



2017 SUPPLY CHAIN TRENDS RECAP

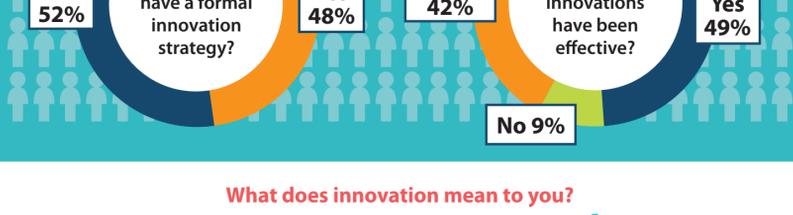
INNOVATION

Innovation has gone from something reserved for start-ups to a must-have for supply chains looking to adjust to **digitalization and disruption**. A perfect storm of huge technological advancement coupled with changing consumer habits means that all organizations within the industry will need to adapt in 2018.

Are supply chains succeeding at innovation?



Only **48%** of manufacturers, retailers and logistics providers have a formal innovation strategy.



What does innovation mean to you?

Machine learning is not new in SCM. But it has been used in very limited ways. There is an arms race to improve supply chain applications, particularly planning applications, using Machine Learning. There has also been a real push to better use Social, News, Event and Weather (SNEW) data to improve planning and risk management. Again this is not brand new, but many more solution providers are now focused on this area and the innovations in this area markedly increased this year. Actually leveraging SNEW will in large part depend on Machine Learning technologies.

Steve Banker, Vice President SCM, ARC Advisory

'My thoughts on innovation can best be summed up by Lewis Carroll "...In a rapidly changing world, standing still is the fastest way to move backward.'

Neil Swartz, Vice President and General Manager, Toyota Motor North America

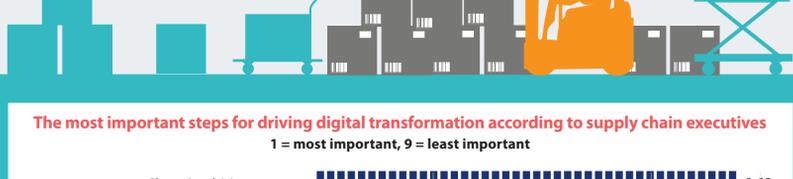
There are three levels of innovation:

- 1) Doing things better: Continuous Improvement
- 2) Transforming supply chain
- 3) Reinventing business model (for eCommerce)

Jim Tompkins, Chairman and CEO, Tompkins International Supply Chain Consulting

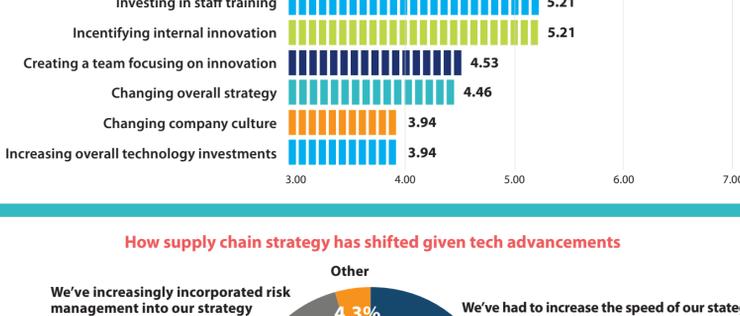
DIGITALISATION

The rise of digitalization has brought **huge change** to our industry this year – in 2018 transformation and innovation will be vital to survive. Organisations must ensure they have a robust strategy in place to stay competitive.

