



THE CIO AS A SUPPLY CHAIN CHAMPION

ENABLING AND ACCELERATING
DIGITAL TRANSFORMATION



The Changing Role of the CIO in Supply Chain Leadership

WHITE PAPER

Digital technology is creating vast opportunities for supply chain transformation. Business leaders need to look no further than industries such as retail, industrial manufacturing, consumer packaged goods, transportation and life sciences to see how profoundly innovation in supply chain management can shift business models that have been in place for decades, if not longer.

Today's reality is that supply chain transformation can have a positive impact on all types of organizations, enabling improvements in profitability, competitiveness, market share and corporate culture. This expansive view of the supply chain as a change agent comes at a time when two other important and interrelated trends are taking place. These are:

- **The changing role of the chief information officer.** In "The Ascent of the CIO," a special report by Forbes Insights, 84% of CIOs said their role has increased in importance over the past five years. Approximately three-quarters of CIOs cited "technology in customer relationships" and "use of technology in supply chain" as major factors influencing their changing role.¹
- **The explosion of data and the rise of intelligence.** Data continues to double every two years with no end in sight. With the growth of technologies such as big data analytics, artificial intelligence, machine learning and the Internet of Things, data management is a critical supply chain factor. Companies that can harness all their data—structured and unstructured—can use insights and analytics to improve operational efficiencies and deliver a more impactful customer experience.



Because of these changes, the supply chain is now front and center in many boardrooms and executive suites. And if it is not front and center today, it probably will be soon. This combination of higher visibility and the shift to digital technologies is creating a growing chorus for CIOs to take a stronger leadership role in supply chain management and strategic direction.

As noted in the Forbes study: “The CIO is now expected to be an integral member of any team asked to improve the customer experience or speed up the supply chain. It just can’t be any other way. They are expected to be both an expert advisor and a leader of change.”²

In this white paper, we explore the business case for the CIO to take a stronger leadership role in supply chain management and innovation, without undermining or minimizing the vital part played by current leaders in supply chain and procurement.

THE CHANGING NATURE OF THE SUPPLY CHAIN

The supply chain has always been critical in business operations and strategy, an area of the business often leveraged for competitive advantage. When an organization can get products and services into the hands of customers faster and cheaper, it can drive greater market share and profitability.

That is still the case today, but the stakes are higher and the opportunities for innovation more abundant. As such, the role of the supply chain is now even more tied in with the overall strategic direction of the business. Supply chain is no longer just about logistics or efficiencies; it is now closely linked to the transformation of your entire business.

It is the ubiquitous use of connected digital technologies that has moved the supply chain front and center into the C-suite as a driver of business innovation and disruption. Today’s supply chain is fully digital and built on a wide range of digital technologies, including:

- Hardware, such as storage, networks and servers; converged infrastructures; mobile, desktop, handheld, RFID and IoT devices; and in some cases, even mainframe computers.
- Software, such as databases, middleware, data warehouses, business intelligence and specific applications for ERP, HR, procurement, supply chain, manufacturing and much more.
- Cloud services and software-as-a-service solutions potentially covering any and all parts of the business, from billing and tracking to sales, cybersecurity and regulatory compliance.

This is, admittedly, only a partial list of the digital technologies that comprise the foundation of today's modern supply chain. We provide it to illustrate what may be fairly obvious by now: Any way you look at it, the supply chain is a function and a product of information technology.



THE CHANGING ROLE OF THE CIO

When you consider the modern supply chain in that context, as both a function and product of IT, it becomes difficult to make a case other than the CIO being in either a leadership position or even *the* leadership position when it comes to supply chain management and strategic direction.

That's because the CIO is the one person in the organization who is responsible for making sure all of the technology initiatives come together to create what would be, in an ideal world, a beautifully orchestrated symphony of business strategy, development and execution.

It may not always work out that way, but today's reality is that this orchestration of IT is the direction in which almost every organization is heading. The old days of siloed systems are anathema to the digital transformation initiatives driving businesses today.

For CIOs and their teams, it's not just about eliminating silos; it's also about leveraging data. The goal across all of IT—including the supply chain—is to leverage all of the company's data, structured and unstructured, wherever and whenever possible to gain strategic advantage.

