

# The Strategy Formulation Process: describing a 'lived experience'

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# Abstract

In what seems to be an ever competitive and fast paced environment, many organisations attempt to plan their future in the hope that they will either retain or gain a foothold in their respective markets. In practice, one method many organisations use to achieve this is the creation of a strategy. The term strategy itself is vague, leading to misunderstandings about what it is and how to do it. As a consequence, a strategists may lack the tools and skills necessary to create a strategy that is fit for purpose.

The focus of this research is to build a better understanding of the practice of strategy formulation. It achieves this through qualitative means. Through an engage approach, I follow the Chief Strategy Officer as he creates and develops a strategic plan that outlines a future for innovation activity of the organisation that he works for. This research reflects on the strategy formulation process as a lived experience and as a consequence humanises it. It reflects on the process of sense and re-sense making throughout the process of formulation and thus sheds light on the decision making in flight that which impacted the process.

A central finding of this thesis, connects the challenges experienced by the CSO as he makes choices and decisions that corresponded to the needs of a wide range of stakeholders. It shows how the diversity of these needs impacted the CSO's ability to make meaningful choices and as a consequence of this he created a strategy that was not valuable in the eyes of the Director and as such not implemented.

# Acknowledgements

I wanted to engage with an organisation and develop a research focus with them, to see where it takes us. I wanted to produce something that had real and positive impact for me, the organisation and academia. This was my agenda when beginning this CASE Award. What resulted was an interesting journey of discovery that resulted in the production of three strands of impact of real change and understanding. Together with the assistance of many key individuals and groups this was achieved and without them it would not have.

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## List of Abbreviations

CSO	Chief Strategy Officer
BULBz	Pseudonym given to research company
AMP	Asset Management Plan
LRP	Long Range Planning
RBV	Resource Based View
SAP	Strategy as Practice
CIS	Community Innovation Survey
OHL	Over Head Line
UTC	Underground Track and Cabling
OFWAT	Water Services Regulation Authority,
TSB	Technology Strategy Board
OpCo	Operating Company
Group	Head of Group
PPP	Public Private Partnership
PFI	Private finance initiative
CASE Award	Cooperative Awards in Science & Technology

# Chapter 1: Introduction to the research

## 1.0 Introduction

How do strategists strategize? What steps do they take throughout the practice of strategizing? What impacts do their decisions make and how do they choose the direction a strategy will take? Who is the Chief strategy officer and how do they engage with the activity of strategizing? These are the questions that have been driving research in the area of strategy as practice (Sandberg & Tsoukas, 2011).

Strategy research and the practice of strategy is an area of robust debate and strong opinions. Research on strategy has been argued to be in steady decline since the 1980's. However within the field of industrial application strategic management has not, with 88% of companies surveyed use strategic planning as a means to plot their future needs and requirements (Rigby and Bilodeau, 2007). This mismatch between the research of strategy by academics and the interest in strategy by companies could be explained in part by an inability of academics to get close to strategy process. As a consequence, it may well be the case that firms are basing how they create strategy on outdated practices.

The focus of this research is to better understand the practice of strategy formulation. In simple terms, how do a strategists strategize and what does the process of strategy look like

though out the formulation process. Developing additional insight, it is envisaged, will help us to better understand the complex nature of strategy formulation and the elements that impact the activity of creating a strategic direction for an organisation.

This thesis begins with an examination of the literature in the broader field of strategy and the research conducted over recent years. The literature also covers the field referred to as strategy as practice, a field of study that aims to examine the micro processes and actions of managers as they make their decisions on a day to day basis. What was found and highlighted through this review is a fundamental lack of empirical understanding of a strategic manager's practice when formulating strategy. Part of the reason for this, is the way in which past research has been conducted. It has relied upon reflective methods that often paint a rather simplistic picture of what happens or follows a normative model of what academics think ought to happen. As a consequence, one line of research I believe would improve our understanding of the strategy formulation process is to follow an approach that engages with a manager in an organisation who is attempting to bring about strategic change. Insights will be derived from data collected in real time and over the full length of the formulation process. This approach, it is intended, will highlight the messiness of the strategy process and seek to uncover how decisions are made. These it is recognised will often be based on personal judgements and driven by a variety of factors at any one given moment.

What I hope to reach for in this research is a move away from exposed theory to seeking theory in use. The purpose of this thesis is then to undertake an empirical exploration of one

organisations development if a strategy for innovation. Within the study it will also focus on the flows of activity that take place as well as the context in which the strategy is created. The particular context for this research was the development of a short, medium and long term strategy for innovation in a UK utilities company. The research conducted adopts a qualitative approach which is based on a single longitudinal case study with the analysis of the case being achieved through the theoretical lens of activity theory. This approach simultaneously built strong relationships that allowed for a deeper investigation to take place. Activity theory was seen to be a useful way of conducting the analysis as it was through to help reveal the relationships that exist between subjects (in this case the strategy manager) and an object (in this case the development of a strategy).

This research contributes to previous research in a number of ways. Firstly, the thesis advances current debates in relation to the practice of strategy. The strategy of practices movement as proposed by academics such as, Schatski et al., (2000) Reckwitz, (2002), Sandberg & Tsoukas (2011). The contribution tracks a major strategy formulation attempt over the whole of its life and does this through the close involvement of the research through the adoption of an action research approach.

Secondly, the thesis seeks to re-humanise the strategy formulation process. Until now the domain has been dominated by insights made at the level of the firm. This research will view strategy formulation from the perspective of the lived experience of the innovation manager. Understandings have been gained by becoming close and using the voice of the innovation

manager. To achieve this, chapters 5 and 6 been written as a narrative, using research data, diaries and interviews collected over the whole period of research.

Thirdly, the thesis highlights the benefits that can be gained from engaging in a collaborative approach to research. In conclusions at the end of the thesis, it is recognised that the approach adopted has both strengths and weaknesses. The majority of issues (both positive and negative) stemmed from me being within the company. However, notwithstanding the difficulties, the research has the propensity to generate a wealth of understanding not available by other means (Pettigrew, 2003; Van de Ven, 2007; Antonacopoulou, 2010). The experiences of conducting a variety of roles, often simultaneously, are presented, as the choices made impacted the research practice itself.

Finally, this thesis highlights how strategies are continually being invented and reinvented as the dynamics of the business unfold and personalities change. The findings are somewhat at odds with my original expectations form the research. I had originally expected the strategy to be one which was far more certain and much less ambiguous and the outcomes were cleaner. What was found was the strategy is extremely difficult and problematic to create.

This research shows strategy formulation as both erratic and unpredictable, one that relates more closely aligned to picture that Rumlet (1991) paints which suggests that strategy development as highly ill structured, which is as a consequence of vague, uni-dimensional



policies that lead to complex problem solving activities with no predefined method for clarification.

## 1.1 About the author

My interest in this study stems from industrial experience as a product designer. This profession operates on the need to build a strong empathetic view of a problem before moving to its resolution. The focus is on providing actionable deliverables that satisfy a variety of stakeholder needs. My experience as a product designer has developed my interest in examining in more detail some of the wider more contextual dimensions in relation to problems in general.

# Chapter 2: Literature review

## 2.0 Introduction

This chapter offers an overview of the relevant streams of academic literature that relates to strategy, how it is formed as well as the process of innovation within organisations. The primary focus of this research is to develop insights into how strategy is undertaken with organisations. A particular focus is on the flow of activity in when strategy is formulated and how different contributors influence the creation process. In setting the context, the literature review reflects on the debates in relations to the evolution of strategy and those perspectives that have been taken to examine the field as well as those practices employed by organisational practitioners.

The current perspectives taken of a practice-based view of strategy formulation in management studies will be used to underpin my research. As a consequence it is this view that will be used as the lens for study. My main focus in relation to strategy formulation is the Chief Strategy Officer and the activities he practices when formulating a strategy. As a consequence the research aims to develop a deeper understanding of the implications of the micro practices of how strategy is formulated and this is something called for by a number of researchers (Johnson et al., 2003; Felin & Foss, 2005; Sandberg & Tsoukas, 2011; Greve, 2013). This approach contrasts economical and psychological approaches which have favoured reductionist techniques in order to understand strategy formulation to generate

theory. In contrast practice theory engages with various sociological theories of practice and welcomes the '*web of social practices*' and aims to build a perspective that is closer to the reality in which the practitioner lives in order to represent the lived experience (Samra-Frederiks, 2003; Schmid et al., 2010).

As a consequence, the research is positioned at the intersection of strategy and innovation. A further twist in this research seeks to understand how strategy is developed for innovation. As with strategy as a process, innovation is also a heavily debated area of management with a whole variety of perspectives offered on both innovation as a concept and best practice that might aid in its effectiveness. Also like strategy, innovation has received a great deal of attention, however the black art this is often attributed to it, reflects our gap in knowledge as to innovators actually innovate.

By the end of this chapter the reader will have an understanding of current debates in both fields of strategy and innovation, as well as the gap that this research aims to bridge. In the case of this study the research will explore the connections between strategizing and innovation as a company attempts to formulate a strategy for innovation.

## 2.1 Literature review methodology

Articles chosen for review were identified through conducting database searches. Key phrases used were: 'strategy', 'strategic planning', 'strategy as process', 'strategy as practice', and 'strategy manager'. Various databases were used to broaden the search for literature but it was controlled to focus on research in the areas of: management, economics, humanities, and social sciences. All searches included full text and were limited to scholarly articles within the past 30 years only. Later using the 'snowball' technique, articles were added that had not been picked up in the initial search.

All articles were initially accepted or rejected through reading the abstracts. This process produced some 50 articles for detailed reading. A process of reflection and iteration helped in the development of an understanding of the fragmented strategy field. This process highlighted gaps in knowledge in both strategy and the practice of strategy formulation.

## 2.2 Strategy research

Since the 1960s when strategy emerged as an area of academic interest there has been no single overarching definition of what strategy is (Nag, Hambrick and Chen, 2007; Ketchen, Boyd and Bergh, 2008; Ronda-Pupo and Guerras-Martin, 2011). Whether a single overarching

definition is required or not is debatable as an organisations strategy is often formed or formulated as a consequence of a range of very different factors unique to that organisation.

Notwithstanding, within these different themes it can be argued that they transcend the contextual differences and an understanding of these add to our understanding. The disciplines that have engaged in an understanding of strategy is diverse, each adopting its own distinct philosophical underpinnings to guide the logics used in their investigation. These disciplines include: economics, sociology, management, finance, psychology and marketing (Nag et. al, 2007; Bowman, Singh and Thomas, 2002; Hambrick, 2004).

An interesting way to track the evolution of our understanding of what strategy is at a given moment in time is presented in Table 1.

TABLE 1 CHRONOLOGY OF STRATEGY

Chandler (1962)	The determination of the basic long-term goals of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.
Pettigrew (1977)	Strategy evolves as a result of partial resolution of environmental and intra-organisational dilemmas and the process of resolving these dilemmas will be influenced by organisational, cultural, task, leadership and internal political factors.
Andrews (1980)	Corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purpose or goals, produces the major policies and plans for achieving those goals and defines the range of business the company is to pursue.
Van Cauwenberghe and Cool (1982)	Strategy is a calculated behaviour in non-programmed situations
Barney and Hesterly (2006)	A firm's strategy is defined as its theory about how to gain competitive advantage
Chaharbaghi (2007)	A multi-dimensional, dynamic construct that allows organisations to align the corporate, business and functional dimensions more effectively in making progress and receiving more in terms of what they want to achieve
Hitt, Ireland and Hoskisson (2007)	A strategy is an integrated and coordinated set of commitments and actions designed to exploit core competencies and gain a competitive advantage
Grant (2008)	Strategy is the means by which individuals or organisations achieve their objectives. Corporate strategy defines the scope of the firm in terms of the industries and markets in which it competes. Business strategy is concerned with how the firm competes within a particular industry or market
Johnson, Scholes and Whittington (2008)	Strategy is the direction and scope of an organisation over the long term, which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations

As can be seen from Table 1, what strategy is, how it is developed and its focus is still heavily debated and is a fragmented field that is lacking a consistent identity (Whittington and Caillaud, 2008; Regner, 2003).

Many of the perspectives in Table 1 view strategy from the perspective of the firm, where the focus is on the development of a unique set of core competencies for competitive advantage (Chandler, 1962; Hofer and Schendal, 1978; Andrews, 1980). Others reflect on those factors that influence strategy, for example the environment, leadership, culture, purpose and motivation (Pettigrew, 1977; Quinn, 1981; Ohmae, 1982; Van Cauwenberghe and Cool, 1982). More recently the focus has changed to a view of what are important resources. This resource based view of the firm and how focuses on how resources are utilised to satisfy stakeholder needs while achieving competitive advantage (Barney and Hesterly, 2006; Hitt, Ireland and Hoskisson, 2007; Grant, 2008; Johnson, Scholes and Whittington, 2008). This lens views the individual who drives the strategy as the 'spectator which haunts [the] economic model' (Baumol, 1997).

This fragmentation of the field of strategy is seen as a barrier to its development and thought to have contributed to a decline in popularity in strategy research over the past decade (Nag, Hambrick and Chen, 2007; Whittington and Cailluet, 2008; Regner, 2003). However, Grant (2003) and Whittington and Cailluet (2008) have asserted that contrary to Mintzberg's prediction that the practice of strategic planning in companies is dead, but is in fact quite alive and thriving. Rigby and Bilodeau, (2007) have shown that the industrial application of strategy practice has a strong presence with 88% of the companies surveyed stating that they are using strategic planning as a means to plot their future needs and requirements on a regular basis.

The disparity between what takes place in practice and what is written about in research raises a number of interesting questions. For example, what is the cause for this decline in academic research? Could this decline be due to lack of access to be able observe the phenomena of strategy? This might also account for why up to now we have relied on a firm level using historical data that only portrays economic performance (Nag, Hambrick & Chen, 2007; Ronda-Pupo and Guerras- Martin, 2011). Another is that there is simply a lack of access to firms who might feel this area is highly sensitive one. It is difficult to tell, it does suggest a need for a move away from econometric thinking and the need to examine strategy at a more micro level. This theme is something that will be picked up later on in this chapter, when a strategy as practice lens is put forward as the best approach to understand how strategies are formulated.

### 2.3 Gaps in our understanding of strategy

Strategy as a teaching and research phenomena was established at Harvard University with in the business policy courses in the 1950's. The approach from the outset engaged with industry practitioners who explained to students how they made decisions for future organisation activity. The practitioners provided cases and scenarios based on their personal experiences, and gave insights into the processes involved in strategizing at a micro level. These cases were subsequently developed into a series of qualitative case studies that were rich in practical insights and distributed widely indicating how managers and academics should respond to situations with their organisations.



However critics of this approach argued that there was a lack of theoretical grounding in these single case studies and that a more economically driven understanding would prove more beneficial for the development of theory as well offering more to practitioners. This led to an econometric driven research focus, which was regarded as more scientifically accurate (Hussey, 1997). As a consequence, questions began to emerge over the general rigour and generalizability of the research conducted at the time (Hussey, 1997).

This exultation to change to a more econometric led approach resulted in an increase in academic focus in strategy. The econometric centric approach resulted in the development a different understanding, one which moved away from something people were intimately involved in to something one stepped removed from that. As a consequence it is argued that our knowledge and understanding improved at the level of the firm and the impact of how decisions made affected organisational effectiveness and performance. The benefits of this macro approach also led to the creation of a series of tools that were designed to help organisations better understand their environment and plan the means whereby they could adjust and improve. These tools included: Porters 5 forces, Boston Consultancy Group Matrix, Porters value chain analysis, scenario analysis (Singh and Thomas, 2002).

However based as they were on the same economic organisational logic it indicated what firms *should* do rather than how strategy *is* created by the individuals who are involved in the process. This concern has in turn led to an intersect in research that instead focuses on establishing ways of measuring tangible outputs, such as indicators that measure how well

the strategy was formulate; individual agency and the capabilities of those who create a strategy and context (Hutzschenreuter and Kleindienst, 2006; Bower, 2008; Antonacopoulou, 2009; Jarzabkowski and Spee, 2009). Building a better insight into how people create strategies and why specific avenues for activities are selected over others will improve our understanding of strategy as well as the ability for firms to practice strategy is seen as a positive way forward.

**Caveat**

*This literature review is not meant to come across as an attack on quantitative research methods in the area of strategy and its formulation. But as indicated the view is that there needs to be a shift from the unit of account being the firm to one where the unit of account moves to the individuals who shape the strategy. This will require different techniques and approaches which will be discussed in the methodology chapter.*

## 2.4 Evolution of strategy practice and strategy research

In line with the argument above this next section seeks to examine research that has sought to understand the process of strategy formulation. As before, I begin with a look back at the history of strategy to gain an overview of what has already been revealed. The review aims to highlight the evolution of thinking on strategy, showing how strategy has been interpreted of what it consists of. It shows it as a as fluid and changing phenomenon. I have taken a critical view of the frameworks provided to strategists from this research which help managers in the process of strategizing. This will be presented in a chronological sequence beginning with long range planning.

#### 2.4.1 Long range planning

Long range planning (LRP) emerged in the 1950s and 1960s. LRP was a processes forecasting tool used by organisations to gain competitive advantage. The underlying logic of the LRP was to maintain the status quo (Hussey, 1997). As a consequence it used both historic and existing trends to extrapolated and build an accurate description of an organisations medium and long-term future. It achieved this through the use of numerical techniques, largely based on time-series analysis and regression analysis. The seemingly mathematical accuracy of the techniques was seductive and, in the relatively stable decade of the 1960s, it often appeared that they worked well, even in the longer term (Steiner, 1979; Ansoff, 1984; Ocasio and Joseph, 2008). Based on the projections from the planning programs organisations would focus on anticipating future decisions by putting into place actionable formats, agendas, targets and budgets. It was the opinion of the time that markets were predictable entities where change only occurred at an incremental and predictable rate (Ocasio and Joseph, 2008).

As understanding of strategy evolved and increased the LRP framework attempted to predict social and political movements. It did this by which strategists incorporated historical environmental data, which were then used to develop insights which helped new-products and markets could be identified (Ansoff, 1979; 1984). This increase in understanding saw the development of other models that also competed with the LRP framework. The 'design school' model was one which has been associated with Learned, Christensen, Andrews and Guth (1965). This approach was developed as a practical approach which dealt with this new complex environment. Incorporated in this approach was an understanding of both the

internal and external environment and these have been encapsulated in the SWOT model (Strengths, Weaknesses, Opportunities and Threats) approach which is still widely used today in research, teaching and practice.

Throughout the 1950's and 1960's there have been many attempts by organisations to develop theoretical models related to strategy formulation that have not proved useful in practice (Ansoff, 1984). There have been a number of contributing factors put forward as to why this is so. One is that the increasing levels of competition in markets as well as the rapid change and often volatile nature of industrial environments has made the ability to have a recipe difficult (Porter, 1991). Additionally, over this period, many developed economies and organisations performed at or close to what was considered best practice of the day. In case of product centric companies the period saw supply exceed demand and the consumer became more selective in their choice of product (White, 2004). What organisations found was that by the time they had developed a model of strategy that work for them, the model was in some ways already out of date when it was implemented (Hussey, 1997).

#### 2.4.2 Strategic planning

During the 1980 doubts began to emerge in reaction to whether a scientific approach to strategic planning was indeed an appropriate way forward (Grant 2010). Due to the limitations of LRP and the greater need to satisfy consumer needs, 'strategic planning' was introduced to address some of the issues that had confronted the industrial practitioners in the 1960s and 1970's (Berg, 1965; Ansoff, 1979; Mintzberg, 1994, White, 2004). This view

which focused on strategic planning worked to balance future scenarios against current processes and objectives of the day to day to generate reflexive strategies (Ansoff, 1984). This changed the focus from planning to strategy making, where there was less emphasis on the micro management of organisational practice and a move to position the organisation more in relation to its competitors in order to maximise profits.

The strategic planning approach sought to identify future trends, threats, opportunities and new ideas being implemented across the market place. This mode was therefore much more externally focused than the internally view of LRP. It analysed the competition as well as forcing diversification in order to ensure the organisation remained competitive which differed from LRP in that it attempted to break the status quo as opposed to maintaining it (Ansoff, 1977; Gluck et al, 1980; Porter, 1991). Achieving a market position was seen as a key priority for the organisation and strategies developed were expected to reflect this by directing resources into to those areas which had the potential to be exploited the best, i.e. market positioning (White, 2004). This made strategic planning an essential component of an organisations arsenal when future trends and competitive environments were seen to be uncertain. It also served to drive strategists to seek new means of finding new sources of competitive advantage (Grant, 2010).

#### 2.4.3 The resource-based view of the firm

In the 1990's emphasis moved again from a focus on an analysis of the external environment to seek a better understanding of the organisations internal capabilities (Grant, 1991). This

approach has been labelled *the resource-based view of the firm*. This perspective represented a significant shift in thinking about strategy. The resource-based view (RBV) saw itself as the cornerstone of competitive advantage, where the advantage lay primarily in the application of a bundle of valuable tangible or intangible resources at the firm's disposal (Mwailu & Mercer, 1983; Wernerfelt, 1984; Rumelt, 1984; Penrose, 1959). The VRIO model constitutes a part of RBV approach (Crook, Ketchen, Combs, and Todd, 2008). The VRIO framework is the tool used to analyze exactly what an organisation's internal resources and capabilities are and to identify if they can be a source of sustained competitive advantage. The tool was originally developed by Barney, (1991). This view was that the resources need to be valuable, rare, imperfectly imitable and non-substitutable. The VRIO tool asked four questions of an organisation's resource or capability in order to determine the competitive potential (Barney and Hesterly, 2006), these were:

1. The Question of Value: Does a resource enable an organisation to exploit an environmental opportunity, and/or neutralize an environmental threat?
2. The Question of Rarity: Is a resource currently controlled by only a small number of competing organisations?
3. The Question of Imitability: do other organisations without a resource face a cost disadvantage in obtaining or developing it?
4. The Question of Organization: Are an organisation's other policies and procedures organized to support the exploitation of its valuable, rare, and costly-to-imitate resources?

As a consequence of adapting this shift in mind set, firms began to try and articulate how they might be different from their competitors and what the nature of these differences meant.

They then set out to take advantage of these difference based on the resources at hand within the firm (Porter, 1996).

#### 2.4.4 The knowledge economy

The turn of the millennium brought a new set of challenges to the strategy field. The principals and practices of strategy are seen to have been moulded by the uniquely challenging circumstances of the 21st century (Grant, 2010). The impact of technology has had significant on how organisations engage with market forces and react to given scenarios (Frank & Cook, 1997). The beginning of the millennium saw the IT boom emerge and within the development of the new economy (Grant, 2010). As a consequence of this, the focus of organisations undertook another transition. The 'knowledge economy' as it was labelled organisations are now seen to be in competition on many fronts simultaneously. These were noted by many authors to be: standards wars, the winner takes all market and the blue ocean of uncontested market places (Frank & Cook, 1997; Kim and Mauborgne, 1999; Porter, 1996). This change saw strategy move to a more responsive philosophy one that engenders flexibility and views competitor advantage as a temporal phenomenon.

#### 2.4.5 Reflections on the evolution of strategy

This section has shown how strategy has evolved but in the way academics have thought about it but also how it has been practiced. It has shown that when it was discussed in the earliest time, the accounts were based on practitioners accounts which die to problems of

generalizability and methods by which research was conducted gradually moved to being seen as something people did something organisations do. With the increasing speed of change in markets coupled with technological innovations, the existing theories of strategy are not equipped to cope with the rapid advancements. The lens appropriate to the study of slower and more predictable environments are not up to the task. As a consequence research has come full circle, there has been a growing interest in research practice in relation to the understanding of strategists (Sandberg and Tsoukas, 2011). What was seen to be missing was an understanding of the process by which strategy takes place and through an understanding of this, our understanding of what constitutes strategy as a whole would improve (Shotter & Tsoukas, 2014; Vaara & Whittington, 2012; Antonacopoulou, 2008, 2012; Nonaka & Toyama, 2007)

The 'practice' turn in management studies has come of age (Sandberg & Tsoukas, 2011, Vaara and Whittington, 2012). This focus on practice engages with the micro practices of what people do. The interest in the things that people do, often subconsciously when engaging with a task or challenge (Antonacopoulou, 2008; 2010). By doing so, it seeks to place the practice of strategy at the heart of research. The approach has some academics such as Shotter & Tsoukas (2014), Vaara & Whittington (2012), Antonacopoulou (2008, 2012) and Nonaka & Toyama (2007) call for a better understanding of strategy through the lens of practice.



## 2.5 The process of strategizing

Historically, process research in the field of strategy explores how organisations recognise the need for change and then set about achieving this change, for example, Pettigrew (1987). The strategy as practice stream draws many of its insights from the strategy as process stream while bringing into the mix a managerial focus on how 'strategists strategize' Whittington (1996). The focus of this stream provides both theoretical and practical insights into the generative mechanisms associated with the strategy formation and formulation process; specifically those that understand the social complexity and casual ambiguity associated with the process (Whittington, 1996). This narrowing of emphasis and the focus on practical insights aligns itself with current thinking in the broader management field with regards to the closing of the relevance gap (Pandza and Thorpe, 2010; Nicolai, 2004).

A number of authors have given different interpretations of how strategy should be formulated in theory and how it is formulated in practice (Shrivastava, 1983; Van de Ven, 1992). Shrivastava (1983), for example, aligns with the classic view of strategy and regards it as a process of high rationality. From this view the organisation uses a series of methods, tools and techniques in order to understand its environment. This understanding also regards the strategy process as a set of well-formed sequential steps with little or no deviation.

However since this strategy process focus emerged in the mid 1980's a number of case studies (e.g. Hinings and Greenwood 1988; Whipp and Clark 1986; Johnson 1987; Lewis 1988;

Pettigrew 1985; Sminia 1994) had already highlighted the fact that strategy formulation and the process of implementation rarely conforms to the idealistic linear model, i.e. initial input through to final output. These cases show that the strategy process itself is an evolving progression of ideas, plans and agendas with many unanticipated changes, interruptions and set-backs. Rumlet (1979) also suggested that the 'ill-structured' nature of the strategy process itself, was one that was vague and one-dimensional that led to complex problem solving activities with no predefined method that served to clarify the process and this also contributed to the complex nature of the phenomenon.

## 2.6 Strategy as process

Strategic planning as an activity aligns closely with the views of strategy-as-process researchers. They view the strategic planning process as a formal practice of formulation (Mintzberg & Waters, 1985; Hart, 1992; Mintzberg & Lampel, 1999; Andersen, 2004).

Andersen (2004) defines the strategy planning processes as a set of:

*“Organisational activities that systematically discuss mission and goals, explore the competitive environment, analyse strategic alternatives, and coordinate actions of implementation across the entire organisation”*

Quinn (1978) and Mintzberg (1994), suggest that strategic planning can be defined as a formalised practice to produce an articulated outcome in the form of an integrated structure of decisions. This process concentrates on formalisation as the main condition that differentiates planning from other activities of strategy design or formulation. Mintzberg and Lampel (1999) attempted to understand the various means by which strategy is formulated and have categorised the various strategy approaches into ten different schools. The ten schools of strategy matrix (Table 2) shows a diverse array of views. Taking a broad view the ten schools shows that a strategy consists of many changes which depend on the focus, logic and philosophy of the individual or organisation.

TABLE 2 MINTZBERGS TEN SCHOOLS MATRIX

Category	Prescriptive	Prescriptive	Prescriptive	Descriptive	Descriptive	Descriptive	Descriptive	Descriptive	Descriptive	
<b>Schools</b>	Design: formulation as a process of conception	Planning: formulation as a formal process	Positioning: formulation as an analytical process	Entrepreneuria: visionary process	Cognitive: formulation as a mental process	Learning: strategy formulation as an emergent process	Power: strategy as a process of negotiation	Culture: strategy as a collective process	Environmental: strategy as a reactive process	Configuration: strategy formulation as a process of transformation
<b>Philosophy</b>	Fit between internal capabilities and external possibilities Strategy development is a rigorous and rational process.	Synthesis follows analysis. Conducted by a strategy specialist in a formal way.	Combination of defensive and offensive moves	Strategy is dependent on the vision of the strategist	Strategy is developed as a process of cognition: understanding how decisions are made is key to understanding how strategy is developed	Strategy emerges through trial and error.	Strategy is a result of power struggles both internal and external to the organisation	Strategy is developed through a process of social interaction	Organisation must respond to environmental forces in which it inhabits	Conscious activity of transforming form one business model to another
<b>Tools</b>	SWOT	Scenario planning	BCG matrix, game theory, Porter's Generic strategies, Value chain analysis	Skill of the strategist	Cognition maps, concepts, discussion	Intuition Interpretation integration	Bargaining Conflict Stakeholder analysis Political analysis Polys/counter plays	Values, beliefs, myths	Market analysis, reaction and adaptation techniques	Use of different business models to develop a plan of action
<b>Weakness</b>	Requires ability to forecast the future of external environment	Limited scope for creativity. Process is more important than output	Everything is reduced to simplified terms.	High decency on the skill of the strategist	Highly subjective approach to strategy formulation	Taken to the extreme an any goes approach may result in restricting an movement or development	Narrow view of strategy as all activities can be viewed as a power struggle.	Concepts are vague and lack precision. Tends to favour the status quo.	The complexities involved in defining the environment can inhibit progress.	May force major change when not required
<b>Strengths</b>	Forces consideration of external factors	Strategist can evaluate options, if these created in the process	Emphasis on analysis and calculation	Can articulate a high degree of fragmented information	Can articulate a high degree of fragmented information	Recognition that strategy must evolve over time.	Adds value in complex situations, in decentralised organisation of experts.	Recognises and engages with corporate culture to drive thinking	Recognises the importance of context in the development of understanding	May prove to be a radical solution when required.

Mintzberg (1994) has argued that in practice, strategic planning had become a procedural activity with little focus on strategic thinking or change. He suggests that the practice of strategy had become an annual ritual by organisations resulting in the creation of plans that thereafter no real attention is paid to. That being said, a number of questions are raised about how strategists strategize in practice. Moving beyond the procedural element and observing how organisations create strategy raises questions such as; who creates the strategy and how do they set about it? More specifically, what does the process of strategy formulation consist of and what factors contribute most heavily to its creation and completion?

The 'learning school' of thought in relation to strategy formulation argues that strategy cannot emerge through deliberate means or tactics (Quinn, 1978; Quinn, et al., 1988; Mintzberg, 1994). Building on the notion of strategy formulation as unplanned, the longitudinal studies of Mintzberg and Waters (1982) identified that the emergence of strategic direction had little resemblance to formal, rational, strategic planning processes (Grant, 2003). In doing so, complementing a view, by Bower (1970) and Burgelman, (1983) that strategic decisions emerged from complex interactions between individuals with different interests and different perceptions through limited formal means (Bower, 1970; Burgelman, 1983).

More recently, Hodgkinson (et al., 2006) has suggested that the activity of strategy formulation is actually far more integrated than previously thought. Hodgkinson et al. (2006) highlight that executives continue to practice strategy workshops as part of formal strategic

planning processes. They see strategic planning as an entrenched and formalised form of strategy development, where strategy can be both emergent and deliberate in its development (Hodgkinson, et al., 2006). The evolution of the business environment has reinforced the case against formal strategic planning (Grant 2003). This is due to criticisms with respect to the impossibility of forecasting (Mintzberg 1994). This debate pitted the advocates of systematic, rational analysis (Ansoff, 1991; Goold, 1992) against those who favoured the empirical validity and normative merits of emergent processes (Mintzberg, 1991, 1994). However the contribution of both areas of research appears limited due to the lack of empirical investigation of the phenomenon itself with the research in the area being based largely upon superficial depictions of strategy practices derived from questionnaire data or hindsight (Grant, 2003).

Even the most hardened of critics of the deliberate approach to strategic planning acknowledge its importance to the strategy process (Hill and Jones, 1998). Mintzberg's (1984) model of the strategy making process retains a role for deliberate strategic planning, while concurrently stressing the importance of unplanned emergent strategies. Research has indeed reinforced this view by showing the coexistence of both deliberate and emergent strategy planning processes (Grant, 2003; Hodgkinson, et al., 2006). Brown and Eisenhardt's 1997 idea of 'semi-structures' in the strategy processes suggests that some elements are rigid, prescribed or determined while other elements are flexible, reactive and adaptable. An application of this idea in strategy formulation concerns the use of simple rules that incorporate adaption while providing a boundary or general direction to give a sense of direction (Eisenhardt and Sull, 2001). Table 3 summarises the rules put forward:

TABLE 3 STRATEGY AS SIMPLE RULES

<b>Type</b>	<b>Purpose</b>
<i>How to rules</i>	They spell out key features of how a process is executed – “What makes our process unique?”
<i>Boundary rules</i>	They focus managers on which opportunities can be pursued and which are outside the pale.
<i>Priority rules</i>	They help managers rank the accepted opportunities.
<i>Timing rules</i>	They synchronize managers with the pace of emerging opportunities and other parts of the company
<i>Exit rules</i>	They help managers decide when to pull out of yesterday’s opportunities.

Mintzberg and Waters (1985) presented strategy as the merging of both intended and emergent strategy. This unification of both intended and emergent strategy highlights the complex habitat that strategy practitioners inhabit, where they may set out with a clear focus of the unknown often resulting in an alternative and unforeseen outcome. The Mintzberg and Waters (1985) paper is part of a stream of research which aims to understand how strategy is formulated and delivered (Sminia, 2009). This particular stream of research referred to as ‘*strategy process*’ approach to strategy research as opposed to the main stream of strategy research which predominantly focuses on strategy content (Sminia, 2009).

### 2.6.1 Reflections on strategy process research

What has been presented in this section on the strategy process are the main debates that are seen as fundamental in our understanding of what constitutes strategy process. It has highlighted that there is still much confusion as to what strategy is and how it is formulated. As has been noted, this may be as a consequence of limited empirical research in the domain of strategy process research as it attempts to understand what strategists do on a micro level. This may be because there have been limited attempts to use methods that fully engage the academic in the process itself.

### 2.7 Strategy as Practice

The term practice in the relation to strategy as practice reflects the need to maintain close links with field of work and also a commitment to sociological theories of practice (Antonacopoulou, 2009). In other words this approach recognises how practitioners engage with practice. It does this as it is felt that people at a given time engage with a myriad of both observable and unobservable phenomenon that influence their activity in some way. This phenomenon can be historical or in the present or both. It is the influence that these phenomena have on the logic of the individual at the time a decision is made that is of interest Antonacopoulou (2009).



The 'practice-turn' can be traced back to the works of Wittgenstein (1951) and Heidegger (1962) with added focus from a social science view coming from the works of (Reckwitz, 2002; Rouse, 2007; Schatzki et al, 2001). The field is diverse ranging from anthropology (Bourdieu, 1990) to activity theory (Engeström, Miettinen and Punamake, 1999). This diversity highlights the all-encompassing nature of practice research in terms of methodological approaches, theoretical perspectives and philosophical underpinning. It reflects the diverse nature in which the activity of practice takes place, thus requiring multiple lenses to understand what practice is, in a given context.

On a philosophical level, Bourdieu (1990) argues that the concept of practice is a way to articulate how the objective world and a subjective merge in social action. Bourdieu endeavoured to articulate the relationship between people's practices and the context in which these practices occur. His research led him to view practice as a:

'series of contexts which constitute an objective hierarchy and which produce  
and authorise certain discourses and activities' (*Webb, 2002*).

Through this understanding he does not refer solely to the institutions and the social rules that governs them but also to the interaction that occurs between them.

Bourdieu also stresses that adopting a scientific rational framework requires researchers to use representational logics to help them understand what they are seeing (1998). As a consequence of the scientific rational framework, the researcher risks missing the underlying logic of whatever practice is being investigated (Antonacopoulou, 2008; 2010).

The strategy-as-practice view is a relatively new research area. This emergent domain explores the practice of strategy, as strategy is seen as something that people do (Jarzabkowski, 2003; Hodgkinson, et al., 2006; Whittington, 2006; Whittington, et al., 2006; Paroutis & Pettigrew, 2007). It is interested in the practical activities and tools used to formulate a strategy. This perspective has evolved in response to the limitations of process and performance studies, which do not investigate how managers and strategists undertake the activities needed to run their strategic planning system effectively.

The strategy-as-practice lens has begun to influence understanding with regards to the act of strategy formation and formulation (Jarzabowski 2005 and 2008, Jarzabowski et al. 2007, Johnson et al. 2007, Whittington and Cailluet 2008). It draws its focus from the microeconomic driven 'competitive advantage' approach, moving it towards a dynamic, social inclusive understanding of the strategy processes in organizations. It recognises that strategy is not something organisations have, but rather it is a dynamic and malleable construct that is engaged with by various stakeholders on a continual basis (Jarzabowski, 2005). Much of the research that emanates from the strategy as process agenda, appears to attempt have been made to understand the role of the actor and the process by which a deliberate strategy is

formulated. This research has drawn explicitly on the earlier works of Mintzberg (1987) crafting strategy (Whittington and Cailluet 2008). Early findings suggest that the process of formulation is largely explicit and deliberate, albeit a messy social process.

### 2.7.1 Framing the activity through strategy workshops

The a strategy-as-practice perspective has investigated those things that have taking place within strategic planning through the process of breaking down the activities involved into different 'episodes' (Jarzabkowski, 2003; Hodgkinson, et al., 2006; Whittington, 2006; Whittington, et al., 2006; Paroutis & Pettigrew, 2007). An episode is seen to describe a particular point or stage in the strategy formulation process of concerned as the core focus of strategy-as-practice movement is the practical activities, and tools that might be necessary to make the strategic planning happen.

