ST3188 Case Study: Client Brief

Client	Tesla, Inc.
Information	Founded in 2003, Tesla is a vertically integrated sustainable energy company which also aims to transition the world to electric mobility by making electric vehicles. The company sells solar panels and solar roofs for energy generation plus batteries for stationary storage for residential and commercial properties, including utilities. Tesla has multiple vehicles in its fleet, which include luxury and midsize sedans and crossover SUVs. The company also plans to begin selling more affordable sedans and small SUVs, a light truck, a semi-truck, and a sports car. Global deliveries in 2021 were a little over 936,000 units.
Business objectives	Tesla wants to accelerate the transition to electric cars globally, and is aware that competitors such as Ford, Rivian and Mercedes-Benz etc. are eager to accrue market share. Tesla is concerned with both customer acquisition and customer retention. The company is also keen to diversify its existing product range further and needs to consider where to direct its research and development (R&D) budget.
Research aims	Tesla wants to accurately understand drivers' attitudes toward electric cars – for example, maximum willingness to pay, perceived driving range limits on a single battery charge, and convenient access to charging points. As more competitors move into the electric vehicle space, Tesla wants to better understand the brand perceptions among motorists of different manufacturers to assist with customer acquisition and retention. Tesla also wants to engage in problem identification research, i.e. horizon-scanning of market potential for new product lines and evolving trends in consumer appetites.
Designs to consider	The survey should include Tesla customers, as well as customers of its competitors (which could include owners of hybrid vehicles as well as conventional combustion engine vehicles, please advise Tesla accordingly on suitable "competitor customers"). They prefer an online methodology, but are willing to consider other designs, if justified. A database of Tesla customers would be made available to you.
Suggested analysis	Regression, factor and cluster analyses (among others) could be possible multivariate statistical techniques proposed. However, Tesla requires a justification of why any proposed techniques would help meet the research aims.
Suggested sample size	At least 5,000 Tesla customers globally, segmented appropriately, although Tesla is unsure how many "competitor customers" to sample so would like advice on the appropriate sample size of competitor customers, with an explanation.
Budget and timescale	Tesla has a large budget and would like the research to be completed within a six-month window.

This case study brief is for the 2022-23 academic year, with a submission deadline of **1 March 2023**.