The 2018 Next Generation Operations Summit:

Shaping a Growth Agenda

June 13-15, 2018 at Harvard University Cambridge, Massachusetts







The 2018 Next Generation Operations Summit: Shaping a Growth Agenda

If there's one commonality in society, it's the dynamic pace of innovation and change. Fueling this environment are the forces of deepening digital disruption, shifting market boundaries, and growing customer power and choice. Amidst all this one thing is certain – architecting an agile supply chain is a catalyst to shaping a growth agenda.

For chief operating officers and chief supply chain officers (COO/CSCOs), shaping a growth agenda means building supply chains that are robust enough to maintain stability and accountability, but also agile enough to offer choices and delight customers, driving growth. Progress will require a deft hand, as leaders will face fresh challenges in managing multiple business models, freeing up resources to invest in innovation, and creating new ecosystems of suppliers and partners to deliver more customer-centric solutions.

To help next-generation supply chain leaders acquire these new strategies and capabilities, Leadership for a Networked World and the Technology and Entrepreneurship Center at Harvard, in collaboration with Accenture Strategy, convened the **2018 Next Generation Operations Summit: Shaping a Growth Agenda.** The summit brought together supply chain leaders to discuss critical issues defining the profession today.

During the Summit participants explored questions including: How can supply chain and operations executives work across the c-suite to shape the business and translate customer insights into a competitive advantage? What new methods enable customer centricity and incubate disruptive business models that will fuel future growth while optimizing the supply chain? Where can big data science and analytics, including artificial intelligence techniques such as machine learning and deep-learning, bring newfound agility and insights to operations?



This report highlights key findings from the Summit. In particular, it features several cases illuminating the role of supply chain in value creation, responding to evolving customer expectations, integrating new technology, and effective leadership strategies for innovators.

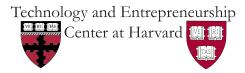
- Peter Kraemer, Chief Supply Officer, and Elito Siqueira, Global Vice President of Logistics and Operations at AB InBev, share their latest innovations to harness blockchain to build agility into their international supply chain.
- Hans Melotte, Executive Vice President of the Global Supply Chain at Starbucks, discusses their use of new technologies to improve client experience and product management, while creating a caring supply chain.
- Meri Stevens, Vice President of Strategy and Deployment at Johnson & Johnson, describes the company's embrace of personalization to create a customer-centric supply chain without sacrificing reliability.
- Stan Deans, President of Global Logistics and Distribution at UPS, articulates steps they are taking to refine supply chain fundamentals and introduce new components that must exist in the near future for e-fulfillment.

We hope this report offers new strategies, insights, and ideas to supply chain and operations leaders and their organizations as they shape a growth agenda.

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-William Kerr D'Arbeloff Professor of Business Administration, Harvard Business School

Reflections from the Executive Director

Dear Colleagues,

More than ever, operations and supply chain leaders are in the driver's seat on shaping the future of business value. In today's dynamic world, this means supply chain leaders will need new strategies for building supply chains that are robust enough to maintain stability, but also agile enough to offer choices, delight customers, and drive growth.

The backdrop for shaping the future of business value is one with a relentless pace of change. In fact, at this year's Summit, 86% of attendees said they are facing "significant or extreme change" in their operating environment – punctuating the idea that shaping strategies will take vision, ingenuity, and perseverance.

This constant – and ever increasing – change pressures next generation operations executives and Chief Supply Chain Officers (CSCOs) to continually adapt their organizations to a new value proposition and methods of producing that value. This continual adaptation presents a challenge for executives as they navigate three dimensions:

- First, the day-to-day focus of the CSCO function is generally on **optimizing current business value** executing strategy that preserves core and organic business value while managing for risk. The focus is on "current state" supply chain models and supporting activities such as building and scaling infrastructure, navigating the regulatory environment, mitigating natural disruptions to the supply chain, and managing workforce and capital structures.
- Second, while maintaining supply chain performance is a must, CSCOs are increasingly taking a central role in
 generating new business value leading strategy that builds inorganic/new business value. The focus is on
 ideating and incubating "future state" supply chain models based on disruptive technologies and innovations,
 fostering partnerships and alliances, building ecosystems, as well as financing and scaling viable models.
- Third, the CSCO of the future must work across the c-suite and be a central figure in creating dynamic capacity

 aligning operations and its people with a continually evolving value proposition and business model. The focus
 here is on adopting and integrating new skills and competencies, while embedding dynamic capabilities in the
 firm's and supply chain's structures, systems, processes, and people.

