



LEEDS  
BECKETT  
UNIVERSITY

---

Citation:

Amoo, NA (2019) The Use of Tools and Frameworks by SMEs in the Strategy Formation Process. *International Journal of Organizational Analysis*, 27 (2). pp. 337-367. ISSN 1055-3185 DOI: <https://doi.org/10.1108/IJOA-02-2018-1363>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/5612/>

Document Version:

Article (Accepted Version)

---

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on [openaccess@leedsbeckett.ac.uk](mailto:openaccess@leedsbeckett.ac.uk) and we will investigate on a case-by-case basis.



**The Use of Strategy Tools and Frameworks by SMEs in the Strategy Formation Process**

Journal:	<i>International Journal of Organizational Analysis</i>
Manuscript ID	IJOA-02-2018-1363.R2
Manuscript Type:	Original Article
Keywords:	Strategic management, Small to medium sized Enterprises, Strategy Formation, Strategy Tools, Frameworks

SCHOLARONE™  
Manuscripts

## The Use of Strategy Tools and Frameworks by SMEs in the Strategy Formation Process

### **Abstract**

#### *Purpose*

To examine the use of tools and techniques of strategy and strategic analysis within SMEs as part of the strategy formation process.

#### *Methodology*

A qualitative, multiple-case-based investigation utilising semi-structured interviews and secondary data sources to create a context-rich insight to the area examined.

#### *Findings*

The findings indicate a strong orientation towards operational tools deployment aligned with financial management and resources and process planning, monitoring and control. Strategic perspectives of the respondents indicate an implicit, rather than explicit deployment of strategy tools and unstructured deployment, but general awareness of the resulting component issues. Clearer strategic approaches and strong implementation appear to positively influence success, when measured by growth.

#### *Limitations*

This study is limited to nine organisations within a UK geographic region and therefore larger scale investigation would be beneficial to extend and confirm the findings in differing contexts.

#### *Practical Implications*

With resource scarcity potentially stymying the opportunity for owner-managers to develop more structured approaches to strategic analysis and development, consideration should be given to how owner-managers can further develop their strategic thinking in order to support enhanced strategic outcomes for their organisations. Furthermore, strategy educationalists may wish to reflect upon the manner in which they prepare delegates for strategic roles, where the SME context may differ radically from corporate experience.

#### *Originality*

The methodology for this study differs substantially from previous investigations within the field, which has had relatively few contributions, as it utilises in-depth context-rich qualitative techniques to investigate the micro processes at play. The conclusions capture new insights, indications and identify areas for further investigation, hence adding to our understanding of a complex and heterogeneous field.

### **Key words**

Strategy Tools, Frameworks, SME, Strategy Formation, Process

## Introduction and Rationale for the Research

The use or adoption of management concepts, theories, tools and frameworks by those in industry and practice is a subject of debate that often produces a flurry of views in literature (Vuorinen et al., 2018; Belmondo and Sargis-Roussel, 2015; Pellegrino and Carbo, 2001; Clark, 1997). Most often, these views and debates take two forms: the widely discussed debates on the relevance of management education to management practice (Currie et al., 2010; Kelemen and Bansal, 2002; Starkey and Madan, 2001) and the application of strategy theories and frameworks by those in industry and practice in strategic planning (Paroutis et al., 2015; Jarzabkowski et al., 2010; Baldrige et al., 2004; British Journal of Management, 2001; Starkey and Madan, 2001).

After the dwindling research on the impact of strategic planning on organisational performance (Wolf and Floyd, 2017; Whittington and Caillaet, 2008), there has recently been a growing interest in conjunction with new literature on the use and adoption of strategic management concepts, theories and frameworks as tools for organisational performance (Jarzabkowski et al., 2013b), and more specifically by small businesses (Devins et al., 2016; Redmond and Walker, 2010). Such interest being motivated by the increasing challenges that small business faces in today's competitive global economy that is increasingly dominated by large organisations and the global giants (Hodgkinson and Starkey, 2011).

However, in spite of these recent interests, there remains very little empirical evidence on the use and adoption of strategy tools and framework by Small and Medium Enterprises (SMEs). Most past studies have tended to focus on particularly large samples in a quantitative research capacity (Jarzabkowski et al., 2013b; Gunn and Williams, 2007) or very large organisations – with examples noted through the Bain Annual Report (Rigby and Bilodeau, 2005, 2007b, 2015; Rigby, 2011). Further, as has been the case over the past five decades of strategy research, despite many criticisms, there is a propensity of using a positivist quantitative approach in strategy studies (Powell, 2002; Mir and Watson, 2001; Hoskisson et al. 1999; Rumelt et al., 1991). Scientific method and language have been purposefully used by those adhering to the positivist or positivist-empiricist approaches, to unearth human experiences through the detachment of research from one's political, ideological and value-laden influence (Ryan, 2006). There have been the suggestion, therefore, that if we have to have a better understanding of how strategy is made in organisations then we must interpret the worlds in which the decision-makers exist, and as noted by Hodgkinson and Wright (2002) and supported by others (Gunn and Williams, 2007) using in-depth qualitative analysis could provide a more contextual understanding of how SMEs use strategy tools.

SMEs are widely explored within business and management research (Henry, 2013; Kyriakidou and Maroudas, 2010; McMahan and Stanger, 1995; McGuire, 1976) and are the focus of policy-based studies (Kuyucu 2011) such as studies of firm age and influence on government policy (Pickernell et al., 2013). SMEs play a significant role in the resurgence and growth of economies (Kirby, 2013; Curran and Storey, 2002) and can lead countries to increased levels of competitiveness (Hotho and Champion, 2011; Dobbs and Hamilton, 2007; Fillis and Wagner, 2005; Man et al., 2002). They are central to the underpinning of a robust industrial base and promoting a vigorous commercial-space sector (Hoffman et al., 1998), enabling innovation and creative industries to flourish and facilitate the industrialisation process (Nissan et al., 2011; Welter and Smallbone, 2011; Smallbone et al., 2010; Stam and Wennberg, 2009; Dickson and Weaver, 2008). Whilst explicitly and implicitly impacting upon a country's economic growth, they also create vast opportunities within the local labour market (Treasury 2011; Beck et al., 2005) with SMEs responsible for 99.7 percent of the 4.7 million UK businesses and globally forming part of the private sector (Rahman et al., 2017; Wilson et al., 2012). As the economy and society are inextricably

dependent on SMEs (Boateng and Abdulahman, 2013), the factors that underpin and influence their strategy formation processes remain largely under-developed (Wu and Boateng, 2010).

### **Research Aim/Objectives**

Considering the above void in the literature, the aim of this study is understand and construct knowledge on how SMEs uses strategy tools and framework in the strategy making process. We therefore address this void by providing results and findings from the investigation of SMEs using an in-depth qualitative and interpretative approach. This methodology approach, based around multiple case-studies, primarily gathers qualitative as opposed to a quantitative data, under a paradigm of relativism and social constructivism (Creswell, 2009; Young and Collin, 2004). In adopting a social constructivism epistemological position, our focus is to identify learnings from our interactions with SME managers. We mentally construct their world of experience in the use of strategy tools and frameworks through our cognitive processes (Lee, 2012). In this way, we developed knowledge and meanings in their use of these tools and frameworks by considering the specific and peculiar context of SMEs and how this is suitable for their business processes (Mahoney, 2002). The remainder of this paper is organised in four parts. The first part provides an overview of existing debates about the application of strategy theory and concepts by those in industry and practice in general. This is in terms of the strategy formation process and then, more specifically, the literature on how such adoption is undertaken and used by SMEs. Based on this literature review, we outline our research questions, noting the peculiarities and complexities that SMEs encounter with regard to organisational variables and what is required to remain competitive. We then develop a conceptual framework and posit that these peculiar organisational parameters are conducive for the SMEs in the adoption of academic theories to their practice. Part two explains the multiple case-studies based research design and our specific methodological approaches. Part three presents our empirical findings on the use and adoption of the strategy tools and frameworks by the SMEs. In the final part we discuss these findings and their contributions to the literature.

### **Theoretical Background**

The normative strategy literature suggests the rational and structured approach to strategy development and the strategy concepts and frameworks are tools that assist in this process (Ansoff 1965, 1991; Bryson 1988). Clark (1997) noted the use of the generic term “strategic tool” as concepts, analytical frameworks, techniques and methodologies that assist strategic managers in making decisions, simplifying and representing a complex situation, and thus informing the strategy development process.

In relation to this, a number of tools and techniques to assist analysis are proffered in leading strategy textbooks used in the instruction of strategic management (De Wit 2017; De Wit and Meyer, 2014; Johnson et al., 2014; Lynch, 2012) and research has examined how tools are used in organisations (Rigby and Bilodeau, 2015; Jarzabkowski and Kaplan, 2015; Tassabehji and Isherwood, 2014; Jarzabkowski et al., 2011; Jarzabkowski and Balogun, 2009; Jarzabkowski and Spee, 2009; Gunn and Williams, 2007; Frost, 2003; Rigby 2001; Clark, 1997; Hussey, 1997; Day, 1990; Prescott and Grant, 1988).

Most of these noted studies into strategic tools have tended to focus on what tools are being used, and to a lesser extent the reasons for use and values for the organisation as an important activity (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al., 2011; Gunn and Williams, 2007). Although over five decades of studies have produced inconclusive results of the relationship between strategic planning and performance (Ghobadian et al., 2008; O'Regan and Ghobadian, 2007; Gumbis and Lussier, 2006; Grant, 2003; Brews and Hunt, 1999; Goll and Rasheed, 1997; Ansoff et al., 1970; Thune and House, 1970), it is argued by

some researchers and theorists that strategic planning still remains an important activity within organisations (Wolf and Floyd, 2017; Whittington and Caillaet, 2008; Jones et al., 2007; Hodgkinson et al., 2006; Perrott, 2005; Grant, 2003; Miller and Cardinal, 1994).

One of the reasons for the inconclusive nature of the value of strategic planning has been the propensity of researchers to suggest this activity is part of the macro-economic narrative. For this reason, strategic planning and its surrounding activities have been used as reductionist models in order to hedge against the turbulences and unpredictabilities of the business environment (Poister and Streib, 2005; Pellegrino and Carbo, 2001; Porter, 1973). Such reductionist models of strategic planning where strategy tools and frameworks form the basis, posit that strategy tools are vehicles in a rationalist and structured way by which organisations should be analysed and operated (Thompson and Strickland, 1981; Steiner, 1979; Hofer and Schendel, 1978; Uytterhoeven et al., 1977; Andrews, 1971; Ansoff, 1965). This view is supported by the much-used definition of what strategy tools consist of. Clark (1997) for instance referred to strategy tools as instruments required by managers for decision making. A comment echoed by Rhaman and de Feis (2009).

Such views hinge heavily on what is considered in the normative literature as an organisation whose performance is predominantly determined by quantitative parameters (Kim and Mahoney, 2010; Jacobson, 1992; Borch and Arthur, 1995) which are then seen as a more neo-Classical perspective in strategy research. After the rejection of the most dominant organisational theories, which were based on closed-rational system models, such as Taylor's scientific management approach (Taylor, 1911), Weber's model of bureaucracy (Weber, 1946), Fayol's administrative theory (Fayol, 1949), Barnard's theory of cooperative systems (Barnard, 1938) and Mayo's human relations model (Mayo, 1933), most recent theories have viewed an organisation as an open system (Sheldrake, 1996; Hendry, 1979, 1980; Wood, 1979). In its most simplified form, the open system view of an organisation considers it to have an input that goes into the organisation. The organisation itself is made up of formal and informal processes and the enacting of these inputs, and the external environment enables the organisation to produce an output, but it is contingent on a number of contextual variables as well (Fiss, 2011; Donaldson, 1987; Drazin and Van de Ven, 1985).

