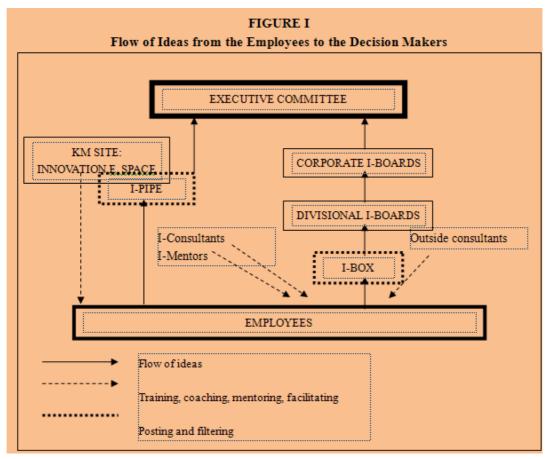
The insight gained from the cross-fertilization of ideas between people from various disciplines such as marketing at engineering also helped. For the employees, the thrill of achievement was its own reward, and innovators received to bonuses or perks for their ideas. According to Tammy Patrick, global director of knowledge management, the innovato got charged up by the opportunity for exposure and the fact that someone listened to their idea.

Though initially Whirlpool got very few ideas out of the process, the rank-and-file employees were happy that the participation was being sought in important matters. However, the immediate superiors of the people who were engaged this process and senior managers were not so happy as they thought that this initiative was a distraction from their regul work. Moreover, in the absence of concrete goals and this initiative not being tied to their performance in any way, the middle level management had little incentive to support the initiative. The hardest part for Whirlpool was to change the way leaders saw their roles as this required a huge shift in thinking. According to Snyder, only leaders could change a environment and allow an innovator the freedom to pursue different things.

REINVENTING THE CORPORATE CULTURE

That the employees were enthusiastic about the various innovation initiatives started by Whirlpool between 2001 and 200 was evident from the fact that the KM site recorded up to 300,000 hits per month.

In 2002, Whitwam decided to bring in more structure into the innovation process so as to increase the participation include all employees and also to get more practical ideas. In monthly I-Board meetings, the top management evaluate and funded new proposals. Only new ideas that helped enhance Whirlpool's existing brands or products would I considered (Refer to Figure I for flow of ideas from the employees to the decision makers).



Adapted from various sources.

Snyder also came out with an "I-box" to ensure that only brilliant ideas reached the I-board. The I-box was a two-stagraphing tool. In the first step, the employees had to demonstrate that their proposals were something that people wou buy. These arguments had to be backed by market research. The I-consultants graded the ideas on a scale of 1 to 10, fro dud to sure success. Only ideas with a grade of at least 6.5 could proceed to the next step. The second step also involve market research to find out whether the new product would fetch a premium price. Again ideas that scored less than 6 were discarded. The I-box changed Whirlpool's development process. Analysts felt that this tool brought Whirlpool clos to the customer as innovation was coming from the consumer through research.

The I-board reported to Whirlpool's executive committee, which consisted of nine members. Ideas that survived th scrutiny were assigned to the various departments such as design, market research, R&E, etc. Annual revenue and pipelin targets were also set. Regular employee surveys were conducted to measure workers' involvement in innovation and monitor the smooth running of the process. The pay of senior executives was tied to these metrics. Those who did not me the requirements had to forego 30% of their annual bonus.

In mid-2004, Fettig succeeded Whitwam and he carried forward the initiative started by Whitwam. Analysts were of the view that Whirlpool had become much more flexible and adaptable. The people were not easily flustered by problems was evident when Best Buy Co. unexpectedly backed out from a collaboration to co-design a modern fridge for dor

rooms and Generation Y apartment dwellers. Whirlpool went on its own and in 2005 marketed the fridge in Braz under the brand name Pla. This went on to become a huge success.

According to Whirlpool, its innovators were also learning how to revive products and services that had previously faile They also pointed out that they never killed ideas but rather shelved them for possible use in the future. As of April 200 Whirlpool had 717 ideas in an inactive status.

As of April 2006, the company had 24 I-consultants and 600 I-mentors on its workforce. More than 5,000 employees have been formally trained in innovation. Clearly, Whirlpool had succeeded in reinventing its corporate culture. In 2006, a announcement on Whirlpool's website said, "Delivering a continuous stream of innovation to consumers is central to o business strategy because it ensures that we are providing a brand experience unmatched within the appliance industry. I accomplish this, our people at every level are harnessing creative thinking and turning it into market realities. Innovation is ingrained in Whirlpool's culture, with more than 5,000 employees trained and actively involved in innovation [21]

initiatives."

THE RESULTS

According to the company, revenues from innovative products were almost US\$800 million in 2005 as compared to ju

US\$10 million in 2001. The share price had also doubled (Refer to Exhibit III for a comparison of share prices Whirlpool in Q1 of 2001 and 2006). Between 2003 and 2005, Whirlpool's revenues had grown at an average of 9% p annum. Fettig had attributed one third of this growth rate to innovative new products. As of April 2006, Whirlpool innovation pipeline had 568 projects under development of which 195 were being scaled up for commercial launch. Tl company expected these new appliances to rake in another US\$ 3.3 billion in annual sales once they were launched (Ref to Exhibit IV (A) and Exhibit IV (B) for Whirlpool's innovation pipeline).

