

IKEA AND THE NATURAL STEP

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In September 1995, Jan Kjellman took over as president of IKEA North America, the U.S. and Canadian subsidiary of the Swedish furniture giant. At IKEA's headquarters outside Philadelphia, Pennsylvania, Kjellman sat at his desk, located in an open, brightly sunlit bay. His assistant, also the service center office manager, sat at a nearby desk a few feet away. Co-workers walked through one side of the bay, heading for the coffee room. On the landing below the president's office was a pedestal bearing a large gray rock. It was from the rocky and poor land in Älmhult, a small village in the province of Småland, Sweden, where IKEA's founder was born and where the design and production core of IKEA's business was still located.

Kjellman pondered the success of his predecessor, Gorän Carstedt, who had moved back to Sweden to take responsibility for worldwide marketing and the European retail stores. Carstedt had turned the subsidiary around since 1991, increasing sales to over \$700 million and moving the company to number three in the U.S. market. Kjellman was developing an agenda to build on that success.

One important piece of that agenda was the company's environmental stance in North America. Over the past several years IKEA had articulated a strong environmental policy and was well into its implementation in the parent company. By incorporating environmental principles provided by The Natural Step (TNS) organization in Stockholm, IKEA had developed its own environmental statement, policies for product design, supplier relations, and operations, as well as educational materials for consumers in the retail stores. TNS was an educational organization that offered a practical guide to companies wishing to limit their adverse effects on the natural environment (see Exhibit 1). The three co-workers trained by TNS had returned to North America and trained people in the retail stores, and discussions had begun with certain North American suppliers about the company's environmental values and TNS principles.

Kjellman reflected on the differences between the Scandinavian/European markets and the North American market. Led by Germany, many of the European and Scandinavian nations had been active for several years using public policy and regulation to encourage innovation and competitiveness by firms around environmental issues. While the U.S./Canada markets generally trailed the Scandinavian/European markets in these areas, Kjellman felt sure IKEA's environmental strategy could become a competitive advantage here as well. Public concern for environmental issues was strong in North America, and local authorities were coming under increasing pressure to protect environmental resources and deal with related public health matters (such as toxic materials, landfill management, or clean water). Recent political shifts in the federal government, to reduce or eliminate environmental controls would not eliminate the issues and could increase the need for private companies to become more active partners with local governments and consumers to solve problems.

Kjellman considered the possibilities. Should he encourage the retail stores to do more? The "Trash Is Cash" waste reduction program that had worked well in Gothenberg, Sweden, could be implemented in all stores. Or should the emphasis be on the production side and accelerating the consideration of these issues with North American suppliers? By applying European standards to North America suppliers, IKEA had already caused some innovation, but there was room for improvement.

IKEA Origins and History

IKEA was an acronym derived from the initials of its founder, Ingvar Kamprad, his farm Elmtaryd, and his county, Agunnaryd, in Småland, South Sweden. Kamprad began his venture in 1943 at the age of 17, by selling fish, magazines, and seeds. Within the next few years, Kamprad developed IKEA into a mail-order business selling a variety of consumer and household products. His product line included home furniture (made by subcontractors), which quickly became the primary focus of his new company.

In the post-war years of the late 1940s, younger households began demanding new, inexpensive furniture, as the Swedish tradition of handing down custom-made furniture through the generations was waning. At the same time, Swedish furniture manufacturers artificially inflated prices by using inter-association contracts between retailers and suppliers. The result was an increase in furniture prices 43 percent more than other household goods. Most furniture retailers and manufacturers were creating beautiful, new household items affordable by only the small proportion of relatively well-to-do people. This situation presented what Kamprad saw as both a social problem and a business opportunity. Looking beyond furniture to household products generally, Kamprad resolved to design IKEA products with the majority of the populace in mind. Kamprad's idea was to offer a wide selection of home furnishings of sound design and function at far lower prices than IKEA's competition. Low cost and high value would be central to IKEA's philosophy.

To accomplish this goal, IKEA developed many of the product designs, supplier relationships, and customer service practices that have stayed with the company to the present. Relying on manufacturers' design expertise and production knowledge, Kamprad worked closely with the original group of furniture makers to create products that met his design specifications and yet were easy and low-cost to build. Experimenting with an unprecedented strategy, furniture was packaged disassembled in "flat packs" and shipped to stores. The furniture items were then displayed on the showroom floor along with detailed explanatory tickets, which allowed customers to serve themselves without a salesperson's assistance. Customers purchased items in the store or through their catalog and picked their items up from the on-site warehouse. The customers then brought the furniture packs home for self-assembly. Both the customer and IKEA won with this arrangement. IKEA realized cost savings from manufacturing, shipping, storage, and marketing, which were passed through to customers in the form of lower prices.

This strategy however, was a challenge to the Swedish furniture retailers who tried to shut Kamprad out by excluding him from furniture fairs and pressuring suppliers not to sell to him. Independent manufacturers encouraged him to circumvent the retailers by designing his own furniture, and pledged that they would make his products. The result was that Kamprad and his loyal suppliers worked closely to reduce costs further, consequently challenging the established competitors even more.

Kamprad was content to grow the company slowly, allowing it to learn from its mistakes and permitting its catalog and retail stores to evolve and adapt as consumer needs were identified. The first store, located in Almhult, was a factory converted into a showroom. Customers drove long distances to the store to see and touch the furniture. Early on, as a novel cost-cutting measure, showroom salespeople were pulled off the floor to assist with cashier duties, creating smoothly running self-service shopping. This strategy boosted sales and built the new company's reputation for excellent value. In 1965 a second store was built outside of Stockholm (see Exhibit 7 for timeline). Again Kamprad challenged existing retail patterns and located the store on cheaper land outside the city, a location that was easy to reach by car and had a large parking lot. Realizing customers were limited in what they could buy by what their cars could carry, he offered roof racks at cost allowing IKEA's patrons to tie more flat packages of furniture to the roof. Information about products was added to the catalog, and product labels were provided for the customer detailing the product's size, color, material, and source. The Swedish Furniture Research Institute's quality label was placed on all the furniture. This Mobelfakta tag assured the consumer of high-quality workmanship, function, and durability. By paying attention to consumer needs, the company was able to satisfy needs and creatively reduce expenses, which translated into lower prices.

The furniture offerings, called the basic range, were the core of the business, but stores soon began offering other home furnishing items. Kamprad's vision was that families would come to a complete home furnishings store and have an enjoyable experience. As the number of stores expanded, restaurants were added to enable customers to relax, have a meal, and then continue their shopping. Eventually play areas were added for children, and changing areas were offered for parents with infants. The stores soon took on the bright yellow and blue colors of the Swedish flag. Incrementally, new products were added including glassware, china, cutlery, rugs, wallpaper, lamps, plants, kitchen utensils, fabrics, kitchen and bathroom fittings, and children's decorative and educational items. Regular surveys of customers were conducted and, with worker input, the products and stores were adapted to meet the buyers' needs and to make the experience of shopping easier and more fun.

Ingvar Kamprad and the IKEA Idea

IKEA was driven by the vision and legacy of its founder, Ingvar Kamprad, who was motivated by practical business concerns combined with social values. Kamprad once wrote,

To be on the side of the majority of people is a social ambition on which our business is based. The IKEA vision is to contribute to a better way of life for the majority of people. We do this by offering a wide range of home furnishings of good design and function, at prices so low that the majority of people can afford to buy them. That is our business idea. We know that in the future we may make a valuable contribution to the democratization process at home and abroad.

In 1976 Kamprad committed his philosophy to paper in *Testament of a Furniture Dealer* (see Exhibit 2). The work became an important tool for disseminating IKEA's unique culture throughout the organization.

This was particularly important at that time because of the firm's escalating international expansion and resulting distance from Sweden, where maintaining its unique culture had not been difficult. With the help of Kamprad's book, IKEA trained special "IKEA ambassadors" who then were placed in key positions to act as role models and spread the cultural message directly to co-workers.

With its roots in Kamprad's home region of Småland, historically one of Sweden's poorest, the company had retained the Småland characteristics of thrift, frugality, inventiveness, and honesty, plus a strong work ethic. In 1995, product development, quality control, and catalog production were still centered in Almhult, and managers and co-workers were strongly encouraged to visit Almhult to gain a deeper understanding of the organization. The company booklet that introduced the firm to newcomers reflected the founder's outlook and his roots:

It's all about people, about our relationships with each other and the world around us, about thrift and hard work, humility and willpower. Our culture allows no barriers between different categories of personnel. We know that all tasks are important, that we need each other.... The true IKEA spirit is founded on our enthusiasm, on our constant will to renew, on our cost-consciousness, on our willingness to assume responsibility and to help, on our humility before the task, and on the simplicity of our behavior.

Stories of Kamprad's frugality and work ethic were commonplace and had become part of IKEA's cultural narrative and legend. He paid extraordinary attention to the details of the business. One executive commented,

In a group of 600 items, he will ask about a particular product, know its price, its cost, and its source, and he will expect you to know it, too.... He is constantly bypassing formal structures to talk directly with front-line managers, particularly the designers and the purchasing group.

During the opening of IKEA's outlet in Hamburg, Germany, the store manager arrived at work at 6:30 in the morning and found that Kamprad had already been there for over an hour. The hotel where he was staying was modestly priced yet Kamprad asserted to the manager that the price was 5DM too high. Once he spent the entire night driving to local hotels until he found one that he considered reasonably priced. Whenever visiting an outlet, Kamprad made a point of trying to meet and shake hands with every employee and offer a few words of praise and encouragement.

