

The Phenomena to Theory Roadmap: Illustrated through a Phenomenological Case Study

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Abstract: *Phenomena Driven Research (PDR) is valuable to the researcher because its focus is the discovery of reality rather than the explanation of existing theory. The author suggests that the future of management theory is not the application of theory, but the development of theory from observations in the real. Empirical patterns within themes that emerge from grounded interpretations generated by PDR can be transformed into theory that can be applied purposively. To illustrate, this phenomenological case study explores the application of PDR through a discussion about an organizational transformation. This transformation is referenced to show how phenomena can be captured, coded, relationally mapped, and then turned into propositions for application.*

Keywords: *phenomena driven research; theory roadmap; organizational change; change execution; systemic complexity*

I. Introduction

Phenomenological research, founded by German philosopher Edmund Husserl (1859-1938), uses the analysis of substantial statements made by data sources, or interviewees, to make sense of lived experiences (Richards & Morse, 2013). This research method is an engaging mode of inquiry that, according to van Manen (1990), documents an individual's perceptions of presence in the world at the moment when things, truths, or values are constituted. It also includes reflections on concepts of time, space, body, relations, and how people intend to respond. It follows then, that people are connected to their world and phenomenological study aims to create understanding around their experiences about things, people, events, and situations (Richards & Morse, 2013). Husserlian phenomenology suggests that perceptions present us with evidence of these connections by focusing on sense-making around lived experiences (Richards & Morse, 2013). Schwarz and Stensaker (2014) have discussed the 'theoretical straightjacket' of change. New models of theories of change have been constrained by existing theory. This theory could be the problem in change research. While adding to existing theory is a figurative constraint, narrowing the understanding of change theory restricts the development of knowledge about change. PDR releases the 'straightjacket' by letting phenomena drive the theory that emerges from the study of phenomena.

Consequently, the study used in this paper is approached as a type of phenomenological case study based on: (a) the researcher's belief that an understanding of a phenomenon is best achieved through lived experience; (b) the researcher's desire to explore sense-making at a deeper level than has been presented to date; and (c) the understanding that lived experience is irreducible as it cannot be deduced or derived from the third-person perspective (Lutz & Thompson, 2003; Thompson, 2007; Varela & Shear, 1999a; Varela, Thompson, & Roach, 1993). The author determined that descriptions of embodied experiences could be subject to epistemological interpretation that correlates *experiencing* with the *experienced*. In fact, phenomenological

investigations can take descriptive claims based in *tactilesensings*, and turn them into naturalistic presuppositions (Lincoln & Guba, 1985) that may be more generally applied to the experiences of lived space.

II. The Phenomenological Case Study

A phenomenological case study approach, following Lincoln and Guba's (1985) naturalistic inquiry, is used within an organizational setting to bind the study by time and location, and to move forward a "naturalistic basis for generalization" (p. 120). Yin (1981, 1994) suggests that case studies are used for exploratory purposes when *how* or *why* questions are posed, when the researcher does not have complete control over events, and when the focus of research is on a "contemporary phenomenon within some real-life context" (Yin, 1994, p. 1). Forward looking theory development as well as evolutionary theory in a complex adaptive system is challenging beyond the discovery of real-time systematic interrelatedness, (Ahlqvist & Rhisiart, 2015; Kruger, 2011; Samet, 2012). To help with this challenge, Merriam (2001) posits that a case study approach can be selected as a means to reveal knowledge about a phenomenon that may be missed by standard statistical approaches, that may occur infrequently, or that is non-obvious or counterintuitive, and that may reoccur or occur in the future. With this in mind, traditional theory may not be appropriately applied to or be competent in explaining future topics without incurring risk. In fact, future topics may or may not be considered in traditional theory, and so, theory must be modified, evolve, or be made new. PDR, as described in the following study, is capable of managing this risk as it uses phenomena to reveal inconsistencies and expose otherwise hidden knowledge while avoiding the complexity of mixing parts of multiple theories in an attempt to explain what has been observed.

To optimize the scope and the results, this study was framed by a single organizational event (bracketing) that simultaneously exposed participants in the case study. Enacting PDR in this way is of interest because it can be reliably executed and widely used to create knowledge around organizational change. As a result, the theory, which the derived propositions inform and support, can be used as a basis for continuous learning about how to successfully execute organization-wide change activities. The resultant empirically derived theory may then be subject to further debate, advanced knowledge creation, theory validation, and theory expansion. And, by bracketing reality, the true meaning of the phenomenon under study can be pursued with focused energy.