This view of the organisation also recognises the complexities on both the internal and external process. This process confronts the organisation and strategy models, methods, frameworks and tools used in simplifying and representing this complex situation, informing the strategy development process (Tassabehji and Isherwood, 2014; Rahman and de Freis, 2009; Jones et al., 2007; Frese et al., 2000; Tushman et al., 1986; Hrebiniak and Joyce, 1985; Weick, 1979). Central to this view is the ability of organisational strategists to analyse using environmental-based (EBV) or resource-based (RBV) view strategy tools and frameworks; and if the sum (mostly measured in economic or accounting terms) of the output is higher than the input it is then said that the organisation has performed or it is "successful" (Johnson and Schaltegger, 2016; Rowe and Morrow, 1999; Jennings and Beaver, 1997, p.64; Watts and Zimmerman, 1990).

However, most of the theories in organisational architecture and its strategy have been developed and tested in large organisations (Gibbons and O'Connor, 2005). It is acknowledged SMEs have certain attributes that in comparison with large companies will suggest a mis-match between organisational theory and strategy. For example, the adaptive approach of SMEs compared to predictive of larger organisations (O'Regan and Ghobadian, 2004); the characterisations of bureaucracy and hierarchical features; and the use of expensive existing information systems that cannot be extended to SMEs (Liao et al., 2003). Additionally, SMEs have a greater reliance on individual influence on strategy (Gibbons and O'Connor, 2005); some taking a bottom-up rather than top-down approach (Barnes, 2000). The need for contextual strategy development, catering for the differing level of socio-cultural relations (Ghobadian and O'Regan, 2002; Rauch et al., 2000; Borch and Arthur,



1995) and environmental influences (Lieberman-Yaconi et al., 2010) in SMEs is warranted. By understanding the social and absorption capacity in SMEs, the creation of a strategy space supports long-term vision and business viability (Jones et al., 2007; Liao et al., 2003). The relatively small nature of SMEs means they are able to adapt, internalise, and crystallise information better; and often tend to be more innovative, more customer-oriented and have quicker response times when it comes to implementing changes (Chaudrie and Culkin, 2013; McCann et al., 2001; Pelham, 2000; Klimoski, 1992).

The notion of performance “success” as attributed to large organisation has been debated within a range of studies in the SME field. For example, observers (Jennings and Beaver, 1997, p.64) state that for SMEs “success cannot be measured according to rational economic criteria” and that “small business owners are less motivated by financial gain than might normally be expected.” Ghezzi et al. (2010) offer 10 strategic planning flaws and most fail to support SMEs in establishing ongoing business models.

In the SME literature the quantitative measure of performance has been used (Ghobadian et al., 2008; Beck et al., 2005; Gibson and Cassar, 2005; Frese et al., 2000; Bracker et al., 1988). Similar quantitative measures such as growth have also been used (Dobbs and Hamilton, 2007; Larsen et al., 2006; McKiernan and Morris, 2005; Liao et al., 2003; Georgellis et al., 2000; Hogarth-Scott et al., 1996; Shuman and Seeger, 1986). If we agree that there is a mis-fit of the organisational theory and SMEs, then the use of softer measures of success such as, for example, survival (Jones et al., 2007; Perry, 2001; Schindehutte and Morris, 2001), employment (Vinnell and Hamilton, 1999) and personnel (Rauch and Frese, 2000) are appropriate.

The suitability for application of these items needs to be considered contextually. With reference to SME's, there may be tools and techniques which are not in keeping with the nature of the organisation, due to: the independence of company ownership resulting in a lack of applicability of corporate portfolio related activities (Gibbons and O'Connor, 2005), the small scale resulting in lack of opportunity to influence the environment through large projects or investment (Liao et al., 2003), the scarcity of resource with respect to capacity for extensive corporate planning style research and strategy development activities (Jarzabkowski et al., 2013b; Anderson and McAdam, 2006; Liao et al., 2003; McCann et al., 2001; Upton et al., 2001; Barnes, 2000), the corporate perspective of tools application in representation within texts and in initial conceptualisation (Johnson and Schaltegger, 2016; Jones et al., 2007; Anderson and McAdam, 2006; Gumbus and Lussier, 2006), the large organisations' inability to change rapidly, and possible requirement for more extensive planning horizons to deal with (Rahman and de Feis, 2009; Thune and House, 1970), and the complexity of the tools juxtaposed to the relative simplicity and uniqueness of small firms (Rahman and de Feis, 2009; Ghobadian et al., 2008; Anderson and McAdam, 2006; O'Regan and Ghobadian, 2004; Frost, 2003).

Due to this mis-match between organisational theory and SMEs, neither any inferences made in the use of strategy tools by organisations nor the findings from research on large organisations' use of strategy tools can be logically extended to SMEs. This view, where the sole purpose of the organisations' success is determined by such values, is currently debatable in the literature. For this reason, studies have focused on other intended purposes for the existence of the organisation and have suggested that survival is a more realistic outcome, particularly if they are SMEs (Perry, 2001, Schindehutte and Morris, 2001). As such, the value of strategy in supporting SME survival remains under-researched.

The extant strategy literature has tended to have some disagreement about the number of different stages in the strategy process (Dyson and O'Brien 1998; Mintzberg 1990; Andrews, 1971; Ansoff et al., 1970; Ansoff, 1965). Although the identification of stages in strategy is suggested by some as artificial and therefore irrelevant (Johnson et al., 2008; Mintzberg, 1990), over the decade of the existence of the discipline, strategy texts and research have focused in the strategy making or formation in the strategy process (Andersen and Nielsen,

2009; Pearce et al., 1987). Discounting the recent publications by Jarzabkowski et al. (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al., 2011; Jarzabkowski and Balogun, 2009), there are no empirical studies on where in the strategy stage strategy tools are most used. However, most strategy textbooks used in the teaching of strategy have tended to locate strategy tools as being mostly used in the strategy making stages (Lynch, 2012; Johnson et al., 2011). From a representational epistemology perspective where the strategist is a rational actor capable of understanding the context and deciding whether to use certain tools, strategy tools are designed to be used in a prescriptive fashion where thought precedes action and where managers use tools in the way they are taught (Jarzabkowski and Kaplan, 2015; Jarzabkowski and Wilson, 2006; Clegg et al., 2004; Tsoukas and Knudsen, 2002).

Research has suggested that there are other usages of strategy tools other than in the strategic planning process. For example, it has been suggested that tools could be used to convey the impression of action (Meltsner, 1976) purely as rituals and symbols to imply a sense of rationality in order to legitimise their strategic decisions (Feldman and March, 1981). Other usages are in the competitive analysis in the dynamic nature of markets/industries (Prescott and Grant, 1988).

The use of strategy tools in strategic planning could be based solely on the activity that the macro-economic narrative in normative strategy literature suggests. However this rational, structured and designed approach to strategy development has elicited much debate as not exactly what organisations do (Goold, 1992; Ansoff, 1991; Mintzberg, 1991) instead of the rational – comprehensive or synoptic model (Thompson and Strickland, 1981; Steiner, 1979; Hofer and Schendel, 1978; Uytterhoeven et al., 1977; Andrews, 1971; Ansoff, 1965). Other writers had advocated an incremental, emergent and learning model of strategy making (De Geus, 1988; Wrapp, 1984; Quinn, 1978, 1980; Steinbruner, 1974; Mintzberg, 1973, 1978; Lindblom, 1959, 1968, 1979). Studies have therefore been undertaken that not only suggest the mixing of both approaches (Grant, 2003; Brews and Hunt, 1999; Hart and Banbury, 1994; Lorange and Vancil, 1977; Nutt, 1976, 1977; Mintzberg, 1973), but also conclusions that have subsequently been put forth (Andersen and Nielsen 2009; Anderson 2004) that effective organisations engage in more complex strategy making processes that complement each other.

This has led in recent times to suggestions that the development of strategy is being viewed from different types of lenses (Durand et al., 2017; Wolf and Floyd, 2017; Johnson et al., 2011). For instance, from a more micro-process, micro level of analysis and practice-based informed by sociological, humanistic and behavioural science (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al., 2011; Jarzabkowski and Balogun, 2009; Jarzabkowski and Spee, 2009; Gunn and Williams, 2007; Whittington et al., 2004; Wilson and Jarzabkowski, 2004). Spee and Jarzabkowski (2009) suggest the use of strategy tools as boundary objects in communications within the organisation and as vehicles for organisational members to micro-strategise in an informal manner. However, the extent of which strategy tools play a role in this micro-process and practice-based approach is still a question for researchers to answer (Wilson and Jarzabkowski, 2004). As such, we seek to explore the relevance of SME strategic tool use in this micro-process and practice.

Liao et al. (2003) suggest that SME responsiveness is a function of organisational absorptive capacity, and the organisational absorptive capacity could be construed as an organisational micro-process. A micro-process where skills needed deal with the tacit component of transferred knowledge and the need to modify this imported knowledge learning capability and problem-solving skills that enable an organisation to assimilate knowledge and create new knowledge (Kim 1998; Heeley, 1997; Mowery and Oxley, 1995).

### **Study Research Questions**

To address the under-development of strategy formation and lack of empirical evidence of use and adoption of strategy tools and frameworks by SMEs, our research seeks to elicit



how strategy tools serve as aids to SME responsiveness to organisational absorptiveness. Interest therefore in this investigation is to explore the following:

- In relation to previous research, how do SMEs differ in their application of strategy tools and techniques?
- How do SMEs deploy strategy tools within the strategy formation process and how does this inform our understanding of SME strategy formation?
- How can strategy-tools deployed in SMEs be related to the traditional macro-economic model when establishing practice-based views of strategy processes in organisations?
- What is the potential for the deployment of strategy tools within SMEs to enhance organisational performance?

### **Methodology**

Two of the authors of this paper emanate from strong positivistic and analytical backgrounds, with vast experience in engineering and project management. However, in this paper we recognise the frustration that typically exists in strategy research of always taking the ontological positivist position which is now a major criticism of findings emerging from strategy research (Gunn and Williams, 2007). Other researchers, such as Mir and Watson (2001), argue for other perspectives to be used in strategy research other than the realist positivist approach. In recent times, strategy planning investigations and publications has been conducted by academics coming from a more qualitative background and this work continues that trend (see e.g. Jarzabkowski, et al., 2015).

We embraced the assertion that ‘Researchers, in their “humanness,” are part of the research endeavour rather than objective observers. Their values must be acknowledged by themselves and by their readers as an inevitable part of the outcome [...]’ (Mills et al., 2006, p.2). Hence, the worldview for this strategy work on SME’s is social constructivist. In a similar vein to social constructionist (Berger and Luckmann, 1966), social constructivism as a research paradigm that queries the existence of an objective reality (Mills et al., 2006) and enabled us to see different things, explore through contrasting lenses, perhaps arrive at different conclusions, and because “... Multiple and even conflicting versions of the same event or object can be true at the same time” (Rubin and Rubin, 2005, p.27). Social constructivism was preferred over social constructionism, due to its individualised focus on knowledge construction in situ, and because we had less pressing concern for cultural and historical influences on knowledge construction and meaning (Young and Collin, 2004). Our research approach thus addresses both Leisering and Walker’s (1998) concern about the lack of dynamic research methods catering for an increasingly intricate social world and Proctor’s (2005) call for qualitative approaches that relate to lived human experience. The epistemological stance for this study seeks to unearth emergent social processes and co-produced, shared meanings that reflect social reality (Burrell and Morgan, 1979) and seeks to gauge human sense-making in situ, whilst acknowledging its deeper complexity and ambiguity (Kaplan and Maxwell, 1994). For instance, social constructivism, in our case, assumed that SME owner-managers made sense of their social world through the use of strategy tools and frameworks in the strategy formation process and thus attached intersubjective values to their experiences of events and activities within SMEs. This enabled us to probe deeper in order to ascertain the true meaning to strategy tool usage in the unique context of SMEs (Gunn and Williams, 2007).

