Undertaking Business Leadership Research

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Any leadership team seeking to improve its performance should start by identifying their -

- 1. Shared driving core values.
- 2. Preferred leadership behaviours, and support capabilities, and
- 3. Overall, leadership shared purpose.

As a basis for developing their Personal Contingent Leadership Paradigm (PCLP) ¹, this endeavour requires identifying the research paradigm, philosophy, and methodology to research the PCLP- essential competitive actions.

Few leadership practitioners take time to understand the justification for their research approach. However, selecting an appropriate research paradigm, philosophy, and methodology is essential to identifying necessary competitive adaptative actions. ²

Research paradigm terminology has proliferated, and specific meanings will vary from one disciplinary or philosophical context to another. Further, the definition of terminology within any given disciplinary area or "community of thought" evolves.³

Two distinct classes of research paradigms have independently evolved and progressively adapted to the changing thinking. 4

¹ See Fayed, R. (2023) *Aspirational Leadership*. Sydney, Australian Graduate School of Leadership for a more detailed exposition of the PCLP concept and how it can be used in leadership development.

² A research paradigm is a way of thinking about reality (the research paradigm's ontology) and how knowledge may be gained given the adopted ontology (the research paradigm epistemology and axiology). The research philosophy is the philosophical underpinning of a research paradigm. The three important elements of any research paradigm are -

Ontology - The nature of reality: is there a real world which exists independently of any individual's perceptions of it, that we can experience and learn about (realism), or can we only take as real and knowable what we individually experience (relativism)? Extreme relativism holds that perception is reality?

Epistemology - How you can know what you seek to know. For example, "How can I best identify and understand my leadership approach

Axiology - What values guide your acquisition and use of knowledge derived from research? This question determines, for example, whether you commit to ensuring the privacy of information providers; how information provided will be used; and how the data collected will be stored and protected on behalf of respondents. Your axiology will also determine the values driving your ontological and epistemological positions. Methodology includes all the methods that are to be used in the research process. The answers to these questions will impact the research philosophy and methods deployed.

³ Babich, B. E., From Fleck's 'Denkstil' to Kuhn's Paradigm: Conceptual Schemes and Incommensurability, *International Studies in the Philosophy of Science*, (2003).

⁴ Adapted from Daymon, C and Holloway, I (2002) *Qualitative Research Methods in Public Relations and Marketing Communications*. Routledge: London; Lincoln, Y., Lyneham, S.A., and Guba, E.G. . (2011). Paradigms and perspectives in contention. In *The Sage Handbook of Qualitative Research*. Edited by Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks: Sage Publications, pp. 91–95.and others referred to separately. The

Up to about the mid-20th Century, research undertaken was deemed generalisable if the research was conducted by an objective external observer (external to the research context) attempting to test hypotheses deduced from actual or proposed theories. These research paradigms were labelled positivist research paradigms. All assumed a real world separate from any individual's perceptions of it (a realist ontology) and purported to yield value-free objective knowledge (a naïve realist epistemology).

For centuries, in the natural sciences and all emerging disciplines seeking research community legitimacy,⁵ this naïve realist positivist research approach ⁶ was accepted as the basis for discovering 'objective' generalisable deduced value-free truth. It supported Newtonian deterministic, mechanistic thinking characterised by linear cause-and-effect and stability. The approach dominated until the mid-20th Century.

The eighteenth-century British "empiricist" philosophers Locke, Berkeley, and Hume argued that direct sensory experience was the most reliable basis for knowledge but struggled to deal with arguments that always seemed to be able to raise doubts about accounts of reality inferred from direct sensory experience. This struggle continues today.

In the twentieth Century, philosopher Karl Popper⁷ argued, based on accepted understandings of deductive logic, that scientific research can never prove a theory or explanation true: it can only deal with theories that can be subjected to empirical testing and possibly disproven. That is, we can know what knowledge claims are false, but all other claims to knowledge are provisional. None can be asserted as certain or even probably true. However, if a theory survives multiple attempts at disconfirmation, it has what Popper called "verisimilitude".