Hodgkinson, Whittington, Johnson, and Schwarz (2006) examined the role of strategy workshops in strategy development processes. They found that strategy workshops are a common practice in many organisations and that they are part of formal strategic planning processes. According to Hodgkinson (et, al. 2006:488), strategy workshops:

*“play an important role in introducing a degree of emergence within a wider formal strategic planning framework”.*

It is suggested that these episodes provide a space for contemplating, translating and formalising strategy that originates in lower levels of the organisational hierarchy (ibid). The importance of strategy workshops is reinforced by Jarzabkowski and Seidl (2008) who found that strategy meetings provided a platform for strategy to emerge from the engagement between specific participants, on a particular problem and when looking for specific solutions. Jarzabkowski & Seidl (2008) also suggest that the meeting format provides a platform for politically skilled executives to shape and influence the strategic objectives.

Goldman (2007) suggests that organisations should continue to organise strategic planning sessions on a regular basis. The strategic planning meetings should have a high degree of process regularity, with an emphasis on preparation: reviewing materials and thinking about specific questions that are provided in advance. As Goldman (2007) noted, the strategic thinking ability is enhanced by participation in strategic planning processes with three characteristics:

1. *“having strategic planning sessions with management teams on a regular basis”*
2. *“preparing for the planning sessions such as the required reading of materials that help focus people’s thinking”*
3. *“establishing the formal output of the planning process such as an overall plan, business-unit goals and tactical plans”*

Executives he argues gain their proficiency in strategic thinking through planning in the form of strategy meetings, strategic planning exercises and sessions (Goldman, 2007).

## 2.8 Strategy as design

As has been noted, present day business models emphasises speed and agility with the ability to think broadly and opportunistically at all levels (Liedtka and Rosenblum, 1998). Traditional approaches to strategy formulation, through the use of many of various tools such as SWOT and PESTLE (as well as many others), are regarded by some as not fit for purpose for the modern organisation (Liedtka and Rosenblum, 1998). This is because they are regarded as too rigid and formal, while becoming an annual procedural act with little real impact (Mintzberg, 1994). Beyond the development of product and services the process by which designers approach problems may have important implications for how managers approach management problems (Dunne and Martin, 2006).

Academic interest in the area of management as design is in its infancy. In *'The science of the Artificial'* Simon (1996) calls for management to further its knowledge about design and design process as a method towards understanding and solving managerial issues. In *'Managing as Designing'* Boland and Collopy (2004), draw several parallels between both management and design, with consideration given to striking a balance between having a decision attitude and a design attitude. However as Dunne and Martin (2006) note:

*'the idea of applying design approaches to management is new and, as yet, largely undeveloped', stipulating that further empirical and theoretical research is required 'to understand the scope of the concept and its potential'*

Ralph and Wand (2009) have attempted to create a formalised definition for design and present it as: the outlining of an issue, recognised by an agent, intended to accomplish goals, in a particular setting, using a set of developed tools and techniques to satisfy a set of requirements that are subject to a set of controls; or in other word the development of a roadmap or a strategic approach to achieve a unique outcome. In this mould the designer defines the specifications and processes for how and what to do in correspondence with the established constraints to achieving the objective (Don Kumaragamage; 2011). In this instance a '*specification*' can be viewed as either a plan or a finished product.

An emergent view proposed by Liedtka (2000; 2010) and Liedtka and Mintzberg (2006) discuss the use of design as a metaphor to improve understanding of strategy. They suggest that the 'design' or 'design thinking' approach could be used as a means to move beyond the sterility of traditional methodologies and inserts speed and flexibility as it views the world as fluid and evolving (Cross, 1995; Liedtka and Mintzberg, 2006; Kimbell, 2009). However, due to the various ways in which the term 'design' can be interpreted in the strategy field a broad if somewhat confusing spectrum of research streams have been developed. For example Mintzbergs (1994) labelling of the 'Design School' describes hierarchical, top down approach that does not infuse itself with the notion that design is a fluid problem finding and problem

solving action that builds towards solutions rather than finding the right answer. The design approach within this research is seen as an approach to work that engages with an unbounded view to satisfying a need. This approach allows the actor to engage with multiple factors to build a more coherent picture than can potentially create a more rounded solution (Kimbell, 2009).

Having the ability to develop strategy in the modern business environment needs a change of focus and mind-set, moving away from incremental percentage growth setting and towards creating the ability to shape and respond in a continuous and interactive way. To achieve this business outcome the approach taken to strategy formulation has to be conducted in a similar vein. Similar to the approaches taken by designers and architects a strategy should be seen as a stepping stone process that continually evolves as each goal is achieved (Dunne and Martin, 2006). As the process matures new forces at work occur that cause the strategy itself to evolve. This evolution should be seen as par de course and not as an issue; it should be embraced not fought. Understanding how and why a strategy is formed and results in a particular outcome is a complicated due to the multifaceted nature of the process with a variety of social influences emerging over time.

The notion of incorporating aspects of the design phenomena into management has long been recognised. In 1969 Herbert Simon noted:

*'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones ... Design, so construed, is the core of all professional training'*

The focus of achieving the 'correct' answer with a specific focus has its merits and has achieved many results, but assumes that the world in which the strategy is being developed for is constant and consistent; however numerous examples exist proving this is not the case. Strategy as design assumes that the world is ever changing and that each developed solution is a stepping stone to the next problem space that requires a new resolution (Kirkbey, 2011).

#### 2.8.1 Reflections on the term design and design science

What does the term design mean? It's a context-specific term and depending on where and how it is utilised has resulted in vagueness or discrepancies in mutual understanding of meaning. This is particularly true when the term design transcends disciplines such as architecture, clothing and textiles, I.T., product development, process, corporate and methods. When refereeing to process, design is understood as '*an act of practice*'; product development it can be in relation to an aesthetic or functional quality with regards to clothing and textiles it can refer to a pattern and/ or look of a garment. This has resulted in overarching definitions of 'design' being seen as inadequate (Liedkta and Mintzberg, 2006; Woodham, 1995; Margolin, 1992; Walker, 1989; Hannah and Putnam, 1980).



In practice, the importance of design thinking (Brown, 2008) to organisation has been highlighted as a key strategic resource to organisations, specifically in the areas of change management (Myerson 2001; Johansson and Svengren 2002; Squires and Byrne 2002; Lojacono and Zaccai 2004; Ravasi and Lojacono 2005) innovation and organisational performance (Cooper and Press 1995; Lester et al. 1998; Bruce and Harun 2001; Bruce and Bessant 2002; Broja de Mozota 2003; Press and Cooper 2003; Romme, 2003; Nussbaum 2004; Michlewski, 2008). The idea of designing is taking a human centric approach to business that integrates technology and economics rather than focusing on them unilaterally. This approach moves away from prioritising questions about ergonomic and economic issues and into the realm of understanding culture and context of the group and the individual in question. The design approach brings a novel perspective with a focus on value.

Table 4 below compares and contrasts how the different streams of study and works approach a problem. Engineering for example is primarily technology focused with limited consideration for fiscal or humanistic needs. Through this lens, when a problem arises the engineering approach bounds the issue in order to solve it. The problem is then divided into 'knowns' and 'unknowns' and solved through mathematics resulting in the best possible solution. An engineering approach is essentially solving its way forward.

In contrast a business perspective to problem solving has a primary focus on Return on Investment (ROI). Similar to an engineering approach, the problem is bounded but in this instance a number of solutions are developed through a series of systematic procedures,

prescribed techniques and established metrics (e.g. net present values, core competencies and strategic fit). One or two decisions are then isolated and factored to a figure of merit, such as ROI to produce forecasts to select the right solution. A business approach to problem solving is deciding its way forward. Both of these approaches work on linear models of problem solving with a focus on finding the *'right answer'*. Both business and engineering thinking is built upon *'assumptions of rationality and objectivity'* (Liedkta, 2010), where decisions are made in a cold and calculated logic. Reality is precise and quantifiable. Both approaches take a snapshot or glean understanding of a solution at the beginning of the process and assume nothing will change until the solution is achieved.

In contrast to both the engineering approach and the business approach the design approach does not predefine the parameters of the issues before or during the process of developing solutions. The design approach leaves the problem unbounded as it claims that the answer to a problem can't be known from the outset and the original problem often changes both over time and as our understanding of the issue increases. The *'right answer'* is not sought as there are multiple interpretations of the problem as well as numerous *'right solutions'* all of which can't be proven to be correct. Rittel (1972) refers to this as *'wicked'* problems. These are a series of problems that have a unique set of properties and that do not have a definitive set of solutions. The design approach is based on the assumption that reality is socially constructed and that the human experience is chaotic and unpredictable in nature. It believes that decisions are based on emotions such as desire and the building of an ever evolving contextual picture is essential to understanding. To this end the design approach seeks to

develop ‘simplicity, emotional engagement and the sweet spot between the familiar and the new’ (Liedtka and Mintzberg, 2006).

This is a regular issue in product development where products often don’t meet customer requirements when they are developed, but meet the original specification. Through the traditional systematic approach to problem solving by the time a solution is achieved for the original problem the problem has changed and the solution is out-dated. The iterative nature of the design process counteracts this by being open to new data throughout the process and incorporating it into the evolution of a solution.

TABLE 4 COMPARATIVE TABLE

	<b>Perception of a problem</b>	<b>Primary focus</b>	<b>Philosophy</b>	<b>Framing</b>	<b>Analysis</b>	<b>Solution process</b>
<b>Engineering</b>	Challenge to be solved	Technology	Solve the way forward	Bounded problem	Analytics and mathematics	Linear
<b>Business</b>	Threat to be countered	ROI	Decide the way forward	Bounded problem	Analytics and metrics	Linear
<b>Design</b>	Opportunity to be exploited	Human centric	Build the way forward	Unbounded	Empathy and context	Iterative

### 2.8.2 Strategy as design in management

When reviewing the works of Simon, Pandza and Thorpe (2010) pose a number of interesting questions about the nature by which different artefacts emerge and how prone different types of design are to the acceptance of rules. The first of these is deterministic design, which has synergies with professional engineering, through which all design decisions made by the designer determines the structure, behaviour and performance of the artefact. Each decision is based on pre-existing knowledge in a form that has been codified and prescribed. The second of these is path-dependent design, which is akin to evolutionary design in engineering, whereby artefacts develop gradually as a result of experimental learning or trial and error. This is interesting, as it demonstrates prolonged difficulties that exist with regards to the implementation of heuristics and design rules in technical and social design; as this was the primary focus of the design methods movement which disbanded and referred to as a 'wicked problem' (Rittle, 1972; 1973).

The prescriptive power of this approach lays not so much in the use of design principles informing interventions, as in identifying limitations of decision-making and processes as a result of managing ambiguity due to designer limitations driven by their own biases (Tripsas and Gavetti, 2000). Path creation is the final perspective identified by Pandza and Thorpe (2010). This view is similar to that of radical design in engineering. The application of this approach is best suited to those problems that are fuzzy (Mendel, 2001), ill structured and with a high degree of unknowns that are fundamental to the advancement of a concept; in

other words, an un-structured approach to building an unknown solution to an ambiguous need.

In practice, the agent is the driving force in the search for novelty and in doing so, identifying the processes through which an organisation can secure its current and future position. In this mode, the designer or design team's use of their embedded imagination creates uncertainty by design decisions as it opens up issues of traceability and repeatability. Through this mode, things begin 'fuzzy' and become clearer as a result of cycles of iteration. The prescriptive power of this approach is the identification of processes that enable amenability of evolutionary mechanisms to serve the purpose of design.

Comparisons can be made here with current research in strategy and how to formulate one. Rumelt (1979) suggests this could be as a result the 'ill-structured' nature of the strategy process itself, where vague, uni-dimensional policies lead to complex problem solving activities with no predefined method for clarification. One of the questions at the heart of this thesis seeks to understand how a strategist strategizes in a context and what impact the processes itself have on the formulation of the strategy?

## 2.9 The Chief Strategy Officer

The strategy process is seen to comprise of three elements: the strategist, the issue and the sequence of action, each of which has a major influence on its outcome (Jarzabkowski and Spee, 2009). Insights have been made on the *sequence of action*, while the *issue* will be considered under the sub heading of innovation, later in this chapter. This section takes a closer look at what academics know about the strategists themselves.

Strategies are developed and agreed upon by individuals, the process by which a formal strategy is created and how decisions are made are strongly linked to individual-related attributes (Samra & Frederiks, 2003; Hutzschenreuter and Kleindienst, 2006; Antonacopoulou, 2009; Schmid et al., 2010). This suggests that each strategy is inherently unique and although many have strived to compartmentalise specific elements there is a high degree of variance involved in their formations and formulation. As a consequence I would argue that academics have only just begun to understand the phenomenon.

Research on the main decision maker, the Chief Strategy Officer (CSO) is in its infancy (Cunningham et al. 2007). In 2007, Breene, Nunes and Shill surveyed 200 senior managers in the US who considered themselves as CSOs. In their research they collected media data on 100 CSOs and then carried out a series of interviews. The CSOs had a multiple titles and diverse back grounds but the researchers observed that despite these differences there were common aspects to the role. All the CSOs were involved in strategy formulation, strategy

refinement and its implementation. They also needed to be able to work with and influence a wide range of executives across the whole organization. This broad mix of skills and experience is seen to be both rare and highly valued.

Whilst CSOs are often involved in strategy formulation, their main efforts are seen to be focused on getting buy-in to the strategy, its refinement and implementation. In the words of Breene et al. (2007: 87)

*‘fundamentally, these are people that wield the authority and have a complex range of skills to make strategy happen’.*

They are often given carte blanche to tackle companywide challenges and seize new business opportunities (Breene et al. 2007: 86).

A sizeable portion of respondents in Breene et al.’s survey said they used direct authority to achieve their aims and a few influenced others through reflected authority the implicit or explicit support of the CEO, although the authors remark that this probably severely underestimates the true extent of this influencing mechanisms. This portrayal of the CSO who is seen as a powerful figure in their own right and one who is acting behind the scenes in order to influence and organize managers to achieve strategic alignment. Could be seen to represent, perhaps, a CEO in-waiting.

Dye (2008) published in the McKinsey Quarterly reports findings from a round table of senior strategy officers. Various titled senior vice presidents of strategy and investor relations; strategy and business development; strategy and execution. The round table identified that the strategists felt there are certain commonalities in the role. Firstly they all comment upon the centrality and importance of the CEO as chief strategist and recognized the Strategy Director's role is dependent upon the CEO for sign-off decisions. The critical role of the CEO means that the Strategy Director needs to be able compliment their specific skills and tendencies and add their value by being able to explore facts and alternatives around the various strategic choices which they face. Secondly a CSO has one foot in the corporate suite and the other deep in business units. Thirdly, balancing short and long term goals was perceived as an important challenge and some felt it the most important one. This would vary from emphasising expansion to restructuring an organisation depending upon the state of the market. Despite these pressures Strategy Directors had to always maintain some sort of balance and perspective between long and short term issues. Again, as mentioned above, this work does appear to characterize the Strategy Director more as a powerful and somewhat remote figure, shaping, dictating and evaluating strategy in an organization.

Research by Cunningham et al. (2007) moves attention away from the role of the senior strategist and on to their skills, motivations and backgrounds. Through the use of focus groups in an Irish software company, the researchers identified four key skills for a strategist, namely:

1. A structured and analytical mind
2. An entrepreneurial ability – to think outside the box
3. The ability to network and communicate effectively
4. Leadership to provide direction and take decisions



These findings to some extent corroborate with earlier work on strategizing capabilities (Paroutis and Pettigrew, 2005) and surface a paradoxical quality in Strategy Directors – that at the same time they may need to balance analytical and creative skills to strategize.

However there are still gaps in our knowledge as to who the CSO is and how they practice strategy formulation. Acknowledging that the work of both Cunningham (2007) and Paroutis & Pettigrew (2005) there is still much for academics to learn. Building on the existing research, the questions that emerge are what is the CSO experience through the development of a strategy, how do CSOs make decisions and choices; and what are they underlying logics that underpin the decisions made? Who are the key stakeholders that the CSO seeks to satisfy and how do they balance conflicting points of view when they arise? What are the triggers that drive decision making when unknowns often outweigh knowns?

#### 2.9.1 Practical judgements in strategy practice

Insights on the decision making processes used by the CSO could be found in the development of a better understanding of the practical judgements made inflight during the process of strategizing. Antonacopoulou (2009) refers to this type of sense making as phronesis. Phronesis is a virtuous mode of knowing or the use of practical judgements Antonacopoulou (2009). It is seen as practice not only as something someone does, but also how they do what they do (Antonacopoulou, 2009). In other words in this body of work I am not only investigating a strategist, but also how a strategist strategizes. In the context of strategizing this can be referred to as how the strategist exercises judgements when faced with large

amounts of information, which can be assumed to be often contradicting each other and often not a lot of time to process the data gathered. As a consequence of the limiting factors such as time, tensions emerge such as socio-political factors, personal factors that the strategist has to resolve in order to create a strategy that will be accepted by their peers. Answering questions such as, how these tensions manifest, what they resemble and how they are engaged with at different points in time would extend our knowledge accounts of the lived experience of strategizing (Samra-Frederiks, 2003; Schmid et al., 2010).

## 2.10 Strategizing in context of innovation

The question of, just what is strategy how is it created in firms and does developing long term strategy for normative business trajectory differ from that of one that focuses on innovation is an important question. Strategizing is defined Jarzabkowski and Spee, (2009) as:

*‘the actions, interactions and negotiations of multiple actors and the situated practices that they draw upon in accomplishing that activity’*

That is strategies are shaped by the environments in which they are created and the organisation in which they are created (Pettigrew, 1997). This poses a number of questions, does strategizing for innovation differ from strategizing for normative business activity and why should an innovation strategy differ from a normative strategy? Also what are the major steps in the strategy formulation process and what are the key influences that affect the outcome at the different stages throughout the process?

The primary concern of my research is strategy formulation as it unfolds over time and in context and as a result this literature review will focus on the practice of strategy. As has been argued here is an increasing dissatisfaction with conventional 'strategy' research (Jarzabkowski and Spee, 2009). What has emerged within different fields of research that aim to understand the micro level intricacies for strategy with impetus on providing a more practical focus. This is evidenced by such as the rise of strategy-as-process and strategy-as-practice research fields (Breene *et al.* 2007). The result of these studies has produced a large volume of work but has yet to produce robust and conclusive findings (Grant 2003). The field is still a fragmented one and consists of a contradictory body of research (Ramanujam, Ramanujam and Camillus, 1986).

The findings from the above literature strongly reveals that strategic planning has a major role to play in the modern organisation. Strategy workshops as strategic episodes (Whittington, 2006) drive strategic planning processes and play a key role in establishing a degree of emergence within formal strategic planning. This suggests that to understand how executives interact with each other a number of strategic phases of the process would give deep insight into what actually happens in strategic planning. This thesis therefore adopts this notion to examine how strategy practitioners interact with each other in a series of strategic phases within strategic planning process. Therefore, in order to gain a better understand of the strategic planning process the thesis will follow the wider definition of strategic planning based on the strategy-as-practice perspective. The strategic planning process in this thesis is

viewed as a formalised form of planning practice, i.e. the strategist has been tasked with creating a strategic plan.

Understanding how and why a strategy is formed and results in a particular outcome of course complicated due to the multifaceted nature of the process with a variety of influences that are bound to emerging over time. These influential factors can be seen to include political, cultural, cognitive and visionary processes as well as the balancing of internal and external environmental issues plus the ability to navigate between these configurations (Sminia, 2009).

To add value to our understanding of how strategy is formulated, a sense making view is used to gain critical insight. Drawing on the work of Weick (1995; 2001) as well as Weick and Sutcliffe (2007), this research focuses on the notions of leadership, sense making and re-sense making in the practice of strategy formulation. By doing this, this research draws attention to a variety of mechanisms that influence the strategists view of what the organisation needs are on the context of and how this view evolves over time.

## 2.11 Innovation

The nature of the strategy formulation process within this research takes place within the prism of innovation for a multinational that functions in the UK utilities sector. The following sections now reflects on academic understandings of innovation in this complex environment.

Innovation is seen as an important mechanism that ensuring economic competitiveness and growth (Metcalfe, 1998; Storey and Salaman, 2005). Academics and practitioners recognise innovation is an important asset in modern business development but uncertainty remains on how firms might innovate successfully (Droge et al., 1994; McEvily and Chakravarthy, 2002).

The complexity of innovating successfully is further emphasised by Gourville (2006), who estimates that the failure rate of the successful launch of innovative product ranges between 40% and 90% depending on the industry. Yet distinguishing why one innovation might be successful over another is unclear.

Historically innovation has not been a popular focus of academic research. However, research on innovation has increased from 2 per cent in 1960 to 20 per cent in 2002. This shows the growing importance of understanding the innovation process (Fagerberg, 2005). It is recognised that there are large gaps in understanding the practice of innovation activity (Fagerberg, 2005).

The barrier to better understanding of innovation is that there appears to be no single discipline which has a monopoly on all aspects of innovation. In a similar way to strategy, insights are made from a variety of disciplines and many inferences are made through an interdisciplinary lens. Brown and Eisenhardt (1995) note:

*'large and fragmented literature that has not been tied together to create cogent understanding, it is difficult to grasp what is actually known'*

This comment is still very true.

It could be said that this multidisciplinary approach is a requirement because of the very fact that the environment that innovation inhabits is externally complex. Consequently an unrestricted search of academic publications produces tens of thousands of articles on innovation with various interpretations and focus (Crossan and Apaydin, 2010, Wolfe, 1994; Van De Ven and Polley, 1992). Within this very large volume of knowledge there is also a created degree of fuzziness that extends even to the basic concepts used (Fagerberg, 2003). However there are a number of common themes that emerge from the literature (Jaskyte, 2011).

TABLE 5 COMMON THEMES IN INNOVATION LITERATURE

<b><i>Social effects</i></b>	individual, firm, industry, consumer group, region, nation
<b><i>Innovation type</i></b>	product, process, business model, culture
<b><i>Nature of the innovation</i></b>	Radical, incremental, expansionary, evolutionary, developmental, technological, product, process, administrative, transfer, imitator, first mover, invention.

Some authors stress the importance, before implementing or initiating innovation of differentiating between the various interpretations of innovation (Subramanian and Nilakanta, 1996). Kline and Rosenberg (1986) denote when discussing innovation itself that:

*'it is a serious mistake to treat innovation as if it were a well-defined, homogenous thing'.*

The definitional issue is a perspective shared by many academics. To overcome this, it has been advocated that different communities of research to work together in order to help in the understanding of this complex phenomenon (Hamel, 2006; Adams, et al., 2006; Fagerberg, 2003).

On an organisational level, Abrahamson (1996) defines innovation as *'new to the state of the art'* what he means is, the development of something without precedent. However others define innovation as something new to the organisation (Van de Ven and Poole, 1995). One definition that is very practical is to see innovation as something that can be taken from situation and implemented into another organisation. If the idea is new to the recipient organisation then it can be seen as an innovation.

Looking at the innovation process, Kline and Rosenberg (1986) take yet another view. They express that it is easier to define what innovation is by highlighting what it is not. The Kline

and Rosenberg (1986) created a linear model (Figure 1) bringing to light the inaccurate perception of how the innovation process is perceived, one which is often taught to undergraduates in the engineering disciplines.

It is based on the assumption that innovation is an applied science, a four stage, linear process. Steps are conducted in sequence and the result is an innovative solution is produced. This perception views the innovation process as a clean, straight forward, step by step progression by which the desired outcome is achieved.

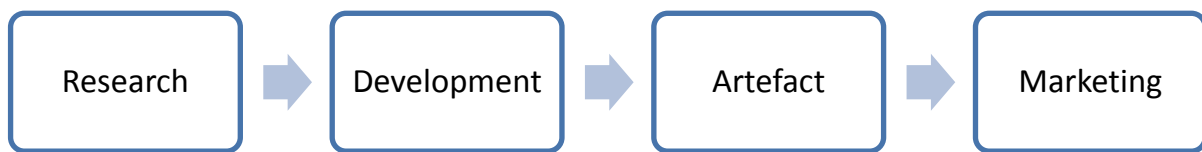


FIGURE 1 LINEAR INNOVATION MODEL

As Kline and Rosenberg stress there are two key issues with presenting innovation in this way. Firstly, this type of innovation is in the minority, with the majority of firms innovating as they see a commercial ‘gap in the market’ and tend to start by reviewing and combining existing knowledge to fill that gap. Secondly, the linear model ignores the iterative processes that occur throughout the innovation process (Figure 2). Such iterations include incremental improvements that are made before a product or process is launched or the development of new innovations that were not perceived at the outset of the project.



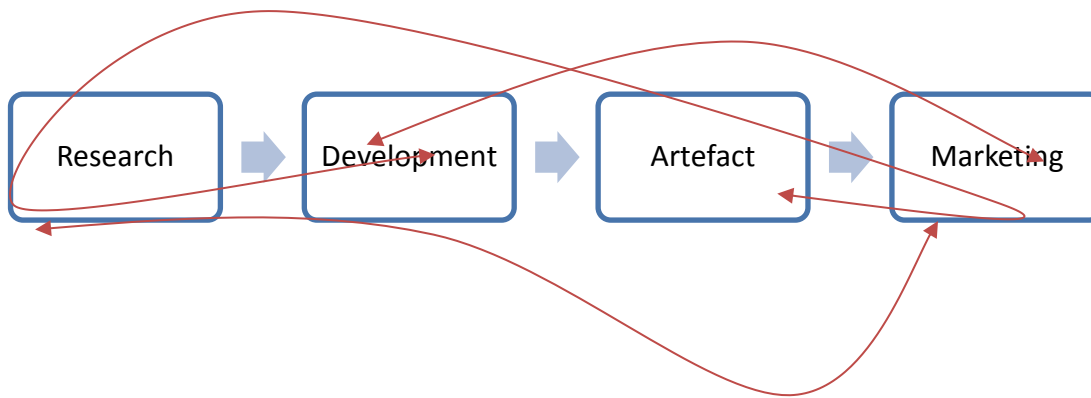


FIGURE 2 ITERATIVE PROCESS OF INNOVATION

A factor that is not considered in the Kline and Rosenberg is the role of the innovators in this process. As it is individuals and teams that are susceptible to their surroundings that have the greatest influence on how and innovation is developed. The following sections reflect further on both technical and social (administrative) innovation as well as the management of innovation.

## 2.12 Technical innovation

Research on technical innovation has emphasised the importance in the growth of technology in conjunction with a firms research and development practices. The dominant perspective is that firms which concentrate on technological innovations will be at the cutting edge of industry (Leblanc et al, 1997). This stream of literature stream focuses on a level removed from the individual, with emphasis given to the steps taken to achieve a specific goal. Technical innovation (in terms of product or process [processes regarding product development]) is focused on consumer wants and needs and the steps taken that will

facilitate that need. This emphasis on the technical takes little consideration of the social dimensions and thus has a myopic view. The development of innovations of any kind involves much more than just science and technology they also include the makeup of the team and how people interact with each other (Porter and Stern 1999).

## 2.13 Administrative innovation

Administrative innovation as defined by Birkenshaw et al. (2008) as:

*‘the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further the organisational goals’*

Administrative Innovation research focuses on the adoption of innovative organisational structures and support mechanisms that promote and or inhibit productivity and efficiency of the workforce and organisation. It considers and emphasises the importance of organisational structure, cultural conditions, administrative systems and human relations where a major change to the organisation itself is taking place (Cooper and Kleinschmidt, 2010; Birkinshaw et al., 2008). It is internally focused, with priority given to the support mechanisms of the organisations and the internal workings of the firm for example hierarchies, structures, HR policies and practices. In other words, if an organisation decides

to implement a radical change to its operational practices that will have ramifications across the whole of the organisation, administrative innovation is the terminology used to analyse and discuss the issues as a result of these changes.

However whilst there has been a focus on the types of innovation that can occur, the management of innovation itself, as an independent activity, has received little academic focus (Hamel and Mol, 2008). As McCabe (2002), states:

*'what is required is an understanding of innovation as part of a far more complex social process: interrelated to the way in which interpret, act and ascribe meaning to the world'*

The management of an innovation team will have an impact on the innovative ability of the organisation. The development of a culture that is supportive to innovative practices of the team is seen as vital to the success of long term innovation strategy (Deshpande et al., 1993; Herbig and Dunphy, 1998; Jassawalla and Sashittal, 2002). This is seen as a key area for further academic research (Jassawalla and Sashittal, 2002).

Due to the nature of innovation and the broad spectrum of diverse topics that it encompasses, priority it is argued need to be given to the softer side of innovation. That is the management of innovation as opposed to the harder side considered the development of technology. The

structures required to facilitate innovative practices within teams and organisations has been highlighted to be an underappreciated subject area with serious implications for innovation outcomes. This will now be discussed.

## 2.14 Management of Innovation

The management of innovation can be seen as an umbrella term that includes the study of: managerial innovation (Kimberly and Evanisko, 1984), organisational innovation (Alange et al., 1988) and management innovation (Abrahamson, 1991). Although in many cases the management of innovation is not overtly discussed, it is often implied across many of these papers as they highlight the requirements of the individual/team to facilitate and drive innovation. As noted by Birkinshaw et al. (2008) there is:

*'a need to increase the emphasis on human agency in management  
innovation while not losing sight of the contextual dynamics'*

This suggests that the individual or team and the organisational context are the critical success factors of successful innovation. Porter and Stern (1999) suggest innovation involves much more than just science and technology it also includes the team dynamic and how stakeholders internal and external to the innovation team interact. When investigating product innovation Brown and Eisenhardt (1995) highlight the importance of human agency

and the mechanisms that govern when conducting innovation in practices, as these have direct correlation on the level of innovation output. This research showed the highly relevant roles team leaders and senior management had in providing an environment through which innovation could develop. Although each role provides a different function in the provision of this environment, each has an effect on the level of innovation output.

The team leader is seen to have a crucial role and is critical in any innovation project (Clark and Fujimoto, 1991; Joyce, 1986; Katz and Allen, 1985). Team leaders with considerable decision making responsibility, organisation wide recognition, and purchase at a high hierarchical level have been shown to have direct impact on innovation quality (Ancona and Caldwell 1992). The authors also highlighted that the ability of a team leader did not stop at managing the innovation team, but in the leader's ability to obtain resources, manage external impressions and attract highly skilled project team members.

Further to this, research on senior management has shown them to play an integral supportive role in the management of innovation (Cooper & Kleinschmidt, 1987; Gupta & Wilemon, 1990; Zirger & Maidique, 1990; Imai et al., 1995). Imai et al., (1995) push this further however and suggest that not only should senior management practice traditional roles but also engage in 'subtle control' what they mean by this is that they have the ability to clearly communicate requirements while allowing degrees of freedom for creativity to flourish.

Other management practices related to innovation have also been considered such as the role of management during failure. Innovation trauma is a term coined by Valinkangas et al., (2009); it refers to the impact of failure on an individual or team within the innovation process and how this trauma may cause self-esteem issues which has been seen as a major factor in maintaining a productive innovation team (Kessler and Chakrabarti, 1996). As Anderson (1992:17) outlines when describing the result of a negative innovation environment:

*'Good ideas and proposals are frequently stifled in a morass of bureaucracy and complacency or, even worse, never come to the attention of those in power for fear of failure through rejection'*

The management of failure has been recognised in other streams of management practice (Burgess, 1998). However due to the high failure rate of innovation projects, how management is able to deal with such a recurring issue is likely to be of critical importance and therefore is likely to be an area of academic interest.

However while certain practices have been analysed rigorously by academics, generally there is still limited academic focus on the management skills and practices that are required to facilitate innovation outside of leadership management (Joyce, 1986; Katz & Allen, 1985; Brown and Eisenhardt, 1995; Valinkangas et al., 2009). There are difficulties in observing, defining and identifying system borders in this area and these are seen as major barriers to further investigation (Alange et al., 1998). However research into the management of

innovation and the mechanisms and structures required that create conditions to innovate are also of vital importance (Mumford and Lucianan, 2004).

In this thesis I combine the emerging perspectives on management innovation with design science in order to investigate the nuances of strategic planning, development and implementation in an organisational setting. Together, these two perspectives span the fields of management, strategy and innovation and are, therefore, appropriate and relevant for the particular focus of this study. Combining these complementary, but hitherto disconnected theoretical perspectives, enables this research to account for the diverse set of social and environmental influences which may impact on a firm's innovation strategy whilst also factoring in the role of managerial agency during this process. In the next section, I will elaborate on the difficulties associated with creating strategy and innovation in multinational conglomerate – the research setting of this study.

## 2.15 Multinational conglomerates

BULBz<sup>1</sup> is an operating unit of BULBz Group. As such this resulted in a literature review being conducted to better understand the context in which this research was taking place. A multinational conglomerate (MNC) is an organisation that manages production or delivers services in more than one country but has a central unit in a single country (Pitelis and Sugden, 2000). There are a number of structures by which a MNC can be based upon. These include

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<sup>1</sup> BULBz is an acronym given to the organisation in which the empirical study of this research is based.

the matrix structure, the transnational model, global account management structure and the functional structure. BULBz Group and BULBz structures both resonate with the functional structure and as a result we will now consider the positives and negatives of this design.

A functional structure as defined by Hill and Jones (1998) is the grouping together of common expertise and experience that use the same resources or are targeting a similar market. There are a number of advantages to this structure. Firstly the grouping together of individuals who perform similar tasks allow them to learn from one another becoming better (more specialised and productive) at their jobs. Secondly due to common expertise in a specific area an element of self-monitoring can occur that can reduce mistakes and manufacturing cost while increasing operational flexibility. Thirdly, are the increased levels of control afforded to management within the functional structure as opposed to creating several different hierarchies that can occur in a matrix structure?

There are also a number of issues with the functional structure. In adopting this structure a company increases its horizontal differentiation when undertaking complex tasks. Although this structure is suitable for an organisation that remains true to its core business, it is unable to maintain a high level of control if the company diversifies as it does not have to ability to coordinate these activities (Woolridge and Floyd, 1990). Communication issues exist within this functional structure as hierarchies evolve and become isolated from one another. This results in communication difficulties when coordinating activities due to different time and goal orientations (Rumelt, 1974).



## 2.16 Innovation and Multinational conglomerates

In reviewing innovation in the setting of an MNC, it has been suggested that innovation acts as a critical source of added value (Dellastrand & Kappens, 2011; Almeida & Phenes, 2004; Hallin & Holmstrom, 2011), since it can be used as a strategy to differentiate from competitors or reduce manufacturing costs for the firm. Most research on innovation in MNCs takes the perspective that innovation in such structures is dependent on the development of knowledge (e.g. Almeida & Phenes, 2004; Pearce, 1999). However, where this knowledge originates is a source of contention, with some authors proposing the subsidiary as a source of innovation, whilst others propose that it is the headquarters that holds the key.

Johnson and Medcof (2007) and Phene and Almeida (2008) both contest that subsidiaries are the best potential source of strategic advantage through technical innovation, with Headquarters (HQ) only playing a limited role, especially when the subsidiary has already established itself within the organisation. They argue that this occurs as it is in the subsidiaries that competences in distinct and specialised technology (beyond that of the knowledge of the headquarters itself) is held and demonstrated. Phene and Almeida (2008) noted that potential areas exist both internal and external to the MNC from which a subsidiary can assimilate knowledge to incentivise and promote innovation to varying extents. Internally these include the subsidiary itself, HQ and other MNC subsidiaries, while externally they consist of other firms in the host country of the subsidiary, firms in other countries and other firms within home country of the HQ. Dellestrand and Kappen (2011) extend this proposition by outlining how subsidiaries gain autonomy for innovation over time, by initially seeking resources from

HQ before they become centres of excellence in their area. They highlighted that subsidiaries need to become a centre of excellence in order to solidify its position within the MNC, as it may see other subsidiaries under the HQ umbrella as competition for resources supplied by the MNC, and there is thus greater motivation for innovation within MNCs in order to attain this status. Demonstrating this, Pearce (1999) found that subsidiaries tend to focus on product (and to a lesser extent process) innovation, highlighting that headquarters has very little input in the development of any technical innovation other than that of facilitating in knowledge transfer across the MNC.

Whilst agreeing that subsidiaries are the main source of innovation in MNCs, Johnson and Medcof (2007) concluded that whether or not innovation actually occurs at this level is determinant on the organisational structure, with macro-level dynamics and mechanisms acting to promote or inhibit proactive subsidiary innovation. Dellestrand and Kappen (2011) took a similar perspective, stating that HQ can aid subsidiaries innovative effectiveness and efficiency through its use of formal hierarchical power from both inside or outside of the organisation. HQ thus has the ability to support specific resource consuming projects while subsequently shielding them from external markets in the hope of further increasing the profitability of MNE as a whole. They further claim that HQ involvement in the innovation process is of vital importance as it provides organisational legitimacy and increases its trustworthiness with subsidiaries due to the fact there is often intra-firm competition for headquarter resource.

Further to this, innovation in a single subsidiary is likely to be inadequate if the MNC cannot benefit from this elsewhere. There have been conflicting views of the roles of subsidiaries. Early literature in international strategy views the subsidiary as appendages or as largely independent entities (Stopford & Wells 1972), but more recent research (built on the works of Ghoshals & Bartlett, 1990; Hedlund, 1986; and Birkinshaw & Hood, 1998) claim that the MNC should be viewed as a global differentiated network, accentuating the interdependencies of each subsidiary within this MNC network (Phene & Almeida, 2008). Phene and Almeida (2008) explained that whilst subsidiaries do play an important strategic and organisational role in the MNC, they have few technology linkages with the rest of the firm and as a result need the HQ to facilitate and support the transmission of innovation throughout the organisation.

