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Scenarios Research and Cognitive Reframing: Implications for Strategy as Practice

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Introduction

This paper makes two contributions to strategic management research. It positions scenarios research as a way to connect micro, meso, and macro level cognitive framing (Cornelissen and Werner, 2014) regarding environmental uncertainties. This extends the boundaries of strategy as practice by involving extra organizational actors in strategy praxis to ascertain macro level uncertainties (Vaara and Whittington, 2012, Floyd, 2011) and by linking the complex connections between the micro, meso and macro praxis (Jarzabowski and Spee 2009).

The paper considers the role of a scenarios methodology in strategic management with respect to two unrelated case studies – a real estate firm, and a trade association, with and about whom two of the researchers have a detailed knowledge since 2009. While the findings we report here must be treated as exploratory, they do conform to a pattern of findings that a broader six year old research effort has been producing (Ramirez et al, 2015). The findings also conform to the way sociology has been treating the ‘framing’ of issues since Goffman (1974) popularized the construct. As Cornelissen & Werner’s (2014) recent review of framing suggests, the field includes ‘micro’ (individual) level research concerning the cognitive frame, frame of reference, and the framing effects involved; ‘meso’ organizational) level research about what strategic frame, technological framing, and collective action framing take place; and ‘macro-level’ research at the field level including institutional frames as well as framing contexts. This paper establishes that scenarios research allows management to clearly connect what Pierre Wack (1985) famously called the ‘microscope of the mind to the ‘macroscope- of the world accessed with scenarios; it does so by respectively reframing roles and relationships at the micro and meso levels.
This paper is also a response to the call made by Vaara and Whittington (2012) to broaden the analyses of strategy-making, moving away from a strong emphasis on the ability of individual managers or management teams to steer an organization to instead become more concerned with placing agency in a web of practices. Accordingly, Whittington et al (2003) proposed that strategy be investigated as a field or social system characterised by connections between corporate elites, strategy consultants, financial institutions, state agencies, the business media, and business schools with an emphasis on understanding how these interactions contribute to the production and consumption of particular kinds of strategy discourse. This paper establishes that taking a scenarios approach can help strategists in firms in turbulent environments (Emery and Trist, 1965) to host diverse views without having to reach agreement, and so more readily comprehend the relevance, complexity, and potential impacts of such a web of practices. By having a small set of scenarios that disagree with each other but do so within different futures, the views of “the other” (Habermas, 2000) and the connections between the web of practices can be safely explored within a “safe” transitional space (Amado and Ambrose, 2001).

**Cognitive framing and re-framing**

The concept of framing has been very important in the management and organizational literatures since its use in the Carnegie research on decision-making in organizations (Cyert and March, 1963; 1993; March and Simon, 1958). Cornelissen and Werner (2014) sought to consolidate the disparate literature on framing. Their review highlighted how the widespread use of the construct has led to the growth of separate research traditions, each with their respective interpretation and application of the ‘framing construct’. They organized the many streams into three distinct bodies of research traditions - those at the micro, meso, and institutional or macro level.
The micro level literature focuses on individual managerial cognition and decision-making in organizations (e.g. Hodgkinson, Brown, Maule, Glaister and Pearman, 1999; Nutt, 1998). Micro level managerial cognition frames represent an understanding of the individual’s ‘frame of reference’ through which she screens and filters the environment (March and Simon, 1958). Over a period of time, the managerial cognitive frame of reference serves to validate perceptions. This cognitive frame is reinforced more strongly via in-group communication with others in the organization, most of whom have similar frames of reference (March and Simon, 1958). Cornelissen and Werner (2014) point out that cognitive frames as knowledge structures act as key resources for cognition, but overreliance on a pre-existing cognitive frame can be a significant source of failure in the context of novel, unprecedented or changing circumstances which require flexibility and alternative conceptualizations (Benner and Tripsas, 2012; Levinthal and Rerup, 2006; Tripsas and Gavetti, 2000).

Research at the meso level has focused on how individuals and groups construct and negotiate meaning in interactions. Such frames are socially constructed in interactions between managers of firms in the same industry, leading to a common cognitive understanding (Benner and Tripsas, 2012). Nadkarni and Narayanan (2007), refer to such socially constructed frames as strategic frames that set a common understanding about industry boundaries, competitive rules and strategy-environment relationships available to a group of firms in an industry. Cornelissen and Werner, 2014 highlighted that at the meso level frames are often depicted as relatively stable modes of representation to which employees align themselves. However, there remains the concern that the static tendency in frame analysis reduces frames from socially situated processes and meaning construction to objective, disembodied and stable interpretive schemas. Chreim (2006) highlighted in this
context, that there is a need for a more balanced view that can acknowledge that in some instances, employees may also openly contest such frames and resist change.

At the macro level of analysis, the concept of frames and framing has been discussed at a variety of institutional contexts, (Ansari, Fiss and Zajac, 2010) and in the creation and institutionalization of new markets (Weber, Heinze and DeSoucey, 2008). Bateson 1955, 1972; Burke, 1937 and Goffman, 1974 started this work when they focused on how common cultural frames of reference are used by actors to define and label experiences in specific contexts that define the very content of the institution. These meanings structure order and stabilize power orders and interaction patterns (Lounsbury et al, 2003); they elaborate on the typical roles and behavioural scripts associated with a particular frame (Borum, 2004; Weber and Glynn, 2006); and play an important role in determining the durability and regularity of meaning and experience in institutions. Current research focuses on how institutional fields are constructed, sustained, and altered; with struggles over frames and their consequences. Institutional fields refer to organizations which in aggregate constitute a recognized area of institutional life – key suppliers, consumers, regulatory agencies and organizations that manufacture products and services (DiMaggio and Powell, 1983). The struggles between institutional frames occur and intensify over periods of upheaval and changes in which the previous frames are questioned and when they are seen to no longer apply (Fligstein, 2001; Maguire, Hardy and Lawrence, 2004; Meyer and Hollerer, 2010).

Upon reviewing this literature, Cornelissen and Werner (2014) invited researchers to consider using research designs and methods that make stronger connections across the three levels of analysis; particularly mutual, reciprocal linkages between cognition at micro and meso levels. This would pay more attention to how extra-organizational actors like strategy practitioners external to a focal organization contribute to organizational (re-)framing (Jarzabowski and Spee, 2009). They also found a lack of empirical research at the macro level that sheds light
on understanding how particular types of strategy and institutionalized practices are modified through interaction between multiple actors at the meso level (Jarzabowski and Spee, 2009). They proposed that studying these linkages will make the case for an enlarged conceptualization of framing that better synthesizes the concept (Entman, 1993) and helps to clarify a multi-level agenda for future research (Cornelissen and Werner, 2014).

**Strategy as Practice**

The strategy as practice (SAP) school of research has attempted to make connections between micro-phenomenon studied in practice based research and more macro phenomena (Balogun et al, 2007; Denis et al., 2007; Jarzabowski 2004, 2005; Johnson et al, 2007; Whittington 2003, 2006). Jarzabowski and Spee’s (2009) review of strategy as practice literature highlighted that there is a lot more research on the links between micro and macro praxis (Vaara et al 2004; Jarzabowski 2004; Johnson et al 2007; Whittington 2006, Lawrence and Suddaby, 2006; Oliver, 1991) compared to role played by extra-organizational actors in strategy praxis (Jarzabowski and Spee, 2009). These studies seek to explain the institutional, market or industry praxis from the perspective of the individual’s actions and interactions (Jarzabowski and Spee, 2009). However, this line of research is incomplete as strategy is also a field or social system for investigation in its own right (Vaara and Whittington, 2012). This field connects corporate, strategy consultants, financial institutions, state agencies and business schools in the production and consumption of strategy discourse (Whittington et al, 2003).

