

Digitalization





Digitalizing the Supply Chain

Technology is disrupting and transforming traditional supply chain management. From raw material at a fabric mill to tracking consumer behavior at retail, each step of the value chain is being driven by digitalization. Li & Fung is building a platform to digitalize the global supply chain, allowing data and information to flow seamlessly from end-to-end, delivering valuable business insights and customized services that meet our customers' needs.



Creating supply chains of the future

A recent study¹ estimates that 40% of today's Fortune 500 companies on the S&P 500 won't even exist in 10 years.

The idea of disrupt or be disrupted has never been truer.

At Li & Fung we are embedding innovation into the core of our business and into the culture of our people. Technology is enabling us to digitize information and processes so we can bring speed inside our organization and to the way we add value to our customers and supply chain partners. We recognize the importance of embracing change in the world around us and in our industry, and the digital transformation that underscores our new Three-Year Plan (2017 – 2019) demonstrates our ambition to lead our industry into the future.

“
Our Three-Year Plan signals a bold transformation. To lead, we must embrace change.

Spencer Fung, Group CEO, Li & Fung

The convergence of technologies such as cloud computing, social media, mobile devices and data analytics, coupled with changing consumer behavior and expectations led by millennials and Generation Z have fundamentally changed our industry and the retail landscape. Consumers are demanding more transparency; they want to know how and where a product was made, where the materials come from and understand the sustainability of the products they purchase.

We are in a unique position to create the supply chain of the future for our customers to deliver solutions on speed, quality and sustainability. Over the next three years, our aim is to build an integrated digital platform to connect every stakeholder and process in our global supply chain.

The Internet of Things (IoT) is no longer a trend to watch, it is the reality of our world today. The end consumer already lives a fully digital life, relying on their smartphones and apps for all aspects of life from entertainment, to work, shopping, travelling, and everything in between. On the other end are the service providers who must digitize legacy systems and supply chains and rethink how they offer products and services in this new world. In the consumer goods industry, the prevalence of devices, connectivity, and the expectation of instantaneous information is changing the relationship between the end consumer, the brand or retailer, and their global supply chain and this is impacting every industry all over the world.

A fully digital platform integrating our partners along the supply chain unlocks a world of data insight and creates a platform that does not exist today. We see this as a natural step in the evolution of our business and a necessary reinvention of our operating model, to continue as the supply chain leader in our industry. 📱

“
By 2018, there will be 22 billion IoT devices installed. Six billion connected things will be requesting support and responding to service requests from things, creating new service businesses. In five years, 1 million new devices will come online every hour. IoT devices and solutions have the potential to redefine competitive advantage in every type of economic activity and fundamentally alter how consumers interact with enterprises and how enterprises interact with their supply chain and distribution partners.

Gartner

¹ Study conducted by John M. Olin School of Business at Washington University

Disruption of the traditional supply chain

The traditional end-to-end supply chain, often conceptualized as a linear model, is being disrupted.

Disparate and outdated technology systems, inefficient manual processes and lack of transparency are just a few examples of what isn't working in today's traditional, analog supply chain.

From consumer behavior and engagement to omni-channel and new retail formats, disruption is occurring at every level of retail from product creation to delivery and consumer purchase. Technology is driving this disruption, and leading brands and retailers need to understand these new technologies and leverage them to secure their very survival.

