

Reimagining the Mid to Luxury Automotive Manufacturer:

Roadmap to tackle emerging technologies & effects of COVID 19

Executive Summary

This report is commissioned by the client PricewaterhouseCoopers (PwC) for Lexus, the luxury vehicle division of Japanese automaker Toyota, for the purpose of developing a 10-year Target Operating Model (TOM) for new or existing products for 2020 to 2030, concentrating on the Canadian Automotive Market. The model is focused on the incorporation of emerging technologies that would make Lexus more profitable in the next decade and help it come out of the COVID aftermath.

Our team undertook a market study of the mid-to-luxury segment automotive market in Canada in the COVID era, conducted market segmentation and competitive analysis of the mid to luxury segment automotive industry and explored emerging technologies. The influences of regulatory drivers, incentives, stimulus packages, public health restrictions, shifting consumer preferences, and alternative energy delivery systems to fossil fuels were also considered. Utilizing the review, market study, and research regarding Lexus' current product line and sales model, our team generated recommendations for a 10-year target operating model for the courses of action to increase sales in the present day, mitigate effects of COVID 19 and position the company for increased growth into the next decade in North American markets.

Lexus should focus on the younger buying segment of age group ranging between 25 years and 45 years with an annual earning capacity of \$80, 000 CAD or higher. This will provide longer business prospect and consumer association with the brand. Lexus should focus on SUVs and crossovers, as there has been a significant boom in SUVs over the decade compared to sedan in the Canadian market. Our vision for the TOM is to bring the standard of excellence and craftsmanship that Lexus is known for, to the next decade's luxury vehicle market by incorporating hybrids, electric vehicles (EVs), hydrogen vehicles/ fuel cell vehicles (FCEV) and a highly personalized integrated customer and ownership experience.

The short-term goal (2021 to 2025) of the TOM is to manage the current market trend towards EVs. It will involve product lineups of SUVs and Crossover which includes EVs, plug in hybrid

electric vehicles (PHEVs) & Autonomous Driving. We recommend that the EV/PHEV should be competitively priced starting at \$60,000 (CAD) and the EV model with Autonomous Driving Capability should be priced starting at \$100,000 CAD. We estimate that Lexus can increase its current market share in Canada from approx. 1% to approx. 1.4% by cannibalizing 8% of the current New EV motor sales and 0.25% of gasoline market (excluding the current Lexus share) in Canada by launching EV Model at \$60,000, generating an estimated gross revenue of approx. \$54.89M for this particular model. Further, we concluded that Lexus could utilize approx. 33% of its available capacity to assemble and roll out EV and FCEV in future without troubling the production of existing Toyota and Lexus models at Toyota Motor Manufacturing Canada Plant (TMMC). The recommendations for the modification to the sales model include incorporation of an online -in person sales model, introduction of car subscription service in Canada and establishment of EV charging network across Canada.

The long-term goal (2021- 2029) of the TOM is to support the value of Lexus (inherited from Toyota), which believes Hydrogen Fuel car is the future. By the end of the 2027, we recommend Hydrogen cars should be released incorporating Vehicle-to-Vehicle (V2V) technology while slowly phasing out gasoline powered vehicles. Lexus should consider utilizing its V2V technology as a branding strategy for its hydrogen vehicle. As a part of our long-term goal, we propose to introduce a fully online sales model for Lexus which includes VR showrooms, holographic projections of cars and virtual test drives.

Lexus should leverage its extensive experience in building strong partnerships when entering the EV market to emulate past successes. It is necessary to partner with government bodies, technological innovators such as Mobileye for self-driving platform, Upstream for cyber security, Denso and Panasonic for EV capabilities and infrastructure leaders like Electrify Canada. An assessment of risk and challenges for the implementation of the TOM has also been considered.