Considering how social constructivists ‘...promise to deliver a veritable gold mine of those most highly valued of academic treasures: case studies’ (Winner, 1993, p.366), a cross-sectorial qualitative case-based examination of nine organisations was undertaken, across three sectors: Manufacturing, Service, and Construction. In the case study discussions, these sectors are denoted as M, S, and C respectively (see Appendix B, Table 3, for respondent attributes). The case study examinations were longitudinally undertaken, with

primary data gathered through interviews and triangulated with secondary data where available (company and environment specific). Riege describes how the: 'case study's realistic modes of inquiry lead to the discovery of new relationships or realities and build up an understanding of the meanings of experiences rather than verify predetermined hypotheses' (2003, p.77). A total of five pilot scoping interviews were conducted with two manufacturing companies, one construction company and two service companies (a training organisation and a hotel), before full data collection commenced. A further 34 interviews were then conducted within nine main study organisations. All respondents were directors or owner-managers. Within the manufacturing, two were owner-managing directors and one a financial director. Within construction, one was an owner-managing director, and both an employee-manager director and contracts director. Within services, two were owner-managing directors, and one a chairman with a partnership arrangement. The semi-structured interviews engaged to gather the bulk of the primary data allowed some degree of latitude by the researcher to explore the topic, verify points made and gain greater insight into the subtleties of the situation examined (Jankowicz, 2000). Rather than simply adopting a purely historical approach (Honig and Samuelsson, 2012; Steinmetz, 1998) or a snapshot/black-box form of analysis, we investigated the process through time, and discovered and recorded the facets of the socially constructed process as they developed. This reflects Bhide's (1994) assertion that aspects of analysis, choice and implementation will emerge over time, irrespective of their order, making data capture at a single point potentially problematic. This multiple-case, longitudinal type of approach allows initial observations to be tested within an alternate organisational context and modified by an ongoing review and reflection process, where we cognitively started to construct how these managers are using strategy tools and frameworks. The objective was to understand the world in which senior decision-makers formulate and implement strategy and use strategy tools, and to develop subjective meanings of experience which are themselves directed at certain objective things. NVIVO was employed to support the coding process and structure the primary data. Data analysis packages used within '...constructivism...can track and match every phrase of every perception in a transcript' (Sobh and Perry, 2006, p.1206). The multiple case study approach (Yin, 1994) allowed triangulation to occur within firms through time, with other firms within the sector, across sectors and, where appropriate, with secondary data. This helped to ensure an elevated degree of validity and reliability from the project. To achieve conformability, we took steps to demonstrate that the findings emerged from the data rather than our own predispositions (Shenton, 2004).

### **Research Design**

The methodology section noted how we looked at the whole broad situation, with a particular SME context on strategy tools over an extended period. Longitudinal case studies also helped to analyse the underlying social processes and to comprehend the intricacies between the phenomenon of strategy formation and context. Hence, this was considered the most appropriate method for addressing the research questions and addressing the fissure in knowledge pertaining to the strategy tools, thereby opening a new chapter in the literature.

Intrinsic to the designated research approach was the leveraging of a range of general strategic management models and typologies, in conjunction with selected SME theory to develop a context-rich examination of strategy formation in the chosen organisations, including a granular examination of constituent parts of the strategy process. We also sought to understand the context through an examination of the overall operations of the firms under study. The diversity of the SME sector, the complexity of strategy formation and the human-centeredness of the planning process lends itself to the use of qualitative tools and techniques and encompasses the traditional focus on quantitative approaches. Hence, our cases illustrate different perspectives of the problem, process and event. The longitudinal cross-sectorial aspect also helped to capture emergent changes (Silverman, 2005) through

the strategic nature of the research topic. We have produced findings that were not determined in advance and are applicable beyond the immediate boundaries of the study. In essence, knowledge was cognitively constructed about the 'human' and more implicit side of the strategy making business of nine SME businesses.

The models considered in the literature review (for example: SWOT, PEST, and Porter's 5 Forces Analysis) indicate the utilisation of structured strategic analysis. In relation to this, a number of tools and techniques to assist analysis are proffered in leading texts (De Wit, 2017; Lynch, 2012; Johnson et al., 2011; De Wit and Meyer, 2010). Frost (2003) developed a list of tools and techniques of strategic analysis as an extension of previous work by Hussey (1997). Table 2 (refer Appendix A) was compiled within an Australasian context and there may be some variance in terminology, but content is in general agreement with leading instructional texts available within the UK, the setting for this research, and in much more recent studies on strategy tools (Jarzabkowski et al., 2013a; Write et al., 2013; Hodgkinson et al., 2006; Rigby and Bilodeau, 2007b).

The suitability for application of these items, as outlined in the Appendix, should be considered contextually. With reference to SMEs, there may be tools and techniques which are not in keeping with the nature of the organisation, due to the following:

- Independence of company ownership resulting in lack of applicability of corporate portfolio related activities.
- Small scale resulting in lack of opportunity to influence the environment through large projects or investment.
- Scarcity of resource with respect to capacity for extensive corporate planning style research and strategy development activities.
- The corporate perspective of tools application in representation within texts and in initial conceptualisation.
- The 'oil tanker' phenomena of large organisations (inability to change rapidly) and possible requirement for more extensive planning horizons to deal with such.
- The complexity of the tools juxtaposed to the relative simplicity of small firms (Frost, 2003).

It could be argued that most of the tools and techniques do not provide anything further than our own thoughts and intelligence gathered on a specific factor, but they do serve to formulate a framework which ensures that we have considered all relevant areas (though not necessarily all the salient points within those areas). These tools and techniques are therefore subject to the *skill of the user with lack of expertise* by these users (notwithstanding *lack of awareness* of the individual tools existence) rendering them effectively useless or maybe with highly polarised or partial viewpoints. Therefore, the tools cannot be considered a substitute for strategic management skills or strategic thinking. They can, however, assist in the process of strategy formation and when examined as to if, where and how they are deployed can assist in indicating the granular parts of the strategy formation process and so a greater level of detail.

The *process models* of strategic management discussed in the literature review illustrates *distinct stages* in strategy formulation. Allied to this, these present a range of strategic management tools and techniques for application within these stages. This is typical of a general strategic management text approach to the presentation of the subject, though most now qualify with statements surrounding alternative process development views. Within the respective chapters, appropriate tools and techniques are presented allied to the process stage. Within the SME field some texts reflect this approach (Analoui and Karami, 2003) but many take a different perspective, that of the small business plan, where tools and techniques are represented in a *strongly tailored SME format*.

It is reasonable that *instructional text* in the general field present these tools and techniques in the context of educating individuals, as it provides frameworks and structures

within which students of the field can make sense of the complexities of the subject and in application the situation (Hussey, 1997). Research into the use of these techniques explicitly in SMEs is, however, severely limited (for an example see Frost, 2003, who finds relatively little use). So, there must remain a question over the *value and resulting non-adoption of these tools and techniques explicitly in SMEs* and whether perhaps they are used implicitly. That is, within a process of 'strategic thinking'. This element has not been explored despite the potential contribution of following such a line of investigation. Our research now draws upon quotes on the use of strategy planning tools in strategy formulation.

### Research Findings and Discussions

Respondents were initially asked about their awareness of the named tools and techniques and then, as applicable *if* and *how* they were used within their organisations, to establish the extent of their *explicit* knowledge and use. Specific items or categories within these tools and techniques (e.g. politics, economics, competitor activity) were also explored. These questions surfaced *implicit* knowledge relative to specific tools and techniques and allowed the development of a qualitative judgement in relation to the respondent's overall tool and technique related knowledge. The same challenges in deciding the various stages in the strategic planning process apply to the classification of strategy tools. In a recent review of the literature, Vuorinen et al. (2018, p.587) suggest that this is most often based on the strategy process, strategy content, and in more recent extension of strategy work in the strategy-as-practice (SAP) perspective (Seidl and Whittington, 2014; Jarzabkowski and Spee, 2009). Within these classifications, the dominate being whether tools are used to analysis the internal business of the firm (see e.g. Barney, 1995, 1991; Wernerfelt, 1984; Penrose, 1959), as in the resource-based view (RBV) or the external business of the firm, for those who favour an industrial economic analysis (see e.g. Porter, 1985), as in the environmental-based view (EBV<sup>1</sup>). Bearing in mind, for our SME context, other more specific areas could be relevant. Therefore, for the purposes of this study, we expand the classification of tools. Those used are captured within the following table:

Table 1: Classifications

Tool Type	Classification	Description
Financial	Tools for financial analysis and control	Used for long or short-term planning, monitoring and decision making support (e.g. budgeting, cash flow, sources of funds/capital planning)
Operational	Operational planning and control tools	Deployed to support the short-term operations of the organisation (for scheduling, monitoring and control of processes, projects and resources)
External	External tools of analysis	Used to examine the macro and industry or competitive environment (e.g. PEST and Five Forces)
Internal	Internal tools of analysis	Primarily to assess the resources and competences of the

<sup>1</sup> We coined the EBV in comparison to RBV, whereas the RBV is an acronym for Resource-Based View, so EBV is a coined acronym for Environmental-Based View.



Tool Type	Classification	Description
Competitor Analysis	Competition and benchmarking	organisation, from a strategic perspective (e.g. Value Chain Analysis, Strengths and Weaknesses (SW) elements). Formal benchmarking approach, and for assessing competitor position and attributes (including areas relating to financial analysis)
Development	Development tools	Deal with the directional choices being made by the organisation indicating strategic options (e.g. Ansoff Matrix, Directional Policy Matrix)

Analysis of the use of tools and techniques therefore examined the strategy formation processes in two main ways. First, for the indication of structured approaches. And second, for its insight to implicit knowledge in relation to strategy processes. This further allowed a judgement to be made on the 'strategic thinking' capability of the respondent and aspects around prescriptive or emergent strategy formulation. The following sections briefly capture the findings against each of the categories outlined and include illustrative quotes. Within this section we also discuss our findings in relation to the extant literature.

#### *Financial Tools*

*Financial* tools utilised included universal application of basic accounting techniques deployed as a feedback mechanism or 'health-check' for operations, with the exception of S1 (Service Company 1) who, as a 'young' organisation, used finance factors in relation to their original business plan and substantial set-up costs. Cash flow monitoring and control for operational stability was considered crucial by all organisations. The way in which the tools were used indicated a short-term focus overall but with some variation. C2 considered requirements in keeping with their capital-intensive industry nature (house-building). They were experiencing rapid growth and indicated their developing approach to financial control within the company, with a plan spanning several years: "...it's all cash driven... so I look at... how much money we're able to borrow from the bank and basically do cash flows [long term] according to that" (C2). Manufacturing (M) Sector companies appeared to have relatively mature and similarly developed systems for short-term financial control and included longer-term commitments within ongoing budgeting.