An important attraction of strategy as practice is partly explained by the challenges bestowed upon the strategic research community of locating objective reality in an otherwise socially constructed business environment where managerial cognition steers organizational change. Vaara and Whittington (2012) have also reiterated in this context that strategy research in the 21st century is going to be very different. This is because firstly, the twenty first century
in institutional environment will witness a rapid pace of social, technological and economic transformations that will contribute to the unpredictable nature of the institutional environment (Vaara and Whittington, 2012; Floyd et al, 2011). Firms therefore need to develop a capability base to respond to this somewhat unpredictable nature of the institutional environment (Floyd et al, 2011). Vaara and Whittington (2012) highlighted that when managerial cognition steers organizational change, uncertain environments (Floyd et al, 2011) might become divorced from the realities faced by people, firms, and markets. To resolve this issue, Vaara and Whittington (2012) called for future studies which focus more attention on actors beyond the managerial ranks. Their recommendation was that strategy as practice needs a macroscopic lens to avoid the dangers of micro-myopia in a socially constructed environment. The macro-institutional lens treats strategy as a large scale phenomenon that can be tracked over long periods of time and across different societies and internationally. However, Vaara and Whittington (2012) also highlighted in this context that the macro perspective needs to be tempered by attention to local praxis, where practices are translated into particular organizational or sectoral contexts. This reinforces the more recent call made by Cornelissen and Werner (2014) mentioned above for multi-level research designs incorporating interactions between macro-meso and micro level praxis.

**Scenarios research**

Scenarios here are understood as a small set of manufactured plausible future contexts designed for a user, a purpose, and a use (typically to inform strategic planning practices). Importantly, scenarios distinguish between the broader contextual environment beyond the influence of those in it from the more immediate transactional environment made up of those they interact with and can thus influence; scenarios study how the uncertain driving forces in the contextual environment might change the transactional environment in the future (Emery and Trist, 1965; van der Heijden, 1996; Ramirez et al, 2008). They come in sets of two or
more, usually not more than four, and are typically depicted as stories. Wilkinson and Ramirez (2016), as we do here, saw scenario planning as a methodology that produces knowledge through action (Morgan 1983)–as “an approach to research that is substantially rational in the sense that its practitioners develop a capacity to observe and question what they are doing and to take responsibility for making intelligent choices about the means they adopt and the ends these serve… and actively examine the choices that are open to realize the many potential types of knowledge waiting to be engaged, with active anticipation of the consequences of such engagement” (Morgan, 1983, p. 406). Ramirez et al (2015) were the first to propose working with scenarios as a methodology that can help produce interesting research in the sense of Alvesson and Sandberg (1993): “This is because scenarios involve processes of inquiry that can guide the research of complex issues involving long range dynamic processes in uncertain contexts by accommodating and comparing different perspectives; and can involve doing so in a number of iterations that makes it possible to revisit and revise assumptions and decisions and tentative findings, as required by the learning that each iteration supports (p.7)”. Based on three case studies, Ramirez et al (2015) showed that as scholarly methodology producing scenarios which entails an accessible, transparent, testable and contestable inquiry process, all of which are constituent elements of rigorous research. We use that approach here, in particular focusing on two companies – a trade association and a real estate company.

METHODOLOGY
A research methodology theorizes the choice of tools, techniques, and other processes of inquiry which seek to produce or verify knowledge. Methodology manifests the specific epistemology of the chosen research strategy. This paper is based on two qualitative case studies where the epistemological assumption was social constructivism, a world view where individuals seek understanding of the world in which they live and work (Mertens, 2003).
Individuals develop subjective meanings of their experience. As these meanings are varied and multiple, the researchers seek to clarify the complexity of views rather than narrow the meanings into a few categories or ideas (Creswell, 2007). This approach is distinct from the positivist philosophy of scholarly (scientific) research that typically includes a systematic process of gathering data; here the data is not only gathered but produced. Yet in both cases rigor in part rests on how well the data can be verified.

As shown above, Morgan (1983) critically examined the scientific choice of method and proposed that just, —as Gödel (1931) has shown in relation to mathematics, there is a fallacy in the idea that the propositions of a system of thought can be proved, disproved, or evaluated on the basis of axioms within that system…. (so) it is not possible to judge the validity or contribution of different research perspectives in terms of the ground assumptions of any one set of those perspectives, since the process is self-justifying. Hence, according to Morgan (1983, p. 15), “the attempts to judge the utility of different research strategies in terms of universal criteria based on the importance of generalizability, predictability and control, explanation of variance, meaningful understanding, or whatever are inevitably flawed”.

Research methods help to advance scholarly inquiry when they help the researchers to generate, (in)validate, or alter theories in the form of insights on current views that are considered true, and when they encourage the questioning and problematization of assumptions (Pettigrew, 2011). Sandberg and Tsoukas (2011) suggested a move from a scholarship centred exclusively on scientific rationality to one that also encompasses practical rationality. Hence a methodology that takes in and utilises multiple conceptualisations (practical as well as theoretical) would make research findings usable not only by researchers but also by practitioners such as government, urban planners and business executives to name a few. The research study comparison we use in this paper was inspired by the case-
comparison research done by Eisenhardt (1989), and it follows Yin’s (1994) indications on how to compare case studies.

The research proceeded as follows. Firstly, each research study was done by the same research team, using the same scenario research methodology. Both case companies had primary business interests in the retail sector (despite not being retailers themselves) and consequently, were facing similar environmental uncertainties. The results of scenario research in both companies allowed the respective senior managers to connect their strategy at the micro level of the firm to the macroscope of scenarios; in each case this was done by reframing roles and relationships - respectively at the micro and meso levels. The next section describes all the stages of the research and the data generation process.

The application of scenarios methodology in two research projects

Background of case companies

The first research project was conducted in 2014 for a trade association (renamed here as the Local Shops Association for anonymity) representing over 33,500 Small and Medium sized Enterprises in Europe. They are often family run enterprises. LSA management approached the research team at a time when consumer sales through small stores were rising, though not as rapidly as online sales or sales through low price discount stores. At the same time, customers were moving away from using large stores, which led to the major corporate retailers opening more small stores. In this changing market, LSA wanted to better understand the future of local and small store retailing.

The second case study was conducted for a large international real estate company (renamed Company ‘Tower Power’ for anonymity) with a turnover in excess of US $2 billion. Tower Power (henceforth referred to as ‘TP’) holds a successful track record in developing shopping malls in both developed and developing markets in Asia, Europe and North
America. The new CEO of TP was concerned that the business environment was becoming increasingly uncertain as changing shopping patterns were not only moving some consumer purchases, such as music, from the TP controlled physical space to retailer controlled online spaces, but was also changing the way in which shopping malls were being used. The CEO therefore wanted to reassess strategy by re-examining the impact of digitalization on store based retailing as much of its property portfolio is based around physical retail development.

The researchers (two of the authors of this paper) and management of LSA and TP agreed that scenarios research was the most appropriate methodology for the organizations to identify alternative possible futures in their uncertain and complex business environments.

**The Research Process**

The entire research process for the two companies were similar in that they comprised of 12 activities beginning from identifying the specific research purpose jointly with the organizations to data generation, scenario development, feedback to the organizations and follow up with organizations after completion of the research projects. The activities comprising the entire research process are summarized in Figure 1 below:

[Insert Figure 1 here]

**Activities before scenario workshop (Activities 1-2)**

*Activity 1- Establishing the research question as the main purpose of doing scenario research*

Both research projects began with several conversations between the researchers (two of the authors of this paper) and the respective Chief Executive Officers of LSA and TP. These meetings helped the researchers familiarize with the organizational context and the key
strategic issues, finally leading to the following agreed research objectives between the researchers and the respective organizations.

- For LSA: ‘What might the future bring for the small and local shop sector’?
- For TP: ‘What is the future of the mall in an increasingly online retail environment in the next 5 years?’

