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A Methodological Blueprint for Social Sciences Research – The Social Sciences Research Methodology Framework

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Abstract: Most research practice constructs in social sciences are predominantly well defined and constructed, yet many authors hold different interpretations of certain key terms and concepts, causing a degree of confusion, overlap and uncertainty. The term 'qualitative research' is such a case in point. Not only does this concept show different interpretations by many authors, but there is also uncertainty about how this concept relates to exploratory research or other contemporary social research practice concepts. It is also unclear whether a longitudinal research approach can be applied to qualitative research or related concepts. In order to provide a clear perspective on the above-mentioned dilemma, the authors recommend the application of the so-called *social sciences research methodology framework*, which follows Saunders' (2009) research 'onion' approach. This proposed framework provides an uncluttered and unambiguous guide to social sciences research methodology with relevant social sciences methodologies and constructs clearly positioned in a structured and simplistic way. The research employed was fundamental in nature. Inductive rational philosophical reasoning was used, and a theoretical analysis was applied through a systematic literature review of published text. In the end, the framework provides a unified understanding of most social sciences research constructs and at the same time acts as an aiding tool in the evaluation of all academic work, thereby enabling various examiners to provide clear and unambiguous guidance to contributors and students alike.

Keywords: Social sciences research practice; research framework; research methods; sociological and methodological dimension; research strategy; research 'onion' approach

Introduction

Social sciences research practice, as well as its accompanying terms and constructs, has evolved over time. Although most terms and concepts in social sciences are predominantly well defined and constructed, many authors hold different interpretations of these concepts, causing a degree of confusion, overlap and uncertainty. To illustrate this ambiguity, the following example depicts the various interpretations of the concept *qualitative research* as it relates to social sciences research practice.

Starting with the concept itself, a number of sampled authors hold different interpretations of the term 'qualitative research'. Firstly, Babin and Zikmund (2010, pp. 109-130) hold the widest view of qualitative research by including phenomenology, ethnography, grounded theory and the case study

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method, as well as the common research techniques of focus groups, in-depth interviews, and projective techniques. According to Welman et al. (2005, pp. 193-207) it comprises of phenomenology, depth interviews, focus groups, observation, in addition to historical and participatory research studies. In the third instance, the view held by de Vos et al. (2011, pp. :313-323) on qualitative research is not restricted to phenomenology, ethnography, grounded theory and the case study method alone, but also incorporates the biographical narrative method as an option. Taking a different stance, Wilson (2019, p. 122) regards qualitative research in its narrow sense comprising of focus groups, depth interviews, observation and projective techniques as data collection methods. Finally, a mixed engagement is posited by Cooper and Schindler (2006, pp. 198-209) who not only include individual depth interviews and group interviews, but also add the case study method and action research as additional methods in their view of the qualitative research engagement. To limit the confusion in this regard, an all-inclusive definition of qualitative research is sought.

Furthermore, the disagreement of what constitutes qualitative research has further implications for all *implied and related definitions* of qualitative research. For example, holding different interpretations of the concept qualitative research, various authors would indirectly define the *mixed methods approach* as applying at least one qualitative and one quantitative component in a single research project or programme differently (De Vos, et al. 2011, pp. 434-439). For Cooper and Schindler (2006), for instance, it would be either, individual depth interviews or group interviews and a quantitative method, whereas Babin and Zikmund (2010) would include phenomenology or even ethnography in the qualitative component. Consequently, this adds to the confusion, and a singular definition is called for.

There is uncertainty what actually constitutes qualitative research; likewise, there is uncertainty among authors between qualitative and *exploratory research* as two related concepts. In its application, exploratory research is seen as merely a preliminary study to both qualitative and quantitative research (Babin & Zikmund, 2010, pp. 156-157); for another it is part of the qualitative research approach (Wilson, 2019:122) or it is regarded as objectives of professional research from which qualitative research flows (De Vos et al., 2012, pp. 95-96; pp. 312-323). A clear differentiation between qualitative and exploratory research will contextualise these approaches.

In the fourth instance, other ambiguities arise with the limited application of defined concepts outside the term qualitative research. It is about how non-related concepts are defined which thereby influence the application of the term qualitative research. For instance, Bryman et al. (2011, pp. 109-111) and Wilson (2010, p. 122) view *longitudinal research* as an extension of quantitative survey research which is according to Welman et al. (2010, pp. 95-96) part of experimental design. Given the restricted definition of longitudinal research, it disallows the inclusion of the qualitative Delphi technique method as a *longitudinal true panel study*. Hence, another more open definition or application for longitudinal research is sought in order to make the concept more inclusive.

Finally, although most authors show a thorough understanding and grasp of all quantitative and/or qualitative constructs, the groupings and arrangement of these seem to be vague at times. It begs the question for instance: how do pragmatically defined social research practice concepts, such as action research, case study design, causal research, cohort design, cross sectional and longitudinal designs, descriptive and experimental research, histography, exploratory research, meta-analysis, mix method research design, triangulation approach, observational research, philosophical design, sequential design, systematic review, inductive logic, etc. relate to qualitative research? Additionally, one would

ask, how can these quantitative and/or qualitative constructs be grouped and structured to ensure common and logical interpretations?

In order to provide a clear perspective to the above-mentioned and other concerns, the paper recommends the application of the so-called *social sciences research methodology framework*. This proposed framework provides an uncluttered and unambiguous approach to social sciences research methodology with relevant social sciences methodologies and constructs clearly positioned in a structured and simplistic way. This engagement will assist both academia and students in all of their research engagements.

In the sociological dimension of research knowledge, if this proposed structure is offered as part of any postgraduate coursework, it will provide a unison understanding of most social sciences research constructs. Additionally, this proposed research framework can also act as an aiding tool in the evaluation of all academic work, which at the same time will enable various examiners to provide clear and unambiguous guidance to contributors and students alike.

The paper, nevertheless, does not provide definitions to all the terms and concepts used in the text, nor does it offer reasons why key concepts are constructed and grouped as they are, as this lies beyond the scope and context of this work. It does, however, align all mainstream social research practice terms in a systematic way using the research 'onion' approach of Saunders' et al. (2009). This approach makes it possible for academia to locate research text and phrases and position them into the bigger picture of social research practice.

The rest of the paper will state the aim of the study, the research methodology and literature review within which the social sciences research methodology framework is proposed.

Aim

The aim of the paper is to put forward a social sciences research methodology framework which structurally and logically groups the social research engagement, including its philosophies, research strategies, research designs, data collection techniques and methods, using the research 'onion' approach of Saunders et al (2009, pp. 106-109).

Research Methodology

The research methodology employed is fundamental by nature and draws on both the sociological and methodological knowledge base by applying an inductive rational philosophical approach. In this regard, an archival research design was applied, using a theoretical analysis through a systematic literature review of published text.

The full explanation of the methodology followed is related to the social sciences research methodology framework (Table 1) and can be found in the conclusion section.

Literature Review

The paper is based on the research 'onion' approach of Saunders et al. (2009: 108) of structuring research practice. In order to contextualise all contemporary research terms and constructs, and to group these concepts into a coherent flow, a revised research 'onion' is considered. The new nine-

stepped research 'onion' approach is illustrated in Figure 1, which will act as a guide in the discussion to follow. The recommended and detailed social sciences research methodology framework put forward for consideration using the 'onion' approach is depicted in Table 1.