The values of the company were also reflected in the feel of its offices. Noticeable immediately was the lack of formality. Casual dress was the norm, and office spaces were open and bright. With the exception of key executive personnel, no titles were used, and the co-workers (which included everyone) addressed each other by their first names. Co-workers were distinguished by their responsibilities, and performance was judged through an evaluation system based on personalized yearly goals and broad guidelines. Initiative and entrepreneurial imagination were strongly encouraged. When a co-worker believed he or she was ready for more responsibility, that person searched for new opportunities and, when a new area of responsibility was found, interviewed and hired their own replacement.

IKEA's motto, "Retail is detail," was indicative of its management style, which emphasized customer service and attention to detail. Managers and corporate staff were expected to understand all aspects of IKEA's store operations. To assist in this process and to fight against the hierarchy typical of most firms, once a year the company celebrated Anti-bureaucratic Week, in which executives and managers worked on the sales floors, loaded furniture into customers' cars, unloaded trucks at the warehouse, and generally

got a feel for the hands-on retail experience.

Cost-consciousness was a hallmark of IKEA, as indicated by Kamprad's writing, "Waste of resources is a mortal sin at IKEA" and "an idea without a price tag is never acceptable." Expensive solutions were seen as signs of mediocrity. Operations, from design and raw material selection to in-store displays, were all scrutinized to ensure low costs, particularly long-term costs, and the tenet was that there was always more to be done. To be self-congratulatory and rest on one's laurels ran against the cultural grain. The usual executive perks were completely absent. Executives were expected to travel via the lowest-cost means available and lodge at economical hotels. Everyone ate at the store cafeteria that was open to the public every day.

Innovation and creativity were highly prized. Co-workers were expected to perform their responsibilities with a minimum of supervision. Improvement suggestions bubbled up frequently. Solutions that improved IKEA's operations and image the most were then standardized throughout the organization. Goran Carstedt, IKEA's former president for North American operations, wrote:

We encourage experimentation. Each co-worker is invited to try new solutions, and purchasers are encouraged to seize opportunities when suppliers are overstocked. To increase speed, we have replaced instructions from headquarters with general guidelines on how to recognize outstanding opportunities. By substituting a general strategic direction for specific goals, targets and instructions, we give local store managers the power and freedom to recognize stepping-stones that lead in desired directions.... IKEA is an empowered organization. People are constantly invited to be a part of the innovation process.

To assist in this localized effort, IKEA abolished internal budgets in 1992. Management felt that the planning system was getting tedious and the time saved was more usefully spent doing other things better. Managers focused primarily on keeping a low fixed-cost/sales ratio.

IKEA in the 1990s

By the 1990s IKEA was internationally known as the world's largest designer and retailer of well-designed, inexpensive, and functional home furniture. The entire product range now included lighting, rugs, textiles, utensils, tools, kitchen and bathroom fixtures, glassware, decorative items, wallpaper, paint, and just about any other item that was found in the typical home. Worldwide the retail stores carried over 20,000 products, of which 12,000 formed a core product set that was sold in all stores. Scandinavian design with clean simple lines dominated, but outside designs were occasionally accepted as needed by specific national consumer tastes. In the 1980s a range of office furniture had been developed and successfully introduced. By the mid-1990s, IKEA operated over 120 retail outlets in 24 countries and distributed over 45 million catalogs printed in over 12 different languages. IKEA claimed that its stores were visited by nearly 116 million people a year, a number equal to two percent of the world's population. In 1994 worldwide sales were \$4.8 billion, and the company had experienced a 33 percent average annual growth rate in the prior seven years.¹ By 1995, 21 stores had opened in North America. Outside observers estimated eight to 10 percent profit margins, which allowed for expansion without turning to traditional capital markets.

Customers set aside blocks of time to shop at IKEA stores. At the front door they were supplied with a

¹ IKEA's No Frills Management, *Crossborder* (Winter 1994), pp. 3840.

tape measure, pen, notepaper, and a catalogue to aid in selecting products. Products were grouped with each item clearly labeled. Workers were available for questions, but the shopping experience was designed for the customers to choose, order, pick up, and transport their own selections. The focus on costs enabled the customers to buy from IKEA at 25-50 percent savings compared with the competition.

IKEA's management structure was as flat as its packaged furniture. Only four layers separated the CEO from the cashier or warehouse clerk. Essentially, IKEA saw itself as a reverse hierarchy with customers at the top supported directly by the individual stores that served them. The stores were in turn supported by the regional offices. According to Carstedt:

Finally, at the bottom—and I mean the bottom—is IKEA's service center [headquarters]. This includes me... A customer-oriented company cannot survive with the traditional top-down leadership structure. Management cannot be on the 27th floor somewhere, far removed from employees and customers. In general, I think that American and some European managers tend to place too much importance on the boss running the show. Instead, managers should first learn to be servants.

This structure allowed IKEA to maintain a steady and controlled rate of growth of 30 percent a year. Because there were no dividends paid or stockholders to satisfy, all of its earnings were plowed back into the business, and IKEA could focus on its goal, as Carstedt put it, "to be the best home decoration company in the world."

Suppliers

IKEA manufactured very little of its product range. Since it designed and sold all of its products in-house, its relationships with its suppliers were crucial. IKEA maintained a network of over 2,300 suppliers in over 70 countries that shipped finished product to 14 large regional warehouses. Sales and shipping patterns worldwide and by store were monitored electronically at the operations headquarters in Almhult and in each warehouse to match supply and demand. In some cases suppliers shipped directly to stores but the usual process for key products was for at least two suppliers to provide parts for a particular product. The product was then packaged at a warehouse, and shipped to the stores. Since the pieces of the product were not assembled until the customer put them together, strict quality standards were demanded of the suppliers and, as such, they had to demonstrate that they had an effective quality control system in place.

Low cost was ensured through volume purchase agreements and actively purchasing excess capacity from unconventional sources. For example, IKEA contracted with a ski manufacturer to produce tables. Because of such agreements, IKEA carried large amounts of inventory in its warehouses but it rationalized this by pointing to the volume savings that such purchases provided. One executive commented, "it is by ensuring our suppliers' delivery schedule security and by filling their available manufacturing capacity that we can maintain our unique price levels." Long-term suppliers also gained access to global markets and received assistance from IKEA Engineering to upgrade production to world quality standards.

IKEA established many joint ventures with suppliers in supposedly difficult locations to get cost savings from low-priced sources. Furniture manufacturers in Bulgaria, Poland, Russia, Romania, and Slovakia were provided with financing, new technology, factory design, or other industry know-how. Typically, IKEA provided these suppliers with information, financing, and/or machinery, possibly through a leasing arrangement, and agreed to purchase all their product in return. Through these partnerships IKEA ensured low-cost supply while providing much-needed currency to the suppliers and their employees.

In addition, IKEA had recently acquired its own factories for supplying key raw materials, such as fiberboard. IKEA proceeded cautiously because it liked to maintain flexibility with its suppliers to change with the market. Some of these facilities were used to train suppliers and to set standards for production economy, quality, and environmental awareness.

IKEA and the Environment

IKEA's formalized environmental program began with a problem. German law stated that the formaldehyde emissions from fiberboard must not exceed the "E- 1 standard," which was equivalent to .01 parts per million. In the early 1980s, IKEA's best selling bookcase, called "Billy," was tested and shown to exceed the standard. Since IKEA's furniture products used vast amounts of fiberboard, the enormity of the problem was obvious. If the particle board of one product was considered hazardous, then all products using particle board would be similarly hazardous. Adverse publicity required fast action. IKEA's solution was to work closely with its suppliers of particle board to ensure that the German standard was met. But instead of specifying E-1 particle board for German markets only, the company made sure that the E- 1 standard was followed for every particle board supplier.

The logic was straightforward. First, the strategy was the simplest solution to implement. IKEA would not have to worry in the future about the logistics involved with ensuring that no non-E- 1 board found its way into Germany. Second, since the E-1 standard was the strictest in the world, such a solution ensured that IKEA's raw material would meet any future formaldehyde standard emanating from another country, thus avoiding re-tooling costs and maintaining a competitive edge. This proved to be the correct move when the voters in California passed Proposition 65, which not only tightened formaldehyde emission standards for fiberboard products, but also offered citizens a portion of the litigation award for turning in noncompliant companies. "Environmental bounty hunters" would visit various retail establishments throughout California and ask if their products met the standard. Those stores that did not meet the standard or that did not know one way or the other would immediately be turned in to the state for investigation or prosecution. IKEA's executives visited the California Attorney General, informed him of their tests and company-wide standard (which exceeded the California standard), and thus avoided all litigation, re-tooling, and logistical costs associated with changing their product line. Last, IKEA knew that emissions of this sort were a real health hazard for its customers. Implementing the world's strictest emission standard company-wide was consistent with the company value of "making a better everyday life for the majority of people." Similarly, IKEA imposed the strictest local standard in other areas, such as guidelines for flame retardancy of foam and complete voluntary UL testing of fixtures, to the products sold in all of its retail outlets. This strategy was viewed through a long-term lens: stretching beyond even the strictest regulatory standards ensured IKEA's competitive advantage worldwide 10 to 15 years out.

After the bad experience with formaldehyde, IKEA's Swedish executives looked to environmental groups for assistance in identifying or addressing issues before they were business problems. However, these groups were better at describing the issues than at offering solutions, with the exception of the Natural Step (TNS). IKEA had established a relationship with The Natural Step before the formaldehyde concerns arose. Now it committed to working with Karl-Henrik Robert, TNS's founder, to anticipate rather than react to issues (see Exhibit 1). With Robert's help, IKEA felt that it could be assured that environmental concerns would become an integral part of the IKEA culture.

IKEA's Environmental Program

At IKEA we shall always strive to minimize any possible damaging effects to the environment which may result as a consequence of our activity. It [the policy] will demand our collective efforts and will require initiative, creativity, and unorthodox solutions.