Compounding this balancing act is that increasingly – particularly in a hyper-digital world – supply chains have to reach outside their own boundaries to bring in new capabilities – essentially building a collaborative ecosystem of ideas, technologies, products, and services. These new capabilities – whether they are "home grown" or brought in from the outside – then have to be integrated into the current organization, which means executives will have to grapple with an array of governance, structural, procedural, and cultural barriers.

Before diving into the report, I would like to thank Accenture Strategy – as without their generous insights, resources, and support, this important research and Summit would not have been possible. We would also like to extend our gratitude to the Executive Leadership Group – their subject matter knowledge and insights on operations and supply chain innovation provided a solid foundation for this Summit and for the advancement of organizational transformation as a whole. And last but not least, thank you for investing your time and energy into this Summit and report. I'm certain it will help you shape your growth agenda.

Now, let's get to work!

Sincerely,

Dr. Antonio M. Oftelie

Fellow, Technology and Entrepreneurship Center at Harvard

Executive Director, Leadership for a Networked World Harvard John A. Paulson School of Engineering and Applied Sciences



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"What is becoming very clear is that the linear SCOR model – I plan, I source, I make, I move, I service – doesn't work anymore. It is linear in nature, it doesn't support multiple business models. It is slow in its innovation. It's functional excellence versus integrated excellence. It is not the way to go because once you have to support multiple channels, multiple supply chains, multiple finite customer segments, and greater personalization, this becomes too complex and too expensive. So, the evolution clearly is into a network."

> - Kris Timmermans Senior Managing Director, Accenture Strategy



Balancing Core Activities and Growth Initiatives at AB InBev

Regardless of industry or discipline, leaders successfully driving enterprise-wide transformation must develop strategies to maintain core activities while incubating, evolving, and scaling innovations. At AB InBev, Peter Kraemer, the Chief Supply Officer, and Elito Siqueira, Global Vice President of Logistics and Operations, are developing a long-term vision to connect with customers and exploring how the future of supply chain can enable that. AB InBev's Disruptive Growth Organization (DGO) tests new innovations and then determines how effective new approaches, strategies, tools, and techniques are brought back to the company through larger scale pilots. At the same time, they are tenaciously ensuring that their core activities remain strong and consistent.

Developing a Strategy for Innovation

AB InBev is the world's largest brewer and a global, distributed organization. The company has almost 300 breweries worldwide making a combination of craft beer and large-scale brand name options. From those breweries, product flows into more than 600 distribution centers and then on to stores, bars and other venues throughout the world. AB InBev's delivery fleet makes more than 350,000 deliveries a day of beer with an average shelf life of 180 days. In order to orchestrate all of this, AB InBev has had to develop a strategy for innovation that rests on four pillars:

- Building a connected company
- Planning for growth
- Setting internal benchmarks
- Disrupting from within

For Kraemer and Siqueira, the supply chain should serve as the lifeblood of the organization bringing all the parts of the company together. In practice, this means using data-driven modeling to look at where resources are located as well as

"Our supply chain is changing just like everybody else's, and the beer market is changing - consumers' preferences, the types of beers, the amount of beers, where they're consuming them – and we have to adapt to that change. We've been adapting our business to the consumer."

> – Peter Kraemer Chief Supply Officer, AB InBev

growth trends. This creates a connected environment to ensure consistent supplies are in place and that the organization will be able to plan for the future. Fostering connection throughout the enterprise enables the supply chain team to identify and plan for future growth. From there, the team can set internal benchmarks and work through strategies to bring all parts of the company up to standard. AB InBev's Disruptive Growth Organization works on the fourth pillar by developing, experimenting with, and piloting new technologies and innovations for the future. "With a strong innovation agenda, we need to have a different approach to demand forecasting and sales and operations planning. Supply chain must become even more flexible and agile to respond effectively".

70/20/10

As AB InBev has worked through its transformation agenda, Kraemer and Global Vice President of Le Operation Siqueira set a formula that they call 70/20/10. This formula helps the company measure how each brewery is doing as well as identifying potential growth opportunities. It's designed to balance core supply chain strategies and priorities with transformation efforts.

- Elito Siqueira Global Vice President of Logistics and Operations, AB InBev

The type of beer made by AB InBev's brewers varies from operation to operation, location to location. Even so, the company has a certain level of quality assurance that has to be in place. Many of AB InBev's brands have come under the company's banner through acquisition, creating integration challenges. As such, they may have specific standards of taste or a specific culture and it's up to the supply chain team to put ingredients and support in place to ensure that brands don't suffer at scale. With global brands, the key is maintaining consistency of taste from region to region. Budweiser should taste the same in Shanghai as it does in St. Louis even if it was brewed in China.