Table 1. The Social Sciences Research Methodology Framework

1. Knowledge base:	Epistemological, methodological, sociological, and ontological dimensions									
2. Nature of inquiry:	Basic (fundamental) or empirical (applied) research									
3. Research philosophy:	(i) Social constructivism, (ii) interpretivism, (iii) positivism & post-positivism, (iv) realism, (v) critical theory, (vi) feminism, (vii) rationalism, (viii) functionalism, (ix) behaviourism, (x) modernism & post modernism, (xi) structuralism, (xii) rationalism, (xiii) objectivism, (xiv) pragmatism and (xv) neoliberalism. For basic research, the sociological point of departure and/or life orientation must be stated									
4. Research logic:	Exposition: Reporting study (^) Research argument: (i) inductive reasoning, (ii) deductive logic, and (iii) abductive reasoning									
5. Research strategy:	ARCHIVAL RESEARCH DESIGN		EXPLORATORY RESEARCH DESIGN		DESCRIPTIVE RESEARCH DESIGN		OBSERVATIONAL RESEARCH DESIGN		CAUSAL RESEARCH DESIGN	
6. Time horizon:	Longitudinal(**)	Cross-sectional(#)	Longitudinal	Cross-sectional	Longitudinal	Cross-sectional	Longitudinal	Cross-sectional	Longitudinal	Cross-sectional
7. Research tactics:	Basic research: Theoretical analysis. Applied research: Fact finding (Literature review) Model building (**)(#) Content analysis		(Grounded theory) Qualitative research (Phenomenology) Case analysis Preliminary study Researcher-subject relationships Simulated studies Narrative biographies (Hermeneutics)		Non-experimental research design Person-administrated interviews Telephone-administrated interviews Self-administrated questionnaires		Human observation Observation of physical objects (Process & flow analysis)		Experimental research design (pre-experimental, true-experimental, quasi-experimental & statistical-experimental) or market testing, applying both descriptive and observational research tactics	
8. Data collection techniques and research methods:	Systematic (literature) review, meta-analysis and philosophical analysis Secondary data searches, market tracking, environmental scanning, and reporting		1. Grounded theory 2. Group discussions, Delphi method and individual interviews 3. Phenomenology 4. Ethnography (incl.netnography) and case study method		Electronic, fixed premises (corporate & household) and consumer face-to-face intercept interviews Traditional, computer assisted telephone interviews (CATI), text and multimedia based		1.1. Behavioural observation: media usage analysis, verbal & non-verbal communication and mystery shopper/visitor study 1.2. Physiological		See descriptive and observational data collection techniques and methods	

	study(^) Literature review Data mining, statistical modelling, forecasting studies, trade area analysis and market potential study Bibliometrics, document studies, historiography, social media analytics and Big Data analytics	5. Pilot study and field experiment 6. Collaborative, action & participatory research, and participant-observer approach 7. Scenario research, game & role playing and futures research 8. Narrative (biographical & auto-graphical analysis, life story & life history) account and storytelling 9. Hermeneutics and exegesis	interviews and completely automated telephone interviews (CATS) 3.1. Mail-administrated: Freepost, and direct mail surveys (postal & electronic) 3.2. Self-completion: paper and electronic (self-administrated) interviews, and mail panel surveys	reactions measurement 2. Audits (wholesale, retail, store & home audits) 3. Process and flow analysis	
9.1. Sample design:		Non-probability sampling design	Probability sampling design	Non-probability sampling design	Controlled probability sampling design
9.2. Sample techniques:	Sampled text (by topic x time x authors) 'Census design' (state time frame of literature collected)	Convenience, quota, deviant case, theoretical, sequential, volunteer, experience, judgmental and snowball sampling	Simple random, systematic (object & time based), stratified (proportionate/disproportionate), cluster (one & two stage & area) and multi-stage sampling Census design	Judgmental sampling Census design	RR (units randomly assigned), RM (units matched), RRM (units both randomly matched and assigned), using descriptive and observational sample techniques. Census design
9.3. Measurement:	Published text, governmental and official public records, data depositories, internal records of public entities & organisations and internet sources	Open-ended probing questions. Projective techniques	Structured; scaling techniques and attitude measurements	Structured (Likert & rating scales) and semi-structured verbatim	Observations and controlled structured questions
9.4. Data manipulation:	Information, content analysis and interpretation	Category construction; deductively based (pattern matching, explanation	Frequency and cross tabulations Statistical analysis (descriptive & inferential) and	Multilayered (tiered) reporting by store x area x region x	Measuring cause and effect relationships

		building) and inductively based (content analysis, analytical induction)	hypothesis testing	national Measuring structural relationships	

Source: Based on Iacobucci and Churchill (2010: 58-107), Hair, et al., (2008: 110-112), Haydam et al., (2011: 24-25), Dillon, et al., (1994: 115-164, 174-207), Merriam (2009: 21-76), Mouton (2006), Remenyi and Money (2004:57-65, 69-79), Rooney et al., (2016:147-156), Salkin (1991:10-15), Saunders, et al., (2009,107-166), De Vos, et al., (2012:133-247, 297-396), Wilson (2019:102-113), and Babin and Zikmund (2010: 131-163, 189-279

