

# SUMMER BOSS

## TAILORED TO FIT

Spanish clothier Zara turns the rules of supply chain management on their head. The result? A super-responsive network and profit margins that are the envy of the industry. **Kasra Ferdows, Michael A. Lewis, and Jose A.D. Machuca** report.

**W**hen a German wholesaler suddenly cancelled a big lingerie order in 1975, Amancio Ortega thought his fledgling clothing company might go bankrupt. All his capital was tied up in the order. There were no other buyers. In desperation, he opened a shop near his factory in La Corua, in the far north-west corner of Spain, and sold the goods himself. He called the shop Zara.

Today, more than 650 Zara stores in some 50 countries attract well-heeled customers in luxury shopping districts around the world and Seor Ortega is arguably the richest man in Spain. The clothing company he founded, called Inditex, has been growing ever since he opened that first Zara shop. From 1991 to 2003, Inditex's sales - 70 per cent of which spring from Zara - grew more than 12-fold to net profits ballooned 14-fold. In May 2001, a particularly tough period for initial public offerings, Inditex sold 25 per cent of its shares to the public.

The lesson Ortega learned from his early scare was this: To be successful, "you need to have five fingers leeching the factory and five leeching the customer". Translation: Control what happens to your product until the customer buys it. In adhering to this philosophy, Zara has developed a super-responsive supply chain. The company can design, produce and deliver a new garment and put it on display in its stores worldwide in a mere 15 days.

Such a pace is unheard-of in the fashion business where designers typically spend months planning for the next season. Because Zara can offer a large variety of the latest designs quickly and in limited quantities, it collects 85 per cent of the full ticket price on its retail clothing, while the industry average is 60 to 70 per cent.

Zara defies most of the current conventional wisdom about how supply chains should be run. Unlike so many of its peers, Zara keeps almost half of its production in-house. Far from pushing its factories to maximise their output, the company intentionally leaves extra capacity. Rather than chase economies of scale, Zara manufactures and distributes products in small batches. Instead of relying on outside partners, the company manages all design, warehousing, distribution and logistics functions itself.

We conducted a series of interviews with senior managers at Inditex and examined company documents and a wide range of

other sources. We were particularly curious to see if Zara had discovered any groundbreaking innovations. We didn't find any. Instead, we found a self-reinforcing system built on three principles:

■ **Close the communication loop.** Zara's supply chain is organised to transfer both hard data and anecdotal information quickly and easily from shoppers to designers and production staff. It's also set up to track materials and products in real time every step of the way, including inventory on display in the stores. The goal is to close the information loop between the end users and the upstream operations of design, procurement, production and distribution as quickly and directly as possible.

■ **Stick to a rhythm across the entire chain.** At Zara, rapid timing and synchronicity are paramount. To this end, the company indulges in an approach that can best be characterised as "penny foolish, pound wise". It spends money on

fads and ever-shifting industry practices.

In Zara stores, customers can always find new products - but they're in limited supply. There is a sense of tantalising exclusivity as only a few items are on display even though stores are spacious (the average size is about 1000 square metres). A customer thinks, "This green shirt fits me and there is one on the rack. If I don't buy it now, I'll lose my chance."

Such a retail concept depends on the regular creation and rapid replenishment of small batches of new goods. Zara's designers create about 40,000 new designs annually, from which 10,000 are selected for production. Some of them resemble the latest couture creations. But Zara often beats the high-fashion houses to the market and offers almost the same products, made with less expensive fabric, at much lower prices. Since most garments come in five to six colours and five to seven sizes,

Zara's system has to deal with something in the realm of 300,000 new stock-keeping units (SKUs), on average, every year.

This "fast fashion" system depends on a constant exchange of information through every part of Zara's supply chain, from customers to store managers, from store managers to market specialists and designers, from designers to production staff, from buyers to subcontractors, from warehouse managers to distributors, and so on.

Zara's single, centralised design and production centre is attached to Inditex headquarters in La Corua. It consists of three spacious halls, one for men's and one for children's. Unlike most companies, which try to excise redundant labour to cut costs, Zara makes a point of running three parallel, but operationally distinct, product families. Accordingly, separate design, sales and procurement and production-planning staff are dedicated to each clothing line. A store may receive three different calls from La Corua. In one week from a market specialist in each channel; a factory making shirts might deal simultaneously with two Zara managers, one for men's shirts and another for children's shirts.

In each hall, floor-to-ceiling windows overlooking the Spanish countryside reinforce a sense of cheery informality and openness.