So, we are seeing organizations focusing on data management as a business strategy, ensuring capabilities such as data mobility across multiple cloud and on-premises environments. We are also observing organizations using AI and machine learning to not just optimize customer experiences but also accelerate development cycles and improve IT operational efficiencies. We see IT and business leaders push for the adoption of technologies such as blockchain, 3D printing and robotics to create disruptive business models. And we are seeing exponential growth of big data analytics infusing every aspect of the business to drive wholesale digital and workplace transformation.

All of this data-driven IT activity comes under the aegis of the CIO. So why shouldn't the CIO be a leader in the digital supply chain?

DEFINING ROLES, DEFINING LEADERSHIP

It is difficult to argue against the CIO occupying a leadership role with supply chain, at least when it comes to the specific IT technology that is deployed and the processes involved in integrating that technology with other IT-based systems. In the past, other systems may have been in silos separate from the supply chain and procurement systems.

These could include everything from HR to finance and, in some cases, perhaps even sales management, customer relationship management and enterprise resource planning. If the organization in the past viewed supply chain through the lens of logistics, it is possible that each of these vital functions was treated as separate and disconnected.

For any organization embracing digital transformation, however, that separate/siloed strategy no longer applies. All of the organization's IT-based systems need to be integrated, unified and connected to meet the demands of today's environment. Otherwise, it is impossible to orchestrate business operations along with necessities such as cybersecurity, regulatory compliance, data sovereignty and IT governance—not to mention ensure performance, reliability, availability and scalability across the organization.

So, at least when it comes to the IT aspect of supply chain, with the proliferation of digital technologies, it makes sense to look at the CIO as the overall steward. This goes hand-in-hand with the direction in which supply chain is headed—even more digital and data-driven, if possible—and also with the CIO's business profile, which is, as the Forbes research shows, on the ascent.

As described by Forbes: "Digital transformation is changing every corner of the business, from how companies source parts to how they deal with customers. Each change, both large and small, creates a demand for technology expertise and leadership."³

However, as the steward of IT, the CIO has broad organization-wide responsibilities. That does not necessarily make the CIO an expert on supply chain or procurement. In most organizations, those roles are already in the hands of able-bodied professionals with years of experience in supply chain and procurement management.

The changing role of the CIO, from Forbes Insights research

Percent of CIOs ranking the influence of these key factors as "strong" or "very strong."



Making the case for the CIO to assume a strong leadership role in supply chain management should not and does not diminish the roles of supply chain and procurement professionals in any way. The organization must still rely on their expertise, vision and experience to make decisions about everything from logistics to operations to technology to personnel.

In this case, it's a matter of all boats rising. As CIOs get more involved in supply chain leadership—and as they increasingly take a seat in the board room or executive suite—the importance of *everyone* involved in supply chain becomes elevated. With the supply chain becoming more strategic and more closely aligned with the digital transformation imperatives of the organization, everyone's job becomes more visible.

This looks to be a permanent change. As organizations embrace business transformation, the supply chain will only become more unified, more data-driven and more digital in the future, which is why the right supply chain leadership is critical to shaping the business. *(Please refer to our related white papers, "[The Future of Supply Chain Management](#)" and "[A CIO's Guide to Defining and Implementing the Data-Driven Supply Chain](#)".)*

CONCLUSION

Every organization is different, and in fact, every supply chain is different. Each organization has its own issues, its own strengths and weaknesses, its own culture and management model, and its own industries and competitors to deal with. However, while there are differences across all organizations, there are also similarities.

Virtually every business in every industry is embracing digital transformation in some form or fashion. It is almost impossible to avoid because your customers, employees and partners won't allow you to. They are living in the digital world, and you are doing business in the same digital world. The reality is that the businesses that continue to be successful and thrive in the future are the ones that embrace this type of transformation and adjust their business models accordingly.

The CIO is often the pivotal point person in driving this transformation. The CIO is the one responsible for setting the technology vision for the company and trying to turn that vision into reality. As the supply chain becomes increasingly a product of digital technologies, it increasingly falls into the CIO's orbit.

This is a good thing for the company and a good thing for everyone involved in managing and deploying supply chain operations and strategy. As organizations embrace digital transformation, the digital supply chain rises in strategic importance. It is not a function defined by logistics; it is now about business transformation.

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