

The background of the slide is a dark blue, semi-transparent image of a shipping yard. It shows stacks of intermodal containers in various colors (blue, red, white) and a crane in the center. The overall aesthetic is industrial and modern.

SUPPLY CHAIN & LOGISTICS:
A TRANSFORMING WORKFORCE



WE LOVE TO PUT **ORDER** IN YOUR CHAOS.

Morai Logistics Inc. is a 3rd party logistics provider with an operating agency agreement representing Mode Transportation. We are a powerhouse logistics team based in the Greater Toronto Area and do business throughout North America, including Mexico. Our team is dedicated to our terrific clients and we strive to take the chaos out of your supply chain. We are always on the lookout to do exceptional work with remarkable people and companies!





SUPPLY CHAIN & LOGISTICS: A TRANSFORMING WORKFORCE

According to the report **Digital Supply Chain: Creating Skills for the Future**, the Canadian supply chain and logistics industry currently employs 878,000 people. Digital technologies is stated to be a contributing factor to the increase in job creation expected to happen over the course of the next five years.

HOWEVER, RESEARCH ALSO IDENTIFIES CANADA'S RANKING AS THE 14TH NATION IN THE WORLD BANK'S LOGISTICS PERFORMANCE INDEX.

While the country's investment in research and technology remains high, less than 41% of Canadian industries actually utilize advanced communication technologies. The report further identifies that as the integration of emerging platforms continues to rise, the need for an advanced workforce is critical.

Unceasing technological advancements in the form of artificial intelligence, the Internet of Things (IoT) and Big Data, are necessary to help companies keep up with consumer needs and demands. They're also key to improving the countries performance in trade logistics.

This eBook takes a look at current technology trends that will have a direct impact on the transportation supply chain and logistics workforce.



THE DIGITAL IMPACT

The digital workplace is a concept that is receiving much recognition across a variety of industries. Described by **Deloitte** as “the natural evolution of the workplace”, the digital workplace has been found to improve employee productivity, satisfaction and retention. The integration of new technologies into business operations creates efficient processes that help organizations optimize their services.

The transformation of the supply chain workplace is also underway. Companies are integrating technologies into their operations to meet the growing demands of immediacy and visibility expected by consumers. To become ‘digital trendsetters’ in the supply chain industry, companies strive to achieve the following:

- INDIVIDUALIZE CUSTOMER EXPERIENCES
- CUSTOMIZE SERVICES TO OFFER HYPER-FLEXIBILITY
- INVEST IN AI AND IOT
- CREATE INCLUSIVE ECOSYSTEMS INCLUDING START-UPS

With 85% of companies already making efforts to implement technologies, the need for a workforce with specific skills will also be required.