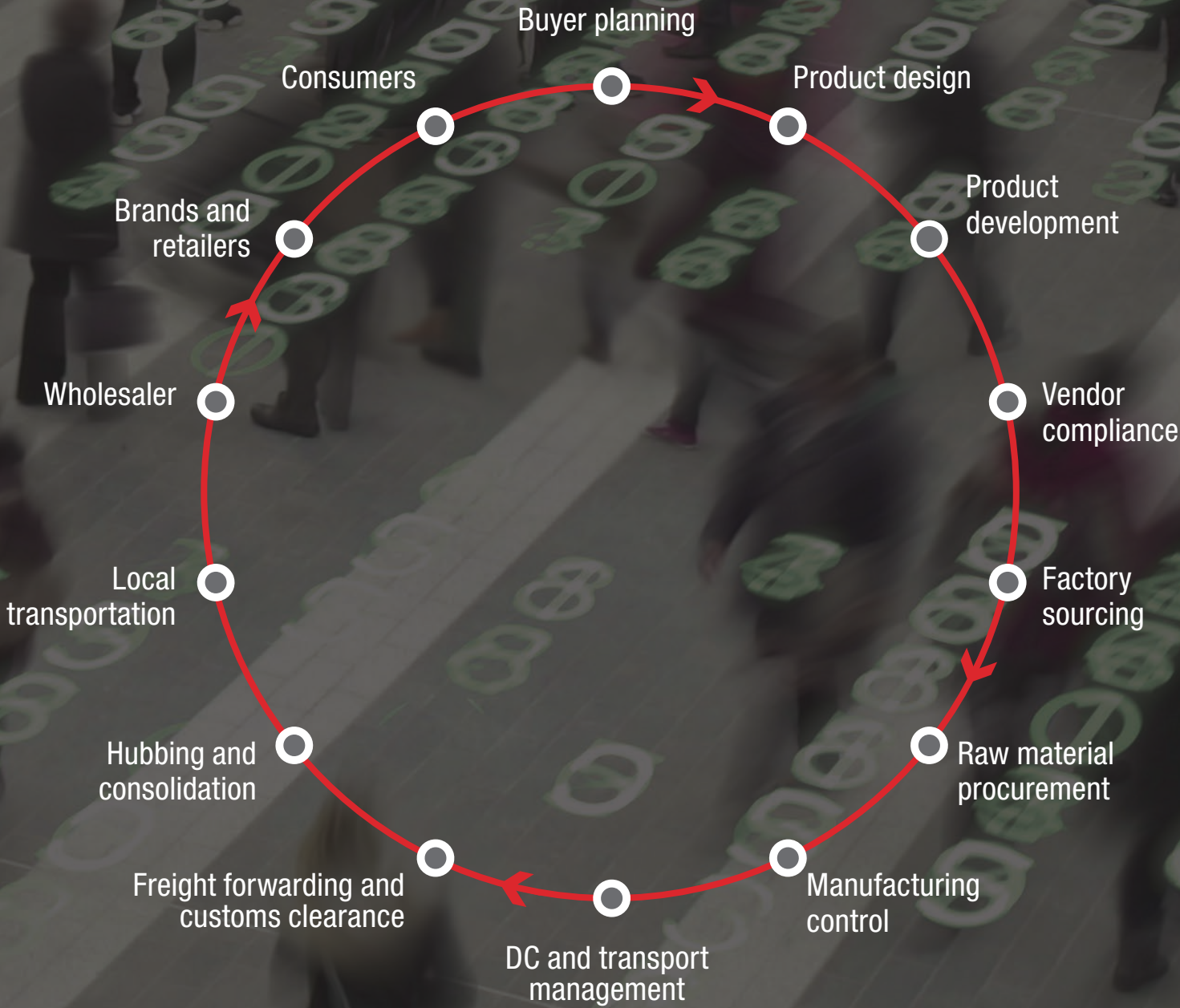
There are a number of new technologies disrupting the retail, manufacturing and logistics industry that have fundamentally changed the traditional supply chain.

3D printing is not new. For decades it has been used in multiple industries in different capacities, including footwear, toys, consumer electronics and the automotive industry. The technology used to be prohibitively expensive and access was limited, but today it's a different story. Not only are 3D printers affordable, there are a whole range of new services that are so easy that a consumer doesn't need to own a 3D printer to create a product. For instance, 3Dprintlr is a startup that developed a search engine for locating 3D printing services. Users simply upload a 3D file for printing, select the materials they want their file to be printed in and get a list of quotes to compare. They can then order the print directly, with 3Dprintlr taking a cut of any sales its search engine generates. With analyst firm Canals anticipating that the worldwide market for 3D printers and its associated materials and services will grow to \$20.2 billion by 2019, it's clear that 3D printing is disrupting the entire value chain by putting the customer in control in terms of demand and production.