In many ways IKEA's environmental program could be understood as a natural extension of its corporate culture since elements of resource conservation were present in its fundamental operating procedures. Flat packaging and the chlorine-free paper used in its catalogs and advertising flyers (see Exhibit 5) were just two examples that derived directly from the company's frugality and mission. IKEA never overstated its environmental achievements for several reasons. According to its managers, environmental friendliness was simply the right thing to do. It was also against the company's cultural norm of humility to trumpet its achievements. "Once you set yourself as a model, complacency is right around the corner... most is still left to be done," said Gorän Carstedt. In addition, attention invited scrutiny of areas where the firm knew there was room for improvement. It was too easy for someone to point to an area where IKEA was lacking and dispute its efforts in their entirety. Therefore, instead of announcing its environmental policies to the media, information was provided directly to customers either through the product information tag, store reference books, or direct interaction with the customer by answering questions.

The power of the TNS framework was that it was a model based on fundamental scientific principles: matter and energy can be neither created nor destroyed, and closed systems (such as the Earth) tend toward entropy (disorder) over time. Based on these laws, Karl-Henrik Robert developed four System Conditions for sustainability.

First, materials from the Earth's crust (for example, CO₂ from fossil fuels), particularly those that are scarce in the biosphere, must not systematically increase in concentration in the ecosphere. Second, human-made, persistent compounds (for example, CFCs), which have no natural flow or concentration, must also not systematically increase in concentration in the ecosphere. The logic behind the first two System Conditions is that the ability of ecosystems to absorb waste has evolved over millennia under relatively steady conditions. Quick, high-concentration disruptions are harmful to ecosystems because they do not allow natural systems time to react.

The third condition stated that the natural productivity of the ecosphere must not be reduced over time by human manipulation. Forests, agricultural areas, and fisheries are all renewable resources, with limited capacity to maintain themselves. Use of these resources must be within these limits for the systems to continue to perform their functions.

The final condition, a conclusion from the first three, was that to meet the needs of present and future generations resources must be allocated fairly and efficiently.

The TNS model both outlined the unsustainable activities in the economy which lead to environmental problems and described the characteristics of a sustainable economy. In presenting the TNS framework, Robert was candid about the fact that changes could not come overnight. Nonetheless, there were business opportunities in both the short and the long term in sustainability. The key was for each new investment, in addition to reducing environmental impacts, to also be designed as a *step* on which to build continuous improvements down the road. Using the System Conditions, IKEA formulated an environmental policy (Exhibits 3 and 4) and an action plan based on that policy.

The seriousness of IKEA's commitment was illustrated in its 1996 catalog in which, for the first time in company history, the CEO's picture appeared along with a statement regarding IKEA's environmental concern (see Exhibit 5). Placing a picture of an executive in the catalogue went against corporate culture, but an exception was made to reach both customers and co-workers with a strong message.

Environmental Action Plan for IKEA 1993-96

IKEA's environmental action plan for 1993-96 covered six major implementation areas: management and personnel; products and materials; customers; suppliers; buildings, equipment and consumable materials; and transport. To change IKEA's operations in all of these areas Kjellman required buy-in from many managers throughout the company to encourage innovative solutions at many levels. The TNS model was also useful in overcoming this challenge because of its power as a communication tool for organizing environmental issues and beginning a dialog.

Management and Personnel. A training program for company management and co-workers was implemented in 1994 to deal with environmental problems relating to each functional area. Employees at each store were encouraged to participate in environmental projects in conjunction with local community organizations. An ECO-Facts database was created to identify environmental issues and provide information in the stores regarding IKEA's position. Environmental news was disseminated to each store. Finally, IKEA was also exploring the possibility of awarding research grants for environmental issues that fell within its sphere of influence.

Products and Materials. IKEA evaluated the environmental impact of all materials used in its products and conducted life-cycle analyses of its products' environmental impacts. Guidelines for choosing environmentally adapted surface-treatment systems and use of tree varieties were approved and PVC guidelines were implemented worldwide. IKEA of Sweden (responsible for design and production) decided which materials should be replaced or phased out. ECO-products were introduced as part of IKEA's product range.

Customers. Explicit information concerning materials used and the recyclability of each product were developed to be shown in each IKEA store. The question of whether IKEA should take the initiative to carry out the recycling and re-use of furniture was to be determined in 1996. Environmentally friendly products were to be highlighted in stores and in the catalog. Improvements were continuing in the recyclability of the catalogs. In addition, an environmental question and answer form for customers seeking answers about products and materials was provided with a response from management promised within two to four weeks of a form's receipt. Feasibility studies were conducted on programs to recycle packaging, catalogs, and discarded IKEA products. A survey of mass transit options to and from stores was underway. The company's transportation infrastructure was being examined for ways to integrate unused resources for recycling purposes.

Buildings, Equipment, and Consumable Materials. A checklist of how IKEA stores could be environmentally adapted was drafted in 1993. Local managers investigated the possibility of recycling waste at each location. Waste separation programs were being implemented where possible, and IKEA was active in trying to influence the authorities and local waste companies to encourage the evolution of better markets for recycled material.

Environmental considerations were incorporated into new construction on properties owned or operated by IKEA. A checklist was drafted in May 1993. All consumable supplies (for example, photocopiers, office machines, fluorescent tubes, decorative material, toilet paper, coffee mugs) were surveyed for more

environmentally compatible alternatives which were comparable in price and quality. Similarly, the most environmentally sound alternatives of comparable price and quality were to be chosen for products such as forklifts, container lifts, and company cars.

Transport. IKEA designed packaging alternatives to maximize the efficient use of transportation space. “Combi-transportation” utilized railroads for long-distance transportation. IKEA stressed the use of the most efficient transportation to reduce the number and volume of trips, reduce the number of empty cars/trucks, maximize cargo space, ensure that return transportation was utilized, and avoid rush hour traffic. In Europe IKEA chose transportation companies that fulfilled EC-standards on noise and emissions and that used environmentally sound fuel. Initial steps had been taken to talk with willing suppliers. Karl-Olof Nilsson, a member of the Executive Staff Environment group in Almhult was cautiously optimistic about these efforts.

We have started talking to carriers [in] our transportation area [distribution]. This is a major environmental area for us, but we need extra training for transport suppliers, beyond the basic training. We haven't yet reached out to the full network of suppliers, because we need to be more clear ourselves about what needs to be done. We can't put higher requirements on suppliers than we put on ourselves.

Tangible Results

Training. By 1995, IKEA had implemented an environmental training program in North America with the TNS principles at its core. Key co-workers were trained and then traveled to different retail stores in the network to spread the message. Detailed information was provided to the stores on IKEA's position on different environmental issues that related to its operations. That information could then be used on the showroom floor to answer any environmental concerns or questions asked by customers. The environmental training was also incorporated into the “IKEA Way” training for new co-workers so that every person on IKEA's payrolls was fully aware of IKEA's environmental position. Some co-workers had already voluntarily started environmental action groups, which autonomously implemented IKEA's program by scheduling regular meetings and discussing how IKEA could improve on its efforts within its individual stores.

Trash Is Cash. One result of the new thinking on environmental issues was the “Trash Is Cash” program begun in Gothenburg, Sweden at the initiative of the store manager. Retail outlets the size of a typical IKEA store generated large amounts of waste, and the Gothenburg store was no exception. In 1979 the store had invested in a small facility in which cardboard and wood were sorted for recycling and everything else was disposed of as waste. In the early 1990s the store manager began exploring opportunities for extending the process to other material. Charges for unsorted waste disposal were scheduled to increase by 20 percent annually, and environmental consultants ascertained that marketing opportunities for sorted waste were likely to increase in the near term. One Tuesday morning, failure of the local trash service to service overflowing containers provided the ultimate incentive for the store manager. He dumped the containers out onto the parking lot, and he and coworkers went through all the materials, separating everything that could be reused or sold as a resource.

In September 1993, construction began on a state-of-the-art on-site recycling facility at a cost of SKr1.4 million (US\$168,593). The facility consisted of large and small re-use or recycling containers for sorting a variety of material, compactors for corrugated cardboard and other waste, and a baler press for plastics. Materials that were sorted included corrugated and standard cardboard, paints and solvents, wood, fluorescent light tubes, plastic picture frame cassettes, pallet edge guards, plastics, metal, white paper,

glass, and compostable plant/soil waste.

1991 and 1994 total waste declined from 966 tons to 620 tons. The percentage of waste recycled rose 50 percent to almost 85 percent. By 1995 the store reversed a cost of US\$34,636 (Skr 244,500) to a small profit. In addition, scrap wood sold as building material in the store provided an additional income of approximately SKr200,000 (US\$28,333) annually. Thus the name “Trash Is Cash” was derived. Future plans included an on-site composting unit for organic restaurant waste and a program to accept customers’ old furniture for recycling.

Having gone through the TNS training and subsequently training people in Canada’s eight retail stores, Stephen Plunkett, with responsibility for customer service in Canada, was encouraging the stores to adopt a Trash Is Cash program. The Waste Management Company, as the recycling contractor, was conducting waste audits with Canadian stores and suggesting systems to make waste management efficient if not profitable for them. In IKEA’s style of providing an overarching goal but allowing co-workers autonomy to define the means to reach the goal, Plunkett had introduced his stores to the environmental policies, but his role was as a representative of the Canadian *service* center. Markets for recyclable materials were growing in Canada and prices were rising. For example, in 1995 cardboard sold around Toronto for US\$250 per ton, up from zero a short time earlier. He observed,

The training raised people’s sensitivity so that daily actions changed and recycling became natural. But incentives differ by location depending on local regulations and fees. Waste *is* a resource. We welcome the regulations that will enable us to manage it to our competitive advantage.

