# Innovation Audit of Tesla

Ala Nasser Alomrani

Abstract:- This audit study aims to discuss the innovative capabilities of Tesla and address the challenges and opportunities of its key innovative processes. Also included are the learning implications on future management practices and suggestions for organizational improvements.

*Keywords:*- Audit, Innovation, Business Model, Portfolio, Business Intelligence.

#### I. INTRODUCTION

With global consumption increasing rapidly, the demand for energy has also increased. This great impact on carbon dioxide emissions has also meant a change in the world of cars, specifically electric cars, an important maker of which is Tesla Motor (Kim, 2020). The positive cultural characteristics of an organization can provide an element of innovation, and this is what green technology as supplied in Tesla cars, can do (Cormican & O'Sullivan, 2004).

Therefore, there is the need for development and innovation, as it enhances competitive advantage in new products and services (Cormican & O'Sullivan, 2004). The first review on innovation tools, published by the European Commissioner (EC), aimed to evaluate consultant tools and methodologies for small and medium-sized enterprises (SMEs) to provide support in innovation management (Albors-Garrigos et al., 2018).

# II. SIGNIFICANCE OF INNOVATION AUDITING

During examination of the innovation audit, Hallgren (2009) described innovation as improvement introduced into an organization with many employees participating and inspiring positive change. (Goffin & Mitchell, 2010) conducted in-depth best practice that suggests managers should adopt innovative ideas and effective solutions that impact the company. Moreover, (Björkdahl & Börjesson, 2012) noted that companies face many disincentives for innovative development so need to apply thought systems and approaches throughout the organization's systematic structure. Additionally, (Albors-Garrigos et al., 2018) implied that audit of innovation is proven analysis of company weaknesses and strengths, and it identifies the possible way to improve innovation across the organization. In terms of audit approach, Hallgren (2009) emphasizes participation, in audit procedures, of all company employees, to benefit from cumulative knowledge.

As per Loewe and Dominiquini's study (2006), it is important to emphasize the four key skills needed for successful innovation as leadership, organizational culture, process tools and people. Additionally, innovation enables decision-makers to significantly improve innovation culture and processes, leading to increased motivation through the organization and quicker adoption of innovative processes initiating change (Kosenko et al., 2019). This leads to implementation of new ideas to generate revenue or reduce cost. Thus, an innovation audit effectively assesses an organization's innovation performance, forms an approach to better understanding of its state of innovation and includes an element that stimulates its ability to improve. Moreover, the innovative characteristics of an organization can impact an industry significantly, which has made Tesla at the forefront of automobile production due to its development of self-driving software" Autopilot" (Kim, 2020).

### III. MANAGEMENT CHALLENGES AND OPPORTUNITY

Measuring innovation is now is a valuable interest to companies because it helps them reach their current position and reveals possible strategies for achieving competitive business advantages. Furthermore, this performance evaluation enhances the company's ability to detect and predict unexpected changes in the business early (Teece, 2018). Moreover Kim, 2020 indicated the cost of Tesla's entry for the initially was high due to the expansion of size and the spread of the distribution network. However, Tesla's software has been able to make self-driving a viable one and is a major resource for the company.

In addition, this can depend on establishing effective portfolio reviews which list companies' track records in bringing new business to market so as to verify the effectiveness of the firms (Loewe & Dominiquini, 2006). Similarly, Tesla's distribution network. gives it an advantage in terms of developing a close relationship with its major part suppliers worldwide, enabling increased quality and lower costs (Kim, 2020).

## IV. AN INNOVATION AUDIT AND ITS FIVE KEY THEMES

In his study, Teece (2018) stated that innovation audits have been crucial to Tesla's success. The business model of Tesla is still unquestionably innovative, and its inventive products impress consumers. In their study, (Cormican & O'Sullivan, 2004) stated that effective planning is essential in selecting clients and keeping them in the domain of strategy goals. Traditional business models are being replaced with customer-oriented or result-oriented models. Kralisch et al. (2016) agree that creating and maintaining value is integrated with innovative customer activities. Following, potential benefits of an innovation audit for companies are indicated:

# ISSN No:-2456-2165

Tesla has always been known for improving electric vehicles which can be enhanced from performing an innovation audit. However, the audit framework would enable companies to compete in the industry by innovating the products. Tesla should also as suggested by (Björkdahl & Börjesson, 2012), to use R&D for its innovation to develop a diversified portfolio, in this way the company will be financially stable. However, Tesla's key activities are: the producing of electric vehicle and solar power panel, award for new comer to existing vehicle market place.

As stated by Cormican and O'Sullivan (2004), the five keys in the basic model product innovation management:

- Analyze environment, identifying opportunities.
- Generate innovation, investigating.
- Plan for project, selecting sponsor.
- Prioritize project, assigning a team.
- Implement product innovation plans.