In support of this construct, Miles and Huberman (1994) also describe a case study as a phenomenon that occurs in a bounded context. As such, the case study referenced in this paper is situated in the context of a real-world practice, occurring in the moment, in an organizational setting (Bamberger, 2008). When exploring complex phenomena, such as this, where immature theoretical insights exist, case studies are an established research approach (Brown & Eisenhardt, 1997; Ghoshal & Bartlett, 1994; Lovas & Ghoshal, 2000). The researcher is challenged to recognize the complexity and context of this case study while exploring the phenomena holistically (Eisenhardt, 1989; Punch, 1998; Siggelkow, 2007; Yin, 1981, 1994). To help with this, the methodology used accounts for the holistic role of the researcher as both participant and observer within the study (Miles & Huberman, 1994; Moustakas, 1994, Petitmengin, 2006).

While quantitative studies expand and generalize theories through analytical and statistical generalization (Yin, 1994), the phenomenological case study approach, as a method, is more inductive and explorative in character. Following Maturana (1978), Strasser (1969), and Varela et al. (1993), the study employs a constitutive ontology, wherein constitution is the process of providing an *ever clearer meaning* (Strasser, 1969). To explain further, Maturana's (1978; Maturana & Varela, 1987) constitutive biological perspective holds that living systems cannot refer to an external, independent reality. This unique perspective reflects an epistemology in which individuals pull in reality. They do not construct it, nor does it exist independently of them. Thus, it is possible to extrapolate from Maturana's (1975, 1978, Maturana & Varela, 1987) constitutive perspective that sense-making occurs in individuals moment-to-moment, either as a change triggered by interactions or *perturbations* coming from the environment and/or through an individual's own internal processes. This individual level of analysis is consistent with the epistemological and ontological perspectives of this case study.

Phenomenology can be broadly thought of as “providing a disciplined characterization of the phenomenal invariants of lived experience in all of its multifarious forms” (Lutz & Thompson, 2003, p. 32). Phenomenal invariants are categorical features of experience that are describable across and within a lived experience (Lutz & Thompson, 2003). Disciplined characterization is a phenomenological mapping of experience that uses first-person methods for increasing an individual’s sensitivity to his or her own lived experience (Depraz, Varela, & Vermersch, 2003; Lutz & Thompson, 2003; Varela & Sheer, 1999a, 1999b). Moustakas (1994) characterizes phenomenology as the first method of knowledge because it begins with *things themselves*. In the case presented in this paper, a precipitating event highlighted or punctuated the experience of the participants and, thus, created conditions for sense-making to emerge while serving as the basis of the phenomenological interview phase of the study from which data, related to the participant’s experience, was obtained.

Moustakas (1994) refers to these data, or observations, as *essence descriptions*. They are helpful in sense-making, as they are the lived experiences described by participants (Giorgi, 2009; Moustakas, 1994), or stakeholders in this case. They are grounded in reality, as they are reflections on actual field data (Creswell, 2014). This study was consistent with the phenomenological perspective of Allard-Poesi (2005) and Petitmengin (2006), which is as follows: (a) the study of sense-making is an active and subjective process in itself, (b) participative action research is a means to fully engage in sense-making with others (vs. on or against others), (c) in order to study cognition it is essential to take into account its subjective dimension as it is lived from the inside (Varela et al., 1993), and (d) an interview method is necessary that enables an individual to become aware of his or her subjective experience and describe it with great precision. The interpretive nature of sense-making is such that it places the researcher in the role of *making sense of* the associated phenomena (Allard-Poesi, 2005; Weick, 1995). Phenomenological driven research, as opposed to theory driven research, is a first-person-oriented research method (Moustakas, 1994) that is the most likely methodological lens through which to study the role of individual awareness in sense-making. Phenomenology is the reflective study of the essence of consciousness as experienced from a first-person point of view (Moustakas, 1994).