Commenting on these improved results, Fettig explained, "We're seeing evidence of what we call a "want in." In oth words, consumers see something that is so different or innovative that they want to buy it as opposed to: they have to be it. Because of that, we're dramatically changing the lifecycle of products. For example, if you looked four or five yea ago, the average life of a washing machine was something like 13 years. With our Duet washers and dryers, which have been huge hits, we're surveying owners and finding out a lot of people are replacing their washing machine with the Du after five, six, or seven years because they want it, not because their old machine broke or wore out. They just saw it, at

they wanted it."

Whirlpool's innovative products not only meant that it could differentiate itself in the market but also that it did not have succumb to price wars. The average price of Whirlpool appliances had been growing by about 5% per annum since 200 With US\$14.3 billion in total revenue in 2005, Whirlpool was in a sound financial position. In April 2006, it also acquire

long time rival Maytag Corp (Maytag).

According to analysts, Whirlpool was also successful in weeding out the self-defeating conventional thoughts perceptions that had been ingrained in the corporate hierarchy. Its employees learnt to appreciate the fact that consume were not driven by price alone. This was a big change from their view in the 1990s. Moreover, employees were given mo freedom and were empowered to drive innovative ideas to completion. "Leaders are no longer controlling, managing. No they're removing barriers, setting up seed funds, interacting. It was very hard, and there are still a few holdouts, but it

hard to deny the change," said Snyder.

Fettig believed that as a result of the change in corporate culture, the employees thought that they had more freedom contribute than ever before. He commented, "This is fun. This is exciting. Our retail partners value this a lot. Young peop talk about us like we're a high-tech company. No, we're not, we're a high-innovation company. Which is different fro how people thought of us before, as an old, traditional company. People at Whirlpool don't believe they're in an ol

traditional company. They believe they have the right and the obligation to create a future."

Analysts credited Whirlpool with creating a culture that regarded the quest for innovation as its norm. The process innovation development was ingrained in its corporate culture. Organizational levers were in place to manage innovation from concept generation through rollout in a synchronized fashion. Funding for new projects was idea-driven, n calendar-driven. And managers had new measures that balanced the need for core-business efficiency and innovative change.

OUTLOOK

According to Fettig, Whirlpool's approach had been quite healthy. He felt that Whirlpool was in a position to leverage of innovations devised in one part of the world and apply them to another part of the world. According to his estimates, as April 2006, about 1,500 employees out of the 60,000 Whirlpool employees worldwide worked on innovations on ar given day. Around 5,000 people worked on innovations in any given year. Fettig said that Whirlpool could increase the figure to 10,000 or 15,000 employees. However, he also felt that it was unlikely that they could have all the 60,000 employees working on innovations. Snyder was also of the opinion that Whirlpool still had a long way to go as it was st trying to get its metrics right and understand if everyone in the organization could do it.

Analysts were of the view that the new culture would not allow Whirlpool to fade away like Maytag. Moreover, they for that the employees of the erstwhile Maytag would also benefit from the culture at Whirlpool. They were of the opinion the Whirlpool would continue to deliver innovative products in the future. Snyder said that for 2006, Whirlpool had set a go of US\$1 billion in revenue from its innovative products.

According to analysts, Whirlpool had laid a foundation on which it could continue to recreate its core business and standard. The strength of the foundation could be gauged from the words of Whirlpool's vice president of global cooking technology development, Steve Paddock, who said, "If anyone were to try to suppress the innovation efforts of the suppress of the contraction of the contraction of the suppress of the contraction of the c

organization at this point, there would be a revolt. They couldn't do it."

EXHIBIT I

The Whirlpool Logo

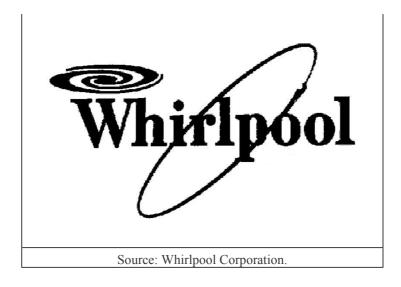
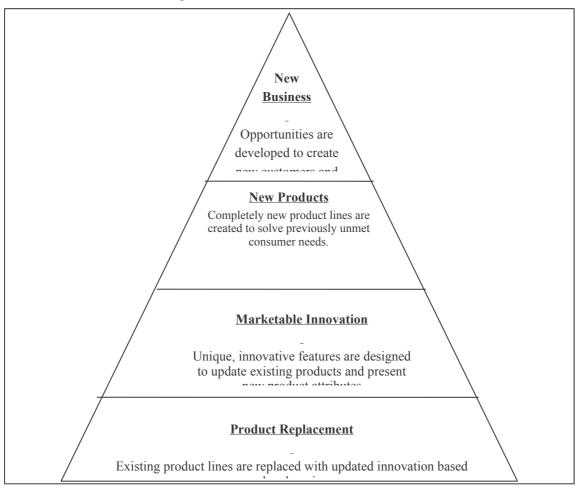




EXHIBIT IIWhirlpool's Consumer-Driven Innovation Model



Source: Whirlpool Corp, Annual Report, 2004.