The research team and the respective management of LSA and TP then agreed the participants for the scenario workshop. The research team together with LSA and TP, selected and invited participants to the research workshop due to the latter’s knowledge of LSA and TP’s respective businesses. Jarzabkowski and Whittington’s (2008) broad definition of practitioners was adopted, such that the participants worked at a variety of levels in those organizations operating in LSA’s and TP’s transactional environments, in order to represent a balance of operational management roles, strategic management roles, and third parties, as shown in Appendix 1&2. The practitioners were therefore able to provide broad perspectives on the possible impact of the contextual environment uncertainties on LSA’s and TP’s future business strategies. Thus the selection process provided an informed diversity enabling LSA and TP executives to go beyond their established world view and to take on a pluralist approach in the knowledge building process (Morgan, 1983 and Pettigrew, 2001). To avoid bias in the participant selection process, team agreed on the overall split between different sectors (as in Appendix 1) to create a diversity of relevant views. Then they applied an add-drop heuristic approach (Whitaker, 1985) to allocate participants to each group. By this process, the research team did try to create a group of workshop participants holding different perspectives.

Activity 2- Desk research and documentary data collection before scenario workshop
Before embarking on the scenario research workshop, the researchers gathered documentary data from published market research reports to identity the significant future trends in the macro environment of LSA and TP. The researchers paid particular attention to economic, political, legal, social, technological, and consumer behaviour trends. This served two functions. Firstly, focusing on these trends allowed the researchers to verify whether the initial assumptions made by the executives in LSA and TP about the macro trends fit what had been published. Secondly, the data collected from the documents also provided material to introduce the research workshop participants to how the business context of LSA and of TP had been depicted, asking them to confirm or qualify such views.

The documents researched confirmed that the future uncertainties facing both LSA and TP were a combination of demographic, digital and global issues that might transform the direction of travel of the trends that were studied. Of particular relevance to LSA’s business was the trend where large national and international retailers were increasingly operating small shops, providing new competition for the existing independent players. For TP, the documents researched (IGD, 2014) highlighted that the comparative relevance of department stores in one of their largest markets was changing at a very rapid pace in the shopping habits of the relevant consumers. The purpose of the scenario research workshops, which followed the documentation research, was to further explore the the uncertainties further with the participants and eventually develop the scenarios.

**Scenario research workshop activities and data generation (Activities 3-8)**

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1 In the past few years superstores had moved into the convenience shop business, hypermarkets have devoted space to online fulfilment, and foodservice solutions have become part of the convenience channel (IGD, August 2014).

2 According to Pallozzi (2013) talking about a new brick and mortar shopping experience ‘The role of the physical retail space is moving away from being a point of sale, to a space where consumers engage, interact and fall in love with brands’. A survey by Mintel (Crabbe, 2013) showed that the top two reasons for visiting departmental stores in TP’s prime market was ‘when there was a sale on’ (58% respondents) and ‘when they wanted to go for a day out (54% respondents)’.
The LSA scenario research workshops were conducted in 2014 with 18 invited participants and the TP scenario workshops were conducted in 2015 with 24 invited participants. In both cases the invitees were limited enough to fill the (18 or 24) roles. The acceptance was high as the individuals were known either to the researchers or the firm, and agreement was made with potential dates in mind some months in advance. These were two separate research projects that were part of a larger research initiative on the future of retailing undertaken by two of the authors but the scenario research workshop activities and method of data generation was the same for both projects.

**Activity 3: Group allocation and introduction to scenario research methodology**

At the onset of both research workshops, the participants were divided into groups. Participants were allocated groups to ensure that each group had representative experts of each type (See appendices 1 & 2 for group break up information). This method of allocating groups ensured that the diversity of views in the wider workshop was represented in each group. The workshop began with the researchers outlining what a scenario research workshop entails using examples of other scenario research projects and following the deductive scenarios research method (van der Heijden’s 1996, 2006; Mukherjee et al, 2013; Cuthbertson and Mukherjee, 2012).

**Activity 4: Introduction to research purpose and desk research**

During this activity, participants were introduced to the central research question and the research purpose. The research team then presented participants with a summary of data from the documentation research. As participants were practitioners within the context under analysis, this information was generally not new to them but did confirm and clarify the scale of such trends.
**Activity 5: Identifying uncertain driving forces in the macro environment**

Uncertainties in scenario research are aspects of the contextual environment and therefore beyond the influence of the strategist of the organization that might affect the more immediate transactional or business environment. Those that are considered as plausibly affecting the transactional environment of the organization for whom the scenarios are being developed within the five year time horizon involved are called ‘uncertain driving forces’ in that, together or alone, they can ‘drive’ change in the business environment (Ramírez and Wilkinson, 2016).

To complete this activity, participants began to assess the uncertain driving forces using the summary of the desk research, which they combined with their own experience and insights. Participants were provided specific criteria for assessing and identifying the uncertain driving forces for the business environments of LSA and TP. To assess levels of uncertainty of the driving forces, the participants had to answer the following two questions:

i) How may the uncertain factors affect the future of the business environment?

ii) What is the capacity of organizations such as (respectively) the LSA / TP to confront the impact of such factors upon their respective business environments?

*Data generated during workshop activity 5:* Workshop participants in each workshop were instructed to list the uncertain driving forces their groups had identified, basing their choices on the criteria specified above. The list of uncertain driving forces generated by the participating groups are summarized in Tables 1 & 2 respectively

**Activity 6: Identifying critical and uncertain driving forces**

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3 A time horizon of five years into the future was agreed by the management of both companies as that was optimum time frame for any long term strategic planning to be relevant and meaningful.
Following the identification of uncertainties, to ascertain the driving forces, workshop participants were then asked to identify the two independent (not affecting each other) most critical and uncertain driving forces which they thought would pose unchartered, novel challenges for the management of the two companies. In identifying the critical and uncertain driving forces, participants were given two specific criteria for assessing the relative critical importance AND uncertainty of each force (following van der Heijden, 2005). These were as follows –

i) Criticality was to be assessed by the degree of impact of the uncertainties acting as driving forces on the transactional environments of the two businesses (of the case companies) – the higher impact, the greater the criticality.

ii) The more uncertain driving forces were those developments in the contextual environment which could be explained in more than one way; that is, with more than one plausible cause-effect\(^4\) structure to explain what might unfold.

*Data generated during workshop activity 6:*

Based on the above criteria, workshop participants first worked individually and then brainstormed within their respective groups to identify the two most critical and uncertain driving forces in the business environment of LSA and TP respectively. The critical and uncertain driving forces were plotted on the Critical-Uncertainty Template provided (See Appendix 3 for Templates). The data and resultant critical uncertainties are summarized in Tables 1&2 respectively.

[Insert Table 1 about here]

[Insert Table 2 about here]

\(^4\) In scenarios, cause-effect refer to the inference of similar patterns which explain the behaviour of variables See Van der Heijden (2005) pg 107.
Activity 7: Identify mutually incompatible outcome of critical uncertainties and develop scenario matrix

Having determined the two most critical and uncertain driving forces (which had to be casually independent from each other), participants had to determine the two mutually incompatible but logically possible outcomes within the agreed five year time horizon for LSA and TP. (of X years in LSA and Y years in TP) for each of these driving forces and plot them on the template for scenario axes provided (See Appendix 3). The two axes and their respective logical outcomes were combined to develop a 2x2 matrix which provided the framework for four plausible and contrasting scenarios for the next 5 years. For example (see in Figure 1) in the LSA research workshop, Group 1 developed the ‘Hypermarket Heaven’ scenario as a combination of the two dimensions, ‘consumer behaviour limited to regional shopping’ and ‘low government intervention’ in the local shop sector. In a similar way, the other three scenarios were developed by combining the remaining extremes of the two variables. The scenario matrix for TP was developed in the same way in the TP research workshop.

Data generated during activity 7:

The resulting four corners of the scenario matrix posed four questions to the groups in both research workshops. In each corner, two scoping outcomes of different dimensions were combined to specify a future world – For example, in the ‘Hypermarket Heaven’ scenario, (LSA research workshop) Group 1, had to specify ‘what kind of future world would it be if consumer behaviour was restricted to regional shopping and government intervention in the local shop sector was low’? (See Figure 2) In the TP research workshop (See Figure 3), Group 1, for example, had to specify for ‘The Ateliers’ scenario, ‘what kind of world would it be if consumer behaviour embraced outdoor shopping and technological development was
Answering these questions allowed every group to fill in the detail in each scenario box and create a story of how the end-state (in each scenario) would be reached from LSA and TP’s current state of affairs and particularly in relation to their resource capabilities. This resulted in the first scenario iterations\(^5\) (See Figures 2&3).