Catalogs. In early 1992, IKEA’s manager in charge of the catalog sat down with a paper expert from Greenpeace to jointly develop goals and guidelines for the 1993 catalog. Since IKEA used over 40,000 metric tons of paper annually on its catalog and advertising mailer, one of the largest color printing jobs in the world, any resource savings would have a tremendous impact on the industry. The goals were to prohibit the use of paper derived from old-growth forests and minimize the use of toxic chemicals and chlorine bleach. By working closely with suppliers from a set of guidelines (see Exhibit 6), IKEA not only met its first goal, but actually succeeded in eliminating chlorine bleach entirely from its catalogs without sacrificing print or picture quality. In addition, IKEA took back old catalogs, both its own and those from other companies, for recycling.

IKEA’s success in this area prompted Mark Floegel of Greenpeace’s international pulp and paper campaign to state:

The fact that the IKEA catalog is now chlorine-free proves that all users of high quality printing papers could switch to chlorine-free alternatives today...IKEA’s demand for guarantees from their paper suppliers that the paper in their catalog does not contain any wood pulp from old-growth forests shows that the consumer can act to save the hundreds of endangered plant and animal species in unprotected old-growth forests. If we use our planet’s resources in a sustainable manner, we have to make and use products which are durable... By only issuing one catalog a year, and taking them back for recycling, IKEA is making a commitment to keeping trees in the ground and not in the wastebasket.

Lighting. Per Tovas was the co-worker responsible for general store maintenance at IKEA’s store in Plymouth Meeting, Pennsylvania. His job included light fixture and machinery upkeep, and technical and mechanical equipment purchases. Tovas had worked at IKEA since 1985 and was a humble, soft-spoken,

friendly, and dedicated individual. In mid-1990, he began to hear more about the efficiency of fluorescent lighting and began to explore the virtues of this type of lighting. As he gathered information, he began to experiment with different types of fluorescent bulbs, ballast and reflecting mechanisms, testing them for reliability, reputation, appearance and performance.

In 1992 IKEA North America had signed on to the U.S. Environmental Protection Agency's Green Lights Program which committed the company to retrofit 90 percent of all facilities in fluorescent lighting by 1997. The goal was to decrease by 15 percent the total 35 million kilowatt hours of energy used each year by North American IKEA stores. Participating companies kept the EPA abreast of developments through regular reports and received engineering and consulting services in return.

Having volunteered to head the Plymouth Meeting Green Lights Program initiative, Tovas contracted with seven different consultants to study IKEA's furniture showroom and suggest an appropriate retrofitting plan. Because of conflicting analysis and a lack of understanding by the consultants of IKEA's needs for retail light levels and lighting quality, Tovas decided to undertake the retrofitting and energy audit of the entire store himself

The final analysis, which took him four years to finish from his initial experimentation, was completed in early 1995. The lighting tested included various mixtures of bulbs, ballasts, lenses and reflectors. Tovas presented the three best combinations side by side with IKEA's current fixtures. Based on efficiency estimates, he calculated that the store could save thousands of dollars each month on utility and maintenance bills if retrofitted with fluorescent lighting. Also interested in solar energy, he considered the cost of sky lights, but abandoned the idea because the store's existing cross-beam ceiling structure did not lend itself to skylight installation.

The results of Tovas's analysis were striking. IKEA's controllers preferred a two-year payback on all major investments. At a cost of US\$151,000, Tovas estimated that a total savings at the Philadelphia store from, electricity, maintenance, and on-site AC energy generation would be US\$85,322 a year -- an undiscounted payback period of 1.78 years. The savings resulted from several factors. The most obvious savings was from reduced direct electricity consumption. The new lights and ballast simply required less electricity to operate. They also tended to last longer than the old style, which meant savings through redirection of maintenance personnel to other tasks. Also, the old-style lighting generated a tremendous amount of heat which required compensation in the form of additional air conditioning. Since fewer lights would be required, replacement costs were reduced. Finally, the new lighting system would actually result in an *improvement* in light intensity, thus the new lighting not only saved a considerable amount of money but also provided superior illumination. After some initial resistance from the controllers, most of which stemmed from disbelief in the validity of Tovas's numbers, IKEA decided to go ahead with the retrofit. Early results show that his analysis was correct almost to the dollar. In his final report, Tovas wrote:

To retrofit the whole building will give us tremendous savings and benefits. It is also the right thing to do in this time and age. It will bring us one step closer to fulfill our commitment to the "Green Lights" program. This retrofit will also give us a visual display for all of our visitors about IKEA's environmental consciousness.

IKEA planned to retrofit all of its U.S. stores with Tovas's recommended lighting system. As of August 1995, the Plymouth Meeting, Burbank, and Baltimore stores were completed and the Long Island store was in process, all of which gave Tovas a great deal of personal satisfaction. When asked why he initially took on such large project Tovas replied in true IKEA fashion that, "Sometimes you see something that

you have to do... [yet] there are still a lot of other areas needing improvement.”

Suppliers. Supplier relations was an important area of focus. In an attempt to influence IKEA’s product producers and suppliers, each purchasing unit was responsible for guaranteeing that suppliers be aware of the applicable environmental requirements in his/her country. An environmental checklist was used when choosing a supplier.

Environmental concerns extended into supplier relationships through product specifications. IKEA of Sweden set the specifications required worldwide of suppliers. Between 150 and 200 suppliers provided products for the North American stores. Of these, 85 accounted for furniture items. After ten years of effort, sourcing of furniture in North America had risen from 100 percent outside the continent to over 50 percent from the Americas with plans to push on toward 100 percent. Of approximately US\$740 million in sales in North America in 1995, about 60 percent was accounted for by furniture. There were few large suppliers because most large furniture manufacturers had established product lines, and these dominant companies made the fully assembled pieces, set the prices, and customers bought whatever was offered. IKEA’s operations reversed that process. To make its ready-to-assemble (RTA) furniture, IKEA dealt with small- to mid-size suppliers with revenues less than US\$250 million. Few of these had much experience with an international customer, and RTA furniture was also a new experience for them. RTA represented approximately 6 percent of the U.S. furniture market in 1995.

Robert Paolozza, the manager responsible for quality and environmental issues with suppliers, described the process of working with new suppliers as challenging. Most suppliers were very surprised at the environmental requirements integrated into product specifications because no one else imposed similar demands. The key requirements applied to harmful chemicals (such as formaldehyde) and wood sourcing (such as rainforest woods). The environmental requirements extended to packaging materials, which had to be recyclable or reusable and use no PVCs. Paolozza described the process of working with a new supplier as

an immense amount of work, education, and training. It requires a lot more explanation and advising, all of which takes time, and for most suppliers, this is the first time anyone has raised the issues with them.

In the case of formaldehyde in particle board, U.S. particle board manufacturers followed an old government standard put out by the U.S. Department of Housing and Urban Development (HUD). IKEA’s standards for emissions were significantly stricter than the HUD levels, which meant Paolozza had to travel and talk to the subcontractors who provided the particle board. The subcontractors and direct suppliers also had to meet IKEA’s standards for lacquers used on the wood, a demand that no one else in the market made. Working closely with suppliers allowed IKEA to avoid higher costs for these adaptations. By selecting three or four U.S. and Canadian suppliers and connecting through them to subcontractors, IKEA was successfully setting up approved supplier networks that could meet its standards and that saw the competitive advantage in doing so as IKEA’s North American operations grew.

Paolozza had seen significant changes in just six years. Sensitivity had risen in every area (chemicals, recycling, reuse, raw material use) and was approaching European levels, although it was still not comparable to European awareness where severe pollution problems and raw material scarcity concerns had been raised earlier.

In the use of organic fabrics, June DeBoemers, North American product developer for upholstery and

textiles, broke new ground in early 1996. After months of investigation and discussion with an organic cotton grower, partnerships had begun with the grower and a separate weaving company. Growing, spinning, and weaving organic cottons were growth areas in the fabric industry. DeBoemers said, "It feels like natural foods twenty years ago. You had to go to small, out-of-the-way stores and pay high prices for healthy foods. Today you have Fresh Fields and other supermarket chains that regularly carry organically grown foods [foods which are herbicide and pesticide free and meats which are free of antibiotics and bovine growth hormones]." Creating organic fabrics with IKEA styles required extensive collaboration among IKEA's designers, the cotton grower, and the weaver that specialized in organic cottons. To be introduced in 1996, the fabrics would be available to consumers on sofas and in the "marketplace" area of the store in cushions, curtains, and fabric purchased by the yard. Getting to the right price with the two suppliers took considerable time and effort with IKEA keeping to its high quality/low price principle. Moving to organic cottons allowed IKEA to meet TNS's system condition Number 2 (see Exhibit 1), and DeBoemers believed customers were ready to purchase organic fabrics when given the choice and reasonably comparable prices. The possibility of high-volume sales through an IKEA supplier partnership encouraged the suppliers to bring the costs down to an acceptable level for IKEA.

What's Next?

While the stores could be an important area for further work on environmental issues, Jan Kjellman knew from his work in Sweden in the design and production areas that major progress also could be made there. IKEA's commitment to the TNS program gave the company guiding principles that could be applied in any area of the business. The company environmental policies provided further focus and priority setting. The question was not whether to proceed with a strong North American program but which direction offered opportunities for significant impacts and competitive advantage for IKEA in the short and long term. How could the TNS framework help Kjellman guide IKEA's next move?