The 70/20/10 formula represents the focus, attention, and approach AB InBev adopted to balance this consistency and the accompanying core supply chain activities, with efforts to spur disruptive innovation. 70 percent of the work focuses on making sure all parts of the organization are meeting the benchmark standards for taste, quality, and safety. 20 percent of attention goes towards incremental innovations. When supply chain entities have reached the benchmark, 20 percent of efforts are focused on opportunities they have to improve and reach new levels of excellence. As Siqueira shared, "it's doing more, but better. Doing the same, but better...." The final 10 percent represents efforts to create internal disruptions, ensuring that the whole organization is forced to keep thinking of innovation and value creation opportunities.

Piloting Disruption

AB InBev's Disruptive Growth Organization lives in the 10 percent of the 70/20/10 formula. As the company looks for new ways to evolve it will need to leverage technology smartly. This means implementing everything from automation to analytics to blockchain and even driverless cars. The team at AB InBev created a heatmap to keep track of where each new idea is in the development process so that it can ensure that innovations are truly ready for prime time before rolling them out to the global organization.

In one pilot project, the international logistics team worked through how to manage global production and shipping using distributed ledger, or blockchain, technology. Through the project, AB InBev was able to regionalize its operations, cutting down on import/export through differing and complex jurisdictions. The company's headquarters in Belgium oversees the six regions and ensures that processes are running smoothly. By regionalizing, the "Once people are benchmarked the next step is to create or identify a gap. When you have that gap people can rise to a new level. Maybe they are doing the same thing but they are doing it better. Maybe they are doing more, but better. It's all growth."

- Elito Siqueira Global Vice President of Logistics and Operations, AB InBev

company was able to do more effective benchmarking and identify areas for improvement. AB InBev also realized cost and time efficiencies through regionalization, which cut down on product waste. Now when new brands or new markets come online, they are incorporated into their respective region, allowing them to join the network in a faster and more consistent way.



Blockchain-backed regionalization also helped the company to enhance information sharing and deal with its myriad SKUs, labels and bottles across global brands. As Siqueira observed about their global operations, "the amount of information that we need to share, and the amount of people that need to connect with that same information, that's what drove us to pilot blockchain." Blockchain, or distributed ledger technology, allows for organizations to enter and verify information worldwide on a secure network. However, first the company had to centralize its paperwork, so that all of the necessary information was flowing to and from countries of origin, suppliers, carriers, customs at the receiving country and others, as appropriate. Blockchain has made that documentation much easier and quicker. In the first year their measure for compliance when a container arrived in a new country was below 70%, and last year they closed at 98%

"We saw we were being disrupted and we decided that it was time for us to not only be able to see the disruption, but to lead it. To do that we needed a group that was separate from all the challenges of the organization and the pressures of cost-savings and the disruption of things that happen with daily execution and market upsets... to just focus on what's going on with the consumer, how are they changing? And, to deal with the whole world of start-ups and emerging technologies and try to bring it all together."

> – Peter Kraemer Chief Supply Officer, AB InBev

In addition to improving coordination, AB InBev has made great strides in strategically streamlining their processes. On the surface, a Corona bottle in Mexico may look the same as one in Helsinki, but each country has certain requirements about information that should be on labels, as well as materials that are used for bottling. Before the streamlining process that meant a bottle of Corona had hundreds of labels and SKUs to track, each with only slightly altered information in order to meet global regulatory requirements. The team set about finding commonalities and was eventually able to create a package of ten labels and SKUs that were regionalized and still compliant. Regionalization extended into the documents required for shipping - bills of lading - making it less likely that shipments would be held at borders because they were missing small bits of information as a result of human error and complexity. Brewers and Bottlers in the pilot were able to realize production efficiencies immediately and the system was soon rolled out to the whole organization.

Conclusion

As AB InBev has grown into a global network of small craft breweries and massive internationally known brands, the supply chain team has led the way ensuring that the organization is connected and focused on growing smartly. As part of this connectivity, brewers throughout the company come together once a year to stay in touch, learn from each other, and identify new possibilities for growth. Kraemer and Siqueira have made sure that supply chain is leading these conversations and benchmarking the organization for quality, consistency, and safety.

"We are always pushing. We call foundations defense and dreams the goal."

- Elito Siqueira Global Vice President of Logistics and Operations, AB InBev

The supply chain team is also spearheading disruption from within by dedicating resources to the research, development, and implementation of new technologies. An internal innovation team leads organizational pilot projects to ensure that innovation is implemented in a way that makes sense before rolling it out to the whole company. So far, these pilots have been successful at both levering nascent technologies and realizing cost and time efficiencies.