**Activity 8: Workshop Plenary session to revisit and assess the first iteration scenarios and identify commonalities and differences among them**

The scenario frameworks developed by each group within the workshop were in this activity reviewed in a plenary session to identify common elements and to assess differences (See Table 3 for common and different themes across scenarios). In the LSA scenario workshop, the common theme across the scenarios was the role of public policy and digital impact on consumer experience in the local shop sector. In the TP research workshop the common theme across the four scenarios was the importance of consumer experience in retailing. The differences across the first iteration scenarios in the LSA workshop were the result of varied public policies and digital development across different retail groups. The differences in the first iteration scenarios in the TP research workshops were owing to the difference in focus of analysis between the groups from design solutions to impact of technology. The comparison provided each participant with a clearer and deeper understanding of the uncertainties and their implications for the business environments of LSA and of TP respectively.

The common elements in scenario planning are considered to be ‘predetermined’ as they appear to occur regardless of what scenario might actually unfold (Wack, 1985; Van der Heijden, 2005). These predetermined elements were therefore carried into subsequent scenario iterations. The research team collected all the documentary evidence of data

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\(^5\) Detailed description of every first iteration scenario is beyond the scope of this paper owing to constraints of page limit and also because they were not the final scenarios used by the companies. But these details can be provided if required. However, the 1st iterations were significant for identifying the predetermined elements, which have been discussed in the subsequent sections.
generated (recorded on flipcharts and research team notes) and used them as the starting point for the second iteration of scenarios.

[Insert Table 3 about here]

**Second scenario iteration after initial scenario workshop (Activities 9-10)**

According to Van der Heijden (2005), the outcome of the first iteration of scenarios is a clearer and better articulated understanding of what one does and does not know about the environmental uncertainties of an organization. This set of insights however, is not the final outcome. Producing a second iteration of scenarios helps those they are for to obtain a clearer and deeper understanding of the plausible contexts, of the driving forces shaping them, and of their implications for the organizations. The researchers thus undertook the following activities to develop a second iteration of the scenarios.

**Activity 9 – Brainstorming sessions to refine the critical and uncertain driving forces**

The researcher team spent one day following each scenario research workshop refining the critical uncertain driving forces generated as data in the workshops. During the LSA research workshop was meeting was held in the office of the research team. During the TP research workshop this meeting was held in a meeting room allocated to the research team for a day in the TP head office. Flipcharts were used during this brainstorming Q&A and with these the refined critical and uncertain driving forces for the second iteration of scenarios were developed. Figures 2 & 3 summarize the proceedings recorded in the flipcharts.

This refining entailed asking ‘What-if’ questions to develop further insights into how the uncertain driving forces identified in the first scenario iteration might determine the core outcome of the predetermined factors for LSA and TP respectively. According to Ravetz (1997) “it is only when we are accustomed to asking ‘what if’ (that we) expect the unexpected”
and fully appreciate how no single perspective can completely capture any real solution as would be the case in turbulent times” (p.537). Asking ‘what if’ questions enabled the research team to think widely and identify the various combinations of scoping outcomes for each critical uncertainty. In the LSA scenario workshop (see Figure 2), the critical and uncertain driving forces developed by groups during the first iteration concerned government policy (nature of government intervention on health issues and impact on small local shops) and the nature of consumer requirements from the small and local shop sector (range of products sold, opening hours, variety of services provided). The question raised was ‘(What) type of service could local stores provide (if) consumer requirements varied from buying weekly top ups to complete shopping, but government policy focus restricted sale of products for these shops?’ See Figure 2 for the resultant scoping outcomes.

During the TP brainstorming session (See Figure 3), the critical and uncertain driving forces developed by groups during the first iteration concerned changing lifestyles and demographic effects on shopper buyer behaviour – consumer preferences for products, a function of demography as well as social structures, was standardized (homogenized) for some products and/or customized (heterogeneous) for others. The second critical and uncertain driving force was the mix of channels retailers would use in the future, the choice being seen as primarily a function of technological development – High-tech online channels versus Physical channels. The question raised was ‘(What) type of retail experience would need to be delivered (if) consumer shopping behaviour varied from familiarity/convenience seeking behaviour to variety/entertainment seeking behaviour across physical and digital platforms’? See Figure 3 for the resultant scoping outcomes.

**Activity 10: Second iteration of developing and deepening scenario stories**

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6 Channels are seen as a set of interdependent organizations, which by an exchange of outputs, are involved in the process of making a product or service available for consumption (Reve and Stern, 1979). More recently, there is an entirely new perspective on channels, reflecting the practice of integrating disparate channels into a single seamless omnichannel experience – See Rigby (2011)
During the second iteration, each of extreme and incompatible outcomes of each critical and uncertain driving force were combined once again into a newly minted 2x2 scenario matrix, resulting in the second iteration of scenarios.

Each corner of the four boxes, resulting from combining the two scoping outcomes of each different dimension, specified a plausible future world -an outline scenario. A similar line of questioning as in Activity 7 was used to develop the scenario matrix. The resultant second iteration scenarios are as follows:

**LSA scenario stories**

*Scenario 1 (Consumer requirement – one stop shop; Policy focus – National formats dominates):* In this scenario, local and small shops combine with online formats to provide a novel type of down-sized hypermarket in a small store format. About 80% of products bought, both food and non-food, are ordered online and delivered to the store in advance of the consumer topping up with impulse purchases such as snacks, confectioneries and soft drinks; as well as daily items such as newspapers. In this scenario stores operate under big brand names and they are typically located in city centres and prosperous commuter suburbs.

*Scenario 2 (Consumer requirement – One stop shop; Policy focus – Local formats dominate):* In this scenario the store format comprises a central market square supported by different regional revolving market stalls that change daily as they move from one local small store location to another. These revolving stores are highly differentiated with each selling different products each day of the week. The customer visits the central market frequently for the everyday items and top up each day with different items from the revolving stalls. The central everyday stall and the various stalls operate under their own separate brands and are usually family run enterprises.

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7 Formats refer to broad competing categories of stores that provide benefits to match the needs of different types of customers and/or different shopping situations (Benito, et al 2005)
Scenario 3 (Consumer requirement – Top up shop; Policy focus – National formats dominate): This scenario is focused on top-up shopping in-store with a supporting online offer. Most sales (80% plus) are direct from the store with regular and specialist items available to pick up in store via an online service ordered in advance by the customer. Within the store, a large range of product categories is available but with little choice within each category unless the supporting online service is utilised. This format operates under a big brand and typical locations include secondary retail locations and urban suburbs.

Scenario 4 (Consumer requirement – Top up shop; Policy focus - Local formats dominate): This scenario is also focused on top-up shopping but the emphasis is on local products as well as local services such as a coffee area. The product range is variable depending both on demand for everyday products and the supply availability of local products. The store is typically run by a local family or the community. Typical locations would be rural communities.

TP scenario stories:

Scenario A (Shopper buying behaviour – Consistent; Channel Mix – High touch): In this scenario consumers purchase products and services from physical stores such as malls, departmental stores and small stores. Shoppers rely on in-store staff for a consistent service experience. Consumers expect consistent consumption experience from the products purchased. Services are geared towards building relationships with consumers to develop long-term loyalty to product brands and services based on the familiarity, reliability and trustworthiness of the products and services.

Scenario B (Shopper buying behaviour – Diverse; Channel mix – High touch): In this scenario consumers’ shopping experience occurs indoors as well as indoors in a retail space where the outdoor and indoor distinction is blurred. Consumers seek a diverse experience
ranging from shopping to entertainment when they visit these areas. The interaction between consumers and service staff is more varied – the service system is geared towards providing entertainment for consumers and enhances a greater feeling of community in a public space.