Dellestrand and Kappen (2011) corroborate this view, stating that the HQ manage the governing structures and processes that control the transfer of innovation across MNC subcomponents. Hallin and Holmstrom (2011) take a similar perspective and suggest that the MNC ascribes superior technologies and management skills that allow it to compete successfully against indigenous firms. Through the intra-organisational transfer of knowledge, subsidiaries benefit from the knowledge and competence developed within different parts of the MNC and that this gives the MNC as a whole a competitive advantage. However, Hallin and Holmstrom (2011) note that HQs can have difficulty in the transfer of innovative knowledge, underlining the complexity involved in conveying all the relevant details of the innovation from its operations. They highlight that the transfer of this knowledge is vertical rather than lateral and that unless the HQ invest time and energy into the transfer of this

knowledge little or no transfer will take place. Even if the firm does invest in transferring knowledge, the authors argue that intra-organisational transfer of this innovation is too difficult for the MNC as a whole to take advantage of due to the complex nature by which innovation is created, in particular process innovation which is inherently tacit. The authors' findings also have some important managerial implications, as they noted the paradox in which an MNC is situated when it comes to knowledge transfer. This paradox refers to the difficulties managers face in balancing the exchange of knowledge within specific business relationships while preventing the leakage of valuable information to its competitors. This unwanted diffusion of innovation knowledge is especially challenging when third parties or outside bodies are involved.

MNC's use various constructs to facilitate innovative practices such as the hub, network and federation structures (Gassmann and Von Zedtwitz, 1999). The hub structure is defined by its strong relationships between HQ and each innovation team, and weak relationships between the innovation team and other departments (Johnson and Medcof, 2007). Whereas the federation structure is defined by its weak relations between HQ and the innovation team, and weak relations among the innovation team and other departments (Gassmann and Von Zedtwitz, 1999). The network structure is defined by its active and flexible links between the HQ and the innovation team, and also among the other departments. Coordination in the network structure is achieved by continuous interaction of management and teams among the various departments and HQ using flexible and varied coordination mechanisms.

Baird et al., (2001) took an alternative perspective to innovation in MNCs, investigating the complexities of innovation from that of the human, personal and team perspective. They propose that it is not at HQ or subsidiary level that innovation can be controlled but at team and personal level due the tacit, innate nature of the process itself. This would suggest that a micro level analysis is required to understand whether the mechanisms put in place by HQ to facilitate knowledge transfer for innovation projects are appropriate. A study that considers the humanistic aspects of innovation within MNCs - a perspective already stated to be of interest and requiring further investigation

## 2.17 UK Utilities

Academic research on the utilities sector that focuses on innovative practices of the sector is limited. Research that has been conducted has focused on the privatisation of the utilities sector and what effect this has had on a societal level and environmental issues with regards to the sector. Few studies have been found that investigate issues relating to innovation and the management of innovation in the utilities sector.

However there are a number of governmental and industrial papers that have focused and discussed innovation within the utilities sector. It is clear that the utility sector has distinct qualities. What is very apparent is how modern society has become dependent on the commodities that it provides in order to function. As Hutton (1998:24 cf. Van Vliet, 2005) explains when utilities fail it:

*'rams home to ordinary people what only exists as a theory. Electricity [for example] is not a commodity like a designer dress where an interruption of supply poses no wider consequence; it is a precondition for successful modern life'*

Secondly is how a wide range of modern technology, such as the light bulb, fridge freezer and oven, would cease to be of any use if the provision of utilities failed. As a result the manner in which these resources are provided and practices that are put in place to safe guard and improve the efficiency by which they are done so, is of high importance to ensure their longevity and consistent supply.

Innovation activity varies significantly across the UK industry (Hellebrandt, 2007). This is due to the various characteristics of the firm and market make up (ibid). According to the CIS4 (Hellebrandt, 2007) survey innovation practices within utilities sector are inherently unique when compared to other UK industries. However in other industries (Manufacturing, mining, plastics, chemical, transport, retail, hospitality and financial intermediation) focus on wide innovation<sup>2</sup> as well as product and process. The utilities sector wide innovation is given greater focus while both product and process is rated among the lowest out puts across the UK. When comparing the last three CIS<sup>3</sup> surveys (CIS2, CIS3 & CIS4), innovation activity in the

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<sup>2</sup> As defined by CIS (2007), 'wide innovation occurs when an enterprise makes major changes in business structure and practice, including corporate strategy, advanced management techniques, organisational structure and marketing.'

<sup>3</sup> The Community Innovation Survey is a survey conducted every four years by EU member states to measure progress in the area of innovation.

utilities sector is seen to be in decline with an estimate 38% reduction in innovation activity across water, electricity and gas.

## 2.18 Conclusion

In this chapter the various theoretical lens that exist in the strategy research area have been identified and discussed which has resulted in a better understanding of the complexities of the research area. This complexity has been unpicked and has highlighted a need for more micro level understanding of how strategies are created. It has also highlighted the emergence of the Chief Strategy Officer (CSO) and that this individual has a high degree of influence in shaping future business activities. This literature review has shown that little is known about the CSO and how this individual creates a strategy. However little is known about the practices and processes that influence the strategy formulation process.

This chapter has also highlighted the important need to re-humanise the strategy formulation research agenda. The strategy as design view has been highlighted as one theoretical lens than can add to the ongoing strategy debate. This view reflects the need for organisations to move away from a snap shot, econometric driven approach to strategy formulation and to develop an approach that adheres to building forward and engaging with all elements of an organisation.

This literature review on strategy has highlighted the importance of context in which a strategy is being created. As a result a literature review was conducted that reflect the context of this research that is innovation in an operating company of a multinational organisation that functions in the UK utilities sector. The literature review also highlights the nature of innovation activity in the UK utilities sector. It highlighted the incremental, technologically focused culture that is engrained in this environment.

At a higher level, the literature review also demonstrated the complexity of innovation itself. It highlighted that the high degree of confusion that exists both in academic terms and in practice. It has shown that this confusion is as a result of the varying perspectives and understanding.

This leads to an interesting area of research and begs the questions as to how such research should be conducted. The questions are; how does a strategist strategize for innovation, what are the driving factors or identified tipping points that influence him/her when attempting to strategize for a complex multifaceted phenomenon that fosters a high degree of debate due to its considered importance and poorly defined mechanics? In addition the next chapter sets out how the research on this topic will be conducted.



# Chapter 3: Methodology

## 3.0 Introduction

The main focus of this study is to gain an understanding how a Chief Strategy Officer engages with the activity of strategy formulation. Questions emerge as to how, what and why certain decisions are made and how an understanding of the triggers that define the decisions made can be gained alongside how these decisions impact the formulation of strategy. To research these issues a high degree of knowledge of the local environment was required so that a reliable understandings of why decisions were made could be acquired. In order to contextualise the strategy formulation process, a pilot study was conducted. This used a traditional case study approach. Qualitative methods were chosen so that a better understanding of what was taking place (often in real time) could be achieved. The pilot study lasted one year and the knowledge gathered was extremely useful in building a strong foundation for a larger study, (conducted in years 2 and 3). This larger study adopted a more focused approach, based as it was on the insights gained from the pilot.

The research emphasised an understanding of the micro practices of strategy formulation, and aimed to uncover and discover the mechanisms that influence how strategy is created in practice. To achieve this level of understanding I took the view that I had to be fully immersed into the 'messiness' of the strategy process, in order to share the lived experience of the strategist. To place some order on what was observed a methodology was devised that had

the potential to allow me to observe at the interrelationship between the variables identified as important in both the literature study and from the pilot.

In the main study, the theoretical lens of Activity theory was used as a way of ordering the data and seen as a way of putting order into the inherent messiness. It also provided focus to the process of data collection, contextualising as it does important elements that helped me structure my thinking. The use of this lens also facilitated the analysis of the interactions I observed, enabling me to see links and connections, which gave me insights into the practice of strategy. As such research approach adopts an interpretive paradigm which:

*‘provides a systematic and contextual understanding of collaborative activities within social practice and environment’ thereby providing ‘the basis for analysing complex socio-cultural, organisational and societal setting’*  
*(Bardram, 2000).*

This chapter goes on to provide a more detailed justification of the methodology and methods used in the research. On reflection I view this as being a longitudinal, multi-level, phenomenon led and practitioner orientated piece of work. At the conclusion of the chapter the reader will have a clear understanding of how this research was undertaken. It will also demonstrate the rigour of the methodology adopted. It will also highlight the tools that were used and developed that helped create, impact with the business at the same time as being studied to advancing knowledge about innovation strategy and practice.

The structure of this chapter is as follows. In section 3.1 to 3.7 those methodological concerns relevant to this study are reviewed. Issues surrounding the selection and evolution of appropriate research roles during the research are discussed. Sections 3.8 to 3.11 forms an introduction and justification for the use of Activity Theory as both a lens for theoretical understanding and as a sense making tool.

### 3.1 Philosophical underpinning

Ontology is defined by Easterby-Smith et al., (2005) as the:

*'philosophical assumptions about the nature of reality'*

The nominalist view of ontology understands that there is no one single truth, that all facts are created through understanding and interpretation although this happens within a context where there is some objective realities (critical realism). This is a view I share is that there is no single truth and that individuals will interpret their environment in their own unique way. This having been said I recognize that as indicated there are some stabilities and regularities that need to be acknowledged even though when interpretations may differ from one person to the next. This position posits me close to that of a critical realist. As a consequence, the nominalist perspective was considered as an appropriate platform for this research due to

the complexity and uniqueness of the context and the very different views and interpretations I expected to uncover.

This research takes a social constructionist epistemology. This implies that I do not assume any pre-existing reality and as a consequence but instead aim to understand the way individuals view and understand events within a particular context (Ackroyd, 2010; Bryman and Bell, 2003; Corner, 1991). This suggests that from this perspective I need to decipher and interpret the subjective reality of others as well as develop a meaningful understanding of those actions and intentions so as to make sense of what is taking place within a particular setting. In order to do this it is incumbent on me to engage with the research setting so that I would be able to observe the practice of strategy formulation.

### 3.2 Engaged research

The notion of engaged research is an area of debate in the field of management. A primary focus of the debate reflects, how best to be relevant to practice both in terms of developing new knowledge that would be of interest to academics whilst at the same time acknowledging that this knowledge needs to be translatable to practitioners (Nicolai, 2004; Rynes, Bartunek and Daft, 2001; Starkey and Madan, 2001; Whitley, 1985). The debate on the relevance of research has engendered a wide variety of responses from the academic community with some proponents strongly advocating the need for academia to remain focused on high quality knowledge production and theory generation (Weick, 1989), with others advocating a

more balanced one that produces both advance theoretical knowledge as well as practical impacts for the organisation (Hodgkinson, Herriot and Anderson, 2001; Huff, 2000, Huff and Huff, 2001; Pettigrew, 2000). Yet a third group call for more practical relevance to be the main focus of academic research (van Aken, 2004, 2005; Hatchuel, 2011; Romme, 2003). In this research I intend to achieve an outcome that will advance both theoretical knowledge as well as have some practical impact both with the organisation I am working with and the wider industrial community.

### 3.3 Case study approach

As indicated, the research was designed to uncover the micro activities and actions that facilitate or inhibit the practice of strategy formulation in a single organisation. To achieve this level of insight, a case study approach has been selected as the framework to achieve insights in the desired context. A case based approach was considered to be the most appropriate way to present the findings of this research. The case based approach to research is a commonly used methodology to conduct and frame research. However this has led to a variety of interpretations of what a case study is and how it is used. I will be using the Easterby-Smith et al., (2009:97) definition:

*'the case study as an in-depth look at 'one, or a small number of, organizations, events, or individuals, generally over time'*

Bryman and Bell (2003) suggest that in case studies, emphasis tends to be on an intensive examination of a specific setting, which aligns with what I wish to achieve in this study. Bryman and Bell (2003) also note that case studies are generally associated with qualitative research methods as they are seen as being reliable means by which insight can be generated. Saunders et al. (2000) argue that a case study is a means of exploring existing theory and/or also providing a new source of hypothesis. This point is further emphasised by Welch et al., (2009) who:

*'....conceive the case study to be a research strategy that examines, through the use of a variety of data sources, a phenomenon in its naturalistic context'*

Yin (2003) and Eisenhardt (1989) take what some might see as a rather positivistic approach to case studies that play down, context and uniqueness in order to create generalizable outcomes. Their approach negates the importance of building a socially complex picture that holds many intangible relationships. In contrast Stake (2005) places a large focus on the singularity or the unique nature of a specific case rather the comparable features. Stake (2005) suggests that case studies are to be used to generate issue based or thematic questions in complex, situated problematic relationships. Stake (2005) sees the case study as an intensive investigation, emphasising personal contact, reflection and constant revision of descriptions of people, relationships and processes. In order to achieve this representative narrative of a socially complex situation, context is of significant importance so the reader can interpret key discoveries made as a result of the research.

However criticism of the case study approach suggests generalisations are not always possible (Bryman and Bell, 2011). However there are a MNC's in the world coupled together with many organisations working across the utilities sector both on a local and global scale. Selecting one subsidiary of one MNC in one regional back drop, however random, will not ensure that it is representational of the population of the UK utilities sector, let alone the world, where the variety is even richer. This being the case the use of a case study in this instance has I believe allowed me to:

*'fashion meaning out of events through prolonged, complex processes of social interaction involving history, language and action' (Schwandt, 1998:222).*

### 3.4 The four stages of research

This research study was broken down into 4 major phases beginning in 2010 and culminating in 2014. Two research/data collection phases were envisioned under the titles of pilot, main study, as well as two output stages i.e. industrial output and academic output.

TABLE 6 DATA COLLECTION AND ANALYSIS ACROSS EACH PHASE OF THE RESEARCH

<b>Phase</b>	<b>Step</b>	<b>Primary data source &amp; output</b>	<b>Focus</b>
Phase 1 2010-2011	pilot study engagement and data collection	Interviews and observations	What is innovation for BULBz. The development of relationships and access in the organisation
Phase 2 2011-2012	Primary study data collection	Interviews, observations and participation	Strategy formulation for innovation in BULBz W&G
Phase 3 2012- 2013	Industrial analysis and output from pilot -study	Data analysis, writing, submission and review	Means to improve a unified push on the innovation agenda
Phase 4 2013 - 2014	Academic analysis and output	Data analysis, writing, submission and review	The practice of strategy formulation Development of a deeper understanding of the nature of engaged research

Within this research study two parties were brought together to collaborate and develop a program of research that was to be beneficial to both. Neither I nor the BULBz associates had known each other before and this is reflected in the methodological approach taken.

The collaborative nature of this research required both myself and BULBz to agree on a framework and an area of interest to be investigated. Innovation was agreed as an initial research focus that would lead to a further larger study. The complexity and brevity of this subject area allowed for both parties to find a middle ground on from which a larger study



could be developed and dual output achieved which would later result in an investigation into strategy.

This approach is in contrast to a pilot studies in the usual sense of the word, where the focus is to evaluate a predefined theoretical framework prior to implantation of a full scale research agenda. The nature of this pilot was to foster a high level of engagement between the researcher and the institution involved as well as co-developing a research focus. This was as a result of reacting to the context within which the study was taking place. Reflections and justification for the use of these three forms of engagement are presented.

### 3.5 Pilot study data collection and analysis

A pilot study was planned to develop an understanding of how innovation was understood both across the organisation and the hierarchy. The aim was twofold:

1. Gain understanding, develop a report on my findings and deliver this back to the organisation
2. Develop contacts, gain legitimacy and build awareness of the research I was conducting with the organisation.

The primary method for collecting the data in this pilot phase was through face-to-face interviews with persons identified to have some form of working practice with the

organisations innovation activity. The aim was to develop an understanding of each participant's view of what innovation meant to them and the organisation (King, 2004). To achieve this, my ability to feel my way through the interview was important. This ability to manage the interview involved obtaining trust, being aware of social interactions, using the appropriate language, choosing the location for the interviews and the recording the interviews in such a way that made the interviewee feel comfortable (Easterby-Smith et al., 2005).

I was also interviewed by the organisations marketing department, who subsequently wrote a profile on my and what I was doing. This opportunity was used to encourage cooperation with the research project and to highlight in a broad sense what the aims and objectives of the research were. It was used as a means to reduce barriers generally associated with academia, where academic institutions were seen as 'ivory towers' I was keen to stress the potential benefits of the project to BBUSL and its innovation practices.

The findings that were through important were then made available on the internal intranet and the external internet by the organisation. This caused some initial ethical concerns form me as I had conducted the interview with the understanding that it would be internal use only. I consulted colleagues and my PhD supervisory team on the matter and it was felt that this was not necessarily a negative thing but would be construed as a positive. They argued it could be seen as a form of impact, highlighting an example of academic and industry engagement. 23 participants took part in the interviews (table 3.0 outline of interviewees),

some of these individuals I had already met during my site visits, while for others the meeting was our first encounter. Due to timing issues, two interviews became phone interviews. The identified directors were interviewed first. At the end of each interview permission was sought to engage with key personnel within their hierarchical structure. Although I contacted each individual myself, I felt gaining permission to engage with their team was important. This approach was then continued as I proceeded through the organisation. Many of the interviews were carried out in the organisations two main buildings for utility support and management. However two meetings were held on the site they were currently operating on, another two were held in the organisations head office in London while two more were held in cafes. All of the interviews were held where the participants would feel most comfortable.

TABLE 7 OUTLINE OF INTERVIEWEES

Division Level	Water and Gas	Cabling & Offshore Transmission	Overhead line and Transmission	Innovation Hub
MD	Yes			
Directors	Yes	Yes	Yes	Yes
Operations managers	Yes	Yes	Yes	Yes
Technical managers	Yes	No	No	Yes
Gang supervisors	Yes	No	No	Yes
Gang members	Yes	No	No	Yes
Technicians	Yes	No	No	Yes

Guided by the University of Leeds protocols, research approval was gained from the Leeds University Ethics Committee. A series of steps were then taken to ensure that each participant fully understood what they were doing and why they were doing it. Prior to the interview each participant was presented with a document that outlined the intentions of the research, recording methods and debriefing process, which they subsequently signed prior to the start of the interview.

Semi-structured interviews were chosen for both data collection purposes and to build a rapport with various stakeholders throughout the organisation. The primary benefit of conducting these interviews was that it gave me a higher degree of flexibility when engaging with participants and helped me to pursue interesting lines of enquiry that arose in the engagement. Moreover it was an important facilitator in the identification of interesting research opportunities that could engage with dual impact agenda of this research partnership. I took a flexible approach to the interview process, using judgement to ask some questions while leaving others out (Lee, 1999). Due to the conversational style of the interview I was able to immediately clarify specific points throughout the engagement, which allowed for a deeper understanding of unforeseen issues that may not have been apparent from the outset (Lee, 1999). A limitation of this approach was noted as being that I was often unprepared to engage fully in conversations where I had little or no knowledge of. Other limitations noted were the difficulty in some instances to keeping the interviews focused on topics that were of interest and importance to this research.

I attended a meeting with head of innovation for UK water regulation and the Pipe Industrial Guild conference. This event helped in my development of a holistic view of innovation across the water sector. At this event I was able to engage with a number of actors across the water supply chain. I had requested meetings with similar people and conferences in both the power and gas sector to complement the findings I had made, but nothing came of this request.

The interviews were all recorded; I also where possible took notes. On two occasions the interviewees were not comfortable with the use of the recorded in these instances I took more detailed notes, these notes generally consisted of follow up questions, interesting insights and changes in mood/tone. Interestingly those that did not want the recording were from the same division and had similar views on innovation and what it meant for the organisation. I had hoped to delve deeper into why they did not wish to be audio recorded, but the opportunity did not arise. I speculate that this behaviour was due to the department who had sponsored the research, being seen as competitors for internal funding and as a consequence I was seen as rather threatening.

Self-directed observations were also conducted; personal notes on the recorder, written notes and photographs were used to capture data. Secondary data was also collected in the form of confidential reports provided by various interviewees, information posted on the organisations website, marketing booklets and information posted by the media.

The interviews were initially listened to and along with the notes taken 97 mapping exercise were conducted (Figure 3). This exercise helped in the development of an initial understanding of the organisations innovation landscape. Along with personal sense making activities, colleagues were invited to engage and debate my thoughts at the time. This proved very fruitful with insights being made through engaged scholarly deliberations. As a consequence I began to audio record these conversations to jump starting thinking in the report writing phase. Although this process was slow, deeper understanding the activities proved invaluable to my understanding of the context in which I was going to go on to research.

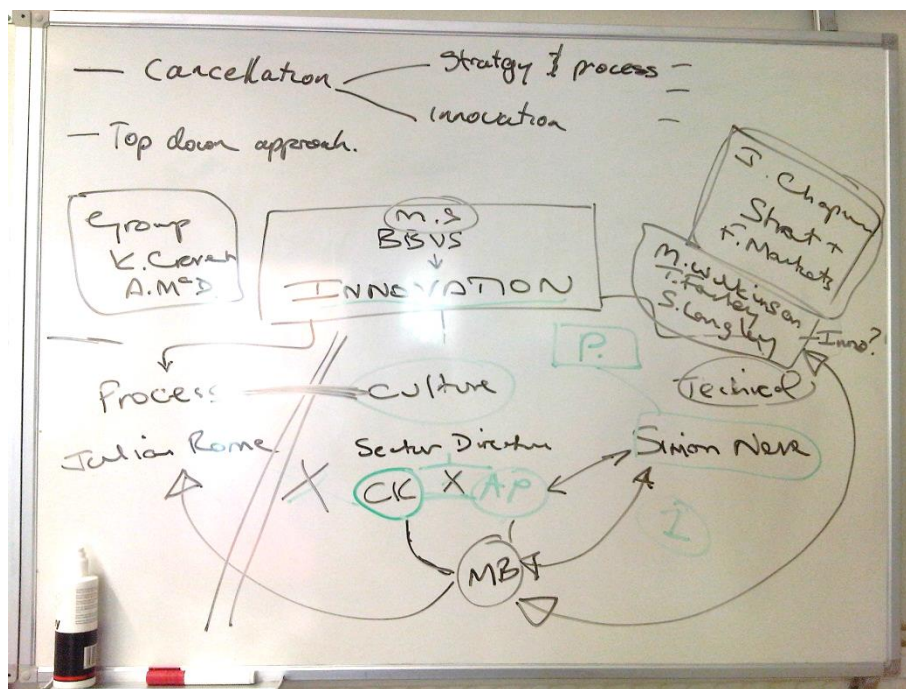


FIGURE 3 MAPPING EXERCISE

Following this process, each interview was transcribed and I became familiar with the use of Nvivo software to collate and synthesis my findings. However having experimented with Nvivo, I felt more comfortable coding the data manually. I then used a standard mapping software (FreeMind) to build themes using an open coding approach (Strauss & Corbin, 1998). Due to the limitations of the mapping software I then began to use a pen, paper and a highlighter. Through this method I began to slowly build a picture of the organisation innovation landscape.

Through the development of a report on innovation in collaboration with the senior manager for innovation a clear perspective of what factors influenced both activity and perspectives emerged. A draft document was subsequently distributed to the directors of the organisation seeking feedback. The feedback received was then used to fill in the gaps of the report. This process assisted in the development of relations as well as my understanding of the context in which I went on to conduct the main study. The completion of this document gave me a holistic view of the innovation practices within the organisation. It provided both official drivers and barriers external to the organisation, as well as hidden '*off the record*' tensions that existed internally. These hidden tensions often came through open dialogue with that they were being disclosed in confidence. What was highlight were the tensions that existed between individuals. There were often at a personal level and often served to restrict the development of innovation output the organisation was seeking to develop. These findings were not added to the report, but upon reflection were helpful following the strategy process was completed and offered an insight into why certain decisions were made.

### 3.6 Main study data collection and analysis

The tools used for data collection included those practiced in the early study. These were interviews; the collection of reports; non-participatory observations; field notes; and desk research documents. However a key difference here was that, upon the request of the organisation I was invited to participate in the strategy formulation process. As a consequence I became an embedded researcher (Pettigrew, 2003; Van de Ven 2007; Anotonacopoulou, 2010). This gave a particular perspective on my understanding of the practice of strategy formulation.

The transition made from non-participant observer to an embedded researcher marked a distinct phase in the research and a change in how I would view the practice of strategy formulation as I now had an opportunity to share the experiences of the process more closely with the Chief Strategy Officer. These insights I judge would not have been possible if I maintained a more distant vantage point and used popular modes of data collection such as observing and reporting to understand what was taking place. An analogy I might make would be using a computer game to learn to drive but the actual activity of driving in reality can be somewhat different in as much as what actually takes place.

Participant observation was utilised during this study. This technique allowed the researcher to observe the *'evolution and unfolding of social actions through time and across situations'* (Denzin, 2009:185). It also provided an opportunity to uncover accounts which may not have



been available by more formal methods (Anderson, 2009). Gold (1958) and Burgess (1984) suggest that title 'participant observer' is an umbrella term covers two methodological techniques for data collection: complete-participant and complete-observer. The complete-participant can be further disseminated into the complete participant and the participant as observer:

- The complete participant, conducts a fully covert research methodology
- The participant as observer, conducting a fully immersed, overt methodology

Similarly the complete observer can be the observer as participant and the complete observer:

- The observer as participant, conducting an overt superficial participant role.
- The complete observer, conducting a fly on the wall type of study where the researcher does not interact with proceedings at all. (Burgess, 1984)

Norris (1993) developed this, proposing a visibility aspect that creates a typology which can map on top of Gold's scale (Table 8)

TABLE 8 NORRIS TYPOLOGY AND THE FOUR FORMS PARTICIPANT OBSERVATION

	<b>Active (Participatory)</b>		
<b>Covert</b>	<b>Spy</b>	<b>Member</b>	<b>Overt</b>
	<b>Voyeur</b>	<b>Fan</b>	
	<b>Passive (Observatory)</b>		

As an overt, participant (active) observer my main aim was to gain first-hand experience and have an ability to explore a company's social and cultural setting (Atkinsons et al., 2001; Kemmis and McTaggart, 2005). Through this approach I was able to gain a high level of insight of the internal workings of BULBz, allowing me to understand specific encounters and events in more meaningful context (Jorgensen, 1989; Tedlock, 2000).

At different points over the course of the strategy formulation process in which I was an active participant the role I played moved between spy, member, voyeur and fan depending on what was taking place at the time. The role I took was often driven by cues from the CSO. Often my role was an amalgamation of some of such as member and fan, often taking place without my knowledge only to become apparent upon reflection.

The strength of this style of research is that I will be able to understand the meanings of underlying social activities more easily. In this approach I feel I had a far better understanding of '*what it means*' to be a strategist and the impact that the member had on a particular social group. While being a complete participant does sometimes have identified risks such as far less freedom to move around an organisation and being able to engage at will (Schatzman and Strauss, 1973; Pollert, 1981). However as the focus of this research was to understand the practice of strategy formulation and the relationships developed in the pilot, specifically those created with the CSO, these limitations were not seen as issues that would be limiting.

One consequence of this focused view was that I was predominately viewing the actions of a small group. This did limit my attempts contrast views and perspectives of what was taking place outside of the social group as noted by Cunnison (1966). In other words I recognised that I was not always able to understand to as great a degree of depth the views of individuals who may well have had alternative opinions to that of the Chief Strategy Officer due to lack of access to those individuals.

Some of the more general downsides of my research engagement, helping to change the process whilst being part of it was a problem of going native. I did go native a little, reflecting on this it is probable that I invest emotionally in what the CSO was trying to achieve. Perhaps more specifically, a greater limitation to the research was being seen to be the ally of CSO. This may have influenced the responses I received and the access I was given so that a more rounded understanding of how other actors viewed the process would have been especially useful here. However due to the high degree of trust coupled with the high degree of praise received from the report created this issue was seen not to have been a major problem in relation to the insight I was able to gain. A danger of being overloaded with work and becoming somewhat of a 'dogs body', with a work load so high that I would not have the time to observe, understand and articulate what was taking place in a meaningful way. As a consequence lessons from other types of study such as ethnography and action research were useful guides as to how to engage with this type of research platform (Venkateswaran and Prabhu, 2010; Easterby-Smith et al. 2009; Denzin, 2009; Van de Ven 2007; Pettigrew, 2003; Heron and Reason, 1996; Schein, 1995; Rapoport, 1970; Whyte, 1955; Lewin, 1946).

Consideration was given to the type of role I would be performing, for example, researcher, consultant, strategist or novice.

To overcome this potential, a meeting was held with the CSO and my second supervisor. He had considerable industrial experience in strategy development. At this meeting, clear guidelines were set out as to the exact roles the participants should adopt and how the work could best be carried out. Assurances were offered that both academic and industrial outputs must be seen to be on of equal importance and both parties needed to be given the opportunity to achieve their interrelated goals.

### 3.7 Framing and coding of data through the activity theory model

As already indicated this research adopted activity theory as both as a conceptual framework and an analytical framework. As the activity theory model was used in a general way as opposed to a tightly defined framework it proved useful to aid which helped me unravel and understanding of phenomena being researched. The activity theory framework has also been helpful in articulating the research problem and refining the research questions. The use of the activity theory as a conceptual framework facilitates the development of understanding across an activity system, both as individual components organisational system under going change as well as indicating how different parts of the system relate to each other (Artemeva & Freedman, 2001).

Other theories for use as a theoretical lens were considered, for example actor network theory (Latour, 2005) and sense making (Weick, 1995). However due to the nature of this research and the desire to engage with the practice of strategy formulation in a holistic sense, activity theory was considered the most appropriate. Crawford and Hasan (2006) state:

*'activity theory is relevant not only where situations have a significant historical and cultural context but also in dynamic situations where people, their purpose and their tools are in a process of rapid and constant change'*

Barab et al. (2004) note when activity theory facilitates the understanding of a subject at work whether they are working in isolation or in collaboration. Activities are not static or rigid, but are constantly evolving so this flexibility is important as in this case have little insight exists as to what may take place so a framework is required that can accommodate change (Nardi, 1996).

### 3.8 Reflection on activity theory

Activity theory was developed by Lev Vygotsky in Russia during the 1920's (Engeström, 2001; Toomela, 2000). It is founded on a need to understand history, society and culture. It is also build upon the understanding that reality is subjective with reality being moulded by each individual's social and cultural experiences (Vygotsky, 1978) as such it has cultural and

historical dimensions. As a consequence human activity cannot be detached from consciousness and or thought processes, as activity and consciousness are intertwined.

This early work also known as first generation activity theory reflects on three variables, the subject, object and tools. In this generation the subject impacts the object through the mediating artefact. The primary unit of analysis for first generation activity theory is the activity.

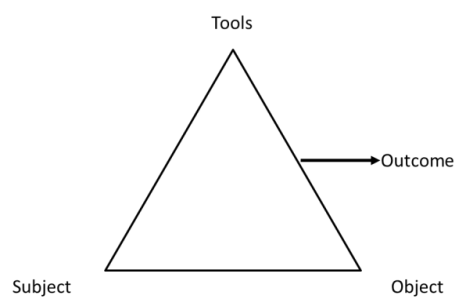


FIGURE 4 FIRST PHASE ACTIVITY THEORY

In terms of strategy research, there is precedent for the use of the activity theory frame work to better understand strategy. Jarzabkowski (2003) has used the first generation of activity theory to better understand the micro process of strategy with specific focus on direction setting, resource allocation, and monitoring and control of the formulation process.

Activity theory seeks to understand the relationship between human actions and the external environment in which they practice. It attempts to paint a whole picture through the concept

of understanding how mediation takes place and what its form is. Engeström (1999) argues that humans can control their behaviour, not only from the inside but also their outside by using and manipulating social and technical artefacts to create an environment that they desire. Where change in an organisation is complicated as was the case in this research seeing how various aspects of the act with system support (or not) the outcomes (success) is seen to be externally useful.

The primary unit of analysis for activity theory is activity; this can be subdivided into actions and operations. Level 1 as represented in Figure 5 shows that is activity driven by an object-related goal. Level 2 is an individual or group action driven by a conscious goal. Layer 3 is operations which is a routine process driven by a condition.

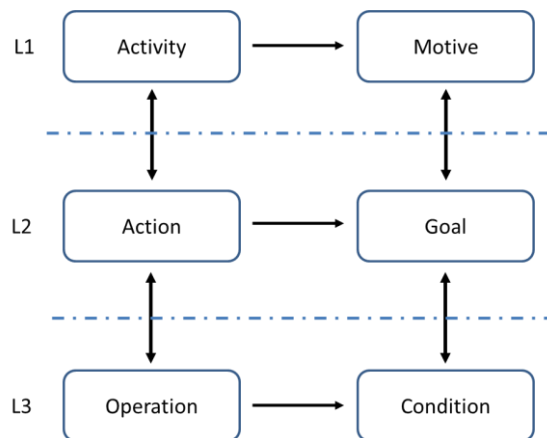


FIGURE 5 THE HIERARCHICAL STRUCTURE OF ACTIVITY (LEONT'EV, 1981)

An activity system has a desired outcome and is hierarchical, i.e. composed of the activities, actions and operations, with the activity itself the smallest unit of analysis to understand how

the work is performed. The activity is orientated by motives and constructed, from goal directed actions which are themselves:

*'realised through operations that are determined by the actual conditions of activity' (Kaptelinin, 1996).*

The activity theory model also engages with the understanding of socially constructed models that can come in the form of mental, physical or social artefacts. As a consequence these principals and its ability to bridge this dichotomy between the social and the physical, the activity theory frame work is useful in understanding and explaining behaviour in action.

### 3.9 The activity theory model used in this research

Building on Vygotskys work Engeström has developed additional levels to expand the first generation activity theory model. Known as the second generation of activity theory Engeström has added: rules, community and division of labour (Figure 6).



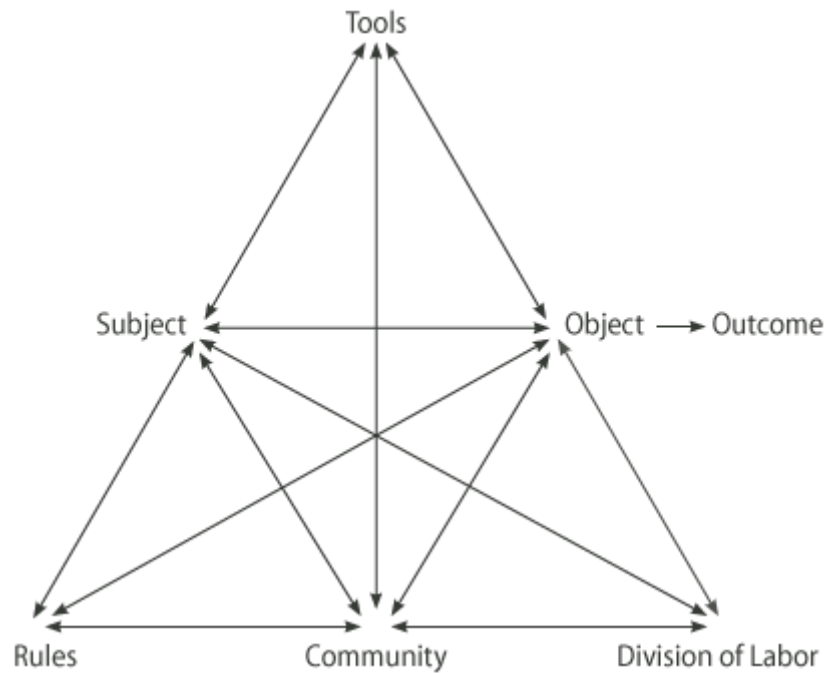


FIGURE 6 ENGESTRÖM'S ACTIVITY THEORY MODEL (1978)

Figure 6 shows that an activity is object orientated and is triple-mediated (Spasser, 2002). This second generation model shows that the activity is subject orientated but is also influenced by additional factors (Spasser, 2002). Second generation activity theory in this environment assists in the understanding of the strategy formulation process. The main elements of the area under study are framed through the lens of the activity theory framework through the sections outlined below (Mwanza and Engestrom: 2003; Chen et al.,: 2008):

- **Object:** why is the activity taking place?
- **Subject:** who is involved?
- **Mediating artefacts:** what means are used in performing the activity?
- **Rules:** are there any cultural norms, rules or regulation?
- **Division of labour:** who is responsible for what and are those roles organised?
- **Community:** what is the environment in which this activity is being carried out?

- **Outcomes:** what is the desired outcome?
- **Actions:** the specific, conscious actions or behaviours that participants undertake in the course of the response. This includes actions of information seeking and sharing, and influence as well as the creation of a physical artefact.
- **Operations:** This is a level below conscious action, these are commonly seen as both physical and mental processes that end in an action.
- **Motive:** this refers to the individual, group or organisational motivations that drive the actions of participants in the activity of strategy formulation, i.e. protection of job role, safe guarding organisations ROI, and increasing individual importance.
- **Contradictions:** these occur where tensions exist between or within various elements of the activity system. For example a contradiction may exist between the original draft of the strategy and final submitted draft.
- **Environment:** this is the geographical as well as the cultural within which the activity is taking place (Chen et al., 2008)

These headings are the ones that I used in this research to frame my understanding of what took place in the strategy formulation process. This process used took a form similar to the earlier study outlined, where I initially made sense of the data through the use of a mapping and discussion process (Figure 7).

This research focuses on, what is referred to as second level or secondary generation (Cole, 1999). This refers to the understanding of the tensions and contradictions that occur in the practice of strategy formulation. Second generation activity theory incorporates primary

artefacts from the first generation model, but moves past the tools used and reflects on action. The focus on secondary tensions and contradictions consists of defining the object content and structure of its collective form. The interrelations of those involved in the formulation process and the methods of their exchange. It will also unearth the various transformations, and the conditions and regularities of the emergence of the activity of strategy formulation. This is important as it helps us begin to understand the ‘whys’ and ‘hows’ underpinning the actions being undertaken.

