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THE ROLE OF PRODUCT STANDARDIZATION IN INNOVATION - A CASE STUDY OF JAGUAR

CHAPTER THREE: RESEARCH METHODS

3.1. Introduction

The third chapter of the following research is aimed towards discussing the methods and techniques used in the collection of data. This chapter discusses how the researcher collected data from different sources and it has helped in achieving the objectives of the research. Mainly, the chapter includes an in-depth discussion on the research design, data collection, instrument of the research, data analysis technique and the ethical issues faced by the researcher during this research. The chapter will be providing a brief discussion on the research designs and methods which will help the readers in understanding how the research was carried out.

3.2. Research Design

In the field of social sciences, there are two types of research designs which are broadly used by the researchers, authors and practitioners for achieving their aim of the study. The types of the research design include quantitative and qualitative research design. In the light of Mackey and Gass (2015), the quantitative design of the research emphasizes on the objective measurements and the statistical, mathematical and numerical analysis for the data collected from different sources such as questionnaires, surveys or polls or by the manipulating of the existing statistical data.

On the other hand, the qualitative research has been characterized according to its aims which are related to the understanding of social life aspects and its methods

(Brinkmann, 2014). It implies that the emphasis on the meanings and processes are examined through the expressions and perceptions which are not experimentally measured in terms of frequency, quantity or intensity (Smith, 2015). In addition, the qualitative researchers stressed on the fact that the reality is socially constructed, where the intimate relationship between the researcher and the object of the study are evaluated according to the situational constraints.

In the present research, the researcher has opted for using qualitative research design keeping in mind the objectives of the study which are focused towards the product standardisation and its role on the innovation. The main justification for selecting qualitative research design for this study is because the integration of qualitative data has permitted a synergy for using the qualitative data which helps in getting reliable results on the main subject of the research study which is directed towards exploring the role of product standardisation in innovation. This inclusion of this design helped the researcher in learning about different practices involved in the standardisation of products in the association with innovation with a special focus on the automobile industry. The decision regarding the selection of qualitative research design is intended towards achieving the aim and objectives of the research which is to explore the role of product standardization in the automobile industry. The main rationale behind selecting qualitative research is based on the fact that the researcher will be able to gain new insights associated with the product standardization and holistic picture of the research topic.

3.3. Data Collection Method

The data collection method for the data collection typically involves two types which are named as the primary and secondary data collection methods. In the light of Blumberg, Cooper and Schindler (2014), the primary data deals with gathering first hand and raw data which is collected from different sources that has never been used before for the same purpose of the research. The primary data is collected from different sources such as surveys,

questionnaires, interviews, observations or the experiments. On the other side, the secondary data deals with the already available information which is facilitated in different sources such as internet, company website, journal, articles, books or magazines (Flick, 2015). Hence, it is publicly available and can be accessed by different people. In this research, the researcher has used both primary and secondary data collection methods as it will help the researcher is gaining insights on the product standardisation within automobile industry from both perspectives. The primary research will help in providing updates insights on the innovation and product standardisation, whereas, the secondary research will help in understanding the existing concepts related to product standardisation.

In case of primary method, the researcher will collect the data by 20 employees which also include 2 automobile engineers of Jaguar Company which are working in Shanghai. As the study is directed towards exploring the impact of product standardisation on the innovation within the context of automobile industry, therefore, automobile engineers have been selected in order to get insights on the research topic. In addition, due to time and budget limitations, the researcher has selected 20 employees of the company as it is difficult for the employees to give interviews in their busy schedules. Since the researcher has relatives working at the Jaguar company who has helped in arranging the interviews from the employees of the company and assisted in scheduling the interviews. In addition to the above statement, the secondary data was also used in this research for gathering an overall understanding on the concepts of product standardisation and its relation with the concept of innovation along with the significance of product standardisation. Moreover, the secondary data was collected for carrying out the literature review of the study. In addition, the researcher has gained the secondary data from the published journals, articles, and the studies conducted by previous authors in the field of product standardisation. In addition, the

sampling strategy selected in this research is judgement sampling in which the interviewee's will recommend the other employee for the purpose of conducting interview for the research.

3.4. Research Method

In this research, the researcher has opted for interviews as the research method because it will help researcher in getting an in-depth insight on the research topic which will eventually help the researcher in achieving the objectives of the study.. In the light of Neuman and Robson (2014), the interviews are the systematic way of listening to people or in another way can be described as the collection of data from individuals from end to end conversations. For this research, the researcher has formulated 5-6 semi-structured interview questions which have been answered in an in-depth manner by the research participants. The researcher could have chosen survey analysis for achieving the objectives of the research. However, interviews are found to be more realistic as it incorporates the interviewee's comments on their past experiences, prejudices and orientation which can better shape the overall context of the study.

3.5. Data Analysis

For the analysis section, the researcher has used interviews for collecting data on the research which were focused towards the product standardisation and innovation. Moreover, for the purpose of conducting data analysis, the researcher has employed thematic analysis which is broadly used by the authors for the analysis of interviews. In the light of Holloway and Todres (2003), the qualitative approaches are considered as complex, nuanced and incredibly diverse and the thematic analysis should be considered as the foundational method for carrying out qualitative analysis. It is the first qualitative method which the researcher should learn as it provides core skills for the data analysis. In this research, the researcher has formulated themes which are made in accordance with the responses and aim of the study so as to explain the main context of the study. The author in the research can also opt for

quantitative research, hence, keeping in mind the objectives of the study, thematic analysis is considered as an effective method for interpreting the responses of the respondents.

3.6. Ethical Issues

Ethics should be ensured in the process of research as it is regarded as the eventual responsibility of the author of the research. Moreover, it is also necessary to ensure the anonymity and confidentiality of the research participants. For the present research, the researcher has already filled the checklist of Ethical clearance which is provided by the Loughborough University and the researcher has also gained the approval from the Ethics Sub-Committee of the university. The researcher in this research has ensured that the ethics for conducting research from the interviewees were complied with the ethical procedures followed in the university. Moreover, the researcher also ensured that the personal identity of the interview participants was not disclosed in this research. For this purpose, the responses were recorded and have been saved in the laptop of the researcher in order to ensure conformity and anonymity.

3.7. Summary

This chapter discussed the methods and techniques used for collecting data and analysing that data for achieving the objectives of the study. In the next chapter, the researcher will be providing the results and analysis as a result of the data which has been collected by the researcher.

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Appendices

Interview Questions

- Q1. What is the significance of product standardisation at your organisation?
- Q2. To what extent product standardisation is applied in your organisation?
- Q3. In your opinion, what benefits you perceive underlies the standardisation of the products?
- Q4. What are major challenges for product standardization when innovation is promoted in this process?
- Q5. What are major challenges for product standardization when innovation is promoted in this process?
- Q6. In your opinion, does the product standardisation helps in sustaining competitive advantage for your organisation?
- Q7. In your opinion, does the product standardisation have an optimistic future in the automotive industry?
- Q8. Please provide some suggestions on the role of product standardisation in innovation within the automotive industry?