## V. IMPLICATION TO CURRENT /FUTURE MANAGEMENT PRACTICE

As suggested by Frishammar et al. (2019), an effective audit approach requires holistic analysis and the involvement of many employees to implement the continuous improvement approach. The five-layer evaluation consists of innovation theory, review methodology, audit materials, type of feedback and the results. Furthermore, it can be recognized that management auditing enables firms to identify strengths and weaknesses and to review innovation to sustain competition. Teece corroborates the importance of auditing: The global economy today is full of complex interconnected systems, and most of these types cannot be confirmed and certain, but rather with sensing processes, however the ability to make sense out of uncertainty is a good strategy that can process the invention to help the industry field (Teece, 2018).

Therefore, companies should implement 'sensing' capabilities to reach enough certainty to form knowledgeable strategies. Such processes as senses, sense making, narrativebuilding and hypotheses- testing form a framework that could potentially prove to be powerfully effective to the management of a firm (Teece, 2018).

An organization's 'reasonable interpretation' of its environment 'may shape the environment more than the environment shapes the interpretation' (Daft & Weick, 1984: 287).

Concerning entrepreneurship, Teece implies that, though this understanding of what the business environment entails means strategies can be planned with more certainty, errors will undoubtedly be encountered. However, this newfound knowledge means new hypotheses can be developed to address any issues. The 'lean startup' methodology, advocated by Eric Ries (2011), expands Teece's framework (2007) as it focuses on processes valuable to customers and in turn, companies. Cox, Raspin and Teece further agree that testing new products in the market and effectively adapting them should be routine in all firms; this, therefore, supports the sense making process.

Tesla has used business intelligence and analysis of future predictions for the auto industry and this could prove invaluable to other car firms if the Tesla phenomenon is studied as an example of what works well in the industry (Anderson et al, 2016). "Tesla as business organization is one most innovative company in the world", (Kim, 2020).

### REFERENCES

- [1]. Albors-Garrigos, J., Igartua, J. I., & Peiro, A. (2018). Innovation management techniques and tools: Its impact on firm innovation performance. International Journal of Innovation Management, 22 (6). https://doi.org/10.1142/S1363919618500512
- [2]. Anderson, M., Dauner, T., Lang, Nikolaus & Palme, T, (2016). What automakers can learn from the Tesla phenomenon. Bcg perspectives by the Boston Consulting Group. Retrieved from: https://imagesrc.bcg.com/Images/BCG-What-Automakers-Can-Learn-from-Tesla-May-2016\_tcm79-61989.pdf
- [3]. Björkdahl, J., & Börjesson, S. (2012). Assessing firm capabilities for innovation. International Journal of Knowledge Management Studies, 5(1–2), 171–184. https://doi.org/10.1504/IJKMS.2012.051970
- [4]. Cormican, K., & O'Sullivan, D. (2004). Auditing best practice for effective product innovation management. Technovation, 24(10), 819–829. https://doi.org/10.1016/S0166-4972(03)00013-0
- [5]. Daft, RL., & Weik, KE. (1984). Toward a model of organisations as interpretation systems. Academy of management review. Journals.aom.org
- [6]. Frishammar, J., Richtnér, A., Brattström, A., Magnusson, M., & Björk, J. (2019). Opportunities and challenges in the new innovation landscape: Implications for innovation auditing and innovation management. European Management Journal, 37(2), 151–164. https://doi.org/10.1016/j.emj.2018.05.002
- [7]. Goffin, K., & Mitchell, R. (2010.). Innovation Management: Strategy and Implementation using the Pentathlon Framework, Second Edition (2nd ed.). Hampshire, U.K. Palgrave Macmillan.
- [8]. Hallgren, E. W. (2009). How to use an innovation audit as a learning tool: A case study of enhancing highinvolvement innovation. Creativity and Innovation Management, 18 (1), 48–58.
- [9]. Kim, H. (2020). Analysis of How Tesla Creates Core Innovation Capability. International Journal of Business and Management, 15(6), 42. https://doi.org/10.5539/ijbm.v15n6p42

- [10]. Kosenko, O., Cherepanova, V., Dolyna, I., Matrosova, V., & Kolotiuk, O. (2019). Evaluation of innovative technology market potential on the basis of technology audit. Innovative Marketing, 15(2), 30–41. https://doi.org/10.21511/im.15 (2).2019.03
- [11]. Kralisch, D., Ott, D., Lapkin, A. A., Yaseneva, P., De Soete, W., Jones, M., Minkov, N., & Finkbeiner, M. (2016). The need for innovation management and decision guidance in sustainable process design. Journal of Cleaner Production, 172(2018), 2374–2388. https://doi.org/10.1016/j.jclepro.2017.11.173
- [12]. Loewe, P., & Dominiquini, J. (2006). Overcoming the barriers to effective innovation. Strategy and Leadership, 34(1), 24–31. https://doi.org/10.1108/10878570610637858
- [13]. Teece, D. J. (2018). Tesla and the Reshaping of the Auto Industry. Management and Organization Review, 14(3), 501–512. https://doi.org/10.1017/mor.2018.33