The logistics industry is facing unprecedented change, and forging ahead with the use of **automation** and **robotics** in warehouses and drones for last mile delivery and fulfillment. Drone-based technologies are still new and being tested commercially, but the unique capabilities that this technology offers to support today's production and aftermarket retail looks promising. The "uberization" of the transport industry refers to how significantly Uber disrupted the taxi industry with the idea of ride-sharing, and that's spilled over into the trucking industry as well. A number of companies now offer uber-like trucking services with easy to use apps, giving the consumer more visibility and control.

One disruptive technology that has garnered significant interest and research, both because of its ability to disrupt as well as the new opportunities it presents, is the Internet of Things (IoT). Connecting billions of devices to the internet and to each other and to everything that touches our daily lives at work, at home and everywhere in between creates an entire ecosystem that is connected, with tremendous data that can be analyzed and used to create more services, products and value.

Data provides brands and retailers with a full 360-degree view of a consumer and their habits and preferences. This enables the development of fully personalized products and services.




Every industry is being driven by digitalization. The winning companies will know how to use data to shape the end-to-end customer experience.

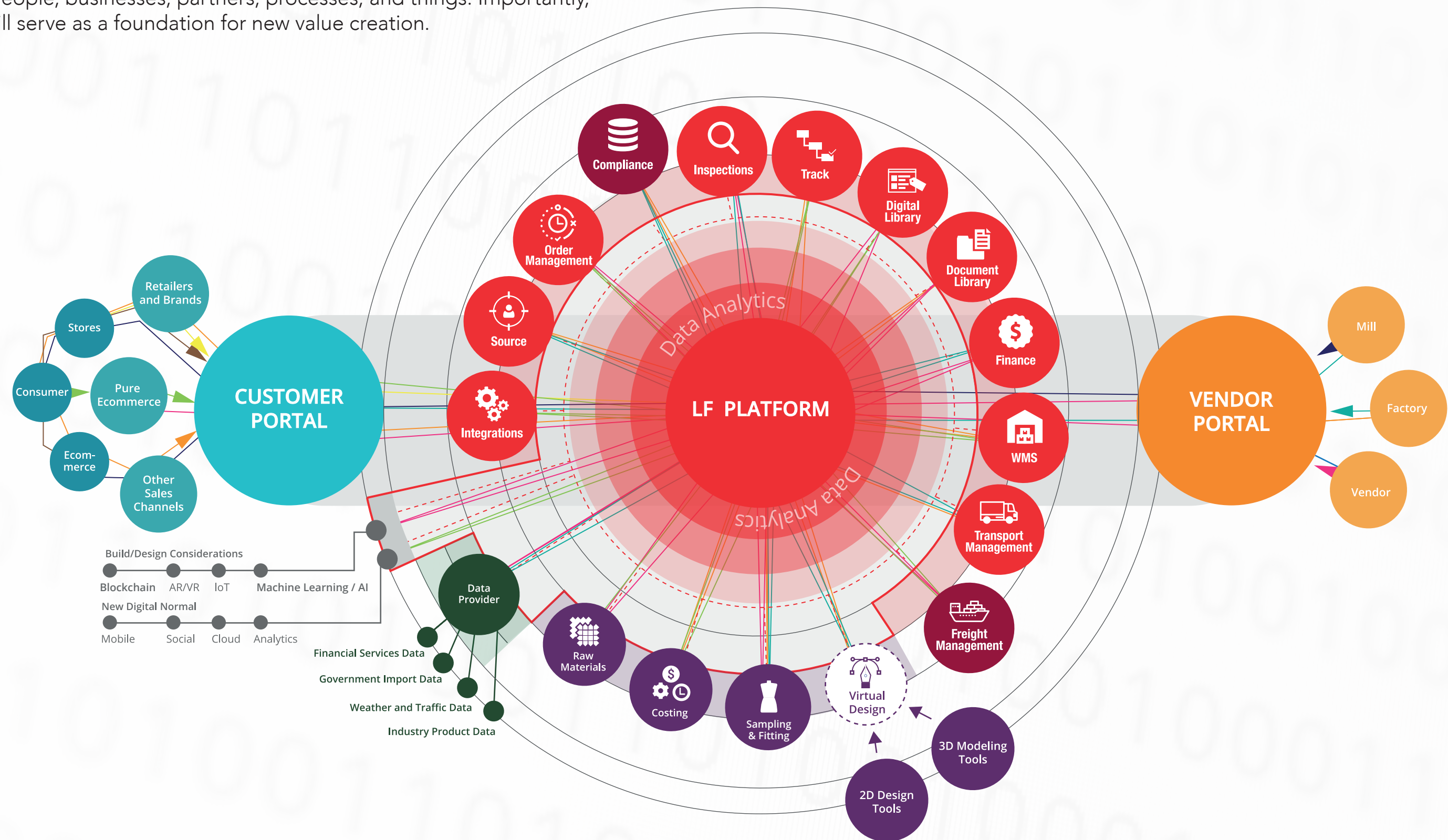
The digital supply chain

A digital platform is the core of our new business model. It will fundamentally change how we operate as we integrate ecosystems of people, businesses, partners, processes, and things. Importantly, it will serve as a foundation for new value creation.

The supply chain of the future is a multidimensional world where brands and retailers, vendors and suppliers can seamlessly connect into an ecosystem of our digital services and data insights that was not possible until now.

Beyond simply digitizing manual processes, our ambition is to reach a state where we deliver

predictive analytics to enhance the business performance of our customers and partners. Li & Fung's integrated digital platform continues to be built to capture and share data across the entire value chain, to enable smarter, faster and more effective decisions. This is the supply chain of the future. 



