

IKEA's corporate mantra is "Low price with meaning." The goal is to make things less expensive without ever making customers feel cheap. Striking that balance demands a special kind of design, manufacturing, and distribution expertise. But IKEA pulls it off in its own distinctive way: tastefully, methodically, even cheerfully, and yet somehow differently than any other company anywhere. Here's a step-by-step guide to how IKEA designs, builds, and distributes the items that the entire world wants to buy.

The Trofé mug is one of the most popular IKEA products. The story of the mug is an example of how IKEA works, from a co-worker's bright idea through to production and sales. It is also a story about all the demands that customers place on IKEA. A low price tag is the obvious one, but other requirements include function, modern design, environmental considerations, and making sure products have been manufactured under acceptable working conditions. Both customers and co-workers must be able to rely on IKEA.

Step 1. Pick a Price

Product Development—A sketch for a new product? Yes, but it's also a calculation of what that product will cost. The low price begins at the drawing board.

The team behind each product consists of designers, product developers, and purchasers who get together to discuss design, materials, and suitable suppliers. Everyone contributes with their specialist knowledge. Purchasers, for example, use their contacts with suppliers all over the world via IKEA Trading Service Offices. Who can make this at the best quality for the right price at the right time?

When product developer Pia Eldin Lindstén was given the task of creating a new mug over five years ago, she was also told how much it should cost in the stores. In the case of Trofé, the price had to be incredibly low—five Swedish kronor! This mug had to have a real knock-out price.

To produce the right mug at the right price, Pia and her colleagues had to take into account materials, colors, and design. For example, the mug is made in green, blue, yellow, or white as these pigments cost less than other shades, such as red.

Step 2. Choose a Manufacturer

Suppliers and Purchasing—The task of developing products never ends. Working with suppliers, the mug was shortened and the handle changed so it stacks more efficiently, saving space for transport, warehousing, and store display—and, not least, in the customers' cupboards at home. IKEA is always keen to banish as much air as possible from its packaging. Packages should preferably be flat for efficient transport and storage.

One supplier, a factory in Romania, has worked with IKEA for 15 years. Long-term relationships help both parties to build up a huge fund of knowledge about demands and expectations. That is why products are often

developed in close cooperation with suppliers. In the case of Trofé, for example, the new size has rationalized production by making better use of the space in the kiln during the firing process. That's cost-effective and saves time.

IKEA has introduced a code of conduct governing working conditions and environmental awareness among suppliers. This deals with matters such as health and safety in the workplace and forbids the use of child labor. The practical work of implementing this code of conduct is carried out by co-workers in IKEA Trading Service Offices worldwide. Many suppliers already meet the demands; others are working together with IKEA to carry out the necessary improvements. IKEA also works closely with external quality control and audit companies that check that IKEA and its suppliers live up to the requirements of the code of conduct.

The low price tag is crucial to the vision IKEA has of creating a better everyday life for many people. That is why IKEA works nonstop to reduce costs. But it's also a question of saving raw materials and, ultimately, the environment. The low-cost mug is one example of how environmental considerations can influence the development of products. For example, the new mug is lighter in color—a move that cuts costs and is more environmentally friendly. The less pigment that is used, the better. The mug is also lead and cadmium free.

Step 3. Design the Product

With a price point and a manufacturer in place, IKEA once again uses internal competition to find a designer and select a design for production. The designer begins the design process by writing a brief that explains the product's price, its function, the materials to be used, and the fabricator's capabilities. The designer then sends the brief to IKEA's staff designers and freelancers, and refines promising designs until settling on the one to produce. The designer wants products to be like Swiss Army knives—to get maximum functionality at minimum cost.

Step 4. Ship It

Distribution and logistics are the lifeblood of IKEA and important pieces of the puzzle on the road to a low price. IKEA strives to deliver the right number of goods to the right stores at the right time. It calculates the goods requirements and makes sure that deliveries are efficient.