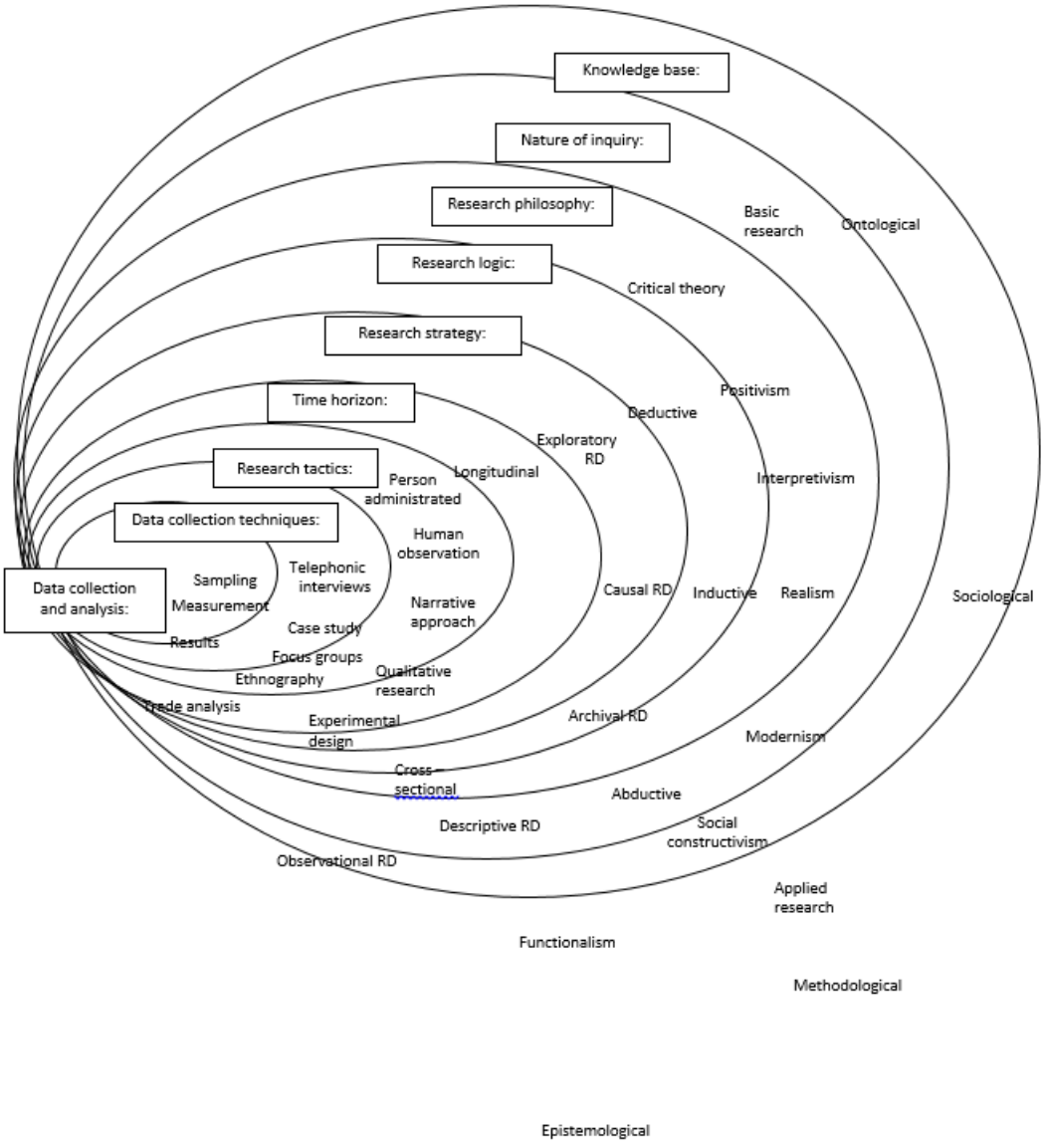

Figure 1. The Research 'Onion' Revisited

Based on: Saunders et al. (2009:106-109)

RD = Research design.

Looking at the research 'onion' as depicted in Table 1 and Figure 1, the research process starts with the identification of the research knowledge base and ends with data collection and analysis at the central point.

Knowledge Base

The 'pursuit of knowledge' is a decision a researcher faces and forms the foundation of any research project from which all scientific engagements flow. In this regard, viewing scientific knowledge as multidimensional, Mouton (2006, pp. 26-27; pp. 47-51) refers to four key elements or dimensions of scientific inquiry. These include (i) the pursuit of valid knowledge (i.e. the epistemological dimension), (ii) the methodical and systematic inquiry to obtain knowledge (methodological dimension), (iii) collecting knowledge as a social practice (sociological dimension), and (iv) knowledge depicting the social world as 'reality' (the ontological dimension). For the latter engagement, researchers will define the 'unit of analysis' i.e. individuals, collectives, organisations (formal and informal), institutions, social actions and events, and cultural objects or interventions to guide the ontological research process and designs in the social sciences.

Guided by the problem at hand within the stated scientific dimension, the nature of scientific inquiry lies between the choice of basic and applied research with scholars conducting theoretical research creating (inductively) theories instead of testing them (deductively) (Vogt, et.al. 2012, p. 92). This choice between basic and applied research forms the basis of scientific inquiry on which the search for knowledge is initiated.

Research Philosophy and Argument

Once the knowledge base has been defined, researchers then decide how they wish to express their research engagement. This is done through a stated research philosophy. According to Saunders et al. (2009:106), any chosen philosophy additionally carries key assumptions about the way a researcher views the world. At the same time this allows the researcher within the selected paradigm to defend the key propositions under investigation in a structured way. The choice of a research philosophy used is rather personal but according to Bryman et al. (2011, p. 12-21), can be dictated by the knowledge base the researcher engages in. For example, the researcher would expect an epistemological position to be upheld by positivistic, realistic and interpretivistic approaches, whereas in the ontological position, objectivism and constructionism could be considered. It must be noted that researchers can engage in multiple paradigms at a time, thereby displaying different paradigms side by side and providing competing versions of reality (Bryman et al., 2011, p. 21).

Overall, research philosophies can be grouped in terms of their subjective and the objective orientation to scientific inquiry. This philosophical grouping rests on the spectrum of social constructivism, interpretivism, and the positivistic approach, with the latter claiming to be the most objective. An objective or subjective orientation of science ultimately dictates the logic of research. For instance, an objective orientation would be deductive by nature and in the case of a subjective engagement, its logic of argument would be inductive (De Vos et al., 2011, pp. 48-55). Other philosophical interpretations from this spectrum can either flow laterally from this orientation, as in the case of realism and post-positivism, or cross-sectionally through specialised orientations such as critical theory and modernism.

Finally, social scientists are expected to be value free and objective in their research engagement, but this premise of neutrality can only be seen as an ideal rather than a doable reality. An approach to handling personal values would be to recognise and acknowledge these values in the research process and to be self-reflective about the influence these factors may have in this regard. Hence, researchers would additionally forewarn readers about their

biases and assumptions (Bryman et al., 2014, pp. 21-23) by stating their sociological point of departure or life orientation in order to put the research analysis and critique into context. This engagement becomes a necessity when executing basic research or some forms of interpretive social research studies such as participant-observer research or intensive interviewing (Remenyi & Money, 2004, p. 78; Bryman et al., 2014, p. 22). Alternately, the researcher could engage in research through a chosen value-laden research paradigm such as feminism or critical theory, thereby accepting the entrenched disposition upfront and be guided by the premises these philosophies uphold.

Research Strategies

In its simplest terms, a research strategy is a general plan of how the researcher goes about answering the research questions (Saunders et al., 2009, pp. 106-109) which, according to Remenyi and Money (2004:58-61), provide the overall direction of the research including the process by which the research is conducted. It comprises the full spectrum of scientific research, as well as research questions and objectives, existing knowledge on the subject area, research methods and techniques, and the philosophical underpinnings of the researcher (Saunders et al., 2009, pp. 106-109). Accepting that all philosophical underpinnings guide rather than dictate to research strategy, one could group the research strategies into five key research designs, namely the (i) archival, (ii) exploratory, (iii) descriptive, (iv) observational, and (v) causal research design.

A research design, according to Bhattacherjee (2012, p. 35), is a comprehensive plan for data collection and provides a blueprint for research. The author mentions that any design must specify at least three interrelated processes, namely (i) the data collection process, (ii) the instrument development process, and (iii) the sampling process. However, viewing each research design as a strategy rather than a design itself, the social sciences research methodology framework extends each research design into six processes. These processes include: (i) the time horizon, (ii) research tactics applied, (iii) data collection techniques and research methods used, (iv) sample design, which incorporates sample size establishment and techniques, (v) measurement and (vi) data manipulation (as reflected in Table 1).

The notion of the archival research design lies within the scientific premise of ‘science as a body or product of scientific knowledge’. Hence, the archival research design is underpinned by the documented edifice of science and includes all information, whether stored on paper or electronically. The other four research designs, on the other hand, posit the premise of ‘science as an ongoing practice of data collection’ and should be seen as separate research designs (Mouton, 2006, pp. 13-16).

In this regard, the exploratory research design encompasses all data collection techniques which provide a deeper insight into a situation, phenomenon, community or individual. On the other hand, descriptive research design, commonly known by the descriptor ‘sample or census surveys’, includes all research which aids in the presentation of specific details of a situation, social setting or relationship. It focusses on answers to who, what, when, where, and how and creates a general picture of the condition under investigation (De Vos et al., 2011, pp. 95-99). The observational research design is part exploratory and part descriptive research. However, its qualitative engagement is limited to semi-structured assessments in which participants record their behaviours and experiences. Its main differentiator lies in the way the data is collected, in other words the absence of an interviewer. The causal research design mimics the descriptive research design in virtually all aspects. However, it

additionally measures cause-and-effect relationships through involved intricate experimental designs. Finally, in the context of research methodology, any reference to the concept of 'quantitative research' would include both descriptive and causal research designs.