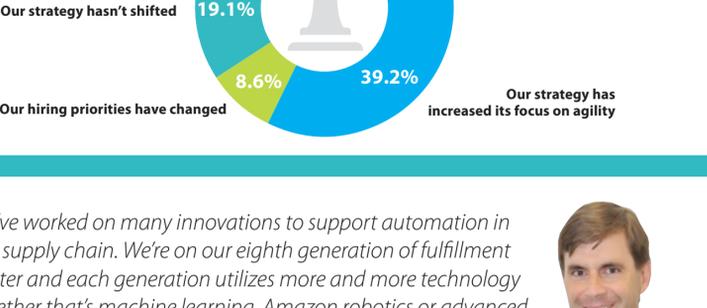


The most important steps for driving digital transformation according to supply chain executives

1 = most important, 9 = least important

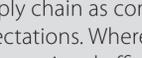


How supply chain strategy has shifted given tech advancements



"We've worked on many innovations to support automation in our supply chain. We're on our eighth generation of fulfillment center and each generation utilizes more and more technology whether that's machine learning, Amazon robotics or advanced algorithms that support customer delivery, to name a few."

Ed Feitzinger, Amazon, Vice President, Global Logistics



ROBOTICS

Building on 2017's momentum, **robotic automation** is tipped to become one of the most revolutionary technologies for supply chain as companies work out how to implement, integrate and define ROI expectations. Where and how robotics are being utilised is fundamental to increasing operational efficiency.

Supply chain executives on whether their warehouses are automated

YES 63.5% **NO 36.5%**

Do supply chain executives plan to automate their warehouses?

NO 70.6% **YES 29.4%**

The biggest barriers to automating warehouses

Complexity of the technology

Regulation 15.2%

Labor unions barring job losses 1%

No barriers 29.4%

Cost 32.4%

BLOCKCHAIN

Blockchain - **distributed ledger technology** - has been widely discussed for years for its disruptive potential of the supply chain. In 2017, the technology started to gain traction. Moving forward, it will allow organizations to add greater visibility and efficiency across the entire supply chain to deliver higher value to customers and trading relationships.

Are supply chain executives engaging with blockchain?

NO - 52.59%

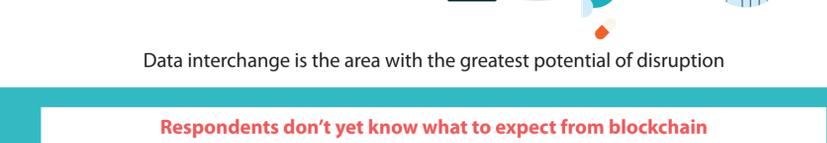
YES - 47.41%

2016

NO - 38.75%

YES - 61.25%

2017



Data interchange is the area with the greatest potential of disruption

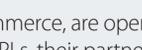
Respondents don't yet know what to expect from blockchain



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"There is lots of money and innovation focused on building out better visibility and traceability applications using distributed ledger technologies. We probably will not see the emergence of off the shelf SCM blockchain applications in the next few years. I think the next year will see a major jump in understanding among Chief Supply Chain Officers on what is possible surrounding this technology."

Steve Banker, Vice President SCM, ARC Advisory



E-COMMERCE

Consumer demands, alongside the rise of eCommerce, are opening the doors to new and exciting opportunities for innovation - for 3PLs, their partners and their customers too. Inventory challenges and the last mile are the key 2017 trends set to move into 2018.

The biggest challenges that executives face when it comes to eCommerce



The percentage of visibility that executives have over their inventory



TOMPKINS' TOP 5 TRENDS

- | 2017 | 2018 |
|--|--|
| Brick vs. Click has transitioned to Brick AND Click | Artificial Intelligence for inventory management going beyond predictive analytics |
| Fulfillment is becoming distributed (Get Local) | Commerce being viewed as pre-purchase and post-purchase processes |
| Unichannel is replacing Omnichannel | Huge growth in food/grocery eCommerce |
| Customers are getting a new view of customer experience | New awareness of pop-ups for customer experience |
| Leaders, retailers and brands want more control of their own destiny | More EACH supply chain replaces CASE supply chain |

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To stay up-to-date with evolving and emerging trends as we go into 2018, be sure to download the **3PL & Supply Chain Summit: Atlanta brochure** and get the latest news straight to your inbox!