**Scenario C (Shopper buying behaviour – Consistent; Channel mix- Hi-tech):** In this scenario consumers seek consistency, efficiency and reliability in their interaction in a high tech retail environment. The service system is geared towards mass customization and delivered via click and collect services and robotics technology to achieve precision and consistency in service. Physical stores and malls function as showrooms and/or warehouses or as unmanned collection points.

**Scenario D (Shopper buying behaviour – Diverse; Channel mix – Hi-Tech):** In this scenario consumers expect a diversity in retail experience using customized apps on mobile devices and through the real-time interactive use of technology in stores, malls and departmental stores. Customer interaction with staff is minimal and most staff is hired to perform back end functions in churning big data to create new apps to customize new offers to customers on a regular basis. The basic retail infrastructure in this scenario is geared to enable the hi-tech, real-time interaction with shoppers.

[Insert Figure 2 about here]

[Insert Figure 3 about here]

After completing the second scenario iterations, the researchers briefed the senior management about the second scenario iterations in a one to one meeting to ensure that the scenarios reflect worlds in which LSA and TP want to live and to prepare for (van der Hiejden, 2005). The senior management agreed that the scenarios developed would be
thought provoking and challenge the next level of management to think more widely about the issues faced by their organizations.

Feedback session with company senior and middle management (Activity 11)

Activity 11: Assessing strategic capabilities vis-à-vis the 2nd iteration scenario set

After confirming the second scenario iterations with the senior management, the research team presented the scenarios to the senior and middle management of the respective companies to assess strategic options. There were seven participants in the LSA feedback session and fifteen in the TP feedback session. The decision to involve senior and middle management was to ensure that the research process included organization-wide participation and avoided the rigidities of top management perception (Vaara and Whittington, 2012). The participants were selected across strategic and operational roles within the organizations since they would eventually have responsibility and accountability in strategy making and implementation. As a result, their participation and inclusion in the feedback session was solicited to receive their critical analysis of the scenarios (Sillince and Mueller, 2007). For each research projects, the research team presented the second iteration of scenarios to senior and middle management of both organizations. The purpose of this broadened engagement was twofold – firstly, to brief the respective management teams about the scenarios and to explain the steps that were followed in developing these. The second purpose (which was a significant part of the engagement) was to help top management to assess the strategic capabilities of (respectively) LSA and TP in each of the four second iteration scenarios the research developed for them.

To achieve this assessment, managers were asked to envisage how their organization would change to do well in the ‘end state’ depicted in each scenario; describing the change from the

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8 The proceedings were video recorded for circulation within the respective organizations to action any strategic decision emanating from the research workshops. Data supporting this activity is commercially and personally sensitive and cannot be disclosed publicly.
existing (current) cognitive frame\textsuperscript{9} underpinning the current strategy of the organization. The assessment results were as follows:

**LSA existing cognitive frame in relation to obtaining success in each of the four scenarios**

At the beginning of the assessment activity, the researchers presented to the LSA managers the second iteration scenarios and highlighted their implications. The end point in all the LSA scenarios assume a greater focus on customer experience rather than the purely transactional relationship between store and customer which depicts the current cognitive frame. However, the relevant customer experience may be focused on speed and efficiency in some scenarios (Scenarios 1 and 3) and on more time to dwell and for leisure in others (Scenarios 2 and 4).

The common denominator was that shopping would not depend on the product, as it could be assumed that the relevant product, from local produce to national brands, would be available regardless of the scenario. This view ties in with the thinking of Vargo and Lusch (2004) and the move towards a Service Dominant Logic\textsuperscript{10}. The assessment exercise with LSA management highlighted a major area of mismatch between LSA’s existing cognitive frame and that required to succeed in the scenarios. The existing cognitive frame of LSA managers was to view its role as the trade association for local shops, where “local” traditionally implied being a local business - a family run store or an entrepreneurial small or medium sized enterprise (SME) trading within a defined community or geographical area. In the scenarios developed, the definition of “local” had shifted from being focused on the local neighbourhood business to all the customers from the catchment area. This was now a business for customers in the immediate vicinity (or the entire catchment area) of that business, and so their demands would shape the future of that business. It was the difficulties

\textsuperscript{9} For reasons of confidentiality data about the existing frame cannot be disclosed here. But the existing cognitive frame of both organizations are embedded and reflected in their Annual Reports under the corporate mission, vision and corporate strategy sections.

\textsuperscript{10} Vargo and Lusch’s (2004) seminal paper introduces the concept of service dominant logic highlighting that the focus of marketing is shifting away from tangibles and toward intangibles, such as skills, information, and knowledge, and toward interactivity and connectivity and ongoing relationships. The orientation has shifted from the producer to the consumer.
of predicting customer behaviour in terms of their use of digital channels and their overall need for a local shop (top-up or one-stop-shop) that dictated the choice of axes on the second iteration scenario framework – not the size of the business providing such a service.

Moreover, while on the one hand all the scenarios suggest a need for scale in the distribution system to provide the required product; on the other hand each scenario had distinctive requirements at the small scale store level. Looking around the Board members, it was clear that they represented the retailers that had already accepted such futures as they were already increasing their scale, either through their own growth in the case of larger retail groups or through partnership agreements in the case of the small independent retailers. Thus, while they had implicitly accepted this future as plausible and perhaps already unfolding, the Board had not overtly defined this future requirement.

By clearly redefining “local” from the size of the business to the catchment area of individual stores, the LSA were then able to address what had up to then been a difficult to talk about issue - concerning the membership of large national retail groups, known as “multiples”, in the LSA. The multiples had been opening large numbers of convenience stores as customers had changed their behaviour, reducing their use of large stores and increasingly shopping online. In the past, the LSA had not allowed these large retailers membership of the association as their lobbying concerns were often seen as in competition to the concerns of small, local, independent retailers. However, in these scenarios, the lobbying concerns of both large and small retailers at the local level could be seen to converge. Hence, they changed their scope of membership based on the reframing that the scenarios had offered. This was seen as a big strategic move as the reframing would extend membership of LSA to the meso level larger retailers thereby forging stronger links between the micro and meso level.
TP existing cognitive frame in relation to doing well within each of the second iteration scenarios

At the onset of the assessment activity, the researchers presented the second iteration scenarios and highlighted their end points to the TP managers. The common end point in the TP scenarios (the predetermined element) is the significance of a much more integrated consumer retail experience\(^\text{11}\). Shopping in all of these scenarios is not limited to the act of purchasing a product but has instead become extended to comprise the whole ‘experience of purchasing and consuming a product’ in a physical store or in an online or mobile platform connected to a store in the mall, as well as receiving ordered goods or picking these up. The consumers’ retail experience has in these scenarios become dependent on the service delivery standards in the common areas of the malls and inside the stores (Scenarios A&B); and the levels of connectivity and technological advancement beyond as well as within the malls and stores to enhance the mobile shopping experiences (Scenario C&D).

In all the four scenarios, delivery of the integrated retail experience and the associated services has become the combined responsibility of the mall management and the retail stores. This highlighted the mismatch between TP’s perception of its own current role as real estate company landlord with the more proactive and partnering roles it would need to play in any of the scenarios. Assessing how TP would become or remain successful in each scenario involved a change from the current position; this revealed a need for cognitive reframing. In a first instance, it needed to rethink its current role from that of a real estate company to a

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11 Verhoef et al (2009 pg 13) define consumer retail experience as “holistic in nature and involve[ing] the customer's cognitive, affective, emotional, social and physical responses to the retailer. This experience is created not only by those factors that the retailer can control (e.g., service interface, retail atmosphere, assortment, price), but also by factors outside of the retailer's control (e.g., influence of others, purpose of shopping).
provider of services to consumers visiting the malls in partnership with the shops which lease its spaces.