Time Horizon

In terms of the time frame at hand, the researcher has to decide between cross-sectional or longitudinal research studies across all five defined research designs. If the latter are considered, then the researcher has to specify whether the study is a true panel where the same sample units are surveyed over time, or a periodic panel study where different sample units and sample elements are selected and surveyed over a certain time period (Saunders et al., 2009, pp. 155-156). Additionally, for both true panels and periodic panels, Churchill et al. (2010, pp. 109-110) differentiate between continuous and discontinuous panels, depending on whether the measured variables have changed over time or not. Hence, a longitudinal continuous (periodic or true) panel indicates a study in which the measuring instrument stayed unchanged over time. Also, in applying a cohort research design as a variant to longitudinal studies, researchers have to specify whether a true or periodic panel study was applied.

Research Tactics and Data Collection Techniques and Methods

Once a strategy has been selected, an appropriate action plan (tactic) with accompanying research methods and techniques must be chosen. A silo approach is applied in this regard. In other words, if, say, an exploratory research design is chosen as a research strategy, then only grounded theory, qualitative research, phenomenology, case analysis, preliminary study, participatory and action research, simulated studies, narrative biographies and hermeneutics are available as research tactics. Furthermore, each research tactic has an accompanying data collection technique(s) and method(s). In this regard, the social sciences research methodology framework sees qualitative research as a research tactic of exploratory research and defines it in its narrow sense by including only group discussions, Delphi method and individual interviews as research methods.

Without going into much detail, certain data collection techniques can also have their own specific variants. Depth interviews, for example, have additional options to choose from, including the critical incident method, verbal protocol approach (Bryman et al., pp. 221-223), structured (Maree (ed), 2012, pp. 87-88), semi-structured and unstructured interviews (De Vos et al., 2012, pp. 348-353), the conversational interview (Babin & Zikmund, 2016, p. 127), etcetera. These variations have to be identified and applied to the listed framework. Hence, executing an unstructured conversational depth interview is very clear in its application and location within the research framework.

Also, in the case of grounded theory, for instance, this concept serves both as a research tactic and a data collection technique and method. In other words, it has no variants. In Table 1 it can be seen that causal research draws on both descriptive and observational research designs for its data collection techniques and methods.

Data Collection and Analysis

From here, each research design follows its own set of instructions in terms of execution, sampling, measurement, data analysis and reporting as prescribed by the research community through its sociological dimension. In this regard, exploratory and observational research is associated with non-

probability sampling, and descriptive research with probability sampling techniques (Shao, 2002, pp. 42-45). In its application of the causal research design methods, Dillon et al. (1994, pp. 197-198) differentiate the assignment of respondents to groups to be either randomly assigned (RR), or allocated through a quasi-design approach where respondents are merely matched and the treatment is randomly assigned to groups (RM), or when respondents are both matched and randomly assigned (RRM). These randomised and at times structured sample procedures are what the framework refers to as controlled probability sampling design. See Table 1.

The Lateral Approach to Social Sciences Research

Although a silo approach was used to structure social science research, the application of research seldom occurs unilaterally (as in silos) but rather multi-dimensionally, meaning across research designs. In its simplest form, a post-graduate student will conduct both a literature review (archival research design) as well as, say, a telephonic sample survey (descriptive research design).

More advanced approaches would include the mixed methods and triangulation methods. For the former methods, the researcher would conduct group discussions, or apply the Delphi method, or execute individual interviews as the qualitative engagement, and additionally execute quantitative research by applying any descriptive or causal data collection technique, say, face-to-face at home interviews. Triangulation, on the other hand, would apply any three data collection techniques and methods across all five research designs, and/or within the same category of a design. It would, for example, execute a group discussion, individual interviews and conduct a biographical narrative life analysis.

In the same way, many variants may be possible within a specific data collection technique. For example, the case study method can cover all the required qualitative dimensions, but the researcher may want to supplement the collected data by using a descriptive data collection dimension through a staff census survey. Each data collection technique and method follows its own inherent strict rules of engagement.

Lastly, a sequential research method would be executed in a staged approach both unilaterally and/or across designs applying multiple methods with the one building upon the previous one until enough data is gathered over an interval of time (Labaree, 2019).

Conclusion

Firstly, the proposed social sciences research methodology framework as depicted through the augmented nine stepped research ‘onion’ approach, is a structured and sequential research process with each stage feeding into the other to provide an all-inclusive base for the entire social sciences research practice. Being an all-inclusive framework, it forces researchers and academia to address all relevant research dimensions in their research endeavours in a simple, clear and logical way.

Secondly, the application of the social sciences research methodology framework allows for direct and unambiguous instruction of how any research was, or will be executed. Therefore, referring back to the stated research methodology in the introduction of this paper:

‘The research methodology employed is *fundamental* by nature and draws on both the *sociological and methodological knowledge base* by applying an *inductive rational philosophical approach*. In this

regard, an *archival research design* was applied, using a *theoretical analysis* through a *systematic literature review* of *published text.*'

Table 2. The Methodology Now becomes clear and certain and is as Follows

Fundamental:	No empirical research was done or any questionnaires were used.
Sociological knowledge base:	The study aims to assist the social sciences research community with its institutionalised frameworks by enhancing the research engagement and academic review systems (Mouton, 2006, pp. 41-45).
Methodological knowledge base:	It will aid in 'how' research data is collected by critically assessing the current research techniques and methods (Mouton, 2006, pp. 35-44). The intended outcome in this regard is to propose a new social sciences research conceptual framework of the topic under investigation (i.e. research methods) (Garbers, 1996, p. 279).
Inductive:	It uses a qualitative research approach and builds from facts and theory to a general truth. It hopes to engage in a new social sciences research conceptual framework or to obtain a systematic explanation of the topic under investigation (i.e. research methods) (Garbers, 1996, p. 279).
Rational philosophical approach:	The authors believe that human reason is superior to all other forms of knowing and view empirical research as fallible and misleading. They furthermore acknowledge that knowledge obtained through basic research is objective, truthful and eternal across time and space (Maree (ed.), 2007, p. 21).
Archival research design:	A research strategy, as defined in the social sciences research methodology framework.
Theoretical analysis:	For this study, a theoretical argument was used in its engagement.
Systematic literature review:	The contributions of existing research, i.e. the body of completed and recorded work produced by researchers, scholars, and practitioners about a well-defined topic (i.e. research methods in social science) of investigation were critically evaluated (Fink, 2005, p. 3, p. 17).
Published text:	This is the evidence collected for this research engagement.

In the third instance, the five research designs provide valid options for any research strategy chosen in the social sciences. Each research design selected illustrates how the researcher wants to depict the reality under investigation. This is expressed by the stated research philosophy, which ultimately depends on the research topic at hand, as well as the social point of departure or life orientation of the investigator.

Furthermore, the key and ambiguous terms as noted in the introduction are now fully clarified through this framework.

Qualitative research as a key concept is classified as a research tactic of exploratory research and includes only group discussions, Delphi method and individual interviews as data collection techniques. Quantitative research, on the other hand, refers to the usage of both descriptive and causal research designs and their subsequent data collection techniques and methods. Therefore, when applying mixed methods as a lateral approach in the social sciences, the researcher would include group discussions and/or Delphi method and/or individual interviews, combined with any descriptive and/or causal research design method, for example, person administrated, telephone administrated and self-administrated, or any observational method.

Also, triangulation as an alternate lateral approach within the framework applies to any three data collection techniques and methods across all research designs, and/or within the same category of a

selected research design. The sequential research method, on the other hand, is a consecutively staged approach, which also employs multiple methods unilaterally or across research designs, until sufficient data has been collected for the problem at hand.

Lastly, the concept of longitudinal studies is no longer limited to quantitative research, but cuts across all five defined research designs. In other words, the new definition allows for repeat observations using, say, group discussions, case studies or even a narrative analysis over time. Its application extends to include any type of model building tactic (see archival research design), for example, data mining, statistical modelling, forecasting studies, trade area analysis and market potential study, as well as any observational research study.

