Autonomous vehicles, teaching case

Use this link to get the teaching case file from the Harvard repository of teaching cases (you need to sign up as a student):
https://hbsp.harvard.edu/import/1152608

Read the teaching case and think of the following five questions:

1. Pick one of the following players: a car manufacturer, car dealer, or Waymo (Google's/Alphabet's self-driving car project) and consider what kind of autonomous vehicles (AV) business model would be best for them and why?
2. Choose one industry (for example taxi, insurance, or trucking) and explain how the introduction of AVs might impact the chosen industry. What kinds of opportunities and challenges might the industry face?
3. What do you see are the biggest benefits for consumers in adoption of AVs? What about barriers? How could the barriers be overcome?
4. What role do you see for the government in making AVs a reality?
5. What is your forecast for the adoption and market penetration of AVs in Finland (or a country you know well) 10 years from now? How did you arrive at your assessment?

In your answers, assume AV to mean SAE level 4-5 automation. You can use the frameworks and theories discussed in this course in producing your answers or you can apply other frameworks / theories / tools from previous courses.

You may find the following articles helpful (optional reading):

- https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/as-dramatic-disruption-comes-to-automotive-showrooms-proactive-dealers-can-benefit-greatly
- https://www.wevolver.com/article/2020.autonomous.vehicle.technology.report
- https://www.cnbc.com/2021/01/27/elon-musk-explains-how-self-driving-robotaxis-justify-tesla-valuation.html
- https://hbr.org/podcast/2020/05/autonomous-vehicles-are-ready-to-disrupt-society-business-and-you. (this is a Harvard Business Review podcast related to this case)

The teaching case will proceed in three steps:

1. **Before**

Before the Monday lecture on March 18th at noon (Digitalization of transportation), draft a short answer to all five questions (each of the five tasks around 200-300 words of text), and submit the answers in one pdf file to the submission box entitled "Teaching case pre-assignment". The dead-line for submitting this file is March 18th at noon.

2. **During**

After the Monday lecture on March 18th and prior to the case discussion session on Wednesday March 20th, go to the Jamboard environment to post your thoughts. Students are divided into three groups based on the article review panel group. The first Jamboard link is to be used by students whose last name begins with A-K, the second one L-P, and the third one R-Y.

Group 1 (A-K): https://jamboard.google.com/d/1I64Ow2SC2VSlfwfFfODLrCcf5jC3QwrfKXpQOkOEPIY/edit?usp=sharing
Group 2 (L-P): https://jamboard.google.com/d/1ALmJxLZFxIcAJEQeNm-fRIi0wwdmxmaBVBWc72NfmfU/edit?usp=sharing
Group 3 (R-Y): https://jamboard.google.com/d/1gtQo_5I282zbIvIEHP1x0eTJw_BhOIbJlRWCcLsREZo/edit?usp=sharing

3. **After**

Reflect on your learning during both sessions and write a teaching case report (around 2000 words) where you provide your responses to the five questions and discuss how your thinking evolved as you progressed through the week's sessions. The grading criteria for the report is given below. The dead-line for this assignment is April 12th. Use citations within the text and a list of references at the end of the document.

Grading criteria

Measurable attributes	0-Insufficient	1-Sufficient	2	3-Good	4	5-Excellent
Analysis of the five teaching case questions	0 out of 5 questions are answered; presented answers are not in line with the questions.	At least a few questions are answered providing some opinion and argumentation.		All questions are answered. Author provides his or her opinion and a limited argumentation for the answers.		All questions are answered. Author demonstrates critical thinking in answering the questions, supports answers with clear argumentation and real-life examples.
Reflection on learning experience and outcomes	Does not provide any information about the learning experience or outcomes.	For some or all questions provides scarce description of the learning experience. For example: "I learned a lot", "My opinion changed", "I liked the discussion" without elaborating on details of the process.		For at least 3 questions provides clear explanation of what thoughts the author had before the discussion, what are the final thoughts, how the opinion evolved.		For each question provides clear explanation of what thoughts the author had before the discussion, what are the final thoughts, how the opinion evolved.