The power of platform-driven ecosystems

Our digital platform is at the core of an overarching digital strategy that covers the entire organization. It will enable us to create a seamless and integrated digital supply chain that delivers on speed, transparency and data-driven insights.

According to Accenture, ecosystems are the new bedrock of digital. Their recent report states: "86% of retail executives agree that platforms will be the glue that brings organizations in the digital economy. Companies need to master digital technologies to help drive growth and protect core business profitability. However, the next wave of disruptive innovation will arise from technology-enabled, platform-driven ecosystems."²

With all of our services connected and online, our digital platform will enable a shared ecosystem for all of our stakeholders. The value creation will come from the engagement and interaction of our customers, suppliers, vendors or industry partners. As these interactions grow and scale, value comes from the interactions and the insights we draw from it. This opens an entirely new area of growth and service for our customers.

In every industry, companies like Bosch, Disney, GE and Merck are rapidly building platforms as their customers demand more intuitive, real-time, integrated solutions and services.

With a platform-based business model, ideation takes on a whole new dimension when you consider the possibilities of intra-ecosystem innovation and collaboration.

Getting our vendors online and connected

Total Sourcing is our digital front end platform connecting our global network of vendors, suppliers and factories. By digitizing manual processes like receiving and accepting orders and submitting shipping and billing notices, our vendors gain added value in productivity, transparency and efficiency.

With this digital portal, we're able to facilitate greater collaboration with our vendor partners. They can update their profiles, upload products and respond to alerts which are automatically visible to all Li & Fung partners. Records and documentation are stored online and accessible by all parties providing greater transparency, and transactions are standardized.

As transparency becomes a given, digitalization allows us and our stakeholders to understand our supply chain performance and impact better than ever before. 📱



We are building a fully digitalized platform that is at the heart of the digital supply chain of the future.