Zara's cadre of 200 designers sits in the midst of the production process. Split among the three lines, these mostly twenty-something designers - hired because of their enthusiasm and talent, no prima donnas allowed - work next to the market specialists and procurement and production planners. Large circular tables play host to impromptu meetings. Racks of the latest fashion magazines and catalogues fill the walls. A small prototype shop has been set up in the corner of each hall, which encourages everyone to comment on new garments as they evolve.

Designers can quickly and informally check initial sketches with colleagues. Market specialists, who are in constant touch with store managers (and many of whom have been store managers themselves), provide quick feedback about the look of the new designs (style, colour, fabric and so on) and suggest possible market price points. Procurement and production planners make preliminary, but crucial, estimates of manufacturing costs and available capacity.

The cross-functional teams can examine prototypes in the hall, choose a design and commit resources for its production and



anything that helps to increase and enforce the speed and responsiveness of the chain as a whole.

■ **Leverage your capital assets to increase supply chain flexibility.** Zara has made major capital investments in production and distribution facilities and uses them to increase the supply chain's responsiveness to new and fluctuating demands. It produces complicated products in-house and outsources the simple ones.

Some of Zara's practices may be directly applicable only in high-tech or other industries where product life cycles are very short. But Ortega's simple philosophy of reaping profits through end-to-end control of the supply chain applies to any industry. Zara shows managers not only how to adjust to quixotic consumer demands but also how to resist management

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Linking Technology and People to Profits

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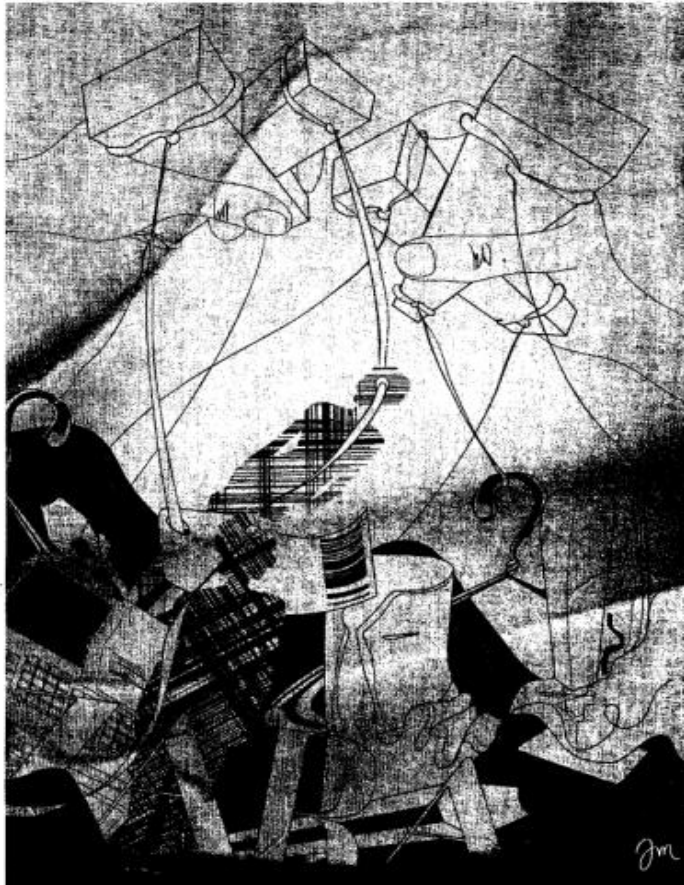


Illustration: Jo Morley

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introduction in a few hours if necessary.

Zara is careful about the way it employs new information technology. Customised handheld computers support the connection between the retail stores and La Corua. These PDAs segment regular (often weekly) phone conversations between the store managers and the market specialists assigned to them. Stores transmit all kinds of information to La Corua, such as hard data as orders and sales trends and such soft data as customer reactions and the "buzz" around a new style.

Once the team selects a prototype for production, the designers refine colours and textures on a computer-aided design system. If the item is to be made in one of Zara's factories, the specifications are transmitted directly to the relevant cutting machines and other systems in that factory. Bar codes track the cut pieces as they are converted into garments through the various steps involved in production (including sewing operations usually done by subcontractors), distribution and delivery to the stores, where the communication cycle begins.

The constant flow of updated data mitigates the so-called bullwhip effect - the tendency of supply chains (and all open-loop information systems) to amplify small disturbances. A small change in retail orders, for example, can result in wide fluctuations in factory orders after it's transmitted through wholesalers and distributors. In an industry that traditionally allows retailers to change a maximum of 20 per cent of their orders once the season has started, Zara lets them adjust 40 to 50 per cent. In this way, Zara avoids costly over-production and the subsequent sales and discounting prevalent in the industry.

