

THE CHANGING AUTOMOTIVE LANDSCAPE:

An Introduction

January 2017

EXECUTIVE SUMMARY



The Changing Automotive Landscape: An Introduction

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Vehicles are evolving into mobile computing centers, which include connectivity between vehicle to vehicle and vehicle to infrastructure through the internet.

– *Key Informant*

EXECUTIVE SUMMARY

The advent of advanced technologies is changing long-standing automotive industry practices. Vehicles are evolving into mobile computing centers, which include connectivity between vehicle to vehicle and vehicle to infrastructure (traffic lights, road ways, etc.) through cloud and the Internet of Things (IoT)¹. Automakers and the automotive aftermarket industry have continued to look at ways of modernizing the next generation of vehicles, and put consumer needs at the forefront. Since digital technologies are pervasive throughout the automotive industry, the need for innovative strategies and approaches is increasingly important. Given this new reality, it is critical to get an in-depth understanding of how the automotive aftermarket industry views innovation.

The Automotive Industries Association (AIA) of Canada partnered with Information and Communications Technology Council (ICTC) to develop this report. It offers a quick overview of the state of innovation in the automotive aftermarket industry which consists of manufacturers, remanufacturers, retailers, distributors and suppliers of all vehicle replacement parts, accessories, tools, equipment, and services. This paper attempts to answer the following crucial questions:

- What recent technological innovations have been the greatest disruptors in the aftermarket industry?
- What skills/talents will be required for the aftermarket industry given the changes?
- What strategies are currently employed by aftermarket industry players to take advantage of technological innovations?
- What are some of the government policies that encourage innovation and research and development (R&D) in the automotive industry?

Key Findings

- *Telematics, Autonomous Vehicles (AVs), Electric Vehicles (EVs), and Additive Manufacturing (3D Printing) are the top disruptors in the industry.*
- *Emergence of non-traditional players like Google and Tesla has increased competition in the industry.*
- *Increased focus on vehicle security and safety due to use of telematics systems.*
- *The labour market is slow in adapting to the technological shifts and skills needed.*
- *More science, technology, engineering and math (STEM) and digital skills are required in the industry as a result of the changing landscape.*
- *Technological innovations will negatively or positively impact the aftermarket depending on how business managers leverage the opportunities they present.*
- *Government at all levels need to provide more incentives to encourage innovation.*

¹ IoT is the extension of the Internet into the physical world through embedded technology that can communicate in real time. Cisco (2014). *The Internet of Everything — A \$19 Trillion Opportunity*.



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