Service (S) Sector organisations used a variety of financial measures to monitor the performance of the organisation. The simplest approach consisted of regular checks on the bank balance (S3). Further development of monitoring systems varied. S2 for example noted a relatively detailed approach: "...our whole accounts is exported onto excel, the whole nominals exploded and then we've different reports that come off excel looking at sales and customers, looking at output, looking at purchasing. So any combination of those as a percentage against each other."

Overall the deployment of financial tools, albeit in a predominantly operational rather than strategic manner, was evident across all the organisations and 'right-sized' to their operation, only deviating from this where substantial capital issues remained. The emphasis on 'cash' and ongoing viability appeared to dictate this position. These findings on how SMEs use financial tools are in keeping with the short termism of SMEs and the survival instinct (Jones et al., 2007; Perry, 2001; Schindehutte and Morris, 2001) of the organisations. The focus of using financial tools in a more operational, albeit to a strategic



sense, is explained by the availability and, at times, challenges SMEs face in accessing capital. For most, liquidity is a prime focus in any business analysis they undertake (Hasan et al., 2017; Berger and Udell, 2002; Strahan and Weston, 1998). Construction firms tend to deal with long-term asset planning and as such are more into Capital Budgeting Analysis. This explains the exception of them using financial tools in long-term planning.

#### *Operational Tools*

*Operational tools* of some form were deployed within all the organisations to manage the processes and projects. Only M3 explicitly linked this to any business planning activities (which they considered to be strategic projects, aligned to acquisition and capital investment), the rest focusing on short-term (up to one year) concerns. Regular meetings were reported as a key way of controlling the operations of the organisation, with the exception of S3 and M2 who tended to communicate in a less structured manner with their employees, simply through their frequent daily interactions, a product of their small size. Construction (C) companies each employed project team approaches to address the operational aspects of contracts. C1 represents an approach that is similarly employed in C2 and C3: “...the directors have a meeting most Monday mornings and we sit down, generally every Monday morning as best we can, to discuss the issues of the day, of the week... both historical and for the next week. We then have on a monthly basis a management meeting at which the four directors sit down with the contracts manager and the managing surveyor. In addition to that we have what I would call contracts review meetings... monthly where myself and the guy who looks after the construction activity review all current contracts.”

Manufacturing Sector organisations each had a definite operational control approach, through quality and production system related derivatives. M1 and M3 had achieved quality systems accreditation and M2 noted: “So we all have procedures that we follow for each of our duties...all our forms are numbered, we have traceability, and we’ve got quality control” (M2).

The much smaller, adaptive and less bureaucratic nature of SMEs (O’Regan and Ghobadian, 2004; Barnes, 2000) suggest that operational approaches were evident across the group and appeared to be sector influenced. Manufacturing organisations had set quality assurance and production systems, and construction companies utilised project management-based approaches. Overall, as with their use of financial tools, it reinforces the strong operational and short-termism positioning of the organisations. Our focus in this study looked at the strategy formulation and formation part of the strategy process. However, for most SMEs, putting things into action (Crittenden and Crittenden, 2008; Pryor et al., 2007; Hrebiniak, 2006) such as the operational aspect of planning is their strategic focus and should not be seen as an ‘afterthought’ (Raps, 2004, p.53).

#### *External Tools*

*External tools* of analysis had no formalised recorded use across the group. However, each of the respondents showed external awareness, implicit to discussions. This awareness varied greatly with M3, S2 and C2 appearing to be able to articulate this strongly, with M2 and S3 displaying relatively low awareness. These could be considered as perceptions of the respondents regarding the organisational link to macro-environment factors. These, therefore, shaped strategic decisions. External reference point discussions with customers was a recurring theme and crucial to their scanning of the environment. Barriers to entry (5 Forces) were notable in the following quote: “...it’s very hard to setup a house building business, they’re very cash intense and you need to start with a couple of million pounds to get cracking” (C3). However, when pressed as to knowledge of formal approaches (such as PEST or 5 Forces analysis), which was then explained briefly, C2 responded, “No never heard of it... so we probably do quite a lot of these things without realising we’re doing them” (C2). M1 confirmed that they had read about strategic analysis techniques but did not

deploy them specifically. S1 displayed knowledge of competitive business factors, typical of Porter's (1985) 5 forces model and the general business environment. When they were further pressed about their consideration of the macro-environmental impact (Grant, 2003) their comment was: *"You know I think we'd be very naff if we just sat there waiting for the funnel to discharge on top of us. As much as you can you're actively looking at these things"* (S1).

This was further explored. When asked about the development of this within their planning and decision-making approach, they conceded no formal action to investigate had taken place. This alluded to a point of resource constraint in developing analytical frameworks, a point echoed by S2: *"...you need to deal with all the government legislation and all the documentation that's been put on the industry, the environmental law, employment law and all that sort of stuff and whilst you can buy in that expertise it's very expensive"* (S2). So here it appeared that resource is a barrier to the systematic collection of external data to inform the strategic decision-making process for these organisations and this resulted in informal approaches.

In regard to information gathering, associated with the deployment of these tools and techniques, the respondents were asked where they gathered their information about the business environment. There were wide ranging responses here. For example S1 expanded: *"I...read regularly business pages, started reading the Economist, signed up to a thing called Northern Businesses... listen to things like Moneybox or you know the business programme on Radio 4..."* (S1). This was a general awareness exercise, conducted without a specific contextual purpose and unstructured in its consideration of the potential requirement for information for the organisation. Allied to this, it was clear that respondents did not value the information in supporting their strategy formation, as C3 noted: *"...you can look at reference books, you can collect government statistics. I tend not to put a lot of reliance upon that"* (C3).

Overall therefore there was a lack of explicit external analysis tool and technique application. This is in keeping with the discussion in our theoretical framework that there is a mis-match of trying to apply organisational theories on strategy in SMEs (O'Regan and Ghobadian, 2004). There was no systematic approaches to data gathering and a more sporadic and unstructured sensing of the macro-environment due to their inability to access and use expensive information systems (Liao et al., 2003). Resource scarcity appeared to be a barrier to implementing these approaches. The respondents noted that often general media and experience dictated information gathering for any business decision.

### *Internal Tools*

*Internal tools* of analysis were absent for the organisations and they were comparatively weak in expanding upon this area in discussion. Only one organisation, C1, had deployed a technique formally, for a one off exercise during a team building activity facilitated by an outside party. Overall, it was clear that none of the organisations used tools and techniques for internal analysis in an explicit way as part of a strategy formation process (Barney and Hesterly, 2008; Grant, 2003). This is a departure for those who advocate the resource-based view (RBV) is what organisations should use as the determinants for their strategy and strategic position (Barney, 1995; Wernerfelt, 1984; Penrose, 1959). It was also clear that the respondents had relatively little to offer in terms of expanding on this area in comparison to others areas, such as concerns for financial issues or scope for strategic development. However, there were indications of awareness of component parts of these techniques evident, again variable across the group. Given the size of each organisation, the proximity of the owner-manager to the activity could be argued as obviating the need for more formal approaches as SMEs have a greater reliance on individual influence on strategy (Gibbons and O'Connor, 2005).

### *Competitor Analysis*

*Competitor analysis* was formal for one organisation only, M3, which conducted a one-off benchmarking exercise. All organisations however, took a level of interest in competitor activities with price and product featuring, and quality checking, albeit *irregular and unstructured*. Financial examination occurred intermittently and M3 undertook this formally with purpose, an interest in acquisitions and hence investigation of competitors was driven by their market perspective: “*We’ll buy other players in existing markets because we understand... the reason why prices go down is generally because of oversupply*” (M3). They were the only organisation to benchmark in a formal manner.

Whilst organisations were generally interested and aware of competitor position and activity, only one worked systematically to assess the performance of competitors. This was primarily with a view to acquisition, their key growth strategy.

### *Development Tools*

*Development tool* awareness was displayed by all organisations in the consideration of strategic options. At no point could this be considered formal nor was it recorded. However, the respondents were able to clearly articulate and rationalise why the strategic options selected were chosen, albeit at varying levels of detail and insight. Mainly *implicit* references were made to strategic elements. The following could be related to strategic capability and views on diversification for example: “*We’re happy in the sector we’re in, we’re in our comfort zone, we know what we’re doing. That’s where we’re looking to go, we’re not looking to go into something we have absolutely no experience of*” (C1). This comment was made in light of a discussion on *development opportunities/diversification*, utilising Ansoff’s Matrix for growth strategies (Ansoff, 1965). S1 discussed a relatively impressive range of strategic actions explicitly, such as product and market development, market penetration, exit strategies and capital financing options.

M2 focused primarily on operational matters during discussion, though displayed some consideration of options through a possible relocation of the organisation, acquisition opportunity (initiated by an outside party) and product development. However, these options, although investigated, were not pursued and this they rationalised as: “*Until we have a bigger slice of the cake for what’s already out there I can’t see any reason to diversify*” (M2).

*Overall Development Tools* considered across the organisations showed that all displayed a degree of strategic awareness with regard to development options and methods and some pursuit of opportunities. The strongest display, both terminologically based and in options selected, came from M3. Relatively weak awareness (in relation to the rest of the group) was indicated by S3 and M2. The examination of these developmental options was not documented or formal, nor did it indicate the explicit use of tools and techniques. In each case the respondents were able to rationalise the options selected in comparison to other options considered and displayed to component parts of tools. Considering the overall implications for process, the integration of options generation and associated screening seemed to be concurrent and therefore emergent in nature.

### *Overall*

There are a number of key issues able to be drawn from these findings in relation to the use of tools and techniques and the nature of strategy formulation within these organisations. These include:

- Finance and operational oversight is important to organisations and they right-size their approaches to monitor and control. This is predominantly short-term focused, with infrequent financial projections used around larger project investments.
- The proximity of the owner-manager to the operational environment of the organisation removes the perceived requirement for systematic consideration of

resources and capabilities. The high visibility aspect and strong communications link are argued as facilitating the need for less formal oversight.

- Strategic tools and techniques, dealing with the longer-term fundamental direction of the organisation lack explicit application, except within activities such as strategy workshops. Even then, the application is limited to the tools and techniques available.
- Implicit application of tools and techniques of strategic analysis is demonstrated through varying levels of strategic awareness of impacting factors, as part of the overall technique. The consideration of these is sporadic; indicating an ongoing environmental sensing and integrated decision-making as a result.

## Conclusions and Recommendations

In this study, we noted that we adopted a social constructivist approach, where our quest was to cognitively understand and construct meanings on how SME managers uses strategy tools and frameworks in the strategy formation process. The conclusions we are about to draw are based through the social interactions of the SME managers, and came about through the learning that took place during these interactions. In this concluding section, our learnings are expanded reflected the discussions and conclusions. To enable us do this, we revisit our research questions again to see how the finding of our study has contributed to the extant literature on strategy tool usage and specifically by SMEs.