III. Complexity of Phenomenon

An effort to explain reality must take into consideration the fundamental complexity of natural phenomena (Guba & Lincoln, 1994). A phenomenological case study is a means to understanding the experiential reaction and sense-making of participants as they transform their own role and behavior to adapt to a new environment and paradigm of leadership in order to achieve desirable outcomes. It follows then, that PDR can reveal thought-provoking and new perspectives that may inspire creative theorizing in the future about the existence of socially complex phenomena that cannot be sufficiently influenced (Barney, 2007). It is impossible to anticipate every potential action or reaction. This lack of predictability occurs when phenomena that appear to be unrelated actually follow an unknown or hidden related pattern referred to as *attractors*. Chaotic systems have two characteristics; they have a sensitive dependency on initial conditions and they have unpredictability in the long run even when there is some predictive accuracy in the short run (Crandall et al., 2010). Due to sensitivity to even small shifts in an interconnected organization, a slight change in the initial conditions can lead to a substantially different, and potentially unwanted, outcome in the larger system. Outcomes could include bifurcations or oscillations between two possible values in alternating time periods (Gleick, 1987). Market undulations may be partially explained by seasonality but layered bifurcations, such as seasonality and product life-cycles, can cloud the correlation between variables resulting in outcomes that are complex. These outcomes may appear to be random even though undulating attractors exist and are known. Chaos theory, therefore, offers some insight into these systems (Smith, 2002). For example, transformational changes may depend on the ability of an organizational system to predict needed change, the ability to self-organize, and the ability to morph into a new form without intervention from external forces (Loye & Eisler, 1987). Because systems experience events in flux and change (Kiel, 1995), bifurcations may require that the system change suddenly causing it to behave unpredictably while attempting to reach a new equilibrium (Edgar & Nisbet,

1996). This dynamic supports enacting PDR to understand the factors involved in organizational change in an ever changing environment.

In summary, a lived experience offers deeper insight into the underlying causes and ingredients of an event or series of events and is best captured using qualitatively rich descriptions by individuals in the trenches. Similarly an experienced researcher may effectively mine these descriptions since their familiarity with the topic can enhance the extraction of relevant data from the qualitative narrative provided by interviewees. This experience may also help with the interpretation as the researcher understands the inter-connectedness of the variables in play. To control the potential for chaos, constraints should be optimally deployed to create focus around the objective. Organizational systems are fundamentally complex and so are conducive to PDR for sense-making and theory creation.

IV. Phenomena to Theory Roadmap

The *PDR to Theory Roadmap* creates observed organizational phenomena from a case study into theory through the use of a roadmap as illustrated in Figure 2. This process is structured, goal-oriented, purposeful, and systematic. In this section the author show how observed phenomena from a case study in particular, can be utilized to accomplish the road mapping process. The complexity and dynamic nature of investigated phenomenon, however, requires an iterative and agile process, rather than a rigid one. As such, the research questions, methods, and field study protocols coevolved. This approach is described by Pettigrew (1990) as *planned opportunism* and is prevalent in qualitative studies that cover complex phenomena. Following Eisenhardt's (1989, Eisenhardt & Graebner, 2007) suggestions, research can be accomplished through a process for building theory from a case study. With this in mind, a researcher can iteratively cycle between data collection and analysis with the goal of using PDR to create usable theory (Strauss & Corbin, 1996).

The process that links PDR to a theory roadmap includes the following steps: (1) phenomena description, (2) sense-making of the phenomena, (3) coding of the raw data, (4) theme extraction, (5) relational themes, (6) relational map staging, (7) proposition extraction, (8) theory for broader application, (9) qualitative validation, and (10) theory renewal or expansion. The interpretive nature of this phenomenon driven process is such that it places the researcher in the role of making sense of the way the world is experienced (Allard-Poesi, 2005; Van Manen, 1990; Weick, 1995). Phenomenology is therefore differentiated and unique as a first-person-oriented research method (Moustakas, 1994) and is the most likely methodological lens through which to study the role of individual awareness in sense-making. This allows essential features to be extracted from real-life "to obtain a picture of the experience" (Creswell, 1998, p. 52). The author posits that this roadmap is capable of capturing the essence of phenomena, interpreting it, and then using extracted propositions for further theoretical application.

The initial step in the PDR to theory roadmap process begins with an interview quote. This is essentially sense-making around organizational phenomena that will ultimately allow the researcher to extract propositions as emerging theory. While theory traditionally comes first through a frequently used hypothetical lens, the roadmap described shows how PDR can be used as an unbiased open ended basis for discovery to understand and explain phenomena. Since an unconstrained discovery process allows for more accurate descriptions of experience, this process can be successfully executed repeatedly. In short, this roadmap creates kinesthetic consciousness around PDR.