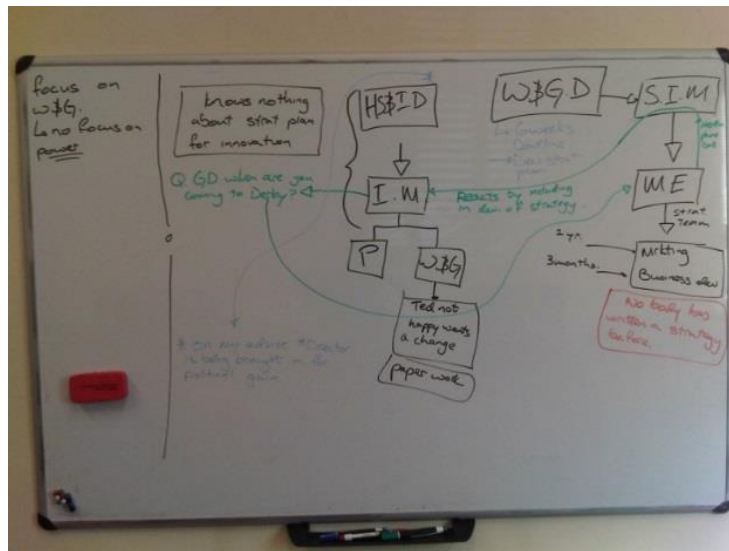


FIGURE 7 STRATEGY MAPPING EXERCISE

This process resulted in over 40 white board sessions. The lessons from this initial mapping exercise were noted and set aside. The audio recordings from the strategy formulation process were then transcribed, many of these were transcribed by hand using pen and paper. Again I did this through pen and paper as I found this approach more useful than computer

analysis as it helped me to engage with recordings, noting thoughts as I worked through each audio file. There were approximately 20 hours' worth of audio.

Then I began the process of coding against the activity theory framework. I began by positioning early nodes against the activity theory framework (Figure 8). This process was repeated, early phases used chunks of raw data, which through each iteration was slowly refined and processed. This resulted in the narrative and the insights highlighted in chapter 5 of this thesis.

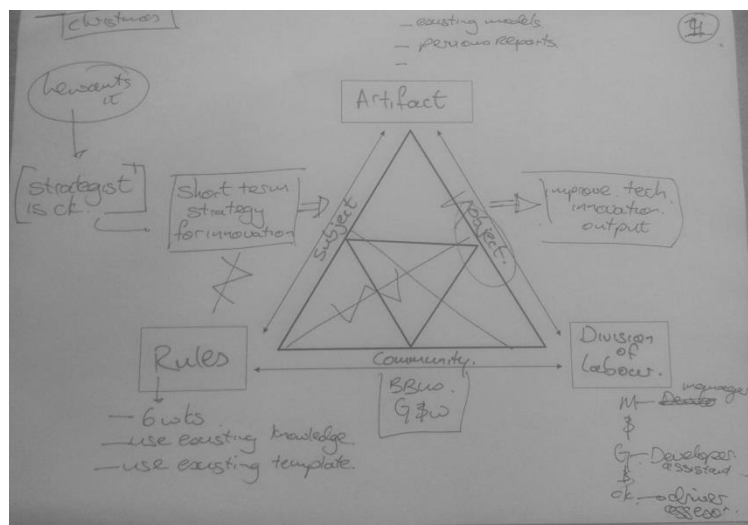


FIGURE 8 CODING OF DATA

### 3.10 The presentation of data

Here again activity theory is used to allow me to meet the research objective of systematically analysing the contradictions of the strategy formulation process. It was seen as a suitable framework to build understanding of human activities over time (Engeström, 1999; Engeström, 2000). In this case, the lens helped in the exploration of the strategy formulation process as a dynamic phenomenon. It enabled me to capturing the various elements that influence the strategy formulation process and helped me understand the phenomenon better. It also creates a frame work to better understand how various components interact to create an output (Engeström, 1999; Kuutti, 1996; Engeström 1987).

The idea was to break down the process into four phases. The inception phase, early research and development phase 1; development phase 2 and completion of strategy for board approval. Unlike others who have used one activity theory model to represent a full process, I decided to break this down into 5 phases. The logic behind this is that it would capture as more depth and analysis as opposed to analysing the process as a single unit. Reflections and discussion take place in the discussion chapter this draws out learnings from using the five stages below so that major themes could be drawn out (Figure 9). No distinct phases were predetermined; these would emerge when reflecting on the process in real time and when analysing the data post completion of the strategy.

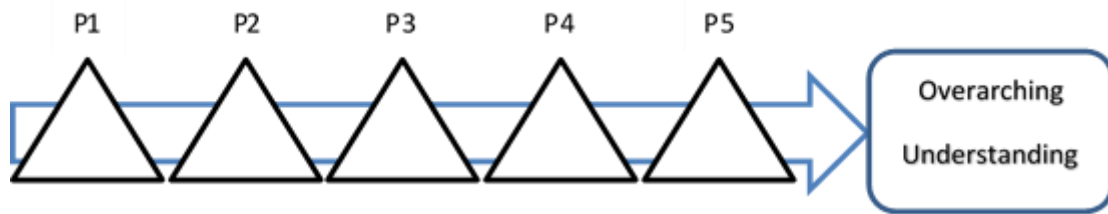


FIGURE 9 OVERARCHING UNDERSTANDING OF THE PRACTICE OF STRATEGY FORMULATION

### 3.11 Creating the narrative

This analysis is presented at the end of a narrative that provides a thick description of the practice of strategy formulation within this one large organisational case. The narrative is a response to studies such as Clandinin, (2007) that highlight reductionist techniques often lose much valuable information in the process of creating theory. The narrative was created through a process of iteration and development that wanted to convey the fundamental human experience (Clandinin, 2007). I wanted to provide a way for an understanding, that demonstrated the complex environment in which practice of this kind takes place, and by so doing highlight the complex landscape over the whole strategy formulation process.

### 3.12 Conclusion

To conclude, the nature of the research conducted has taken an inductive approach. This has focussed on how a strategy occurs in a particular setting. This phenomena which I set out to understand was a deeper understanding of the strategy formulation process within BULBz.

The chapter has detailed the methodologies I used and methods developed along the way for the purpose of the research. The chapter addressed the strengths and weaknesses of both the case study method and action research methodologies in general. I have also outlined my rationale for adopting an activity theory lens and discussed with the benefits of this approach for this investigation.

The next chapter gives the results of the pilot study with the host company and the background evolution of innovation within this organisation. Chapter 5 and 6 give the account of the main research which investigates the strategy formulation process.

## Chapter 4: Early stages strategy formulation journey

### 4.1 Back ground to the data

This study began in August 2012. Taking the role as a participant observer meant that at times I felt very much like a member of the company whilst at others I felt very much like a researcher collecting as much data as possible so I could best understand what was taking place. Since understanding the research, I realise that on many occasions I acted like a critical friend to and support of the CSO in the development of his strategy for innovation (Ellwood et al, 2014).

The research and data collected was from natural settings. I had to take a great deal at face value, as I had no back ground understanding of how to develop a strategy. There were many benefits as well as disadvantages, one was that it allowed me to take nothing for granted and be able to participate as a complete novice. The CSO, himself had limited experience of strategy development and I think my support was a welcome one. It was here that the pilot study became extremely valuable as it allowed me to gain a better grasp of what was taking place. It also enabled me to get a better grasp of the terminologies being used, the nature of the organisation, the external markets and many of the individuals that were engaged with. It also gave me some insight into the nature of the relationships between the individuals.



The activities identified as important at phase are presented using the activity theory template in a linear fashion (Figure 10). Representation in this way highlights how different elements in the activity system assume different levels of significance, episode by episode. It also highlights how the internal interactions evolve over the course of the strategy formulation process.

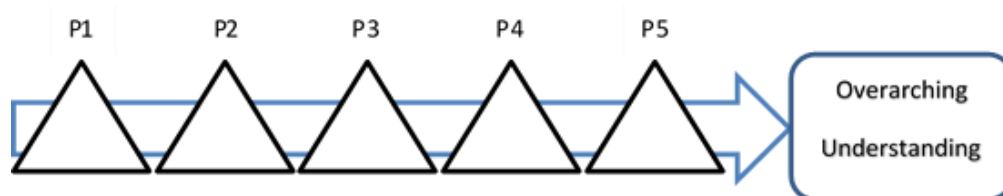


FIGURE 10 PRESENTATION OF RESEARCH

Adopting this approach it is intended will allow the reader to understand the different tipping points and episodes that shaped the direction the strategy took.

#### 4.0 Introduction

This chapter engages with how one of the organisations utilities divisions sought to develop a strategy for future innovation activities. The account set out follows how two departments (of four), situated in the UK gas and water sector. The examination focuses on the micro level practices of strategy formulation as has been discussed in the previous chapters and does this by following a number of the key decision makers.

The chapter engages with the formulation of the innovation strategy from the perspective of the Chief Strategy Officer (CSO). By doing so it sheds light on the whole process of formulation, from the initial preparatory activities, through the various milestones during its shaping process then on to its completion. What is shown is that in strategy formulation process a number of contradictions emerge. It explains how these contradictions and dilemmas are dealt with and how the judgements and key decisions by the CSO are played out in the final strategy.

In order to provide the evidence for the issues raised a rich description method has been adopted. This helps highlight the emergent process and shows the reader where the tipping points occur at which interlinked activities are extended or broken. The overall aim of chapters 5 and 6 is to present socio political dynamics that influence different aspects of the activity system described in the methodology chapter. The process 'lived experience' of the managers and employees involved and it does this by preserving where possible the personal voices of the CSO, the researcher and others. As I was an active member of the strategy formulation team my own reflections were considered important.

The use of an activity theory framework as a template has assisted in the identification of various influential elements that occur over the period of the formulation process. Without the use of a framework it was considered that the identification of the tipping points would have been extremely difficult to identify. The use of the framework to help develop an

understanding also allowed for the identification of those elements that had, to a greater or lesser extent, stronger or weaker degrees of influence at various points in the process.

As has been shown in chapter 2, for the purpose of this research, strategy has been divided into two categories: formulation and implementation. The research focuses primarily on the formulation of a strategy in the context of innovation activity. It is recognised that not all strategies are actually implemented and insights gained from those that are not are able to provide insights as to why they are not. It is also recognised that there is limited understanding of how strategies are assembled in real time by the individual and teams.

Prior to the commencement of this research study, I had spent 18 months in the organisation building insights on what innovation meant to various stakeholders and to the organisation as a whole. Through observations, interviews, conversations and documentation analysis a high level of understanding was obtained of the BULBz innovation environment. The primary focus of this phase of the research was to gain a high level of access to the organisation as well as a deep understanding of how they perceived innovation.

#### 4.2 Phase 1: The beginning of the strategy journey (September 2012)

Phase 1 describes the antecedents of the strategy formulation journey the CSO took. What is presented in this phase are the decisions that lead to the need for a strategy to be created

and the selection of those who were to develop it. The judgements made by decision makers will be highlighted at each stage in order to bring them together later on in an analysis that connects the various episodes together in an explanation of the final outcome. Unlike the other phases of the formulation process, I was not present at this stage. The insights made at this stage are developed from a series of interviews and conversations I had with both the Director and the CSO.

During my time with the organisation a number of individuals had left the organisation. The Group Director of innovation moved. Additionally, but not as consequence of his departure, the innovation team were divided into two units and separated into two offices in the same building. This was in part due to growing tensions between the four OpCos on working practices for innovation activity. In addition, 2008 saw the UK in the middle of one of the worst financial crisis for some time and the utility sector and companies like BULBz were starting to feel the effect of this.

As a consequence the organisation felt an increased need to develop a strategy for innovation and progress was being closely monitored at board level. The board had instructed all departments to develop a new short-term strategy for future activity. Following this the Director of Water and Gas subsequently appointed Mr. Brent (former senior manager of innovation) to create an innovation strategy (as CSO) for the Water and Gas division along with the other OpCos.

The Director of the Water and Gas division (to be referred to as CK) set an objective to develop a short term technical strategy for BULBz water and gas future innovation activity. The primary focus of the strategy was technical innovation. The outcome of this from the perspective of CK is that he will have a better understanding of what is taking place in his divisions. It also provided an opportunity to compare future activities with the two power divisions.

An estimated figure of 90% of the strategy was to be created from existing internal reports. Specific reports were not identified or discussed. Additional information was to be collected through the interviewing of stakeholders, as well as the views of CK himself. A six week time frame was put in place for the completion of the strategy. This approach and the tools to be used was agreed upon by both CK and the CSO.

The Director wanted to develop a short-term strategy for technical innovation. In order to achieve this he has put a number of rules in place to guide the CSO in the development of this objective. For example he had given the CSO a specific time frame and a list of tools and techniques to use in order to create the strategy. The specific tools and techniques were discussed in vague terms. For example, no reports or individuals were specifically identified, however that was a general feeling of what needed to be delivered was discussed. He outlined that he would need to be interviewed at some point later in the process. He would for example, he outlined that he would need to be interviewed at some point later in the

process, that he would not play an operating role in the development of the strategy preferring to be a sounding board and possible gatekeeper instead.

In organisational terms the BULBz philosophy of 'Altogether, Safer, Better, Leaner, Faster (ASBLF)' was seen as a key underpinning framework that needed to be used in order to support the short term strategy for innovation. Using this philosophy, future technological innovations need to aim to support the improvement of areas such safety, communication and efficiency in working practices. The ASBLF was seen as a central pillar of the organisations, something that had, up to this point, successfully been used as a differentiator between BULBz and its competitors.

Tensions existed between the four operating companies when it came to technical innovation activity. These differences were driven by the different Directors as well as the markets in which they were situated. In the terms of this case, the Director of Gas and Water, supported the culture of proactive innovation which is engrained in his team. In the Gas and Water operating companies, to be innovative was seen to mean progress and was seen as an essential activity for future success. The approach to innovation then was to be proactive, which meant to seek out opportunities to exploit. This required the team as a whole to engage with a high level of divergent thinking, this in turn lead to the team challenging convention and to attempt to think big on a consistent basis. Although a drive for innovation was evident across all of the OpCos in some regard, the water division desired to achieve what it regarded

as blue sky or radical innovation. As a consequence they sought real change that would revolutionise both the organisation and the industry for the better.

As has been explained the CSO was reemployed by the Director of Gas and Water to create a strategy for innovation. Previous to this appointment the CSO was the joint senior manager of the innovation team. He was appointed to that position by the Director of Water and Gas when innovation first became a considered activity in the organisation. They both acknowledged that they hold a strong working relationship, sharing similar ideals and together they had a wealth of experience of BULBz innovation activity. In an interview the Director stated that the CSO was chosen for his ability to stand up to popular opinion and to go with his own judgements, which he valued and trusted. He felt that this quality would be one that would be required so that a strategy for innovation could be created within an organisation where innovation was a continually contested topic leading to a fragmented working environment.

As part of his new role the CSO was isolated from normative business practices, to focus on the creation of the strategy for innovation. The CSO was then given a level of freedom to shape the task as he saw fit. However as discussed the director did dictate the shape of what was expected and the time scale for the project.

#### 4.2.1 Back ground of the Chief Strategy Officer (CSO)

The CSO was the Innovation Strategy Manager for BULBz Gas and Water. He has over 30 years' experience of the utility sector. This experience itself was broad, ranging from working in capital and operational maintenance; clean water activities; operations and as a senior contract management.

Since taking up the post of innovation manager with BULBz in 2005, the CSO has led many successful innovation projects including: development collaborative projects with clients, suppliers and academia under the umbrella of innovation. Included in the later was the securing of £1million Technology Strategy Board funding for a series of water industry technology advancement projects.

The CSO was also a well-established speaker at industry and technology events. He is well known for innovation in the utilities industry particularly innovating through the development of new technologies through the engagement of the wider supply chain as well as looking to other industries for best practice. He has also played a pivotal role in the development and implementation of technical and process innovations such as the SV Repack and flow and pressure no dig techniques. These techniques require no excavation which had a direct and positive impact on the organisation Health and Safety record. This passion for innovation has assisted in BULBz's profile valued as one of the leading organisations for innovation and change in the UK water sector.



#### 4.2.2 Becoming the Chief Strategy Officer

Six months prior to his appointment, the CSO had left the organisation partly as a result of some internal conflict. A poorly functioning innovation team and some internal politics had caused the CSO to resign from his position as Head of Technical Innovation.

Towards the end of the second year of the research program however the CSO returned from his self-imposed 6 month sabbatical and was ready to implement his views as the newly appointed CSO. When I asked the Director why he had chosen him for the role? He explained his decision based on the view that:

*The CSO was 'chipped differently and willing to say it as he sees it'<sup>4</sup>*

The CSO explained his coming back in the following way:

*'I came back and my role has changed. I used to be Innovation general manager for the whole business, managing a team of 10-12 men... I came back and I no longer lead that team. I came back. I am now innovation manager gas and water strategy and technology strategy that is my role. So I*

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<sup>4</sup> Director of Gas and Water

*no longer have a team working for me. I am basically a one man band. You can call me the organ grinder so to speak... I have been given a huge task to do over the next couple of months and that task is to develop an innovation strategy. Basically I have to write a document to present to the board.<sup>5</sup>*

Existing data was used to identify the future short terms opportunities. This data was to come from documents such as organisational reports, industry reports, white papers and governmental directives. Interviews were to be used to 'plug the gaps' of any holes that may not be answered from the documents used. The interviews were also to be used as a means to:

*'bring people along with us, as we will need their support for this to get through'<sup>6</sup>*

At this point in the process not all of the key stakeholders were clearly identified at this point. The CSO at this point, was to use his own initiative to develop insights to complement the strategy and develop support. He was to use existing frame reports to support the strategy he was going to develop. It was to align to existing frameworks that were known and accepted by the internal community. Where this was not possible, the Director envisaged that interviews were to be used to gain support and gather intelligence. As a consequence the

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<sup>5</sup> CSO

<sup>6</sup> Director of Water and Gas

interviews had a dual purpose, to gather data but also to engage stakeholders so that they will support the vision of what the Director was trying to achieve.

As already noted, the philosophical differences of the various stakeholders as to what constituted for best practice in innovation has resulted in tensions across the divisions. To overcome this, the Director sought to align the strategy for innovation within the organisational philosophy of *Altogether Safer Better Learner Faster*, while also highlighting the need for future innovation activities. He commented that:

*'The idea is that in doing this, the strategy will have legitimacy with more stakeholders as it will be rooted in the core beliefs of the organisation'<sup>7</sup>*

Stakeholders were to be engaged at the earliest opportunity so that they could contribute to the formation of the strategy. The Director felt that this approach would give those that took part an increased sense of ownership of the strategy. This relationship between the community (BULBz staff) and rules (method of engagement) was regarded as important. Without this strong link to organisation philosophy the Director felt that the innovation agenda that he was trying to put forward would not get passed the board.

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<sup>7</sup> Director of water and gas

The CSO was to engage with the community to develop the strategy. The ability of being able to simultaneously gather information and gain support was seen as an essential element to the success of the strategy.

The Director selected the CSO, an individual who had left the organisation months previous as he was seen as a blocker to planned innovation activity in the organisation. Some in the community were happy to see him leave, as he was controversial and outspoken in his views. This could cause difficulties in his ability to gain access and develop support for the strategy. The CSO was aware of this and noted to me that he would have to mend bridges in order to achieve his goal.

#### 4.3 Reflections on phase one

Figure 11 presents an overview using the activity theory model of the various elements that were impacting on the Directors W&Gs strategy for innovation. What is being sought here are the tipping points that influenced the strategy at this stage.

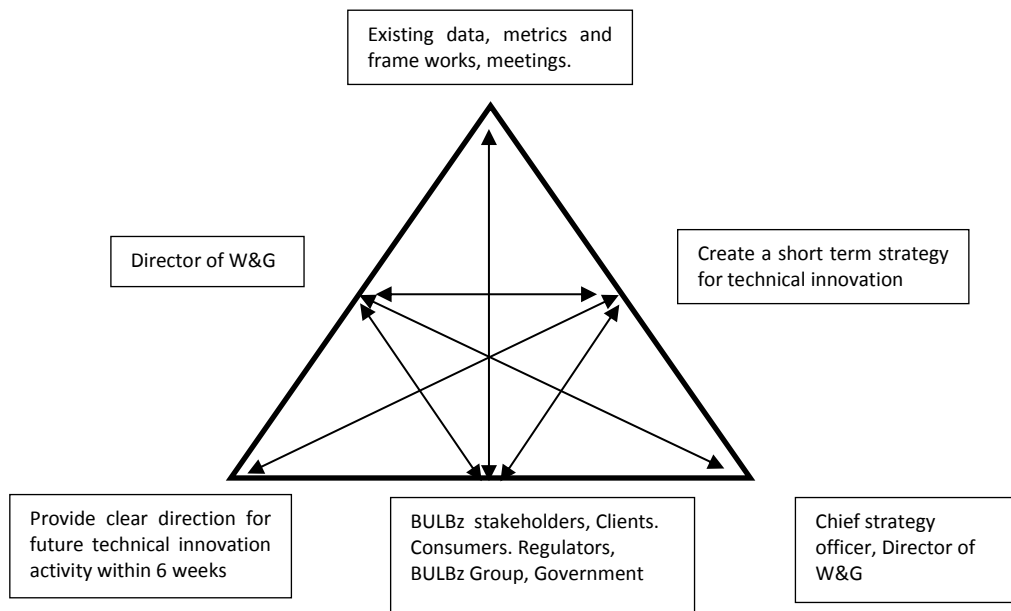


FIGURE 11 REFLECTION ON PHASE 1

The need to create a strategy for innovation was based on the desire of the board of directors to gain better knowledge of where the organisation it was going to be in 12 months' time. As part of this, each OpCo was tasked to create a strategy for their innovation activity.

The Director of Water and Gas chose the former head of the innovation department to create the strategy for both the water and gas divisions. The CSO had a high degree of experience in innovation but limited experience in strategy. The CSO shared similar views of the current state of innovation in the organisation and how it should function in the future.

The capacity for change in practice arises from the interaction between actor, collective and practical activity. Since the constituents of the system may not hold similar interpretations, the rationale for strategic activity is beset by contradictions and is innately contested.

Some contradictions may be largely suppressed, occurring only for some of those involved but not surfacing as a contested interpretation of the activity at the time of debate but may also surface later during the development and learning cycle. These aggravations are likely to occur and be resolved without any change to the collective rationale for activity. However, when there are contradictions and contested interpretations between actors, these generate system level tensions that provide an opportunity for changing interpretations about activity (Blackler, 1993; Engestrom et al., 2002).

Tensions and contradictions are evident in the selection of the CSO. The Director had chosen someone who had a legacy of challenging convention and not bowing to organisational pressures. The Director had chosen someone that had a background in the development of technical artefacts for a slow paced, low innovative environment. As stated he had chosen someone with no back ground in strategic thinking. The director attempted to balance these conditions by applying specific platforms to ensure his vision would be achieved by the newly appointed CSO. These included the appointment of strict deadlines and the outlining of methods and specific documents to be used in the formulation of the strategy.

It could be suggested that the intended use existing data and an internal focus for the development of the strategy, means that a strategy was not desired. The focus is not to plan ahead, but to legitimise current frameworks in order to safe guard existing platforms. This adds weight to the thinking that strategy has become a procedural activity (Mintzberg, 1994), where the intended focus is to maintain the status quo.

A missing tension during this period, was the holding of a strong debate during the strategy discussion. The newly appointed CSO did not contest or challenge the views of the director, he accepted the point of view of his superior even though he did not fully agree or fully understand what he was being challenged with.

#### 4.4 Phase 2: Development of resources (September to October 2012)

In this phase the CSO was observed to take control of the strategy formulation process. The tipping points that triggered the implementation of change in a direction are identified. Unlike the previous phase it was from this point onwards I became an active participant in the process of the strategy formulation. The insights made from this stage are derived from data that was gathered by me through the methods outlined in chapter three.

At the beginning of this phase of activity the Director of Water and Gas had removed the CSO from any day to day activity and given him the responsibility for the creation of the strategy.

The CSO now took charge of the strategy development process. The Director had outlined what he expected to be in the strategy.

Throughout this phase the CSO had begun to develop his views on BULBz innovation and even regards the strategy he is to develop as an opportunity to influence governmental, regulatory and organisational activities outside of the firm and outside of technical innovation. He also began to collect resources that he could see were necessary for the successful completion of the strategy.

During this phase the CSO continued to use a series of tools to achieve his object(ive). These included a number of communication tools, both physical and non-physical. These were meetings, phone calls and emails. These tools focused on what the CSO was attempting to achieve at this stage, which was the development of a coherent vision and the capacity to deliver a strategy that satisfied both the Directors requirements as well as his own vision.

A number of factors can be seen to influence how these tools would be used. The Director indicated what he wanted in the strategy. Preference was given to the CSO's existing skill set of project management, political manoeuvring and contextual understanding based on his opinion and understanding. Emails, phone conversations and face to face meetings on both university and the organisation. These methods were used to help develop a common view of sense making and resources were sought to aid the CSO development of the strategy.



The strategy itself using this lens was also seen as a tool, in the form of a document. This helped to set out and articulate the CSO's vision. At this early stage when the CSO was discussing 'the strategy' it was always referred to as a physical entity and a mechanism that could be used to fix something, rather like a spanner that can fix an engine.

The CSO acknowledged that the '90%' of what was being suggested was in the mind of the director not his. He also indicated that some additional research would be needed to unearth a focus to understand the organisations existing competencies and help develop them in the direction felt to be important. This research was conducted through the gathering of organisational and industrial reports as well as the interviewing key stakeholders. At this stage in the process, no specific reports were identified as being useful, however those reports that were used highlighted the benefits of innovation while limiting any negative aspects. For example some reports questioned the need for innovation in the utilities sector altogether, while others pushed for a new innovation agenda. Those in favour of innovation were used while those against were buried and not discussed again.

Also at this stage, continuous communication between me and the CSO helped him better reflect on what he needed to focus on. As a consequence I was actually being used as an aid to help him bounce ideas as well as an exercise for him to justify his own logic. Even when I did not agree or even understand every single detail of what he was explaining, I still felt that the process was useful for him. The extract below evidences how the evolution of understanding occurred. This extract is taken from a meeting held between myself and the CSO.

TABLE 9 MEETING EXTRACT

CSO: I have been given a huge task to do over the next couple of months and that task is to develop an innovation strategy for the water and gas sector over the next 10 years... What does that mean? I don't really know yet. What I do know is that we have.... every department has been tasked to put a strategy together for the next five, ten years.

How we are going to shape our department and the structures to do it. I don't know what we are going to be doing in 4/5 years' time. But I know where... I know what we are going to be doing sorry. I don't know how we are going to do it, I don't know what technologies we are going to need and everything else. So that's the point to make.

CK said he wants it in the next 6 weeks, I'm going to stall him on that and tell him we need more than 6 weeks to do it right. So what we are going to do, GD is going to look at innovation in BULBz, how do we structure it? How do we incorporate the reporting mechanisms and everything else?

It needs to be broader than that and it needs to be more high level. It needs to embrace the three tiers, what we call process, culture and technology. How do all those fit and everything else. How do we engage it more? So we have to recognise what partnerships do we need to be in? What kind of partnerships do we want? How do we need to change our training and coaching methods, our people plans...those kinds of things?

How do we interact with academia, everything, everything. What do we need to do now or to plan to do now to be in 10years time to be where we want to be? I mean I'm very much...its water and gas, it's not power.....its specific to water gas which I am very very comfortable with....how do we effect change at government level, how do we effect change at regulatory level, how do we leverage ourselves to have a bigger voice and have more play and everything else. So do we need to be...what kind of conferences, which kind of people do we need to target as friends etc, buddies in taking this on. And a lot of that work GD has already taken on, because he has been interviewing people, internal and outside of the...emmm, so that's the premise of what we need to do. I'm pretty certain that fits in with the plan.

It was recognised that my own connection with the university was useful and could be seen as itself a tool. It was felt that this link gave a sense of legitimacy to the project to others with.

The CSO also hoped that I would share much of the insights from the pilot study. The findings

would be used to reinforce the direction of the strategy. He wished to use direct quotes attributed to specific individuals from the pilot to reinforce his message. That was he said to legitimise his thinking and so they could be used in the document itself. This desire to use my data from the pilot study placed me in a difficult situation. The data was collected in confidence. I refused provide this information explaining that it would cause an ethical dilemma for my PhD. The CSO acknowledged this, accepted it and agreed that we would find sufficient information from what we had available to achieve the same outcome.

The need to compete against the power side of the company now began to reflect the tensions that were apparent through the pilot study. The need to *do better and outperform* was a competitive driver. Innovation was a point of intersection between the four OpCo's of BULBz and as a result an area of conflict arose between competing factions for resource and focus of works. As a consequence of this tension, an underlying rule to '*beat power*' influenced the approach the strategy was to take:

*'we are not dealing with the power, the power side we are not looking at, they are doing their own. I know the person that is doing theirs; it will be a last minute job and will only focus on the little things. Ours will be a proper strategy, it will be better'<sup>8</sup>*

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<sup>8</sup> The CSO

A personal driver for me was to bring innovation to the centre of everything that BULBz did. In doing so make it '*business as usual*'. He wanted innovation to be used as a platform that engaged everyone, with specific reference being given to all operations departments (Gas, Water and the two power divisions). The CSO's email outlined that he recognises a need to build relationships with operations for his innovation model to succeed (Table 10).

The email I believe highlights many of the rules and challenges that the CSO had identified in order to achieve his goal, which was to bring about real change in how the organisation conducts its innovation activity. It also highlights his vision for the development of an innovation hub and for the organisation as a whole and for BULBz to become leaders in the industry. What I observed was that in a very short space of time and even before any research had been conducted, the CSO had already created a vision of what he wanted to achieve and an outline of how he would achieve it.

TABLE 10 CSO'S EMAIL

Q: what are we trying to achieve? Who are the targeted individuals and what are their perceptions of what we are trying to achieve?

- The targeted individuals are the BULBz board and senior managers.
- We are trying to create an environment for innovation which achieves these basic objectives:
  - Breaks down the barriers between the three tiers of innovation – culture, process, technology
  - Maximises innovation output in either/ all of the tiers
  - Create a seamless process from conception to reality
  - Ensures innovation projects are taken to 'business as usual'
  - Engages everyone in the business in the stages of development, especially operations

Creates involvement throughout (for example innovation in [REDACTED] is seen by the business as a 'dark art' – it is not exposed to the business regularly and it is not marketed externally

In addition this model needs to be developed alongside my task to develop a '5 year strategy for innovation in gas and water

Q: what are the desired outcomes? A, b, c etc. And once completed where do we go from there?

The desired outcome is to make innovation in [REDACTED] to model for the utility industry. For BULBz to be the leaders. For example CK spoke at the National Innovation Seminar for Water this year on the need to create an 'innovation hub' within the industry. If we cannot get it right how can we expect to lead such change? Also the desired outcomes will result from achieving the objectives bulleted in the previous question.

My first meeting with the CSO was held in the company's Derby office. The new direction for our collaborative research agenda was established in this meeting. From the earliest stage of the project, the CSO had apparently engaged with me to be an assistant to him in the formulation of his strategy and in turn I saw this close interaction as extremely useful to my research. The idea for my inclusion in the strategies development was something that was put forward between the CSO and the Director of Water and Gas. Both felt that I might add value to the process as particularly as I had access to the university and its resources. This they felt would add some legitimacy to what was developed. According to later conversations the CSO, they both at the time, they both recognised that I would be able to get access to valuable knowledge about the strategy creation process. They also felt fresh eyes would help them develop foundations from which a strong piece of work could develop.

In order to demonstrate that I did in fact have expertise at my disposal, I engaged with Dr Roberts who has 10 years of practical experience of strategy development. In early discussions between myself and Dr Roberts, concerns were raised over the degree of involvement an academic tutor ought to have in a research project of this nature. Dr Roberts was however willing to engage if requested by the CSO. As a consequence a plan for a workshop was developed. However, once the whole strategy project gained momentum it was envisaged that Dr Roberts role would revert back to simply being one of supervision of my thesis.

Duly a request was made for me to assist in the development of a strategy for innovation and in addition there would be a de-facto involvement of Dr Roberts. Full access would be provided about the development process of the strategy some of which could be used for academic output. A meeting was set up with Dr Roberts as he was included in discussions both as an academic supervisor and also for his own experience in and knowledge of strategy development. The premise for the very first meeting was an open conversation in relation to the changed in direction being proposed and the focus the research needed to take.

Before this meeting I had briefed Dr Roberts how, as I saw it was being requested to move away from working with the innovation team and move to act as an assistant to the CSO to develop the strategy. In this meeting I raised my concerns as to the nature of any academic output that might follow and how the new role might affect my ability to complete my doctoral thesis. My academic work up to this point had been focused on technical innovation team dynamics, I was worried the change in focus would prevent me from getting my PhD as I would have different data from that I originally intended to collect and theorise about, it was also an academic field that I had no knowledge of. However following this discussion we agreed that there was an opportunity in the changed circumstances to observe as well as partake in the strategy formulation process, which could provide a rare opportunity and that potential existed to surface insights and real knowledge of strategy process as well as in classical action research manner be able to assist and influence an organisation in a practical and meaningful way.

As the meeting got underway the CSO discussed his thinking his thinking with respect to what the strategy might involve. At this stage of the process the CSO thinking had in fact evolved dramatically (Table 11). From an initial focus on short term technical focus, he had now expressed a wished to develop a short, medium and long term strategy for both social and technical innovation that engaged on a technical and cultural level. The CSOs aspirations had I believe grown and he was beginning to challenge and question the original brief set. That is from one that provided incremental improvements to one that would be far more radical. This can be observed from an extract from a discussion between Dr Roberts, myself and the CSO.



TABLE 11 INITIAL MEETING EXTRACT

Mr Brent: I have been given a huge task to do over the next couple of months and that task is to develop an innovation strategy for the water and gas sector over the next 10 years... What does that mean? I don't really know yet. What I do know is that we have.... every department has been tasked to put a strategy together for the next five, ten years.

How we are going to shape our department and the structures to do it. I don't know what we are going to be doing in 4/5 years' time. But I know where... I know what we are going to be doing sorry. I don't know how we are going to do it, I don't know what technologies we are going to need and everything else. So that's the point to make.

CK said he wants it in the next 6 weeks, I'm going to stall him on that and tell him we need more than 6 weeks to do it right. So what we are going to do, GD is going to look at innovation in BULBz, how do we structure it? How do we incorporate the reporting mechanisms and everything else?

It needs to be broader than that and it needs to be more high level. It needs to embrace the three tiers, what we call process, culture and technology. How do all those fit and everything else. How do we engage it more? So we have to recognise what partnerships do we need to be in. What kind of partnerships do we want? How do we need to change our training and coaching methods, our people plans...those kinds of things?

How do we interact with academia, everything, everything. What do we need to do now or to plan to do now to be in 10years time to be where we want to be? I mean I'm very much...its water and gas, it's not power....its specific to water gas which I am very very comfortable with....how do we effect change at government level, how do we effect change at regulatory level, how do we leverage ourselves to have a bigger voice and have more play and everything else?

So do we need to be...what kind of conferences, which kind of people do we need to target as friends etc, buddies in taking this on. And a lot of that work GD has already taken on, because he has been interviewing people, internal and outside of the...emmm, so that's the premise of what we need to do. I'm pretty certain that fits in with the plan.

Based on what had been discussed and gleaned from the CSO, an agreement was now in place that gave clarity of roles-particularly mine. I would assist the CSO in the development of the strategy and in return I could use my findings for the purpose of research. The plan drawn up set goals that could be achieved. Also at this stage, the rather limited development of a short term strategy would be extended and I would also be part of the implementation team, so that a full process could be investigated, this is shown in Figure 12. By doing so I t was felt I would be very close to the action consistent with understanding the micro processes in strategy research.