*In relation to previous research, how do SMEs differ in their application of strategy tools and techniques?*

Although our initial focus of this study was in the strategy formation process, this research identified a strong operational bias (in terms of regularity) in the explicit deployment of tools and techniques, as most SMEs implementation issues are more on the forefront than strategy formation (Crittenden and Crittenden, 2008; Pryor et al., 2007; Raps, 2004). Survival is a strong goal for SMEs and this is coupled with the short-term health of the business in terms of resources (Jones et al., 2007; Perry, 2001; Schindehutte and Morris, 2001). For most SMEs, accessing capital and liquidity are in the forefront of their operations (Hasan et al., 2017; Berger and Udell, 2002). As such, the organisations used financial tools extensively, with planning and controlling techniques as and when required to ensure that ongoing operational monitoring and control was maintained. However, the nature of the organisation varied the sophistication of these aspects. With more complex control, for example, within manufacturing, stronger systems development was realised. The short-termism of SMEs see their approach to strategic position as more of an incremental, emergent and learning model of strategy making (Lindblom, 1979; Mintzberg, 1978), and less of the rational, structured and designed approach (Goold, 1992; Ansoff, 1991). Any longer-term explicit use of strategy tools tended to occur only at points of intervention i.e. facilitated strategy workshops or at significant investment points. Scope of the tools deployed in analysing the internal and external factors was limited or almost absent, with any usage if it exists, concentrating on a basic understanding or linked to the development or 'refreshing' a business plan.

The resulting position is, therefore, that SMEs use relatively simple approaches explicitly in the use of strategy tools, right-sized to their relatively small size, needs of their organisation and determined partly by their limited resource in development (Rahman and de Feis, 2009; Ghobadian et al., 2008; Anderson and McAdam, 2006). It was also observed that *implicit* usage of strategy tools is dominant for SMEs, as part of the ongoing strategy formation process.



*How do SMEs deploy strategy tools within the strategy formation process and how does this inform our understanding of SME strategy formation?*

Whilst there was a distinct lack of explicit deployment of strategy tools, despite some awareness of these across the group, it is clear that a deconstructed form of deployment is used as part of an ongoing 'sensing' of the organisational environment (Jarzabkowski and Kaplan, 2015; Balogun, et al., 2014). Respondents displayed, to varying degrees, a grasp of a range of external factors related to the organisation and, in an integrated fashion, considered how these may impact and how they should respond. This manifestation of the emergent strategy formation process linked with key decisions articulated around strategic options (Thomas and Ambrosini, 2015; Mirabeau and Maguire, 2014). Rather than undertaking explicit analysis of external and internal environments, SME owner-managers are immersed in the actions of analysis, i.e. the strategic choice and implementation part of an integrated process, which oscillates towards one aspect or the other depending upon the current circumstances and timing of critical 'thoughts'.

*How can strategy-tools deployment in SMEs be related to the traditional macro-economic model when establishing practice-based views of strategy processes in organisations?*

The use of strategy tools in SMEs is part of a micro-process, micro-level and practice-based approach as proscribed by sociological, humanistic and behavioural science represented by more recent debates in strategy (Durand et al., 2017; Jarzabkowski and Kaplan, 2015; Spee and Jarzabkowski, 2009; Gunn and Williams, 2007). An organic and sensing aspect of SMEs management operational emersion and sporadic longer-term strategic thought oscillate with the development of the organisation, stimulating the owner-manager to undertake strategic adjustments to the strategy and direction of the organisation in relation to the unfolding strategic landscape.

### **Research Contributions to Knowledge and Practice**

Our final research question was stated as: *What is the potential for the deployment of strategy tools within SMEs to enhance organisational performance?* As we address this question, we would like to do so in relation to the implications for research, practice and how we make our contributions to bridge the gap between theory and practice.

The suggestion is for more formulaic approaches to the deployment of strategy tools within respondents' organisations. It is with the intention to enhance consideration of the strategic landscape relative to the potential for application. There is a danger that owner-managers may not consider the breadth of the organisation's position from a simple threats and opportunities perspective, and that their awareness may therefore be limited. It may also be the case, however, that they, in a resource scarce environment and through an incremental approach, discard the aspects from consideration they *believe*, rightly or wrongly, they do not require. Application of the fragments of tools and techniques therefore represent a contextual, lean approach to deployment and one which could leave the organisation exposed due to strategic 'blindspots'.

The use of strategy making tools (vs operational or short-term financial tools) was, aside from within discrete intervention events (acquisition strategy or start-up), embedded as part of the ongoing emergent strategy formation process and therefore associated with learning, strategic thinking and cognitive perspectives on strategy formation. Within this aspect there is a dominance of micro-processes, with an acknowledgement that these link to the macro-environment. The positivistic and rationalist historical perspectives of the subject, therefore, are generally tempered when consideration of the apparent dominance of behavioural, sociological and humanistic perspectives emerge within this context. To benefit the realised



position, there is the thought of strategy tools as a learning device, where the competence of the strategist in their application could help to improve their strategic thinking.

In relation to strategic thinking, and in consideration of success, all the organisations had operated prior to and throughout the study successfully, as all had survived as organisational entities. They can, therefore, be considered as being resilient within the challenging and often turbulent context of SMEs. However, some were demonstrating a difference for growth and profitability indicators, albeit under varied sectorial conditions. Any particular conclusion with regard to the use of tools and techniques could only be stated as tentative, but did appear to indicate that those organisations which could articulate more clearly its direction and effectively manage operations (through good financial and operational control) appeared to be more successful in achieving growth, i.e. enhancing strategic thinking should enhance performance and therefore training and development within the field, however the recipient decides to deploy this, should yield benefits.

Overall, it is at both the micro and the macro level that opportunities for further research exist and this continues to be valuable as an academic debate. One which is drawing considerable interest through the strategy-as-practice research agenda where practitioners, practices and praxis are examined (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al., 2007; Johnson et al., 2007; Whittington et al., 2006), raising the importance of accounting for the connections between the detail of the process and the overall impact. This has been the objective of this research and has been achieved through the detailed understanding of processes operating within context and as related to the organisation and individual.

### Limitations and Areas of Further Studies

This study is limited to nine organisations within a UK geographic region and therefore larger-scale investigation would be beneficial to extend and confirm the findings in differing contexts. The findings of this also suggest that SMEs are more concern with operational and implementation issues. Therefore, as an area of further study, research could look at the use of strategy tools in the other stages of the strategy process i.e. the choice and implementation stages. We noted the adoption of a social constructivism in this study. It may be worthwhile to also look at the other side of this by using a social constructionism approach, where the focus would be on the artefacts that could be created through the social interactions of the group. This could also be done through an ethnographic study where, if possible, the researcher is embedded as part of the whole social settings of the SME organisation.

### References

- Analoui, F. and Karami, A. (2003), *Strategic Management in Small and Medium Enterprises*. Cengage Learning Emea.
- Anderson, A.A. (2004), "Theory of Change as a Tool for Strategic Planning: A Report on Early Experiences", *The Aspen Institute Roundtable for Community Change*.
- Anderson, K. and McAdam, R. (2006), "Choosing the Best Business Improvement Strategy: the Effects of Organisational Size and Sector on Management Decision-making", *Journal of General Management*, Vol. 32 No. 1, pp. 13-29.
- Andersen, T. and Nielsen, B. (2009), "Adaptive Strategy Making: The Effects of Emergent and Intended Strategy Modes," *European Management Review*, Vol. 6, pp. 94-106.
- Andrews, K.R. (1971), *The Concept of Corporate Strategy*. Dow Jones and Irwin.
- Ansoff, H.I. (1965), *Corporate Strategy*, McGraw-Hill, New York.
- Ansoff, H.I. (1991), "Critique of Henry Mintzberg's 'The Design School: Reconsidering the Basic Premises of Strategic Management'", *Strategic Management Journal*, Vol. 12, pp. 449-461.
- Ansoff, H., Avner, J., Brandenburg, R., Portner, F. and Radosevich, R. (1970), "Does Planning Pay Off? The Effects of Planning on Success of Acquisitions in American Firms," *Long Range Planning*, Vol. 3, pp. 2-7.

- Baldrige, D.C., Floyd, S.W. and Markóczy, L. (2004), "Are Managers from Mars and Academicians from Venus? Toward an Understanding of the Relationship Between Academic Quality and Practical Relevance", *Strategic Management Journal*, Vol. 25, pp. 1063-1074.
- Balogun, J., Jacobs, C., Jarzabkowski, P., Mantere, S. and Vaara, E. (2014), "Placing Strategy Discourse in Context: sociomateriality, sensemaking, and power", *Journal of Management Studies*, Vol. 51 No. 2, pp. 175-201.
- Balogun, J., Sigismund Huff, A. and Johnson, P. (2003), "Three Responses to the Methodological Challenges of Studying Strategizing", *Journal of Management Studies* Vol. 40, pp. 197-224.
- Barnard, C. (1938), *The Functions of the Executive*, Harvard University, Cambridge.
- Barnes, D. (2000), "In Search of the Source of the Stream: the Process of Formation of Manufacturing Strategy in Small and Medium-sized Enterprises", *Journal of Small Business and Enterprise Development*, Vol. 7 No. 3, pp. 261-271.
- Barney, J.B. (1991), "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Barney, J.B. and Hesterly, W.S. (2006), *Strategic Management and Competitive Advantage: Concepts and Cases*, Pearson, Harlow.
- Beck, T., Demircuc-Kunt, A. and Levine, R. (2005), "SMEs, Growth, and Poverty: Cross-country Evidence", *Journal of economic growth*, Vol. 10, pp. 199-229.
- Belmondo, C. and Sargis-Roussel, C. (2015), "Negotiating language, meaning and intention: strategy infrastructure as the outcome of using a strategy tool through transforming strategy objects", *British Journal of Management*, Vol. 26, pp. S90-S104.
- Berger, A.N. and Udell, G.F. (2002), "Small Business Credit Availability and Relationship Lending: the importance of bank organisational structure", *The economic journal*, Vol. 112 No. 477, pp. F32-F53.
- Berger, P. L. and Luckmann, T. (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor, Garden City, New York.
- Bhide, A. (1994), "How Entrepreneurs Craft Strategies that Work", *Harvard Business Review*, Vol. 72, pp. 150-161.
- Boateng, A and Abdulrahman, M.D. (2013), "Micro Small-sized Enterprises and Bank Credit: Evidence from West Africa", *Journal of Emerging Market Finance*, Vol. 12 No. 2, pp. 129-150.
- Borch, O.J. and Arthur, M.B. (1995), "Strategic Networks Among Small Firms: Implications for Strategy Research Methodology", *Journal of Management Studies*, Vol. 32 No. 4, pp. 419-441.
- Bracker, J., Keats, B. and Pearson, J. (1988), "Planning and Financial Performance Among Small Firms in a Growth Industry", *Strategic Management Journal*, Vol. 9, pp. 591-603.
- Brews, P.J. and Hunt, M.R. (1999), "Learning to Plan and Planning to Learn: Resolving the Planning School/Learning School Debate", *Strategic Management Journal*, Vol. 20, pp. 889-913.
- British Journal of Management (2001), *Special Issue in Bridging the Relevance Gap*, Vol. 12.
- Bryson, J.M. (1988), "A Strategic Planning Process for Public and Non-profit Organizations", *Long Range Planning*, Vol. 21, pp. 73-81.
- Burrell, G. and Morgan, G. (1979), *Sociological Paradigms and Organisational Analysis*, VT, Ashgate Publishing
- Choudrie, J. and Culkin, N. (2013), "A Qualitative Study of Innovation Diffusion: the Novel Case of a Small Firm and KTP", *Journal of Small Business and Enterprise Development*, Vol. 20 No. 4, pp. 889-912.
- Clark, D. (1997), "Strategic Management Tool Usage: A Comparative Study", *Strategic Change*, Vol. 6, pp. 417-427.