Moreover, for TP the perception of service delivery was limited to the tenants and achieved through active asset management and regular maintenance of properties. Within that cognitive frame, consumers entering TP-managed malls and department stores or using online and mobile shopping were perceived primarily as customers of TP tenants. This highlighted the mismatch between TP’s cognitive framing of service delivery and the framing of service delivery depicted in the scenarios. To do well in each and all scenarios TP would have to reframe its view of what in the exiting framing was termed the "end" customer and extend its customers to include customers of their tenants. TP would also have to reframe the concept of service and extend it to deliver a consistent and integrated (physical and digital) experience to all consumers visiting the malls managed by TP. To deliver a consistent and integrated service, TP would have to reframe its existing transactional relationship with tenants to a collaborative partnership wherein both partners would together develop and implement an integrated service strategy. The tenants would also have to reciprocate in this collaboration and thereby reframe their perception about their transactional relationship. For TP to be successful in any scenario, a similar reframing would need to occur at the micro and meso levels thereby highlighting the links between the two levels.

[Insert Table 5 about here]

**Follow-up with companies after the research projects completion (Activity 12)**

*Activity 12: Following up on organizational strategic changes after completion of each research project*
After completion of the scenario research projects for each company follow up\textsuperscript{12} by the researchers with the managers of each organization revealed that LSA were at the cusp of altering their membership structure in late 2014 to include larger retailers and acknowledge the expanded scope of ‘local’ businesses. TP were deliberating the testing of service options for each scenario in laboratory conditions to assess feasibility and to collect customer feedback.

\textbf{ANALYSIS}

\textbf{Inter-case analysis: Scenario research enabling cognitive framing and reframing}

The two research case studies discussed in this paper are about organizations in different sectors but there were similarities in how the level of praxis moved throughout the intervention in both research projects (see graph in Figure 4 below).

[Insert figure 4 about here]

\textbf{Micro - meso praxis at the inception of research project}

The initial process of engaging the meso level external actors to interpret the perceptual information coming from the macro environment was an attempt by LSA and TP senior managers to break away from their reliance on the existing micro level cognitive frame in determining future strategic direction. They felt they might be locked in ways that ignored macro-level changes which were emerging or were feared. To overcome the felt rigidity of existing frames at the organizational level both LSA and TP senior managers firstly engaged the research team to jointly identify the central research purpose and secondly, to jointly select scenario workshop participants.

\textbf{Meso-Macro praxis in scenario research workshops}

\textsuperscript{12} Follow up with LSA was via email correspondence and one to one meeting in late 2014 and early 2015 respectively. Follow up with TP was one to one meetings and email exchange in July 2015.
The group allocation in the scenario research workshops reflected an informed diversity across the different levels of praxis (see Appendix 1) to provide a breadth of knowledge and experience. Each group represented different and independent perspectives and sought to avoid interactions between managers of firms in the same industry (Cornelissen and Werner, 2014). This is was done to ensure that common industry level cognitive frames did not impinge on the group interactions aimed at developing interactive frames representing inter-industry perceptions of macro level trends.

During the first iteration, the process of selecting macro level critical uncertain driving forces, their extreme and incompatible outcomes and subsequently the scenario stories, enabled, in the words of Benner and Tripsas (2012) “a more counterfactual form of analogical reasoning where every individual actively tried to think of the difference or break from their prior cognitive frames as a basis for inferences about macro trends”. Elements of the individual frames were then projected onto what Cornelissen and Werner (2014) call a separate ‘blended mental space’ (the group brainstorming sessions) where further elaboration of the blend developed a new (to the group) set of inferences about the macro environment not immediately apparent from the initial inputs from the individual activities. Scenarios research, by its very design, gave meso level participants the opportunity to interact as creative agents, to reassemble words and thoughts and actively invoke different types of frame to understand the macro context. In the case of LSA, the scenarios provided stories of alternate futures where all local shops would become “more professional” and “scaled through partnerships” within the distribution network, regardless of ownership structures. This provided a change of perspective for the LSA managers. In the case of TP the scenarios provided stories of four alternative futures where the consumer experience would increasingly
drive the interconnected activities of all members of the stakeholder network, rather than acting only within a linear transactional sequence of activities. This was a break from the existing cognitive frame held by TP managers which perceived macro level technological advancement as the single most significant uncertainty altering the business landscape.

**Macro-meso-micro praxis during the 2nd scenario iteration**

The second scenario iteration, carried out by the researchers, consolidated the learnings from the scenario stories generated by the workshop meso groups and then applied them to the specific micro level contexts of LSA and TP and provided a hybrid frame comprising elements and structures from the previous iteration. The researchers were well placed to facilitate a meaningful application of the scenarios to the circumstance of each company’s managers, as they were perceived to hold a neutral position to interconnect the structures of the macro context and the micro level issues faced by the respective organizations. The ‘what if’ questions examined during the brainstorming session established patterns of relations between the critical uncertain driving forces and brought the impact of these macro uncertainties closer to the micro contexts of each company. In the case of LSA, the cognitive frame of its managers moved from the macro focus in the first iteration, particularly concerning changes to public policy, to the micro focus in the second iteration where all businesses had to become more professional, better managed, and more organized regardless of the scenario under consideration. In the case of TP this activity highlighted how variations in consumer behaviour and channel mix at the macro level would influence the design of service systems and the delivery of consumer experience across different stores and malls at the micro level - regardless of the scenarios under consideration.
Meso-micro praxis during interaction with senior and middle managers of each organization

During this interaction the researchers (themselves see mostly as meso level actors\textsuperscript{13}) primed the senior and middle managers of both organizations (micro level actors) with the respective scenarios. The managers were then asked to assess the potential of existing organizational capabilities to do well in each of their four scenarios, particularly if they were to occur in the present time. This process had two outcomes for each organization.

Firstly, this reflection highlighted to the LSA managers that their existing focus on lobbying for the economic viability of small, local stores based on geography was inadequate in the scenarios depicted for the small store sector as it was moving towards a customer service dominant business model requiring service performance. In the case of TP the assessment highlighted that the existing technological and human resource capabilities were inadequate to provide the integrated customer service experience across physical and digital platforms.

Secondly, upon identifying the inadequacies in relation to the scenarios, the managers of both organizations were challenged further to reflect on their existing cognitive frames, which influenced the previous courses of action. This process resulted in challenging some fundamental strategic business assumptions for both organizations – for LSA, this challenged the assumption that their sole purpose was to support the ‘local neighbourhood stores’ run by local families and entrepreneurs, when the scope of what was ‘local’ would have become extended to include all small stores in the wider catchment area regardless of ownership. This called for reframing the existing cognitive frame on LSA membership structure to include all retailers operating in the small store sector. For TP the process challenged the assumption that their role as a real estate company was to construct malls and manage tenants when the

\textsuperscript{13} The researchers were not real estate specialists or local shop specialists but had expertise in the retail sector in general and scenarios research. As a result they were in the meso level vis a vis both LSA and TP
scenarios suggested that increasingly, the purpose of malls and stores was to provide important elements of a much broader and integrated service experience. This called for a reframing of TPs role to that of a provider of customer service, reframing its relationship with tenants to treat them as partners with whom they would collaboratively develop an integrated service experience.

The meso-micro interaction involved was instrumental in providing useful outcomes for both organizations by demonstrating that reframing the cognitive frames that depict their fundamental roles at the micro level and reframing the nature of relationships at the meso level (members of LSA; tenants of TP) would enable senior managers in both organizations to integrate their strategies more closely with the uncertainties in the macro environment that the scenario research had manifested for them. Scenarios research, with its in built mechanism of connecting micro-meso- macro praxis at the data generation stages (Activities 3-8) and then macro-meso- micro praxis during feedback to management (Activities 9-12) linked the macroscope of the critical and uncertain driving forces to the microscope of the managers’ mind in a meaningful and actionable way (Wack, 1985).