V. The Steps Described

The first step includes *describing the phenomena*. As stakeholders make sense of change they are better able to describe what has happened to them and their environment. The objective of this first step is to establish the scope of the field of study and then provide an initial explanation for the phenomena. A topic that is too broad and unstructured may need to be segmented or prioritized to create momentum and focus. The value of the study should have already been established and made known to participants and stakeholders lending credence to the activity. With the scope and value established, the researcher can harvest qualitative data from

participants' experiences through an interview protocol. The researcher may also leverage preexisting data to help drive the organizational transformation. What was experienced can be captured in the form of rich descriptions. It should be expected that these descriptions of phenomena may differ from person to person. The degree to which a participant is affected physically, financially, mentally, or emotionally by a precipitative event could also relate to how much stakeholders are involved in the outcome. So that the stakeholder population is adequately represented, a suitable sample should be taken to create a well-rounded description of the phenomena. The researcher may deepen their understanding of the subject by referencing academic literature. By exploring the experience of others prior to formal data collection the researcher will be able to focus the investigation. This may be accomplished by screening related topics where research has already been accomplished.

The second step is *sense-making of the phenomena*. A researcher must gain insight into the descriptions of stakeholder experiences by capturing idiomatic phrases and experiential descriptions. In this case study, data collection was facilitated by an interview protocol with specific questions oriented in a sequenced schema. Participants were solicited as volunteers from a pool of leaders based on a willingness to share information about the transformation of a company division. Each volunteer co-researcher participated in the changes personally. Following each question, the participants' response was determined to be linked to the question asked and was determined to be meaningful prior to continuing. In some instances, an answer could trigger a clarifying question, or a question formed to solicit a more fulsome answer. The additional information modified the answer and once again was determined to be complete or not. A sample rich description is included below.

This process perpetuates the fractured feel that our company currently has. And this process breaks – often. Our clients receive multiple invoices against one PO – or worse, they are invoiced multiple times for the same work, necessitating credit memos. Not the 'One' message that we would like to send.

In a phenomenological case study scenario, expressions believed to be irrelevant need to be removed. This is recommended by the author to focus the data; however, researchers must not allow bias to influence the inclusion or exclusion of data. As mentioned, when a researcher is embedded in the research and understands the situation there is an opportunity to exclude superfluous data because the scope can be well defined and the environment understood.

The third step is *coding of the raw data*. Data coding methods are well documented. The purpose of coding within captured rich descriptions of experience is that themes will emerge. The raw data from step two was added then to the data sheet and coded. Sub-code themes were also determined and grouped by code and sub-code. The data was surveyed by the researcher, who, due to personal experience, was able to apply an *analysis of good* (ANOG). While this aspect of the study inserts limitations, it is also strength. Slight modifications were made as needed to reduce the noise in the data and ensure completeness and clarity. This was accomplished by consolidating like data points, enhancing descriptions to create context, and simplifying others by stripping out noise and redundancy in the answers.

The fourth step is *theme extraction*. The data was then re-sorted and generalized by categorizing it into pre-established data domains related to the scope of the study. Data domains were categorized into the macro-domain *sendogenous* and *exogenous*. The endogenous and exogenous domains were broken into relevant sub-domains to establish scope and maintain focus. A pivot-table was used to extract themes in the wording. Groups of expressions that seem to be related to a core of common elements should be clustered and labeled. This theme-based data was then posted in a table. In some cases most of the themes were unique in which case a table was not used due to the inability to cluster.

The fifth step is to *establish relational themes*. From the data, dependencies and relationships were determined and organized into a theme relationship map. In cases where the data collected appeared to be confusing relationally, the researcher followed up with the participant and then added the newly acquired

information to the raw data previously collected. The relational mapping was structured around cause and effect connections along with increasing levels of specificity in the same way as a tree diagram or a fishbone diagram would be constructed.

The sixth step is *staging the relational map*. The data clusters were sequenced into logical stages in the relational maps to create depth as illustrated in Figure 1 below. The coded data points typically ended up on the right side of the map, however, this was not always the case. For example *improvement*, a theme cluster that belonged to *performance* as a category, started with a high level of specificity on the right. In the case of *customer satisfaction* there was some clustering to the right as well as some increased specificity to the right of the coded data themes. In the example below, *rigor*, an aspect of *planning* is further described to the right.