Leadership Insights:

- **Foster Connection.** The supply chain is critically important to all parts of enterprise operations, which creates an opportunity for supply chain teams to serve as connectors throughout an organization. By bringing everyone together an organization will be more consistent and opportunities for innovation will reveal themselves.
- Set Benchmarks. In today's competitive global economy, reliability and quality are paramount. By setting internal benchmarks for both, supply chain professionals can ensure that all parts of the network are operating at the same level. From there, teams can set new goals for excellence.
- **Disrupt from Within.** By developing and testing new technologies in pilot projects, AB InBev has been able to disrupt itself without adversely impacting a delicate global network. Now, the company is using bleeding edge technologies, putting the organization well ahead of the pack.

"There are two worlds of knowledge that we are now looking at. One is a world of knowledge that's built up using statistical methods. Most of the current versions of machine learning that you see today, are incredibly powerful, incredibly useful, and allow you to scale into certain knowledge bases. The other world is a world of handcrafted knowledge, where you have an understanding -- domain experts who actually come in and tell you what the task is like and allow you to craft systems that actually fit that task. The best world that you can build, the best kind of system you can build, is a world where those two things come together."

> - Kristian Hammond Professor of Computer Science, Northwestern University



Growing by Delighting Customers at Starbucks

In this digital era, chief operating officers and chief supply chain officers have an unprecedented opportunity to harness new business models and be on the forefront of enterprise growth. Yet realizing the potential of emerging ideas is often difficult. What does this journey look like for supply chain leaders striving to break through barriers and leverage new business models to elevate the customer experience and increase enterprise value? At its core, Starbucks, the number one purveyor of coffee in the world, is and always has been about creating the Third Place Experience, a place where all are welcome; a place to connect with one another over a cup of coffee. To accomplish this, Starbucks aims to create the best experience possible for its customers around the world, and this is integrally connected to the supply chain and operations of the company. "We reset the way we work. We moved from a compartmentalized way of working - pretty opaque way of working - to something more transparent. It was uncomfortable for a lot of our team members. They thought 'my 15 bosses are going to see that I have a problem', and that's true. The point is to let us all in on it, so we can fix it together."

> - Hans Melotte Executive Vice President of the Global Supply Chain, Starbucks

The Third Place

Starbucks has over 330,000 partners around the world, including partners (employees) in the stores and in corporate offices globally. For Hans Melotte, Executive Vice President of Global Supply Chain at Starbucks, each one of those 330,000 partners represent a relationship that has to be nurtured for Starbucks to fulfill its mission of being a place where people come to for inspiration and community. Starbucks describes these aspirations as becoming the "third place" in our daily routines. The "third place" is a social surrounding separate from the two common social environments of home and work. Successful third place locations are warm, welcoming, and community-oriented, and facilitate connections. With locations all over the globe, Starbucks aims to make every store feel like the one that's in your neighborhood. To do that well, Melotte has to ensure that products are consistent and of the same quality, store to store, whether that store is in Seattle or Singapore.

To date, Starbucks has been successful; and, as the company matures and continues growing, Melotte and his team are looking at new approaches to improve product delivery and enhance the impact of supply chain on the business, ultimately ensuring the customer experience is always front and center. To achieve this, Melotte is testing the capabilities of the supply chain against three key criteria:

- Are we agile?
- Are we intelligent?
- Are we caring?

To gain agility, Starbucks supply chain transformation moved the company from being defined by a "patchwork" of suppliers and hubs to an integrated and transparent network. Now, supply chain professionals have the visibility they need to be proactive, not reactive.

As part of its transformation to an agile supply chain, Starbucks created a fit for purpose architecture that allowed the supply chain team to think of its suppliers as an intelligent network. The result is fewer forecasting errors and better business relationships.

Core to Starbucks value model is an experience that includes caring for customers and for one another. In practice, it means delivering the finest coffee in the world to customers globally and creating an experience of warmth and belonging. Starbucks supply chain is integral to achieving this by providing the tools and delivering the coffee, food, and products central to the experience, central to the barista, and central to its customers.

Fit for Purpose Architecture

As Melotte and his team transition Starbucks into an agile and responsive supply chain, they realized it was necessary to create a fit for purpose architecture. To do this meant revising the design of networks, standards, and the role of the supply chain to continuously make sure that resources are being used efficiently and producing the intended

outcomes. Previously, a few hubs were serving most of the business, but with no guarantee that each was providing service in the same way. The new architecture is designed to right-size capacity, ensure all nodes – distribution centers, plants, and third parties – are in the right locations, shape and elevate the capabilities of the supplier network, and finally, ensure the company is using the right distribution channels.