EXHIBIT III

Comparison of Share Prices* (in US\$) of Whirlpool in q1 of 2001 and 2006

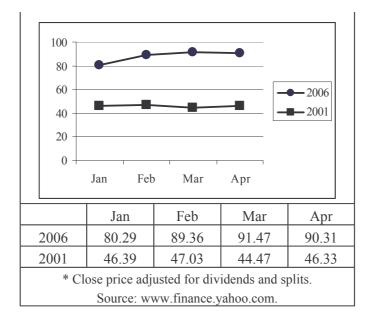


EXHIBIT IV (A)
Whirlmool's Innovation Pipeline: 2005

Products	Description	Market
Completely new products		
Fabric Freshener and	Portable clothing freshener that conveniently	Europe and North
Pret-à-Porter	removes odors and relaxes wrinkles.	America.
Origami Accessories	Multi-functional cooktop accessories.	Europe
Marketable innovations		
Fast-Fill Dispenser	Refrigerator that provides consumers with programmed high-speed and measured-fill dispensing of water and ice.	North America
Personal Lifestyle Appliance (PLA)	Limited-issue mini refrigerators featuring detachable artistic panels.	Latin America
AutoClean Dishwasher	Self-cleaning dishwasher filter for superior cleaning performance.	Europe
Hygienic Refrigerator	Filters refrigerator air to remove bacteria.	Europe
Hygienic Kenigerator	World's first freestanding, full-size oven combines	Europe
Dual Fuel Range with Steam Assist	steam with convection cooking for professional results.	North America
	Refrigerators with emotionally appealing colors.	
Refrigerator Colors	High-tech design with fingerprint-resistant titanium finish.	Latin America
Titanium Appliance Line	Protective cooktop coating that improves durability and is easy to clean.	Europe
Clear Coat	Bottom-mount freezer provides ample freezer space.	North America
Inverse Refrigerator	Full-size oven performance in a countertop oven.	Latin America
Countertop Oven		North America

- 1	Product Replacement Built-In Cooking	Built-in ovens and cooktops, redesigned for style, power and performance.	North America
7	Water Coolers	Water cooler with built-in LCD display and adjustable temperature.	North America

Source: Whirlpool Corp, Annual Report, 2005.

EXHIBIT IV (B)

Whirlpool's Innovation Pipeline: 2006

Products	Description	Market
Completely new products Single Drawer Dishwasher	Water and energy efficient small-load capacity drawer dishwasher enables more frequent washes with improved ergonomic loading.	North America
42" French Door Built-In Refrigerator	The world's first French Door built-in refrigerator, providing the widest refrigeration space available.	North America
Single Refrigerated Drawers	Built-in modular refrigeration and wine drawers.	Europe
Undercounter Beverage Center	Wine cellar/refrigerator with three different temperature zones.	North America
Pro Line Laundry Pair	Premium laundry pair with commercial styling, fit, feel and finish.	North America
Laundry Work Space Platform	Unique staging area for sorting, treating and folding clothes on top of the washer and dryer.	North America
	Affordable, space-saving built-in espresso coffee machine by "for IKEA by Whirlpool"	
Mini Built-In Espresso-maker	Refrigerator that provides consumers with programmed high-speed and measured-fill dispensing of water and ice.	Europe
Fast-Fill Dispenser	Organizer integrates with washer and dryer to eliminate clutter.	North America
Laundry Organizers	Compact speedcook appliance provides four cooking methods: oven, convection, speedcook	North America
Twin Genius Speedoven	and microwave.	Europe Latin America
Marketable innovations Pure Water Dispensing Refrigerator	Features an improved water dispenser that provides pure water.	Latin America
ProScrub Dishwasher	32 targeted spray jets scour away food with no scrubbing or soaking.	North America
European Oven Line	Premium oven line with fingerprint-proof finish and integrated Origami cooking accessories.	Europe
PowerPair Cooking Center	A microwave-hood combo and a freestanding range with coordinated aesthetics are paired for maximum performance, cooking capacity and efficiency.	North America
	High-speed microwave-hood combo with	

Velos Speedcook	improved venting, increased capacity and four ways to cook in one appliance: convection, speedcook, microwave, and steam. Condenser dryer equipped with space-saving accessory to dry delicates.	North America, Europe
Soft Dry Hanger	Water cooler with built-in LCD display and adjustable temperature.	Europe
Water Coolers	Provides variable water pressure, and overnight cycle is the quietest on the market.	North America
6th Sense TurboClean Dishwasher	Ventilation hood with unique light and design elements.	Europe
Moonlight Ventilation Hood	Climate control fridge-freezer "senses" the optimum temperature and humidity for food preservation.	Europe
6th Sense Climate Control Refrigerator	Accessory that provides excellent dishwasher cleaning and maximum care for a full load of glasses.	Europe
Party Program	Electronic temperature sensor allows quick heating, with insulated walls for better, more even heat retention	Europe
Slow Cooker		North America
D. J. A. D. J		
Product Replacement Cabrio Laundry Pair	Large capacity washer pair has a see-through window in the washer and the dryer.	North America
Duet Sport Laundry Pair	Smaller version of the <i>Duet</i> laundry pair with a 6-point suspension system.	North America
Kitchen Suites	Appliances are designed to be sold in suites for one-time shopping.	North America
Classic Laundry Pair	Top-loading configuration with new styling and reliable fabric care.	North America
Metal Toaster	Multiple color choices accent brushed stainless steel finish; sides of toaster stay cooler.	North America
Slow Cooker	Electronic temperature sensor allows quick heating, with insulated walls for better, more even heat retention.	North America
	Unique polycarbonate pitcher and patented blade system with <i>Intelli-Speed</i> for fast and consistent blending.	
Blender		North America
-	10.10.10.10.10.10.10.10.10.10.10.10.10.1	

Source: Whirlpool Corp, Annual Report, 2005.

