

# How Ikea Designs

# Its

**S**UNDAY AT IKEA, AND THERE'S A CIRCUS IN THE living room at the Swedish furniture retailer's jam-packed Emeryville, Calif., store. A dozen Pöäng armchairs (think of a cross between a dentist's chair and your grandmother's lap) are on display and all are occupied: one by an upside-down 4-year-old wearing a tutu, another by a pregnant woman with her feet up, a third by a teenager doing homework while his family shops, and another by a young student whose mother nags, "It grows on you, and it's only \$79."

Every chair has a potential buyer sitting in it, or prodding it, or circling it like a lion around a tethered goat. A hissing noise emanates from a hydraulically operated robot over in the corner that's demonstrating the chair's sturdiness by pushing on the seat of a sample model—over and over and over again. Ikea sold a million Pöängs last year alone.

Many were purchased here at the 274,000-square-foot Ikea flagship in Northern California. When it first opened two years ago, 20,000 shoppers showed up to fill the building; sales at the store have been running at double Ikea's initial forecasts ever since. So this summer, Ikea broke ground on another store, 40 miles away in East Palo Alto. And it's building a third outlet 20 miles to the east in Dublin, just for good measure.

The same scene has been played out across North

America, where Ikea has launched 24 stores since 1985. The most powerful furniture retailer on planet Earth—with 175 stores in 32 countries—is about to get even bigger. The Swedish invasion has only just begun.

Ikea plans to open nine more stores in North America in the next year alone. By 2013, it expects to have 50 of the flag-festooned big-box furniture outlets open for business. Despite Ikea's limited presence, the company is already the seventh-largest furniture retailer in the United States. It's also one of the fastest-growing, enjoying 25.5 percent sales growth in 2001, even as sales in the industry as a whole grew by just 1.9 percent, according to trade magazine *Furniture World*. "Not only does Ikea have monster stores and great prices, it has also created a unique niche," says Howard Davidowitz of Davidowitz & Associates, a retail consulting firm. "It's the quintessential power retailer in America."

Worldwide, Ikea's influence is even more dramatic. The company is poised to become the United Kingdom's leading furniture seller, despite operating only 11 stores there—proof that Ikea's unique retail formula creates a powerfully magnetic draw. The relentless global advance has made Ikea, based in Almhult, Sweden, a financial powerhouse. Though the company is privately held and doesn't release profit figures, its worldwide sales have grown by an estimated 20 per-



The Swedish retailer dominates markets in 32 countries, and now it's poised to conquer North America. Its battle plan: Keep making furniture less expensive, without making it cheap.

BY LISA MARGONELLI

# Sexy Price Tags





cent a year for the past five years, and its 2001 revenues topped \$9.6 billion. Interbrand, a marketing research firm, recently ranked Ikea 44th on its list of the top 100 most valuable global brands, ahead of Pepsi, Harley-Davidson, and Apple.

So what's its secret? Much has been said about the quirks that make shopping at Ikea such a peculiar experience—the cavernous outlets; the conspicuously absent salespeople; the cafes that serve Swedish meatballs and lingonberry juice; the heavy boxes that customers are expected to wrestle off towering racks; the complex furniture that they must assemble themselves.

But above all else, one factor accounts for Ikea's success: good quality at a low price. Ikea sells furniture that's cheap but not cheapo, at prices that typically run 30 to 50 percent below the competition's. While the price of other companies' products tends to rise over time, Ikea says it has reduced its retail prices by a total of about 20 percent during the past four years.

At Ikea the process of driving down costs starts the moment a new item is conceived and continues relentlessly throughout its production run. The price of a basic Pöäng chair, for example, has fallen from \$149 in 2000 to \$99 in 2001 to \$79 today. Ikea expects the most recent price cut to increase Pöäng sales by 30 to 50 percent.

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 furniture that the entire world wants to buy.

## Step 1. Pick a Price



MOST MANUFACTURERS DESIGN A PRODUCT, THEN TRY TO figure out how to make it for a target price. At Ikea, the price literally comes first. Every product's sale price is set by a product developer like Per Carlsson, a large, bearded man who spends his days creating Volvo-style kitchens at Yugo prices. "Our goal," he says, "is to solve problems."