Starbucks consistently monitors its fit for purpose architecture through quarterly network monitoring. Commodities markets are very vulnerable to changes in climate, price, and distribution. Where other retailers might only have to line up supply networks twice a year, Starbucks has to have a complete picture of the coffee market each quarter to account for changes and plan accordingly. Over time, Melotte plans to expand this type of modeling to cover the total supply chain to drive growth and gain new insights. Eventually, with "No matter how many machines and bots we have running our business, at the end of the day, the ecosystem, I firmly and deeply believe, can only be efficient, effective, and caring if it's run by people. People with emotions, people who care."

- Hans Melotte Executive Vice President of the Global Supply Chain, Starbucks

the help of technology, having this level of visibility will help drive automation so, for instance, restocking can be managed algorithmically from end-to-end. In the short term, it means store managers will have the right inventory to consistently meet customer requests.

Network modeling has also helped Melotte and his team forecast with significantly fewer errors. Melotte has a better understanding of where to put resources in the short-term, medium-term, and long-term. These insights give the supply chain team the ability to identify new ways of creating value and strengthening relationships with network partners by becoming a smarter, more agile customer.



Conclusion

With more than 29,000 stores around the globe, ensuring the capabilities of Starbucks supply chain is imperative.

Melotte and his team have integrated more technology into Starbucks supply chain to increase transparency and improve forecasting. By getting connected, the supply chain team is also looking ahead to nascent technologies like blockchain and starting to think about the best ways to incorporate better traceability and tracking. The technology will also help Starbucks own the last mile of its business, which is creating a customer experience that delights, inspires, and keeps people coming back.

Leadership Insights:

- **Build for Agility.** Starbucks is transforming a patchwork supply chain into a more integrated framework. This shift has provided increased transparency and consistency both within the company and across the supply chain ultimately resulting in more nimble and adaptive operations.
- **Capitalize on Data.** By integrating new technology across its supply chain, Starbucks has been able to harness data and insights to improve forecasting, learn more about loyal customers, and strengthen relationships with partners. Data has been essential in gaining efficiencies, improving processes, and developing strategies to support consistent demand.
- **Care for Customers.** Putting the customer at the center of every business decision is key to Starbucks supply chain and business model. With intentionality, Starbucks is creating an ecosystem of suppliers, partners, and employees that is designed to coordinate and align efforts to deliver what customers want, when and how they want it.



"The starting position for any supply chain project is not actually the supply chain. It is the customer value proposition. What companies have to ask themselves is how do I go from my customer value proposition into an effective supply chain strategy without increasing complexity and while using data and analytics to improve performance?"

- David Simchi-Levi,

Professor of Engineering Systems, Massachusetts Institute of Technology and Chief Innovation Officer, Artificial Intelligence & Data Science, Accenture Analytics



A Strategy for Growth at Johnson & Johnson

In a post-Amazon world, there has been a dramatic shift in customer expectations. Consumers want more personalization, on-demand products and services, and immediate access. How can the supply chain and operations leaders of tomorrow meet these new demands while addressing a growing set of disruptors? At Johnson & Johnson (J&J), customer intimacy is a critical part of the equation. The company engages with people through some of the most challenging experiences of their life – when they have new babies, when they are diagnosed with a disease, or when they get hurt. Now as the company looks toward future growth, J&J's Supply Chain is playing a critical role in finding new ways to bring even more personalization to its products and solutions.

J&J's products fit broadly into three buckets - consumer goods, pharmaceuticals, and medical devices. Each of these three areas drive growth for the company by targeting different parts of the healthcare market. Over its more than 100-year history, J&J has helped create many of the markets they serve today. The company has been at the leading edge of healthcare, but in order to stay relevant, the company has to continuously rethink its products and solutions and how it delivers.

"Think about personalizing supply chains in a very, very different way than what we've been doing before, and how it is a must, a requirement, to use the latest technologies, capabilities like track and trace, in order to be able to make good on the promise."

– Meri Stevens Vice President of Strategy and Deployment, Johnson & Johnson

Putting People First

Meri Stevens, Vice President of Strategy and Deployment for Johnson & Johnson Supply Chain, is an experienced supply chain leader. When she began her career, tracking products through the supply chain involved moving magnets around on a board and holding on to paper delivery receipts. Now, supply chain involves a global technology infrastructure to pilot, test, track, and deliver thousands of customized products and solutions on a tight schedule.

For J&J, segmenting the supply chain for personalization drives growth by getting individuals and healthcare providers the supplies and medication they need with the customization they demand. At an individual consumer level that may mean giving someone prescription contacts by mail that allow them to change their eye color to match their outfits. At a more macro level, it means working in emerging clinical care locations like ambulatory surgery centers to deliver customized surgical replacements of knees and hips for each procedure, on time, and without violating patient privacy.