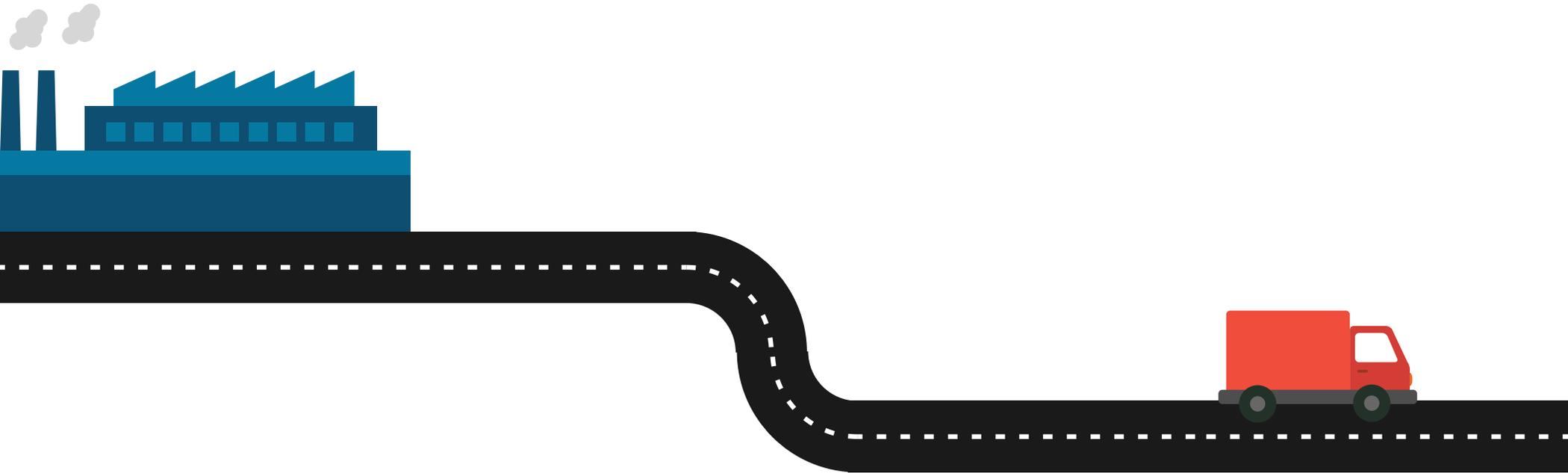
TECHNOLOGIES THAT WILL REQUIRE EXPERTISE

As mentioned above, there are a variety of emerging platforms that are making their mark in supply chain and logistics. In order to create a talent pool that reflects the technical skills and abilities required to run these platforms, companies must understand the trends.

According to the Canadian Supply Chain Council, there are six technologies the industry should consider adopting to remain competitive. They include the following.

- 1. BIG DATA AND PREDICTIVE ANALYTICS**
- 2. INTERNET OF THINGS (IOT)**
- 3. ROBOTICS & AUTOMATION**
- 4. BLOCKCHAIN**

Based on the above trends, the market can expect to see over **50,700 jobs between now and 2021** added to the supply chain workforce. Below we share insights into the types of jobs skills and labour requirements each of the above technologies will produce.



1. BIG DATA AND PREDICTIVE ANALYTICS

It's becoming highly important that companies looking to generate big data, have the tools and teams necessary for analysis. Marketing teams for instant use big data to understand consumer behavior patterns while also monitoring digital engagement.

