

INFO5992 Introduction to IT innovation Tutorial 02

<u>Is there a Dominant Design in Electrical Vehicles?</u>

Pre-reading: "McKinsey Electric Vehicle Index: Europe cushions a global plunge in EV sales."

McKinsey Company has prepared an excellent global electric vehicle industry report for 2020. Please read through the article, and focus on the section 'Key EV markets suggest shifting regional dynamics, with China and the United States losing ground to Europe.'

 $\underline{https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/mckinsey-electric-vehicle-index-europe-cushions-a-global-plunge-in-ev-sales$

Once you have finished reading this section, research with your teammates and find out what are the differences between battery electric vehicles, plug-in hybrid electric vehicles and range-extended electric vehicles. You may refer to the following references. **Then answer the first question in the tutorial sheet.**

https://www.lifewire.com/ev-phev-fcev-hybrid-compared-5201137

 $\underline{https://www.drive.com.au/news/hybrids-explained-mild-v-full-v-plug-in-v-extended-range-electric-vehicle/}$

The "electric vehicle" product category

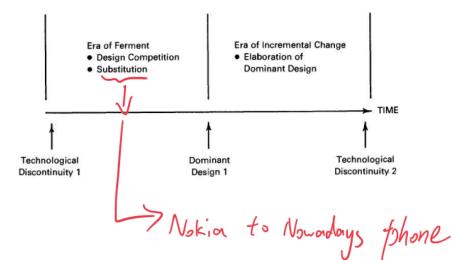
"A product category is all the products offering the same functionality."

"A socially constructed partition of products that are perceived to be similar and in which firms choose to position their products."

Given these two definitions, describe the electric vehicle product category with your teams. Write down your answers in your group's worksheet.

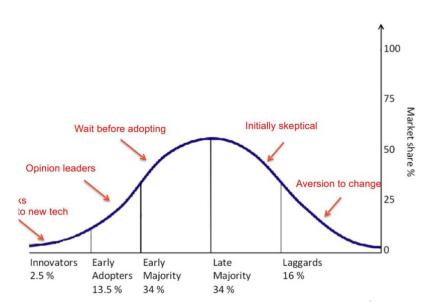
Design Dominance and Technology Cycles

Figure 1. The technology cycle.



Recall this figure from the lecture. Discuss with your teams and determine which phase of the cycle are electric vehicles in. **Answer the third question in the worksheet.**

Technology Adoption Lifecycle Model



Recall this figure from the lecture. Discuss with your teams which stage of the technology adoption lifecycle are electrical vehicles. **Answer the fourth question in the worksheet**.