Exhibit 1

Karl-Henrik Robèrt and The Natural Step

Karl-Henrik Robèrt

In the 1980s Karl-Henrik Robèrt, a leading Swedish cancer researcher and physician, recognized fundamental problems with the current environmental debate. Concerns regarding the destruction of the earth's environment had been increasing exponentially since the early twentieth century. It was only within the last few decades, however, that such concerns had become widespread and very visible and acquired global implications and language. Examples of environmental concerns in the popular media were abundant. The deterioration of the ozone layer, global warming, exponential population growth, massive deforestation, the build-up of persistent toxic chemicals, unprecedented extinction of species, acid rain, and increasing desertification were just a few of the concerns.

Furthermore, Robèrt recognized that along with these concerns had arisen repeated and predictable questions that seemed to be the usual focus of the environmental debate. Are chlorofluorocarbon (CFC) emissions the main cause of ozone destruction, or do natural processes, such as volcanic eruptions, do just as much damage? And if the hazards of ozone destruction are a reality, then what levels of CFC emissions can the biosphere tolerate? Is economic growth harmful, or is it the only way to provide the technologies and resources necessary for restoring the environment? How many people can the earth's natural resources sustain, and what is the best acceptable avenue to prevent overpopulation? Does the developed world have the right to demand from lesser developed countries that they cease or curtail their environmentally destructive activities? Can one nation do anything constructive to save the earth's environment, or is an international consensus and enforcement mechanism necessary to accomplish the worthy goal of sustainability?

According to Robèrt such questions were distracting and unnecessary at best, and largely ignored the important issues, for in too many cases a definitive answer was impossible to achieve. For example, we simply cannot predict with accuracy how many tons of carbon dioxide emissions the biosphere can withstand before the polar icecaps melt because of the greenhouse effect and thereby usher in the second Great Flood. The reason that we cannot know with precision the time frames and capacities in question is that natural differences in organisms and the infinite complexity of ecosystems make precision impossible and provide fodder for endless arguments. Robert compared such questions to focusing on the leaves of environmental concerns while ignoring the more important branches and trunk. The leaves represent crucial, yet isolated and controversial, environmental concerns. The trunk and branches, however, represent core problems about which scientific consensus has existed for nearly half a century. According to Robert and the scientists who joined with him, the heart of the multitude of environmental problems lies in systemic errors that exist in the foundations of modern human society. To achieve real and lasting solutions to these problems without becoming caught in insolvable arguments would therefore seem to require an approach that sought scientific consensus about foundational systemic errors. If such a consensus could be found to correcting the systemic errors in the trunk and branches, then the benefits to the leaves would flow naturally from that approach.

Robèrt regarded bickering over details and differences in short-term interests as a major source of frustration that was stifling progress in the environmental field. He wrote, "[The environmental movement] was like watching a house burning down while the fire brigade was arguing about how the fire brigade should be organized." He then proceeded to write a consensus report regarding fundamental and noncontroversial issues. Though in the first draft the consensus existed only in his head, the completed report was sent to some 50 leading scientists of different political orientations in Sweden along with the request to find the errors, make suggestions, and send the corrected report back for revision. The conversation that ensued as scientists replied enabled Robert to adjust and refine the concepts and language. Robèrt repeated this process 21 times until a consensus was reached on an educational package that presented fundamental environmental issues. A short time later the educational package was turned into an illustrated booklet with an accompanying audio cassette which were sent to every household and school in Sweden.

In the meantime, Robèrt solicited and received financial support for his educational project from major businesses and other organizations. He also enlisted the aid of Sweden's king, who became the patron of the project, and various popular entertainers. Then, in April 1989 *The Natural Step* was officially launched with a nationwide

television broadcast.

The Consensus

As a leading Swedish cancer researcher and clinical physician, Robèrt had long been focused on alterations to the cell. Not surprisingly then, the consensus began at the level of the cell. Robèrt asserted that the cell of a human being, when compared to those of other living organisms including plants, was not as different as is usually assumed and, in fact, that we must go to the molecular level to perceive the differences. According to Robèrt, the basic structures and functions of our bodies are nearly identical to those of eagles and seals. Therefore from the biological standpoint humankind is not the master of nature but instead is a mere *part* of nature. The logic continued.

The cell is concerned only with the conditions necessary to sustain and propagate life. The history of the planet is one of a closed material system slowly evolving the cyclical processes that have allowed life to flourish. The earth receives light from the sun and in turn emits infrared radiation. The difference in thermodynamic potential (energy) between the two flows provides the conditions for biospheric self-organization. Individual plant cells, through photosynthesis, use the energy to break down waste material, which is then used to prolong and propagate the life of the plant. Consequently, the cell is the foundation of life's natural cycle of birth, growth, death, decay, and rebirth. While all living processes deplete the quality of natural resources, the sun and green cells act as a quality machine that cyclically rebuilds and reorganizes dead matter. Thus the process of healthy cell life depends upon a cyclical process of regeneration within the large, closed system of the planet's biosphere.

Understanding cyclical systems is key under this framework. Cyclical processes continuously regenerate themselves while linear processes eventually must end. According to TNS humankind has disrupted natural cyclical processes by using resources in a linear fashion. As resources are used in industrial society they become vast stockpiles of garbage, most of which is invisible to us in the form of molecular pollution of air, water, and soil. Most of this pollution cannot be assimilated within natural cycles. Natural cycles simply cannot breakdown and reuse much of the material, such as toxic metals and stable unnatural compounds synthetically produced in chemical laboratories, particularly since it is not returned to nature in a usable form and industry for the most part does not recycle waste matter back into productive processes. The result is increasing accumulations of pollution and waste with a corresponding decrease in natural resources. In addition, it is impossible to predict the consequences of this process because we cannot know the tolerance level of ecosystems for assimilating molecular garbage because of their complexity, delay mechanisms and interactions between cyclical processes.

According to Robèrt, the result is that humankind is essentially reversing evolution. This is illustrated by the rapid extinction of species, the rise of the greenhouse effect, and all of the other assaults on nature, assaults which are the consequences of our continued reliance on linear processes. Robèrt wrote:

As we busy ourselves with tearing down more than we rebuild, we are racing toward world-wide poverty in a monstrous garbage dump. No temporary trade balances, illusory bank accounts, or pseudo-scientific disputes can save us from the consequences: The only thing that can is the restoration of cyclical processes...It is already more expensive to harvest declining fish stocks over wider and wider areas; it is already more expensive to make water fit to drink; and we haven't even started to pay for the cleanup of toxic metals, radioactive and otherwise, that we are constantly interjecting into our world.

Robèrt concluded that it should be self-evident that continuance along this linear path would be incompatible with either wealth or human and ecosystem health. According to Robèrt, human society needs to reorganize itself based on cyclical processes compatible with natural cycles because to do otherwise would lead to unthinkable consequences. To help accomplish this, he developed with other scientists the consensus paper stipulating four system conditions that individuals, municipalities, corporations, and states should work to meet if humanity hopes to avoid catastrophe.

System Condition No. 1 *Substances from the Earth's crust must not systematically increase in nature:*

These substances (fossil fuels, mined minerals, some heavy metals, etc.) are easily extracted from the earth's crust and are being consumed at increasing rates. Yet their assimilation and redeposit by natural cyclical processes is extremely slow. The effect is that such substances systematically accumulate in nature as industrial and consumer

pollution. The spread of these wastes must be curtailed through decreased mining and fossil fuel consumption and increased recycling and reuse. The question to ask is, does an action reduce the use of finite fossil fuel and mineral resources or molecules?

System Condition No. 2 *Substances produced by society must not systematically increase in nature:* Many of the compounds now accumulating in nature are man-made and are persistent. This means that they cannot easily be reused, and they deteriorate as slowly as or more slowly than natural minerals and fossil fuels, and in some cases cannot be broken down by natural processes at all. The effects of their accumulation are identical to that of substances discussed in System Condition No. 1. The question to ask is whether an action reduces the use of long-lived synthetic products or molecules.

System Condition No. 3 *The physical basis for the productivity and diversity of nature must not be systematically reduced.* Given that the prosperity and health of humankind depend upon nature's ability to provide us with sustenance by recycling waste products into usable form, natural capital must not be harvested at rates that exceed nature's ability to regenerate itself. Not only must the quantity of natural resources be maintained, but the quality of them must not be allowed to deteriorate, because the proper and efficient functioning of natural cycles depends on the robustness of ecosystems. The question to ask is, does an activity preserve or increase natural diversity and the capacity of ecocycles?

System Condition No. 4 *Energy and other resources must not be used unjustly or inefficiently:* Basic human needs must be met with the most resource-efficient methods and technologies available. In addition, the basic needs of less developed countries require a just distribution of natural resources for them to both prosper while adhering to System Conditions Nos. 1-3 and maintain the health of their populations and ecosystems. This requires an increased technical and organizational efficiency in the whole world, particularly in wealthy developed countries where resource-inefficient lifestyles consume the lion's share of natural capital. The question to ask is whether an activity reduces the consumption of energy and other natural resources

According to TNS, when all four system conditions are met, problems involving the accumulation of visible and molecular waste will cease to exist. To achieve this requires a re-thinking of short-term political and economic priorities to overcome society's linear dependence on nature. The critical action is to merge these priorities with the system conditions into a strategic program of step-by-step measures over time. Such measures are not antithetical to capitalism because they will pay off individually if skillfully performed. In fact, over time, if humankind continues along its current path of increasing net resource consumption and population growth, then the long-run unavoidable result will be decreasing returns on investment. This is because resource acquisition will become more expensive as natural capital is depleted. Robèrt wrote:

Non-sustainable development could be visualized as entering deeper and deeper into a funnel, in which the space becomes narrower and narrower. To the individual, company, municipality, or country wanting to make skillful investments, the crucial thing must be to direct its investments towards the opening of the funnel, rather than into the wall. In reality this means that the smart investor makes himself less and less economically dependent on continued violation of the system conditions.

