



# LI & FUNG LTD.

## Measuring the Digital Supply Chain Transformation

In conjunction with the Center for Global Enterprise, APQC is examining how best-practice organizations measure supply chain performance amid the digital transformation. This case study examines how Li & Fung is digitizing the complete supply chain on behalf of its customers across the globe.

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## LI & FUNG LTD.

Hong Kong–based Li & Fung Ltd. is a global supply chain manager for brands and retailers around the world, offering product design and development, raw material sourcing, factory selection, production management, quality control, in-country logistics, global freight management, and e-logistics. With 21,510 employees, the organization reported \$16.76 billion in revenue in 2016.

APQC interviewed a number of executives from the company and the Fung Academy<sup>1</sup> concerning the firm’s digital transition. The Fung Academy works with the business to develop strategy, support innovation, and catalyze change around the firm’s three objectives of speed, innovation, and digitalization of the supply chain.

### GLOBAL SUPPLY CHAIN ORGANIZATION

Li & Fung’s business is built around orchestrating the supply chain for its customers, which include global retailers and consumer products brands. It manages a global network for product development, sourcing, financing, shipping, handling, and logistics. “Li & Fung has been called a middle man, but it is probably more accurate to say that we are a network orchestrator. We use about 11,000 factories to produce apparel, footwear, beauty products, accessories and home goods for several thousand customers. With a few acquired exceptions that act as test beds, we do not own any factories. We are a service company, with deep product knowledge.”

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—Fung Academy

### DIGITIZATION PLANS

Li & Fung operates on a three-year framework for strategic plans. For 2017 to 2019, it is focused on speed, innovation, and the digitalization of the entire supply chain on an end-to-end platform that will deliver data-driven insights and customized services (Figure 1).

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<sup>1</sup> The Fung Academy is the Fung Group’s learning accelerator and business incubator, providing leadership and executive development to the organization’s senior leaders, performing applied research on the future of the supply chain, piloting emerging technologies, and developing sustainability and innovation capacity within the business.

*In our supply chain everything is connected, and our digital platform lies at the center of how we are bringing the connected supply chain into the digital world. Through our digital platform, we are integrating networks, customers, suppliers, people and products – and all the data from their interactions—to extend the supply chain, create new value, and fundamentally change the way we operate.*

*—Technology Leader, Fung Group*

### Digitizing the Complete Supply Chain

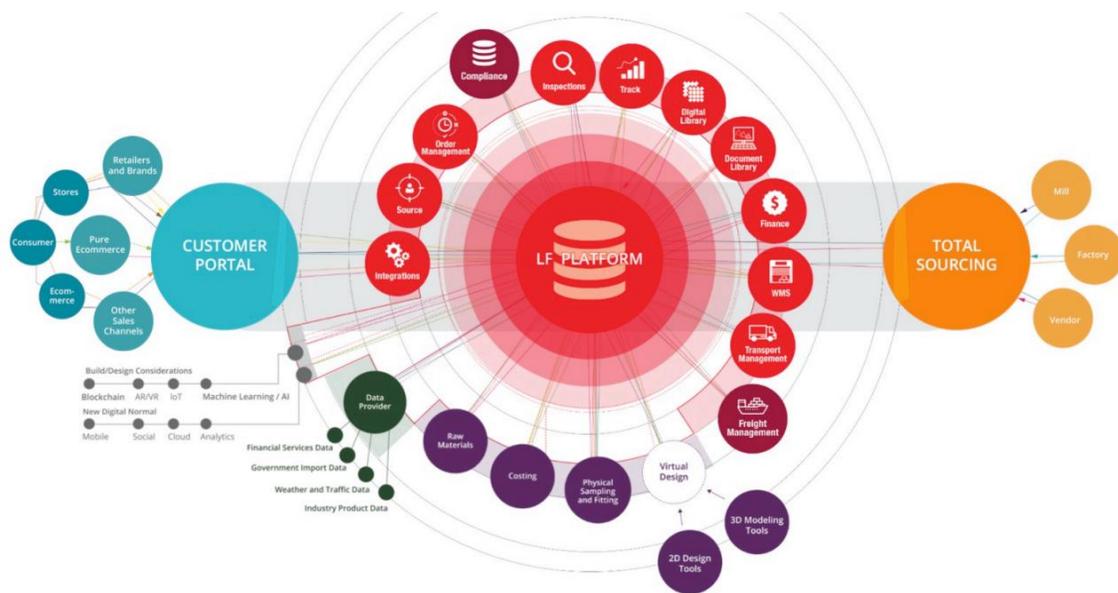


Figure 1

In fact, for some time the company has digitized various paper and email-based processes for efficiency and security, as well as to enhance its Total Sourcing Portal and its supplier-facing Vendor Portal. The outcome of these efforts was massive savings in time and increased efficiency, while producing data about the organization’s activities that could be used to create new value for customers and suppliers alike.