In the fifth instance, in addition to all the benefits that a structured social sciences research model brings (see introduction), with a formal framework to work from for the first time, it allows additional research tactics and data collection techniques and methods, including new research designs in their entirety to slot into the proposed structure. This social sciences research framework then will become a self-feeding system, which automatically updates itself.

Finally, the authors acknowledge that within its scientific nature and through the everlasting quest for truthful knowledge, this social sciences research framework will remain incomplete, thereby encouraging further research into this topic. Nonetheless, with this proposed research framework, social science research inquiry is now significantly closer to having a fully structured social sciences research framework and the authors therefore call on academia and scholars to consider this framework when engaging in any aspect of social sciences research methodology.

Table 3. Terms and Concepts: Knowledge Base and Reasoning.

Abductive reasoning: 'thought experiment'	Abduction refers to the logic associated with trying to explain a surprising or unexpected event and to determine what might have caused it. In this regard, abduction is a process in reverse: working back from an observed consequence to a probable antecedent or cause (Teddlie & Tashakkori, 2009, p. 89). Similar to inductive reasoning, *abductive reasoning* formulates hypotheses to explain symptoms as observable facts instead of goals (Finin & Morris, 1988, p. 2). It is characterised by the lack of completeness, either in the evidence, or in the explanation, or both. Typically beginning with an incomplete set of observations or with some common well- known accepted facts, it proceeds to the most likely possible explanation for the set. Given the use of incomplete observations, the conclusions of abductive reasoning can only be based on probabilities from which it presumes the most plausible probable conclusion as the correct one (Shuttleworth, 2008).
Basic research	Basic research is primarily undertaken to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view. It analyses properties, structures and relationships with a view to formulate and test hypotheses, theories or laws. Basic research allows scientists some freedom when setting their goals (Gulbrandsen & Kyvik, 2010, pp. 343-344).
Cohort design	A specific type of longitudinal study that samples a group of people of a population who are united by some commonality or similarity, i.e. they share the same pre-defined characteristics or common event in time, e.g. baby boomers. Rather than studying statistical occurrence within the general population, a cohort study makes note of statistical occurrence within a specialised subgroup (Labaree, 2019).
Continuous panel	*"A fixed sample of respondents who are measured repeatedly over time with respect to the same variable"* (Churchill et al., 2010, p. 110).
Deductive reasoning: (testing theory)	Knowledge proceeds from the general to the specific and is compatible with methodologies emphasizing *experimental control***,** *structured* and *replicable observation* and *measurement*, *quantification and generalisation* of data given an outsider's objective perspective. Unlike induction, the researcher starts with a clear conceptual framework, e.g. a theory which rigidly guides the research process, including *conceptualisation*, *operationalisation*, *data collection* and a detailed frame

	of reference for the *analysis* and *interpretation of data*. The emerging data is assessed through *hypothesis testing* and the theory will in the end be conclusively confirmed or rejected and represented as proof, i.e. being valid and true. In this regard, deductive logic is also at times referred to as *hypothesis-testing research* and is typical of descriptive studies which follow a *quantitative approach* (Garbers, 1996, pp. 278-279).
Discontinuous panel	*"A fixed sample of respondents who are measured repeatedly over time but on variables that change from measurement to measurement"* (Churchill et al., 2010, pp. 110).
Epistemological dimension	This dimension engages in the acquisition of knowledge in the search for truth or true knowledge in a discipline. Accepting this notion as being an elusive ideal, it uses the construct 'goodness of fit' as a research engagement to approximate reality (Mouton, 2006:46-51; Bryman et al., 2011, pp. 12-13).
Inductive reasoning: (building theory)	The reasoning that proceeds from facts to theory or from experiences to general truths is regarded as *induction*. Studies engaging in inductive logic usually generate hypotheses, which must be tested through deduction. It is a research engagement which is typified by a *qualitative research approach* where the researcher initiates a research project without any initial conceptual framework to work from. As the framework is less structured, the researcher looks for links and patterns within the exploratory data, which is loosely guided by conjectures. The intended outcome in this regard is to engage in a new conceptual framework, or to obtain a systematic explanation of the topic under investigation (Garbers, 1996, p. 279). The methodological features of such an engagement can be summarised as: (i) unstructured observation and interviewing, (ii) ideographic descriptions, (iii) qualitative analysis and the (iv) intersubjective predisposition of objectivity (Garbers, 1996, p. 279).
Methodological dimension	This dimension is concerned with the 'knowledge of how'. It includes the critical assessment of research techniques and methods as well as methodological paradigms (Mouton, 2006, pp. 35-44).
Ontological dimension	The term ontology literally means the study of 'being' or 'reality' and is concerned with the nature of social phenomena. Drawing knowledge from the social world, it studies individuals, collectives, formal and informal organisations, institutions, social actions and events, cultural objects and interventions as units of investigation (Mouton, 2006, pp. 46-51; Bryman et al., 2011, pp. 16-17).
Panel (true/periodic)	The *sample elements* of a true panel (in the case of respondents) have agreed in advance to be interviewed, or (in the case of objects) are compelled to be observed over a certain period of time (Iacobucci and Churchill, 2010:89). Periodic panels, on the other hand, are also conducted at regular intervals as per longitudinal time dimension, but unlike true panels, new samples of respondents or objects are drawn for each *time cycle* (Churchill et al., 2010, pp. 109-110).
Sociological dimension	Viewing the world of science as part of the social world, the sociological dimension acknowledges that researchers collect information whilst being part of the social system with its own specific beliefs, values and interests. Hence, researchers follow implicit and explicit rules within institutionalised frameworks which impose constructs as to what is scientifically acceptable. Social control is institutionalised in this regard through review systems, rules of promotion within research organisations and membership as well as recognition of cited authors (Mouton, 2006, pp. 41-45).

Table 4. Terms and Concepts: Mainstream Research Philosophies.

Behaviourism	According to behaviourism, human and animal behavior can both be explained in terms of external stimuli, responses, learned histories and reinforcement through a cause and effect analysis. It argues that positive and negative reinforcements can change desired behaviour (Maree (ed.), 2007, p. 21).
(Critical)Realism	As in the case of positivism, realism believes in an external reality separate from scientists' description thereof, and can only be captured using techniques by the natural sciences. It sees that social phenomena as produced by mechanisms that are