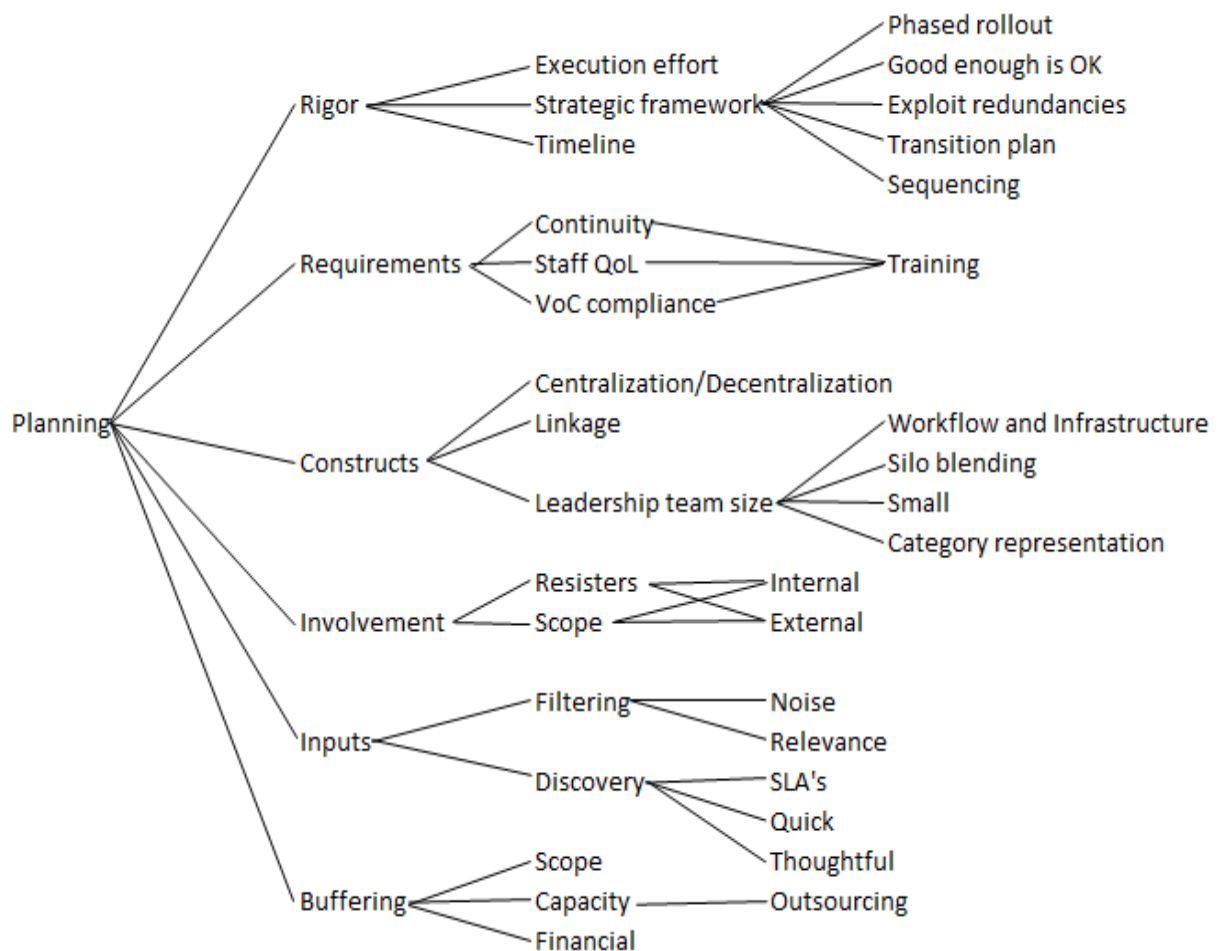


Figure 1. Relational mapping.

The seventh step is *extracting propositions*. The researchers were able to draw conclusions from the relational mapping. This may have included statements about cause and effect relationships or general statements as reflected by the relational logic in the mapping. Conclusions, or theoretical perspectives that emerged from the data, were documented within the context of the research questions. An example is listed below.

Proposition (*deployment rate*): The rate at which system enhancements, called out by stakeholders, are developed and deployed broadly relates to the growth rate of an enterprise in a moderately dynamic marketplace.

The eighth step is *using the emergent propositions to create theory for further use*. Each proposition included a two word summary as seen within the parenthesis. This further categorization enabled the propositions to be exploited for theory creation. These two word summaries allowed the researcher to more easily exploit the propositions that were created in this research. Linkage between the propositions could be established by associating the key words in the two word summaries. For example, the Proposition above could be linked to other propositions that related to *deployment* and *rate*. By clustering propositions that related to deployment, themes could be extracted to build theory around related concepts. In the event that these themes were not interconnected or did not make sense, they were considered irrelevant for theory building.