END OF QUESTION PAPER

Suggested Answers
Integrated Case Studies-I (MB371): July 2008

Case Study

1. i. Need for cultural change at Whirlpool:

< TOP >

Stagnating growth: In the late 1999, Whirlpool's revenues, profits, and market share were stagnating although it had adopted various operational initiatives to cut costs and achieve economies of scale in its operations.

Stagnating Industry: Despite actions taken to cope with stagnating growth, Whitwam realized that the industry itself was stagnating. Whirlpool continued to face industry and economic conditions that led to intensified price competition, rising material costs, and slowing or declining demand. Appliance-industry shipment declined in North America and a broad industry slowdown in Europe were far more pronounced than previously forecast

Declining Products and lack of differentiation: Analysis also indicated that prices of Whirlpool's major products were declining at an average rate of 3.4% per annum and were almost reduced being commodity status.

Whitwam found that it was difficult to identify and differentiate Whirlpool products from competitors' products. Further, price was used as the only way to differentiate its products. During the 1990s, the company had focused on quality and cost reduction as its core competency.

Overlooked the need for innovation: Whitwam realized that in its effort to increase efficiency in the operating plants and distribution channels, Whirlpool had overlooked the need to launch innovative products.

In the above scenario, it was essential to turnaround Whirlpool's corporate culture and strategy; else a future of slow growth in revenues and diminishing margins due to price wars would be inevitable for the company.

Importance of innovation: Innovation is what gives life to a business in a market economy. Businesses that fail under pressure of a changing economy or marketplace have all failed to innovate appropriately. Appropriately implying that only the fittest to pass the test of a changing marketplace survive. This means-learning that what had value yesterday may be, without innovation, un-competitive today.

In today's fast□paced business environment, innovation is a prerequisite for success – and perhaps even for survival. Once considered primarily an output of R&D labs, innovation has become a corporate priority that touches every facet of and, indeed, every employee in an organization. External constituents, too – customers, academia, the government, vendors, even competitors – are playing a growing role in companies' creative processes. So, organizations also need to have enough resources, teamwork, communication, autonomy and other qualities to allow innovations to flourish.

ii. Factors which play an important role in shaping innovation ☐ friendly organizational culture:

Customer focus: Current and potential customers have always driven innovation in companies in the modern age. Therefore, even Whirlpool wanted to turn the company into a customer-focused innovator whose unique products would breed consumer loyalty.

Teamwork/collaboration with others: Teams and work groups are critical in terms of their ability to encourage and support innovation. Of course, not all work groups are created equal. They're most likely to be innovative when they're able to integrate people with diverse perspectives and allow them to effectively swap ideas and expertise.

At Whirlpool, in early 2000, consultants from Strategos trained 75 employees -- core groups brought together from Whirlpool's global operations -- in innovation. The groups of trainees were heterogeneous and represented people from different regions and almost every job classification i.e., vice-president, engineer, factory hand, etc. The insight gained from the cross-fertilization of ideas between people from various disciplines such as marketing and engineering also helped.

Appropriate resources (time and money): "Appropriate resources (time and money)" are vital for developing a culture of innovation while "insufficient resources" can be a barrier to innovation. At Whirlpool, Whitwam allocated a budget of US\$45 million for innovation in 2000. In 2001, the budget was increased for innovation to US\$90 million.

Organizational communication: A truly creative culture tends to be distinguished by open communication and the free exchange of ideas. This means communication among different parts of the organization, communication among team members, and communication up and down the corporate hierarchy. Communicating not only means sharing ideas but also sharing the lessons learned from failures and successes.

Whirlpool enhanced its communication through employee participation and better tools for sharing knowledge.

Ability to select right ideas for research: While having an idea ☐ sharing culture in place is part of the profile of innovative firms, the bigger challenge may lie in having the right

processes in place to quickly cull through those ideas and select those to shepherd through to fruition.

Some companies vest their employees with the responsibility to "sell" their own ideas. Whirlpool Corp., for example, encourages innovation teams to pursue new ideas by creating a business case and applying the \$25,000 in funding to quickly prove the idea's worth. The low-budget, quick turnaround method is a far cry from the big dollar projects of Whirlpool's past and was designed to generate "radical and low-risk" ideas.

Whirlpool also uses an "I-pipe," or online idea pipeline, where ideas are shepherded through the process by trained I-consultants and I-mentors who help employees to work as part of an innovation team. The I-box was a two-step graphing tool used at Whirlpool. In the first step, the employees had to demonstrate that their proposals were something that people would buy. These arguments had to be backed by market research.

The I-consultants graded the ideas on a scale of 1 to 10, from dud to sure success. Only ideas with a grade of at least 6.5 could proceed to the next step. The second step also involved market research to find out whether the new product would fetch a premium price. Again ideas that scored less than 6.5 were discarded. The implementation of I-box changed Whirlpool's development process. Analysts felt that this tool brought Whirlpool closer to the customer as innovation was coming from the consumer through research.