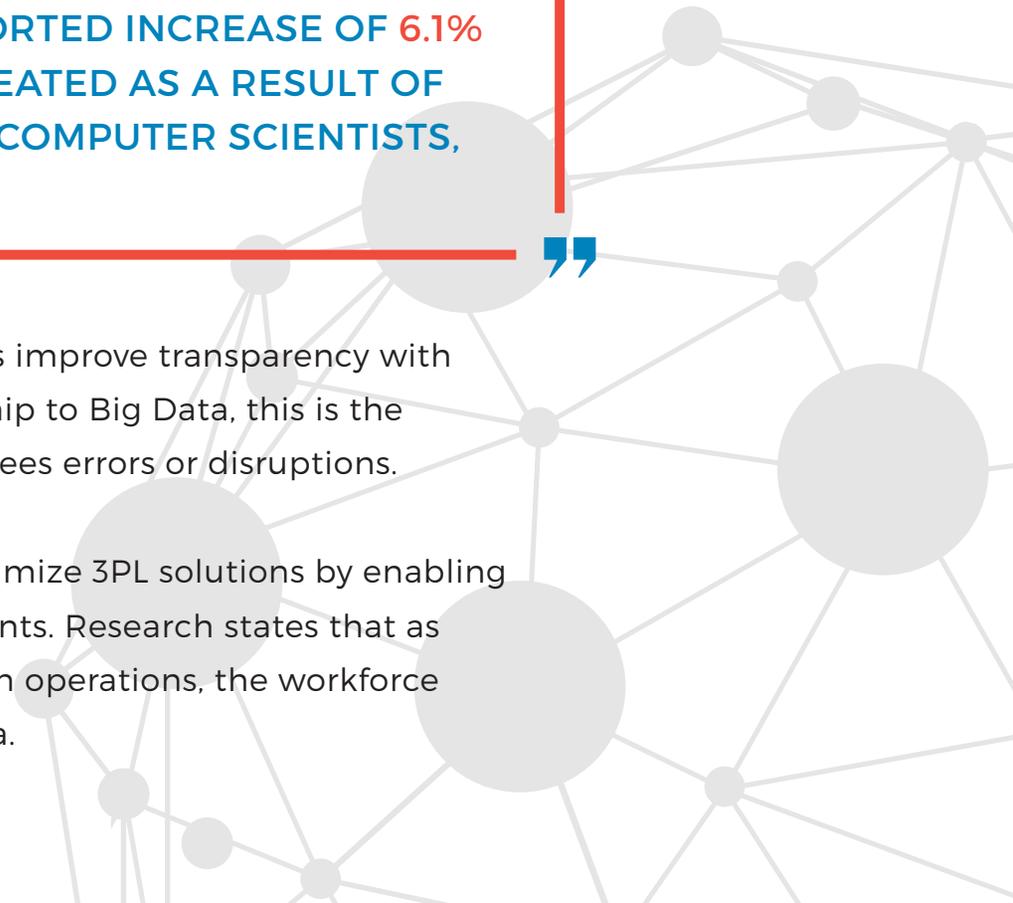


BY IMPLEMENTING BIG DATA ANALYTICS INTO THE SUPPLY CHAIN MANAGEMENT PROCESS, THERE IS A REPORTED INCREASE OF 6.1% IN JOB CREATION. THE JOBS THAT ARE CREATED AS A RESULT OF THIS TECHNOLOGY INCLUDE “ENGINEERS, COMPUTER SCIENTISTS, DATA MANAGER AND ANALYSTS.”



A technology that will shape the way supply chains improve transparency with their customers is predictive analytics. In relationship to Big Data, this is the analytical process that discovers patterns and foresees errors or disruptions.

Morai Logistics also speaks to its ability to help optimize 3PL solutions by enabling companies to maintain detailed insight on shipments. Research states that as predictive analytics is integrated into transportation operations, the workforce must be able to identify and analyze real-time data.



2. INTERNET OF THINGS (IOT)

IoT technology is changing the game for many industries and with consumer behavior gravitating more toward mobile, supply chain and logistics should pay close attention.

Current shortcomings with integrating IoT with supply chains ranges from integration issues and the proper skills required for analyzing data.

To understand that impact on the workforce, IoT technologies such as **sensors and radio frequency identification (RFID) tags** should be considered. By implementing this, companies will fulfill immediacy demands as the process of information will become faster.

THIS WILL HELP CURRENT EMPLOYEES WITH COLLECTION AND MANAGEMENT OF DATA. A NOTED 33.3% IN JOB CREATION WAS FOUND.



3. ROBOTICS AND AUTOMATION

The Supply Chain and Logistics industry is also showing favor to investing in robotics and automation. In fact by 2025, the US will invest close to \$67 Billion on this technology.

THE USE OF ROBOTICS HELPS ENHANCE WORKERS VISIBILITY IN WAREHOUSES BY IMPROVING THEIR FUNCTIONS ASSOCIATED WITH PHYSICAL LABOR.

Although the idea of implementing the use of robotics has reported to negatively affect certain industries, the supply chain industry will receive a positive impact. The Canadian Supply Chain Council reports a high impact of 31.3% on the labor force.



3. ROBOTICS AND AUTOMATION

On December 21st, 2017, Morai Logistics discussed the positive impact **blockchain** will have on the supply chain industry. There were three noted benefits of this technology:

- REDUCTION IN EMPLOYMENT COST
- REDUCTION IN ERRORS
- REDUCTION IN DELAYED TRANSACTIONS

Today, Blockchain is reported to have a high impact of **25.8% on the supply chain workforce**. Its direct impact will be on the **management of the supply chain** and require employees who exhibit leadership, negotiation and collaboration skills, and contract management.

The four technologies noted above have an overall positive impact on the future of the supply chain workforce. While the skills needed to integrate these new technologies have been identified, there is a specific demographic that is believed to make an incredible impact: **Millennials**.



A **WORKFORCE** BUILT FOR **DIGITAL**

The importance of implementing new digital technologies has been proven time and again to be an integral component for supply chains. These technologies will help companies address growing demands, in addition to remaining competitive in a evolving industry.

Although these technologies will be put in place to improve processes, the **digital workplace** also requires analysis and problem solving skills, adaptability and utilization of new tech. in addition to increased leadership skills.



SOURCES

<http://www.supplychaincanada.org/assets/u/The-Digital-Supply-Chain-Final-Report.pdf>

https://www2.deloitte.com/content/dam/Deloitte/mx/Documents/human-capital/The_digital_workplace.pdf

<http://www.supplychaincanada.org/assets/u/The-Digital-Supply-Chain-Final-Report.pdf>

