

LIBERATING THE SUPPLY CHAIN **WORKFORCE**

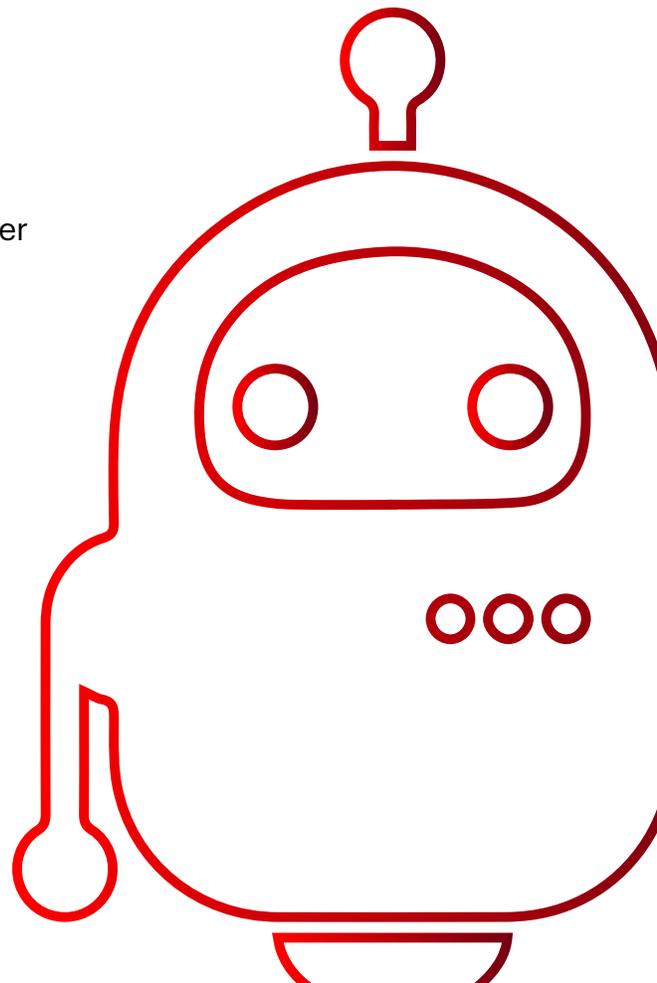


ROBOTS, PRESCRIPTIVE ANALYTICS AND ARTIFICIAL INTELLIGENCE (AI) ARE **LIBERATING UNTAPPED HUMAN POTENTIAL** IN THE SUPPLY CHAIN. ARE YOU TAKING ACTION TO EMBRACE THEM?

Advances in automation are transforming the supply chain future workforce.

No longer relegated to the factory floor, robots are supplementing and augmenting human roles in such knowledge-intensive areas as supply chain planning, customer order management, and inventory management. By enhancing and extending human cognition and capabilities, they are already driving greater operational excellence. In time, robots also promise to deliver significantly better business outcomes, by harnessing the power of evolving AI and using prescriptive analytics to help people reframe how crucial business decisions are made.

For humans, liberating the supply chain workforce heralds an exciting freedom to focus on what people do best: the abstract thinking and contextual reasoning that still elude machines. Though some jobs will change, new, value-enhancing roles will emerge. Thanks to the combined power of humans and machines working together, supply chain executives have an unprecedented opportunity to drive a deep shift in supply chain operational performance.



HUMANS + MACHINES = THE MULTIPLIER EFFECT

Over the past decade, basic automation and analytics, coupled with the widespread adoption of enterprise resource planning (ERP) technologies, have improved the operational efficiency of supply chain processes. But the true opportunity for significantly better operational performance lies ahead—and what a shift it will be.

