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Peeling Saunders's Research Onion

I am great admirer of Saunders 'Research Onion.' I firmly believe that the young researchers, just like peeling the onion, should go from the outer layer to the inner layer of the research onion. Though most researchers design their research to answer a question or address a problem, they begin by working out what data are needed and what method, tools or techniques should be used. This means that they start peeling the onion from the center. Can an onion be peeled from the center?

I have been intrigued with this phenomenon and, therefore, thought to make an investigation. In the process I interviewed 115 research scholars registered for doctoral degree in IIMs, some leading Universities and some private Business Schools. Though quite a few of them were aware about 'Philosophy of Science' and 'Theory of Research', only a few used them in their proposal or thesis writing. Mostly were concerned with the research objectives, the research questions. They focused on obtaining data and mechanistically analyzing them. In the process they used the data collection techniques such as questionnaires, interviews, and observation as well as made use of secondary data but hardly pondered over their ontology or axiology. Selection of technique(s) used to obtain data, along with procedures to process and analyze these data, which should only be a part of the thesis, remained at the center of the thesis. Even the research design and methodology remained in background. Most of them hardly dealt with the design though all of them had a chapter on methodology.

It should be clearly understood that it is the researcher's understandings and associated decisions with regard to outer layers of the onion that provide the context and boundaries within which data collection techniques, processing of data and analysis procedures should be selected. The planning and designing stage of a research is most important. The final elements, the core of the research onion, need to be considered in line with other design elements which are contained in the outer and middle layers of the research onion. In kitchen, generally, the first layer of the onion, after peeling, is thrown away. But in research, the outer layers of the onion form the root and the middle layers the building blocks of the research. They are crucial to the development of an appropriate research design which is coherent with the objectives and the research questions. The research design should be such that it can be both justified and explained.



Let me start peeling these layers starting from outer layer and elaborate their importance. The first layer constitutes research philosophies and their implications followed by choices, strategy, approaches, time horizons, techniques and procedures.

Research Philosophy

The majority of the doctoral students, I talked to, regardless of their year of study, expressed that there was confusion and difficulty in understanding research philosophical debates and classifications. Every doctoral student interviewed showed some form of dilemma about research philosophy. Most of them were bewildered with the debates by philosophical advocates. The classification and terminology, which needed consensus, differed from author to author. This is why there is not only contradictory perception between research students and philosophical advocates but also between the supervisor and doctoral student. As a teacher of Philosophy of Research, I found difficulty in convincing my students, who are in management stream, about different terminologies and paradigms. Some even question about the relevance of philosophy in their research. Only when they start writing assignments, they start questioning various philosophical terminologies. They get better when they start writing research proposal as they begin to understand their view of the world and the terms like epistemology, ontology, axiology, praxeology and doxology start making some sense.

Let us take the case of a research being carried in aviation industry. A researcher, who is concerned with observable phenomena, such as the resources needed in manufacturing aircrafts or running an airline, is likely to have a very different view with regard to the research to be conducted on the feelings and attitudes of the workers in that same aviation industry. Obviously, their methodological choice and strategies will differ considerably. Further, their views on the type of data to be collected and their processing will also differ

Where cause and effect or relationship is being studied, the researchers interviewed generally used the philosophy of positivism. They tasted theory for which they collected data that were highly structured and amenable to measurement. The researchers kept themselves at a distance from the phenomenon and were value neutral in research. This involved large quantitative data and statistical hypothesis testing. The processing and analysis of data was mechanistic devoid of researcher's intellect.

Where rich insights into a nascent phenomenon, which called for derivation of subjective meanings rather than providing law-like generalization was being researched, the researchers had adopted the philosophy of interpretivism. This philosophy related to the study of social phenomena in their natural environment. The researchers mingled with the phenomenon, reflected on the phenomenon and interpreted their observations. They adopted a stance to understand the social world (which is ever changing unlike physical world) and gave a meaning to from their point of view. The interpretivist approach of the research was, thus, value bound. The investigation, in this case, was in-depth but with small sample size and the data collection and analysis were qualitative.

There were cases where the researchers were neither convinced with the positivist or interpretivist approach. In such cases, they had chosen the philosophy of pragmatism which considers that no single viewpoint can ever give the entire picture. They believed that the reality may not be single one but is multiple. The pragmatist researchers use variety of data collection techniques and analysis procedures. Though it is not necessary, the researchers, in general, turn to mixed method of research and use various forms of triangulation.

Methodological Choice

The choice layer of the research onion provides option of deductive and inductive research. This is a basic but important choice researchers need to make while designing their research; the deductive choice, generally, leading to the use a quantitative method or methods while inductive choice leads to a qualitative method or methods. There can be a combinative research design which uses a mixture of both. The design encompasses all; methodology, methods, tools and techniques. Among the researchers interviewed, some had used a single method while some others had used multiple methods; single (mono) method could be qualitative or quantitative whereas multi method could be qualitative, quantitative or a combination of both. Further, multi method can have many combinations such as quan + quan, qual + qual, quan + qual, qual + quan, quan -> quan, qual -> qual, quan -> qual, qual -> quan. Where the researchers have more time and resources, they may even choose longer combination like quan -> qual -> quan. Within quantitative research any tool(s), be it regression, DEA, AHP etc could be used. Likewise, in case of qualitative research tool(s) such as interview, expert opinion, self-reflection, content analysis etc. could be used.



Strategy

Peeling away the philosophical and choice layers leads us to the next layer of the onion; that of: strategy. The researchers used one or more strategies in creating their research design which is nothing but an overall structure of the research giving details for various elements of design. Only a few of the researchers vividly described or depicted their research design. However, they adopted any strategy from experiment to action research or a combination of different strategies mentioned in the research onion. Very few of them used Action Research. While action research calls for working with practitioners to bring about organizational change, they had simultaneously adopted a survey strategy for data collection in a structured manner from a sizeable number of employees of the sample organization. Generally, researchers need to associate particular research strategies with particular research philosophies but the boundaries between them being permeable, they have legroom for flexibility. Some of the strategy may be associated with different philosophies. For example Case Study can be used with all; positivism, interpretivism and pragmatism.

Time Horizon

Before reaching the core of the research onion, the adjacent layer depicts the time horizon over which the researcher undertakes her research. Where a problem at a particular time is to be dealt with, a cross-sectional research is undertaken to answer a question or solve the problem. In

such cases, strategies such as experiment (limited), survey, case study or grounded theory is used. On the contrary, where the question or the problem is such that it necessitates data being collected for a longer period of time, the researcher takes the longitudinal route. Majority of the researchers had undertaken cross-sectional study. Only a few had used strategies such as an experiment (wider, longer), action research, grounded theory ethnography and archival research. The sponsored research, generally, defines a time line; so is the case of research for doctoral degree as the doctoral candidate has limited time and resources. The crux of the matter is what a long period is!

Concluding Remarks

Any research is designed to answer a question or address a problem but the design is constrained by what is practicable to pursue in the investigation and finding the solution. In case of testing the hypothesis, the researcher has definitive tools and techniques which he needs to use but in case of theory development, he has much wider boundary within which he can operate. He can be creative to the extent of his own reflection and developing his own tools and techniques. In either case, what is ethical is of utmost importance. The management research, though slowly but surely, is shifting from quantitative research to qualitative or mixed method research paradigm.

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