THE HUMAN-CENTERED SUPPLY CHAIN

DELIVERED BY DHL
EXECUTIVE SUMMARY

The retail and consumer goods industries will change more in the next 10 years than they have over the past 40. Digitalization, urbanization, a growing global middle class, Millennial spending, and a myriad of other factors will be critical considerations as fashion designers look to the future. A designer’s ability to build agile and adaptable supply chain operations will be key in navigating this evolving fashion landscape.

Recognizing the dynamism of the fashion industry, the Council of Fashion Designers of America, Inc. (CFDA) teamed with DHL, CFDA’s logistics partner, to explore the future of the fashion supply chain and how this new supply chain may affect fashion designers and consumers. Drawing from this exploration, CFDA, DHL and CFDA’s innovation partner Accenture and Fjord, developed a point of view that proposes the human-centered supply chain as the future model for the fashion industry, helping strengthen designers’ global reach.

With a human-centered lens on design, manufacturing, and delivery, this model critically puts the designer at the center of supply chain operations. Designers are empowered to build their networks through collaboration, using digital tools and new business models, increasing their flexibility in an industry in-flux.

Exploring why and how the fashion supply chain is changing, this study presents the most important challenges, disruptions, and changes influencing the industry today and how these affect fashion designers themselves.
CONTEXT
MARKET TRENDS
THE CURRENT STATE

Historically, **designers** and **consumers** have been separated from one another in a rigid, siloed system.

The majority of bargaining power sat in the hands of manufacturers, suppliers and distributors.
OLD INDUSTRY RULES NO LONGER APPLY

The fashion industry is transforming.

Today, new technologies and digital business models are shifting the balance of influence and bargaining leverage across partners in the fashion supply chain.
BEST-IN-CLASS BECOMES THE NEW BASELINE

Consumers have access to an almost unlimited amount of options across every industry. The average consumer has global access to over one billion products.\(^1\) Two-thirds of consumers consider significantly more companies or brands for purchase compared with 10 years ago.\(^2\)

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\(^2\) Accenture Strategy Global Consumer Pulse Survey, July 2016
CHANGES ARE IMPACTING THE FASHION INDUSTRY, INCLUDING:

**NEW TECHNOLOGIES**
New technologies are allowing for increased speed, knowledge transfer, and collaboration across industries and borders.

**NEW EXPECTATIONS**
Consumers today have access to an almost unlimited amount of options across every industry and have liquid expectations across industries.

**NEW MODELS**
Embracing new technologies, businesses are experimenting with new business models to remain agile and meet consumer expectations.
RAPID CHANGE IS THE NORM

NEW TECHNOLOGIES

New technologies and basic digital ubiquity have made significant changes in everyday communication and efficiency of distributing information.

In fashion and retail, the Internet of Things (IoT), autonomous vehicles, drones, robotics and Artificial Intelligence (AI) are predicted to be the most transformational because of their widespread applications, ability to drive efficiencies, and impact on labor.¹

83% of all Internet connections by 2020 will result from IoT, including wearables and smart-home devices, estimates Cisco.²

RAPID CHANGE IS THE NORM

NEW EXPECTATIONS
Consumers today expect to have similar best-in-class experiences regardless of industry. Their expectations have become liquid.

Digital continually raises these liquid expectations. Companies must continually refine approaches to customer interactions and develop solutions to meet their expectations.

44% of consumers globally would be open to consider products and services from companies not generally considered part of traditional industry definitions.\(^2\)

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RAPID CHANGE IS THE NORM

NEW MODELS
New, technology-enabled business models are helping businesses to remain agile. Next-generation sharing, personalization, and on-demand business models are creating more value for consumers and businesses alike.

22% of American adults, or 45 million people, have already offered a product or service as part of the sharing economy.¹

70% of Generation Z apparel shoppers are interested in monthly curated fashion subscription programs.²

41% of consumers have used same-day, expedited, or on-demand delivery services.¹

In today’s business environment, an organization that fails to meet standards set by companies that do not directly compete with it risks failure in meeting consumer expectations.¹

¹ Fjord, “The Era of Living Services,” 2015
EXPECTATIONS ARE BECOMING INCREASINGLY LIQUID

The rapid pace of innovation and the ‘digitalization of everything’ has profoundly changed people’s expectations for their role that services play in their lives.