Stevens describes this as the journey of reliability. Reliability represents not only product performance; it is also tracking and tracing products to ensure they make it to consumers. In order to make the journey of reliability work, Stevens set up a strategic plan. The key components of the plan are:

- Setting a new standard for performance
- · Building trust
- Fast-tracking innovation
- Creating agile customer solutions
- Value creation

"There's a recognition that the speed of change is going to disrupt supply chain more than anything else. As we think about that at Johnson & Johnson, we think about supply chain as how do we really change the trajectory of health?"

– Meri Stevens Vice President of Strategy and Deployment, Johnson & Johnson

Each of these components come together to support product delivery while also helping the supply chain team identify new growth areas. For Stevens, each part of the plan also ensures that J&J remains credible and transparent on product delivery internally and externally. That transparency keeps employees and business partners engaged and invested in a quality process.

In putting the strategic plan into action, the Johnson & Johnson Supply Chain is working to build 'personalized supply chains.' Personalized supply chains put the customer at the heart of product delivery by tailoring solutions to individuals' needs and tracking related outcomes. For example, that could entail delivering customized beauty kits for everyday use to a customer's home, delivering targeted medications in specific doses and developing strategies to track if those medications were taken in line with instructions, or personalizing replacement hips, knees, and other joints ahead of a surgery.

The supply chain team is leading personalization within J&J by focusing on all five principles of the strategic plan and ensuring the production of high-quality products, reliable service, and speed to market. Value is created by putting customers at the center of that process. At a practical level, this change has also prepared J&J for the broader shift within the healthcare industry to a pay for outcomes model that focuses on prevention.

Driving Growth through Innovation

As a company, J&J is no stranger to innovation. The company often invents its own market segments and routinely works on new areas of healthcare to find new cures and new ways to improve services. Within the supply chain, Stevens seeds innovation by looking to other industries for ideas and inspiration. Her team has drawn extensively from the work semiconductor companies do to make microchips quickly while maintaining quality. Microchips require clean rooms, precision processes, and speed to market. Many parts of the healthcare landscape work the same way. Stevens calls it integrated quality - a process that has precision all the way through to delivery.

"Then we started to say, you know it really isn't about setting a standard. It's about setting THE standard."

– Meri Stevens Vice President of Strategy and Deployment, Johnson & Johnson Stevens and her team are also looking for new ways to digitize as much of the supply chain as possible in order to remove the guesswork from tracking and tracing. One recent innovation includes the creation of a kind of "vending machine" for medical parts. Medical practitioners get parts from the machines on an as needed basis and inventory is tracked and replaced accordingly. The machines help hospitals cut down on inventory storage while also making product supply cycles more predictable for J&J. Innovations like this also make it easier for hospitals and other providers to do business with J&J, which creates value and builds good customer relationships. "Now, more and more, supply chain leadership is sitting at the boardroom table."

– Meri Stevens Vice President of Strategy and Deployment, lohnson & Johnson

Stevens views supply chain innovation in the aggregate. Her team is focused on how to improve the network as a whole and intentionally includes all parts of the distribution network in driving innovation. In practice, this means piloting a potential innovation, refining it, and then rolling it out to the global supply chain.

Conclusion

At the core of everything the J&J Supply Chain does is a focus on patients and customers. The culture at J&J is defined by a Credo that implores organizational leaders to think first about how people are impacted by the products they use and the services that are delivered. For the supply chain team that means leading a growth agenda focused on creating a personalized supply chain that meets the unique needs of every J&J customer.

Delivering personalization requires a reliance on technology and analysis that supports the supply chain team as it delivers products and services. Borrowing from other industries that have already created high-quality, technology-driven processes allows the team to scale up quickly. Testing new innovations in small pilot projects before rolling them out globally ensures that the supply chain isn't disrupted while it evolves and improves.

Leadership Insights:

- **Craft a Growth Strategy.** Stevens has been able to drive a growth agenda at J&J by first creating a strategic plan. This plan provides a framework for the supply chain team to innovate and improve without getting too far away from the core mission of reliable product delivery.
- **Borrow from Others.** Stevens' willingness to study the processes of other industries has meant that her own team in supply chain has been able to re-think the way they approach test and learns, enabling quick decision so as to move more like a start-up than a healthcare behemoth.
- Use Systems Thinking. Stevens views her global supply chain and business partners as a complex network and considers how changes will impact the whole before she acts. By using systems thinking, she's able to avoid disruptions and identify areas for change management before a new project gets underway.