Ability to identify creative people: Companies need creative people, of course, but it's a myth that innovation stems only from a small cadre of "creatives". So, not only do employers need to recruit and retain creative people, they need to provide training in creativity and set up work environments that stimulate creativity in all employees.

Whitwam did not want creativity to be limited to a few people in the organization; he wanted all the employees to be creative. Hence the company tapped into its internal market of people for ideas.

Freedom to innovate: The autonomy to work toward goals is an important feature of an innovative culture.

At Whirlpool, People were given the liberty to ideate without any constraints in mind. Whitwam encouraged workers to go to their superiors with new ideas. Besides, employees were given the liberty of communicating with Whitwam directly if their bosses were not supportive of the initiative.

Ability to measure results of innovation: It's clear that companies have many options when it comes to trying to measure innovation. Their choices will depend on their industry, their experience at using such measures, and their ability to make each measure as accurate as possible.

At Whirlpool the management had a problem of measuring the results as they found it difficult to link the results of an innovation to revenues.

Innovation and its impact can possibly be measured in a number of ways such as:

- Customer satisfaction
- Market share
- New products/service/processes produced
- Financial impact of ideas submitted by employees
- Innovations as percent of revenues and profits
- Spending on research and development
- Spinoffs/new operations based on new products
- Intellectual property (e.g., number of patents)

Leadership, Innovation and accountability/goal: The ability to foster creativity and innovation is a competency required of leaders today and that this ability will become considerably more important in future.

Several initiatives for innovation were undertaken at Whirlpool under the leadership of Whitwam.

Motivation and Reward Systems: In this regard, there can be two views - if companies focus too strongly on providing employees with extrinsic rewards such as bonuses, they risk destroying employees' intrinsic motivation. Bonus can become a larger focus than the innovation itself for some employees, while on the other hand the absence of financial incentives can dampen motivation.

At Whirlpool, for the employees, the thrill of achievement was its own reward, and innovators received no bonuses or perks for their ideas. According to Tammy Patrick, global director of knowledge management, the innovators got charged up by the opportunity for exposure and the fact that someone listened to their idea. Though initially Whirlpool got very few ideas out of the process, the rank-and-file employees were happy

that their participation was being sought in important matters.

2. i. Role of leadership

< TOP >

The role of the leadership and the commitment of the top management in any change initiative is critical.

At Whirlpool Whitwam adopted the approach of 'leading' innovation where he articulated a long-term vision for Whirlpool or in other words shaped the organization and the overall management philosophy to make sure innovation could thrive. His role can be summarized as follows:

- He focused on building the right structures, climate and competencies which would enable his people to experiment and innovate so as to achieve the vision of an innovative culture.
- He sought co-ordinated innovation across all aspects of the organization to meet the demands of an uncertain future environment.
- He established a system that regularly encouraged innovation as he saw the value of unleashing discretionary energy and the power of ordinary people harnessing their minds to solve problems and invest in the future.
- His leadership can be considered to be facilitative and oriented toward reasonable expectations and interpretations of what is possible and not possible.
- Whitwam also used his position to ensure that the mid-level executives were supportive of the initiative. Their pay was also tied to their involvement in the innovation process.
- Regular surveys were conducted to evaluate the involvement of the employees in innovation.

Most of Whitwam's leadership yielded positive results. However, many a times leaders have the opposite effect in organizations, inhibiting or disrupting innovations by setting up bureaucratic barriers, quashing creative ideas before they're given a fair chance, or trying to take charge of development teams instead of giving the necessary autonomy.

ii. Proactive Role of leaders in crafting a culture that fosters sustainable innovation

To foster sustainable innovation, today's leaders must take a proactive role in crafting an organizational culture that supports the kinds of behaviors that help achieve their long-term innovation objectives. Leaders can strategize as follows:

- Leaders must envision an ideal future that is creative, compelling and meaningful. Leadership must also outline a vision for innovation itself a vision that describes the importance of innovation to the organization in achieving its business vision. In most cases, innovation will be a critical success factor for achieving the business vision. Whitwam's endeavor to embed innovation as a core competency served as his vision for success. Whitwam believed that only innovative products could command premium prices and build customer loyalty. He emphasized the need to develop a culture that would spur Whirlpool's growth through consumer-focused innovation and this would be a part of the company's competitive strategy.
- Leadership must focus on communicating for culture change. While formal communications can certainly serve a role in driving culture change, creating a culture of innovation means becoming attuned to informal communications. Whitwam always encouraged workers to go to their superiors with new ideas. Besides, employees were given the liberty of communicating with Whitwam directly if their bosses were not supportive of the initiative
- Leadership must sponsor a culture of innovation by taking specific and tangible actions with respect to factors that affect culture change such as processes, structure, people, technology, metrics etc. The depth and breadth of these actions will vary by company, depending on the situation. While some companies are in dire need of a formal organizational structure to support strategic innovation, others may need to develop a more holistic set of innovation metrics to help create a better balance between short- and longer-term goals, and to influence how employees focus their efforts on meeting those goals.

iii. Characteristics/traits of innovative Leaders:

- Great at generating many ideas innovative, game changing and even commonplace.
- Always looking to experiment with good ideas. Sometimes, trying out a few

times

- Unwavering belief in their creativity and innovation, coupled with originality in thinking.
- Smart and bright with a positive self-image. More often, they are not born geniuses.
- Passionate, expressive and sensitive to their teams, colleagues and surroundings.
- Demonstrate superior judgment, and do not make quick decisions (although have a gut feel).
- Non-conformists and independent, requiring less social approval than most people.
- Innate ability to understand and solve the problem, and manage the consequences.
- Born dreamers with strong imagination; however, manage to keep things in perspective.
- Create and launch game changing products meeting a high level of quality and design.
- 3. In most conventional organizations, innovation is restricted to a few people. Those who are <TOP> responsible for developing innovative ideas are often people with specialized training who work in the R&D function or hold key senior positions in the organization. This approach has some parallels with the 'Great man theory' propounded by the 19th century philosopher and historian Thomas Carlyle. According to the 'Great man theory', "great men" or heroes were directly responsible for and had the biggest impact on the course of history.

As opposed to this model of innovation is the democratic model of innovation, where innovation comes from everyone in the organization. This theory contends that an overwhelming wave of smaller events, and not great men, cause certain developments to occur. Both the models have their advantages and disadvantages. The advantages and disadvantages of a democratic innovation model are discussed below:

Advantages:

- All the employees will be involved in the innovation process and they would look for ideas and insights in their routine work.
- The absolute numbers of ideas coming through would be huge.
- Leads to feelings of ownership and act as a motivation.
- More practical ideas may come through as the rank and file may be closer to the customer.
- Synergy due to cross-fertilization of ideas between different groups. E.g., design and marketing.
- Creates a culture where the importance of innovation would be ingrained in everyone.
- Good for the long term.

Disadvantages:

- While going for quantity, quality of the ideas may be hampered.
- Time has to be spent on filtering the huge number of ideas flowing in.
- Employees may be distracted from their regular work.
- A lot of time and money is required for training all the employees.
- Leads to problems in the short term.

Whitwam's initiatives to encourage employee participation:

In 2000, Whirlpool had cut costs by hundreds of millions of dollars, yet judging by everything from stock price to profit margin to market share, they were no better off than a decade earlier. Prices of Whirlpool appliances were falling at an average rate of 3.4 percent a year. Whitwam believed that only innovative products could command premium prices and build customer loyalty. In order to make innovation a core competency at whirlpool he did not want creativity to be limited to few people in the organization, he wanted all the employees to be creative. Thus, employee participation at whirlpool was initiated in the following manner:

- Whitwam started inviting ideas from all the employees. He felt that a direct call to employees was needed to ensure that no brilliant ideas got lost in the corporate hierarchy.
- He released 25 employees from the company's European arm from their routine job and

sent to whirlpool's European headquarters to brainstorm and come out with ideas regarding new products or services.

- Employees were given the liberty to ideate without any constraints in mind. He also encouraged workers to go to their superiors with new ideas. Besides, employees were given liberty of communicating with Whitwam directly if their bosses were not supportive of the initiative.
- When Whirlpool hosted innovation fairs to felicitate inventors and encourage the flow of ideas, proud employees demonstrated their new designs and discussed their proposals.
- To deliver a continuous stream of innovation to consumers, employees at every level harnessed creative thinking and turned it into market realities.

4. i. What is Knowledge Management?

< TOP >

Knowledge management (KM) refers to the process of creating, capturing, and using knowledge to enhance organizational performance. It involves the application of specific processes and practices for identifying and capturing knowledge, expertise and other intellectual capital, and for making such knowledge assets available for transfer and reuse across the organization. KM programs are often tied to specific organizational objectives and are intended to lead to the achievement of specific targeted results such as improved performance, competitive advantage, or higher levels of innovation. It is distinguished from organizational learning by its greater focus on the management of specific knowledge assets. KM systems use various enabling technologies such as knowledge bases and expert systems, help desks, corporate Intranets and extranets, Content Management, Wikis (a type of website that allows users to add, remove, or otherwise edit and change most content very quickly and easily), and Document Management.

ii. Implementation process of a knowledge management system

- A knowledge management system can be implemented in the following five steps:
- Identify the company's critical success factors and understand how knowledge fits into the company's basic needs.
- Identify the people/departments in the company where the most innovative insights are being generated.
- Put in place a system that rewards people for sharing knowledge. The responsibility for contributing ideas and sharing knowledge must be built into the performance appraisal system.
- Focus on creating value by using the available knowledge in real situations.
 More than gathering or storing knowledge in a database, efforts must be made to use it actively on a daily basis to improve organizational efficiency and effectiveness.
- Create interactive knowledge database to enable people to address queries and find and share information easily. This implies some form of data warehousing cum data mining technology.

iii. Knowledge management at Whirlpool

KM system was used as an enabler in instilling innovation as a core competency at Whirlpool. The company harnessed the power of Information Technology (IT) and the Internet to reach out to its employees across geographical boundaries. As the various courses offered through the website were self-paced, the employees could avail of these courses at their own convenience.

Whirlpool's approach was to use IT to facilitate innovation much as it has been used to streamline supply chains. The company would re-engineer management processes that slow down innovation and use IT to improve and accelerate the innovation chain from idea to final product. The key was to encourage many low-cost "stratlets" (or small strategies) rather than a few big-budget projects.

