

# Executive Summary

## BACKGROUND AND APPROACH

Over 57% of companies want to adopt automation and reshape business models and value chains in the retail and consumer packaged goods (CPG) industries

### Framework: Supply Chain



## FINDINGS

### Key Drivers

Growing demand, competition, customer expectations, efficiency, labour, sustainability

### Automation Trends

AI, ML, IoT, AGV/AMRs, Wearables, Robots and Cobots, Cloud Integration, Autonomous Vehicles, Blockchain, Drones

### Impact

- **\$340B** by scaling automation in AI
- **15%** potential revenue increase
- **30%** more efficient inventory use
- **54%** reduction in email communication time

## CONCLUSIONS

As automation moves towards becoming a necessity for companies, this project will help PwC facilitate transitions for future clients by highlighting key drivers, risks and barriers and important steps for companies to take.

## RECOMMENDATIONS

<b>#1</b> Optimize and digitize existing processes	<b>#2</b> Identify the right business process to automate	<b>#3</b> Build digital proficiency
<b>#4</b> Rethink operating and change management models	<b>#5</b> Establish centralized governance	<b>#6</b> Awareness Assimilation Adherence

## GOALS

- 01** Identify the major automation trends in the retail and consumer packaged goods (CPG) sectors
- 02** **Anticipate** current and new automation solutions' impact in upcoming years
- 03** Identify risks and potential barriers to implementation of automation trends
- 04** **Prepare** a research report for PwC to leverage the results and help future clients

## SCOPE

### In Scope

- Retail and CPG sectors
- Transportation, Logistics and Fulfillment

### Out of Scope

- Sales and marketing functions
- Impact of automation on the labour market

## APS 1049 Team 5: Executive Summary

The recent shifts in consumer demands and buying patterns have put immense pressure on companies to meet customer expectations cost-effectively and sustainably. The COVID-19 pandemic has also severely disrupted several functions of global supply chains leading to rising shipping costs, labour shortages, increasing process inefficiencies and supply chain vulnerabilities. Several industries are embracing more digitized ways of working and adopting automation to build resilient and robust supply chains. The retail and consumer goods industries are no exception.

The main purpose of this project is to identify major automation trends in the North American retail and consumer goods sector and determine potential risks and challenges to the implementation of the identified technologies. Functions such as planning, sourcing, procurement, warehousing, transportation and last-mile delivery were studied to identify the upcoming automation trends. Furthermore, the impacts of the trends were identified to understand the value proposition of these technologies. Finally, the potential risks and implementation challenges were identified to provide a holistic implementation plan for firms looking to automate their supply chains. Results from the analysis suggested that there is a need to strategize and make changes from the ground level before taking up any new automation venture.

The following recommendations for automation adopters are described within this report: optimize and digitize existing processes, identify the right business process to automate, build digital proficiency, rethink operating and change management models, establish centralized governance, and follow the three A's (awareness, assimilation, and adherence) of change management. The implementation of identified automation trends using the provided recommendations could help companies build efficient, flexible, and agile supply chains.

In conclusion, many lessons were learned in completing this report. Companies need to learn from the weaknesses that were exposed during the pandemic and implement automation solutions that will better prepare them for future disruptions or other difficult capacity-straining scenarios. For management consultants reading this report, it is important to recognize the complexity of supply chain functions and processes. Implementing automation and potential supply chain management solutions in retail and consumer goods industries requires a combination of technical and cultural management capabilities.