With the advent of the 20th Century, relativity, quantum mechanics, and complex adaptive systems theory have progressively overwhelmed traditional deterministic thinking. The limitations of a purely objective, stable view of reality became apparent, forcing a fundamental rethink of deductive thinking⁸. The Newtonian deterministic mechanistic view of reality was challenged by inductive thinking that viewed reality as -

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word "paradigm" is used to refer to the philosophical assumptions or to the basic set of beliefs that guide the actions and define the worldview of the researcher (Lincoln et al. 2011)

⁵ Naïve positivism was justified when gaps in knowledge of interest can be studied separately and meaningfully reintegrated, and the knowledge system is in stable equilibrium. 'Administration' or as it was later called 'management science' as a subject was justified through quantification as the key to knowledge acceptance and was inherent in the approach to the MBA degree that was created in the 1950s and the popularity of management science in that period.

⁶ Imagine everyone in the world wearing a pair of invisible glasses. These special glasses show them the world around them. Naïve <u>realism</u> is the belief that the world you see through your own personal pair of glasses is the only true world. It is as if no one else's glasses show any different picture. If something seems real to you, it must be real in the same way to everyone else.

⁷ Popper, K.R. (1959) *The Logic of scientific discovery*, London, Hutchinson

⁸ Ackoff R. L., *Creating the Corporate Future*, Wiley, (981).

- Subjective. The approach is defined through normative, inductive reasoning that delivers relativistic, probable conclusions. It contrasts with a deductive realistic rationale, in which the findings are true if the premise(s) are valid until falsified.⁹
- 2. Probabilistic. In complexity science, outcomes are probabilistic, and cause/effect relationships can be circular. Relationship networks are interactive, and systems are often unstable.
- 3. Non-binary: Being true or false is no longer an exhaustive dichotomy; they are the extreme poles of a continuum.
- 4. Chaotic: Equilibrium and stability are replaced by the notion that systems thrive optimally at the edge of chaos, decay, or die when stability and equilibrium set in.

In this context, the positivist researcher's assumptions of complete separateness and the feasibility of securing objective, generalisable understandings by philosophers and social scientists were challenged,

Positivists now view reality as imperfectly and probabilistically apprehensible. This probabilistic approach is called constructive (or critical) realism. It utilises a mix of quantitative and qualitative methods. Scepticism is valued and drives the ongoing search for improved approaches. Reality can and should only be viewed through an espoused value set utilising dialectics. ¹⁰

This deductive approach is characterised by research questions, usually in the form of hypotheses, designed to discover the assumptions that can limit human understanding. The data to be collected can be categorised in advance. However, establishing categories in advance assumes prior knowledge; more importantly, research categorisation can reflect the researcher's perspective and is likely biased¹¹.

The evolving relativistic view of reality caused qualitative research methodology to grow beyond being solely positioned as preliminary to quantitative research. It was recognised as a separate legitimate research approach to deal with data-rich, non-deterministic, complex dynamic situations.¹²

Influential qualitative researchers went so far as to conclude that our knowledge and theories:

"... are all inventions of the human mind and hence subject to human error. No construction is or can be incontrovertibly right; advocates of any particular

⁹ Failure to falsify a negative hypothesis justifies increased trust in the hypothesis and the theory it was derived from.

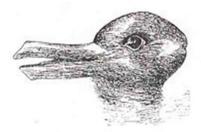
¹⁰ 'Dialectics' is a term used to describe a method of philosophical argument that involves an idea exchange process between opposing views. Critical theorists essentially rely on dialectics to choose between theories.

¹¹ However, much scientific progress has been achieved by creative dialogue between and synthesis of different theoretical perspectives, as well-demonstrated by case studies from atomic physics, climate modelling and child development in Massimi, M., (2022) *Perspectival Realism* Oxford University Press.

¹² It is interesting to note that this qualitative research methodology evolved from an attempted positivist approach to a relativist pragmatic view of reality.

construction must rely on persuasiveness and utility rather than proof in arguing their position". ¹³

Figure 1. Duck or rabbit? It's a matter of perspective.



Kuhn used the duck/rabbit optical illusion (see Figure 1) to demonstrate how a paradigm shift could cause one to see the same information differently due to the perspective applied. The hare/duck image used by Kuhn highlights the importance of the observer's perspective. Which animal "appears" to be depicted depends on what the viewer focuses on. The image can be perceived as two different realities despite being the same. However, recognising that, as observers, we are part of what is observed does not imply that we cannot know with an acceptable level of confidence that what we are experiencing is there.