The ninth step is *qualitative validation of created theory*. As this was a qualitative phenomenological study the research enables further consideration around the topic by suggesting that researchers challenge the theory created through further study. The resultant quantitative studies can be used to determine the generalizability of theory established in the eighth step.

The tenth step is *theory renewal or expansion*. The result of step nine is that further study will create additional perspectives on the theory created by this use of PDR. Further study will not only expand theories created but also refine them and suggest further application for them. The author generally intend that further research is done on their work by creating interest for further refinement and application of the theories that they posit.

In summary, this section has described a roadmap that allows a researcher to establish sense making around phenomena that result in theory creation. This theory may then be further studied to establish generalizability and applicability. A real life experience case study approach results in an opportunity to share the results of sense-making research.

VI. The Phenomena

The researcher chose a phenomenological case study research approach as a method of investigation as described in the previous section. This selection was partially driven by the lack of information available on the topic being studied. The author used an organizational transformation at Signal Corp (a fictitious name of a mid-sized company with a global supply chain) as the case from which qualitative data was drawn to illustrate the process proposed by this paper. Signal Corp's aggressive budget was unrealized in the previous year due to a number of factors, resulting in impending job layoffs and company downsizing. Even though the division had been a large contributor to profits in the multi-national conglomerate over a sustained period of time, there needed to be a reversal in the trend of declining profits to encourage those who had invested in the company. This loss, along with other shortfalls in other divisions, altered the corporate mindset to focus on profitability driven transformation. The building tension, combined with an entrepreneurial culture, challenged the organization to recalibrate. The organization was compelled to deal with emerging market trends by minimizing inertia and optimizing agility.

Some of the financial performance issues promoted desperation in the business units. Employees were unsure of the future of a company that had been stable for decades. To experience profits, business units resorted to disruptive tactics including client stealing through internal bidding. In short, internal competition became unhealthy. The directional change occurred following a study of the situation and the formulation of a strategic plan to move forward. An opportunity for a more effective organizational construct was realized to improve profitability. The transformation occurred through a precipitated event that triggered significant changes in the organization, its design, and how it functioned. Signal Corp's leader deployed the new organizational design to enable the multi-national enterprise to exploit growth opportunities in a dynamic market. This entrepreneurial enterprise was challenged by growth stagnation, price erosion, changing client needs, a technology vacuum, emerging product types, and the ending of existing product life-cycles. Furthermore, clients imposed production oriented market share limitations that were difficult to overcome in an environment of survival-oriented competition. Transformational change lends itself to phenomena driven

research, as the phenomena was the precipitative event that led to the organization-wide change. It is this phenomenon from which data was collected that included the sense-making of participants, who were also stakeholders.

VII. Methods

While qualitative research has its own set of assumptions, so a set of assumptions guides how phenomenological research should be conducted. Moustakas (1994) offers specific guidelines for phenomenological research as applied to this case study:

1. Phenomenology focuses on the appearance of things, a return to things just as they are given, removed from everyday routines and biases, from what we are told is true in nature;
2. Phenomenology is concerned with wholeness, with examining entities from many sides, angles, and perspectives until a unified vision of the essences of a phenomenon or experience is achieved;
3. Phenomenology seeks meanings from appearances and arrives at essences through intuition and reflection on conscious acts of experience, leading to ideas, concepts, judgments, and understanding;
4. Phenomenology is committed to descriptions of experience, not explanations or analysis. Descriptions that retain, as close as possible, the original texture of things, their phenomenal qualities and material properties;
5. Phenomenology is rooted in questions that give a direction and focus to meaning, and in themes that sustain an inquiry, awaken further interest and concern, and account for our passionate involvement with whatever is being experienced;
6. Subject and object are integrated. What I see is interwoven with how I see it, with whom I see it, and with who I am;
7. Inter subjective reality is part of the phenomenological process;
8. The data of experience, my own thinking, intuiting, reflecting, and judging are regarded as primary evidence of scientific investigation;
9. The research question must be carefully constructed in order that the primary words appear immediately, capture my attention, and guide and direct me in the phenomenological process of seeing, reflecting, and knowing. (pp. 58-59)

A phenomenological approach was well suited to this study, as the research design engaged the interpretation that emerged from twenty participants' observations of their experiences of awareness within their own sense-making process. Specifically, interviewees were asked for information such as what they experienced in the transition, what their actions would need to be going forward, how they see their role in the organization, what the strategic actions should be going forward, how they interpret the financial results, and how they can reflect a more unified company image to clients in a structured interview protocol. Their reflections on items like these facilitated the collection of data that traversed the PDR Roadmap and became propositions about organizational transformational change within this case. While there are limitations to this study, the roadmap described was effective in creating theory that can be used for subsequent enquiry.