	real, (but at the same time not directly accessible to observation) are only discernable through their effects. Concerning itself with social phenomena, it sees the social world as mediated and thus subjective. It takes the view that the social world is reproduced and transformed in daily life and researchers are tasked to construct hypotheses about mechanisms capable of producing patterns of events (Bryman et al., 2011, p. 12, pp. 57-58).
Critical theory	Accepting that bias is present in all actions of human beings, critical theory aims to understand the conduct of societies and to establish the various forms of bias. It is concerned with how injustices and subjugation shape people's experiences and understanding of the world. It also critiques and advocates issues relating to the inequalities of gender, race, class and other forms of oppression within a culture by challenging the nature of societies through scientific reasoning (De Vos et al., 2011, pp. 5-10; Maree (ed.), 2007, p. 21).
Feminism	Feminism attempts to give a voice to women and to correct the male dominated perspectives in the social sciences. It is concerned with the under-representation of women and women's experiences within the social sciences both as subjects of research and research producers. It analyses how women were discriminated against and how the social structures in society influenced women negatively, thereby giving men an unfair advantage over them. In this regard, it aims to acquire knowledge about women that will contribute to women's liberation and emancipation (De Vos et al., 2011, pp. 5-10).
Functionalism	Just as biological organisms have systems that perform various specialist and survival functions, the same principles can be applied when the functions of social institutions are analysed. The aim of functionalism is to ensure the ultimate survival and optimal functioning of selected institutions which over time evolve and adjust to the demands of societies. It thereby analyses role differentiations and social solidarities to ultimately ensure the continued smooth and integrated functioning of any organisation or society (Maree (ed*)*, 2007, p. 21).
Interpretivism	This engagement aims to comprehend human actions through 'erklärung' (abstract explanation) and 'verstehen' (empathetic understanding) of everyday lived experiences in specific historical settings. It assumes that any research approach needs to respect the differences between people and objects of the natural sciences. This approach therefore requires the understanding of the subjective meaning of social action (De Vos et al., 2011, pp. 5-10; Bryman et al., 2011, p. 12).
Modernism	Modernism is associated with the analysis of modern societies, developed states and Western nations by providing meta narratives and grand theories about the world. It provides a description of how the world is to be understood through certainty, order, organisation, prediction, rationality, linearity and progress. It celebrates the world of science, the scientific method and the authority of the expert (Maree (ed.), 2007, p. 21).
Neoliberalism	This theory is mainly applied in political and economic theory highlighting the globalised world. It emphasises the positive role of the state to create optimal conditions for capitalist expansion. In this regard, it seeks an efficient and effective public sector which elevates the market as the primary instrument for determining the distribution of social goods (Maree (ed.), 2007, p. 21).
Objectivism	Objectivism is the ontological position that sees social phenomena such as cultures and organisations as external facts that are beyond one's reach or influence. In other words, social phenomena and their meanings have an existence that is independent of its social actors (including staff). An organisation, for instance, has a reality that is external to the individuals who inhabit it. It is the organisation which exerts pressure on individuals to conform to the procedural requirements and rules and regulations, thereby constraining and limiting the actions of its members (Bryman et al., 2011, p. 17).
Positivism	Positivism believes that the same research methods and procedure of the natural sciences are appropriate to the social sciences. Knowledge is seen as the accumulation of facts which provides the basis for universal propositions and theories through induction. It views the world as an objective reality which exists outside of personal experiences. In conducting value free research, researchers are called to adopt a distant, detached, neutral and non-interactive position towards their research

	endeavour (De Vos et al., 2011, pp. 5-10; Bryman et al., 2011, pp. 12-13).
Postmodernism	Rejecting modernism, this philosophy is mainly applied to the artistic and social sciences. This approach gives a voice to the individual and communities rather than prescribing predetermined rules for action. Subscribing to uncertainty, disorder, indeterminacy and regression, it values multiple subjective meanings opposed to a single authoritative voice of the scientist or expert. It questions the capacity of science to generate the truth because of its limiting way of doing so, which is the use of language. It sees language as socially constructed, which in itself distorts reality. It mainly uses qualitative research in this regard by interpreting behavioural patterns through respondent narratives (De Vos et al., 2011, pp. 5-10; Bryman et al., 2011, pp. 154-156).
Postpositivism	Postpositivism argues that reality can never be fully appreciated, only approximated. It emphasises the discovery and verification of theories. It accepts that any cause and effect relationship in social research is difficult to attain, due to the variety of uncontrollable variables in different settings. Hence, this philosophy relies on multiple methods as ways of capturing reality. It thereby allows researchers the freedom to use subjective measures of gathering information, including structured, qualitative procedures and analyses (De Vos et al., 2011, pp. 5-10).
Post-structuralism	This concept argues in contrast to structuralism; it views that structures are not easily discovered and in some cases not discoverable at all. As text is a human construction, it is therefore fallible. Hence, the original meaning of the authors cannot be determined. Consequently, the task of science is, to continually 'deconstruct' text and its various interpretations over time (Maree (ed.), 2007, p. 21). This philosophy is commonly found in the languages and linguistic fields.
Rationalism	Rationalism is a philosophical interpretation which views human reason as superior to all other forms of knowing. It regards evidence through the senses, i.e. empirical research, as fallible and misleading. Rational knowledge (through basic research), is seen as objective, true and eternal across time and space (Maree (ed.), 2007, p. 21).
Social constructivism	Antithetical to objectivism, social constructivism sees reality as subjective and in a constant state of flux, thereby allowing multiple realities to co-exist. Social phenomena and their meanings are continually being produced by social actors through individual or collective social interactions (Bryman et al., 2011, p. 12). It argues that just as researchers, participants also seek an understanding of the world in which they live and work. Hence, this approach allows participants to become active and involved in all the phases of the research process. This approach encourages an open and democratic relationship between researcher and participant (De Vos et al., 2011, pp. 5-10).
Structuralism	It argues that underlying structures determine the meaning of an event or phenomenon. In this regard, it argues that economic structures or organisations determine the social (and economic) beliefs and behaviour. Similarly, the hidden structures of the unconscious mind control human behaviour (Maree (ed), 2007, p. 21).

Table 5. Terms and Concepts: Archival Data Collection Techniques and Methods

Bibliometrics	Bibliometrics is a type of research method, using quantitative and statistical analysis of scientific communication within a given field of body of literature utilised. The fundamental processes in bibliometric analysis involve the measuring of activity, impact, and linkages of a specific area of study. It describes patterns of publications by measuring among others, publication and citation counts, co-citation and co-word analysis, scientific 'mapping' as well as citations in patents. As a meta-analytical and longitudinal form of research, bibliometrics aims to unveil the most authoritative and effective articles, scholars, topics, and prevailing schools of thought in a field of study (Thanuskodi, 2010, pp. 77-78; Seyedghorban et al., 2015, pp. 2664-2665).
Big data analytics	This is an advanced analytic technique that combines and manipulates high volume multiple data sets (numerical, textual, sensor data, audio and video data) of Big Data into a single source through programming languages such as Structured Query Language (SQL). It is mainly used for both in theunderstanding and prediction of research (Wilson, 2019, pp. 87-88).
Content analysis	Content analysis is the analysis of any form of communication, including