The current digitalization initiative will continue this trend, to fill out the end-to-end, LF Digital Platform and enable advanced analytics to improve costs, lead time, working capital, inventory, sustainability, and traceability for the organization’s global network of business partners.

While looking at every opportunity for automation—as well as examining every interaction among supply chain stakeholders—Li & Fung found where hand-offs created process delays. To address these delays Li & Fung have begun reorganizing the supply chain and its workforce using artificial intelligence and machine learning. The goal is to make every process data driven, replicable, and cheaper.

“In the last three to five years, the exponential increase in computing power has enabled us to extract and utilize data in ways we never could before,” said a sourcing executive. “Because of the increase in computing power, we are now able to digitize entire processes, and manipulate this data to inform and adjust our operations in real time. By digitizing that data we’re now able to create digital business models that enable us to create and capture value in significantly different ways.”

### Value-Added Supply Chain

In its sourcing services business, Li & Fung is focused on developing value-adding supply chain services (Figure 2). In its product-based principal business, it is focused on key product verticals (furniture, beauty, and sweaters) with deep product expertise to supply innovative and technologically advanced products to customers.

#### Total Sourcing Portal Digitalizing the Supply Chain

Digital portal connecting customers data platform with our global vendor base

Digitize paper processes

- Order processing, monitoring and changes, inspection approvals and shipping

Orchestrate billing and payment

Resource center on compliance and sustainability

Generated revenue and improved productivity

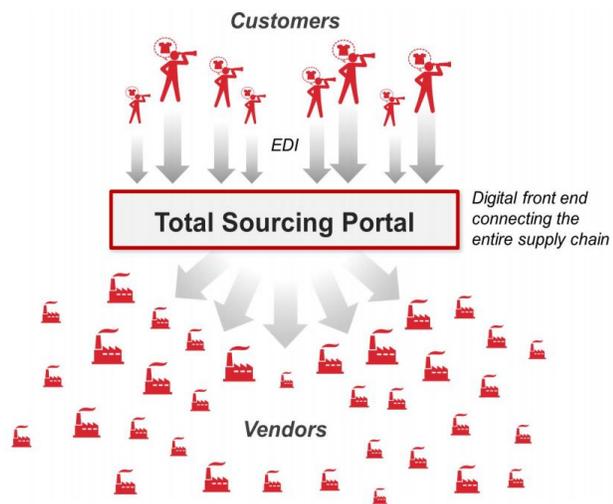


Figure 2

The end-to-end digital supply chain, coupled with a better speed-to-market business model, will enable a responsive demand chain that can “pull” on-trend products to sell at full prices with fewer markdowns. One way to do this is to radically decrease the time needed to process and produce an order by digitizing formerly manual processes such as sample-making.

Previously, the design samples were sketched by the buyer, sewn and produced by the factory, and shipped in small bundles to clients; this process could take several weeks of iteration as adjustments are made to the prototype. Now that the process is digital, customers and

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factories can immediately look at samples—cutting out additional steps and people—resulting in a substantially quicker process. “We’re now using these digital tools to connect people along the way so that a customer’s design team is talking to our digital design teams, and that information is passed on to the rest of the supply chain in terms of placing the orders and getting the product made and delivered,” according to the head of a sourcing group working with major retailers.

“Obviously we are saving money, in terms of the costs of making physical samples and air freighting them around the world, but the bigger savings is really in time. By cutting the amount of time from design to store, we are able to more accurately meet consumer demand and catch and leverage customer trends” said another executive.

The data captured by digitizing the product design, development, and sampling process; enables the company to further hone its supply chain model to more precisely service its customers.

For example, in the retail market, businesses capture customer data in terms of how people are buying things, what colors they want, during what seasons, and at what costs. Li & Fung is aggregating this information across customers to build models that help it and the retailer better manage their inventory, and ultimately, share with the factory for smarter ordering. As a result, the organization now has a stronger understanding of the demand side, which also improves design and production.