Implications of interaction between levels of cognitive framework during scenario research for Strategy as Practice

Vaara and Whittington (2012) suggested that strategy as practice in the 21st century would be well advised to reflect the economic, social and technological transformations taking place at the macro institutional level. Floyd et al (2011) proposed researching how firms develop and sustain new capabilities in response to uncertainties posed by unpredictable changes in the institutional environment. We propose that scenario research is a move in the right direction in response to these calls made by key figures of the SAP academic community. This paper establishes how from the very inception of the two research projects, macro level
uncertainties were a key trigger to embark on the scenario research project. Scenario research accepts and explores environmental uncertainty inviting multiple interpretations as multiple futures (van der Heijden, 2008) without seeking agreement. In the case of LSA it was the multiple interpretations that the uncertainties on customer uses of digital channels and how this could relate to their also using a local shop (top-up or one-stop-shop) that determined the choice of the axes on the second iteration scenario framework. In the case of TP it was the uncertainties concerning consumer expectations regarding a shopping experience (familiarity vs diversity) across physical and digital platforms which formed the basis of the choice for the scenario axes. The scenarios gave managers in both organizations a better judgement of the implications of their exiting cognitive frames by exploring what the current situation of these frames would mean if any of the scenarios they considered plausible actually came about. While the scenarios could not take away the uncertainties (they never were meant to do this), they could clarify what it implied by providing a framework to reconceptualise the environmental conditions that could bring about different possibilities and to help reframe the perception of required capabilities across the range of uncertainties. Thus for LSA, this involved senior managers reframing perceptions about membership structures, and for TP managers it concerned reframing perceptions about their organization's role as real estate company and its relations with tenants. Reframing linked the macroscope of uncertainties with the microscope of the mind – Wack (1985).

Integral to the scenario research process is the participation of external actors. Rather than viewing strategy as a unified body of knowledge or as hegemony (Vaara and Whittington, 2012) the scenario research activities from inception of determining research purpose, to workshop activities and feedback to the management teams entailed a process of social construction involving external actors (Whittington et al, 2003; Whittington, 2006) with multi- industry experiences and knowledge. The 12 activities that constituted the two
scenario research projects highlight how the external actors (workshop participants in 1st scenario iterations and research team in 2nd scenario iterations) engaged in exploratory practices such as discerning critical and uncertain driving forces in the macro environment and developing scenario stories. Both scenario research projects also highlight how external actors (the researcher team) engaged senior and middle managers in reframing their perceptions to nurture strategy praxis. This research process helped the organizations overcome the rigidities of existing frames (Cornelissen and Werner 2014). Including external actors in the strategy process broadens Vaara and Whittington’s (2012) concept of ‘agency in a web of practices’ to include multiple actors from the wider institutional field (Whittington, 2007).

The last activity where the senior and middle management assessed the existing capabilities of each organization vis a vis scenarios is an integral part of scenario research methodology. This entails a ‘social reasoning process’ which utilizes conversation to help those involved to assess their perceptions of how the organization would cope if any of the scenarios were to present themselves currently. The outcome was twofold – firstly this activity effectively demonstrated to the middle management that their views on strategy were being solicited and that top management were considering scenarios developed with external institutional level actors. Secondly, the interaction was facilitated so that middle managers could take the role of ‘critical seekers’ (Jarzabowski and Spee, 2009) and find the possibility to take on a significant reframing of existing perceptions before developing new strategies. Scenario research thereby enabled middle management inclusion in the critical analysis of taken for granted practices at the micro and meso levels, both of which, which according to Vaara and Whittington (2012) are particularly important to advance strategy as practice research.

**Implications for future research**
The research activities linked across micro-meso-macro in the data generation stage and the nmacro-meso-micro in the feedback stage. The engagement at the micro level ended with the realization for reframing of roles and relationship. However, the eventual implementation of any strategy would be influenced by the interpersonal effects at the micro level (Healy et al 2015). The two research projects are examples of how scenario research can help strategy practitioners to link the levels of praxis; yet the impact of the interpersonal effects on the implementation of strategy was beyond the scope of the research projects. The authors therefore propose that longitudinal research could be beneficial in the future to understand the strategic outcomes and interpersonal effects of any cognitive reframing.

**Implications for practice**

Scenarios research in both case study organizations enabled middle and senior managers to question their existing cognitive frame underpinning the role of their organizations and in relation to the uncertain macro level driving forces. Scenario research also highlighted that adapting to the macro level uncertainties would require reframing of relation with key stakeholders (membership structure for LSA and tenants for TP). Reframing fundamental roles and relationships therefore provides a concrete and actionable way for the organizations to take the initial step in engaging environmental uncertainties and the scenarios approach is a suitable methodology for achieving this.

**Conclusion**

This paper demonstrates how scenarios research extends the boundaries of strategy as practice by engaging extra-organizational actors from the macro and meso levels to ascertain the impact of macro level uncertainties on the micro level of the organization (Jarzabowski and Spee, 2009; Floyd et al, 2011; Vaara and Whittington, 2012). More importantly, the paper supports the view that scenario research produces usable and rigorous findings.
(Ramirez et al, 2015) which help to challenge existing micro level cognitive frames in organizations, enabling them to make better sense of the macro uncertainties in the business environment and to engage with those uncertainties in an actionable manner. The authors propose that scenario research similar to the research projects discussed in this paper should not be one-off exceptions but examples of strategy in practice which turbulent times could well make more common.

References


**Market research reports**

IGD (2014) *Discountvenience: Blurring the boundaries between discount and convenience*. August 2014
### List of Figures

**Figure 1** - Activities comprising the research process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
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<tr>
<td>Activity 1</td>
<td>Research team meet with management of companies to agree and identify the research questions representing the main purpose of doing the research, justify an idea to the participants, and outline activities to attend the scenario workshop. Material used - Meeting notes.</td>
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<tr>
<td>Activity 2</td>
<td>Do desk research to gather documentary data about future trends in the macro environment. Material used - Published market research reports.</td>
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<tr>
<td>Activity 3</td>
<td>Participants are assigned groups for the remaining workshop activities. Research team introduces scenario research methodology to the participants and gives examples of previous scenario research projects completed by the research team. Material used - Powerpoint presentation.</td>
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<tr>
<td>Activity 4</td>
<td>Group discussion to identify the uncertain driving forces for the future of the sector concerned. Material used - Uncertain driving forces listed in flipcharts.</td>
</tr>
<tr>
<td>Activity 5</td>
<td>Brainstorm session within each group to identify the two critical and uncertain driving forces and plot them on the ordinal uncertainty matrix and identify the two mutually incompatible outcomes for each critical uncertain driving force. Material used - Each group completes a template for the mutually incompatible outcome for each critical uncertainty on two axes.</td>
</tr>
<tr>
<td>Activity 6</td>
<td>Brainstorming session within each group to develop the scenario stories. Material used - Group work on templates provided to develop stories using combinations of each mutually incompatible outcomes and share those scenario stories with the other groups.</td>
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<tr>
<td>Activity 7</td>
<td>Plenary session with all participants in their groups to discuss the implications of the scenarios and the key learnings about the future of the retail sector. Material used - Flipcharts.</td>
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<tr>
<td>Activity 8</td>
<td>Research team brainstorm asking &quot;what if&quot; questions to revisit and refine the critical and uncertain driving forces and their incompatible extreme outcomes. Material used - Flipcharts and note-taking.</td>
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<td>Activity 9</td>
<td>Combine the extreme incompatible outcomes to develop the 2nd scenario matrix, i.e., the 2nd iteration of the scenarios and deepen the scenario stories, confirm the relevance of scenarios with senior management. Material used - Flipcharts and whiteboards.</td>
</tr>
<tr>
<td>Activity 10</td>
<td>Present second scenario iteration to senior and middle management and make them assess organizational capabilities. Material used - Powerpoint and flipchart.</td>
</tr>
<tr>
<td>Activity 11</td>
<td>One-on-one meeting phone call and email exchange between research team and organizations to follow up on actions taken after completion of research project. Material used - Emails and notes.</td>
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</tbody>
</table>
Figure 2: Summary of 1st and 2nd scenario iterations for LSA

Insights determined from 1st iteration carried into 2nd iteration – Future of local shops is in delivering the right service experience to the consumers across the entire catchment area