Each pallet holds 2,024 mugs, which are transported from Romania by rail, road, and sea to IKEA distribution centers around the world. Transportation does, of course, have an effect on the environment, but IKEA is working toward reducing environmental impact.

Many of IKEA's products are bulky, for example, tables and chairs. IKEA pioneered the concept of flat. The company's eureka moment occurred in 1956, when one of IKEA's first designers watched a customer trying to fit a table into his car. There was only one way to do it: Remove

the legs. From that day forward, most IKEA products have been designed to ship disassembled, flat enough to be slipped into the cargo hatch of a station wagon or safely tied down on an auto's roof rack.

In IKEA's innately frugal corporate culture, where waste has been declared a "deadly sin," the flat package is also an excellent way to lower shipping costs by maximizing the use of space inside shipping containers. The company estimates transport volume would be six times greater if its items were shipped assembled. From the design studio to the warehouse floor, IKEA employees' mantra is always the same: "We don't want to pay to ship air."

Making things flat is an IKEA obsession. How many times can you redesign a simple fired-clay coffee mug? IKEA's mug was redesigned three times—simply to maximize the number of them that could be stored on a pallet. Originally, only 864 mugs would fit. A redesign added a rim such as you'd find on a flowerpot, so that each pallet could hold 1,280 mugs. Yet another redesign created a shorter mug with a new handle, allowing 2,024 to squeeze onto a pallet. While the mug's sales price has remained at 50 cents, shipping costs have been reduced by 60 percent, which is a significant savings, given that IKEA sells about 25 million of the mugs each year. Even better, the cost of production at IKEA's Romanian factory also has fallen because the more compact mugs require less space in the kiln.

When you ship 25 million cubic meters of goods all over the globe, flat-pack frugality adds up. IKEA now uses a 65 percent average fill-rate target for all the containers it ships, and it hopes to increase that to 75 percent. Meeting that goal will require further design changes and sometimes even sucking the air out of items (like IKEA's shrink-wrapped pillows, which look like giant crackers on store shelves). And, of course, flat packing shifts the cost of product assembly to the customer, saving even more.

As IKEA has shifted more of its buying from Europe to the Far East, shipping time and costs have become an even more critical concern. Last year China tied Sweden atop IKEA's list of supplier countries. The company has responded by creating a global network of distribution centers, most of which are near container ports and major truck and rail routes. There are 18 IKEA distribution centers worldwide—which handle about 70 percent of IKEA's total product line—and 4 more are under construction. The other 30 percent of IKEA's products travel directly from supplier to store.

Sometimes, however, product components actually come together for the first time in the store. In the case of the Pöäng chair, the cushion comes from Poland and the frame from China. The two pieces are united only when the customer pulls each one off the shelf.

Step 5. Sell It

IKEA sells a lot of expensive furniture, and in a traditional store this is relatively easy: Put a piece in a lush setting, let the customer fall prey to visions of wealth

and comfort, then offer plenty of easy credit. But to keep prices low, IKEA needs to sell furniture and other products such as the mug without salespeople or conspicuous price reductions. The company asks customers to assemble their furniture themselves. And IKEA doesn't want to ship it to you either. By any conventional measure, these are formidable hurdles to overcome. Yet they also explain why IKEA has worked so hard to create a separate world inside its stores—a kind of theme park masquerading as a furniture outlet—where normal rules and expectations don't apply.

The Trofé mugs arrive at IKEA stores packed on pallets. Any transportation packaging is collected for recycling. Price tags have already been placed on the mugs at the suppliers. In-store display is important. It's not just a question of displaying mugs and other products. It's also about providing inspiration for smart interior solutions. Customers contribute to the low prices at IKEA by selecting and collecting the products from the self-serve area, taking them home, and using the instructions enclosed to assemble them. Many will have already chosen the products from the IKEA catalog, of which 110 million copies are printed in 34 different language versions.