VIII. Findings

All research is driven by certain methodological assumptions that have their origins in the philosophical underpinnings of a research approach. In the case of qualitative research, these basic assumptions are related to the nature of reality; the relationship of the researcher to what is being researched, the role of

values in the study, and the process of research (Creswell, 1998, 2014). According to Strasser (1969), Lincoln and Guba (1985), and Creswell (1998, 2014), the assumptions that guide qualitative research are that (a) reality is subjective and multiple; (a) systematic procedures recognize both co-construction of reality and the researcher as the instrument of data collection; (c) the inquiry is oriented to inductive and generative analysis; and, most importantly, (d) evaluative procedures are used to judge the value of the research. While many researchers of methodology contrast the naturalistic assumptions (qualitative) with conventional or positive assumptions (quantitative), Creswell (2014) did not believe this was necessary, as “qualitative research is legitimate in its own right and does not need to be compared to achieve respectability” (pp. 75-76).

For the purpose of this qualitative study, the phenomenon, or object of the analysis, was the precipitating event that led to a transitional period. Ultimately, the outcome of the study is to understand, through the use of PDR, the sense-making process of stakeholders that helps an organization achieve both a new equilibrium and sustained desired outcomes, sometimes referred to as sustained corporate advantage.

The objective of Signal Corp’s strategy was to achieve budgeted performance in terms of cash flow, returns on capital, and profitable growth. Unofficially, it was to outperform competitors with regard to reliability, on-time client servicing, and problem-solving capability. Following the organizational change, location managers attempted to position their businesses in markets where there was sustainable growth, low volatility, profit potential, and high earnings potential; however, these markets are by nature dynamic and the clients are fickle. Further opportunities were obtained through global operational excellence, market leading technology, innovation leadership, and workflow management that was transparent to the client.

Much of the profitability optimization literature focuses on diversification and operative synergies, like cost optimization, rather than creating an understanding of change phenomenon (Li & Greenwood, 2004). This perspective overlooks the profitability enhancements that can be experienced through the creation and unique combination of capabilities and strategy. By examining profitability opportunity at Signal Corp through a phenomenological single case study, the researcher was able to explore, discover, and capture findings that had previously been ignored. Because of the somewhat unique situation, the data supporting these findings has a number of strengths including that the participants were stakeholders, that the participants were knowledgeable, that the timing of the study allowed for a holistic and reflective view, that the situation was real, that the observations were based in reality, that the researcher was a participant and stakeholder, that the researcher was knowledgeable in the subject matter, that the data was triangulated, that an iterative approach was used to establish data clarity and fulsomeness, that the participants were willing to participate and contribute, and that the participants were able to speak freely to inform the data collected. The key findings were centered on endogenous and exogenous factors as well as opportunities for wider influence within the company as a whole. The researcher’s findings, in concert with the requested research on this topic, are fourfold:

1. A researcher can use relational mapping in phenomena driven research. In this case author have included a relational map in Figure 1 that was subject to theme pairing and multiple levels of description.
2. A researcher can extract propositions from relational themes. A proposition example was listed out of the propositions that were generated in this case study.
3. A researcher can extract theory from proposition themes. Propositions can become theory to be applied in other situations that are similar, or they may be slightly modified as applicable to a situation. Furthermore, another iterative step can be executed whereby propositions are considered to be the rich descriptions at the beginning of the roadmap. In this case the significant number of propositions could result in theme extractions resulting in macro-theory building. For example, and for ease of analysis, *two word summaries* of themes can be used to extract clusters and patterns with the population of propositions.
4. A roadmap for theory building that begins with rich descriptions of phenomena is an example of how PDR can be executed and applied.