SHARING

Over the past decade, consumers have begun subscribing to a new model of consumption in which temporary access to goods and services is preferred to outright ownership.¹

In this sharing economy, digital platforms facilitate new transactions between people, enabling more direct routes to providing value.

CONVENIENCE

Convenience has two key dimensions: speed and choice.

Consumers expect just-in-time and express delivery, but also want to have options to meet sustainability needs.

CURATION

With the endless options provided to consumers, there is still a desire for an experience that has a clear point of view.

Expert advice, recommendations and limited content options are all ways to provide curated options.

CUSTOMIZATION

The ability to customize products and services has become the cornerstone of consumer control.

Consumers expect to be able to create an experience tailored to their implicit and explicit needs.

TRANSPARENT

Transparency has been evolving and expanding across industries, with services from companies like DHL providing detailed tracking and more visibility into production and operations conditions.

Transparency is now expected in all interactions, and the ability to see progress and make comments or refinements during the process is a basic requirement.

OUTSIDE OF INDUSTRY EXAMPLES

SHARING
Crowd sourced driving directions offering real-time directions from drivers, helping to create the perfect commute.

CONVENIENCE
Seamless prescription refilling, payment and delivery from any device, to your home.

CURATION
Personalized recipes using sustainable farming practices delivered direct to consumers, cutting out the middleman to deliver fresher food.

CUSTOMIZATION
The future of our mobile devices will be always-listening and constantly responding to our needs affecting how people interact with digital.

TRANSPARENT
Make, collect, and share payments with friends, family, businesses all through your mobile device.
RETAIL INDUSTRY EXAMPLES

**SHARING**
Consumers can instantly access luxury without the high price tag through peer-to-peer sharing and pay-per-use versus ownership.

**CONVENIENCE**
One-click ordering and reordering, as well as subscription-based product purchasing, increases ease of purchase.

**CURATION**
Personal style service that curates outfits to meet your lifestyle and evolves based on consumers needs.

**CUSTOMIZATION**
Build your own shoe using Nike’s customization tool, putting the power of product design in the hands of the consumer.

**TRANSPARENT**
Ensuring factory integrity to bring the most stringent workplace compliance to the forefront of consumer interactions with the brand.

**EVERLANE**
New technologies, consumer expectations, and business models are transforming the retail industry. New businesses and services are emerging as a result, and established and emerging businesses alike need to adapt to keep up.

The supply chain is critical to this transformation - it has to respond in-line with overall industry trends.

As digitalization continues to impact the retail industry, designers must view the supply chain as an essential piece of strategy and brand-building. They must adopting a collaborative, relationship-based mindset with suppliers and partners along the way.
FINDINGS AND WAY FORWARD
BEST-IN-CLASS BECOMES THE NEW BASELINE

DHL, the CFDA, and Accenture analyzed the industry landscape, market trends, design operations, supply chain and logistics processes and first-hand designer experience by undertaking:

- **Extensive Industry Secondary Research**
- **Fashion Graduate Research Workshops**
- **Immersive Designer Workshops**
- **Supply Chain Partner Interviews**
RESEARCH METHODOLOGY AND ACTIVITIES

HYPOTHESIS
Through research, we tested the hypotheses that, as consumers have more information and influence, designers must think of their supply chain and partners as key elements to their story, brand, and business to successfully reach and deliver for their consumers.

RESEARCH METHOD
Research included two design student workshops, creative research sessions with seven CFDA Member designers, and interviews with nine supply chain partner companies. These sessions explored the current state of the fashion supply chain, identified pain points, and detailed best practices in navigating the fashion supply chain.

SYNTHESIS
Following research sessions, we synthesized findings to generate insights about how the fashion supply chain is evolving and structure recommendations for emerging designers in navigating this transformation.
FOCUS AREAS

We have identified four key areas of focus to anchor insights and opportunities, driven by digitalization and the increase of e-commerce, which map back to the Human-Centered Supply Chain model.

PROCESS OWNERSHIP

RELATIONSHIP BUILDING

BRAND OPERATIONS

ACTIONABLE INFORMATION
WHAT WORKS WELL

• Delegation of supply chain process without clear communication of objectives.
• Many platforms and processes for communication with suppliers.
• Relying on only one manufacturing partner.
• Misaligned schedules across sourcing and manufacturing partners, leading to delays in shipping and delivery.