The Natural Step

In 1995, The Natural Step was a foundation of 16 professional groups comprising approximately 10,000 individuals and a series of supporting networks. With only six full-time employees, The Natural Step's professional networks produced consensus papers anchored in Robèrt's original consensus document and four system conditions. The resulting papers were then used to guide decision-making and inform professionals and the general public. By 1995 The Natural Step networks had produced, or were working on, consensus papers in such areas as: energy, metal flows, transport, political/economic measures, agriculture, forestry, plastics, culture and ethics, and strategy for economic/ecological planning. As word spread of The Natural Step ideas and their practical application, Robert received increasing international attention and was invited to speak at leading universities as well as with corporate executives. In 1995, the U.S. Natural Step was established and by early 1996 was training individuals and working with top executives in over ten major U.S.-based corporations.

Exhibit 2

“Testament of a Furniture Dealer”

To create a better everyday life for the majority of people.

Once and for all we have decided to side with the many. What is good for our customers is also good for us in the long run. This is an objective which entails responsibility.

In all countries and social systems, eastern as well as western, a disproportionately large part of all resources is used to satisfy a small part of the population. In our line of business for instance, too many new and beautifully designed products can be afforded by only a small group of better-off people. IKEA’s aim is to change this situation.

Already after little more than two decades of operation we believe we have had some success. A well-known industrialist/politician once said that IKEA has had a greater impact on the democratization process than many political measures combined. We also think that our activities have inspired many of our competitors to work in the same direction. During the past two decades, IKEA has changed the face of the furniture industry in Sweden and, increasingly, throughout the world. Our revolutionary methods of design, manufacture, and distribution have made fine furniture available and affordable for the majority of people – for all of those with limited budgets.

But we still have great ambitions. We know we can have an important effect on practically all markets. We know that in the future we may have a valuable contribution to the democratization process at home and abroad. We know that larger series provide us with new advantages on our home ground, while new markets allow for greater risk-spreading. That is why it is our duty to expand.

The means to accomplish our objectives are characterized by our unbiased approach, our different line, and our endeavor to relate simply and in a straightforward way to others and among ourselves. A better everyday life also means getting away from status and conventions – being freer and more at ease as human beings. It is our endeavor to become a concept also in this area, for our own pleasure and also as an inspiration to those around us. It is a question of freedom with responsibility, and here we demand much of ourselves.

No method is more effective than a good example.

Our contribution to the democratization process, I said before. To be on the safe side, I would like to add that by this we in no way take up a position concerning questions about equalization of wages, for instance. You might say that we also want to tackle these problems from a different angle.

The following sections describe our product range and price philosophy which is the backbone of our work. Furthermore, we describe rules and methods which have become important cornerstones in the world of ideas which has made and will continue to make IKEA a unique company.

December 20, 1976

Ingvar Kamprad

1

The Product Range – Our Identity

We shall offer a wide range of home furnishing items of good design and function, at prices so low that the majority of people can afford to buy them.

Range

Our ambition is to cover the total home area, indoors as well as outdoors, with loose as well as fixed home furnishings. The range may also comprise tools and ornamental articles for the home and components for different degrees of “do-it-yourself” in the home furnishing area. Furthermore, the range may comprise a small number of articles for public buildings. This range shall always be limited so as not to jeopardize the overall price picture. Our

energy will always be concentrated around essential products within each product group.

Profile

The centre of gravity shall always be in our basic range — the part which is “typical IKEA”. Our basic range shall have a profile of its own. It shall reflect our thoughts, and be as simple and straightforward as we are ourselves. It shall be durable and easy to live with. It shall express an easier, more natural and freer way of living. It shall express design, colour and joy, and have a youthful touch for the young-at-heart of all ages.

In Scandinavia our basic range should be regarded as typically IKEA and outside Scandinavia as typically Swedish. An imperative requirement is that all articles should be suitable for the Scandinavian market.

In addition to our basic product range there may be a limited range of a more traditional character which is firmly established with many people and which may be combined with our basic range. This part of the range shall be strictly limited outside Scandinavia.

Function/technical quality

“Throw-away” products are not IKEA.

The consumer should enjoy his purchase for years. That is why function and technical quality must be good. But quality should never become an end in itself. It should be adapted to the consumer’s needs. A worktop should have a more durable surface treatment than a shelf in a bookcase. It costs more but gives the consumer a longer lasting product. An expensive surface finish on the bookcase shelf is bad for the consumer as it increases the price. Quality should always be adapted to the consumer’s interest in the long run. Our guiding rules are the basic requirements of “Mobelfakta” or other reasonable standards.

Low price with a meaning

Most people have limited financial means. To serve the majority of people, we must always maintain an extremely low price picture. But it must be low price with a meaning. We must not compromise on either function or technical quality.

No efforts shall be spared to keep the price picture down. A substantial price distance from our competitors should always be kept, and we should be able to offer the lowest prices in every area of home furnishing. Within each product group there should be some “breathtaking” items, but our range should never grow to jeopardize the price picture. Low price with a meaning demands very much from all of us. From the product developer, the designer, the purchaser, the administrator, the warehouse worker, the personnel – yes, from all cost units which can influence our purchase prices and **all other** costs. Without low costs we will never accomplish our purpose!

Changes in our product policy

Our basic policy to serve the majority of people can never be changed. Changes of the guidelines for the composition of our range, as indicated here, may only be made by the person or persons having the total responsibility for all activities within the IKEA-group.

2 The IKEA Spirit .A Strong and Living Reality

Certainly you have experienced it. You have perhaps even given it your own interpretation. Of course, it was easier to keep alive in former days when we weren’t so many, when we all reached each other, and could talk with each other. Certainly it is more difficult now when the individual is gradually wiped out in the grey gloominess of collective agreements and in the number register in the personnel department.

Before, it was more concrete, the will to help each other, the art of managing with small means .being cost-conscious almost to the point of stinginess, the humbleness, the irresistible enthusiasm and the wonderful community through thick and thin. But society as well as IKEA has changed since then.

Certainly the old spirit is still alive throughout IKEA. With old and new staffs heroic efforts are still made – daily – and many, many of us still feel and work in the same way. In a large group such as ours, however, not everybody can feel the same enthusiasm and responsibility. Some certainly consider their job as just a meal ticket – as any other job. Sometimes it is my fault and yours, for not always sharing our ardour with others. It is not always easy to give life and warmth to some of our more onerous daily tasks.

But the true IKEA spirit is still founded on our enthusiasm, on our constant will to renew, on our cost-consciousness, on our willingness to assume responsibility and to help, on our humbleness before the task and on the simplicity in our behaviour. We must take care of each other, inspire each other. One cannot help feeling sorry for those who cannot or will not join us.

A job must never be just a meal ticket. Without enthusiasm at your work one third of your life goes down the drain and can never be compensated for.

For you, with some kind of leadership responsibility, it is of crucial importance to motivate and develop your staff. Team spirit is something good, but then all members of the team have to have a feeling for their task.

As captain of the team you decide after having consulted the team. Then there is no time for arguments. Take the football team as an example!

Take care of those who keep our society alive! The simple, quiet and open-minded people who are always willing to give a helping hand. They do their duty and assume their responsibility without being noticed, and their concern and dedication often go beyond their particular responsibility area. I simply call them society supporters because they make the system run. There are so many of them in our company. They are everywhere – on the warehouse floor, in our offices, among the sales staff... They are the essence of the IKEA spirit.

The IKEA spirit is still here, but it has to be taken care of and developed with time. **Development, however, is not always equal to progress.** It depends upon you, as a leader and a responsible person, to make development progressive.

3 Profits Give Us Resources

A better everyday life for the majority of people! To accomplish our objective we must have resources – not least in the financial area. We do not believe in waiting for ripe plums to fall into our mouths.

Profit is a wonderful word! Let us at once take the drama out of the word profit. Politicians often use and abuse this word. Profit gives us resources. Resources you can get in two ways, either through profit or through subsidies. All government subsidies come about by means of state profit on some activity or by means of taxes in some form which you and I must pay. Let us rely on ourselves when it comes to creating the financial resources.

The aim of accumulating our financial resources is **to obtain the best results in the long run.** You know the prerequisites. We shall have the lowest price picture. And we shall marry it to good quality. If we charge too much, we do not keep the lowest price picture, if we charge too little, we get no resources. A wonderful problem! Forcing us to develop products in a more economical way, to purchase better, and to save on all costs persistently. This is our secret. The reason for our success.

4 To Reach Good Results with Small Means

An old IKEA idea which becomes more and more interesting. Innumerable times we have shown that with small means or scanty resources we can get good results. Waste of resources is a mortal sin at IKEA. It is not very difficult to accomplish the objectives set if you can disregard the costs involved. To design a desk which may cost \$1,000 is easy for a furniture designer. But to design a functional and good desk which shall cost \$50 can only be done by the very best. **Expensive solutions to all kinds of problems are often signs of mediocrity.**

We have no interest in a solution until we know what it costs. An idea without a price-tag is never acceptable. Before choosing a solution, put it in relation to the cost. Only then can you assess it.

Waste of resources is one of humanity's most serious diseases. Many a modern building is more of a monument to human stupidity than a rational solution to a need. But small-scale waste is just as expensive: To file paper you know will never be needed again. To devote time to proving you were right anyway. To postpone a question to a new meeting just because you don't want to take the responsibility right now. To phone long distance

when you might as well write a note or send a telex. The list may go on interminably.

Use your resources the IKEA way. You will get good results with small means.

5 Simplicity Is a Virtue

If many people have to function together in a society or in a company there must be rules. The more complicated you make these rules the more difficult they will be to observe. Complicated rules paralyze!