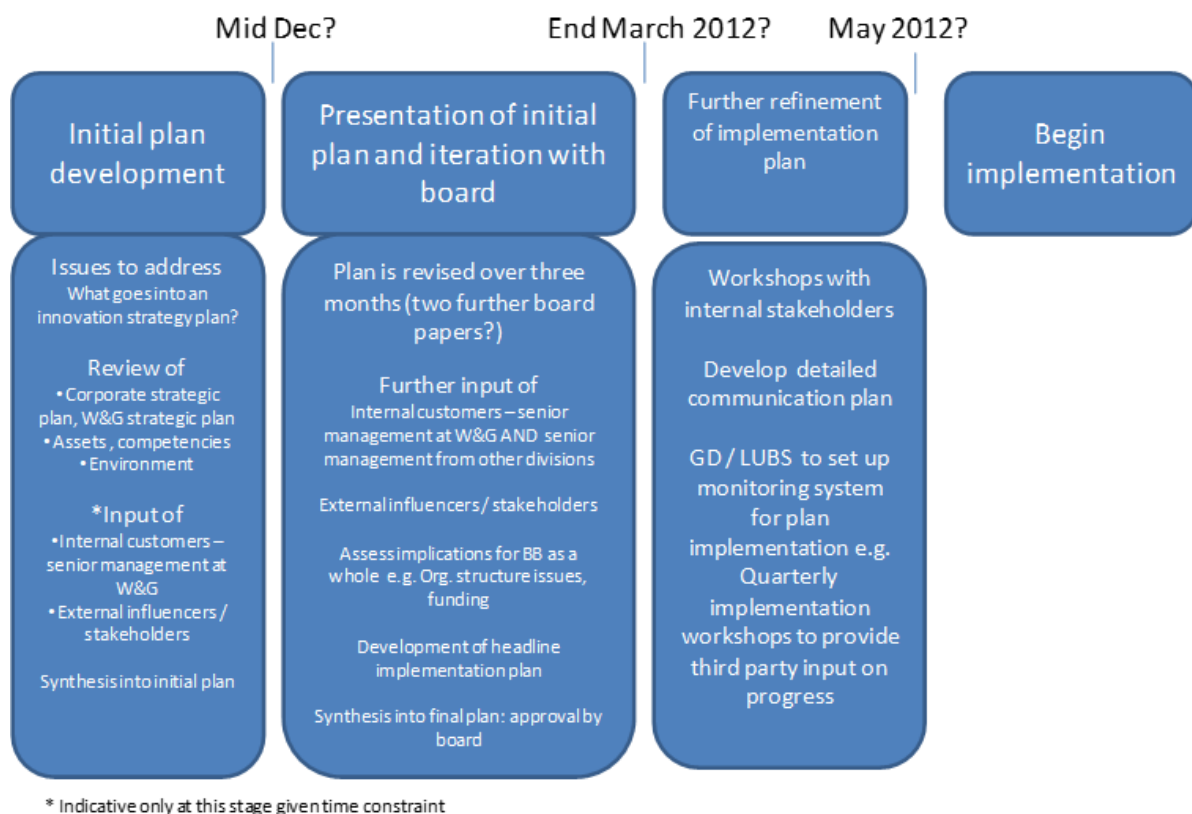


FIGURE 12 STRATEGY PLAN FOR WORKS

The plan developed collaboratively by the three of us envisaged an iterative development cycle where any proposed working strategies would be submitted for feedback on two separate occasions before implementation would begin in May 2012 (5 months later). The plan also outlined a number of actions for each stage and estimated deadlines for completion. These activities included things such as the types of documents required for analysis progress could be maintained, understanding what goes into an innovation strategy plan to the development of workshops and implementation plans. The plan was then reviewed by Dr Roberts and circulated.

The next phase of activity to include a workshop to kick off the process in three weeks from this meeting date. The specific details of this would be confirmed by the CSO. We accepted that given more time, a more comprehensive and structured workshop could have been developed as we could have invited experts in the field. However the CSO felt that time was critical and a session to jump start activity would suffice. This workshop never materialised, and although I broached the subject on a number of occasions but nothing was ever organised and I felt that pushing against this any further would be counterproductive.

Privately, both myself and Dr Roberts were concerned what my role had become a bit of a 'dogs body' and if this continued for too long it might limit my engagement with the strategy formulation process. We were also concerned that I would be used to physically write the document with little or no access to the decision making process that was involved in its

formulation. To overcome this I was to actively present, and if appropriate, engaged with the decision making process of the strategy for innovation.

At this phase in the process the CSO had recognised that the members of the organisation (community) would need to engage with the strategy. He felt that early engagement would aid in the development of a picture that reflected what was going on at the time. It would also help in the legitimisation of the strategy, as he felt that those who were engaged would be less likely to reject it, if they were part of it.

At this point the CSO felt that he would have to mend some bridges with people he had felt let down by or fallen out with when he left earlier that year. At the time he thought he had left for the good of BULBz innovation there were some concerns that there may be some personal and professional baggage, which needed to be sorted out. Many of those where he considered there may be issues were now involved with innovation activity and had influence. He set about mending these bridges through direct dialogue. When developing a list of names of participants in this category there were many including the Director of innovation and the current senior manager of technical innovation.

A desire to raise the profile of BULBz W&G innovation to a state that it could drive real change for within BULBz water and gas and more widely within the UK utilities sector was a big ambition. To achieve this an 'innovation hub' was to be established. The hub would be used as a model for the industry and would it was hoped place BULBz at the heart of UK water and

gas innovation. To achieve this, the CSO had identified a number of individuals who he would need to create and run the hub and make a good job of it were the core members of his innovation team. He had identified these individuals on the basis that they knew what they were doing. No guidance or job specification or personal assessment was given to what the new roles would entail and how capable these individuals would actually be in their newly proposed positions. These decisions were made on the basis of the CSO's history and opinion of each individual's abilities. One thing they had in common was that they shared the same experiences of innovation and also saw eye to eye with the CSO. They also shared the same understanding as to how such a hub might it should function in the future.

At the very top management level, G&W regarded all forms of innovation (Tier 1, 2 and 3) as key drivers for future success and it was felt that innovation should include both a proactive and reactive approaches. This is in contrast to the other OpCos who saw innovation, at that time mainly as a Tier 3 activity that needed to be reactive to any client specific requirement.

During a number of conversations over the course of this research the CSO had noted that he was an advocate of Tier 1 or 'Blue sky' innovation. This perspective focused on pushing out the existing boundaries where innovation was needed and utilising technology to advance both the organisation and the sector as a whole. He regarded Tier 1 innovation as the primary means through which real progress could be achieved and he felt that the water industry and to a lesser extent the gas industry had stagnated. He felt that the stagnant environment existed due to the level of regulation that existed as well as the culture that appeared to be

averse to innovation on a national level. He also felt that these factors would feature within his new strategy.

The CSO noted that not many individuals across the OpCo as well as the larger organisation were willing to pursue the innovation agenda. A number of factors both internally and externally were recognised to encourage the lack of innovation activity. He exemplified this by noting that although 'innovation' often had its place in the agendas of meetings but it was often placed as the last point of concern and as a consequence was sacrificed due to time constraints and placed on the agenda for the next meeting. This was particularly common at board level meetings. This activity was also confirmed by several directors when interviewed for the pilot study. As a consequence 'a rule to change' the culture and perception of innovation within the organisation needed to be changed.

As I have outlined before the CSO had recruited me to assist him in the development of a strategy for innovation. At this phase my role had become unclear. Although he had outlined the role in broad terms what he ideally wanted to achieve but I had little confidence as how this would be achieved at this point. All that he said is that he would have to engage the community so that the new vision would be accepted. This would require him to rebuild bridges from previous encounters with individuals whose opinions mattered.

At the time CSO was rehired a change in direction in my research emerged. My focus moved from understanding team dynamics in the context of developing ways of stimulating

innovation and now I was been asked to assist the newly returned CSO in the actual development of the strategy. As a consequence this left me with at a cross roads. Did I continue you on my innovation and product development focus, or did I reshape 13 months of work and develop a new research focus in an area that I have limited academic back ground in?

To resolve this dilemma I approached my colleagues and they helped develop my understanding of the options. Those that had the most significant influence on my decision to engage with the strategy formulation focus were my supervisors and other experts from Leeds Business School. Through discussion I realised that as an area of research strategy formulation was heavily debated from the view of the organisation and that the practice of strategy formulation was under developed.

Through the pilot study I had developed a good understanding of the context in which the strategy would be formulated, both academically (innovation) and localised empathy (through engagement). I had also developed a strong relationship with the CSO, a relationship that facilitated open discussion. The combination of a strong foundation upon which this research could be conducted, the possibility of developing new and novel insights in the area of strategy and the existing relationship with the CSO was the one that was out and I then became involved in the strategy development project.

## 4.5 Reflections on phase 2

As used before, figure 13 presents an overview using the activity theory model of the various elements that were impacting on the CSO strategy for innovation. Again, what is being sought here are the tipping points that influenced the strategy at this stage.

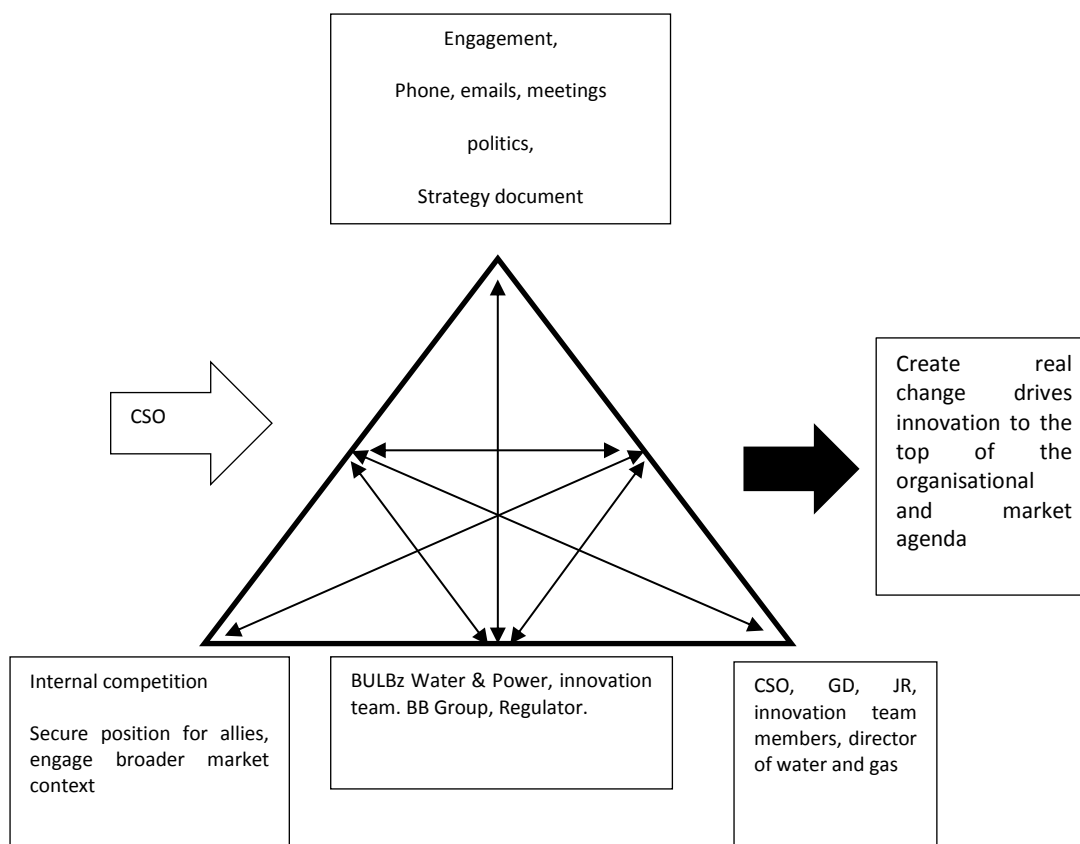


FIGURE 13 REFLECTIONS OF PHASE 2

The decision of the CSO to move away from a short term strategy can be seen major tension at this point. The decision was made based on personal opinion and insight with little to justify this change in direction on whether or not it was to the benefit of the firm as whole or not.



The impact of this change in direction, which was built on the CSOs personal agenda had now over ridden the original brief set by the Director. It might be suggested that the challenging the directors vision was just part of the CSO's nature as this was seen as common practice as those who are proactively involved in the area of technical innovation. However my observations suggest that this challenge was more personal in nature, as the CSO saw this strategy as an opportunity to drive a personal ambition that would see his area of interest and expertise become central to future organisational activities and beyond.

The CSO acted upon the division of labour, i.e. myself and the University of Leeds to assist him the development of the strategy. Even though he was aware that I had no experience of strategy; however we had formed a strong professional and personal relationship during the pre-study of my PhD. He trusted me and felt an external view I could offer would help him develop a better solution for the organisations innovation problems. He had also hoped that I would open access to expertise on strategy across the university and this I was able to do. He also wished to use the data I collected during the pilot to help the whole process.

During this phase the rules as understood in activity focused on developing some legitimacy for the CSO's vision and also to ensure there would be an outcome that was superior to those of his internal rivals. Other rules focused on the reduction of barriers between the three tiers of innovation. To achieve this some tools were designed to gain support were selected as well as the kinds of individuals needed to realise this vision.

## 4.6 Conclusion

This chapter highlights the first two phases of the strategy formulation journey. The CSO has been challenged by the director to create a short term strategy for technical innovation activities. By the end of phase two the CSO is challenging the original brief in its early phase of development. The next chapter moves into the next 3 phases of the strategy formulation journey. We start with the data collection phase, quickly moving to the creation of the document and finally the presentation and assessment of the strategy by the Director.

## Chapter 5 Middle and end phase of strategy process.

### 5.0 Introduction

This chapter focuses entirely on the later phases 3, 4 and 5 of the strategy formulation process and goes on to describe the strategy was received by the director of water and gas who commenced the project. The CSO was also interviewed about his reflections on the process as a whole. Through the activity theory framework lens phase 3 reflects on the data collection phase while phase 4 engages with the process of creating the strategy document. Phase 5 follows the submission and assessment of the strategy by the director of water and gas. This was to be the final hurdle before the strategy was presented to the board of directors to consider.

## 5.1 Introduction Phase 3 (December 2011 and January 2012)

This phase of the strategy formulation process saw the CSO further develop and refine his understanding of what he wanted to achieve both in terms of the strategy document but also how he would create legitimacy for the vision he was to set out. During this phase of the process the CSO engaged in a number of different activities. Firstly, he developed a range of 'organisational resources', such as new and different personnel with various skills and competencies that would together understand how a strategy would be developed. These insights from key individuals would help to legitimize the strategy in the eyes of the wider audience. He also engaged with the wider community as a whole in order to get a greater sense of the context in which the strategy would have impact as well as to gain support for his own vision of how innovation might be conducted better in the future.

To achieve this, the CSO identified key individuals whose inputs he saw as crucial. These individuals were then interviewed. What is demonstrated in this chapter are tensions that exist between the CSO's vision and the impact this vision would have on the strategy development process. These tensions and deviations were observed as having various effects on the CSO's final strategy. The tensions and deviations are explored through the use of the activity theory framework.

Several tools were observed to be used by the CSO and myself in the formulation stage of this strategy. These ranged from holding a number of development meetings and undertaking

interviews and engaging conversations as well as through reports, charts and emails. Others tools which varied in their influence included publications in journals, websites as well as books and insights from Leeds University staff with expertise in the area of strategy formulation.

The first strategy formulation meeting took place in the OpCo's head office in Sheffield. This meeting was organised so that the CSO could develop a strategy team. The purpose of the meeting was to kick start the formulation process. Present at the meeting was the CSO, myself and two junior members of the BULBz team. Throughout this meeting the CSO had developed and used a number of diagrams and charts to outline his view of the organisations current innovation picture. These diagrams and charts were based on the CSO's experiences of working in the context of innovation both inside and outside of the organisation for 20 years.

Figure 13 was created by the CSO and highlights perceived communication links between innovation and other internal departments of BULBz. The G&W OpCo was considered strong but unstructured at times. This strong link was based on the relationship held between the Director G&W and the CSO. Good unstructured links were seen to be existent between Safety, Supply Chain and Business development. These links were seen as *Good* as they were more reactive in nature with little plan with short lead times and were often one off projects. Finance, Marketing, People and Organisational Development and IT were all seen to have poor or no apparent links to innovation activity within the organisation. This chart was created by the CSO with no supporting materials to back up his claims. It was based on his experiences of working as senior manager of innovation.

Figure 13 highlighted both strong and weak links between internal departments of BULBz. In the CSO's view in terms of innovation his department had the strongest links of any other department within the BULBz. The CSO was creating a need for change. He was, in some respects, imposing his view onto the strategy team, none of whom had any experience in strategy and two of whom had no experience of BULBz innovation activity. In doing this he was reinforcing his own thinking rather than seeking ideas on how to best improve organisational practice in the context of innovation.

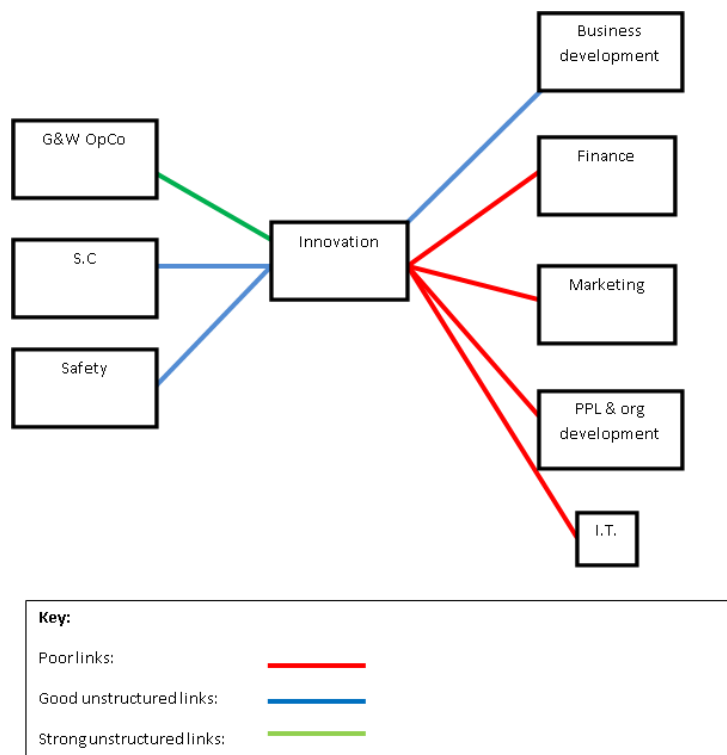


FIGURE 14 BULBz INNOVATION COMMUNICATION

A wide range of reports on innovation activity were collected by the CSO. These included internal organisational reports and external reports and innovation strategies (which the CSO

had peripheral involvement in). Initially considered too radical these reports and strategies were used as a foundation upon which the new strategy would be developed. They were used to develop an understanding of what might be deemed to be an acceptable strategy in contrast to an unacceptable one. The reports were relied heavily on in later stages of the strategy formulation process. At this stage though they were presented to me as a way of improving my understanding of the environment as well as possible an aid to the development of my PhD. Although these reports were promised during the process of creating the strategy I was not given access to the documents. Instead we relied on the CSO's interpretation of the key messages contained in the reports.

#### 5.1.1 Interviews

The CSO selected those he considered would be suitable to help with the strategy formulation process. He considered what kind of opinions might carry the most influence as well as who would also share his vision for innovation in both the organisation and the utilities sector. This selection process was deemed important by the CSO as he wanted to create *real change* and he needed influential stakeholders from both inside and outside of the organisation, to legitimise his view amongst his peers and give his strategy the strongest chance of acceptance. The following illustration indicates this:

*'what we can say, we can put them in sound bites and everything else, it's how you bring it out. But that's very important and that's what I need you to*

*do. I need you to, this isn't a nicey nicey project, we can't treat it as nicey nicey.'*

A list of names was duly created, that included the Managing Director of the Business, the Director of G&W, the Director of Business Development, the Senior Manager of Strategic Planning, the Director of IT and a number of external clients with whom he had a strong personal relationship. As indicated the interviewees were selected based on their position of power and their known views of how innovation activity should be moved forward within the organisation.

Interviews undertaken were conducted in an unstructured format and lasted between 45 minutes to an hour each. I was present at each interview bar two. One interview I was unable to attend due to a scheduling conflict and the other I was asked not to attend at the request of the CSO. I will discuss the reasons for this in more detail later in the chapter. Each participant was given a title topic prior to the meeting but no other support material was provided. The interviews were conducted over a three week period and took place in the BULBz head offices.

The CSO took the lead in each interview and I took a supporting role. I was depicted as an assistant to the development of the strategy, *'the one who will be writing it'* and the link to Leeds University. Each interview commenced with an opening dialogue from the CSO which explained what he was trying to do and what his vision of the future was. He used this opportunity in each interview to highlight the need for change and how innovation is the key for this change.

I also used a dictaphone to capture the conversations and created notes from the meetings and engagements that I was present for. The CSO also recorded one meeting that I was not present for on my behalf. I used mapping software to group all of the findings from the interviews conducted so that insights could be made from the information gathered. This was then presented to the CSO at our next development meeting. Although it took a great deal of time the work was not used to any great extent throughout the remainder of the strategy development.

A primary rule of the CSO was to bring innovation to the heart of everything that the organisation did. The CSO saw innovation as a key component for the future success of the organisation and he and his team were the right people to undertake this particular task, he believed.

The early engagement of individuals who power by dint of their positions and who shared a common view to the CSO served to bring individuals along on a journey and this was seen by the CSO as an essential part of the strategy development process.

The CSO was conscious of a number of factors that would influence his ability to successfully launch his strategy for innovation. One was the contrasting opinions of how innovation should be engaged with in the future and the other was office politics. As presented in chapter four innovation in the context of BULBz was a complex entity that was subject to multiple interpretations as how it should be thought about and delivered. The CSO was fully aware of



this and perhaps it was this understanding of the environment that influenced the tools he used to aid him in the development of this strategy.

The primary methods and tools utilised by the CSO was an opened interview approach. This allowed him to both gather data and to press his vision onto those he was interviewing. However this approach had unforeseen consequences that impacted the strategy process. The CSO had hoped that he would interview these individuals, capture some sound bites, develop some legitimacy and create his vision. However, those being interviewed were senior managers and directors, many of whom had strong opinions on innovation and how it should be developed in the future. The diversity and strength of opinion impacted the CSO in a profound way. He began now to realise the depth of the task he had created.

A list of names was created of various directors and senior management from both inside and outside of BULBz. However there were some notable omissions from the list and two deliberate exclusions, neither the Director of Innovation nor the Manager of the Innovation team were included in the list of stakeholders to engage with:

*I'm not sure AP is the right person, is it the right department? Is it the right person?  
We have struggled with this when we were deciding where does innovation sit and I think it's only gone to AP as a matter of default<sup>9</sup>*

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<sup>9</sup> CSO

Previous discussions and disagreements between the individuals on how to move innovation forward within the organisation had excluded them from the list of critical stakeholders. One morning, I questioned the CSO on the exclusion of the Director for innovation from the list. This took place in the car journey on the way to interviewing the MD of the business. He didn't fully engage with the conversation. He simply noted that he knew what his opinions would be and that they were not needed for the strategy that he envisaged. Later that day, the MD highlighted the need to engage with the Director of Innovation with this strategy, emphasising his surprise that he was not involved already. The CSO responded by saying that he was already on the list and that any delay was the result of a scheduling issue as to why he had not been engaged up to this point.

The interview held between the CSO and the Director of Innovation was the only interview I was excluded from, although I was in the building at the time. The CSO asked me not to be involved as he expected a heated encounter. After this interview the CSO stated it had went has he expected. He said the directors views were as expected, focused on the short term and reactive to the current needs of the organisation.

Community rules emerged as a consequence of the interview process. In many interviews the management of innovation was not overtly discussed, it was often implied and highlighted as a key requirement to facilitate and drive innovation. The interviews sought to engage what innovation meant to key stakeholders within the organisation and how they envisaged it

should be utilised. A diverse view of what innovation meant to the organisation and how it should be developed in the future emerged following the interviews.

Some participants viewed innovation as a reactive and deliberate activity that satisfied the needs of its client base. For this group, innovation focused on the development of technologies that were primarily health and safety focused. They felt that the model was fit for purpose, however the processes of technical development and the capability of the '*innovators*' came into question with additional training in this area seen as an avenue for improvement. This need for additional training was seen to be needed as the speed at which solutions were being developed was considered to be too slow.

Others regarded innovation as a *game changing* activity that provided both clients and customers with technologies and services that they didn't know they needed yet. They regarded innovation as a proactive and emergent activity that requires a high degree of investment and long term planning with a view that this approach will gain them considerable competitive advantage in their market place. This view was further compounded due to a decrease in benefits from the Lean engineering and process improvement model the organisation had focused on for the previous ten years.

Other findings suggested that the development of a culture of innovation was critical to successful innovation and that up to this point the organisation had failed to focus any effort into the development of this culture. All respondents suggested that an innovative culture as

the area that required the considerable attention. Client feedback has highlighted that although BULBz has been successful at times in developing technical innovations it did not have an innovative culture.

Many of the interviewees felt that innovation involved much more than just science and technology it also included the team dynamics of the team and how stakeholders both internal and external engaged with innovation activity. These interviews highlighted the importance of human agency and the mechanisms that govern technical innovation activity which was also seen to be suffering from limited resource and focus from top management within the organisation. It was acknowledged that the business relied on key individuals to conduct innovation independently and with little support. This has resulted in a client perception of *'promises not deeds'* with regards to innovation activity. Those that sought to develop T1 innovations felt that there was a need for G&W to establish frameworks that allowed innovation to grow and thrive within the business and across utility sector. However, what these frameworks would look like and how they would function were not clear and the development of this strategy was seen as a vehicle that could develop this asset.

The mobilisation of BULBZ innovative workforce was seen as key element to any movement forward from this proactive innovation group. Attempts have been made in the past to mobilise this asset, however these attempts failed through poor planning and the reliance on individuals rather than process and systems to promote, develop and maintain a culture of innovative thinking as well as the platforms they support.

Another group felt that technical innovation activity should be solely conducted through the supply chain. This approach was seen to lessen any risk associated with large and medium scale technical developments. It was also seen to reduce the levels of investment needed from BULBz as a collaborative approach with both clients and suppliers in the development of various technologies. It was envisaged that this strategy would require the employment of several innovation managers who's remit was to the develop networks and manage the interface rather than developing technologies. However during this interview this approach was debated heavily with the CSO defending his innovation team and highlighting the many successes they had. He acknowledged the work needed to be done on improving output but he felt the current model needed work and not a radical over haul.

With regards to approaching innovation a number of respondents questioned the need for the blue sky thinking approach. They felt that this approach was not applicable to the organisations needs and did not match the external environment in which the BULBz W&G operated in. They felt that this philosophy was too farfetched as the UK industry was not set up to engage with blue sky thinking and this approach should be focused on foreign markets that are more inclined to accept radical technical innovations.

All senior members recommended that changes be made to the innovation funding model within BULBz. They felt that the current models relied too heavily on the organisation to develop technical innovations. Particular concern was given to high risk technical innovations that required a lot of investment and were often developed independently from the client.

The CSO and I were challenged to develop a model that '*shared the load*' and reduced the level of investment from the organisation.

The innovation team in BULBz, it was seen to sit at an intersection between two opposing cultural perspectives of what innovation meant to the organisation. These departments conduct their businesses in radically different environments and this has influenced the culture within the departments with regards to innovation. As mentioned in chapter four one side looked upon innovate as a radical approach for short, medium and long term activity while the other took a more incremental immediate approach. It was recognised that this inherent difference in perspectives on how innovation should be utilised was to limit the organisations capability to exploit this asset.

As a result many of those interviewed suggested that the CSO should create a clear unambiguous definition of what innovation means for the organisation. He was asked to create an overarching definition that outlines the perspective of the organisation with subsequent mini statement that are specifically outline what this means for each department and what their role is within the innovation drive.

This ambiguity and failure to define innovation was seen to have a negative effect on how the role of the innovation was understood across the organisation. This ambiguity and misunderstanding was seen to have reduced the legitimacy and understanding of what the objectives of the innovation team. Two quotes that best illustrate this point are:

*'[the] innovation team is commercially naive<sup>10</sup>'*

With regard to the exploitation of innovative technologies for commercial gain:

*'innovation for this organisation seems to be not producing patents or product innovations ..... but being a vehicle for other suppliers to operate at that level<sup>11</sup>'*

Another major concern raised was the silo mentality that has grown across the organisation. From an innovation perspective this mentality has meant that projects are often duplicating works and developing similar technologies that already exist within the organisation. This was in contrast the organisations mantra of working together. Working together was seen as a critical requirement going forward for the organisation with a number of senior members of the BULBz management team suggesting this should be a central component of the BULBz 10 year innovation strategy, but how to achieve this was unclear.

The CSO took the lead in the strategy formulation process. He set the agenda and focus of activities. He outline how and what he was attempting to achieve. A major component at the stage in the formulation process was the engagement of the local community. If the CSO's vision was to be achieved he would have to create buy in from senior members of the BULBz board of directors.

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<sup>10</sup> Director at BULBz

<sup>11</sup> Director at BULBz

My role was to support the activities of the CSO. I collected data and provided a means to air opinions so that the CSO could develop his thinking on the problem. I also collected data from the interviews that I was allowed access to. I conducted some early phase analysis on this data and presented my findings back to the CSO. At certain times over the course of the interviews I was used as a means to legitimise what the CSO was hoping to achieve as I was the 'university'.

The community in activity theory terms played an important role in the development of the strategy. Their engagement was seen as a tool through which the CSO's could set his plan in motion. Instead it proved to have far more of an impact on the CSO understanding of the problem than he had first realised. The community highlighted the high degree of complexity that surrounded innovation activity. The CSO knew that he would engage with individuals who had contrasting views to his own, but the process of interviewing unearthed why these views existed. The exposure to this level of understanding triggered a sense of uncertainty with the CSO, who now began to question whether or not his vision was appropriate.



## 5.2 Reflections on phase 3

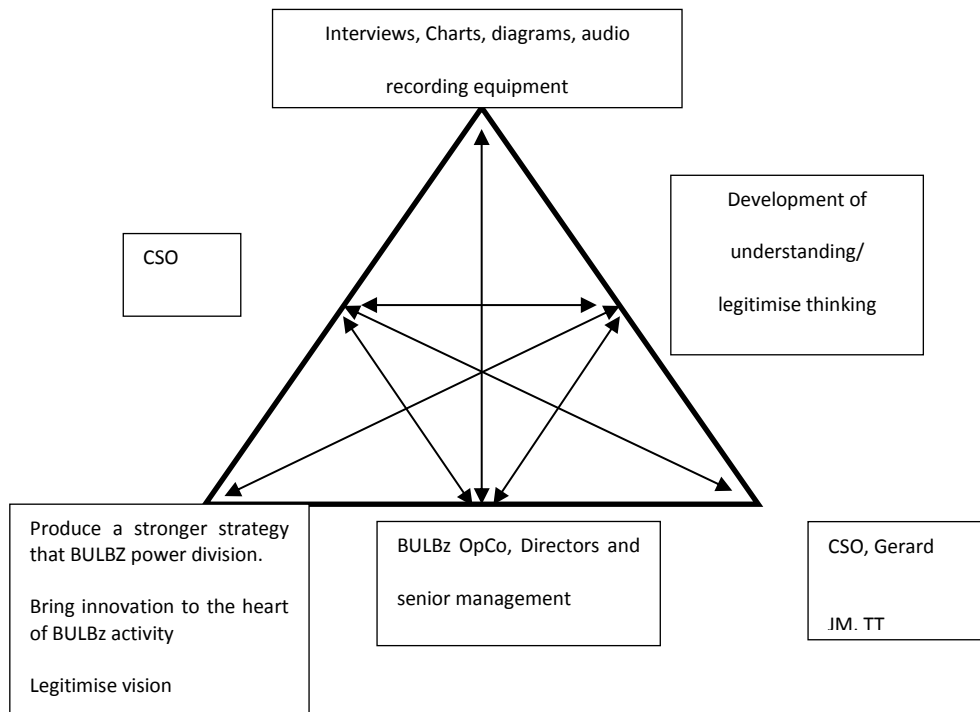


FIGURE 15 PHASE 3 ACTIVITY

Figure 16 shows that the CSO acted upon the community in order to satisfy the motivation of creating legitimacy for his strategy. The interaction is mediated by physical tools such as charts, diagrams, audio recording as well as mental tools such as expertise, experience and language. The activity involved a broader community such as BULBz Directors and senior managers, two low level staff members, a PhD student as well as the CSO himself. The division of labour was the development of a strategy, which at this stage focused on the development of empathy of the context and legitimacy for the CSO's strategic vision.

The activity was governed by rules and norms. In this case it is important to consider that the strategy was attempting to change a political environment where change seen in a negative light and as a result innovation was seen as an activity that was good for marketing purposes but not taken too seriously by many. Emphasis at this point was to do existing activities better and leaner. The primary rules in this case were to produce a higher quality level document to that of internal rivals and to drive future innovation activity.

Tensions existed between the CSO original plan to interview specific allies who he knew would agree with his vision of how innovation should be conducted. However specific members of the community, in particular the organisation MD forced the CSO to change his plan and involve some individuals who had been previously omitted. The engagement with the community also highlighted a large diversity in understanding and interpretation as to the strengths and weakness of the organisations innovation activity in the past and what it should do in the future. This high degree of complexity seemed to have a negative effect on the CSO as it presented a challenge that was far more intricate that he originally envisaged.

The tools and community engaged with interesting processes and tensions. The CSO engaged with an interview style approach to gather the insights from key stakeholders required for the strategy. However what is noticeable is the lack of systematic analysis of the insights gathered. Although I collected notes and presented insights made, these were not used to any great extent in the formulation of theories, concepts or to validate possible solutions in the strategy document. The CSO depended on his memory of the interviews to validate his

views of what was discussed and how innovation should advance in the future, but for my part I took detailed accounts of what took place.

The selection of the original innovation team presents an interesting element to this phase of the research. Questions arise as to why the CSO attempted to create a team with little experience and minimal authority within the organisation. At the time he claimed that this was due to a desire to use youth that was not burdened by organisational politics, but weighted against the lack of contextual experience of both innovation and BULBz seems odd. The fact that the team existed for less than a day and that he did not attempt to fill these positions after they left raises more questions. But more importantly this impacted the division of labour as now the workload had increased for both me and the CSO.

### 5.3 Phase 4 Creation of the strategy (January 2012-March 2012)

Phase 4 represents the development of the physical strategy document. A change in approach and philosophy is evidenced, which became more apparent as the deadline for submission grew closer. This phase commenced immediately after our final interview in the BULBz head office. It is punctuated with Christmas holidays and the need for the CSO to engage with a number of small management projects outside of the strategy.

A number of tipping points emerged through this phase, where what could be considered snap decisions were made that would have a significant impact on the outcome of the strategy. This included the use of a BULBz colleagues successfully accepted strategy document as a framework for the innovation strategy, as well as the decision to make alternative strategies for review. As the deadline for review by the Director of Water and Gas drew closer a need to complete on time rather than create a solution for real change was observed.

Immediately following the final interviews the CSO began to outline his thoughts on where to go from this point. This was to be the first steps in the development of a tangible output from our interview and data collection phase. He was felt that we had reached a saturation point and that all identified personnel had been interviewed:

*'I suppose we had better start writing this down now...all right, we have to have a starting point haven't we? We have gained all of this intelligence for our starting point'*

The CSO chose to use a frame work to help in the development of the strategy. He suggested that we use a strawman template to frame the knowledge gathered in order to build a proposal. He wanted to use the strawman to generate discussion and to provoke further insights, the CSO described a strawman as:

*'A Strawman proposal is a brainstormed simple proposal intended to generate discussion of its disadvantages and to provoke the generation of new and better proposals. So it's not a document, it's a proposal. What should go into a proposal? You don't leave anything out, you put everything in<sup>12</sup>'*

The primary motivation for choosing this template was that the Director had used it in the past. The CSO's thinking was this familiarity with the framework would enhance the strategies ability for being accepted for him. He also felt that by using the tool a sense of familiarity would be brought to the strategy. He also wanted to use this framework as it presented data collected in its rawest format, although many of those who contributed to the strategy would not be overtly identified; it was felt that if they could see their contribution in the document they would be more accepting to his ideas and concepts.

*'Its aim is to ensure that our focus is correct and agreed with senior members of the Gas and Water business. The Strawman is not expected to be the last word; it will be refined until a final model or document is obtained that resolves all issues concerning the scope and nature of the project...As it gets revised and solid it goes from Strawman to stone to ironman and so on, so we can use that process, CK is very keen on Strawman, look at that, there are all*

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<sup>12</sup> CSO

*kinds on there, so if we go.... Right. It's a dummy with no heart no bones or anything. I have never seen this before this is new to us both.<sup>13'</sup>*

The creation of the Strawman was a highly iterative process. It was developed over a five week period after which it was to be presented to the Director of Water and Gas. Up to this point work could be regarded as free flowing and engaging, with conversations as to what innovation means within the organisation and what the CSO's vision entails. However when we began to create the document a sense of urgency and anxiety became very evident and grew in intensity as the submission deadline grew closer.

At this stage in the Strawman development, various elements were now being taken from other reports and strategies. This was for three reasons:

1. We did not have the expertise or the time to develop a return on investment model; therefore one was taken from another strategy that the CSO felt complimented ours.
2. Frameworks were taken to align our Strawman with existing strategies with particular focus given to BULBz water strategies.
3. Time constraints also arose. It became clear that the CSO was running out of time and did not have the capability himself or the time to resource the expertise required to develop the tools that might be more appropriate than those used.

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<sup>13</sup> CSO

An example is the financial model, which was taken from a previously rejected strategy. The CSO stipulated that the financial model used in that strategy was perfectly fine and not the reason it failed to be implemented.

If we consider the Strawman as a sense making tool, PowerPoint was used to communicate the strategy. It was chosen as the CSO knew of another strategy that was submitted successfully used this medium. Similar to the selection process of the Strawman tool, the use of the PowerPoint format was used as it was a proven approach within the company.

The booklet design was given a lot of consideration. The use of graphics and photographs were used to establish both a sense of quality of the strategy while the photography connected the document to things people could recognise. A considerable amount of time and focus was given to this aspect of the strategy. The need to look professional, be polished and connect with the organisation on multiple levels was regarded as a critical element for the acceptance of the strategy:

*'If it don't look right, they won't read it. We have to make sure that it tells the story and the look and style of it is important. It's the first impression'<sup>14</sup>*

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<sup>14</sup> CSO

Graphics were selected of existing successful technical innovations, large scale projects, process improvement initiatives and representations of key personnel relationships developed in the industry. The aim being to relay a sense of success as well as ambition.