WHAT’S NOT WORKING

• Working with multiple manufacturing partners to diversify risk.
• Communicating across internal teams and integrating external partners early in the process to ensure alignment from the start.
• Integrating suppliers and partners into the process earlier has reduced downstream issues.

“We have a lot of sales recaps, which have been helpful to solve the problem of understanding what’s happening.”

- Advanced Established Womenswear Designer

PROCESS OWNERSHIP FINDINGS

A process with clear communication channels across partners will increase flexibility in sourcing, making, and delivery collections.

A defined but flexible approach will create more successful refinements.
RELATIONSHIP BUILDING FINDINGS

Developing and nurturing relationships with partners across the supply chain – from mentors and experts to like-minded peers – is critical to success.

The market is still largely based on building relationships and people are territorial about their “black books.”

“We built our network of suppliers on years of relationship and we nurture the heck out of them.”

- Established Womenswear Designer

WHAT’S NOT WORKING

- The process to building relationships is both very manual and time consuming, with no one source that indexes partners.
- Hands-off approach or delegating the process of building relationships with suppliers.

WHAT WORKS WELL

- Establishing relationships, leading to higher retention rate and increased satisfaction for designers and supply partners.
- Connecting with larger designer mentors who share your passions to identify potential partners.
BRAND OPERATIONS FINDINGS

Establishing clear operations and avoiding continual reinvention of the brand has proven to be an effective way to avoid unnecessary costs and confusion for consumers and suppliers.

“We used to reinvent the collection each year, which was a mistake not establishing a core collection. We’ve learned to hang onto good core best sellers to help develop plan and operations.”

- Established Womenswear Designer

WHAT’S NOT WORKING

• Reinventing the collection (and associated operations) each year is costly and time consuming.
• Expanding into new channels (e.g., e-commerce) too quickly, without using a pilot-based approach, is costly and ineffective

WHAT WORKS WELL

• Using a core collection as a key brand asset to build relationships with consumers and suppliers.
• Testing new retail models with continuous refinement and feedback loops has been the most successful.
ACTIONABLE INFORMATION FINDINGS

Information feedback loops between suppliers, designers, and consumers enable operational improvements and greater collaboration.

“We get mixed messages from different stores, different reports, different systems. We need a more unified and consolidated view of customer behavior.”

- Established Womenswear Designer

WHAT’S NOT WORKING

• Lack of understanding of consumer behavior and incorporating lessons learned to make operational improvements.
• Multiple and often conflicting systems for tracking.
• Inability to act on data received from retail partners.
• Wholesalers are not sharing consumer data, which creates difficulty in demand planning

WHAT WORKS WELL

• In-person visits with sales associates and consumers to educate them on the brand and hear feedback to incorporate into future collections.
• Utilizing shared production platforms to centralize communications and standardize the operations approach.
• Incorporating emerging trend and consumer behavior data from within the fashion industry and parallel industries.
THE WAY FORWARD

PROCESS OWNERSHIP
A focus on process as a key component of design, integrating partners early. Communication of key brand and operation requirements (such as traceability and sustainability), and a dedicated step to integrate learnings from season-to-season.

RELATIONSHIP BUILDING
A relationship-first rather than transaction-based approach that identifies partners with which to collaborate. Fill gaps in expertise and leverage passion points – like sustainability – to open up opportunities for sharing and collaboration.

BRAND OPERATIONS
A supply chain that is part of your brand story, with a test and learn model for manufacturing partners and retail. Creation of a core collection to ensure stability and develop clear ownership for relationship with shipping and retail partners.

ACTIONABLE INFORMATION
Integration of information at every step for more proactive and iterative decision-making, with an established cadence for reviewing sales and consumer data with retailers. Analysis of emerging trends and consumer behaviors from both inside and outside of the industry.
THE NEW MODEL
BEGIN WITH A NEW MODEL

MOVE FROM TRANSACTIONS TO RELATIONSHIPS

- Enable all supply chain partners to provide expertise through a more collaborative process.
- Bring all partners into a conversation before decision-making.

USE DATA TO MAKE DECISIONS

- Use data as a tool throughout the process to ensure accuracy, efficiency and proactive decision-making.
- Data includes both qualitative and quantitative. Customer interviews, sales trends, real-time manufacturing data, social media data.