- Clegg, C., Carter, C. and Kornberger, M. (2004), "Get Up, I Feel Like Being a Strategy Machine", *European Management Review*, pp. 21–28.
- Creswell, J.W. (2007), *Qualitative Enquiry and Research Design: Choosing Among Five Approaches*, 2nd ed, Sage, London.
- Creswell, J.W. (2009), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd ed, Thousand Oaks, CA: Sage.
- Creswell, J.W. (2013), *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 3rd ed, Sage, London.
- Crittenden, V.L and Crittenden, W.F. (2008), "Building a Capable Organization: the eight levers of strategy implementation", *Business Horizons*, Vol. 51, pp. 301-309.
- Cunliffe, A.L. (2010), "Crafting Qualitative Research: Morgan and Smircich 30 Years On", *Academy of Management Annual Meeting Proceedings*, pp. 1-6.
- Curran, J. and Storey, D.J. (2002), "Small Business Policy in the United Kingdom: The Inheritance of the Small Business Service and Implications for its Future Effectiveness", *Environment and Planning*, Vol. 20, pp. 163-178.
- Currie, G., Knights, D. and Starkey, K. (2010), "Introduction: A Post-crisis Critical Reflection on Business Schools", *British Journal of Management*, Vol. 21, pp. s1-s5.
- Day, G. (1990), *Market Driven Strategy*, Free Press, New York.
- De Geus, A. (1998), "Planning as Learning", *Harvard Business Review*, Vol. 66, pp. 70-74.
- Devins, D., Lodorfos, G., Kostopoulos, I. and Webber, D. (2016), "Innovation and Growth in the City Region: Microeconomic Evidence of Asymmetries", *International Journal of Innovation Management*, Vol. 20 No. 22.
- De Wit, B. (2017), *Strategy: an International Perspective*, 6<sup>th</sup> ed, Cengage Learning.
- De Wit, B. and Meyer, R. (2010), *Strategy: Process, Content, Context: An International Perspective*, Learning Business Press, Cengage.
- De Wit, B. and Meyer, R. (2014), *Strategy Synthesis: managing strategy paradoxes to create competitive advantage*, Cengage Learning EMEA, Hampshire.
- Dickson, P.H. and Weaver, K.M. (2008), "The Role of the Institutional Environment in Determining Firm Orientations Towards Entrepreneurial Behavior", *International Entrepreneurship and Management Journal*, Vol. 4, pp. 467-483.
- Dobbs, M. and Hamilton, R. (2007), "Small Business Growth: Recent Evidence and New Directions", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 13, pp. 296-322.
- Donaldson, L. (1987), *In Defence of Organisational Theory: A Reply to the Critics*, Cambridge University Press, Cambridge.
- Drazin, R. and Van de Ven, A.H. (1985), "Alternative Forms of Fit in Contingency Theory", *Administrative Science Quarterly*, Vol. 30 No. 4, pp. 514-539.
- Durand, R., Grant, R.M. and Madsen, T.L. (2017), "The expanding domain of strategic management research and the quest for integration", *Strategic Management Journal*, Vol. 38 No. 1, pp. 4-16.
- Dyson, R. and O'brien, F. (1998), *Strategic Development: Methods and Models*, John Wiley and Sons Inc.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. (2012), *Management Research*, 4th ed, Sage, London.
- Fayol, H. (1949), *General and Industrial Management*, Irwin Grey.
- Feldman, M.S. and March, J.G. (1981), "Information in Organizations as Signal and Symbol", *Administrative Science Quarterly*, pp. 171-186.
- Fillis, I. and Wagner, B. (2005), "E-business Development An Exploratory Investigation of the Small Firm", *International Small Business Journal*, Vol. 23, pp. 604-634.
- Fiss, P.C. (2011), "Building Better Casual Theories: A Fuzzy Set Approach to Typologies in Organisational Research", *Academy of Management Journal*, Vol. 54 No. 2, pp. 393-420.

- Frese, M., van Gelderen, M. and Ombach, M. (2000), "How to Plan as a Small Scale Business Owner: Psychological Process Characteristics of Action Strategies and Success", *Journal of Small Business Management*, Vol. 38 No. 2, pp. 1-18.
- Frost, F. (2003), "The Use of Strategic Tools by Small and Medium-sized Enterprises: an Australasian Study", *Strategic Change*, Vol. 12, pp. 49-62.
- Georgellis, Y., Joyce, P. and Woods, A. (2000), "Entrepreneurial Action, Innovation and Business Performance: The Small Independent Business," *Journal of Small Business and Enterprise Development*, Vol. 7, pp. 7-17.
- Ghezzi, A., Balocco, R. and Rangone, A. (2010), "How to Get Strategic Planning and Business Model Design Wrong: the Case of a Mobile Technology Provider", *Strategic Change*, Vol. 19 No. 5-6, pp. 213–238.
- Ghobadian, A. and O'Regan, N. (2002), "The Link Between Culture, Strategy and Performance in Manufacturing SMEs", *Journal Of General Management*, Vol. 28 No. 1, pp. 16-35.
- Ghobadian, A., O'Regan, N., Thomas, H. and Liu, J. (2008), "Formal Strategic Planning, Operating Environment, Size, Sector and Performance: Evidence from the UK's manufacturing SMEs", *Journal of General Management*, Vol. 34 No. 2, pp. 1-19.
- Gibbons, P. and O'Connor, T. (2005), "Influences on Strategic Planning Processes among Irish SMEs", *Journal of Small Business Management*, Vol. 43, pp. 170-187.
- Gibson, B. and Cassar, G. (2005), "Longitudinal Analysis of Relationships Between Planning and Performance in Small Firms", *Small Business Economics*, Vol. 25, pp. 207-222.
- Goll, I. and Rasheed, A. (1997), "Rational Decision-making and Firm Performance: The Moderating Role of Environment", *Strategic Management Journal*, Vol. 18, pp. 583-591.
- Goold, M. (1992), "Research Notes and Communications Design, Learning and Planning: A Further Observation on the Design School Debate", *Strategic Management Journal*, Vol. 13, pp. 169-170.
- Grant, R.M. (2003), "Strategic Planning in a Turbulent Environment: Evidence from the Oil Majors", *Strategic Management Journal*, Vol. 24 No. 6, pp. 491-517.
- Gumbus, A. and Lussier, R.N. (2006), "Entrepreneurs Use a Balanced Scorecard to Translate Strategy into Performance Measures", *Journal of Small Business Management*, Vol. 44 No. 3, pp. 407–425.
- Gunn, R. and Williams, W. (2007), "Strategic Tools: an Empirical Investigation into Strategy in Practice in the UK", *Strategic Change*, Vol. 16, pp. 201-216.
- Hart, S. and Banbury, C. (1994), "How Strategy Making Processes Can Make a Difference", *Strategic Management Journal*, Vol. 15, pp. 251-269.
- Hasan, I., Jackowicz, K., Kowalewski, O. and Kozłowski, Ł. (2017), "Do Local Banking Market Structures Matter for SME Financing and Performance? new evidence from an emerging economy", *Journal of Banking & Finance*, Vol. 79, pp. 142-158.
- Hassard, J. (1991), "Multiple Paradigms and Organizational Analysis: A Case Study", *Organization Studies*, Vol. 12 No. 2, pp. 275–299.
- Heeley, M. (1997), "Appropriating Rents from External Knowledge: the Impact of Absorptive Capacity on Firm Sales Growth and Research Productivity", *Frontiers of Entrepreneurship Research*, Vol. 17, pp. 390-404.
- Hendry, C. (1979), "Contingency Theory in Practice, I", *Personnel Review*, Vol. 8, pp. 39-44.
- Hendry, C. (1980), "Contingency Theory in Practice, II", *Personnel Review*, Vol. 9, pp. 5-11.
- Henry, L. (2013), "Intellectual Capital in a Recession: Evidence from UK SMEs", *Journal of Intellectual Capital*, Vol. 14, pp. 84-101.



- Hodgkinson, G.P. and Starkey, K. (2011), "Not Simply Returning to the Same Answer Over and Over Again: Reframing Relevance", *British Journal of Management*, Vol. 22, pp. 355-369.
- Hodgkinson, G.P., Whittington, R., Johnson, G. and Schwarz, M. (2006), "The Role of Strategy Workshops in Strategy Development Processes: Formality, Communication, Coordination and Inclusion", *Long Range Planning*, Vol. 39 No. 5, pp. 479-496.
- Hodgkinson, G.P. and Wright G. (2002), "Confronting Strategic Inertia in a Top Management Team: Learning from Failure", *Organization Studies (Walter de Gruyter GmbH & Co. KG.)*, Vol. 23, pp. 949-977.
- Hofer, C.W. and Schendel, D.J.A. (1978), *Strategy Formulation: Analytical Concepts*, West Pub. Co, St. Paul.
- Hoffman, K., Parejo, M., Bessant, J. and Perren, L. (1998), "Small Firms, R&D, Technology and Innovation in the UK: a Literature Review", *Technovation*, Vol. 18, pp. 39-55.
- Hogarth-Scott, S., Watson, K. and Wilson, N. (1996), "Do Small Businesses have to Practise Marketing to Survive and Grow?", *Marketing Intelligence and Planning*, Vol. 14, pp. 6-18.
- Honig, B. and Samuelsson, M. (2012), 'Planning and the Entrepreneur: A Longitudinal Examination of Nascent Entrepreneurs in Sweden', *Journal of Small Business Management*, Vol. 50 No. 3, pp. 365-388.
- Hoskisson, R.E., Hitt, M.A., Wan, W.P. and Yiu, D. (1999), "Theory and Research in Strategic Management: Swings of a Pendulum", *Journal of Management*, Vol. 25, pp. 417-456.
- Hotho, S. and Champion, K. (2011), "Small Businesses in the New Creative Industries: Innovation as a People Management Challenge", *Management Decision*, Vol. 49, pp. 29-54.
- Hrebiniak, L.G. (2006), "Obstacles to Effective Strategy Implementation", *Organizational Dynamics*, Vol. 35, pp. 12-31.
- Hrebiniak, L.G. and Joyce, W.F. (1985), "Organizational Adaptation: Strategic Choice and Environmental Determinism", *Administrative Science Quarterly*, Vol. 30, pp. 336-349.
- Hussey, D. (1997), "Glossary of Techniques for Strategic Analysis", *Strategic Change*, Vol. 6, pp. 97-115.
- Jacobson, R. (1992), "The 'Austrian' School of Strategy", *Academy of Management Review*, Vol. 17 No. 4, pp. 782-807.
- Jankowicz, A.D. (2000), *Business Research Methods*, Business Press, Plane TX.
- Jarzabkowski, P. (2004), "Strategy as Practice: Recursiveness, Adaptation, and Practices-in-Use", *Organization Studies*, Vol. 25, pp. 529-560.
- Jarzabkowski, P. and Balogun, J. (2009), "The Practice and Process of Delivering Integration Through Strategic Planning", *Journal of Management Studies*, Vol. 46, pp. 1255-1288.
- Jarzabkowski, P., Balogun, J. and Seidl, D. (2007), "Strategizing: The Challenges of a Practice Perspective", *Human Relations*, Vol. 60, pp. 5-27.
- Jarzabkowski, P., Burke, G. and Spee, P. (2015), "Constructing Spaces for Strategic Work: a multimodal perspective", *British Journal of Management*, Vol. 26, pp. S26-S47.
- Jarzabkowski, P., Giulietti, M., Amoo, N. and Oliveira, B. (2011), "Use or Value? Practical Adoption of Strategy Tools in Different Stages of the Strategy Process", *The European Group for Organizational Studies (EGOS) 27th EGOS Colloquium on Reassembling Organizations*, Gothenburg, July, 2011.
- Jarzabkowski, P., Giulietti, M., Oliveira, B. and Amoo, N. (2013a), "We Don't Need No Education-Or Do We? Management Education and Alumni Adoption of Strategy Tools", *Journal of Management Inquiry*, Vol. 22 No. 1, pp. 4-24.