The CSO had already made the decision to attempt to make real change to the innovation activities of BULBz. However many recognised obstacles existed to achieve this. Many he had been exposed to for years of driving innovation activity in an environment that had resisted it. During his time at BULBz, he had observed strategies come and go and many had made little impact on innovation activities. They also bore little relevance to his vision of what innovation should be to BULBz. In the CSOs opinion the reason the previous strategies had failed to succeed when implemented as they were nearly all too narrowly in focused and incremental in nature. He also highlighted, on more than one occasion, that one strategy he was loosely involved with previously, which failed to be implemented as the board felt it was *'too ambitious and 'left field'* for consideration. He felt that for this current strategy to succeed an approach that would facilitate change, while not breaking completely from current organisational frameworks had to be developed. If the change was too severe it would have little chance of being accepted:

*'My thoughts are, one of the things I am very keen to do...I think we need to follow three strands and those three strands are technical process and culture....they are our three main headings...ok now, those need to be three*



*headings, but there also needs to be a definite aim that they are all coming together to deliver the strategy.<sup>15'</sup>*

The CSOs aim then was to move his technical innovations team to the heart of the business. It was his opinion that they ought to be engaged with all aspects of BULBZ Water innovation activity. Gas was seen as a similar industry to water but at this point focus was given to the development of a strategy for water innovation; the industry the CSO was passionate about. As he saw it, this unit should be the driving force of both technical and social innovation activity:

*'So technical we have the innovation department in derby, who are technical specialists, so my thoughts are that they should be the centre of all intelligence of the business in terms of...they should, even if they are not participating in, they should be aware of what is going on. They should be the brain of the business for all things that are innovation projects. That doesn't have to be innovation in terms of technical innovation<sup>16'</sup>*

In an extension of this BULBz Water would be developed into the flagship for innovation activity across both BULBz Group and the respective industries. To achieve this strong, identifiable links he sought there would need to be visible to all groups within the strategy.

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<sup>15</sup> CSO

<sup>16</sup> CSO

Existing parameters were identified that could not be altered, but were seen as avenues for development rather than blockers, as the CSO illustrates in the following extract:

*'So what I am trying to do is to create in this framework here, I have that many documents now, but in this frame work here....that is set out by group now, it can't be changed....we have all of this strength in BULBz Group and strategy wise, I want the first one of those innovation everywhere hubs to be water. We could do another one for gas alongside water, but use water as a pilot... Surely we should be using the strength of BULBz Group and this new innovation structure that they have in there... I want the first one to be water and AMcD agrees with me. So in terms of strategy, I think we should as I said, use the strength of BULBz group in shaping it let the Director of Water and Gas be the sponsor of and support it the way through and everything else and that's where we have to convince the Director of Water and Gas to when we talk about it with him. That's just one strand to it, but strategically that's how BULBz Group can contribute and if we had that innovation forum there, it wouldn't be just OPCOS, it would be OPCOS participating in it, but I also want to bring [water] clients in, like CLIENT1 and CLIENT2 because they would like to participate as well. That's my thought, that's my thought pattern, how we put that all into a paper into a Strawman I don't know. My thought pattern, that's where the thought patterns are, that's where I have been.<sup>17</sup>*

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<sup>17</sup> CSO

This phase of the strategy formulation process saw some major changes in subject and division of labour relationship in the activity system. This in turn impacted the object and output. Early in phase four the CSO suggested that we start working on the development of a document. Conversations between us were always open, with the mood a good one and where concepts and ideas discussed freely. However as the deadline grew closer a distinct change in the relationship became noticeable. The pressure to succeed moved the relationship from one that was collegiate in nature to one that was more abrasive, authoritarian and on occasion hostile. Less time was given to my insights and more emphasis given to the CSO personal views and opinions.

In the early stages the process involved much deliberation in relation to just what we were trying to achieve. Twenty documents were collected from both internal and external sources. These ranged from existing strategies from the BULBz Group documents on innovation, governmental white papers, BULBz strategies for both infrastructure and non-infrastructure works as well as previously failed strategies. I was not given the opportunity to read many of these strategies and as a consequence I relied on the CSO's interpretation of what he had read and understood and how the findings impacted his strategy.

The CSO set a target of a week by which time we would need to be meet and discuss our initial thoughts. Under the existing headings of technical, process and culture, I was tasked with the development of both the cultural and process sections of the strategy document, while the CSO developed the technical aspect and content as well as the and financial elements. I was

given process and culture in part due to the insight made from the pilot study conducted the year before. I was also given these areas as the CSO openly stated that he had no expertise here. The CSO thought his expertise and experience of working in technical innovation would help him develop a coherent piece of work and a plan for moving the organisation forward.

The CSO had asked for an outline for what I was planning to develop for the process and cultural elements of the strategy. Yet he had given me little guidance as to what he thought should go into the document or how it should be presented or formatted. I began with looking at the data we had already collected from the strategy research phase (phase 3 in this thesis). I also consulted colleagues from the University of Leeds who had experience in the development of organisational reports and strategies. I also used text books on the subject as a guide, these included: Strategic Management of Technology and Innovation (Burgelman, Christensen and Wheelwright, 2009; Mintzberg, Quinn and Ghoshal, 1998; Hill and Jones, 1998). After two days I had developed an outline and highlighted the types of areas where I felt we needed to discuss further together.

At the same time, I began to question the CSO his use of the Strawman as a framework for the strategy. I suggest that what we were presenting was rather myopic and that other options perhaps needed to be explored. I also suggested that not doing so might risk the acceptance of the strategy as it was one limited point of view, and did not address broader perspectives of how innovation nor in my view did it utilise the data that we collected during

the research phase of the project, although the research done was heavily influenced by the CSO.

The CSO felt that this need not be a problem as we were on the right path and other options were not worth exploring. He felt that this Strawman was the framework that would appeal to CK and that he '*knew* what CK found *sexy*'. He felt that for the strategy to succeed it was the opinion of the Director that mattered and not whether strawman was used or any other framework.

Five days later Dr Roberts entered the Leeds Business School meeting room, where we were working that day. Dr Roberts asked how many options we were presenting, I responded with the answer one. Dr Roberts highlighted that it was normal practice to present a number of strategies. In reacting to Dr Roberts comments, the CSO responded saying yes these were being developed. This came as a complete surprise as it was different from what had been discussed several days earlier. Five options would later be developed, four of which would receive a single slide each while the CSO's primary focus would cover 78 slides. The five options were:

- Business as usual
- Do not innovate
- Break innovation back into the sectors
- Innovate in supply chain
- Create new innovation model

At this point, I began to feel extremely frustrated. As the process questioned my role in the development of this strategy. I began to ask myself why I had been asked to engage with this process in the first place. At this point on more than one occasion when concerns were raised my opinions were dismissed only to be accepted at a later stage when suggested by someone else. I became frustrated and made a decision to accept my new role of that as subordinate

A week before the submission deadline the CSO began to express a negative view of the organisations innovation practices. He had found out that the Director of Gas and Water had commissioned an alternative strategy to look at the water OpCo. It was to review the organisation as a whole and assess opportunities for the future. Part of this focus was to review whether or not the OpCo needed to conduct technical innovations at all. This seemed to make the CSO nervous as the following quote illustrates:

*'I just want to see the plan to understand. That's why I have been trying to get hold of JC so I can understand the grand plan and so I can align our plan with that one. I need you to understand there have been some things that have been too sensitive to talk about...but if I were to put my cards on the table I would disband this team tomorrow and send them back to their contracts, I can say in the first years, when we were not influenced by the politics we made good returns, but since the team has been shaped as a joint*

*team they haven't done an iota because the internal politics and where they sit isn't conducive to innovation. I struggle I struggle.<sup>18'</sup>*

This point marked a change in our approach to the creation of the Strawman. A much more intense feeling became evident. There was also a marked decrease in open conversation with little scope for debate and questioning of ideas. The focus now as to get the Strawman completed and submitted for assessment. From here on, the CSO took control and guided every decision made. The focus was to create something that would be accepted by the Director of Water and Gas in quiet a pragmatic way.

The practical process of creating the document was an iterative process of drafts going back and forth between myself and the CSO, with the CSO having the final say on direction and development. Each iteration build on the last. It incorporated some of the headline information found from our interviews while still maintaining a singular focus i.e. bringing his innovation team into the centre of everything that BULBz W&G did. A process map for communication and decision making channels that was placed in the Strawman best exemplifies this (Figure 17 below).

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<sup>18</sup> CSO

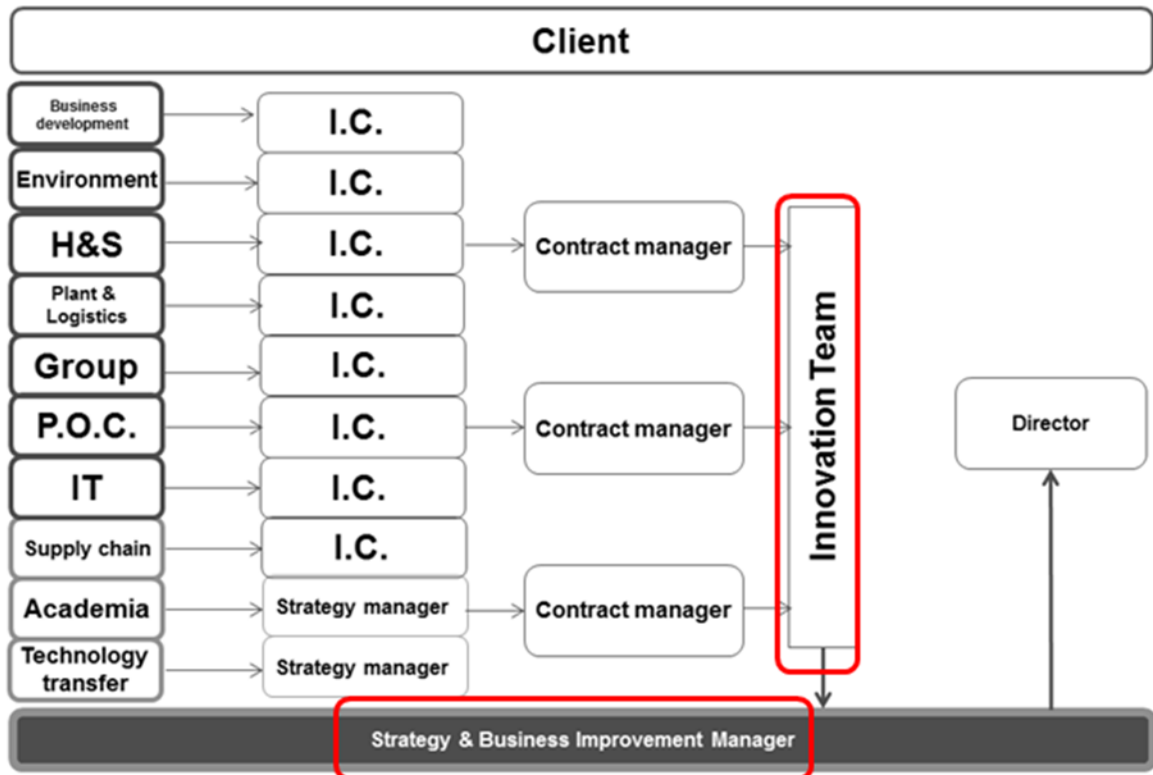


FIGURE 16 COMMUNICATION AND DECISION MAKING CHANNELS

As can be seen from the diagram above the innovations team was to have a central placement to all future innovations activity of BULBz G&W (highlighted in red). Adding to this the CSO had positioned himself so that he engaged with all innovation activity from each of the departments identified, throughout the assessment stages and that final sign off with the director under the title of Strategy and Business Improvement Manager. Under the Strawman each silo would elect and Innovation Champion (I.C.) whose role was to liaise with Mr Brent and the departments contract manager on potential innovation activity. The CSO was to remain as the sole link to both academia and technology transfer works taking place.



The tools used in the first instance were to provide substance to the CSO's vision. The relationship between the tools used to engage with the community and the impact the community had on the tools was interesting. Although the CSO attempted to stack the deck in his favour by managing each interview, at various points in the process the community unknowingly or not overcame this bias and influenced the CSO to change his process. For example when the MD questioned whether or not the Director of innovation was to be involved the CSO changed tack and stated that it was a pending meeting. While others added layers of complexity to the problem that the CSO was unprepared for, an example of which was (the head of operations and strategic direction) promoting an alternative view that the organisation should only be innovating through the supply chain.

Few practical tools were used to analyse the data collected from the interview phase so that a comprehensive picture of innovation could be developed. Instead the CSO relied on his opinion of what he thought they said, relying on memory to drive his understanding. A number of charts were created but these were not used.

The focus on where the water and gas sectors were going to be in 10 years was a new focus to the strategy. The need for change was a constant theme throughout our interviews, but this change was internally focused. Conversations centred on where BULBz Gas and Water innovation needed to be in 10 years and how they would we get there.

The desire in the early stages of this strategy formulation process to outshine, who the CSO considered his internal rivals, had not subsided. The sense of competition and the need to do a better job than his rivals in the power divisions was expressed. I questioned at the time this sense of competition, I understood its historical relevance but did it have a negative impact on this strategy? On many occasions it came across a more personnel than professional. Along these line the CSO stated:

*'a lady called [REDACTED] and she is developing one (a strategy for innovation) for one of the power sectors. I don't know who is doing it for the other power one, but I don't think theirs won't be as detailed or as specific as ours is. Theirs will be a technical document, ours will have technical in it, but I can cover that...but what we need to do is look at a more global outlook of where the water and gas sectors are going to be in 10 years' time and where we need to be globally<sup>19</sup>'*

The development process took place in three locations, a Leeds University Businesses board room and the CSO's home when working collaboratively and in our own offices when working independently. The majority of work was done while we were in the same location, when not convenient, regular email and phone conversations were held to keep each up to date and to answer any questions either of us may have had. This allowed for immediate feedback on areas of confusion. No work was carried out on the BULBz premises as the CSO felt that it

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<sup>19</sup> CSO

would be too distracting and it would not be a place that we could talk openly. He did not access his company email account or his company mobile phone as he felt that this would distract from what he was trying to achieve.

It was at this point the scale of the challenge began to emerge. The CSO began to question whether he should have tried to take on such a large challenge. He began to question if it could be done and if it was to be done right, he needed more time and people. The CSO began to express a high degree of anxiety about the potential impact this strategy could have on his relationship with his colleagues and friends:

*'This is why it is difficult as well. I do get the feeling of being an assassin and everyone is telling me to be an assassin and not to get emotional. But when you work with these people for so long they turn coat you, shit on us and all sorts. But that's not the point I just need to get this right'<sup>20</sup>*

In the development of the rest of the document the CSO took a historical look at successes the organisation had achieved in the past. He presented a short term picture of future activity highlighting projects that were nearing completion. This section of the document suggested that technical innovation did not need to change its current approach. He felt that the outputs achieved in the past represented a future technical innovation agenda. Focus was given to

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<sup>20</sup> CSO

legitimising past works and thus highlighting a need to maintain the team to conduct future works.

At this point the CSO sent an email to a BULBz expert on innovation in the gas industry:

*'Any ideas on how we can form a community in the gas sector for promoting and delivering gas innovation projects'. A few pointers from you would be ideal to add to the strategy. Questions are:*

- *Where do you think the gas industry in 3 years' time?*
- *What will they be doing differently?*
- *Will there be an innovation structure at high level and sub level?*
- *Who are the key players?*
- *Name 2-3 areas where innovation projects will benefit the industry?*
- *Any ideas of short term innovation projects?*
- *Gas industry in 6 years' time*
- *What will they be doing differently?*
- *Any ideas of mid-term innovation projects?*
- *Gas industry in 10 years' time?*
- *What's the big challenge which will take 10 years to bring to the industry?*
- *I will need something for the strategy and I would appreciate your help<sup>21</sup>'*

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<sup>21</sup> CSO

The gas expert contacted the CSO by phone and gave answers to each of the questions; his answers went directly into the Strawman with little consideration. The foundation of this Strawman was developed quickly in comparison to the early stages of data collection and questioning. A *'that will do'* approach was now being taken. Focus was now given the development of a professional looking document.

The process and cultural sections of the report of which I was developing, questioned the lack of the organisations process and cultural innovation initiatives. It highlighted that all participants in the study acknowledged a need to develop an organisational wide process for developing innovation and a culture that accepted innovation as part of a daily activity.

Through the interviews conducted upon the development of this strategy, culture was emphasised as the area of innovation that requires the most attention. It was repeatedly noted that BULBz does not have an innovative culture. It highlighted that BULBz relied on key individuals to conduct innovation independently and with little or no management support. It also emphasised that BULBz needed to establish frameworks that allowed innovation to grow and thrive within the business. The strawman outlined a number of possible frameworks that would provide a platform for the development of revolutionary innovation projects (Tier1) while also supporting evolutionary (Tier2) activities. No focus was given to incremental (Tier3) projects.

## 5.4 Reflections on phase 4

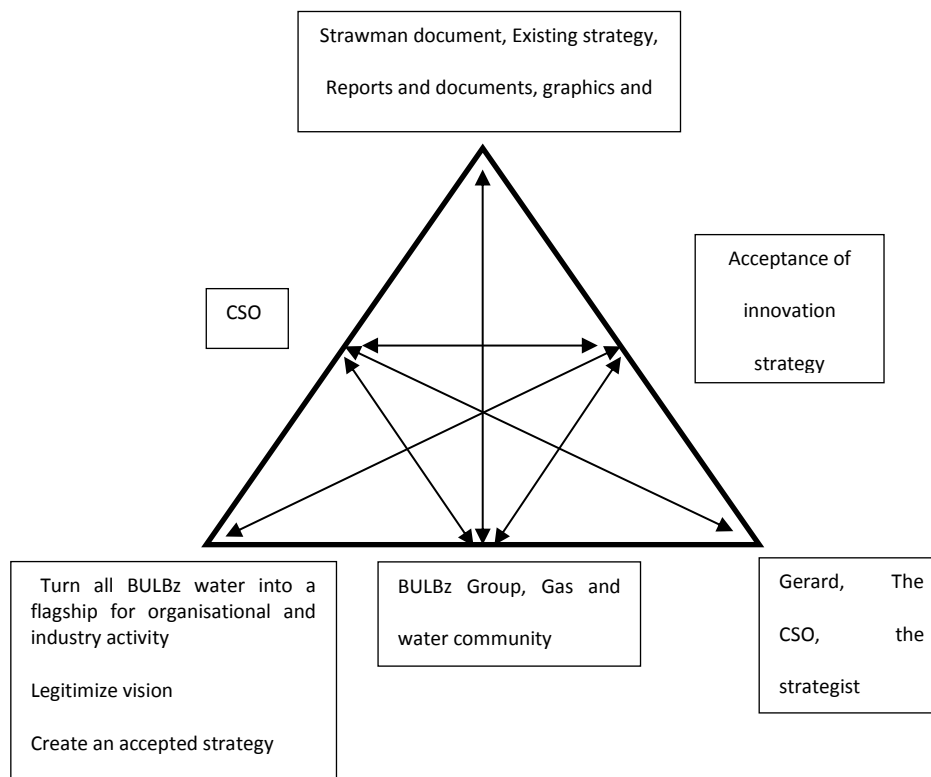


FIGURE 17 REFLECTION ON PHASE 4

The selection of the Strawman approach to the creation of the strategy had a number of interesting impacts on the strategy as a whole. The CSO selected it as for its resonance with the director, as the director had used this tool on previous occasions. The use of this tool gave the CSO space to add a high degree of volume to the strategy as *'everything goes in'*. As a consequence it could be suggested that it allowed the CSO to add so much depth that he did not have to make any clear and outright decisions.

In essence the use of this tool would act as a layer of protection if the strategy was not successful in its submission. The CSO was conscious that his reputation was one the line at he was fearful that if this was not accepted, it would impact his standing in the organisation. However the breath of scope that this tool provided towards the end of the formulation process added its own layers of difficulty as it did not force the CSO to make key decisions on the strategy itself. It allowed for no decisions to be made as *everything* was to be included.

The larger community influenced the strategy for innovation. During the write up phase the CSO and I were invited to engage with a Group discussion on organisational innovation activity. A presentation was given by a senior think tank group who were attempting to develop a platform facilitate innovation activity across all of the OpCo groups. The CSO took this as an opportunity link his current thoughts with those of the Group Director for innovation. As a consequence many of the slides and logics from this presentation were used in the strategy for innovation.

The decision to engage with an internal strategists resulted in a change in direction for the development of this strategy. Previous to this we had begun to develop our own framework and design. As a consequence of this decision to engage outside of our team an alternative approach to how the strategy would be framed emerged. This decision impacted the speed at which we were now operating at. A noticeable increase in the speed at which decisions were now being made of observable, with less debate between the team and more direction led approach from the CSO now being taken.

The selection and use of existing models and frame works from other reports became an important feature in the development of this strategy. The CSO felt that we had neither the time of expertise to develop bespoke model for what he wanted to achieve.

The rules driving the development of the strategy through this phase evolved from creating real change to submitting something that would be accepted by the director. This transition became more apparent the closer the deadline came. However the need to submit a strategy that would be accepted was inhibited by a number of previous rules such as the rule to create real and impactful change and the tools used such as the Strawman. It was also impacted by the lack of tools used such as analysis tools to paint a clear picture of current innovation activities and the use of reports to estimate where the market would be in ten years' time. As a consequence a reliance on other means such as style and the support of others became important if the strategy was to be accepted.

## 5.5 Phase 5 Examination and reflections on the strategy process (March 2012 – June 2012)

This was the final phase of the strategy formulation process that I had access too. It highlights the final preparation activities undertaken by the CSO. It also presents the assessment of the strategy by the CSO and the Director of Water and Gas. Finally it reflects on the process of strategizing through the eyes of the CSO in a review meeting held a number of weeks after the process was completed.



The CSO used a variety of tools both before, during after the review of the strategy to highlight the strengths of the strategy and to dilute its weaknesses. These tools included: Emails, the strategy document, a pre-review meeting and the main strategy review meeting.

Prior to the review meeting, the CSO used an email (Table 13) that had the strategy attached to it as a means to pre-condition the Director as to what he should expect from the strategy. The email was used as a tool to highlight the connections between the strategy and existing frameworks, such Return on Investment process, Safer, Better, Leaner, Faster philosophy of the organisation, the EPMO system and the AMP6 and AMP7 cycles.

TABLE 12 EMAIL SENT FROM CSO TO DIRECTOR OF WATER AND GAS

*Latest version of the innovation strategy document attached for your review. This version has much more relevance to the Infrastructure For Life and Gas and Water Customer Experience Document with many statements aligned directly. I have also met with PD and updated historic ROI as well as put in new metrics for determining projects suitable to go ahead in future with ROI having greatest weight but not overriding all other factors I believe we should consider. I have also spoken with JM on process and project governance – JM is reviewing what I have sent regarding the EPMO system and getting back to me with JM recommendations so this section will change when I have the detail. I have also asked her to give me a date to meet in the next week so we can bottom this. Much of technical activity in AMP6 and AMP7 is from speaking with SL and I have some refinements to do on what we should focus on in infrastructure which I will complete on Monday when I will send you a further update.*

*I am meeting you Tuesday after your meeting in CSC Newcastle to go through this and see what you still need me to address. I also need to talk with you on the STREAM project which ST and we are going to partner – it has passed STREAM validation for their Cohort 4 but I will not go ahead without your sanction. Once I have it I am due to meet KM, Head of innovation who reports to DE. I also want to discuss the Group Water Hub activity. KV, Strategic Consulting, ex PB now is working for AMD and tasked with shaping the HUB should we go ahead. I am due to meet her in Sheffield on 8<sup>th</sup> March'*

Prior to the meeting tensions were high as the strawman was being presented the next day. The Director was seen as central to the successful acceptance of this strawman and the first step towards its implementation. The CSO began to think about how to structure and present the strategy. He had been given an hour to present the strategy, with that hour, the work done would be assessed and recommendation put forward by the director:

*'So how do we structure the hour? I think we tell him about the interviews? Do we put it in a graph, do we show him that? Or will we just talk? We need a plan.'*<sup>22</sup>

In the end, no plan was created. This was a moment of panic and after a few moments he felt that at that stage, no more could be done. He suggested that the Director will be given the lead and from there we would react to whatever was being said.

The review meeting itself took place in the main board room of the Sheffield office. The Director, the CSO and myself were present. Each of us had a printed copy of the strategy. The director, explain that he had cleared an extra hour for us to review the document as he was very interested in what it had to say. He also noted that this was the first opportunity he had to review the strategy.

The Director assessed the strategy page by page. The CSO began to walk him through the document giving a narrative and justification for each page. Debate and conjecture were the tools used to question and validate decisions made in the strategy. The Director used questioning to develop understanding as to why specific decisions were made over others.

Several debates emerged over the course of the review. A high proportion of time and focus was given to what innovation meant to the W&G OpCo. What kind of model should be

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<sup>22</sup> The CSO

followed for innovation within the industry? Should they be innovating at all? Were they innovators or adopters? Within each debate the CSO did his best not to disagree with Director but in doing so often contradicted himself something that the Director raised:

*'listen you are saying all of this just to agree with me, that's not what I want. Tell me*

*what is going on!<sup>23</sup>*

Two rules became apparent over the course of the assesment process. The CSO wanted to defend the work he had done, but also distance himself from the weakness that arose from the assesment. Whether this was a conscious decision or not, I could not tell, as in previous meetings this was never dicussed and as far as I was made aware, we had interviewed everyone he had wished to interview.

The CSO defended the work that he felt the Director would agree with. He legitimised this work by aligning it with existing frameworks and metrics that the he knew the Director supported. He did this both in the email (Table 13) and through out the assesment process.

With works he was unsure of agreement over, he scapegoated and identified people of seniority whom he had engaged with on matters, or whom he had difficulty in gaining access

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<sup>23</sup> The Director of Water and Gas

to. In doing so he attempted to deflect personal blame while also showing that the strategy was a working progress as the identified individuals would be engaged with in the near future.

The director of water and gas took the lead of the review meeting. The CSO took a primary role in the debate and defence of the strategy. I defended the two main areas of the strategy which I had developed i.e. process and culture. Due to the nature of their relationship the discussion was robust and without elegance. It was evident that the Director wanted a strategy for innovation that would work and with the limited time frame available he intended on giving the strategy a critical assessment.

Initial assessment focused on the 5 options put forward, i.e. business as usual, do not innovate, break innovation back into the sectors, innovate in supply chain, create new innovation model. Upon assessment of the 5 strategy routes the Director agreed that the avenue that was chosen for further development (new innovation model) was an appropriate model to explore. However he also felt that breaking back into the sectors should have also been considered in more depth. The CSO justified the approach taken as a result of the interviews conducted with senior members of BULBz.

After this I presented sections I had developed, culture and process. Little feedback was received on culture and process. The Director felt that these sections were strong although I felt he ran through these sections very quickly and did not seem to give them much consideration. I was disappointed with this as I felt that it showed a lack of desire to follow

these avenues of development. Although the internal research we had conducted had shown that process and culture required the most attention.

The next two sections discussed were technical innovation and Return on Investment. These two sections were given the highest degree of scrutiny and time by the Director. These areas were seen as key to the success of future innovations. The Director felt that these sections had to become more robust in the metrics used to quantify their claims. He felt that the ROI targets for future innovations were unjustifiable and needed further investigation.

The community was used for two distinct reasons through the strategy assessment process. As discussed, the community was used to add legitimacy with strong elements of the strategy or to build distance between the CSO and weaker elements. I found this very interesting as I felt I played an integral role in the development of the strategy from its early phase through to submission, it was during this process of assessment was a first time I was made aware of some of the people being engaged with and processes being aligned with. As a consequence the community became a defensive tool through which the CSO could defend or distance himself from the strategy, depending on what was being discussed.

From the perspective of the CSO the role of the community was to support the decisions he made in the strategy. From the perspective of the Director, the role of the community and the rules with which they followed had a different meaning. If the strategy for innovation was to succeed it would have to ensure a ROI on an annual basis, as this was the most important

rule by which his ability to perform as director was measured. This was evidenced in the pilot-study where the utilise sector was a low but consistent return on investment option for investors. Innovation was seen as a risk to framework and if any innovation activity was to be accepted a clear and thorough strategy would have to be created in order to convince the stakeholders to change the rules by which they currently operate under.

Before the review meeting had commenced the CSO became defensive about the strategy and began to question his own thinking:

*'I don't want to put it on paper and get it all pulled apart. What we have got is the shaping paper, the water forum, meetings that are set up [to support this strategy], we have further meetings, what do we need to show? Because I don't really know, until I get a little bit more direction in terms of what he wants in terms of the document, I don't want to waste my time I don't put it on paper unless I am sure it's right.'*

To better help understand what to expect, prior to the strategy assessment meeting with the Director of Water and Gas, the CSO held an hour long meeting with the Director in Business Development to gauge his feeling on the strategy. The Director of Business Development highlighted that as a strategy, it was far too large and comprehensive. It took a far too detailed approach. He felt that a strategy should be presented at a higher level and should be no more

than 10 slides. This information was then used at the opening of our meeting with the Director of Water and Gas:

*'I know it [the document] is far too large, but we have put everything in, the strawman, everything...now when I have written this, just to give you some direction, Gerard has been heavily involved as has Leeds Business School, who have done some sound proofing on it for me...we have addressed culture, process and technology and some internal business needs. We have explored all of the options...the key drivers we matched the drivers of the business, our drivers, your drivers and the sectors as well. We have started off by linking to Zero Harm and safer better leaner faster'*

Outside of a legitimising role, at this stage the community had limited input to the development of the strategy.



## 5.6 Reflections on phase 5

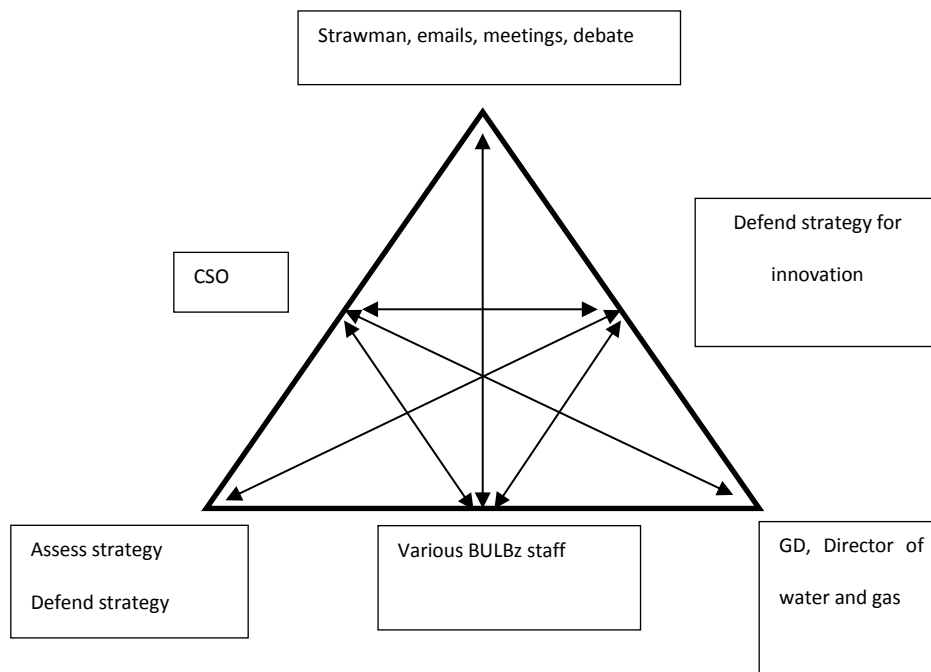


FIGURE 18 REFLECTIONS OF PHASE 5

This phase highlights the assessment of the strategy formulation process from the perspective of the CSO. It has highlighted how the CSO has attempted to defend his strategy for innovation to the Director of Water and Gas. The Director of Water and Gas was the initiator of the strategy formulation process, he had selected to CSO to undertake the task.

Tensions were shown when the CSO became highly defensive towards assessment of the strategy and in doing so used a range of tools and techniques to justify decisions that were made. Phase 5 has also shows that the drivers for the director had not changed from the original brief that he had set, this was evidenced through his focus on the return on

investment and technical development aspects of the strategy. This sequence shows the impact of lack of the debate held at the beginning of the process between the newly appointed CSO and the Director. This lack of communication result in the development of works that did not satisfy the needs of the director or the vision he held for the organisation moving forward. This made it difficult for the director to assess the validity and viability of the presented strategy for innovation as it did not fully support the development of technical innovation activity for the organisation in its current form. The presented strategy, instead, sought to change the organisation as a whole to fully accept innovation as a core philosophy, something the Director could not fully accept as he felt it was unrealistic.

### 5.7 Reflections of the strategy process by the CSO

A follow up interview took place several months after our presentation to the Director of water and gas. His reflections on the process highlighted changes in perspective now that some distance was created between him and the strategy. The CSO seemed more relaxed and reflexive about what had taken place.

During our review meeting the CSO acknowledged that his strategy for innovation was not implemented although he felt that much of what was said had been taken on by others in the organisation, so he regarded it as a successful venture. He felt that:

*'Innovation in BULBz is always competing with the bigger picture and that's why strategies for it have to be fluid. I don't think you can pin down innovation in our kind of organisation it has to be fluid and as a consequence it [the internal landscape] as all changed...what we were trying to do was please everyone. I was back in a new role after 6 months off. I was talking to people engaging with me. Even though we were trying to sense check, I was also trying please them as that's part of my job. If you are a strategist you have to take people on the journey with you, I can't say you are wrong; I have to get them to work with me. CK thinks we got it wrong, specifically the leading the industry element...our strategy wasn't about determining a right and wrong answer, it was about determining where we were going to.*

When reflecting on the approach taken and the tools used he noted that the existing:

*'It was about identifying different options and avenues of activity. You can't do that with SWOTs, it's too narrow due to the fluid nature of innovation. We didn't do them, because they were blazay and boring to be honest, those tools didn't fit with what we were trying to do. But for example the return of investment stuff was needed to the protection of innovation when consulting with the board of directors'*

He felt that in the end, he had not created a strategy; he felt that he had created an aspirational document and that he had completed the task he was set. He also felt that he was not in a position to make key decision, that to make these key strategic decision you must be a director:

*'I don't think we wrote an innovation strategy. I think we wrote an innovation statement. It was a document that outlined where we were and where we needed to be...we didn't state where innovation should sit, we discussed how it should be managed...we didn't pick any of those 5 [avenues] that was the decision MS and CK made... this was more of business plan than a strategy, it took a higher level view'*

## 5.8 Conclusion

This chapter focused on the lived experience of strategy formulation from the perspective of the CSO. Through the use of rich narrative, it preserved the voice and experience of the strategist and his team as they undertook the strategy formulation journey. It has shown the process as an emergent activity where decisions were made in real time.

Through the use of the activity theory frame work, various elements of the strategy formulation process have been examined and the relationship they have had at various times

over its development. The strength of these connections have investigated and how these connections evolved over time. For example the focus of the strategy as it evolved from a focused objective to one that was broad and vague. Others included the influence the development of other strategies had by internal competition had on the CSO's approach to the task.

What has been captured as the socio-political dynamics that underpinned the complexity of the formulation process. It has shown and number of tensions across the formulation process for example the desire to conduct research to justify a predeveloped solution principal and how the action of conducting interviews added levels of complexity to his strategic vision. Others included to desire to satisfy stakeholder needs rather than making tough decisions that may have been more appropriate to the organisations needs.

This chapter has shown the difficulties in working in the unknown. It has shown the struggles of the CSO, who was attempting to do what the thought was best in an unknown and evolving environment. The difficulty of working in the unknown may have driven the CSO to stay with what he knew to closer the deadline became. We can see that after an initial creative and experimentation phase, the desire to return to what he knew was apparent, for example the desire to use his existing team with considering whether or not the skill set they possessed was appropriate for the roles he was creating for them.

The next chapter will exemplify the contribution of this thesis but highlight how the methods used to understand the practice of strategizing. It will highlight the messiness of the strategizing process and the critical role of practical judgements in flight. It will build on what has been learned about strategy as a lived experience, highlighting how it has responded to calls for more insights of the emergent nature of strategy (Vaara and Whittington, 2012).

# Chapter 6 Discussion

## 6.0 Introduction

This chapter discusses the findings and insights made as a consequence of the research undertaken in chapters 4, 5 and 6. The account presented in chapters 5 and 6 gives an indication of the complicated nature of strategy formulation process. Camillus, (2008) recognise strategy as a '*wicked problem*' due to the complexities that emerge as a consequence of dealing with the unknown. Simon, Hitt and Ireland (2007) refer to strategy as a *black box* based on a lack of insight academia has been able to make on the strategizing process. This research seeks to shed light on this *wicked black box* by unravelling some of the complexities the CSO and I encountered through our lived experience of strategy formulation.

This chapter is broken down into two main sections. The first section reflects on research observations made on the strategy formulation process as a lived experience. It engages with the outcome of the case study described in chapters 5 and 6 which was undertaken through the methodologies described in chapter 3.

The research concentrates on a variety of identified stakeholders through their interactions with the Chief Strategy Officer and myself as we develop a strategy for innovation activity for the firm. Insights are made by engaging with the strategy process. This thesis responds to calls to capturing the emergent nature of strategy practice (Felin and Foss, 2005; Greve,

2013). As a consequence of undertaking this focus, this research has considerably improved the appreciation for the complexity and messiness of the strategy formulation process. To this end this thesis shows how judgements were formed and the impact they had on the process of strategy formulation.

The second section reflects on the impact the methodologies and methods applied, assisted in the development of deep insights on the practice of strategy formulation (Pettigrew, 2003; Van de Ven, 2007). By embedding myself as a member of the actual practice of strategy formulation, unique insights in the ways collaborative research generates depth of understanding practices are discussed (Antonacopoulou, 2010).

### 6.1 Dichotomies in the strategy formulation process

At the early stages of this process, intrinsically or otherwise the director had a predefined understanding of what he would like the strategy to resemble. He recognised where much of the information required to create a short term strategy for innovation would come, which in this case was existing internal reports. He also recognised, due to the nature of innovation, unknowns that needed to be understood from information garnered from interviews carried out by the CSO.