Further, an experiment by Chabris and Simons, described in a New York Times article as "one of the most famous psychological demos ever," revealed that people who focus on one thing can easily overlook something else. A video was created where students pass a basketball between themselves. Many (but not all) viewers asked to count the number of times the players with the white shirts pass the ball fail to notice a person in a" gorilla suit" who appears in the centre of the image. At first sight, this experiment appears to support Guba and Lincoln's conclusion and the broader philosophical position that all claims to knowledge (indeed all knowledge) are relative to the perspective of those advancing the knowledge claim.

On closer analysis, the experiment demonstrates the limits of extreme relativism. Some viewers did notice and report the gorilla-suited intruder. When asked to view the video without counting passes of the basketball between players in white shirts, almost everyone notices the gorilla-suited intruder. Thus, the accounts of what is shown in the video are subject to error but are not "inventions of the human mind". It is quite possible to gather evidence to show that some observers can mistakenly believe there was no intruder in a gorilla suit, test explanations for this, and show conditions under which the error does not occur. This experiment reinforces three key points:

- A real world exists and can be known whether it is perceived or not.
- We can be wrong about that reality in ways that can be explained (here by drawing on valid theories about human cognitive processing capacity).
- Perspective limits and biases what each individual is aware of; however, drawing on multiple perspectives improves what can be inferred.

¹³ Guba, E. G., & Lincoln, Y. S., Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage. P 108 (1994)

¹⁴ Also see: https://www.google.com/search?q=paradigm+shift+examples&rlz=1C1CHBF_en

The philosopher A.C. Grayling. set out the essence of an argument that, in part, justifies a more complex view of reality –

"One cannot know or believe just one thing. A commonplace belief about some object or state of affairs in the world is a component of a network of beliefs between complex relations of support and dependency." ¹⁵

Incorporating points from Grayling and others, the following is concluded-

- We are a part of reality and cannot stand aside from it as a solely "objective"
 external observer. While some of us experience living in a desert, others experience
 living in a rainforest, which is so different that they feel like different worlds.
 However, they are parts of the same world. Constructivists argue that the real world
 exists, which we construct from the observer's perspective and, according to
 Grayling, progressively augments through induced networks of related meaning.
- When dealing with social situations and human behaviour, different participants can and often will have different experiences and perspectives, arriving at possibly contradictory accounts of the social reality in which they participate¹⁶. However, by incorporating multiple observer perspectives, a broader agreement regarding reality can be reached, which assists us in "finding solution action" and justifies transferring insights from the original context to other sufficiently similar contexts¹⁷. In a turbulent, rapidly evolving social and business world, we can only propose and act confidently within relatively short-term planned cycles.

We, therefore, conclude that:

A pragmatic constructivist paradigm¹⁸ and philosophy supported by an action research methodology should be adopted in business research. Its ontology seeks understanding by integrating multiple perspectives, and its epistemology aims to secure, at least in the short term, effective leadership team joint resolution action through mixed-method research.

Confirmation of the proposed research approach can be gained from two factual observations: Researchers have steadily increased the utilisation of mixed-method research, which has become essential in sociological research and have adopted multiple perspectives and triangulations to improve the robustness of their research.

¹⁵ Grayling A.C. (2008) *Scepticism and the possibility of knowledge* Bloomsbury, London, pps 184-203

¹⁶ As pointed out by Massimi (2022), differences in theoretical perspectives exist in physical and and biologocial sciences as well as in psychology and sociology, and integrating different perspectives can be the basis for major progress in our understanding of reality.

¹⁷ Transferability and dependability are two of the four criteria for assessing the quality of qualitative research by Lincoln, Y.S, and Guba, E. G., (1985) *Naturalistic inquiry*. Newbury Park, CA: Sage, and in relation to case study research by: Fuchs, O., and Robinson, C. (2023) Operationalising critical realism for case study research *Qualitative Research Journal*, *24*(3): 245-266.

¹⁸ Dewey was an essential contributor to this type of research Hargraves, V. (2021). *Dewey's educational philosophy*