Typically, those "problems" are first identified in what Ikea calls its product-strategy council—a group of globe-trotting senior executives that monitors consumer trends and establishes priorities for Ikea's product lineup. Think of the product-strategy council as a kind of central nervous system: It senses changes in the environment and relays them to subordinates such as Carlsson, the lead developer in the company's kitchen department.

One "problem" recently identified by the council: Around the world, the kitchen has slowly replaced the living room as the social and entertaining center of the home. That means today's kitchens need to project comfort and cleanliness to guests while also reflecting the gourmet aspirations of the host. But how do you do that globally? Comfort in Asia might be expressed in small, cozy appliances and spaces, while in North America, consumers aspire to own supersize glasses and giant refrigerators with names like Viking. Carlsson's job is even more difficult when the council hands down directives that are broad, or even cryptic. He's gotten instructions to "make more furniture for small spaces" and to "think cubic."

After receiving a new set of instructions, Carlsson strolls

up to the showroom on the third floor of Ikea's headquarters, where each of the company's kitchen items is marked with a large red-and-yellow price tag. Then he applies what Ikeans refer to as "the matrix."

Ikea's product managers use a price matrix to identify holes in the company's product lineup—and how much to charge for a new product. Demonstrating how the matrix works, Carlsson draws a tic-tac-toe grid on a piece of paper, explaining that he can plot the price and style of any Ikea item within it. Ikea has three basic price ranges—high, medium, and low—and four basic styles: Scandinavian (sleek wood), modern (minimalist), country (neo-traditional), and young Swede (bare bones). To identify market opportunities, Carlsson takes a product council directive, plots his existing product lineup on the grid, and looks for empty spaces. Starting with the council's small-spaces directive, for example, Carlsson found plenty of stand-alone kitchen islands at Ikea's higher price points, but he noticed that he was missing an inexpensive kitchen unit suitable for use in studio apartments or offices. Carlsson surveys the competition to figure out how much the new product should cost, targets a price 30 to 50 percent lower than the rivals', and voilà: An Ikea price point is born. This is the method Carlsson used to establish the target price for a low end Ikea kitchen—complete with cabinets, sink, stove, and refrigerator—at \$650.

**PRODUCT DESCRIPTION**  
Top panel Solid birch. Oil.  
Main parts Solid birch. Clear.  
Varnish.  
Solid birch/birch. Stainless steel.  
18/10.

**ENVIRONMENT**  
Renewable raw material (wood).  
Solid wood - not from natural  
harvest.  
Possible to separate for material or  
energy recovery.

**PRODUCT MEASUREMENT**  
Width: 19 3/8"  
Depth: 25 5/8"  
Height: 33 1/8"

**UNASSEMBLED  
PACKAGE MEASUREMENTS**  
pk 37 1/8x20 3/8x 2 1/4"  
(82x52x17 cm)  
Weight 49 lb.  
(22 kg)

**CARE INSTRUCTIONS**  
Wipe clean using a damp cloth and  
a mild cleanser.  
Wipe dry with a clean cloth.

Serving table  
**VÄRDE**  
20x33" birch

- Two legs with casters  
and two legs with  
adjustable feet.
- Stainless steel shelf  
included.

Design: Mikael Wamman

**\$149**



## Step 2. Choose a Manufacturer



IKEA WAS FOUNDED IN 1943 BY INGVAR KAMPRAD, AN ENTERprising lad who got his start in business selling matches at the age of 5. When he was 17, his father gave him some money, which he used to create Ikea—a local retail business that specialized in selling basic household goods at discount prices. (The name comes from his initials, plus the first letters of the names of the family farm and the village where he grew up.)

tor product quality and enforce Ikea's global standards for wages and safety, but the company also fosters competition among them to keep production costs down.

When Carlsson puts out a description of the target cost and basic specifications of a new kitchen product, the trading offices vie to offer the most attractive production package, including materials (cheap hardwood or Indonesian rubber,

for example) and a factory where craftspeople have the necessary skills to produce unique items in sufficient volume. Volume nurtures efficiency, and efficiency equals lower prices, so Carlsson always tries to establish production runs that will keep three shifts busy at a factory dedicated exclusively to Ikea's product line. In the case of the \$650 kitchen unit, for example, the Italian office proposed a group of factories that could produce steel sinks, faucets, custom-molded plastic doors, stoves, and refrigerators, and assemble the whole lot for the target price. "High volume is the trick!" Carlsson laughs gleefully.