FIND ALIGNMENT TOOLS FOR ALL PARTNERS

- Use common ways of communicating, scheduling, tracking, and measuring progress.
- Ensure clear definition of roles and responsibilities by developing a shared model (e.g., RACI – Responsible, Accountable, Consulted, Informed).

BUILD FLEXIBILITY INTO THE DNA

- Create a more nimble model capable of refinement during the process, through a combination of integrating real-time information and partner expertise.
- Determine trade-offs based on cost, timing, sustainability and level of quality. Be willing to iterate and refine throughout the process.
THE NEW MODEL

OLD APPROACH

• Siloed
• Sequential
• Minimal collaboration across the process
• The consumer and the designer are minimally connected, if at all

NEW APPROACH

• Interactive
• Interconnected
• Nimble and agile
• The designer at the center
BEGIN WITH A NEW MODEL

The designer moves from being a point in the process to being the focus and the connection point to partners across operations.

The designer provides a clear brand point of view, identifying and aligning the target consumers and consumer touchpoints.
MODEL EVOLUTION: CONNECT

CONNECT

The designer connection forms the glue which ensures all supply chain components are aligned and working properly.

With the new model, the connection points move from being 1-to-1 to 1-to-many. This collaborative partner community ensures there are open conversations across the group – with the different supply chain partners and with the designer. Partners should also work from agreed-upon milestones and metrics for success.
MODEL EVOLUTION: PLAN

PLAN

Planning affects all parts of the supply chain equally. It should be a truly collaborative experience, during which the designers and all suppliers and partners co-create the most effective approach.

Planning should not be a one-time activity, but should continue on an ongoing basis to refine and optimize the approach.
SOURCE & MAKE

The source and make processes of the supply chain are merging. Factories are increasingly focused on smaller runs and working with many designers simultaneously, which allows for more fluid connections between roles.

In the future, a greater dialog between manufacturers and sourcing suppliers will enable decisions to be made based on timing of materials sourcing, manufacturing timelines, and ability for batch decisions with other designers.
MERGING OF TRADITIONAL STAGES

MAKE & DELIVER

The make and delivery processes are also merging, enabling designers to break down process silos between making and sending finished items.

There are two ways this merging will occur:

1. Batch sustainable delivery will inform manufacturing timelines, and
2. Delivery will become more on-demand in collaboration with other designers, creating access to smaller inventory closer to consumers.

The dialog between the two groups will enable more cost-effective and sustainable shipping.
DELIVER & RETURNS

Delivery and returns are two sides of the same process. By using predictive data, returns can be integrated into the delivery process more fully. Returns are also an opportunity to learn about consumers and to reinforce commitment to customer service.

The future will have a return approach as robust as the delivery process. Designers will be able to refine the manufacturing process and more quickly calculate demand to enable supply chain efficiencies.

Returns-related needs with pricing and shipping services, especially relevant for cross-border trading, will also be better understood as a result of earlier logistics partner integration.
MERGING OF TRADITIONAL STAGES

TRACK & OPTIMIZE

Tracking and optimizing is about receiving consumer, supply chain and market information and being more agile in making changes. Tracking and optimizing should be done on a regular basis and should be considered a part of everyday operations.

In the future, increased collaboration across supply chain partners will enhance available information about operations and consumers alike, and increase designers’ ability to incorporate this into enhanced operations. Tracking and tracing solutions will be incorporated with logistics partners’ expertise to support agility in operations.
THE FUTURE STATE
A STORY
SET UP

• **Removes** conventional boundaries in the supply chain and encourages *sharing of expertise*
• Focuses on **collaborative approaches** and technology-supported, transparent, real-time communications
• Uses a **networked approach** to reduce costs
• Develops a **nimble** approach to enable changes
BUILDING A HUMAN-CENTERED SUPPLY CHAIN

Sasha K. is the founder and CEO of a new fashion line, Hem. Hem has unconventional clothing for people of all sizes.

Hem is a 2 year old brand with a team of 12 full-time people. Sasha has received a small round of funding after showing healthy sales and wants to use this to increase the size of her team and be more present in more retail stores.