Brainstorming Q&A during 2nd iteration

'What if' questions to interpret what was happening in the macro environment

LSA 2nd iteration – Revisit & reassess iteration 1

Scoping outcomes

CR – One stop shop/PF – National formats dominate
Scenario 1

CR – One stop shop/PF – Local formats dominate
Scenario 2

CR – Top up shop/PF – National formats dominate
Scenario 3

CR – Top up shop/PF – Local formats dominate
Scenario 4

Figure 3: Summary of 1st and 2nd scenario iterations for TP

Insights determined from 1st iteration carried into 2nd iteration – Future of retail is in delivering the right retail experience to the consumer in the right place

Brainstorming Q&A during 2nd iteration

'What if' questions to interpret what was happening in the macro environment

TP 2nd iteration – revisit & reassess iteration 1

Scoping outcomes

CSB – Consistent/CM Hi-touch
Scenario A

CSB – Consistent/CM Hi-tech
Scenario B

CSB – Diverse/CM Hi-touch
Scenario C

CSB – Diverse/CM Hi-tech
Scenario D
Figure 4: Cognitive development focus over the stages of scenario research methodology
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Table 1: Driving forces and critical uncertainties LSA

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<td></td>
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<td>‘New formats need to be developed beyond tradition c-store sites.’</td>
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<td></td>
<td>- Pressure to reduce waste through taxation</td>
<td>‘Supermarkets may not only increase their number of convenience stores but also start wholesaling operations from hypermarkets’</td>
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<td></td>
<td>- Pressure to improve wages</td>
<td>‘Convenience shopping online may take off.’</td>
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<td></td>
<td>- Perception of lack of sites</td>
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<td></td>
<td></td>
<td>2. Consumer behavior (Local shopping dominates, Regional shopping dominates)</td>
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<td>‘Older, more diverse population is changing the product mix.’</td>
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<td></td>
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<td><strong>Group 3</strong></td>
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<td>1. Dominant formats (Big, Small)</td>
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<td></td>
<td>- Increasing store competition from multiples and discounters, and increasing wholesale competition from hypermarkets</td>
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<td></td>
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<td></td>
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<td>‘There is a risk to certain product categories, such as news, as new methods of distribution are developed.’</td>
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<td></td>
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<td>‘What is the future social experience for convenience stores?’</td>
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</tbody>
</table>
Table 2: Driving forces and critical uncertainties TP

<table>
<thead>
<tr>
<th>Groups</th>
<th>Driving forces</th>
<th>Debating critical uncertainties</th>
<th>Scenario framework – key variables</th>
</tr>
</thead>
</table>
| Group 1 | - Research  
- Consumer education  
- Digital innovation  
- Non-walkable (less accessible areas) | ‘Interesting digital manufacturing will take place on site’  
‘There will be ambiguity of indoor and outdoor’  
‘Consumers will be jumping back in time to the vibrant marketplace of the past for passionate purchases and accepting the industrial and digital revolutions for every other kind of purchase’  
‘Controlled retail environments will become relevant only for emotionally meaningful purchases’ | 1. Technological development (Low, High) |
| Group 2 | - Multiple interface between retailers and consumers  
- Consumer dynamics  
- Technology (innovation) | ‘Consumers will want (products/services) on the same day, want full personalization, potentially buy more..’  
‘(there will be) multiple touch points between supplier and consumer..complex supply chain; supplier-consumer convergence’  
‘Technological innovation will impact payment systems, speed of delivery/logistics’ | 1. Consumer preference (Standardized, customized)  
2. Channel development (All online; all physical) |
| Group 3 | - Consumerism (tech savvy, evolving, emerging markets)  
- Faster information access  
- Interdependency of channels, mobile consumption | ‘There is a cultural shift and a revolution of aspirations..choices are more individualized..also the duality of necessity/value and luxury/status’  
‘There is an interdependency of all channels – information can be accessed faster , mobile consumption, global delivery networks as well as big brand powerhouses’ | 1. Consumer preference (Heterogeneous, homogeneous)  
2. Number of suppliers (Fragmented, Monopoly) |
Table 3 - Plenary session data for LSA & for TP

<table>
<thead>
<tr>
<th>Excerpts highlighting most typical response from groups in from Plenary session - LSA</th>
<th>Common themes identified</th>
<th>Major differences discussed</th>
</tr>
</thead>
</table>
| ‘The government are pushing more planning decisions, alcohol rules and competition issues down to the local level, will this continue?’  
‘Financial constraints on SMEs are hindering local development.’  
‘Consumer expectations keep increasing, wanting everything a large supermarket can offer in a small store at the end of their road.’  
‘How are consumers going to use online retailing, replacing their main shop or as a complementary channel?’ | Public policy driving change through both less and greater regulation  
Digital impacts on physical space requirements are unpredictable | The relative importance of public policy versus digital impacts on physical space varied between groups and individuals |

<table>
<thead>
<tr>
<th>Excerpts from Plenary session – TP</th>
<th>Common themes identified</th>
<th>Major differences discussed</th>
</tr>
</thead>
</table>
| ‘Consumers (these days) want best product, best experience, want to connect to culture, art (and also) at the international level’ – Group 1  
‘Many aspects of consumer behavior have not changed..the emotional function of shoppers, experience which enhances the five senses will motivate them to buy’ – Group 1  
‘In the next 10-20 years there will be re-emergence of physical, convergence of physical and digital as well as technological singularity’ – Group 2  
‘The issue will not be online vs. offline but convergence of the experience of both stores..for e.g. offline will experiment with online prices’- Group 3 | (Consumer) Experiencing products  
(Consumer) Experience enhancing five senses  
(Consumer)Experience across channels | The focus of analysis varied from design solutions (micro focus) to major changes in technology (macro focus) |

Table 4: Reconfiguration of roles and relationships in LSA

<table>
<thead>
<tr>
<th>Trade Association – LSA</th>
<th>LSA focus</th>
<th>LSA membership structure</th>
<th>LSA Measures of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before scenario research</td>
<td>Local implicitly defined as independent SME retailers</td>
<td>Small and medium sized retailers</td>
<td>Effective lobbying on behalf of independent SME retailers e.g. increase in number of independent retailers</td>
</tr>
<tr>
<td>After scenario research</td>
<td>Local defined as any small stores servicing a local community</td>
<td>Include large retailers</td>
<td>Effective lobbying on behalf of small, local stores e.g. increase in number of small stores</td>
</tr>
</tbody>
</table>
Table 5: Reconfiguration of roles and relationships in TP

<table>
<thead>
<tr>
<th>Real Estate Company - TP</th>
<th>Self perception of role in the real estate sector</th>
<th>Perception of role vis a vis shoppers entering malls</th>
<th>Perception of role vis a vis tenants (retailers renting space in malls)</th>
<th>Perception of role in providing ‘service’ in mall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before scenario planning</td>
<td>Construction company</td>
<td>Footfall maximization</td>
<td>Transactional - Rent collection - Contract renewal</td>
<td>Providing Information centre</td>
</tr>
<tr>
<td>After scenario planning</td>
<td>Provider of retail experience in malls</td>
<td>Provider of experiential consumption in malls</td>
<td>Partners collaborating on providing integrated consumer services in malls</td>
<td>Delivering an integrated and seamless service experience across a physical and digital platform</td>
</tr>
</tbody>
</table>

List of Appendices

Appendix 1 – Group allocation in LSA scenario workshop

<table>
<thead>
<tr>
<th>Levels represented</th>
<th>Macro level participants</th>
<th>Meso Level participants</th>
<th>Micro level participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sectors</td>
<td>Wholesale</td>
<td>Third party experts (Public policy; market research)</td>
<td>Supplier Business</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>1</td>
<td>1 product supplier</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>1</td>
<td>1 service supplier</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>-</td>
<td>1 service supplier</td>
</tr>
</tbody>
</table>
Appendix 2 – Group allocation in TP scenario workshop

<table>
<thead>
<tr>
<th>Levels represented</th>
<th>Macro level</th>
<th>Meso level</th>
<th>Micro level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Retail product supplier</td>
<td>Retailer</td>
<td>Architect/designer Academic</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>

Appendix 3 – Templates for scenario workshop group activities

![Diagram](image.png)