Yet even as Ikea fosters competition among suppliers, it also treats

them as long-term business partners—another legacy of the company's early experience in Poland. One afternoon in Sweden, Carlsson puts on his coat and heads down the road to visit a supplier of cabinet doors. The supplier is actually owned by Ikea, as a subsidiary called Swedwood, yet it must compete for Ikea's business like an independent contractor—by offering low prices and good service. In return, the supplier receives a guarantee of high volume that encourages investment in cost-saving technology and equipment. Swedwood is already highly automated, but the company's new spray room—which uses a set of elaborately choreographed robotic nozzles to apply high-gloss lacquer to cabinet doors—is even more space-age than the rest of the plant.

To justify the investment in the advanced spray room, Swedwood plant manager Peter Beckert put his faith in the strength of his relationship with Carlsson. "I had to trust that these items will be big sellers for more than a year," Beckert says. Ultimately, the new spray room reduced the cost of Swedwood's shiny cabinet doors by 30 percent. Carlsson is happy as he leaves the factory. Through deals like this, he's managed to lower Ikea's average kitchen product prices for five years running.



**HEALTHY COMPETITION** With a network of 1,800 suppliers that extends from Sweden (left) to China, Ikea selects a manufacturer even before a new item is designed.

By the early 1950s, Kamprad had expanded his product line to include furniture. He opened Ikea's first store in 1953, and by the 1960s his low-price strategy had proved so successful that Ikea's Swedish competitors pressured the nation's furniture manufacturers to stop supplying their cheaper rival. Forced to look elsewhere for production capacity, Kamprad established relationships with some unlikely contractors: Polish furniture makers working on the other side of the Iron Curtain. But the odd arrangement proved both inexpensive and effective, as Ikea eventually succeeded in getting the communist factories to retool to meet its unique production requirements.

The push to discover ever-cheaper labor in ever-cheaper markets has been one of Ikea's signature strategies. After settling on a target price for a product, Ikea determines what materials will be used and what manufacturer will do the assembly work—even before the new item is actually designed.

Ikea now buys from about 1,800 suppliers in 55 countries. In the past five years, it has increased its buying in developing countries from 32 to 48 percent. To manage relationships with far-flung suppliers, the company operates 43 local trading offices in 33 countries, including China, India, Indonesia, Taiwan, Thailand, and (of course) Poland. The local offices moni-



## 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. Carlsson begins his kitchen design process by writing a brief that explains the product's price, its function, the materials to be used, and the fabricator's capabilities. He then sends the brief to Ikea's pool of nine staff designers and 80 freelancers, and refines promising designs until he settles on the one he wants to produce.

Carlsson wants his kitchens to be a little like Swiss Army knives—to get maximum functionality out of limited space, every piece should have multiple uses. His cabinets, for example, can sit vertically or horizontally on the floor.

Värde, a freestanding kitchen series, is a good seller—not only because of its rugged wood-and-steel construction but also because people often buy the pieces for use in their bedrooms and bathrooms.

But appearance and utility are only part of Ikea's design ethos. To reduce costs, Ikea designers and engineers also focus on using materials as efficiently as possible, analyzing the function of every furniture surface to determine which materials, finishes, and construction techniques will work best for the least amount of money. On the low end, Ikea pioneered a method of printing finishes directly onto fiberboard and particleboard—a technique that's most appropriate for low-stress surfaces on cheaper products. Yet even at the high end, costs and supplies are optimized. Värde's kitchen com-



**GLOBAL CITIZEN** Designer Maria Vinka doesn't use customer profiles. Her designs are derived from her own experiences.

ponents incorporate five different parts of the tree, with the most expensive wood used on cutting surfaces and the least expensive inside the drawers. Money saved on wood goes toward high-quality hinges and drawer pulls, reinforcing the customer's sense that Värde is a classy item.

The designers themselves tend to be people like Maria Vinka, a staff designer at company headquarters who rides her bike to work every day, pedaling past Almhult's trees and little stone houses. Like most Ikea designers, Vinka tends to take a humanistic view of her job. "We don't use customer profiles," she says. "My customer is me."

