Self-study topic: Presentation and Report rubric

As a part of the MTRN3026 Mechatronic Systems, you will need to choose a PLC based Mechatronic topic (basically a very good existing system available in the market) and do self-study. Anything that involves some sensors, actuators, something smart as a system around a PLC will qualify. For example, Sydney metro, Book Archival robot, manufacturing plant and so on.

You need to present the system (history, needs and usefulness, novelty, components, markets, Challenges and Improvements so on) in front of fellow students and markers on Week#12 (Wednesday of Week#12). The presentation time is 8 minutes with a Q&A of 2 minutes. The rubric of presentation is as follows: The presentation will be marked by the tutor along with 2 other people.

SCORES out of 100 for presentation

[1]. Presentation Style	/16
[2]. Technical Content	/16
[3]. Market Survey	/16
[4]. Quality of the Presentation material (Slide/Video etc.,)	/16
[5]. Questions and Answers	/16
[6]. Supporting materials	/20
	Total: /100

Prior to the presentation, you will write a report of 2-5 pages (10 Times font, single spacing, single column format) along with the title to be submitted by Sunday 29th October 2023 (end of Week#12).

The report materials should be supported by published articles (at least 5 papers/reports, company briefing (all 5 are not from the same company), market survey). The report should include the following points: description; operating principle; usage; market share; challenges and opportunities. The rubric is as follows:

Category	Details	Weight
Professionalism	The overall presentation of the report. How well it engages the reader. Consistency of typographic conventions, correct use of tables, lists, figures and other structural elements	10%
Introduction of the Topic	Provide the overall picture of the topic, its importance, usefulness and applications in the society	20%

Operating principle of the system	Describe the operating principle based on which the system has been designed and developed	15%
Companies and Market survey	Who are the main suppliers of the product, market values and share of their market	15%
Challenges (Weaknesses) and Improvements	What are the current challenges and what research/developments required to make it better	15%
Future opportunities/ possibilities	How the future of the system looks like	15%
Supporting materials (References)	5 supporting materials (paper, company brochure, product document etc.)	10%

2-5 page report along with the 5 individual supporting materials should be submitted to iLearn in a zip file (Sunday 29th October 2023, End of Week #12)