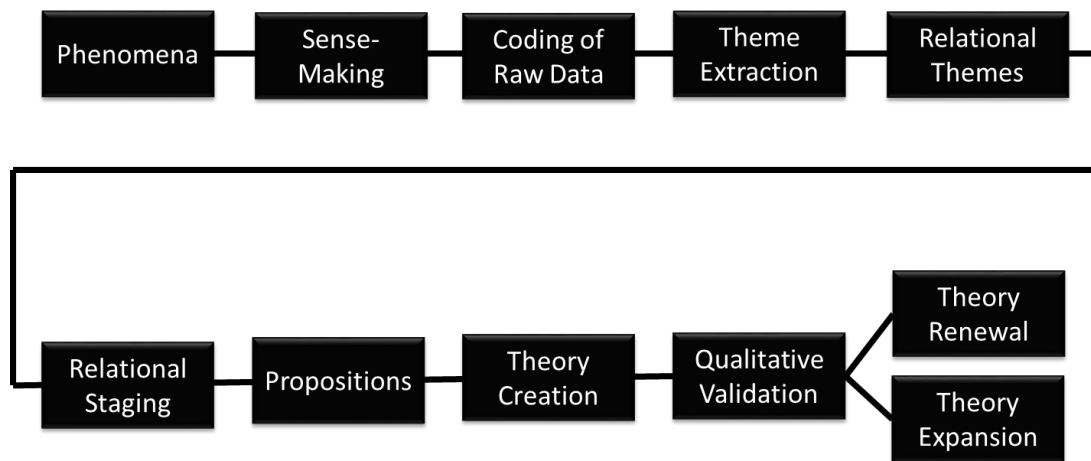


Figure2. Phenomena to Theory Roadmap

Conclusion and Implications

This study was undertaken to explore and examine the capability of PDR to create usable theory. A case study was used to examine data that emerged from the phenomena as a result of sense-making from participants. The author has determined that the *PDR to Theory Roadmap* is at least partially generalizable, and so can be applied. This study encourages theorists to view PDR as a tool to increase understanding in natural environments. Understanding based on PDR may also help to influence the achievement of desired outcomes. Natural elements are conjoined, active, evolving, and subjective processes that are structured and organically adapting with success in a dynamic environment. It is clear that a more agile, yet meaningful, approach is needed for theory creation. From a research perspective, this study demonstrates the value of changing the way theory is used in research. It shows how theory creation results from the application of PDR. Ultimately researcher intendeds to bring new insight into the area of phenomena driven research.

The use of PDR to create theory can be accomplished using this roadmap. Furthermore, this process can be applied to organizational change without being constrained by existing theory. It can also be used to create theory from experienced phenomenon. This paper is essentially a theory on the use of PDR that informs a practitioner who can use PDR situation leveraging the nuances that exist in every situation.

Aside from exploiting experiential sense-making of phenomena, this roadmap allows for data to be related to each other in theme clusters. It exploits these clusters through the creation of propositions that emerge from the clustered data. It allows for these propositions to be summarized succinctly and then relationally exploited for theory creation. These theories, restricted by the scope of the case, can then be exploited by researchers to broaden or refine these theoretical contributions, in this case centered on organizational change. We hope that the concepts illustrated in this paper inspire ongoing research in the field of PDR. There is a need to reach a better understanding of the relationship between this research method and repeatable success in explaining human reaction to naturally occurring events in an organizational change context. The researcher opens up the possibility for integrating this study with existing literature and future research including the possibility for quantitative and qualitative study. The hope is that these topics will provide suggestions for other scholars in the field to develop theory for the purpose of deepening our understanding.

IX. Limitations of the Study

Although this paper develops a novel perspective on an organizational transformation that was meaningfully connected and focused on PDR as an effective research method in a natural environment, there are limitations that should be noted. While reality is somewhat complex and dependent on a number of factors at

any given time, we think that this research approach is promising and shows significant analytical potential; however, it may not be significantly or consistently generalizable. The roadmap may need to be agile to optimize the research activity; however, the components involved may be generalizable. The scope of this case study is limited by the scope and needs further research regarding application in a variety of organizational and environmental circumstances. Even so, considering organizational history and impactful environmental trends, the research method described includes consideration for the number of variables in play. Consideration for these variables and the associated complexity of a naturally occurring situation informs a complex picture that can be described by PDR. To be clear, any time bracketed study is subjectively interpreted based on an incomplete set of variables.

Furthermore, and typically, an incomplete data set is available, and so the author believes that this model provides a meaningful framework for an agile and robust method for research in a dynamic environment. Like any conceptual paper, the primary limitation is a lack of empirical validation for the proposed models. As such, leaders should be cautious when implementing the conceptual models presented in this study. While this paper presents normative recommendations to leaders, much work remains to be done in this domain. The author hopes that this study informs and motivates further work on this important topic.

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