Whirlpool built a knowledge management system, called the Innovation E-Space. The Knowledge Management system was headed by a global director of Knowledge Management. The Innovation E-Space was a set of resources built around the I-pipe. It helped the employees access various resources that were needed for innovation. The site also provided e-learning courses on innovation. Employees were also given access to articles, insight libraries, and innovation templates that helped in developing creativity.

All the projects that were in the pipeline were listed on the I-Pipe on the website. The I-Pipe gave a dashboard view of the innovation pipeline adapted from Strategos. It tracked ideas from concept to scale-up and provided project details as well as the big picture,

enabling management to focus on areas that needed attention. According to Hamel, the I-Pipe helped innovators to create strategy and top managers to edit it so as to fit the company's requirements. He also acknowledged that using IT to support innovation sessions was challenging. Most times when you apply IT, you're trying to bring more discipline. In innovation, you're also always trying to support serendipity and creativity—to use IT to dramatically improve the odds of serendipity happening".

The IT infrastructure didn't require an extensive investment, says CIO Esat Sezer. On the front end, Whirlpool used a Lotus Notes-based intranet and added new capabilities using collaboration tools like QuickPlace and Same time from Lotus. For the I-Pipe, the company built a platform on its SAP infrastructure using SAP's xApps for project resource management.

5. When Whirlpool decided to create a new core competency 'customer-focused innovation' by <TOP > tapping the creativity of all its employees, there was a need for building the required infrastructure to support this initiative. There was also the need for training the employees. The role of the external consultants from Strategos, and later on, the in-house consultants (I-consultants and I-mentors), were vital in creating the new core competency.

The role played by the external consultants and the in-house consultants in creating the new core competence is briefly discussed below:

Role of the External Consultants

When Whirlpool wanted to bring about a culture change, it knew what it wanted but was not sure how to achieve that. Looking outside for ideas is a good move in such a situation. As Whirlpool's idea of a democratic innovation model was thought to be too radical, many external consultants tried to dissuade them. They felt that a company should stick to its core competency. But Whirlpool stuck to its objective of creating a democratic innovation model. In doing so, Whirlpool overcame what is called "core rigidities." Whirlpool had core competency in quality and operations. But over the years, its focus on these competencies led it to neglect new market circumstances that demanded innovative products, so that its core competencies had become core rigidities. Outside consultants are unaffected by the culture, practices, politics and orthodoxies of the client, they may develop solutions that are unbiased and unique.

Ultimately, Whirlpool honed in on Strategos. Strategos' chairman and CEO Gary Hamel was himself the co-developer of the concept of core competence. The external consultants from Strategos brought in a fresh approach to thinking at Whirlpool. The consultants had to adopt multiple roles in order to satisfy the requirements of the client. As analysts they studied the dynamics of the appliance industry and diagnosed the problems at Whirlpool. The Strategos consultants provided training in innovation to batches of Whirlpool employees brought together from various parts of the world. The consultants coached the trainees to ideate with an open mind and worked with them to break down corporate orthodoxies

They helped the company to harness the power of Information Technology to provide elearning programs to all the employees. The I-pipe in the Innovation E-space was also a solution provided by Strategos. They coached and mentored a few high potential employees to become I-consultants. This helped the company to develop its own set of in-house consultants. Strategos continued to provide their consulting services to the vice president of innovation and her team of in-house consultants.

The role of these external consultants as change agents was very vital. Individuals resist being changed. When organizations try to launch a change initiative, individuals resist it for a variety of reasons. In such a scenario, they are more receptive to outside consultants, as they are viewed by the employees as being impartial (or without any ulterior motive). The employees may come out of their shell, and discuss their ideas, problems and apprehensions more openly in front of an external consultant than in front of their own management.

In short, the external consultants from Strategos helped Whirlpool to get the wheel of innovation rolling at Whirlpool by helping them to build the necessary infrastructure and creating a network of dedicated in-house consultants.

Role of the In-House Consultants

The in-house consultants played an important role in facilitating the change in the company's culture. They were in direct touch with the company's employees and facilitated the process through coaching and mentoring. Being part of the company gave them a better idea of the changing requirements of the company as they had a better understanding of the existing organizational culture. They could provide need-based coaching whenever their co-workers approached them. Even when they were not approached for help, they conducted monthly innovations sessions that helped in the development of the employees. As part of their work, the in-house consultants had to adopt multiple roles of coach, mentor, facilitator, change agent, and expert. Having a large number of in-house consultants helped Whirlpool to cater to the

individual developmental needs of its vast pool of employees and embed innovation as a core competency.

The in-house I-consultants were specially trained in developing an environment of innovation by the external consultants. Whirlpool used I-consultants and various I-mentors, who were recruited by the I-consultants, to form a coaching network within the organization. These I-mentors were specially trained in innovation and coached/mentored the employees to help them develop an innovation mindset. These I-mentors were very accessible. They conducted formal innovation sessions where they helped the employees to reflect on customer needs and industry trends, and to use their own experience to come up with insights. They also coached them to develop these insights into innovative product ideas, and from ideas to products.

The I-mentors were also accessible whenever the employees needed their help. Even when the employees did not reach out to them for help, these I-mentors acted proactively to constantly interact with them through coaching/mentoring sessions.