"We have to think about what we can do from an operating systems standpoint. How can we scale faster? How can we use data and analytics better? It's an end-to-end perspective."

- Cornelia Coles

Vice President, Operation System-Product Supply Execution, Johnson & Johnson



Enabling Innovation to Drive Growth at UPS

In the past, supply chains and operations were typically very linear. With increased uncertainty and complexity, today's operations leaders have had to become even more forward-leaning and thinking, particularly in planning for the future of last mile delivery. UPS is taking steps to refine supply chain fundamentals and introduce new components that must exist in the near future for e-fulfillment. Through the use of the right data, analytics, and automation to enhance inventory optimization and transportation movements, UPS is finding new ways to grow, with the supply chain helping to drive that growth.

Stan Deans, President of Global Logistics and Distribution at UPS, has been with the company for 34 years. He started as a package handler, working his way through the organization to eventually become the leader of the supply chain team. His trajectory was common for people at UPS, which had a culture of long-term employment with the company. Today, UPS is augmenting its long-tenured executive workforce with leadership from outside the company "You have to think about everything - every mode of transportation - all the way to the end. You have to think about managing the supply chain, cost, quality, performance, compliance. The quality assurance has to be impeccable. Those are the issues today."

> - Stan Deans President of Global Logistics and Distribution, UPS

in an effort to foster innovation and continue to transform the company. These hires bring new skills with them like data science, market research, and experience with new technologies. The addition of fresh perspectives is helping UPS understand more about how customers use logistics and it is also helping the supply chain team leverage technology to improve service.

Igniting Growth through Customer-Centric Services

Many organizations today are working through how to deal with technological disruption. For UPS this is not a new challenge. Over its 111-year history, UPS has rarely made it through a market cycle without encountering a significant form of technology disruption. UPS started as a messenger service, but quickly had to contend with telegraphs and telephones, which eventually led the company to launch a home delivery package service. The nature of home delivery has also changed dramatically over the years. UPS delivery was originally a part of life in major cities. UPS handlers typically made many short trips throughout cities, delivering to and from stores. But as people moved to the suburbs, they expected the same level of service— even in far-flung subdivisions. So, UPS expanded again, eventually evolving into the global logistics service most people are familiar with today. At the core of this growth is the customer. As people have changed their lifestyles and consumer habits, the one constant is the expectation that a person in a brown uniform will deliver whatever it is they've ordered on time and without fail.

"You shouldn't be afraid of technology, you shouldn't be afraid of your competition, you shouldn't be afraid of what's going on in the market. But, you should be afraid of your customers. Because they're the ones that can put you out of business if you don't know what you're doing for them, and if you don't have the capability to adapt to them staying in business."

> - Stan Deans President of Global Logistics and Distribution, UPS

However, managing customer-centric growth has not been easy. UPS has had to find ways to differentiate itself in an increasingly crowded logistics market. To

do this effectively, UPS relies on a combination of new technology and borrowing ideas from other industries. In the 70s as the demand for global logistics grew, UPS decided to build its own airline. Historically, shipping companies paid domestic airlines for space in the cargo hold to ship a few boxes quickly. When the company decided to add overnight domestic and global shipping as products, it made sense to start flying its own planes. Now, UPS operates the seventh largest airline in the world. The only people on those planes are the flight crew.

Other innovations, like the use of online tracking, are designed with customers in mind. When someone places an order and UPS is the carrier, consumers can track the package in real time as it makes its way to their door. It may sound simple, intuitive even, to move the tracking process online, but internally it meant a huge culture shift for package handlers. Handlers were accustomed to managing their deliveries through the use of paper clipboards, forms, and receipts. But customers expect online tracking, and over time, handlers realized that electronic tracking also helped them manage their deliveries better and improve reliability.

Thinking Inside the Box, Outside the Box, and Through the Box

As UPS looks toward the future, Deans says it will be important for his team to "think inside the box, outside the box and through the box" to find innovative ways of getting closer to the customer. Some early plans are starting to take shape. UPS' presence internationally is growing. The company has established 1,000 field stocking stations worldwide to put resources in place in areas where the business is likely to grow over time. Deans is also thinking through warehousing, freight, and more specialized services, imagining what they will look like in the future.

As part of this evolution, Deans has had to rethink how he plans for competitors and customers. As one example, companies like Amazon are both competitors to UPS' logistics business and a customer. Amazon stores often use UPS as a rapid shipping method alongside Amazon fulfillment. In order to remain in a leadership position, Deans and his team have to give customers what they want - the option for efficient order fulfillment, even if the orders originate through platforms that might be competitors in other contexts. Rather than being afraid, Deans and his team have to focus on how to provide the best service and learn to view the Amazons of the world as opportunities for growth.