The relentless introduction of new products in small quantities, ironically, reduces the usual costs associated with running out of any particular item. Indeed, Zara makes a virtue of stock-outs. Empty racks don't drive customers to other stores because shoppers always have new things to choose from and are often happy to snatch what they can.

In fact, Zara has an informal policy of moving unsold items after two or three weeks. Since the stores receive small shipments and carry little inventory, the risks are small: unsold items account for less than 10 per cent of stock, compared with the industry average of 17 per cent to 20 per cent. Furthermore, new merchandise displayed in limited quantities and the short window of opportunity for purchasing items motivate people to visit Zara's

shops more frequently than they might otherwise.

The high traffic in the stores circumvents the need for advertising. Zara devotes just 0.3 per cent of its sales to ads, far less than the 3 per cent to 4 per cent that its rivals spend.

Zara designs and distributes all its products, outsources a smaller portion of its manufacturing than its peers and owns nearly all its

strictly enforced: if a store in Barcelona misses the Wednesday deadline, it has to wait until Saturday.

Order fulfilment follows the same strict rhythm. A central warehouse in La Corua prepares the shipments for every store, usually overnight. Once loaded onto a truck, the boxes and racks are either rushed to a nearby airport or routed directly to the

tagged, and most are shipped hung up on racks, store managers can put them on display the moment they're delivered.

This relentless and transparent rhythm guides daily decisions by managers and reinforces the production of garments in small batches, though larger batches would reduce costs. It validates the company policy of delivering two shipments every week, although less frequent shipments would reduce distribution costs. It justifies transporting products by air and truck, although ships and trains would lower transportation fees. And it provides a rationale for shipping some garments on hangers, although folding them into boxes would reduce freight charges.

Zara produces roughly half of its products in its own factories. It buys 40 per cent of its fabric from another Inditex firm, Comdile (accounting for almost 90 per cent of Comdile's total sales), and it purchases its dye stuff from yet another Inditex company. Zara's managers reason that investment in capital assets can actually increase the organisation's overall flexibility.

Owning production assets gives

**Large circular tables play host to impromptu meetings. Racks of the latest fashion magazines and catalogues fill the walls.**

retail shops. This level of control allows Zara to set the pace at which products and information flow. The entire chain moves to a fast but predictable rhythm that begins in the retail shops. Store managers in Spain and southern Europe place orders twice weekly, by 3pm Wednesday and 6pm Saturday and the rest of the world places them by 3pm Tuesday and 6pm Friday. These deadlines are

European stores. All trucks and connecting air freight run on established schedules, like a bus service, to match the retailers' twice-weekly orders. Shipments reach most European stores in 24 hours, US stores in 48 hours and Japanese shops in 72 hours, so store managers know exactly when the shipments will come in.

Because all the items have already been pre-priced and

Zara a level of control over schedules and capacities that, its senior managers argue, would be impossible to achieve if the company were entirely dependent on outside suppliers.

Zara can ramp up or down production of specific garments because it normally operates many of its factories for only a single shift. These highly automated factories can operate extra hours if needed to meet seasonal or unforeseen demands. Specialised by garment type, Zara's factories use sophisticated just-in-time systems, developed in co-operation with Toyota, that allow the company to customise its processes and exploit innovations.

Zara's senior managers follow a fundamental rule of queuing models, which holds that waiting time shoots up exponentially when capacity is tight and demand is variable. Surprisingly, these practices don't burn up investment dollars. Thanks to the responsiveness of its factories and distribution centres, Zara has dramatically reduced its need for working capital. Because the company can sell its products just a few days after they're made, it can operate with negative working capital. The cash thus freed up helps offset the investment in extra capacity.

Perhaps the deepest secret of Zara's success is its ability to sustain an environment that optimises the entire supply chain rather than each step. Few managers can imagine sending a half-empty truck across Europe, paying for air freight twice a week to ship coats on hangers to Japan, or running factories for only one shift. But this is exactly why Zara's senior managers deserve credit. They have stayed the course and resisted setting performance measures that would make their operating managers focus on local efficiency at the expense of global responsiveness. They have hardwired into the organisation the lesson Omega learned almost 30 years ago: touch the factories and customers with two hands. Do everything possible to let one hand help the other. And whatever you do, don't take your eyes off the product until it's sold.

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