When you walk through the door of an IKEA store, you enter a meticulously constructed virtual Sweden. The first thing you encounter is a company-sponsored child-care facility. Hungry? Have some of those Swedish meatballs and lingonberries. The layout of an IKEA store guides shoppers in a predetermined path past several realistic model homes, which convey an eerily lived-in impression but are open for customers to sit in. Information kiosks provide advice on home decor. Color-coordinated cards offer plenty of suggestions on offbeat uses for products.

But the emphasis is always on price. Low-priced products that IKEA calls BTIs ("breathtaking items") are often perched on risers, framed by a huge yellow price tag. Nearby, shoppers will find other products—pricier, more design-oriented—as substitutes for the BTI.

The model homes suggest cheerful young people throwing dinner parties in hallways, using mismatched office chairs and narrow side tables. These aren't the aspirational images you'll find at Pottery Barn or Crate & Barrel. These are people who are living well in modest circumstances—frugal folks who know the value of a comfortable place to sit.

IKEA says its biggest selling point is the price tag, but it can't hurt that getting through one of IKEA's huge stores takes a lot of time. The layout is blatantly manipulative—though in a friendly, knowing way, not unlike at Disneyland—but when customers finally arrive at the checkout counter, they've had plenty of time to fully consider their purchases.

IKEA products broadcast an ethos for living in the modern world: Don't buy an ugly pitcher if you can get a stylish one for the same price. If you organize your plastic

bags, you'll feel more in control of your life. It's left-brain logic applied to the right-brain art of living well. And if happiness involves dragging a cumbersome flat package off the shelf, standing in line at the checkout, hauling the box home, and spending hours assembling a kitchen cabinet, well, 260 million customers a year are willing to make that trade-off.

And, of course, next year it will be even cheaper.

Source: Information about the Trofé coffee mug was obtained from www.ikea.com.

Questions

- 1 What are IKEA's competitive priorities?
- 2 Describe IKEA's process for developing a new product.
- 3 What are additional features of the IKEA concept (beyond its design process) that contribute to creating exceptional value for the customer?
- 4 What would be important criteria for selecting a site for an IKEA store?

Case: Dental Spa

Would a warm paraffin hand treatment during your dental cleaning or dental treatment put you at ease and make the process more bearable? That is the idea behind the new "dental spa" services opening in major cities throughout the United States. Beyond calming music and comfortable chairs and flat-screen TVs mounted on the ceiling with sound from the noise-canceling headphones that block unpleasant dental noises, at the same time foot scrubs, pedicures, or other spa services are sometimes possible. Two major trends have helped fuel the growth of dental spas: lessening of the painful

associations of dentistry and the increased cosmetic focus of dentistry that goes along with other spa treatments.

Questions

- 1 Which one of the three new service requirements would a dental spa least likely pass: service experience fit, operational fit, or financial impact? Why?
- 2 What are some of the main areas of complexity and divergence in this kind of operation relative to the standard dental clinic?

Practice Exam

1. An organization capable of manufacturing or purchasing all the components needed to produce a finished product or device.
2. The one thing that a company can do better than its competitors.
3. The six phases of the product development process.
4. A useful tool for the economic analysis of a product development project.
5. An approach that uses interfunctional teams to get input from the customer in design specification.
6. A matrix of information that helps a team translate customer requirements into operating or engineering goals.
7. The greatest improvements from this arise from simplification of the product by reducing the number of separate parts.
8. The incorporation of environmental considerations into the design and development of products or services.

1. Contract manufacturer 2. Core competency 3. Planning, concept development, system-level design, detail design, testing, production ramp-up 4. Net present value 5. Quality function development 6. House of quality 7. Design for manufacturing and assembly 8. Ecodesign

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Footnotes

1. Excerpt from T. Peters, "Beating the Great Blight of Dullness," *Forbes* ASAP (undated).
2. Adapted from Karl T. Ulrich and Steven D. Eppinger, *Product Design and Development*, 5th ed. (New York: McGraw-Hill/Irwin, 2011), pp. 12-25.

used for qualities, because QFD is widely used in the context of