This in part, aligns itself to the Mintzbergs design school for strategy. At this point (Phase 1) the director is the chief strategist, a top down approach is apparent, and the vision for the strategy is relatively coherent with a systematic and deliberate means to create the strategy.

What was observed to have actually taken place breaks away from the design school framework on a number of levels. The director requested a formal strategic document to be created and subsequently delegated the responsibility of its development to a senior manager of the organisation. In this case the director is simply too busy with broader company issues to create the strategy further himself and as a consequence, selects a trusted member of his team to develop his vision.

The Directors logic in phase 1 was that the CSO had the experience from his involvement in innovation within BULBz, he had understanding of historical issues and he had a high level of social capital both inside and outside of the organisation. The CSO also had a reputation for delivering outputs that were not necessarily popular amongst his peers.

What might be conceived as the CSOs limitation to undertake the task was that he had no prior experience of strategy formulation or decision making at this level. However, the Director saw this as a positive, as he considered that the CSO would not be restricted by director level politics that in his view had inhibited the development of previous work in this area. He also had a high level of experience in what Whittington, Molloy, Mayer and Smith

(2006) refer to as *crafting* i.e. a range of hands on and practical skills in getting something done.

This delegation calls into question the notion of strategizing. The central premise of the design school and other deterministic strategy formulation advocates place the primary decision maker at the heart of the strategy formulation process (Bower, 1970; Quinn, 1978; Mintzberg, 1994; Hart, 1992; Mintzberg and Lampel, 1999; Anderson, 2004). Within this case however, we see responsibility for its development is given to the CSO.

It could be interpreted that the delegation of the development of this strategy reflects a low prioritisation of innovation across the organisation, or it could reflect that the director himself was unsure if his sense of how to engage with future innovation activity was appropriate. Either way, in this case the key decision maker was not at the heart of the strategy formulation process which challenges the assumptions made by Bower (1970), Quinn (1978), Mintzberg, (1994), Hart, (1992), Mintzberg and Lampel, (1999) and Anderson, (2004).

In phase 2 of the case aspects were observed more synonymous to those of the Entrepreneurial school and Cognitive schools of strategy (Cole, 1956). In order to make sense of what he was attempting to do the CSO relied on his own intuition, judgement and experience to create a vision of an idealised future for innovation in BULBz. This triggered a break away from the directors original view of what was to be developed. This one might speculate could be as a consequence of a mismatched sense of reality between the two

individuals. The personal view and identity of the CSO as the *chief innovator* pushed his innovation agenda to the fore.

The CSO view might be regarded by some as myopic, one that centres on innovation activity rather than the needs of the business as a whole. His view sees innovation as the only means by which the organisation can move forward and that he and his team were the only group that could manage this activity. This personal view of how innovation should be done and how it has been misused and underappreciated within the organisation in the recent past triggered a range of activities and the development of a strategy that was not an aspect of the directive given by the director.

Internal competition for resources and what could only be described as a deep disdain for the innovation activities of the other two OpCos was also a driving force. In order to legitimise his vision, the CSO, now bounded by his decision to change, embarked on a journey of justification so that his view could be realised in practice. This new vision subsequently triggered a range of activities, both internally and externally, that legitimised his thought processes. Examples of these can be seen in both phase 2, 3 and 4.

The first step in making sense and legitimising the process was the creation of the strategy team. How and why the CSO selected the team could be interpreted in a number of ways. However the makeup of the team was such that those engaged with those who would support his views. With the others in the team being made up of individuals who had little or no

experience of the field and holding relatively junior positions in the company - this would include myself the team thus constituted served to bolster Mr Brent's personal views.

Another identified trigger which helped initiate a change in direction was the reaction to the interviews conducted as part of the research. The CSO desire to engage with key stakeholders was from the outset to help legitimise his own view of how innovation should be conducted. In an attempt to ensure responses would reflect his own views, he had identified individuals both inside and outside of the organisation that had a recognised views of innovation similar to his own. These individuals ranged from those who had a certain degree of influence internally within the organisation as well as externally – particularly close relationships with clients. However there were a number of individuals who were interviewed who were in positions of power and authority within the company.

Attributes of Mintzbergs (1994) power school can be recognised here in the CSOs desire to engage with the company's political landscape in order to help legitimise his view of innovation. These engagements did not produce the desired outcome in terms of legitimation of the CSO's established vision for future innovation activity. As a consequence a breakdown in the CSO envisaged flow of action as it presented a much more complex and contested view of BULBz's innovation landscape. This links to the ideas of McCabe, (2002) who indicates that the complexity of the phenomena is in part influenced by the context. What the interviews told us was that each interviewee had a unique view of the situation and landscape, landscape far more contested than even those the CSO had hand chosen accepted or realised. This adds

weight to the argument as strategy as a '*wicked problem*' Camillus (2008), as the CSO had developed a highly complex view of the company's innovation landscape and was struggling to draw synergies between the conflicting views.

This induced a re-sense making exercise that attempted to engage with this new broader view of innovation. Subsequently this new understanding of innovation became complex and difficult to articulate. It also became more difficult to create a succinct message. The CSO thus became reliant on the strawman template as a justification to produce a complex document '*that showed everything*'. As a consequence nodes of Mintzberg's (1994) cultural school can be sensed here as the CSO began to develop a strategy that attempted to incorporate all of the perspectives gathered through the interview process.

Building on this new view, secondary data in the form of existing strategies and other influential documents were gathered and evaluated with a focus of legitimising this new understanding of innovation. Elements of these documents were judged and chosen based on what the CSO perceived were the elements of what a strategy should contain. At this point time was becoming a major factor, the deadline for submission and assessment to the director was looming.

Sense making and understanding was overtaken by the desire to get the *right* answer and to do a good job. In essence as '*snatch and grab*' or a '*that will do*' philosophy became the driving force at the later stages of the strategy formulation process. This approach triggered a

deliberate restriction of useful information by the CSO in the decision process (Eisenhardt & Bourgeois, 1988). The desire to do a good job was based on the CSO assumption that the proposed strategy would reflect on his ability to produce an output on the basis of the directors original directive.

As a consequence of seeking the *right answer* the CSO reacted by returning to the original design model (Mintzber, 1994) that was outlined by his director at the beginning of the strategy journey. '*I know what CK finds sexy*' highlights the desire to try and articulate and develop a strategy that aligned with what the director wanted, rather than what the company needed. This coming of full circle, back to the design model, has implications on how we as academics research strategy.

This return to the design model could be seen as a cause for why the activity of strategizing was considered as a linear process (Shrivastava, 1983). If interviews were conducted at the beginning and or at the later stages of the strategy formulation process it may have been observed was straight forward with little deviation from the original. This research has shown this is not the case. This research has identified that in the early to middle phases of the formulation a high degree of sense and re-senses making caused multiple strategies to be formulated.

As can be seen throughout chapter 5 engaged with a process of sense making was a culmination of knowledge built from engaging from the strategy process. As a consequence

leaps in thinking had occurred that when presented at a later stage would appear out of the CSO mind.

What has been recognised here is that much of the leaps in creativity were as a consequence of strategy development in the early to middle stages of the process. Furthermore, conceiving of a change process in terms of cycles of sense making, rather than elapsed time, better reveals the uneven pace of interpretation development, and the uneven pace of development.

The CSO began to try and make rapid sense of what was learned and began to try and fit what was made sense of into the original template. The speed at which this was now being conducted had an effect on the perceived saliency of information being used. The process became less an exercise in creating a well-articulated solution to an understood problem and more a need to complete a piece of work that resembled a traditional strategy document.

Examples of this can be seen by the use of a number of existing frameworks from other strategies such as the proposed return on investment model –taken from a failed strategy- and the water vertical platform -from a BULBz Group initiative- amongst others (Phase 4). These were submitted into the strategic document based on the view that all document required such frameworks not based view that this strategy needed them.

Reflecting on the reason for the mixture of schools/approaches, and the fact that they came into different levels of influence and during different phases of the strategy formulation process, could be linked to the different sense making activities that took place. For instance each time a new disruption emerged the CSO reacted and activated a process *re-sense* making. This process of '*re-sense* making' led the CSO to assess what he had, what he wanted and what he needed to achieve a shifting end goal. This necessity to continually make sense and re-sense of things led the CSO to adopt unforeseen process and engage which in turn led to a journey through a variety of what Mintzberg (1994) calls schools.

This study contributes to a deeper understanding of the concept of strategy in practice. What has been presented within the thesis is strategy as a lived in experience, one where I became close enough to the action within the organisation, through observation and engagement, to be able to better understand and highlight the complexities of the strategizing process and identify those things that disrupt and subvert the strategy formulation process.

The understandings gained do not offer neat or formulaic solutions and the notion of a systematic approach appears deeply flawed. What have been illuminated have been a number of triggers which have been shown to induce or cause a break away from the development of a systematic approach to the development of strategy. These in turn have led to a continuous process of high-level sense making and re-sense making which can be attributed to the iterative process of development. Triggers such as personal desire, the



absorption of new knowledge and the desire to satisfy everyone were seen as factors that impacted the final strategy.

Also highlighted has been where the limitations of traditional (positivistic) methodological practices, that have tended to dominate our understanding of strategy, failed to show how and where planned approaches are subverted. What has been illuminated here is that a more engaged, collaborative approach can be harnessed to understand the strategy development process better. However to undertake studies of this kind, academics may have to go beyond normal boundaries and undertake additional work within the organisation as a means of exchange and as a way of bartering for improved or enhanced access. This often entails an increased work load, longer working hours and increased pressures to produce both academic and practical outputs. However as has been shown this case, the rewards for engaging with this type of approach can result in data that is extremely rich.

Aligning with Grants (2003) attempts were being made to install communication lines that were to be coordinated by the innovation team and controlled by the CSO and his director emphasis was not on econometric led models to validate action. However a disconnect emerged when the strategy document was analysed by the director, who required a econometric driven model –or at least section- legitimise the strategy to the board of directors.

The suggestion for a complete move towards a socially driven strategy is limited in practice as has been demonstrated in chapter 5 in phase 3 and phase 4. Emphasis, particularly in the middle stages of the strategy formulation process, reflected Grants (2003) view to develop lines of communication, coordinate works and to control various aspects of innovation activity. However towards the later stages of the process the need to engage with econometric led frame works were seen as necessary to ensure that the strategy as a whole would resemble an artefact similar to others that the Director was familiar with to ensure its acceptance.

The analysis conducted in chapters 5 and 6 reveals ways in which practices changed both incrementally and radically through the practice deliberate strategizing. The analysis helps to better comprehend how and why some practices can to be seen as strategic with all kinds of both organizational and personal implications (Ezzamel & Willmott, 2008; Whittle & Mueller, 2010). As a consequence this research has added to understanding the relationship between deliberate and emergent strategies; i.e. the way in which both deliberate and emergent strategies contribute to the evolution of organizations.

## 6.2 Decisions making and leadership in strategy formulation

This research is positioned in the practice based view as a lens for studying organisational phenomena. Through this lens I seek to extend debates on what strategists do when they strategize. As such it seeks to develop insights into the subjective judgements at different

stages of the strategizing practice. This reflects calls in strategy research for adopting a practice perspective in the wider management research debates (Shotter and Tsoukas, 2014; Vaara and Whittington, 2012; Antonacopoulou, 2008; 2009; 2010; Nonaka and Toyama 2007).

A central findings of this thesis, connects the challenges experienced by the CSO as he made choices and decisions that corresponded to the needs of a whole range of stakeholders (including himself). It shows that decisions made in the early phase of the strategy formulation process had profound implications on the later stages of the activity.

Adding a high degree of complexity to attaining this satisfaction is how the CSO change his understanding of who the key stakeholders were overtime and the degrees of importance which he gave them. Many examples exist in chapter 5 and 6 that reflect this, what is also apparent in some cases the variety of reasons some stakeholders were deemed more important than others. For instance in the beginning the CSO is creating the strategy for the Director of Water and Gas, during the middle 2 phases he is then at various points creating the strategy for himself, his innovation colleagues, the utilities sector and the Board of Directors. Towards the end of phase 4 and phase 5, the Director of water and gas is the key stakeholder whom the CSO is creating the strategy for. As a consequence a mixed and muddled message is created that tries to appeal to everyone but satisfies no one. The diversity of these needs impacted the CSOs ability to make meaningful choices and as a consequence of this he created a strategy that was not valuable in the eyes of the Director and as such not implemented.

Having a localised view and the lack of depth of analysis of the needs of the organisation, drove key decisions that impacted the nature of the strategy. It could be suggested that the act of muddling through, lead to this approach as the CSO failed to step back so that he could create a division between wanting to create a model for innovation activity to succeed and satisfying all stakeholder requirements.

The analysis and reference to innovation is so that it extends current thinking in innovation and the impact this context has on the activity of strategy formulation when compared to strategizing for normative business practices. It shows how the complexities of understanding of what innovation is and means to an organisation result in a high degree of inertia result in an inability to move forward in a collective manner.

What is highlighted in phase 3 was that all those who were interviewed recognised a need for a cultural shift in thinking when it comes to innovation, however this aspect of the strategy when reviewed received the least amount of attention.

### 6.3 Strategy as design

The ad-hoc changes in direction presented in the strategy process depicted in this research reflect Feldman and Pentlands (2003) study on organisational routines. They show how the examination of routines indicates little evidence of a routine or structured approach in

practice. What has been evidenced throughout chapters 4 and 5 is when searching for identified routines, the structures themselves were not consistent, and rather, it is a messy and at times chaotic and unpredictable activity. What I observed through this research has been 'breakdowns' in the *'flow of action'* which have served to undermine ('subvert') the development of a strategy that served the interests of the organisation and those that operated within it. Tsoukas and Sandburg (2014) suggest that the breakdowns and disruptions can be in part attributed to the interrelated processes of sense making, creation, interpretation, and enactment which depending on how they are engaged can produce unforeseen outcomes. The notion that both anticipated and unanticipated consequences flow from actions is well accepted, leading to a focus, less on their identification and more on their exploration (Harris and Ogbonna 2002).

#### 6.4 Reflections on the CSO

Given so much of this thesis is directed towards the activities of the CSO, it seems appropriate to reflect on the nature and role of a CSO. The CSO was a relatively new position that has emerged in many different types of organisations (Powell and Angwin, 2012) but thus far has not received much attention in terms of managerial roles within the business and management academic community.

The role of CSO has been created by a number of organisations to assist in guiding firms through what is perceived to be an ever increasing turbulent and complex economic

environment. Cunningham (et al, 2007) have called for further understanding of the importance of the CSO and a clearer understanding of how these individuals engage with the act of strategizing. The a-typical CSO presented by Cunningham (*et al*, 2007) depicts the CSO in a similar light to Mintzbergs (1994) chief designer in the design school theory. Both writers' views depict the CSO as conducting their work in a manner that focuses on both the content and context of strategy as it develops and perhaps rather less on process.

However as Powell and Angwin, (2012) acknowledge this role has the least defined role among top level management. It is seen as a highly dynamic role with regular changes in focus and scope (*ibid*). The common understanding is the CSO is a senior executive whose main responsibility is to support the development and execution of strategic directives (Kachaner and Stewart, 2013; Powell and Angwin, 2012; Cunningham, *et al*, 2007).

What I observed adds to this understanding in respect to behavioural aspects of CSO work. Although differences lay in Kachaner and Stewart, (2013), Powell and Angwin, (2012) and Cunningham's (*et al*, 2007) depiction the extent to which there was a similarity in this case is of a high order. Where differences occurred though was in the way that the CSO was not a member of the executive team. At times this position both liberated and limited his ability to make decisions. In the early stages of the process, decisions were being made in quick succession and with seemingly little after thought, but as his understanding of the problem grew in complexity, the CSO's became less able to make and commit to decisions that would impact those around him.

In contrast to the depiction of a CSO by Cunningham (*et al*, 2007) and Powell and Angwin (2012), where someone is asked to occupy a temporary role and undertake a task for a finite period of time in order to find a specific solution to a problem in a particular area of concern the CSOs leadership in the position what somewhat different and less attenuated. Kachaner and Stewart (2013) in their writing on this topic, suggest that the CSO should spend their first 100 days of the role, building legitimacy and rapport across the organisation, the CSO in contrast had only 42 days (although his time horizons for completion were subsequently increased) to create and submit the original strategy. They reflect on the CSO as an individual as who engages with company level issues to produce solutions that builds the company forward which is not quite the case here.

Powell and Angwin (2012) reflect on the role of the CSO as an internal consultant who gets the facts on the table, comes up with a series of options post evaluation and recommends these to the business as a means to ensure growth for the business. Again, there are both similarities and differences to what was observed in this case. Driven by his own vision of what innovation should be the CSO set about reshaping the innovation activity of the business but based on this analysis on little else than his own sense of what should take place. To this extent it might be argued that he was too close to the *coal face* and as a consequence his objectivity and ability to make decisions on fact rather than opinion became somewhat compromised. This calls into question the balance that is needed between expertise in a specific area and a degree of objectivity born from personal distance from the issue under examination. In this case it could be said that the CSO was too close to the area of

development and as a result this inhibited his ability to think as rationally and objectively as he otherwise might.

What might be of interest in any further study is a better understanding of the role of CSO's. As has been shown what was experienced in BULBz in comparison to what is acknowledged in other published articles are somewhat at odds with each other. The aim of this section has been to highlight a need to engage further in how this role is perceived and developed in different organisations.

## 6.5 Reflections on Methods used to gain insights

In the present strategic management literature there is a limited understanding of how people practice strategy formulation. Traditional conceptual and theoretical research within the strategy as practice and strategy as process fields have tended to bound understanding of the activity of strategy formulation into simplistic dichotomies (Vaara and Whittington, 2012). These dichotomies are often presented in frames such as: think vs. act, content vs. process, micro vs. macro, rational vs. process. These acts of over-simplification have dehumanised the practice of strategy formulation into subcomponents that in reality may not play as significant a role as they are made out to have, over the course of the formulation process. As shown within this research, such dichotomies are misleading, and instead the strategy process is inherently mixtures of all of these aspects at different times.



This is in part due to the limited research attention given to the subject area, despite the emergence of the strategy as practice field (Vaara and Whittington, 2012). I believed this is in part due to academics being unable to gain access so that the phenomenon can be observed in real time. This is in part due to strategy and its formulation process being a highly confidential aspect of organisation activity.

Strategy as practice research is seen by some to be anthropological in nature, with scholars called to gain deep understanding of how organisations and its actors engage with strategy activity on an intimate level (Johnson et al. 2013). Regardless, such calls for in-depth sociological research that gains insights into what strategists actually do during the act of strategizing have thus far failed to be met, re-igniting further requests for such research (Schatzki et al, 2000; Whittington, 2003, Jarzabkowski, 2003). The cyclical nature of these calls would suggest that academia is having limited success in achieving its goal of understanding the practice of strategy formulation.

From a methodological perspective, why have academics to date been unable to observe this phenomenon in its natural environment and gain the in-depth understanding that is so desired? I argue that this is due to using traditional methodological approaches that do not align with the practice of strategy. As a consequence what is even less known is how strategy formulation practices change over time on a micro level and in real time.

Samra-Fredericks (2003) suggests that due to the market sensitivity of strategies, confidentiality and anonymity have restricted our ability to observe the phenomenon of strategizing in its most natural state. Within this research however, I have managed to gain in-depth access that allowed me to see the strategizing process and how it changed over time by using a less traditional methodology. The approach taken here was grounded in nature and executed in a collaborative style. Conducting research in this manner allowed me access to a level of data that would otherwise be unachievable. As a consequence a four stage approach was created that allowed me to build relationships, empathy and opportunity. The first stage was to have a pilot study. This meant that I could have access to potential key stakeholders and begin building relationships without potentially biasing the research itself, as this was not yet on the agenda. The second was the main study, which at this stage was yet to be established. The third was the creation of a report based on my findings from the pilot study and the fourth was the development of research output. The underlying principle that drove this research was a desire to engage with an organisation and to make a positive difference both practically and academically.

I presented myself as someone who wanted to make real change for both the organisation and academia. I did this by being up front about my professional agenda and by highlighting how this research program could benefit both the department and organisation. This approach achieved a high level of success, affording me the opportunity to engage with the organisation and develop a network of contacts and resources to help me develop insights into various activities that were taking place.

The topic of innovation was an important factor in the development of access and engagement in phase 1. Innovation was a topic that a lot of people in the organisation were aware of and had an opinion on. By playing on my position as just someone *'from the University'* who, rather than being an adversary was just a non-judgemental, interested outsider, afforded me the opportunity to engage in conversations with people who may otherwise have remained quiet. This allowed for a high degree of access and engagement with key decision makers, which in turn allowed me to create relationships with key stakeholders.

The relationships developed varied in nature. Some were driven by a need to find a solution to an existing problem, such as finding ways to help the existing innovation team function to its perceived potential. Other relationships were formed due to personal connections that were made through the discussion of common hobbies and interests. Some of these I purposefully manufactured, for example I began to actively follow motor sports such as formula 1 and football so that I could engage in social conversations that were being had in the innovation team's office. Regardless of whether the relationships developed were driven by a desire to solve a problem or just due to personal connectivity, at this early stage the underlying focus was to work together so that a common ground could be found, that was mutually beneficial to both parties. This approach created a platform that fostered trust and a willingness to engage with me as a person and a colleague.

The opportunity to engage with a similar process of pilot study and main study may not always be available to other researchers. As a consequence of the approach taken here, a number of critical factors lead to the successful immersion into the organisation.

The ability to quickly develop relationships of various types is a critical component for building access. Many of the relationships developed counted for little in terms of strategy practice, however they provided alternative insights into organisational dynamics which proved important in understanding the context of the main study.

The ability to discuss issues of a professional nature but also having an ability to switch off and chat other topics of interest. This helped in developing layers of trust between myself and various stakeholders. I found my ability to tell an anecdote or a joke, quickly removed nervousness and tensions that existed due to my association with the university.

If a more traditional method was used, I believe in the early engagement between both parties, emphasis must be placed on the development of a strong relationship rather than a specific output. This is as opposed to seeing the participant as a means to gather sought after information which can be quickly discarded after their need is finished. This is of particular importance when attempting to gain insights in areas as heavily guarded as strategy and the formulation practices of the strategists.

## 6.6 Making sense of data through activity theory

The use of activity theory in strategy is in its infancy. This research therefore contributes to literature by showing how this model can be applied to understanding the process of strategy formulation. This research has shown activity theory can serve as not only a theoretical framework but as an explanatory model. A challenge of this research was how to frame a large body of data that was collected. Unlike other studies on strategy that build theory on a smaller data samples (Samra-Fredricks 2003), a way to analyse data and maintain the lived experience of strategy formulation needed to be found.

Using the Activity theory framework was deemed the best way to achieve this. However existing methods for using activity theory framework were not deemed fit for purpose for this research. Traditionally the framework is used to analyse the whole process under one activity template (Engestom, 1993). Using that approach for this research would lose the lived experience of the formulation process. The benefit of activity theory framework is that it is flexible in how it is used.

The strategy formulation journey was divided into 5 phases. These were selected at natural and distinct changes in direction or emphasis occurred, e.g. the transition from data collection in phase 3 to development of the physical document in phase 4. This approach highlighted changes in activity, personnel, tools and focus throughout the strategy formulation process.

## 6.7 Case Award

The Case Award<sup>24</sup> scholarship proved to be a strong platform from which the study of strategy formulation proved to be successful. The premise of a CASE Award is for two institutions to collaborate together in the development of a research focus that aims to understand and solve a specific problem. A major benefit of a CASE Award platform is its ability to act as a conduit that provides and establishes a means by which academic and industrial partnerships can establish strong links.

As a platform to study the practice of strategy formulation it prove to be a successful avenue through which other longitudinal studies can be conducted. The CASE Award provides a means to engage with research that is sensitive nature, such as strategy, as an established level of trust has been created through the formation of a partnership.

However the successful execution of the partnership is reliant upon the researchers' ability to engage with and manage the various stakeholders involved in the CASE Award. This includes the ability to drive a research agenda, or as was the case in this research programme realign focus to take advantage of an opportunity when it arises.

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<sup>24</sup> Cooperative Awards in Science and Engineering

## 6.9 Limitations of the research

As with most academic work in this nature, a major constraint was time and funding. In this research in particular, the major change in direction from innovation team dynamics to strategy formulation significantly increased the difficulty of this PhD. However this change did not impede the rigour in the collection of data or its subsequent analysis.

Firstly, this is only one case study and although there will be many aspects that are generalizable (at some level of abstraction) there will also be many others that will be context specific. To reinforce this point I consider that there will be many aspects of this study that will not be generalizable even within BULBz. As a consequence the findings from this study cannot be generalised beyond the parts of the business where the research took place. However the insights made can be used to inform the understanding of the strategy formulation process, filling in gaps in knowledge of the strategy formulation process.

Data collection involved semi-structured interviews, observations and the taking of field notes. All this was in 'real time' and meant that I had limited preparation time in order to formulate questions in the context of literature that I liked to read in advance around which I could formulate questions and through which I could better interrogate my data and theorise.

Of significance under this system meant that often I was unable to 'preplan' what might be significant and had to instead had to develop a great deal of pragmatism in my approach. This meant that on a number of occasions I regretted on reflection not pushing for more clarity on certain points and in certain situations. The lesson I have learnt here in relation to research is

that this style of research has its difficulties and challenges and that the researcher has to learn to 'go *with the flow*' and engage with a research environment that is not often clearly apparent as to what was interesting.

Although the research was conducted with an effort to limit the effects of bias, the pull to 'go native' was a constant issue. This issue was overcome through the development of a supervisory relationship that consistently challenged to remain dispassionate and to ensure that I was consistent in my interpretation of what was unfolding.

A final limitation of the research is that many of those who participated in the formulation of the strategy, (such as the two junior members of the strategy team) were not always interviewed separately. The reason for this is that it was not always practical or possible to do so and although I tried to ensure that I was sensitive to other views being held (or group think) there may have been occasions when I was unaware of different views being held.

#### 6.10 Valuable insights based on the methodologies used

A disconnect between what was observed and what the CSO would have expected to have taken place. The disparity between the two views raises questions about the methods that are most usually used to view strategy and the strategy formulation process. Such methods purport to engage with understanding a phenomena which in many cases is complex and ambiguous and not amenable to the kind of objective analysis positivistic methods set out to achieve. This has implications for strategy research and wider management research (Paroutis



and Heracleous, 2013). As can be seen throughout chapters 5 and 6 as well as the CSOs reflection on the strategy formulation process in chapter 6.

If I were to focus on the exit interview as the basis of this research then a very different and somewhat linear picture would emerge. What would be portrayed would be a far more straightforward explanation of the strategy formulation process. Using this interview alone the CSO would be seen to present the strategy process as comprising of the development of a number of potential solutions that were requested by both the MD and the Director of the OpCo.

According to the final interviews no decisions were made that were not made by both the Director and the Managing Director. No bias would be suggested towards a specific department or a specific agenda, nor would it show the process of sense and re-sense making that occurring on multiple occasions throughout the process of development and how earlier *'schemata and outcomes become the ground for subsequent understanding'* (Barley and Tolbert 1997).

If the snapshot method was used in this research, a picture of a simple process that fulfilled the requirements of the director's brief would have been found. What this thesis is shown is that much of the research conducted in the field of strategy may have missed key insights as a consequence of the methods they have employed. Examples of this kind can be found in the works of Paroutis and Heracleous (2013), Barry and Elmes, (1997) Mintzberg and Waters

(1982), Mintzberg and McHugh (1985) and Ramanujam, Ramanujam, and Camillus (1986). It argues that more collaboratively driven approaches can yield much more depth of understanding of the practice of strategy formulation. With this added depth of understanding, stronger insights will be made that will have a positive impact on how academia articulates the phenomena which in turn will benefit organisations through the creation of better tools and techniques for creating strategy.

However the level of access gained here is not always possible. There was an element of both skill, luck and serendipity involved in the gaining of access so that the formulation of strategy could be observed here. However the skill of gaining access, supported the luck involved to study the topic of strategy formulation. The luck in this case was being given the opportunity to engage as a full participant in the strategy formulation process, but this would not have happened if the decision to engage as a collaborator in the first place had not been made.

The question then emerges as to, if access of this level cannot be achieved in further studies, when along the process are the critical junctures at which researchers should engage with the strategy process?

The critical points that were identified in this research were the major tipping points at which an activity theory model was used to understand what was taking place. In this case these were the development of the original brief by the Director, the challenging of the brief by the CSO, the research phase, the development of the strategy document, analysis of strategy and

the exit interview (Table 14). These points in the process were seen to have a significant impact on the outcome of the strategy formulation process and my understanding of what was taking place, both as a practitioner and an academic.

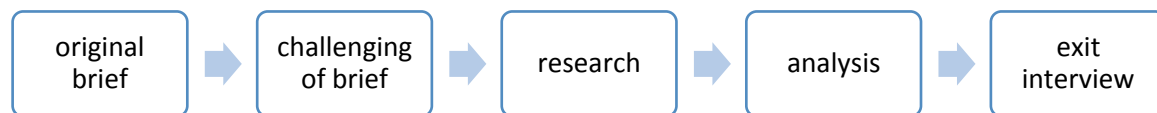


FIGURE 19 STRATEGY FORMULATION PROCESS

Reflecting on one of these points in isolation would create a different picture to what was understood when looking at these points in unison. As a consequence it can be understood how strategy research has become fragmented in its understanding of how strategy is formulated, as it depends at which point the researcher engages with the process and how the respondents reflect on the process that they have just undertaken. A good example is if we look at the exit interview in isolation. A different interpretation of what took place over the course of the strategy formulation would be gained.

TABLE 13 EXIT INTERVIEW WITH THE CSO

*Innovation in BULBz is always competing with the bigger picture and that's why strategies for it have to be fluid. I don't think you can pin down innovation in our kind of organisation it has to be fluid and as a consequence it [the internal landscape] has all changed...what we were trying to do was please everyone. I was back in a new role after 6 months off. I was talking to people engaging with me. Even though we were trying to sense check, I was also trying please them as that's part of my job. If you are a strategist you have to take people on the journey with you, I can't say you are wrong; I have to get them to work with me. CK thinks we got it wrong, specifically the leading the industry element...our strategy wasn't about determining a right and wrong answer, it was about determining where we were going to.*

*It was about identifying different options and avenues of activity. You can't do that with SWOTs, it's too narrow due to the fluid nature of innovation. We didn't do them, because they were blazay and boring to be honest, those tools didn't fit with what we were trying to do. But for example the return of investment stuff was needed to the protection of innovation when consulting with the board of directors*

*I don't think we wrote an innovation strategy. I think we wrote an innovation statement. It was a document that outlined where we were and where we needed to be...we didn't state where innovation should sit, we discussed how it should be managed...we didn't pick any of those 5 [avenues] that was the decision MS and CK made... this was more of business plan than a strategy, it took a higher level view*

When investigating this area, researchers should be aware of personal ambitions, the political environment and legacy of context in which the strategy is being formulated. In this case these three elements had considerable influence over the course of the strategy formulation process and should be considered if conducting snap shot style research.

## 6.11 Conclusion

This study contributes to a deeper understanding of the concept of strategy in practice. What has been presented within the thesis is strategy as a lived in experience, one where I became close enough to the action within the organisation, through observation and engagement, to be able to better understand and highlight the complexities of the strategizing process and identify those things that disrupt and subvert the strategy formulation process.

The understandings gained do not offer neat or formulaic solutions and the notion of a systematic approach appears deeply flawed. What have been illuminated have been a number of triggers which have been shown to induce or cause a break away from the development of a systematic approach to the development of strategy. These in turn have led to a continuous process of high-level sense making and re-sense making which can be attributed to the iterative process of development. Triggers such as personal desire, the absorption of new knowledge and the desire to satisfy everyone were seen as factors that impacted the final strategy.

Also highlighted has been where the limitations of traditional methodological practices, that have tended to dominate our understanding of strategy, failed to show how and where planned approaches are subverted. What has been illuminated here is that a more engaged, collaborative approach can be harnessed to understand the strategy development process better. However to undertake studies of this kind, academics may have to go beyond normal boundaries and undertake additional work within the organisation as a means of exchange and as a way of bartering for improved or enhanced access. This often entails an increased work load, longer working hours and increased pressures to produce both academic and practical outputs. However as has been shown this case, the rewards for engaging with this type of approach can result in data that is extremely rich.

# Chapter 7 Conclusion

## 7.0 Introduction

At the beginning of this research journey I sought out to understand how people practice innovation. Through the twists and turns of engaged research, this evolved into understanding how a strategist strategizes? This question drove the research into the area of strategy as practice, a lens to understand the micro practices of strategy formulation (Bourdieu, 1990; Sandberg & Tsoukas, 2011).

Throughout this thesis I have attempted to demonstrate that the strategy formulation process is an under investigated area of strategy research that is in need of elaboration and development. This is a view supported by a range of leading academics (Jarzabkowski and Spee, 2009; Bower, 2008, Hutzschenreuter and Kleindienst, 2006). I have also highlighted that research in the field of strategy has been dominated what might be seen as positivistic accounts, which reflect the impact a strategic direction has had in hindsight within the reason only being done only at the level of the firm (Whittington and Cailluet, 2008; Regner, 2003). As a consequence, there exists a significant lack of understanding of how strategist strategize and an understanding of the micro practices that take in the process of strategy formulation.

## 7.1 Main findings

This research has made a number of contributions to research. Firstly, in the area of strategy writing, currently the strategy research field has been seen to be highly disjointed with many conflicting perspectives on what strategy is and how it is implemented in practice (Nag, Hambrick and Chen, 2007; Whittington and Caillaud, 2008; Regner, 2003). The thesis suggests that this variation of views might be as a consequence of how academics research strategy and this is thought to be particularly true when understanding the process of strategy formulation.

This research has demonstrated the twists and turns that take place in the formulation process, showing it is not straight forward and certainly not linear. It has also shown that if a snap shot in time approach is taken, insights can vary greatly depending on at what stage the strategist is at in the formulation process. This research, shows how a researcher engaged at the early stage, an environment can gain comprehensive views of how change occurs. This challenges existing frameworks and if a researcher had covered the whole cycle of a strategy in its formulation, the process, the risk, the pressured environment and the inherent ambiguity would have been observed.

Secondly, much of the research conducted on strategy has been at the level of the firm and because of this it has lacked the 'human' dimension which is very real and can make a significant difference. This of course relates to agency and leadership and skills and quality of



senior individuals in the organisations possessing particular qualities and sensitivities. One contributing to the lack of micro level understanding has been the inability of academics to gain access to observe the phenomena. This research has bridged this gap through the examination of the practice of strategy formulation in real time on a micro level. It has sought to rehumanise the strategy formulation process (Jarzabkowski, 2003; Hodgkinson, et al., 2006; Whittington, 2006; Whittington, et al., 2006; Paroutis & Pettigrew, 2007).

The insights gained has been achieved through the adoption of an action research approach and by doing this has resulted in significant learning on behalf of the researcher (i.e. me). The access gained has enabled me to closely examine the strategy formulation process at the level of the individual. This approach has allowed me to capture of the lived experience of the CSO. Strong efforts were made of retain the voice of the CSO when constructing the narrative in the empirical chapters. I created a platform based on activity theory which enabled the reader to connect with the challenges the CSO faced throughout the process, illustrating the difficult decisions being made in real time with limited information and insight. As such, I demonstrate to the extent to which the CSO relied upon his phronetic insights so that a strategy could be created. The findings shed light on these judgements he exercised at different stages throughout the formulation process, impacted each other and the final outcome.

Thirdly, the thesis highlights the benefits and strengths and weaknesses of a collaborative approach to research. By embedding myself as a member of the team who were writing and implementing the strategy I am able to offer a unique insight on the ways in which collaborative research has the propensity to generate depths of understanding not available

by other means and build on others works for example Pettigrew, 2003; Van de Ven, 2007; Antonacopoulou, 2010. The experiences of conducting a variety of roles, often simultaneously, have been presented, and the choices made explained that impacted the research practice itself.

The closeness of the researcher to those individuals at the heart of the strategy formulation process has enabled understandings to be gained at what I have referred to as the micro level. What is revealed on the factors that lead to the complexities of the strategy formulation. It also shows that the formulation of strategy is not just about the individual and the process and their ability to shape strategy but also engage with various 'constraints' and 'structures' that impacted its development. This builds on and supports the work of academics such as Pettigrew and Whipp (1992).

## 7.2 Contributions to practice

The thesis shows the inadvisability of attempting to plan innovation too precisely and as a consequence having too high an expectation of the benefit of adopting an approach to strategy that would perfectly control the innovation and change that took place. Rather directors and managers need to facilitate a space within which innovation can incubate and occur naturally, populating this space with experts and facilities to exploit opportunities as they arise.

This aspect can be seen most clearly in the account presented in chapter 4 where BULBz developed an innovation capability that loosely bounded and perceived as highly successful both across the organisation and in the market place. Seeking to further exploit this capability the organisation attempted through a variety of means (highlighted in chapters 4, 5 and 6) is to control the process of activity so a higher degree of planning could be incorporated. This desire to control the innovation process so higher returns could be achieved is seen in this case to have a negative effect on the process as a whole.

### 7.3 Evaluating research practice

Through the process of this thesis I have become increasingly aware of the advantage of conducting research on questions such as gaining a better understanding of the strategy process by developing a research design and accompanying research methods that enabled me to stay close to issues as they emerged. In my case and I was successful in negotiating a relationship with the organisation that allowed me to be both embedded and engaged.

What I have learned from this practice is that taking a longitudinal framework with an action research approach proved to be extremely useful. The approach allowed me to engage with an organisation and develop a deep understanding of the strategy formulation process in real-time.