Manuel Fernandez, CTO, Li & Fung

Further Reading



Accenture Technology Vision for Retail 2016 - **Accenture**

The new retail ecosystem: From disrupted to disruptor - **PwC**



How digitization makes the supply chain more efficient, agile, and customer-focused - **Strategy& and PwC**

² Accenture report: "Accenture Technology Vision for Retail 2016"

Virtual design technology is changing the game

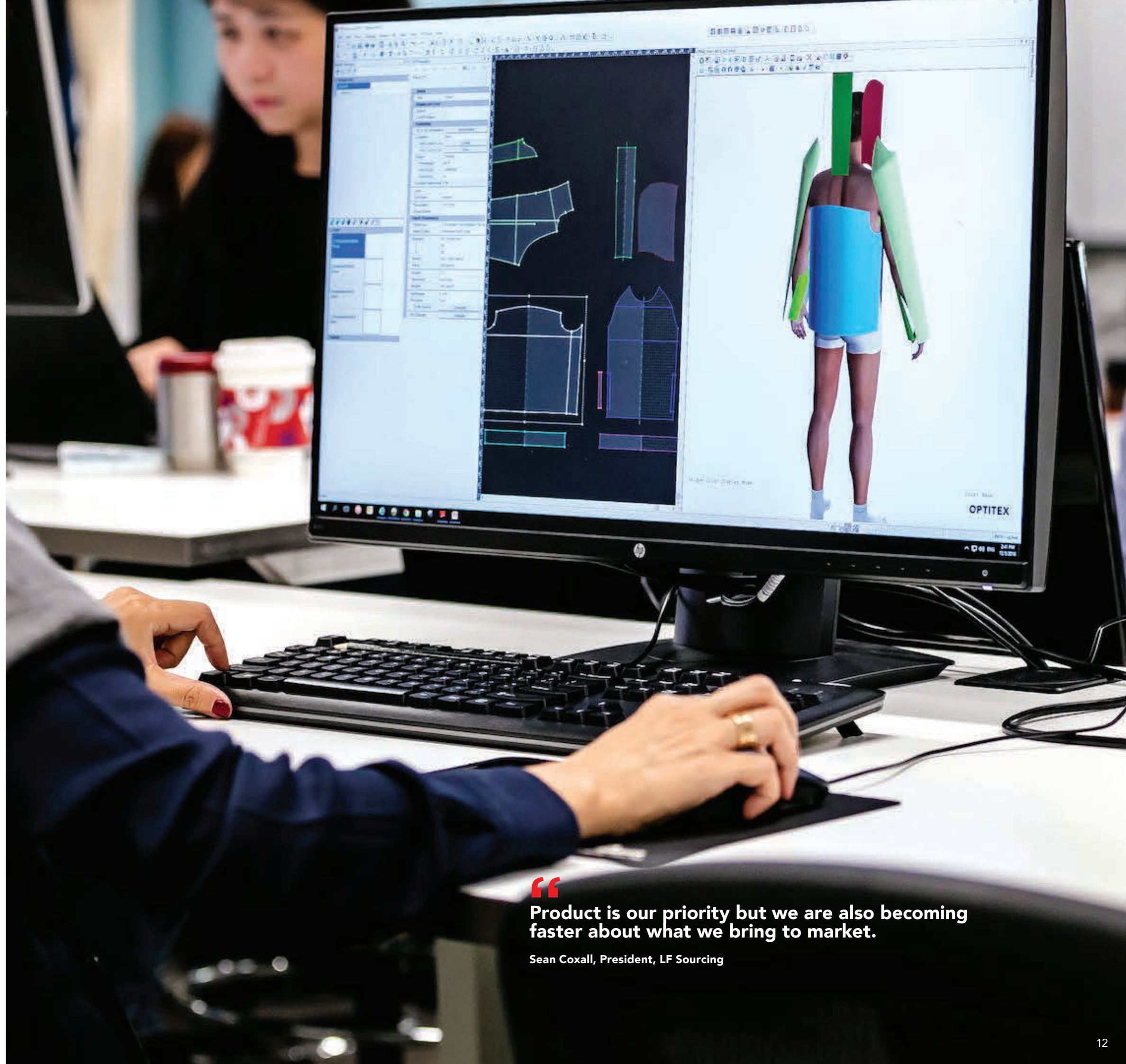
Virtual design technology brings tremendous speed to customers.

