

EDITORIAL FOREWORD

Case Study as a Research Strategy

We receive a large number of manuscripts for possible publication in this journal. In reviewing them, we find that the bulk of them are from the area of crop sciences, livestock production and allied fields that have used experiments as the research strategy. The minority that falls in to the areas of agribusiness, agricultural economics and extension have used survey strategy. There is a lack of utilizing other research strategies in current research.

Research has to be commenced with a clear direction and a clearly identified study process. These are primarily provided by its research strategy (Wedawatta, 2011). There are numerous strategies that a researcher can adopt to achieve the objectives of a particular research study. Some common research strategies are; experiment, survey, archival analysis, ethnography, action research, narrative inquiry, and the case study. This paper explains what a case study is and outlines the components of a case study.

The Nature of a Case Study

Yin (2003) defines case study as ‘an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’. A phenomenon and context are not always distinguishable in real-life situations. Therefore, a case study uses a large number of variables of interest than data points; and essentially relies on multiple sources of evidence for data triangulation. A historical viewpoint on case study strategy is presented in Tellis (1997).

According to Yin (2003), case studies can be exploratory, explanatory or descriptive. Research in social sciences deals with interactions between institutions and human behaviour. These can be best studied in real-life settings and contexts. Sometimes an inquiry may be undertaken on an individual organization with a limited or a narrow population. These suggest qualitative investigations which are assessments of attitudes, opinions and behaviour (Kothari and Garg, 2018). These qualitative investigations are characteristic with the case study strategy. Whilst often been identified as interpretivist, case studies can also be used in positivistic research (Saunders *et al.* 2012).

There are few criticisms against the case study strategy. Firstly, it is criticized of having a poor scientific basis for generalization to populations. This is particularly in the context of case study on a single organization. This is not true as the generalization of case studies is to the theory, but not to populations. Secondly, it is criticized for lack of validity. Yin (2003) suggested following tactics to improve the validity of a case study. Construct validity can be addressed by using multiple sources of evidence and by getting the case study drafts reviewed by the key informants. While internal validity in case studies is ensured by using the tactics of pattern matching and explanation building, the external validity can be safeguarded through replication logic. The third concern with case studies – the reliability, can be ensured through the use of case study protocols and developing case study data bases. Sound research design, data collection and data analysis are needed to avoid above issues in the case study strategy.

Although popular to be a predominantly qualitative strategy, the robustness of results of case studies can be greatly enhanced by using quantitative methods. Rosairo (2010) used a cluster analysis of variables in a multiple case design in research on the factors affecting the performance on farmer

companies in Sri Lanka to supplement and strengthen the results and conclusions. Theories are developed based on the explanations built in case studies.

Case Study Research Design and Protocol

Case study strategy is used to conduct research on organizations or even phenomena. There are at least two main designs relevant in case studies. They are single-case and multiple-case designs. Multiple case study tactic is popular among researchers at present to enhance the quality of their research studies. Replication is exercised in multiple case designs by using more than one comparable entity. The ideal number of cases in a multiple case design is not a concern as it is dealt with by the replication logic. Both these designs can be either holistic or embedded. Holistic case studies are used to study such subjects (or entities) in their entirety, while embedded case designs are used to investigate parts of a holistic design by considering sub-units of such entities (Hamel *et al.* 1993). A case study researcher usually selects cases via purposive sampling to select entities that can provide rich data. This is valid as case study research will generalize to theory but not to populations (Yin, 2003).

Yin (2003) recognizes five important aspects of a case study research design. They are research questions; propositions under consideration; unit of analysis; the logic to relate data with the propositions; and the basis of interpretation of results in the conclusions. Therefore, maintaining a strong link among the data to be collected; research questions; and the type of analysis undertaken are very important aspects to enhance the quality of case study designs.

A case study can enhance its quality by using a case study protocol that includes components such as field practices; questions or the interview guide and observations; collection of data; brief overview of the study along with the issues investigated and objectives; and the analytical procedure. Questions to be asked form an important basis for the collection of data. A pilot case study is necessary to ensure the appropriateness of questions in the interview guide. The sources of evidence and subjects (respondents) should be defined and identified clearly prior to collection of data.

Collection of Case Study Evidence, Analysis and Reporting

Evidence for case studies should come from multiple sources. The usage of multiple sources of evidence can be used as means of triangulation and can ensure the construct validity of a case study. Referring to secondary data, interviews with general subjects and key informants, focus group discussions, and direct observations are important sources of data in case study research.

The data collected through multiple sources should be converted into an analysable format. The interviews should be transcribed and along with all the other data they should be subjected to techniques such as categorization. The quantitative data (if collected) can also be tabulated for analysis using quantitative means as appropriate. The most dominant qualitative analytical techniques are the pattern-matching and explanation-building. There is a popular software available to analyse qualitative data such as interview contents and videos.

The composition (or overview) of the case study report is also a part of the case study protocol. This can be refined and modified over time to reflect on all the research questions being investigated and to crystallize the findings to generate appropriate conclusions and implications.

REFERENCES

- Hamel, J. (1993), *Case Study Methods*, Sage Publications, Newbury Park, California, USA.
- Kothari, C.R., and Garg, G. (2018), *Research Methodology: Methods and techniques*, 3rd Edition, New Age International Publishers, New Delhi, India.
- Rosairo, H.S.R., (2010), *Factors affecting the performance of farmer companies in Sri Lanka*, Doctoral thesis, Lincoln University, Christchurch, New Zealand.
- Saunders, M., Lewis, P., and Thornhill, W. (2012), *Research Methods for Business Students*, 6th edition, Pearson, USA.
- Tellis, W. M. (1997), Introduction to case study, *The Qualitative Report*, 3(2), 1-14. <https://doi.org/10.46743/2160-3715/1997.2024>
- Wedawatta, G.S.D., Ingirige, M.J.B., and Amaratunga, R.D.G, (2011), *Case study as a research strategy: Investigating extreme weather resilience of construction SMEs in the UK*, Workshop paper, available at <http://usir.salford.ac.uk/id/eprint/18250>
- Yin, R. K. (2003), *Case Study Research: Design and Methods*, third edition, Applied Social Research Methods Series, Volume 5, Sage Publications Inc., California, USA. ISBN 0-7619-2553-8.

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