Historical burdens, fear, and the lack of a sense of responsibility are the breeding ground of bureaucracy. Indecision leads to more statistics, more investigations, more meetings – more bureaucracy. Bureaucracy complicates and paralyzes!

Planning is often synonymous with red tape. Of course, planning is necessary to establish guidelines for your work and make the company function in the long run, but do not forget that **exaggerated planning can be fatal!** Exaggerated planning restrains your freedom of action and reduces your time for the actual performance. A complicated planning process paralyzes. Let simplicity and common sense characterize your planning.

Simplification is an honoured tradition with us. Simple routines mean greater striking power. Simplicity in our behavior gives us strength. Simplicity and humbleness characterize our relations with each other, with our suppliers, and with our customers. It is not only for cost reasons that we avoid the luxury hotels. We don't need any flashy cars, impressive titles, uniforms, or other status symbols. We rely on our own strength and our own will!

6 The Different Way

If we from the start had consulted experts about building a company like IKEA in a small village like Almhult, we would certainly have been dissuaded from doing so. Nevertheless, one of the biggest establishments in the whole furniture business is situated today in Almhult.

By daring to be different, we find new ways. By refusing to accept a pattern just because it is established we get further. Not only concerning the big problems but also when we must solve the small daily problems.

The fact that our purchasers turn to a window manufacturer for table underframes and to a shirt manufacturer for seat cushions is no accidental occurrence but quite simply the answer to the question “Why must we do things in a traditional way?”

Our protest against the established order is no end in itself, but a purposeful will always to develop and improve.

Our development must always be vigorous and dynamic. Because of that, for instance, I hope that we will never have two stores completely alike. We know that the latest store will always show several imperfections, but still, taken all in all, it will be the best. A healthy appetite for experimenting shall lead us forward all the time. “**Why**” remains an important keyword.

7 Concentration of Energy -Important to Our Success

The general who splits up his forces inevitably fails. Even the multi-talented athlete faces problems. Where and how should he concentrate his energy?

We too have to concentrate our energy. We cannot do everything everywhere at the same time.

Our product range must not exceed all bounds. We cannot satisfy all tastes. We must concentrate around our own profile. We can never promote our whole range at the same time. We must concentrate our energy. We cannot conquer all markets at the same time. We must concentrate on maximum effect, and while concentrating on important areas we must sometimes make do with scanty resources in other areas.

When we build up a new market we concentrate our energy on the marketing effort itself. We then have to work

with temporary stocks and routines. Energy concentration means that we, at an important stage, have to relax our demands on other things which are in themselves quite important – security systems, for example. That is why we have to make extra high demands on our staff's honesty and loyalty.

Concentration of energy. The phrase itself implies strength. Use it in your daily work. It will give results.

8 To Assume Responsibility -A Privilege

In every type of society and company and on every level there are people who make their own decisions instead of hiding behind others. People who dare to assume responsibility. The more there are of such responsible people in a company or society, the less red tape. Meeting frenzy and endless group discussions are often a result of the inability of a responsible person to make a decision. Sometimes one puts the blame on democracy or the obligation to consult with others.

To assume responsibility has nothing to do with education, economy or position. Those willing to assume responsibility are to be found on the warehouse floor, among purchasers, sellers and office staff, yes everywhere. And they are necessary in all systems. They are important to every kind of progress. They see to it that the machinery works.

In our IKEA-family we want to keep the human being in the centre, and to support each other. We all have our rights but also our obligations. Freedom with responsibility. Your initiative and mine, and our ability to assume responsibility and make decisions are decisive.

Only while sleeping one makes no mistakes. To make mistakes is the privilege of the active person – the one who is able to start from the beginning again and put things straight.

Our objective demands from us that we perpetually train our capacity for decision-making and for assuming responsibility, and that we continuously combat our fear of making mistakes. **The fear of making mistakes is the root of bureaucracy and the enemy of all evolution.** No decision may claim to be the only right one. It is the drive behind the decision which determines its correctness. One must be allowed to make mistakes. The mediocre person is negative and wastes time to prove that he was not wrong. The strong person is always positive and looks forward. It is always the constructive people who win. They are always a delight to others around them and to themselves. But to win does not always imply that somebody else must lose. The most splendid victories are those where there are no losers.

If somebody steals a model from us we do not bring a lawsuit – because a lawsuit is always negative. We solve the problem by making a new model which will be even better.

Make use of your privilege – your right and your obligation to make decisions and assume responsibility.

9 Most Things Still Remain To Be Done - A Glorious Future!

A feeling of having finished is an effective sleeping-pill. A person who considers that his share has ended when he retires declines fast. A company which considers its objectives accomplished stagnates quickly and loses its vitality.

Happiness is not to reach one's goal but to be on the way. Our glorious fate is to be at the very beginning. In all areas. Only by perpetually asking ourselves how what we do today can be done better tomorrow, can we make progress. Constructive delight in exploring will urge us forward also in the future. Experience is a word to be handled carefully.

Experience is the drag on all evolution. Experience is used by many people as an excuse for not trying new ways. Still it is wise to rely on experience sometimes. In that case you should preferably rely on your own experience. It is often more valuable than long investigations.

The ambition to develop ourselves as human beings and in our work must remain high. The keyword is humbleness. Humbleness means so much to us as human beings. It does not only imply consideration and respect for your fellow-beings but also kindness and generosity. Will and strength without humbleness often lead to conflict. Together with humbleness, will and strength are your secret weapons in the development of yourself as an

individual and a fellow-being.

Bear in mind that **time is your most important asset**. You can do much in 10 minutes' time. 10 minutes gone are irretrievably lost. You can never get them back. 10 minutes are not only the hourly wage divided by 6. 10 minutes are a part of yourself. Split your life into 10 minute units and sacrifice as few as possible to futilities.

Most things still remain to be done. Let us grow to be a group of constructive fanatics, who with unwavering obstinacy, refuse to accept the impossible, the negative. What we want, we can and will do. Together. A glorious future!

Source: *Testament of a Furniture Dealer*, pp. 80-89

Exhibit 3

IKEA's Implementation of Environmentally Sensitive Measures

Since August 1992, IKEA catalogs worldwide have been printed on chlorine-free paper from farmed wood (not old-growth forests). This was a significant development in the printing industry, since the IKEA catalog is one of the largest printing jobs in the world and it was previously thought that it would not be possible to achieve high photographic quality for a job this large without bleach. In addition, IKEA catalogs contain recycled paper fibers. The environmental organization Greenpeace has endorsed IKEA's catalog program.

- Along with the Marcal Paper Company, IKEA has developed a program where customers can return old IKEA catalogs—and other companies' catalogs—to any IKEA store. Marcal then recycles the catalogs into consumer paper products. Marcal is one of the oldest manufacturers of 100% recycled paper products.
- As of September 1993, IKEA no longer develops new products containing Polyvinylchloride (PVC) unless no other alternative is available. The production of PVC may result in harmful effects to the environment. Greenpeace has also acknowledged this as an important development.
- A new version of IKEA's OGLA chair is made of 100% recycled plastic.
- IKEA does not knowingly purchase products made from tropical wood which is not from sustained forests.
- IKEA shopping bags are made from 30% post-consumer recycled plastic.
- IKEA offers an assortment of unbleached items . wrapping paper, corrugated cardboard storage boxes, and cotton products.
- IKEA produces many items made of wood from rubber trees which have been exhausted of their ability to produce rubber. In the past, these trees were either burned or discarded.
- IKEA offers an assortment of compact fluorescent light bulbs. These bulbs save 75% in energy compared to regular incandescent bulbs.
- IKEA is currently testing a program for delivering custom upholstery items in a reusable bag instead of a carton.
- All IKEA stores and corporate offices use recycled paper products.
- For many years, IKEA's philosophy has been to reduce waste by developing ready-to-assemble products which are flat-packed to save space in transport and storage. A byproduct of this is, of course, that energy consumption and emissions are reduced as well.

Source: IKEA Documents

Exhibit 4

IKEA's Environmental Policy

“At IKEA, we shall always strive to minimize any possible damaging effects to the environment which may result as a consequence of our activities.”

We shall therefore always strive to ensure that our product range with regard to raw materials, production, distribution, use and disposal is environmentally friendly.

We shall therefore always strive to ensure that customers purchasing articles from IKEA feel that they are contributing to a better environment through their choice of products. Customers shall therefore be provided with factual information about the characteristics of products, component materials etc. which they require in order to arrive at a purchasing decision.

We shall therefore always strive to ensure that environmentally friendly, preferably recyclable, materials are used. Products and materials, which, according to Group Management's evaluation, have detrimental effects on the environment should if possible be phased out or substituted by environmentally better alternatives.

We shall therefore always strive to ensure that all internal activities involving our stores, warehouses, offices, transport etc. are performed in such a way as to contribute to a better environment. Our staff shall have access to the necessary education and information on current environment questions. Suggestions for measures beneficial to the environment shall be actively encouraged and adopted.

We shall therefore always strive to ensure that the following activities shall be actively encouraged and supported within our area of operations: research and environmentally kind products, materials and production processes.