Accenture Strategy research shows that the vast majority (90 percent) of business and supply chain executives agree that over the next three years supply chain performance will rely to a great extent on supply chain talent. They also expect robots, together with AI and the forecasting power of prescriptive analytics, to have a significant impact on the supply chain workforce's responsibilities and tasks.¹ This isn't about technology versus humans. Both are critical and by collaborating in roles like planning and inventory management, they will create new sources of value for the business. For example, most executives (65 percent) expect the combination of technology and humans to enable more forward-looking and strategic decision-making to support business goals.²

As routine tasks become automated, humans can focus on more decision-intensive activities. One big chemicals player with more than one-thousand employees in its central supply chain function aims, for example, to automate the transactional activities that currently consume more than 50 percent of its workforce's time. Import/export management, customer order management and outbound transport management will be particularly impacted.



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Meanwhile, as prescriptive analytics reduce the scope for human error and thus improve compliance, critical business insights can be delivered in a fraction of the time that it takes humans working alone.

In fact, prescriptive analytics, which not only anticipates what will happen but also suggests options to capture opportunities and mitigate risks, can be applied across multiple supply chain areas to enhance the chances of human planners achieving optimal outcomes. For example, companies expanding across markets could use advanced network modelling techniques to evaluate multiple configurations and determine optimal routes, markets and product selection. To improve day-to-day operations, companies could adopt collaborative sales and operations planning. This technique connects statistical forecasting methods for demand planning with rough-cut, multi-level supply planning. These in turn help determine the right amount of inventory, achieve targeted service levels and boost productivity.

The impact of digital on the supply chain future workforce

Supply chain executives believe digital advances will augment the supply chain workforce. They expect supply chain roles over the next three years to change most significantly in the following ways:



Source: Accenture Strategy Supply Chain Workforce research, 2016

WANTED: INTRAPRENEURS

As technology improves human productivity, such uniquely human qualities as judgment, empathy, collaboration and persuasion will increase in importance. More than four in five supply chain executives (87 percent) believe that digital advances will drive major changes in the supply chain job mix over the next three years.³ To compete, human workers will need to move well beyond their traditional roles and skills as efficient order takers and function increasingly as internal entrepreneurs, or “intrapreneurs.” These dynamic innovators can proactively identify growth opportunities and manage the risks associated with them.

One critical role ripe for intrapreneurship is supply chain demand and supply planning. Sixty-five percent of business and supply chain executives anticipate that advances in analytics will enable planners to make more forward-looking, strategic decisions and spend less time on reactive problem-solving.⁴ Executives also envision planners moving into category, or segment, roles that reflect an end-to-end business focus. Over the next three years, other top emerging supply chain roles will reflect a similar focus on profitability and performance improvement, as well as the importance of strong analytical skills that can leverage the algorithms and advanced simulations powered by AI and prescriptive analytics. These roles include process improvement managers, business development leads, risk managers and data scientists.



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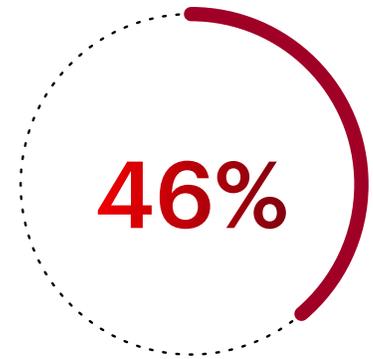
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SEIZE THE TIME

Automation of routine activities like data processing and cleansing is low-hanging fruit: a good place to start, but not to finish. Some 46 percent of supply chain executives anticipate more automation of daily transactional activities and exception handling.⁵ But the real value comes from leveraging technologies to drive innovative supply chains that support growth by offering new products and services to customers. This is the primary business objective for 54 percent of supply chain executives in the next three to five years.⁶

Advanced technologies will be needed to support the human intrapreneurs tasked with driving future innovation and growth. Although still evolving, some of these technologies are already available and leading companies are beginning to deploy them in support of specific supply chain strategies.

The most promising opportunities for value realization will target investments that increase competitiveness by aligning supply chain operations with customer characteristics and business objectives. A supply chain needs above all to be standardized, stable and reliable and operate in a highly cost-sensitive business environment. For instance, a commodity chemicals player can drive significant value from basic analytics pertaining to statistical forecasting, inventory control and transport consolidation. However, when flexibility and speed are paramount—a downstream chemicals player offering engineered and customer-specific products, for example—advanced AI with the power to predict, prescribe and shape demand is especially appropriate.