To achieve this, a two stage approach to the research methodology was created. The focus of the first stage was to build an understanding of the innovation practices of the organisation. As a consequence, I was able to engage with many individuals across the organisations hierarchy. This allowed me to build strong relationships across the organisation, and also to build a rapport with colleagues who began to see me as an additional resource that could be useful to them, particularly one that could assist BULBz in its development of a better understanding of their innovation capabilities, this aspect of my involvement is detailed in chapter 4.

The approach also enabled me to become involved in the development of a strategy for innovation, and my focus shifted to investigate how one individual can create a strategy over the course of the strategy formulation journey. My focus through the analysis was to unpick the process, reflecting on the twists and turns made throughout the strategy formulation process I observed and uncover and understand why they were made.

#### 7.4 Impact on practice

Through the research I believe I have managed to establish some wider relationships within what is, a large multinational company with reach far beyond the context described in this study. As a consequence opportunities now exist to continue research within the organisation in the future in closely related areas but very different geographical locations.

This opportunity would not have taken place had I not deliberately set out to establish a strong relationship with organisational members at the outset. The ability to develop outputs (which included reports to the company on progress) throughout my engagement also proved useful. I consciously made sure that I was as visible as I could be in the engagements that form part of the role, with bodies which I attended, such as those with the Technology Strategy Board. There were also a number of meetings that took place within the organisation where I spoke on behalf of strategy development team. I was also involved in presentations made to the House of Commons all party Parliamentary Water Conference and at meetings with OFWAT. Recognising that innovation is more usually discussed as the production of some kind of technical development I took all the opportunities I could to engage in for a that were interested in understanding innovation as a social artefact.

Other forms of impact came in the form of two documents, I produced for the organisation (one in the middle and one at the end of the research). The first outlined the strategy for innovation activity that had taken place together with recommendation, the other reflected on the nature of innovation within the organisation. Both of these documents were presented to senior members of the organisation in order to assist them to gain a better understanding of the diversity of views that existed and to help key stakeholders better address the various tensions that exist within BULBz innovation. It was hoped that these insights would point the areas where possible avenues for developing capability lay. The strategy for innovation within the company, armed with these reports and insights, would then be developed in collaboration with the organisation's CSO.

At both team and individual level, impact was made through engaging individuals in debate about what exactly was meant by innovation. The perspectives and views that individuals held were calibrated against others in the organisation in order to not only show the diversity of views but also to enable a debate about how exactly the organisation should view, understand, manage and reward innovation. These debates between colleagues often occurred on an ad-hoc basis due to the fact that I was well positioned within the innovation office for extended periods of time and was able to engender them. Many members of the team would engage with the debate and would often carry forward the discussion had their colleagues throughout the wider organisation. These debates and views that originally emanated from the report on the nature of innovation within the company, I believe assisted in the development of a better shared understanding of the intricacies of the current innovation model that existed in the organisation.

## 7.5 Opportunities for future research

Areas of interest that I believe would follow naturally from this research and which would be fruitful to follow include, research into how CSO's create strategy in very different contexts both within a single company and between different companies.

Also important are comparisons of the strategy for innovation process within other firms and within different industries. Identified areas for future research have already been found that aim to further understand the intricacies of innovation in the UK utilities sector. Of particular

interest is the area of innovation trauma and how this impacts on team dynamics and the ability of a team to produce outputs on a regular basis.

Also important are insight into the aspects of strategy formulation. I consider that within the PhD I have barely scratched the surface with potential insights to be made in relation to the role(s) of the CSO, reflecting on the processes and techniques used to create a strategy and how these compare across contexts.

## 7.6 Limitations of this research

Although I believe that this research has achieved its overall aim of acquiring a deeper understanding of strategy as a lived experience and related issues, I need to acknowledge limitations in relation to the study.

Firstly, this is only one case study and although there will be many aspects that are generalizable (at some level of abstraction) there will also be many others that will be context specific. To reinforce this point I consider that there will be many aspects of this study that will not be generalizable even within BULBz. As a consequence the findings from this study cannot be generalised beyond the parts of the business where the research took place.

Data collection involved semi-structured interviews, observations and the taking of field notes. All this was in 'real time' and this meant that I had limited preparation time in order to formulate questions in the context of literature as I would have liked. It would have been

more satisfactory if I was better able to read in advance those areas of literature where my questions were formulated. Through this approach I could better interrogate my data and to theorise. As a consequence, I was often I was unable to 'preplan' what might be significant and had to instead had to develop a great deal of pragmatism in my approach. This meant that on a number of occasions I regretted on reflection not pushing for more clarity on certain points and in certain situations. The lesson I have learnt here in relation to research is that this style of research has its difficulties and challenges and that the researcher has to learn to '*go with the flow*' and engage with a research environment that is not often clearly apparent as to what is interesting. Although the research was conducted with an effort to limit the effects of bias, the temptation to 'go native' was never really very far away. The fact that I was on occasions working for the organisation on projects increased my difficult here and it was through the supervisor process and the critical challenging of supervision that I was encouraged to remain dispassionate. Notwithstanding the meanings and interpretation I have made are from my perspective and there may be other interpretations to these that other researchers might make.

A final limitation of the research is that many of those who participated in the formulation of the strategy, (such as the two junior members of the strategy team) were not always interviewed separately. The reason for this is that it was not always practical or possible to do so and although I tried to ensure that I was sensitive to other views being held (or group think) there may have been occasions when I was unaware of different views being held.



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# Appendix 1 Interview questions and sample interview from pilot study

## **On a personal level describe to me what innovation means to you?**

- How important is innovation?
  - BULBz/Ofwat/Gov/You
- Is innovation real?
- Do you feel innovation affects your professional life?
  - If so how?
- Do you think there are any barriers to innovation?
  - Is so what are they?
- How do you report/review innovation within BULBz /sector?
- What does innovation mean to BULBz group?

## **What do you think are the most important factors that influence innovation?**

- How do you report innovation?
- How is it measured?
  - If so, how are these measurements utilised?
- How, in your opinion, is innovation instigated, fostered and developed?
  - Group level, management level.....
- Do you feel innovation is most recognised?
  - product, process or strategy based?
- To what extent do you think innovation differs from creativity?
- What do you feel are the ramifications on local and international business with regards to BULBz and innovation?

## **What are the strengths and weaknesses of innovation?**

- Team/ BULBz / Industry/Gov/

Hand notes
Consumer driven Through regulatory frame works Consumer opinion Focus on impact in the communities and on the environment Trying to change the culture When you talk to the guys in the electricity business about customer, they say its not relevant to us..... consumer & customer is not important

Interestingly, bbusl is increasing consumer driven as a result of all the regulatory frameworks that our clients are subjected too.

A lot of the determination is now being made on the basis of consumer opinion

Having been an engineering task centric organisation it has now changed to a customer driven through the regulatory frame works that all of our clients are subjected to.....determinations are now being made on consumer opinions of the organisation

I am finding that some of the experiences I had in the past that I thought I may not be relevant are in fact relevant with what we are trying to do with the culture of the organisation.

When you talk to the guys in the electricity business about customer, by and large they say it's not relevant to us, because if you are building a big over head line project in the countryside and when you have got sites in areas on sites off the beaten track not sitting in the middle of towns/residential estates...and they say consumer customer is not particularly important ....but then when you talk to our clients in the overhead power lines area they say, what you have to realise is that new regulatory regime is going to give us our determination based substantially on the customer reviews of the service we provide.....there is a complete disconnect there; and even in their own organisation there is a big disconnect by the way in which they and their income and the way in which their people feel they need to discharge their roles. Fascinating.....

What you need to understand is that they way we (the customer) measure our performance is not necessarily linked to our regulatory targets.....(Laughs).....oh right.....*we are trying to link the way we measure our performance in line with how our customers measure there's (paraphrased by G)*

We brought in a customer and community manager in from the service industry to try and synthesise all of the regulatory frameworks that our clients are subject too, the customer strategies that sit in



their organisations and try and to distil those down into some straight forward messages about the way that we manage our business so we can develop some programs through our business that will set objectives and measure performance in a way that is aligned to the customer outcomes that are required by our key clients.

The way our performance is measure by our clients is materially different from the way in the majority of the group (BB) operates

We are much closer to the FM world than the construction world, because we have long term agreements with clients that may last for 5 or 8 years, from programmes of activity, where as with the construction world it tends to be a single contract for a single project to deliver a piece of infrastructure and when that is completed then the contract falls away,

How do the amp period effect

Different clients operate in very different ways. In Anglican waters for example the way in which we work with the client is very integrated. It's an alliance structure and we are imbedded in a structure with 6 contractors in the one alliance. If you go and walk around the office and talk to the teams there you couldn't tell who works for who it's very focused on outcomes and it's an interesting way of making it work.

Outcomes rather than output?.....outcomes. And those outcomes are aligned with regulatory targets..... other clients are much more transactional they will say.....there is this programme of works for this price and here is the contract, we want you to deliver it for us and we are going to measure you and we will police you .....and we will help you get there by having a stick that we can beat you with if you don't achieve the targets that we set.....some very different approaches by the clients set about achieving their goals

The commonality with all of the water sector clients with regards to the amp is that none of them were ready with their program, so you have huge inefficiency in the way that the program operates.

Instead of planning projects that can run straight through from year 5 into year 1, as in one amp into the other they treat the programs as in entirely discrete and they wait until they get their determination, before they start releasing work and when the release their determination they find that they have a 20% challenge on their target the whole program stops then until such time they are satisfied they have a way of getting there rather than anticipating 20% cost saving efficiency built into their target which would be a reasonable assumption they ought to have known within a reasonable tolerance where it was going to land.

They ought to of been pretty much ready with at least the first years work, but the fact that they are not, means that they have to lay off people, you then have scrabble around finding people for the work that does come out, which means you have to invest in training....because inevitably the people you used to have that were reasonably well trained, you wont get all of them back...and so ultimately all those cost wrap up into the price that the contractor bids to the client so we have to pay for our redundancy, pay for our training and if they flat lined their program and anticipated better what the outcomes of the alliance might be, they would be able to tweak their programme a bit to accommodate the differential they then would end up with much better quality outcome.

*Does that go for both ofgem and ofwat?*

It's certainly ofwat, we saw some of that in the new distribution price control period, that started again this time last year.....some of that is for the same reason, but also uncertainty about the infrastructure requirements due to the hiatus...and..But also whether it's going to be nuclear how much of it, where it will be and how much of it will be wind .....the certainty of the infrastructure and so on.

There are different issues in the electricity sector.....

There is two different parts to this

There is what we have being doing and that has been organised

And how I see it going forward.

They are significantly different, they way I have organised ourselves in the past is been to have dedicated team of people, who's job title has been innovation, with a relatively loose brief, who have picked up both short term operational challenges and the spirit of some step change innovative improvements

The step change stuff, innovations that have been established in collaborations with clients...dual funding that is available and tends to be in the water sector....there has been innovation in the electricity sector, but has tended to be one off projects that have been driven in the operational line. Either as a consequence of a demand that has been placed on us by a client or alternatively an innovation that has been spotted internationally and we thought it was a good idea to bring it into the UK.

There are some really good examples of some step change equipment lead innovations.

I see innovation sitting in three buckets:

1. Plant and equipment innovation -80%
2. Processes and systems -20% (on occasions)
3. Culture – 0%

Sitting within each of those buckets you have got different components of the way in which you deal with innovation.....i see

- A. Improvement activities
- B. Product or process development
- C. Step change/game changing innovations

We have dealt with all of those in the same team in the past. And i have been very keen to get people to deal with innovation in:

- Improvement in the operational line
- Development through the supply chain
- Step change through discrete projects which may involve other stake holders, i.e. customers, competitors, university, gov, supply change and may have multiple routes of funding.....but it has a specific remit for step change in industry practice, for me that's where the medium term, big value stuff comes from and the difficulty we have had in the past is making sure that is properly specified at the front end. So do people have a scoping document, do they have business case, all of those components of running a program in the right way?, these didn't exist people were given an operational brief for a problem to solve, well they would say, how much is it going to cost, what is the benefit going to be, how are going to measure it when we put it into the business, what are the implication of this, what are its nock on impacts on other systems and processes, are there any other incremental costs that are not factored into this, none of that thinking was done.....we had a number of cases when the operators had given a spec for doing something to the innovations team who then produced it, there was no interaction through that process and when the innovation teams produces that product it did what it said on the tin and the operators said that's not what we wanted. It's too big we can use it; it's too heavy we can't use it.....

People underestimate the amount of rigour that has to go into dealing with innovation in an effective way, it's not a dream machine, it's a very practical, very business led, very structured process, if you run it in an effective way....i don't think its mad scientists and boffins I thinks it's very considered individuals with good practical, technical skills, working very closely with

operational guys, who understand how that innovation is going to be put into practice so you can something that is engineered and fit for purpose as an output.

So for us that's a big journey, that's not to undervalue some of the success we have had successes in past, but you have to ask yourself the question are they more by luck than judgement than planning?

- A drive for efficiency and to a degree safety was the driver for development for the spacer trolley.
- Practical problems....how do we make this easier, how do we make this safer?

*Q: How was Support for development of these types of products?*

In the past, it was relationship driven, someone would say....'I have got this need or I have got this idea this will how it will work and someone has trusted them to go on and have a go at it....

within the utilities?,

yes within the utilities, it rarely goes outside the utilities which i think is a mistake, fresh thinking, different industry thinking, expertise from outside the organisation is all part of the rich resource that we have available to us, if you keep yourself siloes within in the organisation it can only be to your detriment, the challenge is when you go outside the organisation how do you maintain the IP and the competitiveness....

Q: thats outside PLC but within the OPCO's?

When you are within the opcocs its much easier, because BB owns the IP,

a third party from outside the organisation, you start to run into problems with individuals who are investing in this and want a return from it and see part of their return as coming from the market...and then you are in a position of sharing the IP that you generate with your competitors and part of the value of innovation is differentiation, that competitive element of it forces people into introspective thinking at times, and you either do it that way or put all the cash in yourself so you are buying the IP as a consequence and get a consultant in to help develop the idea.

We need to open our eyes a bit more, the utilities sector as a whole.....there is quite a lot of plagiarism that goes on, ppl will see that some else has a bright idea, and they will go and steal it and try to make it work...they will either try and make it up or they will cock it up....

I am reluctant to set up independent teams, i am a believer in line management and accountability, so if you set up an independent vehicle to do something you dilute its management imputes sometimes it's better for 2,3,4 org to come together and within each org an individual is selected who is accountable for the output, the business case and the time line about how it will get delivered, you get a better quality outcome with that approach I think.

Engagement is one of the biggest challenges with regards to innovation

Guys on the front end probably innovation is done to them

The difficulty is that people will come up with a view of how something will be done better, but they don't want to be involved in doing it,

Getting people to put their idea forward, with a view that they might get asked to deliver it might be difficult, -your ideas- we are playing with a number of ideas to get some more front line engagement and i am hopeful something will come out of that

I do like vertical slice teams working within the business, you have got a number of different dimensions going into a problem. The frontline guys will think practically, or how will that work out on the field, as you go up the management chain, ppl will think of different aspects, does that improve our safety, whats this going to do to our competitiveness, all these questions start to flow when get ppl from across the mgt spectrum involved and get innovation

In order to get value and creativity you need to get people with a different perspective on the problem

Innovation has got to become a priority

That's not us being smart about it, the market demands that we are, and if we can't respond to that, we are going to suffer in future, all of our clients have to achieve more for less, and that's not unusual, but the industry has spent the last 10years, with same process with the same equipment getting progressively more and more efficient at what it does and we are probably reached a point now where its very difficult in achieving any step change in doing things better, tey same way that we currently do them, so the only way we are going to get that step change for the future is to innovate.

BBUSL is not an innovative company, but we have to get it to that position and ppl have to see it as part of their job role....and they also have to see it as something that is welcomed...is it??...yeah yeah

i think it is broadly, quiet often ppl don't know what to do with it, you can get 100 ideas and ppl then are rabbits in the headlights and what the hell do i do with that lot...there is a big communication job in there too on giving feed back to received ideas, on why we have selected or not selected various innovative ideas....

we should probably be more demanding, and say to those with the good ideas, to do as much of it themselves and trust them to do it.....if we can end up with 3000 ppl innovating in a controlled frame work, so that we don't have anarchy out there, then that's got to be a pretty rich organisation.... group would in principal support this yes

our tendency is to pick to 2 or 3 things that will give us the biggest bang for the buck and with limited resources and if there is smaller stuff that doesn't require a budget and that ppl can get on with locally, and they can make it happen through force of will, then thats great....it's a cultural thing

its tricky when you have an organisation from a business perspective needs to be compliant with business process because the first time something goes wrong we have not followed an appropriate business process, someone gets hurt or someone gets killed and some turns round and says i was innovating, and you say well you shouldn't be doing that, and it's the last time they will ever do that, trying to get that balance right of compliance and enabling ppl to come forward with ideas, get them tested and if the look reasonable then ppl articulate how they are going to do them and if you can put some control around them that's fine, then get on with it in those parameters. When things go wrong in our business, ppl get killed.... it means we have to approach this sort of stuff carefully and a lot of time.

Driver and barriers to innovation

#### 1. Barriers

Culture, budget, client environment, time and resource (both ppl and financial) degree of confidence that you are going to get the return.

There are innovations that are easy to write business cases for, but how do you write a business case for culture, it's much more intangible.....

Justification is difficult given the context in which you are operating, could be financial reasons it could be that there are other investments going on in the organisation that are competing for the same resources that have got more tangible outcomes.....

#### 2. Group level driver

Impetus is produce sharing innovation, share best practice, small degree its more about coordination and cooperation. From group to opco, is almost all to do with safety.

From a divisional level there is no push, there is encouragement to share best practice...but there is no push, within the op company's, you have a push from the directors and project managers

At my level Within our group of directors it tends to be competitiveness and differentiation that are the drivers our absolute key is how do we drive our market share, how do we drive our growth, the only way we will do that is \_\_\_\_\_differentiation and price differentiation with our competitors and we cant see how we can create that clear blue water without by simply being better at what we currently do....if you look....project mgt teams, it always about, how do i make my life easier, here you would get the developmental innovation happening in that space and at an audit level, you will find this can be improved

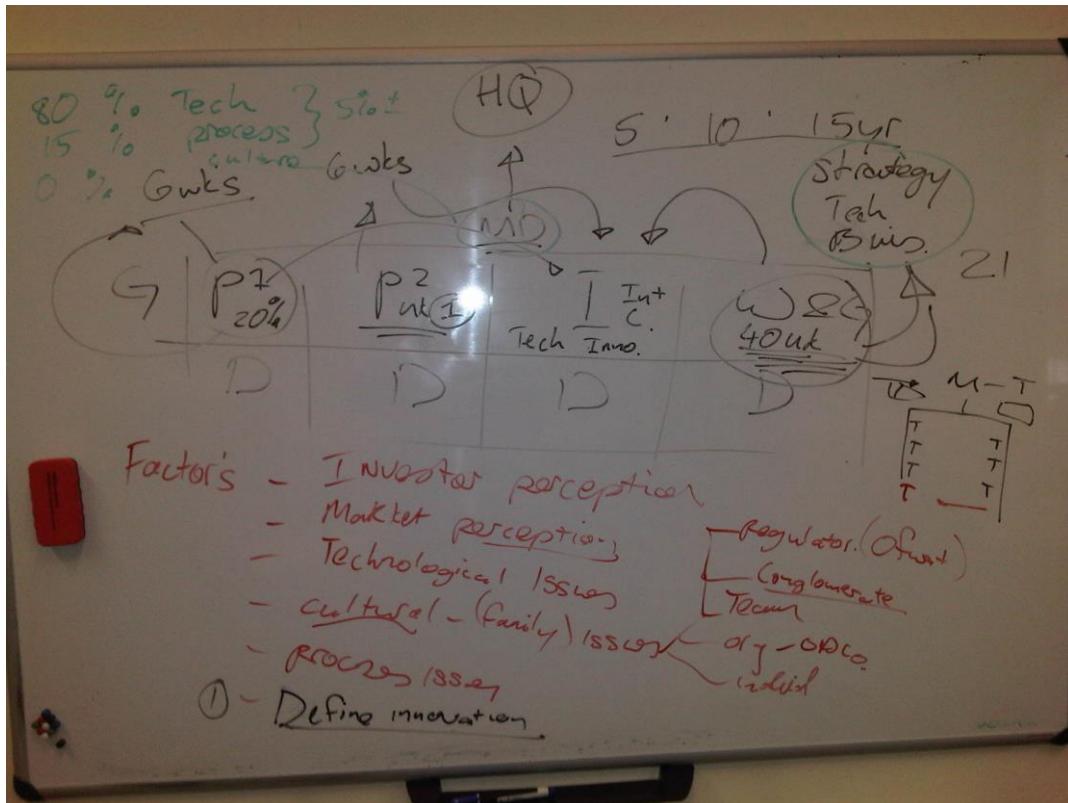
Clients will approach from both agendas, we want this cheaper faster safer....sustainability is coming into it, we want to be able to do things.....very much less prescribed....in terms of what they want, its more about a strategic outcome form them.....

No incentivisation comes from group to innovate...no overt incentivisation given to team members to innovate....i guess to a degree, it about how we measure ppls performance and reaching targets – thats and interesting question that.....

How much of the organisation can you engage in a project at a given time??

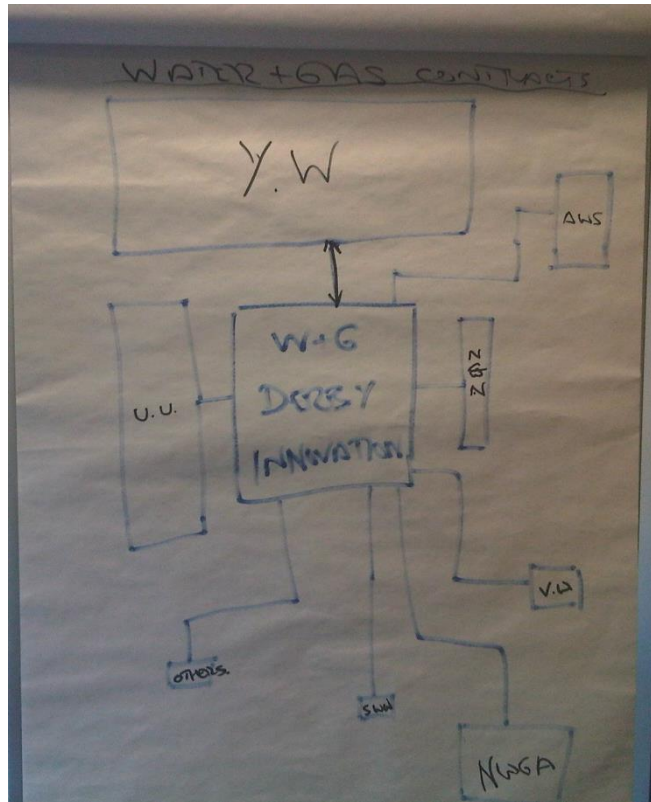
## Appendix 2 sample of analysis process

Use of white board for debate and deliberation with CSO



Understanding implications of innovation strategy for BULBz group





Innovation relationships with clients

Use of hand written scripts and activity theory template to understand the strategy formulation process

WS 560050 — working on Street 12-12-11 1.

M: so have you read up on what a strawman is?

G: yes

W: build it up, knock it down & build a solid final solution.

G: But we use building it up for Colin?  
(to knock it down).

what I thought is that we use properly Q's. to Colin? & that's where Et. knocks it down & from it we build our street? no. no?

W: yes, that's ok (not really listening).

G: the ~~the~~ thing I wrote, I was trying to stay away from just talking about the technical focus but more of generic approach which was difficult to do. because your inclination is to always go back & talk about what you know & not the identified issue.

Try to keep it broad, but having in 'eat' is difficult.

Division of L.

②

M: but we don't head meat at the minute.

Tool.

Spent time working on our own tasks

Right finally I have it printed.

- so here is a doc. have a read.

- here is a streamer there (example)

Tool.

- this is what IBM have sent.

Tool.

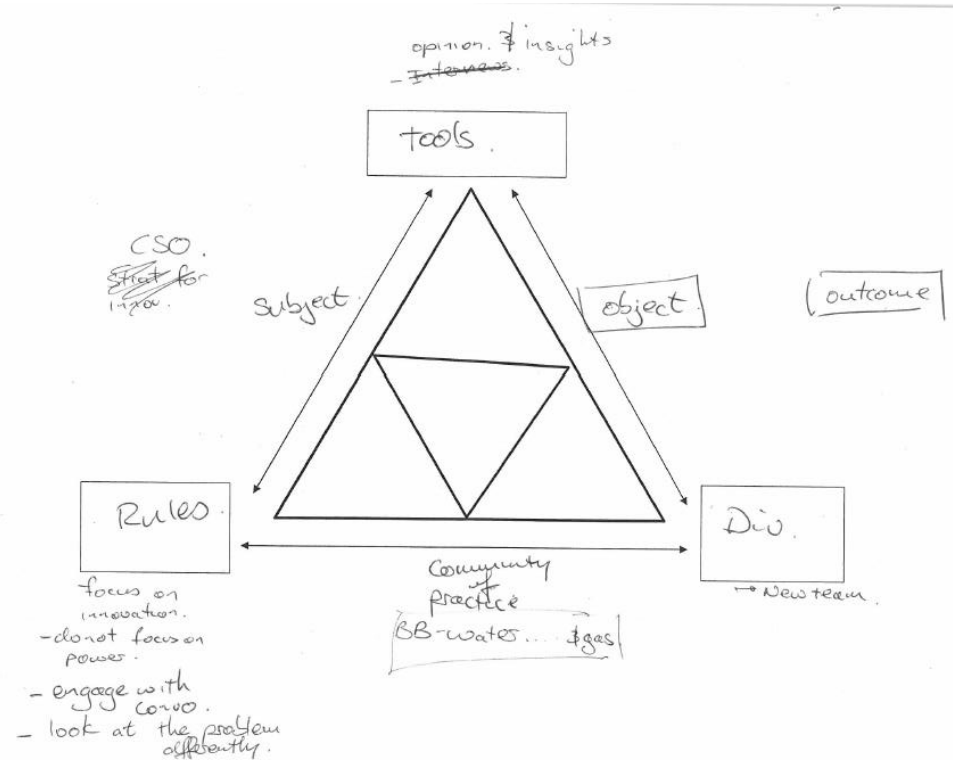
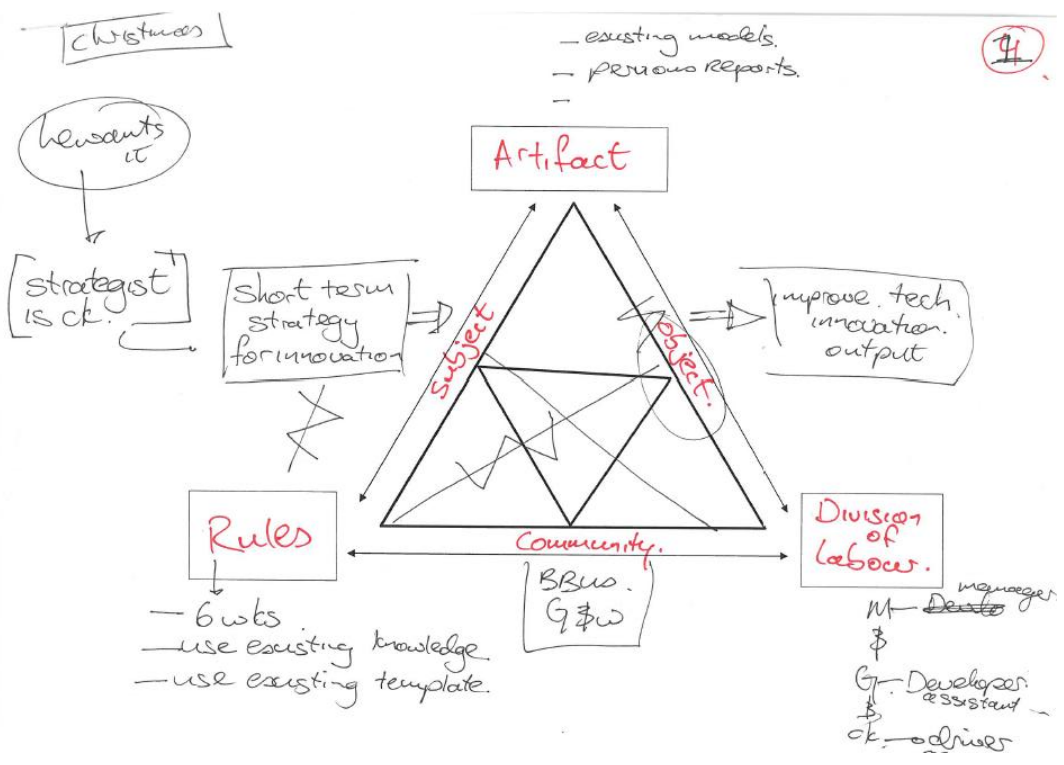
→ look at that... hold on.

↳ look at what we have launched the Mike Sparrow thing now look at the headline on that. ((Docs??) which ones)

→ Just one thing that is important to Kk.

one thing that I am going to change, I know it's a little thing, it's the way the business is structured.... it's G&P, not W&G.

[Mike makes changes to strat]



## Appendix 3 Bulbz Press release

News Release

Date:

Serial No.: 10XX

PhD set to examine innovation in the utilities industry

A PhD student from Leeds University is embarking on a research project to examine the process of innovation within Balfour Beatty Utility Solutions and the wider utilities sector.

Gerard Duff has been granted funding by the Engineering and Physical Sciences Research Council (EPSRC), the UK government agency for funding research and training in engineering and the physical sciences, to conduct the project. The research is centred on how the company approaches innovation, how the wider industry views and incorporates innovative ideas and products into projects and how a greater culture of innovation can be nurtured and grown.

The project will last for three years, during which time Gerard will spend time gathering perspectives on innovation from all areas of the company. He will also attend various industry events to establish a wide range of views on innovation.

Gerard said:

*"I'm really looking forward to starting the project. I come from an engineering background and it will be very interesting to see how engineers in a different industry apply their expertise to technical problems, as I think most*

*engineering projects go through similar steps to establish the parameters and limitations of what you are working with. My research will not only examine this practical side of innovation, but also look at how Balfour Beatty Utility Solutions approaches innovation as a whole – what blocks new products or practices, and how the company incorporates them into its day-to-day work.”*

Gerard’s research will attempt to forge a stronger link between academia and industry. He explained:

*“There is often a perception of academics being in an ivory tower, cut off from the realities of the workplace and industry. We are working hard to change this impression and show how research projects such as this can bring benefits to both industry and universities. It is definitely a two-way relationship. Industry gains access to the research expertise of universities, whilst academics are able to take real-world experience to their students, making them better prepared for the practical engineering challenges facing them in the workplace.”*

Gerard will be working closely with Balfour Beatty Utility Solutions’ dedicated innovation team, based at the company’s site in Derby. General Manager for Innovation and Development, said:

“We are delighted to have forged this partnership with Leeds University and Gerard, which I am sure will have some very positive outcomes. Innovation is vital for the future of the utilities industry, and relationships such as this will do much to help us understand the challenges

facing innovation and how we may be able to reduce some of the factors which block technological development.

“What’s exciting about this project is we really do not know what Gerard’s findings are going to be. As an outside observer of the business, Gerard has no pre-conceived ideas of the industry and therefore will not be starting his research with any assumptions. His research will evolve as he gets to know how the industry works, and this should lead to a very interesting and useful final report.”

‘Innovation in Balfour Beatty’ project at BULBz’

This week we caught up with Gerard Duff a PhD student from Leeds University, who is embarking on a research project to examine the process of innovation within BULBz and the wider utilities sector.

Tell us about your research and what you’re doing with BULBz?

It’s a PhD project, but its more hands on and practical than a normal one. I’ve been granted funding by the Engineering and Physical Sciences Research Council (EPSRC). The research is focused on how BULBz approaches innovation, how the wider industry views and incorporates innovative ideas and products into projects, and how a greater culture of innovation can be nurtured and grown. I’ll be here for three years, and will be spending my time gathering perspectives on innovation from across the company. I’m really looking forward to starting the project, but to begin with I need to gain an understanding of how the government, regulators and Balfour Beatty define innovation. From this I can come up with a plan to see where I want to focus my research.

Why did you choose a case study at BULBz?

I come from an Engineering background and thought it would be fascinating to see how engineers in a different industry apply their expertise to technical problems. I was also keen to do a more hands on project...I'm quite grounded and wouldn't want to be one of these fuzzy haired, bow tied lecturers tied to a classroom! I like dealing with situations where there's going to be an outcome. Innovation is so important and with this kind of research, BULBz will get something out of it rather than just receiving a general report about the industry.

How would you define 'Innovation'?

I find innovation fascinating as everyone has their own definition of what it is. From my experience I'd define innovation as the stage gate and the steps taken to bring an idea into fruition.

Do you think there needs to be a better relationship between industry and academia?

Yes. It's all about knowledge transfer between industry and Universities and creating relationships between the two so that we learn from industry and industry learns from us. This then means we can take real world experiences to the students and they will be better prepared when they start work in the industry.



## Appendix 4 industry magazine interview

### PHD Examining Innovation in Utilities

Gerard Duff is a PhD researcher from the University Leeds Business school working on a research project examining innovation in the Utilities Industry.

Almost half way through the project now with a Utility Business I caught up with Gerard to find out a little bit more.

Gerard is funded by the Engineering and Physical Sciences Research Council working on a project that was jointly set up between Leeds University and BULBz. The focus of the research is an in-depth study into how Balfour Beatty approaches innovation and how industry more generally incorporates innovative ideas and practices.

The study is three years in duration. Initially Gerard took time to understand the industry feeling it is important to have a clear understanding of context and environment before delineating and assessing a specific focus, in this case understanding utilities innovation. To help him in this endeavour his approach has included a variety of stakeholders including, interviews with industry regulators as well as key individuals within Balfour Beatty. He has found the sector intriguing, made up of many different aspects that have shaped and influenced the way in which challenges have been approached and overcome. It is often forgotten that the utilities sector provides the means by which every single one of us can function on a daily basis. Modern society relies on it to keep our lights on, keep our homes heated and water to drink, bath and grow food stuffs, yet it is a little bit taken for granted. If it was not for advancements in the utilities sector, it could be said that we would still be reading by candle light or cooking over an open fire.

Much of the first year of the study has been spent understanding what innovation actually is - not an easy task, says Gerard. In fact, he concludes that broad sweeping definitions of innovation often lose their meaning and as a result are rendered useless. He believes that although broad definitions have their merit, they subsequently have to be bolstered with further refined sets of goals and objectives, specific to a particular organisation, department or market, i.e. context specific.

Gerard feels privileged to be working on this highly relevant area of research at such an important time. Innovation has been seen as means to help UK plc pull its self out of the current global recession. There are downsides of course, one being that innovation is often seen as a cure for every problem and often its complexities are misunderstood, Gerard explained, that already his work is seen to be extremely relevant to industry regulators who are continually pushing the boundaries to create greater and greater sources of technical innovation, yet the missing ingredient appears to be the management of the innovation if it's potential is to be realised to produce the game changing advancements sought. An immediate contribution from the research is the need for a definition of innovation within the utilities sector, this he feels could help give wider scope to innovative practice and assist with long-term planning.

His research has also identifies those drivers that lie behind innovation in the utilities industry, such as cost, safety, process, gaining competitive advantage as well as regulatory requirements.

When posed with the question can someone be taught how to innovate or is it innate in the individual, Gerard replied 'I feel it is a bit of both, in some ways it is like the entrepreneur, some people are natural entrepreneurs that can spot gaps in the market, however the skills required to be an entrepreneur, such as how to start up a company, can be taught in the same way as individual can be taught the skills to develop an innovation'.

Asked to site an 'innovative champion' from any sphere Gerard gave Google as a good example. Their innovative practices and cultural perspective is excellent, he said, they are open to change, open to innovation, they are proactive and flexible, but then the market they are operating in dictates that these have to be. He concluded by reminding me that there is a very fine balance between being innovative and being radical and this is a balance companies need to be aware of. Although the utilities industry is a low risk sector for investors, innovation might well be seen as a risk.

## Appendix 5 Letter of access

Gentlemen,

BULBz Innovation and Leeds University Business School (LUBS) have engaged in a 3 year project on 'understanding innovation' as part of a strategic LUBS study of innovation in UK PLC with emphasis on understanding the culture of innovation, working out the dynamics, examining all the models, identifying and breaking down the barriers, etc. The project is wholly funded by EPSRC (Engineering & Physical Sciences Research Council) and so all we provide is commitment through supporting the post graduate who is engaged to deliver the project by granting him access to people, identifying an innovation project for him to work on and provide facilities. The end result for Balfour Beatty will be a complete report with intelligence on best practices for innovation which is fashioned to our needs (and more besides determined by BB and LUBS throughout the 3 year project).

The post graduate engaged on the project is Gerard Duff. He & I have worked on a plan for activity in the first months of the study and our primary activity in the early phase of the project is to understand what innovation means to BULBz (and BB PLC). He has already interviewed some people in BULBz and the water industry regulatory framework (including OFWAT) and I have planned for him to interview BULBz Directors, Managers, Supervisors and operative already. However, to develop a rounded understanding though Gerard wishes to interview each of you. So can you spare 30 minutes of your time? I would also welcome your help in giving Gerard access to senior people in innovation/ strategy in BB HO and Opcos through the National Innovation Forum, perhaps through an invite to the next National innovation Forum. Gerard is prepared to take a 15-30 minute slot at the forum to explain the

project and where is with it so far, should you find the space for him to do so. I realise you are very busy at the moment but Gerard, LUBS and I would be indebted if you could. If you agree I will ask Gerard to speak with you or your PA's to set up a suitable time.