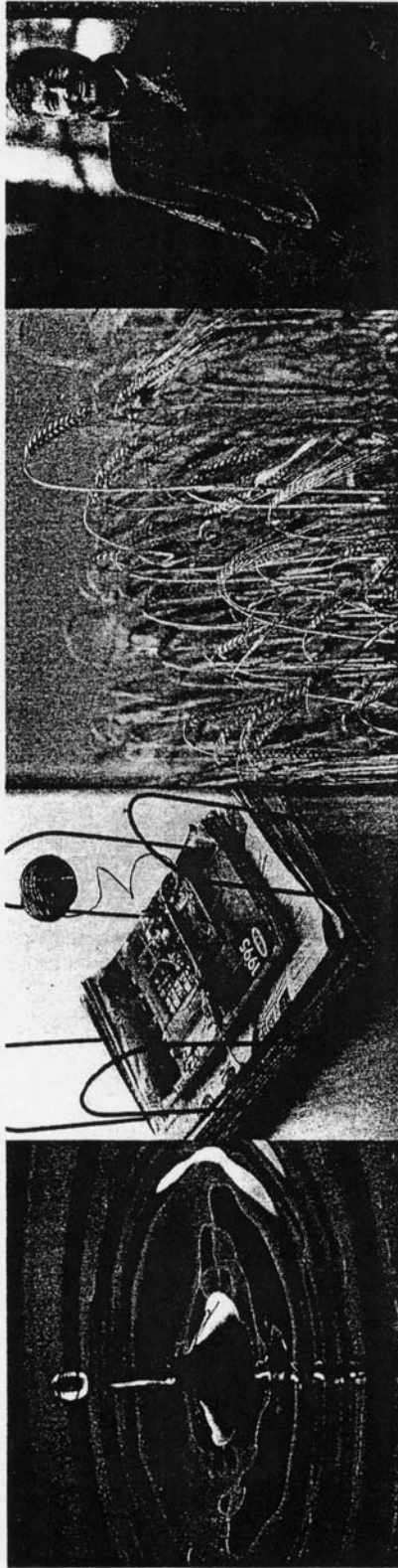
We shall furthermore always continue to fulfill our basic principles, namely to maintain a real price advantage for products, which from our customer's point of view are comparable with those of our competitors, and to provide the best possible offer within each function.

Each manager is responsible within his/her area for the planning and implementation of the above policy.

Environmental Policy approved by the Board 1991.

Source: IKEA and the Environment Trainer's file.

Exhibit 5 1996 IKEA Catalogue



IKEA has set out to improve the every day life of the majority of people.

Now and tomorrow!

IKEA was founded in the Swedish province of Småland, where people have always been frugal and have made "Waste not, want not" a way of life. I have thought a lot about this in connection with IKEA's environmental work, and how the original IKEA concept goes hand in hand with our efforts to conserve the environment.

IKEA has grown out of a vision to improve the everyday life of the majority of people. It is an important vision, and one with which I feel a strong personal bond. This vision remains equally strong when it is reinterpreted in terms of IKEA and the environment. I ask myself, what does a better everyday life, today and tomorrow, really mean?

Ours is a big company, with big responsibilities
My job involves a great deal of travel. Wherever I go, I find a growing interest in the environment, and note that people expect a lot of IKEA in this sphere.

When the environment comes up, I usually talk about "kretslöpp" (a Swedish word for how resources taken from Nature can be reused or returned back to Nature) and how the people at IKEA are trying to look at

production and consumption in a new way. I point out that we want to do our part in creating a society based on Nature's own cycle. A society in which all resources are recycled and used again, either by people or by Nature.

Simply increasing the selection of linen textiles, cotton and untreated pine furniture at IKEA is not the answer. We would not try to deceive you, our IKEA customer, or ourselves into believing that we have solved the environmental problem in that way. Instead, we have decided to try to live up to the requirements set by Nature's own cycle. We are starting with ourselves, right inside the IKEA organization.

Every IKEA employee has been trained to think about recycling and the conservation of resources

This new thinking is resulting in new, improved environmental solutions. And I must confess that I take the same keen pleasure in every single improvement. We have, for instance, in most cases,

already replaced PVC (polyvinylchloride plastic) with other materials in our wallpapers, home textiles and furniture. We have overcome the problem of CFCs (chlorofluorocarbons or Freons) in the foams used in

our furniture. And we have gone to great lengths to remove formaldehyde from our products.

When it comes to tropical woods, IKEA uses timber only from cultivated forests. You might notice that some of our furniture is made from the wood of rubber trees, and you may wonder why. The reason is simple: the wood comes from trees on rubber plantations. We just utilize trees which have stopped producing latex.

Our catalogs are totally chlorine free

Our catalogs are printed on TCF (totally chlorine free) paper. The proportion of recycled fiber in the paper is now up to between 10 and 20%.

You too can do your bit to help the environment by ensuring that your copy of the catalog ends up in a recycling system when it becomes invalid.

Sorting waste at source is also done at IKEA

Sorting waste at source is becoming increasingly common. People separate glass, batteries, paper, organic waste and so on. We, too, are successively implementing sorting at source at all the IKEA stores worldwide. This will enable us to cut down on the

amount of waste we generate and help to increase the amount of material recycled for new uses.

Our environmental work has just begun

The greater proportion of our environmental work lies before us. But we are trying to deal with the issue with the respect it deserves. Put plainly, we want to do the right thing, and do it right from the start. I am convinced that hard work, combined with a determination to bring about changes is the only way we can all live up to our responsibility to future generations. Many of you who read this are parents. I, too, am a parent. We are all aware that our children and their children will have to live with the results of the decisions we make in our lifetime.

In my view, conserving resources is a concept that stretches beyond IKEA.

The issue is far bigger than that.

Anders Moberg, CEO
IKEA

Exhibit 6

Environmental Demands Put on Suppliers of the IKEA Printed Materials

Until further notice and if not otherwise specifically agreed, it is agreed that paper supplied under this contract shall comply with the following environmental specifications:

1. TCF pulp

The pulp used for production of paper shall be bleached not using chlorine as a bleaching agent. Post-consumer recycled pulp shall be considered to be TCF pulp if no chlorine has been used during the de-inking process.

2. Virgin fibers .old growth forests

The virgin fiber used in the production of paper shall not originate from endangered forests or so-called old growth forests.

3. Optical brighteners

The paper produced must not use optical brighteners.

4. Recycled fiber content

The paper produced must contain at least 10% recycled fibers of type post-consumer recycled waste paper.

These are the demands we have on catalogue paper and this is what we get.

As for printing, we have reviewed the situation and believe waste paper to be the most important aspect. All of the western world today has problems with landfills and waste. Therefore recycling capacity must be given priority when evaluating a printer. Inks, glues, and lacquers must be de-inkable in most de-inking facilities.

5. We stay with toluene-based ink and hotmelt glue

These are the easiest to de-ink. Water-based ink cannot be successfully de-inked (and produces bad printing results) and water-based glue has a tendency to accumulate in machinery. We are, however, actively participating in water-based ink tests to expand our knowledge and know-how in the event of their becoming more usable in the future.

6. Toluene and other environmental aspects

A major problem with printing is the release of volatile organic compounds of which toluene appears to be a major concern. We have been carrying out tests during 1994 with several European printers and have been active within the ERA (European Rotogravure Association) to get the level of residual toluene reduced. With some printers we have lowered the level from 900 ppm to under 400 ppm for catalogues arriving at the distributor. Apart from this we make it a major issue to evaluate the internal environmental situation before selecting a new printer and we firmly believe that our printers are among the finest in the world.

7. Chemicals used in the printing plant and repro

Several harmful chemicals, some including heavy metals, are used (in controllable form) in the printing world. Our contribution towards solving these problems is to work filmless (digitally), thus avoiding the use of chemicals. For the gravure printers we have succeeded in going digital with all but one printer (100% in the USA). We now lead the world in print purchases of this type. We are prepared to go filmless also in offset printing but are waiting for the launch of large digital plate producing equipment (anticipated availability: 1995).

8. UV lacquer

Basically we have banned the use of this high gloss lacquer because of negative aspects in the printing plant and in the de-inking process. We are prepared to make exceptions if the printer can prove the ability to handle and control the negative aspects.

Exhibit 7

Key Dates in IKEA's History

1943	The firm IKEA is registered by the authorities of Växjö in Småland.
1946	IKEA runs its first advertisement.
1950	Furniture enters the IKEA range.
1951	The first IKEA catalogue is issued.
1952	Annual sales exceed 1 million Swedish kronor.
1953	IKEA opens its first permanent furniture showroom in Almhult in Småland.
1955	IKEA starts to design its own furniture.
1956	IKEA introduces easy to assemble furniture in flat packages.
1956	Annual sales exceed 17 million Swedish kronor.
1958	IKEA opens its first home furnishing store in Almhult.
1959	The number of employees in IKEA passes one hundred.
1963	IKEA introduces quality labeling of furniture (Möbelfakta).
1963	IKEA opens its first store in Norway.
1965	IKEA opens in Stockholm.
1965	IKEA opens the first Accenten department in the Stockholm store (housewares are added to existing furniture products).
1965	IKEA opens the warehouses in its stores for customers.
1969	IKEA opens in Denmark.
1972	Annual sales exceed 300 million Swedish kronor.
1973	IKEA opens at Spreitenbach, Zurich, Switzerland.
1974	IKEA opens its first store in West Germany.
1975	Annual sales exceed 1 billion Swedish kronor.
1976	IKEA opens in Canada.
1977	IKEA opens in Austria.
1978	Annual sales exceed 3 billion Swedish kronor.
1978	The IKEA catalog exceeds 20 million copies.
1979	IKEA opens in Holland.
1981	IKEA opens in France.
1982	Annual sales exceed 5 billion Swedish kronor.
1983	IKEA's employees number more than 6,000.
1984	The IKEA catalog is printed in 45 million copies in nine languages.
1984	IKEA opens in Belgium.
1985	IKEA opens in the United States.
1987	IKEA opens in the United Kingdom.
1989	IKEA opens in Italy.
1990	IKEA opens in Hungary and Poland.
1991	IKEA buys its own production resources.
1993	IKEA has 114 sales outlets in 25 countries.

Exhibit 8

Exchange Rates 1990-95

	<u>Skr/US\$</u>
1990	5.698
1991	5.529
1992	7.043
1993	8.304
1994	7.461
1995	7.059