- Jarzabkowski, P. and Kaplan S. (2015), "Strategy Tools-in-use: A Framework for Understanding 'Technologies of Rationality' in Practice", *Strategic Management Journal*, Vol. 36 No. 4, pp.537-558.
- Jarzabkowski, P., Lê, J. and Van De Ven, A.H. (2013b), "Responding to Competing Strategic Demands: How Organizing, Belonging, and Performing Paradoxes Coevolve", *Strategic Organization*, Vol. 11 No. 13, pp. 245-280.
- Jarzabkowski, P., Mohrman, S.A. and Scherer, A.G (2010), "Organization Studies as Applied Science: The Generation and Use of Academic Knowledge about Organizations Introduction to the Special Issue", *Organization Studies*, Vol. 31, pp. 1189-1207.
- Jarzabkowski, P. and Spee A.P. (2009), "Strategy as Practice: A Review and Future Directions for the Field", *International Journal of Management Reviews*, Vol. 11, pp. 69-95.
- Jarzabkowski, P. and Wilson, D. (2006), "Actionable Strategy Knowledge - A Practice Perspective", *European Management Journal*, Vol. 24, pp. 348-367.
- Jennings, P., and Beaver, G. (1997), "The Performance and Competitive Advantage of Small Firms: a Management Perspective", *International Small Business Journal*, Vol. 15, pp. 63-75.
- Johnson, G., Langley, A., Melin, L. and Whittington, R. (2007), *Strategy as Practice: Research Directions and Resources*, Cambridge University Press, Cambridge, UK.
- Johnson, G., Whittington, R., Scholes, K. and Pyle, S. (2011), *Exploring Strategy: Text and Cases*, Financial Times Prentice Hall.
- Johnson, G., Whittington, R., Scholes, K., Angwin, D. and Regnér, P. (2014), *Exploring Strategy, Text and Cases*, Pearson Education Ltd, Harlow.
- Johnson, G.S., Scholes, K. and Whittington, R. (2008), *Exploring Corporate Strategy: Text and Cases*, 8th ed, Pearson Education Ltd, Harlow.
- Johnson, M.P. and Schaltegger, S. (2016), 'Two Decades of Sustainability Management Tools for SMEs: How Far Have We Come?', *Journal of Small Business Management*, Vol. 54 No. 4, pp. 481-505.
- Jones, O., Macpherson, A., Thorpe, R. and Ghecham, A. (2007), "The Evolution of Business Knowledge in SMEs: conceptualizing strategic space", *Strategic Change*, Vol. 16 No. 6, pp. 281–294.
- Kaplan, B. and Maxwell, J.A., (1994), "Evaluating Health Care Information Systems: Methods and applications" in Anderson, J.G., Ayden C.E. and Jay., S.J. *Qualitative Research Methods for Evaluating Computer Information Systems..* Thousand Oaks, Sage.
- Kelemen, M. and Bansal, P. (2002), "The Conventions of Management Research and their Relevance to Management Practice", *British Journal of Management*, Vol. 13, pp. 97-108.
- Kim, D.H. (1998), "The Link Between Individual and Organizational Learning", in Ed. Klein, D.A., *The Strategic Management of Intellectual Capital*, Butterworth-Heinemann, Boston, pp. 41-62.
- Kim, J. and Mahoney, J.T. (2010), "A Strategic Theory of the Firm as a Nexus of Incomplete Contracts: A Property Rights Approach", *Journal of Management*, Vol. 36 No. 4, pp. 806-826.
- Kirby, S. (2013), "Prospects for the UK Economy", *National Institute Economic Review*, Vol. 224, pp. F51-F70.
- Klimoski, R. (1992), "Theory Presentation in Human Resource Management", *Human Resource Management Review*, Vol. 1, pp. 253-271.
- Kuhn, T. (1962), *The Structure of Scientific Revolution*, University of Chicago, Chicago.
- Kuyucu, A.D.H. (2011), "Exploring Policy-Formulation for SMEs in Cloud Computing: The Case of Turkey", *IBIMA Business Review*, 2011.
- Kyriakidou, O. and Maroudas, L. (2010), "Training and Development in British Hospitality, Tourism and Leisure SMEs", *Managing Leisure*, Vol. 15, pp. 32-47.

- Larson, P., Lewis, A., Brown, R. and Tonge, R. (2006), "Key Features in the Success of SMEs: a Comparison of Service and Manufacturing", *Journal of General Management*, Vol. 31 No. 3, pp. 31-47.
- Lee, C. J. G. (2012). Reconsidering constructivism in qualitative research. *Educational Philosophy and Theory*, 44(4), 403-412.
- Leisering, L. and Walker, R. (1998), *The Dynamics of Modern Society*, Bristol, Policy Press.
- Liao, J., Welsch, H. and Stoica, M. (2003), "Organizational Absorptive Capacity and Responsiveness: An Empirical Investigation of Growth-Oriented SMEs", *Entrepreneurship Theory and Practice*, Vol. 28, pp. 63-85.
- Lieberman-Yaconi, L., Hooper, T. and Hutchings, K. (2010), "Toward a Model of Understanding Strategic Decision-Making in Micro-Firms: Exploring the Australian Information Technology Sector", *Journal Of Small Business Management*, Vol. 48 No. 1, pp. 70-95.
- Lindblom, C. (1959), "The Science of "Muddling Through"", *Public Administration Review*, Vol. 19, pp. 79-88.
- Lindblom, C. (1968), *The Policy-making Process*, Prentice-Hall, Englewood Cliffs, NJ.
- Lindblom, C. (1979), "Still Muddling, Not Yet Through", *Public Administration Review*, Vol. 39, pp. 517-526.
- Lorange, P. and Vancil, R. (1977), *Strategic Planning Systems*, Prentice Hall, Englewood Cliffs, NJ.
- Lynch, R. (2012), *Strategic Management*, Financial Times Press.
- Mahoney, M. J. (2002). Constructivism and positive psychology. *Handbook of positive psychology*, 745-750.
- Man, T.W., Lau, T. and Chan, K. (2002), "The Competitiveness of Small and Medium Enterprises: a Conceptualization with Focus on Entrepreneurial Competencies", *Journal of Business Venturing*, Vol. 17, pp. 123-142.
- Mayo, E. (1933), *The Human Problems of an Industrial Organization*, McMillan, New York.
- McCann, I., Leon-Guerrero, A. and Haley, J. Jr. (2001), "Strategic Goals and Practices of Innovative Family Businesses", *Journal Of Small Business Management*, Vol. 39 No. 1, pp. 50-59.
- McGuire, J.W. (1976), "The Small Enterprise in Economics and Organization Theory", *Journal of Contemporary Business*, Vol. 5, pp. 115-138.
- McKiernan, P. and Morris, C. (2005), "Strategic Planning and Financial Performance in UK SMEs: Does Formality Matter?", *British Journal of Management*, Vol. 5, pp. S31-S41.
- McMahon, R.G. and Stanger, A.M. (1995), "Understanding the Small Enterprise Financial Objective Function", *Entrepreneurship Theory and Practice*, Vol. 19, pp. 21-40.
- Meltsner, A. J. (1976), *Policy Analysts in the Bureaucracy*. University of California Press.
- Miller, C.C. and Cardinal, L.B. (1994), "Strategic Planning and Firm Performance: A Synthesis of More than Two Decades of Research", *The Academy of Management Journal*, Vol. 37, pp. 1649-1665.
- Mills, J., Bonner, A., and Francis, K. (2006), "The development of constructivist grounded theory", *International Journal of Qualitative Methods*, 5(1), Article 3.
- Mingers, J. (2003), "The Paucity of Multimethod Research: a Review of the Information Systems Literature", *Information Systems Journal*, Vol. 13, pp. 233-249.
- Mintzberg, H. (1973), "Strategy-making in Three Modes", *California Management Review*, Vol. 16, pp. 44-53.
- Mintzberg, H. (1978), "Patterns in Strategy Formation", *Management Science*, Vol. 24, pp. 934-948.
- Mintzberg, H. (1990), "The Design School: Reconsidering the Basic Premises of Strategic Management", *Strategic Management Journal*, Vol. 11, pp. 171-195.

- Mintzberg, H. (1991), "Learning-1, Planning-0: Reply", *Strategic Management Journal*, 12, 463-466.
- Mir, R. and Watson, A. (2001), "Critical Realism and Constructivism in Strategy Research: Toward a Synthesis", *Strategic Management Journal*, Vol. 22, pp. 1169-1173.
- Mirabeau, L. and Maguire, S. (2014), "From Autonomous Strategic Behavior to Emergent Strategy", *Strategic Management Journal*, Vol. 35 No. 8, pp. 1202-1229.
- Mowery, D.C. and Oxley, J.E. (1995), "Inward Technology Transfer and Competitiveness: the Role of National Innovation Systems", *Cambridge Journal of Economics*, Vol. 19, pp. 67-93.
- Nissan, E., Martín, M.-A.G. and Picazo, M.-T.M. (2011), "Relationship Between Organizations, Institutions, Entrepreneurship and Economic Growth Process", *International Entrepreneurship and Management Journal*, Vol. 7, pp. 311-324.
- Nutt, P. (1976), "Models for Decision Making in Organizations and Some Contextual Variables which Stipulate Optimal Use", *Academy of Management Review*, Vol. 1, pp. 84-98.
- Nutt, P. (1977), "An Experimental Comparison of the Effectiveness of Three Planning Methods", *Management Science*, Vol. 23, pp. 499-511.
- O'Regan, N. and Ghobadian, A. (2004), "Leadership and Strategy: Making it Happen", *Journal of General Management*, Vol. 29 No. 3, pp. 76-92.
- O'Regan, N. and Ghobadian, A. (2007), "Formal strategic planning: annual rain dance or wheel of success?", *Strategic Change*, Vol. 16 No. 1/2, pp. 11-22.
- Paroutis, S., Franco, L.A. and Papadopoulos, T. (2015), "Visual interactions with strategy tools: producing strategic knowledge in workshops", *British Journal of Management*, Vol. 26, pp. S48-S66.
- Pearce, J.A., Freeman, E.B. and Robinson, R.B. (1987), "The Tenuous Link Between Formal Strategic Planning and Financial Performance", *Academy of Management Review*, Vol. 12, pp. 658-675.
- Pelham, A.M. (2000), "Market Orientation and Other Potential Influences on Performance in Small and Medium-sized Manufacturing Firms", *Journal of Small Business Management*, Vol. 38, pp. 48-67.
- Pellegrino, K.C. and Carbo, J.A. (2001), "Behind the Mind of the Strategist", *The TQM Magazine*, Vol. 13, pp. 375-381.
- Perrott, B. (2005), 'Towards a Manager's Model for e-business Strategy Decisions', *Journal Of General Management*, Vol. 30 No. 4, pp. 73-89.
- Perry, S.C. (2001), "The Relationship Between Written Business Plans and the Failure of Small Businesses in the US", *Journal of Small Business Management*, Vol. 39, pp. 201-208.
- Pickernell, D., Senyard, J., Jones, P., Packham, G. and Ramsey, E. (2013), "New and Young Firms: Entrepreneurship Policy and the Role of Government—Evidence from the Federation of Small Businesses Survey", *Journal of Small Business and Enterprise Development*, Vol. 20, pp. 358-382.
- Poister, T.H. and Streib, G. (2005), "Elements of Strategic Planning and Management in Municipal Government: Status after Two Decades", *Public Administration Review*, Vol. 65, pp.45-56.
- Porter, M.E. (1973), *Retailer Power, Manufacturer Strategy, and Performance in Consumer goods Industry*, Unpublished Ph.D. dissertation, Harvard University.
- Porter, M.E. (1985), "Competitive Advantage: creating and sustaining superior performance", The Free Press, McMillan Inc, New York.
- Powell, T.C. (2002), "The Philosophy of Strategy", *Strategic Management Journal*, Vol. 23, pp. 873-880.
- Prescott, J.E. and Grant, J.H. (1988), "A Manager's Guide for Evaluating Competitive Analysis Techniques", *Interfaces*, Vol. 18, pp. 10-22.

- Proctor, R. 2005. Methodology is more than research design and technology. *Behaviour Research Methods*, 37, 197-201.
- Pryor, M.G., Anderson, D., Toombs, L.A and Humphreys, J.H. (2007). Strategic Implementation as a Core Competency: the 5P's model", *Journal of Management Research*, Vol. 7, pp. 3.
- Quinn, J. (1978), "Strategic Change: Logical Incrementalism", *Sloan Management Review*, Vol. 20, pp. 7-22.
- Quinn, J.B. (1980), *Strategies for Change: Logical Incrementalism*, Richard D. Irwin, Homewood, Ill.
- Rahman, N. and de Feis, G.L. (2009), "Strategic Decision-making: models and methods in the face of complexity and time pressure", *Journal Of General Management*, Vol. 35 No. 2, pp. 43-59.
- Rahman, M., Uddin, M. and Lodorfos, G. (2017), "Barriers to Enter in Foreign Markets: Evidence from SMEs in Emerging Market", *International Marketing Review*, Vol. 34 No. 1, pp. 68-86.
- Raps, A. (2004), "Implementing Strategy", *Strategic Finance*, Vol. 85, pp. 48.
- Rauch, A. and Frese, M. (2000), "Human Capital of Small-scale Business Owners and Business Success: A Longitudinal Study on Moderators and Mediators", in: ICSB World Conference 2000, Brisbane.
- Rauch, A., Frese, M. and Sonnentag, S. (2000), "Cultural Differences in Planning/Success Relationships: A Comparison of Small Enterprises in Ireland, West Germany, and East Germany", *Journal of Small Business Management*, Vol. 38 No. 4, pp. 28-41.
- Redmond, J. and Walker, E.A. (2010). "Home-based business policy and return on investment for the community", *Small Enterprise Research*, Vol. 17, pp. 150-164.
- Riege, A.M. (2003), "Validity and Reliability Tests in Case Study Research: a Literature Review with 'Hands-on' Applications for Each Research Phase", *Qualitative Market Research: An International Journal*, Vol. 6, pp. 75-86.
- Rigby, D.K. (2001), "Putting Tools to the Test: Senior Executives Rate 25 Top Management Tools", *Strategy and Leadership*, Vol. 29 No. 3, pp. 4-13.
- Rigby, D.K. (2011), *Management Tools 2011: An Executive's Guide*, Bain and Company, Inc., USA, MA.
- Rigby, D. and Bilodeau, B. (2005), "The Bain 2005 Management Tool Survey", *Strategy and Leadership*, Vol. 33 No. 4, pp. 4-12.
- Rigby, D. and Bilodeau, B. (2007a), "Selecting Management Tools Wisely", *Harvard Business Review*, Vol. 85 No. 12, pp. 20-22.
- Rigby, D. and Bilodeau, B. (2007b), "Bain's Global 2007 Management Tools and Trends Survey", *Strategy and Leadership*, Vol. 35 No. 5, pp. 9-16.
- Rigby, D. and Bilodeau, B. (2015), "Management Tools and Trends 2015", *Insights*, Bain and Company <http://www.bain.com/publications/articles/management-tools-and-trends-2015.aspx> (accessed 23 February 2018)
- Rowe, W.G. and Morrow, J.L. Jr. (1999), "A Note on the Dimensionality of the Firm: Financial Performance Construct Using Accounting, Market and Subjective Measures", *Canadian Journal of Administrative Science*, Vol. 16 No. 1, pp. 58-70.
- Rubin, H.J. and Rubin, I.S. (2005), *Qualitative Interviewing: The Art of Hearing Data*, Sage Publications, Thousand Oaks, Calif.
- Rumelt, R.P., Schendel, D. and Teece, D.J. (1991), "Strategic Management and Economics", *Strategic Management Journal*, Vol. 12, pp. 5-29.
- Ryan, A.B. (2006), "Post-positivist Approaches to Research", *Researching and Writing your Thesis: a Guide for Postgraduate Students*, pp. 12-26.
- Saunders, M., Lewis, P. and Thornhill, A. (2003), *Research Methods for Business Students*, Pearson Education Ltd., FT., Prentice-Hall, London.



- Schindehutte, M. and Morris, M.H. (2001), "Understanding Strategic Adaptation in Small Firms", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 7, pp. 84-107.
- Sheldrake, J. (1996), *Management Theory: from Taylorism to Japanization*, International Thomson Business Press, London.
- Shenton, A. K. (2004), "Strategies for Ensuring Trustworthiness in Qualitative Research Projects", *Education for Information*, Vol. 22 No. 2, pp. 63-75.
- Shuman, J.C. and Seeger, J.A. (1986), "The Theory and Practice of Strategic Management in Smaller Rapid Growth Firms", *American Journal of Small Business*, Vol. 11, pp. 7-18.
- Silverman, D. (2005), *Doing Qualitative Research*, Sage Publications Ltd, London.
- Smallbone, D., Welter, F., Voytovich, A. and Egorov, I. (2010), "Government and Entrepreneurship in Transition Economies: the Case of Small Firms in Business Services in Ukraine", *The Service Industries Journal*, Vol. 30, pp. 655-670.
- Spee, A.P. and Jarzabkowski, P. (2009), "Strategy Tools as Boundary Objects", *Strategic Organization*, Vol. 7, pp. 223-232.
- Stam, E. and Wennberg, K. (2009), "The Roles of R&D in New Firm Growth", *Small Business Economics*, Vol. 33, pp. 77-89.
- Starkey, K. and Madan, P. (2001), "Bridging the Relevance Gap: Aligning Stakeholders in the Future of Management Research", *British Journal of Management*, Vol. 12, pp. S3-S26.
- Steinbruner, J. (1974), *The Cybernetic Theory of Decision Processes*, Princeton University Press, Princeton, New Jersey.
- Steiner, G. (1979), *Strategic Planning: What Every Manager Must Know*, Free Press, New York.
- Strahan, P. and J. Weston (1998), "Small Business Lending and the Changing Structure of the Banking Industry", *Journal of Banking & Finance*, Vol. 22, pp. 821-845.
- Tassabehji, R. and Isherwood, A. (2014), "Management Use of Strategic Tools for Innovating During Turbulent Times", *Strategic Change*, Vol. 23 No. 1-2, pp. 63-80.
- Taylor, F.W. (1911), *The Principles of Scientific Management*, Norton, New York, 202.
- Thomas, L. and Ambrosini, V. (2015), "Materializing Strategy: the role of comprehensiveness and management controls in strategy formation in volatile environments", *British Journal of Management*, Vol. 26, pp. S105-S124.
- Thompson, A. and Strickland, A. (1981), *Strategy and Policy: Concepts and Cases*.
- Thompson, J.D. (1967), *Organizations in Action: Social Science Bases of Administration*, McGraw-Hill, NY.
- Thune, S.S. and House, R.J. (1970), "Where Long-range Planning Pays Off: Findings of a Survey of Formal, Informal Planners", *Business Horizons*, Vol. 13, pp. 81-87.
- Treasury, H. (2011), *The Plan for Growth*, Department for Business, Innovation and Skills, London.
- Tsoukas, H. and Knudsen, C. (1989), "The Validity of Idiographic Research Explanations", *Academy of Management Review*, Vol. 14, pp. 551-561.
- Tsoukas, H. and Knudsen C. (Eds) (2002), *The Conduct of Strategy Research*, Sage Publications, London.
- Tushman, M.L., Newman, W.H. and Romanelli, E. (1986), "Convergence and Upheaval: Managing the Unsteady Pace of Organizational Evolution", *California Management Review*, Vol. 29, pp. 29-44.
- Upton, N., Teal, E. and Felan, J. (2001), "Strategic and Business Planning Practices of Fast Growth Family Firms", *Journal Of Small Business Management*, Vol. 39 No. 1, pp. 60-72.
- Uyterhoeven, H., Ackerman, R. and Rosenblum, J. (1977), *Strategy and Organization: Text and Cases in General Management*, Irwin Homewood, Illinois.

- Vinnell, R. and Hamilton, R. (1999), "A Historical Perspective on Small Firm Development", *Entrepreneurship Theory and practice*, Vol. 23, pp. 5-18.
- Vuorinen, T., Hakala, H., Kohtamäki, M. and Uusitalo, K. (2018), "Mapping the Landscape of Strategy Tools: A review on strategy tools published in leading journals within the past 25 years", *Long Range Planning*, Vol. 51 No. 44., pp. 586-605.
- Watts, R.L. and Zimmerman, J.L. (1990), "Positive Accounting Theory: A Ten Year Perspective", *The Accounting Review*, Vol. 65 No. 1, pp. 131-156.
- Weber, M. (1946), "Bureaucracy", *From Max Weber: Essays in Sociology*, pp. 196-244.
- Weick, K.E. (1979), *The Social Psychology of Organizing*, Addison-Wesley, Reading, Mass, London.
- Welter, F. and Smallbone, D. (2011), "Institutional Perspectives on Entrepreneurial Behavior in Challenging Environments", *Journal of Small Business Management*, Vol. 49, pp. 107-125.
- Whittington, R. (2004), "Strategy After Modernism: Recovering Practice", *European Management Review*, Vol. 1 No. 1, pp. 62-68.
- Whittington, R. and Caillaud, L. (2008), "The Crafts of Strategy: Special Issue Introduction by the Guest Editors", *Long Range Planning*, Vol. 41, pp. 241-247.
- Whittington, R., Johnson, G. and Melin, L. (2004), "The Emerging Field of Strategy Practice: Some Links, a Trap, a Choice and a Confusion", *Paper delivered at European Group for Organization Studies, Ljubljana*.
- Whittington, R., Molloy, E., Mayer, M. and Smith, A. (2006), "Practices of Strategising/Organising: Broadening Strategy Work and Skills", *Long Range Planning*, Vol. 39, pp. 615-629.
- Wilson, C.D.H, Williams, I.D. and Kemp. S. (2012), "An Evaluation of the Impact and Effectiveness of Environmental Legislation in Small and Medium-Sized Enterprises: experiences from the UK", *Business Strategy and the Environment*, Vol. 21 No. 3, pp.141-156.
- Wilson, D. and Jarzabkowski, P. (2004), "Thinking and Acting Strategically: New Challenges for Interrogating Strategy", *European Management Review*, Vol. 1, pp. 14-20.
- Winner, L., 1993. Upon opening the black box and finding it empty: Social constructivism and the philosophy of technology. *Science, