**POST 1:**

*Use of Game Theory*

Game theory allows decision makers to put themselves in the position of various players and assess whether each move (option) need to be taken or not and evaluate the correlation between the moves. Therefore, game theory enables the decision makers to predict the outcome (both positive and negative) of each option they take, thus, allowing them to make an informed decision for a given option.

Through the use of game theory, General Motors (GM) could be able to get an overview or understanding of the behavior of various stakeholders in the automobile industry. This is necessary for allowing strategic planning and indicating the areas which need more attention in the decision to replace one of their traditional lines of vehicles with all-electric models. Indeed, game theory provides GM’s decision makers with adequate information about a given issue which guild an organization in its strategic and tactical planning (Fraser, Simkins & Narvaez, 2015, p. 617).

*Major risks GM faces*

GM will be faced with the market and new entrant risks. As a new entrant in electric automobiles, GM will have to venture into a field which is not yet well explored; therefore, they have to mostly rely on first-hand data/ information on how to carry out operations with electric automobiles. Also, the market for electric automobiles is not big because of lack of adequate recharging stations in states where the technology has been embraced; thus, GM has to muscle out with a company like Tesla for a market share.

*Level of the risks facing GM*

The level of inherent and residual of market risk would be significant because if the electric models of vehicles backfire, GM could face both financial loss and reputation damage such as lack of capability to deliver eco-friendly automobiles. On the other hand, the level of inherent and residual of newcomer risks could be moderate and significant respectively. This is so because although GM would experience financial loss because of investing in the wrong idea, they would gain insight from the failure on how to revisit the issue with better strategies in the future.

Reference

Fraser, J. R., Simkins, B. J., & Narvaez, K. (2015). *Enterprise Risk Management: Case Studies and Best Practices.* Hoboken: John Wiley & Sons, Inc.

**POST 2:**

Game theory is the study of human behavior in strategic settings, it is used to solve some of the harder problems in economics. to have a game you need at least two players sometimes called and you need payoffs for the players, you need to define the outcomes they can potentially get depending on how the game unfolds and final rules for the game. It is a decision-making approach that employs a mathematical model that is used to breakdown the social situation in a competition between different actors. With regards to GM, the game theory can be used to predict how majorly consumers will react to the decision of the company shifting to a new paradigm and how the overall market suppliers of this company and its competitors will have reacted to this situation (Cox, Jr, 2009).

Any decision that GM makes will be related to the cost-benefit analysis as when trying to change a product line to completely electric it needs to make sure of certain factors which are needed to be taken into consideration such as the potential of that product, the overall revenue the product will generate and its operational cost (Cox, Jr, 2009).  When GM is planning to convert one of its existing product to electric might have risks involved and the two major risks that I see are represented below,

1. The company will incur high operational cost and risk when moving from the current line to the electric line as it comes at a cost and once the implementation is done and after that, if the company has issues in handling the line down the lane, it can lead to a lot of issues operation and monetary wise (Cox, Jr, 2009).
2. The operational efficiency of the company can be affected as we had seen the same happen to tesla when they tried to upgrade their current product line with new manufacturing capabilities which resulted in lower efficiency and delay in their product deliveries. As we know tesla is a reputed electric vehicle brand and they have faced issues in upgrading their product line. So, GM must be extra cautious in implementing these steps (Cox, Jr, 2009).
3. The organization can face a strategic risk, this can happen if the market is not in a state of readiness to pay the cost because of various issues related to the product line (Cox, Jr, 2009).
4. Another major risk that the company might need to face is with regards to battery technology as existing GM electric vehicles such as the Chevy bolt does not have a good image in the market. Hence, they should be working on fixing existing issues with their electric models before switching to a completely new product.

**References**

Cox, Jr., L.A.(. (2009), Game Theory and Risk Analysis. Risk Analysis, 29: 1062-1068. DOI:[10.1111/j.1539-6924.2009.01247.x](https://doi.org/10.1111/j.1539-6924.2009.01247.x)