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Faced with increasingly demanding customers across a variety of markets, the smart money is on running multiple types of supply chains across businesses simultaneously: not only efficiently operating either a stable or flexible supply chain, but one that adapts as needed to support personalized, differentiated service. Investing in talent and technology to manage this complexity, while providing seamless service to the customer, is at the heart of the deep shift in supply chain operational performance now underway.

POSITIONING FOR SUCCESS

Integrating AI, robots and prescriptive analytics into the supply chain workforce today will position you to capitalize on these revolutionary technologies tomorrow. The following considerations will help you get started:

Attract the future workforce.

Identify exceptional talent, including people who may never have considered a career in supply chain before, to fill the roles of intrapreneurs and innovators. Don't just invest in training; ensure the workplace reflects the ethos of the new new supply chain. Integrate mobility, technology and collaboration tools, and reinforce new behaviors and mindsets throughout the talent development lifecycle. Recruitment, performance metrics and career advancement all need to be viewed through a lens of technology-driven innovation.

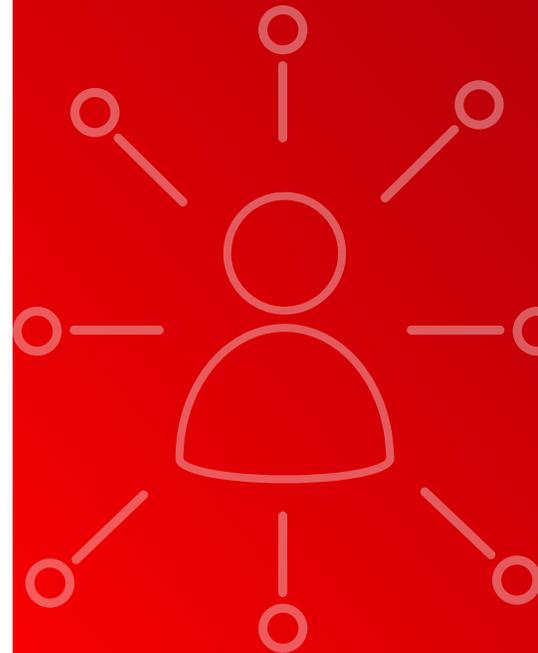
Extract the robot from the human.

Start prioritizing and defining robotic process automation opportunities. Begin with the most routine and transaction-focused activities, based on specific roles and tasks. But don't stop there. Redirect the "liberated" human worker to focus on the customer, service level promises and new products and services.

ATTRACT THE FUTURE WORKFORCE



EXTRACT THE ROBOT FROM THE HUMAN



Place your innovation bets.

Map opportunities to existing technology solutions according to their maturity and availability (e.g., explorative vs. ready-to-implement). Multi-echelon inventory optimization technologies are already on the market, as are such techniques as game theory and non-linear or stochastic dynamic programming. These technologies incorporate complex algorithms to help optimize planning. Start exploring their potential, talk to their inventors and consider pilots. Think big, but start small. Then invest further in technologies that show promising results.

BY DRAMATICALLY AUGMENTING THE FUTURE WORKFORCE, THE MARCH OF THE ROBOTS PROMISES TO DRIVE AN EXPONENTIAL IMPROVEMENT IN SUPPLY CHAIN OPERATIONAL PERFORMANCE. LEADING COMPANIES ARE ALREADY CAPITALIZING ON THIS PROMISE. NOW IS THE TIME TO JOIN THEM.

PLACE YOUR INNOVATION BETS



JOIN THE CONVERSATION



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NOTES

- ¹ Supply Chain Workforce Research, Accenture Strategy, 2016
- ² Ibid
- ³ Ibid
- ⁴ Ibid
- ⁵ Ibid
- ⁶ Digital Supply Network survey, Accenture Strategy, 2015

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