In addition to scaling the brand, Sasha wants to maintain her commitment to environmental and social responsibility through her production, labor, and distribution processes.
**FIND**

Sasha does some analysis of her target consumers and wants to determine the best places to reach them. She researches this and validates the findings with her fellow design council colleagues. She also asks them for references for potential partners that would be open to a more flexible, transparent, and sustainable approach. Her colleagues point her to the central repository, which provides references and sample work of potential partners.

**ALIGN**

She contacts a group and picks 2-3 key partners based on her pre-developed checklist and interview process. After they sign a preliminary contract, they all get on a call together to develop a common project plan, and use a common project platform to track progress and communicate.
PLAN
She also uses a planning analytics platform to help determine appropriate inventory levels. Sasha also involves her logistics partner, DHL, early-on in the process to seek their guidance and prevent issues in delivery later in the process. In scaling, Sasha wants to grow to meet international demand, and DHL is able to manage the customs and duty clearance processes for her given their global expertise. To meet Hem’s sustainability commitment, Sasha also utilizes DHL’s GoGreen shipping solutions to reduce Hem’s carbon footprint.

SOURCE
Sasha wanted to use 100% organic materials but the yardage cost was too high. Sasha contacts CFDA for help in finding other small designers who may be interested in group ordering materials. By requesting the organic materials together, they are able to get the cost down. The sourcing partner has a sustainability accreditation, so Sasha knows their operations meet Hem’s commitment to sustainability.
COLLABORATE

Unfortunately, the dye she wanted has sold out. As a result, she has two options - she can wait and delay her orders, or she can choose a different dye. Sasha immediately has a video conference with the sourcing partner, and together they choose a similar all natural dye (and her order stays on time).

REFINE

During the manufacturing phase, Hem placed pre-orders online and was positively surprised to find that 3 of the dresses already sold-out. As a result, the process needed to be refined to re-order additional inventory for most of the sizes. She sets up a quick call with her manufacturing, logistics, and retail partners to refine the timelines for the styles.
ADAPT AND SHARE

A week later, her manufacturing partner contacts Sasha to mention that there was excess fabric due to the accuracy of the cuts. Sasha and her team get to work and send over a design for a bag, which the partner was able to make in the week using the excess fabric. Sasha became close to her fellow design colleagues with whom she partnered on sourcing, and decides to ask if they are also interested in sharing distribution logistics and costs.

STORAGE AND DELIVERY

Through DHL Supply Chain, they are able to share space in 5-6 key locations, from which they ship both to retailers and directly to consumers. They avoid high start-up costs by sharing labor and systems in DHL's shared warehousing locations and reduce their environmental impact with DHL's pooled distribution services for shipping to retail locations. Sasha also has frequent communications with retailers through a common platform and has been working with DHL from the beginning.
RETURNS AND INVENTORY

Sasha is able to better determine shipping and inventory needs, which has reduced returns and dead stock. With the support of her logistics partner, DHL, she has also been able to coordinate returns in-store and online so consumers have a single simple experience. DHL also educated Sasha on the lack of duties on returns, allowing her to save money for Hem and her consumers. With the small amount of extra inventory, Hem and her fellow emerging designers decide to have a series of flash sales and sell out all remaining inventory!

SUPPLY CHAIN IMPLICATIONS

TRACK AND OPTIMIZE

Although Hem sold out, it is now time for next season’s order. To ensure the business and process improves, the team of Hem looks at all the data from their inventory planning partner, manufacturing partner, and retail partner for sales specific data to benchmark with like companies. They review customer feedback received through the retailers, the direct to customer channel, and the flash sales and incorporate feedback into the design process.
RECONNECT AND REFINE

The team then meets with their supply chain partners across the steps, have a formal review of the season using the data gathered across steps and from partners, and brainstorm how to work together more effectively.

SUPPLY CHAIN IMPLICATIONS

CONNECT | PLAN | SOURCE | MAKE | DELIVER | OPTIMIZE
The human-centered supply chain benefits partners across traditional supply chain steps – from designers to material suppliers to factories to logistics partners. The future of the human-centered supply chain model enhances traditional processes and interactions by:

- Focusing on relationship building
- Enabling the sharing of expertise across partners
- Adopting collaborative approaches and shared communications
- Employing a networked approach to reduce costs and overall waste
- Connecting partners across traditionally siloed steps to increase operational flexibility
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