< TOP OF THE DOCUMENT >

- * The case is prepared only for the purpose of examination and not to illustrate effective or ineffective performance of the company. The case contains factual information adapted to and combined with other information to enable analysis of the given topics.
- Kathleen Melymuka, "Innovation Democracy," www.strategos.com, February 16, 2004.
- [2] "Creativity Overflowing," www.businessweek.com, May 8, 2006.
- [3] BusinessWeek is a leading business magazine published by McGraw-Hill.
- [4] "Whirlpool Corporation Reports Record 2006 First-Quarter Results," www.money.cnn.com, April 25, 2006.
- "Wringer washers" were the forerunners of washing machines. They had a tub for washing the clothes and a double roller arrangement above the tub to wring out the wet clothes as there was no "spin drying" in those days.
- Federal Electric was a manufacturer of low voltage switch gear. Federal Electric was the biggest company of the Federal Group, which comprised six companies.
- [7] Sears Holdings Corporation was the third largest retailer in the US as of April 2006, with approx. US\$ 55 billion in annual revenues, and 3,900 full-line and specialty retail stores in the United States and Canada.
- Founded in 1945, Brasmotor made washers, dryers, microwaves, dishwashers, refrigerators, and air-purifiers under different brand names around the world. It has manufacturing facilities in Brazil, China, Italy, and Slovakia.
- A company that supplied refrigerators and electrical equipment.
- [10] Based in the Netherlands, N.V. Philips is a developer and manufacturer of electronic and electrical products.
- The Super-Efficient Refrigerator Program is a challenge to appliance manufacturers to use advanced technology while maintaining the quality, performance, features, and conveniences that consumers expect, at an acceptable rate. In March/April 1993, The SERP project named Frigidaire Co. and Whirlpool as the two finalists to compete in the much publicized US\$30 million race to manufacture a fridge of the future, a chlorofluorocarbon-free "superefficient" model.
- AB Electrolux is a Swedish company. As of April 2006, it was the world's largest manufacturer of kitchen, outdoor and cleaning appliances for both home and professional use.
- Todd Jatras, "Around-The-Globe: Whirlpool Cuts Back," www.forbes.com, December 13, 2000.
- "Creativity Overflowing," www.businessweek.com, May 8, 2006.
 - "Whirlpool Taps its Inner Entrepreneur," www.businessweek.com, February 7, 2002.

[16] Fara Warner, "Recipe for Growth," www.fastcompany.com, October 2001.

[17]

Kathleen Melymuka, "Innovation Democracy," www.strategos.com, February 16, 2004.

[18]

"How Whirlpool Defines Innovation," www.businessweek.com, March 6, 2006.

[19]

Margaret Driscoll, "Whirlpool: Innovation and Organizational Learning," www.clomedia.com, March 2003.

[20]

"Whirlpool Taps its Inner Entrepreneur," www.businessweek.com, February 7, 2002.

[21]

Strategos, based in Menlo Park, California, USA is a management consultancy firm founded by the legendary Gary Hamel in 1995. Gary Hamel, the CEO of Strategos, was also the visiting Professor of Strategic Management at London Business School. He is the originator (with C. K. Prahalad) of the concept of core competencies.

[22]

3M Company (formerly Minnesota Mining and Manufacturing Company until 2002) is a multinational corporation that produces over 55,000 products, including adhesives, abrasives, laminates, passive fire protection, electronic circuits and displays, and pharmaceuticals.

[23]

Cemex SA de CV is the world's third largest manufacturer of cement and the world's leading supplier of readymix concrete.

[24]

Kathleen Melymuka, "Innovation Democracy," www.strategos.com, February 16, 2004.

[25]

IBM Lotus QuickPlace is a commercial web-based collaborative software application distributed by the Lotus Software division of IBM. It is a

self-service web tool that provides non-technical professionals the ability to easily create a browser-accessible workspace to support a task, project, or initiative. QuickPlace also integrates with IBM Lotus Sametime providing presence awareness of other users online and available for conferencing.

[26] SAPPS A STRATOFFO duct from German software giant SAP AG, intended to assist in corporate supply-chain management. SAP xApps run on

[27]

LearningSpace offered distributed learning courses that students and instructors can access whether they are online or off-line.

[28]

Lego is a line of toys featuring colourful plastic bricks, gears, minifigures (also called minifigs or mini-figs), and other pieces which can be assembled to create models of almost anything imaginable.

[29]

Kathleen Melymuka, "Innovation Democracy," www.strategos.com, February 16, 2004.

[30]

Generation Y is the group of people born immediately after "Generation X". Generation Y is generally considered to be generation of people born between 1990 and 2000.

[31]

Whirlpool, "Corporate Fact Sheet," www.whirlpoolcorp.com, 2006.

[32]

"Whirlpool's Future Won't Fade," www.businessweek.com, May 8, 2006.

[33]

Maytag Corp., headquarted at Newton, Iowa, USA, was a US\$4.7 billion home and commercial appliance company. Like Whirlpool, Maytag also faced pressure due to the intense price competition in the consumer appliance market and the company was acquired by Whirlpool.

- [34] Kathleen Melymuka, "Innovation Democracy," www.strategos.com, February 16, 2004.
- "Whirlpool's Future Won't Fade," www.businessweek.com, May 8, 2006.
 - "Organizing for Business Concept Innovation," www.strategosnet.com.