	advertisements, newspaper articles, television programmes, web pages and taped conversations (Wilson, 2019, p. 113).
Data mining	This method applies mathematical models to extract meaningful data from integrated databases (Cooper & Schindler, 2006, p. 260).
Document studies	Document studies review existing documents, aiming to understand the content of text and to clarify the deeper textual meanings of style and coverage. A whole range of documents is considered for academic purposes in this regard, including personal (e.g. letters and diaries) and non-personal documents (e.g. minutes of meetings and memos), mass media text (i.e. all open forum mass media communications, social media and the Web inclusive), official (government sourced) documents as well as archival materials (De Vos et al., 2011, pp. 377-379).
Environmental scanning	As part of the fact-finding tactic, environmental scanning entails information gathering in order to detect environmental changes in their initial stages of development. Using push technology, researchers would specify their fields of investigation and through filtering, sorting and prioritising, the information is then stored and actioned at a later stage (Babin & Zikmund, 2010, pp. 168-169).
Forecasting studies	This is a quantitative approach associated with mathematical and statistical techniques of regression and time series analysis. The technique attempts to establish relationships between different sets of historical and at times empirical data and attempts to understand why these relationships exist. It is also classified under mathematical simulation (Remenyi & Money, 2004, p. 75).
Historiography	The historical studies collect, verify, and synthesise evidence from the past to establish facts that defend or refute a pre-determined hypothesis. As documentary evidence it uses diaries, official records, reports, archives, and non-textual information, i.e. maps, pictures, audio and visual recordings (Labaree, 2019; Bryman et al., 2011, p. 12).
Literature review	Three types of literature reviews can be distinguished. Firstly, a *theoretical background* is the section of a research output, e.g. a journal article that provides the theoretical foundations and context of the research question, and assists in bringing the research question into focus. *Literature review*, on the other hand, is a chapter (or multiple chapters) of a graduate thesis and anchors a scholarly article. It describes the content and quality of knowledge already available, and presents the reader with the significance of previous work and thereby grounds subsequent work. The third kind is a stand-alone literature review, say, a journal-length article which sole purpose is to review the literature in a field, without any primary data collected or analysed. When a stand-alone literature review is conducted using a systematic, rigorous standard, it is referred to as a *systematic literature review* (Okoli & Schabram, 2010, pp. 2-3).
Market potential studies	This is an estimation of the market potential of a product or service in which existing secondary data sources are used, or in which multi secondary sources are transformed and projected onto the area of interest (Babin & Zikmund, 2010, pp. 169-170).
Meta-analysis	Meta-analysis is a statistical procedure used primarily in evidence-based research and is seen by Haidich (2010, pp. 29-30) as a follow-on to or advancement of the systematic (literature) review design. As an analytical methodology, it uses quantitative measures to systematically evaluate and assess previous research studies for the purpose of integrating the results of numerous individual studies using the total methodology approach. Ultimately, it aims to develop a new understanding of a research problem through synoptic reasoning. To make the results more accurately reflect the strength of the relationship identified, meta-analysis is usually applied across all study results – both to those with and those without statistical significance (Glass, 1976:3; Labaree, 2019; Shelby & Vaske, 2008, p. 97; p. 107).
Philosophical analysis and argument	As a broad approach examining a research problem, philosophical analysis and argumentation challenges deeply embedded, often intractable, assumptions underpinning an area of study. This approach uses the tools of argumentation derived from philosophical traditions, concepts, models and theories to critically explore and challenge contemporary research views. The philosophical analytical design encapsulates both the epistemological and methodological models of scientific enquiry. Its analysis is also framed in ontology (the study that describes the nature of reality, e.g. What is real? What is not real?) and axiology (i.e. the study of values) (Labaree, 2019).
Reporting studies	Reporting studies provide an account or summation of data, including descriptive

	statistics, on a particular topic of interest. These reports typically do not draw any conclusions or apply any inference of data (Cooper & Schindler, 2006, p. 19, p. 762).
Secondary data searches	Data that has been previously collected for some purpose other than the one at hand which may be available within the organisation (referred to as internal secondary data) or available externally through published and electronic sources (Babin & Zikmund, 2010, p. 165; Wilson, 2019, p. 64).
*S*ocial media analytics	Social media analytics assesses and monitors social media channels for brands, products and competitors or social media platforms and cyber community in a given time period or space (Wilson, 2019, pp. 115-116).
Statistical modelling	Statistical modelling is a technique representing variability through probability distributions, which form the building-blocks from which modelling is constructed, accommodating both random and systematic variations. In this regard, systematic patterns are generated by structure in the model. Different models and analyses may be applied to the same data set (Davison, 2008, p. 1).
Systematic literature review	According to Fink (2005, p. 3; p. 17), a systematic literature review is *"a systematic, explicit, comprehensive, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners."* As theoretical methodological design it involves selecting and critically evaluating the contributions of existing research about a well-defined topic of investigation. It must be noted that a systematic review is not a traditional literature review, but should be seen as a self-contained research project that explores a clearly defined research problem. Using existing studies, it analyses and carefully synthesises the data and reports the evidence in a way that facilitates clear conclusions about what is and what is not known (Labaree, 2019; Vogt et al., 2012:90; Okoli & Schabram, 2010, pp. 2-3).
Trade area analysis	This involves applying site analysis techniques to select the most preferred locations for retail and wholesale operations (Babin & Zikmund, 2010, pp. 168-169).
Market tracking	The observation and analysis of trends in industry or market volume or market share over time (Babin & Zikmund, 2010, p. 168).

Table 6.Terms and Concepts: Lateral Approaches, i.e. cutting Across Designs and Methods

Comparative research	Seen as experimental and quasi-experimental research which controls extraneous variables (Terre Blance et al., 2009, pp. 172-174).
Explanatory research studies	Explanatory studies aim to provide casual relationships of phenomena (Terre Blanch et al., 2009, p. 44).
Mixed method	This method is the combination of at least one qualitative and at least one quantitative component in a single research project or programme. More specifically, it is seen as a separate methodology in which both quantitative and qualitative approaches, methods and procedures are combined or mixed to provide a completely different picture of reality. Both qualitative and quantitative research engagements can be executed concurrently, i.e. at the same time or sequentially (one followed by another) and by different priorities (i.e. degrees of dominance) for a particular method (De Vos et al., 2011, p. 434, pp. 439-444).
Sequential approach	Sequential research is that which is carried out in a deliberate, staged approach (i.e. serially), where one stage will be completed, followed by another, then another, and so on, with the aim that each stage will build upon the previous one until enough data is gathered over an interval of time to test the researcher's hypothesis. The sample size is not predetermined. After each sample has been analysed, the researcher can accept the null hypothesis, accept the alternative hypothesis, or select another pool of subjects and conduct the study once again. This means the researcher can obtain a limitless number of subjects before making a final decision whether to accept the null or alternative hypothesis. Employing a quantitative framework, a sequential study generally utilises sampling techniques to gather data and then applies statistical methods to analise the data. Using a qualitative framework, sequential studies generally draw on samples of individuals or groups of individuals [cohorts] and use qualitative methods, such as interviews or observations, to gather information from each sample (Labaree, 2019).
Triangulation	Triangulation is a multi-methods approach of data collection, which aims to compare

	and contrast different findings to assess the extent of agreement or disagreement among the results. It is designed to avoid errors and biases inherent in a single methodology (De Vos et al., 2011, p. 434, pp. 442-443).

Table 7. Terms and Concepts: Exploratory data Collection Techniques and Methods

Action research	This protocol is cyclical in nature whereby a problem is conceptualised and particularised and several interventions and evaluations are executed to form a final interventionary strategy. In this regard, both the researcher and participants are equally involved in the process. On the one hand, the researcher seeks the truth (research) about the concrete problem, and participants, on the other hand, apply solutions (action) to the concrete problem at hand. This cyclic process of research and action repeats itself, until a sufficient understanding of, or a valid implementable solution is found. The collective term for all action research engagements is referred to as the 'participatory action research model' or simply 'the PAR model' (De Vos et al., 2011, pp. 491; Labaree, 2019). See also participatory research.
Case study method	An in-depth study of a particular research problem, this method is used to narrow down a very broad field of research into one or a few easily researchable examples and to assess whether a specific theory and model actually applies to real world phenomena (Labaree, 2019). These phenomena can include a single organisation, a particular community or group, an individual, a decision taken or event (Henn et al., 2009:65). This method is particularly useful when not much is known about an issue or phenomenon under investigation (Labaree, 2019).
Collaborative research	Challenging the conventional ways of how knowledge is constructed in social sciences, collaborative research treats participants more democratically as active rather than passive agents over all the processes and outcomes of research (Bryman et al., 2011, pp. 48-50).
Conversational interview	This is an informal data-gathering approach whereby the researcher engages a respondent in a discussion of a relevant topic As the name indicates, the researcher engages in a completely unstructured manner through dialogue about the respondent's lived experiences (Babin & Zikmund, 2016, p. 127).
Critical incident method	Respondents are asked to describe a critical element where the consequences or potential outcomes thereof are clear. It aims to provide an understanding of the sequences and significances of each event (Bryman et al., 2011, pp. 221-223).
Delphi method	The Delphi technique is a multi-stage exercise where the researcher designs a questionnaire which is sent to a larger targeted audience for completion. Once the individual questionnaires are returned, the researcher then summarises the results for the panel and, based upon the results, develops a new questionnaire for the target group. This process is repeated until a relatively narrow spread of opinions has been achieved. Although commonly associated with forecasting procedures, this method is applied to a wide range of problem solving initiatives (Linstone & Turoff, 2004, p. 5; Remenyi & Money, 2004, p. 76).
Ethnography	Ethnographic studies describe and interpret cultural behaviour of a selected intact cultural or social group. In this regard, a researcher spends a prolonged period of time in the field amongst a community with the ultimate goal to generate a holistic cultural portrait (De Vos et al., 2011, p. 314). Variations include netnography (also called webnography) which can be interpreted as the Ethnography of cyberspace communities.
Exegesis	Exegesis means 'lead out of' as well as to explain, interpret, tell, report or describe by means of articulation or discovery of a text's meaning based on the understanding of the original author's intentions and goals. This method is predominantly applied to biblical text (Porter & Clarke, 1997, pp. 4-5).
Field experiment	Commonly applied in business and management research, these field studies typically test the launch of new product or service prototypes before committing to a full roll-out of a business programme. It is also applied in typical confined area studies (Remenyi & Money, 2004, p. 74).
Futures research	Futures research involves the summation of divergent opinions of experts to provide a way of considering and predicting the future through scenario projections and