When asked to design fabrics last winter, Vinka created them based on what was on

her mind at the time: peace. She designed gingerbread people with bodies that are filled with flags, a collage of pictures of her co-workers' heads, and a carpet with the continents of the world rearranged to make neighbors of the United States and the Middle East. Her new designs began hitting store shelves this fall.

## The Ikea Touch

**This kitchen unit sells for around \$1,000 in Europe. What's the secret? A sexy price is more than skin-deep.**

**1** Higher-quality cuts of wood are used in high-stress, high-visibility parts of kitchen systems, such as countertops.

**2** Lower-grade wood or particleboard is used in areas such as the insides of drawers or cabinets, where customers will seldom see it.

**3** Ikea tests products both to ensure that they're safe and to find out where material costs can be cut. By placing weights on shelves in a lab, for example, Ikea's engineers try to balance cost-cutting with sturdiness.

**4** Ikea often transfers technology from one production arena to another. For example, after Ikea founder Ingvar Kamprad visited a manufacturer of plastic sink drains, he decided to start making a popular chair using a similar process.



## Step 4. Ship It



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 Bang mug has been designed three times so far—simply to maximize the number of them that can 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. Last year, 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 has also fallen because the more compact mugs require less space in the kiln.

**FLAT IS BEAUTIFUL** By designing products for easy transport, Ikea has reduced the volume of goods shipped by 83 percent.



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 by 2006. Meeting that goal will require further design changes (as with the Bang mug) 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 Pöng 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.



**5** Whenever feasible, Ikea tries to use more expensive hinges and drawer pull assemblies. High-end hardware offers the signature "pull" of more expensive cabinets, sending a subtle quality signal to customers.

**6** Kitchens are sold disassembled to reduce shipping costs. Ikea engineers videotape construction sessions with consumers to ensure that assembly instructions aren't too difficult. This is called "Stins" testing, because Ikea used to try out furniture designs on the klutziest man in Almhult—a railway signalman named Stins.



# Welcome to Almhult, the Global Village

The Swedish town where Ikea was born is an unlikely place from which to run a worldwide empire. But Ikea's distinctive product line and quirky retail formula flow directly from the town's unique sensibilities. "We work with the local experience and distribute it globally," says Ikea product strategist Lars Dafnas.

Almhult resembles a model railway village, with two streets of neatly painted shops and a few quaint houses. The area is inhabited by 15,000 people and roughly a zillion trees. It's a town so rustic that chain saws are a big seller at the sporting goods shop, and the local police head home promptly each day at 5 p.m.

Almhult and its ways were the inspiration for local-boy-made-good Ingvar Kamprad, who is now the world's 16th-richest person, worth an estimated \$13.4 billion. From Almhult's trees, Kam-



prad developed Ikea's distinctive blond-wood style. From its stony fields and centuries of frugality, he engineered Ikea's cost-conscious ethos.

Most important, Almhult's residents embody a lifestyle that Ikea's products are designed to address. Almhult's dark winters encourage the use of little lamps, tea lights, indoor plants, and fluffy comforters—items that are mainstays of Ikea's home accessory lineup. While working on a catalog shoot, a young Ikea decorator explains that she used her friends' homes in Almhult as models. "They're the second generation in the home, a young couple with a baby, and now all their relatives are coming for Christmas," she says. "So where will they eat? Where will they put their coats? Where will they sleep?" By paying close attention to simple questions like those, Ikea has learned how to create the products that customers want to buy, all across the globe.



**THAT LIVED-IN FEELING** Ikea stores use realistic displays to help customers help themselves.

## Step 5. Sell It

SELLING EXPENSIVE FURNITURE is relatively easy: Put a piece in a lush setting, let the customer fall prey to aspirational visions of wealth and comfort, then offer plenty of easy credit. Traditional furniture sales have gotten their oomph from consumers' domestic fantasies and the

salesman's push—an experience that makes buying a sofa almost as stressful as buying a new car.

But to keep prices low, Ikea needs to sell furniture 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, which may be why the company's otherwise lovely website makes it so torturous for shoppers to complete purchases. 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.

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 sug-

gestions 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. ♦

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