In the midst of these innovations, the supply chain team has to consider both the transportation necessary to move packages, and the total supply chain including cost, quality, performance, and compliance. As Deans looks ahead, he's excited about new developments including flexible warehousing that will allow UPS to hold inventory episodically and on demand, without having to build an entirely new building. Instead, the company will work with the owners of existing warehouses to use their open space. The company is also partnering with healthcare providers to do rapid delivery of medications and other supplies. "Technology by itself is not what you should be concerned about in distribution. It's not being customer-centric and not paying attention to what your business is doing that will have an impact on whether you survive or not."

UPS uses advanced robotics and analytics technology to run warehouses that process packages without any human intervention. Robots are packing, shipping, scanning, and tracking items. The facilities that run the Symbiotic robotics plan have no human intervention and can cut processing time significantly. - Stan Deans President of Global Logistics and Distribution, UPS

Conclusion

The key to the growth story at UPS has been to make every change with the customer in mind. In some cases that means viewing companies like Amazon as partners rather than competitors. In other cases that means innovating to develop new service additions that will become a part of customers' everyday lives. By adding new capabilities and expanding services, UPS is responding to what customers want now, in addition to thinking ahead about what they might want in the future. Technology is a critical part of enabling that growth. UPS is harnessing the power of technology to improve service delivery and scale up. The supply chain team is leading that effort by working directly with the CEO to implement innovation without disrupting package delivery or raising compliance concerns.

Leadership Insights:

- Focus on the Customer: UPS keeps consumers at the center of all of its supply chain planning and innovation. Supply chain professionals spend time tracking consumer trends and patterns, which has resulted in service expansion over the years and is now driving technological innovation at the company.
- Borrow from Other Industries: When most people think of UPS, they think of packages. However, UPS also operates the seventh largest airline in the world and is a key player in the healthcare industry for its capability to deliver lifesaving medicines quickly. In order to play these roles, the company had to build deep partnerships, learn how their partners' technology worked, and implement it. This type of careful study can create value from unexpected places.
- Futureproof a Global Network: UPS already has a global presence, but it's still thinking about where to go next. The company is setting up facilities all over the world to have resources in place before they are needed. UPS is also leveraging big data and analytics to understand emerging trends and build capacity into their systems in order to be able to respond to new consumer demand before it happens.

"When you define a supply chain strategy, and you think about the big interventions you want to lead in your supply chain, you can think about them as GPS - Growth, Profitability, and Sustainability and trust."

> - Kris Timmermans Senior Managing Director, Accenture Strategy

Summary

For chief operating officers and chief supply chain officers (COO/CSCOs), shaping a growth agenda means building supply chains that are robust enough to maintain stability and accountability, but also agile enough to offer choices and delight customers, driving growth. Each supply chain team featured in this report has their own unique approach to making this happen, but there is one universal lesson: supply chain teams that are willing to do the hard work of building resiliency into their systems become growth leaders in their organizations.

Supply chain leaders have to ask themselves tough questions, such as – how are resources being used now? What is the most effective way to use them in the future? How can we free up time and budget to focus on innovation? What can we learn from other industries? How can we bring in vendors and make them partners? What do our anchor customers say?

Once the answers are in, leading change may be difficult. The successful supply chain teams of tomorrow spend time today working hard to change their culture in addition to changing the way they do business.

Customers expect on-demand, bespoke products and services, delivered reliably. In order to do that, supply chain practitioners will have to rethink their business models and in some cases their core systems. Leading global corporations like Johnson & Johnson and Starbucks have done this work – creating individualized supply chains to deliver anything from knee replacements to your favorite flavor of cake pop. The result has been happier vendors and customers. In the case of UPS, the supply chain team is working with its chief competitor – Amazon. The company is now a vendor partner with Amazon, which has unlocked new areas of growth for the logistics company. Finally, at AB InBev the supply chain team explored new ways of creating global efficiencies through regionalization and the use of data analytics.

To succeed today, supply chain professionals have to reimagine what it means to deliver products and identify ways to create new value by relying on network thinking and being willing to take calculated risks. By putting the customer at the center of supply chain transformation organizations can build systems that respond to current demand while also anticipating future needs; change management will be critical here – but the end result can be a more resilient and dynamic organization.

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"How do you define disruption? We get obsessive about protecting our supply chain from disruption, but I think we need to connect it to the idea of what we need to create growth, not just enable growth."

- Reggie Ecclissato

Executive Vice President of Supply Chain Latin America and North America, Unilever

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