	Delphi studies (Remenyi & Money, 2004, p. 76).
Game and role playing	This technique involves asking individuals to participate in a social-cultural, business or management game by playing out a specific role. It is regarded as a high-level simulation game of interpersonal reactions and group decision-making (Remenyi & Money, 2004, p. 76).
Grounded theory	Rather being a theory itself, grounded theory generates an abstract analytical schema of a specific phenomenon, i.e. a theory that explains some action, interaction or process. Based on the study of social situations, it simultaneously employs induction (the construction of concepts), deduction (theoretical sampling) and verification (constant comparison) techniques until a theoretical saturation point is reached (De Vos et al., 2011, p. 318).
Group discussions	Group discussions are unstructured and free flowing discussions by a selected group of individuals (varying between two to twelve respondents) who follow a dynamic process of interaction and respond to questions relating to a particular theme under investigation (Saunders et al., 2003, p. 175).
Hermeneutics	Hermeneutics is the theory and philosophy of the understanding and interpretation of texts, art, culture, and social phenomena (incl. organisations) through the medium of language. Hermeneutics constructs knowledge through an open dialogue between text and the inquirer. It is a repeated circular process where the researcher returns to the object of inquiry with the logic of question and answer. By moving dialectically between the parts and the whole, the researcher finds an increased understanding and a more complete interpretive account emerging each time (Paterson & Higgs, 2005, p. 342-344).
Individual interviews	Individual interviews are open-ended, free flowing interviews with one respondent conducted by one or more moderators (Welman et al., 2011:211). The person recruited for the study and the topic under investigation dictate the variant of this engagement, e.g. expert, participatory or experience interviews, etc. (Babin & Zikmund, 2010, p. 147).
Narrative accounts	Narrative accounts include the analysis of authored works of biographical and autobiographical nature, as well as narratives of life stories and life histories (De Vos et al., 2011, p. 313).
Participant-observer approach	The researcher joins a team of individuals who are part of the phenomenon under investigation. In this regard, the researcher takes part in the phenomenon in the same way as the other group participants but at the same time acts as an independent observer assessing the group interactions (Remenyi & Money, 2004, p. 78).
Participatory research	Participatory research is a variant of action research. Whereas action research is mainly concerned with specifically organisational and business related problem solving, participatory researchers are more familiar with the subjects under investigation and work towards improving the conditions of disempowered groups (Bryman et al., 2011, pp. 48-50).
Phenomenology	Phenomenology uses naturalistic methods to describe the concepts and structures of conscious experience and actions that give form and meaning to the life world of subjects without any preconceptions or judgments, by providing a description of human experience as it is experienced by the subjects (De Vos, et al., 2011, p. 316).
Pilot study	A procedure used for testing and validating a research instrument to a small group of participants from an intended test population (Barker, 2003, pp. 327-328). It is applied to both qualitative and quantitative research and employed to the study of literature, experience of experts, the feasibility of the study, and the testing of the measurement instrument (De Vos et al., 2011, p. 237).
Researcher-subject relationships	A research approach which *"enables research subjects to play a more active part in designing the research and influencing the outcomes of the process".* (Bryman et al., 2011, pp. 48-50). See also action research, collaborative and participatory research.
Scenario research	A group of suitably qualified experts is asked to discuss the implications of a particular hypothetical situation occurring. Not only is key information obtained from the group of experts in this regard but evolving opinions over time are also assessed and monitored (Remenyi & Money, 2004, p. 78). This technique applies group discussions or Delphi studies.

Semi-structured interview	An interview that provides a detailed and guided picture of a participant's beliefs about or perceptions of a particular topic, using a list of predetermined questions (Maree (ed), 2012, pp. 87-88; De Vos et al., 2012, pp. 348-353). This interview schedule of listed questions merely acts as a guide rather than a dictate. However, in a limited way, participants dictate the direction of the interview.
Storytelling approach	Storytelling is a methodological approach that provides a framework through which one can investigate experience and gain access to the complexity of human affairs and human activity. It seeks to explore consumer issues that reside within the human psyche, thereby trying to discover the meaning of human existence filtered down to the researcher's own individual purpose within it (Rooney et.al., 2016, pp. 147-148).
Structured interview	Investigative questions are detailed upfront before the start of the fieldwork. In order to provide structure, this technique is usually applied to larger samples of depth interviews (Maree (ed), 2012, pp. 87-88).
Unstructured interview	This method is also referred to as an open-ended interview (Maree (ed), 2012, p. 87) or in-depth interview (De Vos et al., 2012, p. 347). It is a one-to-one formalised and extended conversation which explores the understanding of experiences of other people, their perceptions and opinions (De Vos et al., 2012, pp. 348-353).
Verbal protocol approach	A technique which asks respondents to 'think aloud' while they are performing a task. The idea is to elicit respondents' thought patterns whenever a judgment or decision has to be made (Bryman et al., 2011, pp. 221-223).

Table 8. Terms and Concepts: Observational Data Collection Techniques and Methods

Audits	An examination and verification of the movement and sale of a product or product range (Wilson, 2019, p. 102). Commonly applied to homes, retailers (including shelf impact testing), stores and wholesalers.
Behavioural observation	Behavioural observation includes the following observations (Cooper & Schindler,2006, pp. 245-259): *i.* Linguistic: human verbal behaviour during conversations, interactions and presentations *ii.* Non-verbal: recording of physical actions or movements of participants *iii.* Extralinguistic: recording of vocal, temporal interaction and verbal stylistic behaviours of human participants *iv.* Spatial: recording how humans physically relate to one another These combinations are commonly applied to media usage (TV and listening) analysis and mystery shopper/visitor studies.
Physiological reactions measurements	These measurements use a number of techniques to gauge consumers' responses and physiological reactions to a number of external stimuli. The mechanical devices used in this regard are (i) the eye tracking monitor (observing eye movements), (ii) pupilometer (observing and recording changes in the diameter of a subject's pupil), (iii) psychogalvanometer (measuring galvanic skin responses through involuntary changes in the electric resistance of the skin) and (iv) voice pitch analysis (recording of abnormal frequencies in the voice to reflect emotional reactions to various stimuli) (Babin & Zikmund, 2010:258-259).
Process and flow analysis	This is the observation by a time study of stages in a process, which is evaluated on both effectiveness and efficiency. These stages could include traffic flows, paperwork flows, sales transaction processes etc. (Cooper & Schindler, 2006, pp. 258-259).

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