Much of this data is currently being mined by the head of data services, who commented that “efforts such as these will result in a better understanding of demand, leading to improved upfront materials ordering, strategic sourcing techniques, improved tracking, faster timeframes, and ultimately lower costs. Our vision for a digital supply chain is to create and capture value for ourselves and customers.”

## TRADITIONAL SUPPLY CHAIN MEASURES

In its previous, “analog” supply chain, Li & Fung measured on-time delivery, quality (e.g., defect rates), and costs. Given its organizational structure, it could measure its performance by customer with individual dashboards detailing traditional metrics. Performance on measures such as markdowns would inform planning for the following seasons.

*With some basic digitization of supply chain activities, we’ve resulted in operational cost efficiencies of about \$30 million.*

A half a year into its three-year strategic focus on digitization, Li & Fung is evaluating new measures from end-to-end in the supply chain that can track the speed of fulfillment and compare performance in a digitized environment vs. a traditional supply chain. With the end goal of a new set of measures, the organization is breaking down its supply chain into processes in order to pull data on every element of operations, from how the customer provides demand data to how Li & Fung orders fabric. Digitization has improved visibility and accountability for processes, thus making them easier to measure—and making it easier for the organization to connect these measures together.

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“We’re looking at every aspect of our supply chain in terms of how do we speed up that process and/or do the process much more operationally effectively,” said the sourcing executive. “Over the last four years, with some basic digitization of supply chain activities, we’ve achieved significant efficiencies just based on staff time saved. But we really need much better measures that lead to the impact of quality, precision, speed, and processing.”

## MANAGING DIGITAL SUPPLY CHAIN PERFORMANCE

Thus far digitization has resulted in clear benefits in terms of cost and time saved. Going forward, Li & Fung see clear opportunities to use data and digitalization to create and capture value in new ways for its customers. Although the organization has long been focused on nurturing relationships with its clients, those discussions are changing with digitalization.

Whereas customers would traditionally request an apparel product with order numbers driven by the customer’s demand data, Li & Fung can now leverage its own data to quickly and accurately correlate costs, ideal colors and shapes, similar products from the competition, and order amounts. Consequently, Li & Fung has more informed conversations upfront, with insights that are valuable to the customer. “I now have a computational collaborative relationship with my customer that I never had before.”

## DIGITIZATION MOVING FORWARD

Li & Fung is building on its initial research and pilots to further digitize the entire supply chain. It is carefully crafting how to: manage resistance to change, quickly meet customers’ increasing expectations, optimally replace systems, and ensure the organization has the workforce capabilities to support this digitization. “The people in the room now have to be much more skilled and savvy,” said the executive from the Fung Academy which is working to build digital and innovation capabilities within the organization. “This is a battle for talent. In the end, it’s all going to be about people.”

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As the organization digitizes its supply chain, it is experiencing a cultural shift from the mindset that information is power to collaboration is power. Digitization will enable the organization to more easily connect everyone in the supply chain to make decisions quickly based on shared information.

Looking to the long-term horizon, Li & Fung sees this move as an important shift, particularly in view of emerging economies expanding the focus from the west. It anticipates new markets bypassing analog supply chains and the development of digitized supply chains close to major regions. “Supply chains in Asia and Africa will be very different than how we’re now manufacturing in the east and shipping to the west. Those are huge social, technical,

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cultural, and political issues. Li & Fung must anticipate what the world will look like and how we remain a player in that world.”

### ABOUT APQC

APQC helps organizations work smarter, faster, and with greater confidence. It is the world’s foremost authority in benchmarking, best practices, process and performance improvement, and knowledge management. APQC’s unique structure as a member-based nonprofit makes it a differentiator in the marketplace. APQC partners with more than 500 member organizations worldwide in all industries. With more than 40 years of experience, APQC remains the world’s leader in transforming organizations. Visit us at [www.apqc.org](http://www.apqc.org), and learn how you can make best practices your practices.

### ABOUT CGE

The Center for Global Enterprise (CGE) is a nonprofit, nonpartisan research institution devoted to the study of the contemporary corporation, globalization, economic trends, and their impact on society. CGE’s [Digital Supply Chain Institute](#) (DSCI) is a leading-edge research Institute focused on the evolution of enterprise supply chains in the digital economy and the creation and practical application of supply chain management best practices.