From apparel to beauty, virtual design technology is the very definition of how we are bringing speed, innovation and digitalization into our organization.

Take a sweater for example. Once a design has been approved, a virtual sample can be created in less than a week, whereas a traditional physical sample would typically take from 10 to 15 days. With virtual samples, multiple iterations in different colors and patterns can be created instantaneously without losing important detail like stitching, yarn gauge and color. Virtual simulation even allows you to see how a garment looks, fits and moves on a real person. This kind of technology makes the entire process – from design to production – faster and more efficient, creating competitive edge for our customers.

The digital supply chain offers countless possibilities to enhance performance, speed and collaboration between partners. Creating a virtual sample itself is merely one piece of the puzzle. Once you add features like a digital library of assets such as fabrics and trims, or real-time market and trend data to help with costing, it is clear that technology enabled design becomes a game changer.

By creating a platform that is compatible with the dozens of software and systems already in the market, Li & Fung will be at the forefront of virtual design as this technology evolves in the future supply chain. 📺



Product is our priority but we are also becoming faster about what we bring to market.

Sean Coxall, President, LF Sourcing



Data rules

In an era of Big Data, bringing consumers personalized and customized services and products has become the norm. But consumer behavior changes drastically so brands and retailers need to ask: how do we get ahead?


An IBM study³ shows that a consumers' loyalty is no longer to brands but to newness. That means brands and retailers must continuously innovate and differentiate to stay top of mind.

Data insight and market intelligence is how brands and retailers will be able to deliver the right product, at the right time, at the right price, to the right consumer. While retailers today have access to data through multiple touchpoints from in-store, mobile, e-commerce and customer service, there is an entire world of data that they have yet to tap into. This is Li & Fung's data world.

We unlock data that enables our customers to go beyond just insight into consumer buying behavior and preferences. Our insight begins with raw material at fabric mills and flows all the way through pre-and-post production including design, sourcing, costing, logistics, and every step in between. Information holds the potential to drive real frontline differentiation.

In our logistics business for example, we apply statistical modeling and forecasting techniques to develop forecasting models for sales and raw material availability, risk analysis of operational accidents and shipments, and establish proper sampling sizes for issues such as shipment quality testing. We pinpoint operational situations that predict future performance and leverage these into functional models –forecasting potential sales to predict how fast and in which region the market will grow.

In our beauty business, we develop digital point of sale (POS) solutions to showcase our customers' products. Our engineers marry creativity with technology to develop innovative POS solutions that analyze consumer buying behavior and help our customers drive the power of digital and data to stay ahead.

The combination of technology and real-time data will help the digital supply chain of the future meet increasing demands for shipment and transactions as more brands and retailers transform into digital businesses. 

The retail industry of the future will only include those who have the right data insights and know how to use them. That's the value of our digital platform.

FACTS & FIGURES

Big data is providing supplier networks with greater data accuracy, clarity and insights, leading to more contextual intelligence shared across supply chains.

- 64% of supply chain executives consider big data analytics a disruptive and important technology, setting the foundation for long-term change management in their organizations

(Source: SCM World study: "Shaping the Future of Supply Chain")

- Big data is having an impact on organizations' reaction time to supply chain issues (41%), increased supply chain efficiency of 10% or greater (36%), and greater integration across the supply chain (36%).

(Source: Accenture study: "Big Data Analytics in Supply Chain: Hype or Here to Stay?")

- Embedding big data analytics in operations leads to a 4.25x improvement in order-to-cycle delivery times, and a 2.6x improvement in supply chain efficiency of 10% or greater.

(Source: Accenture study: "Big Data Analytics in Supply Chain: Hype or Here to Stay?")

³ IBM study "Brand enthusiasm: More than loyalty"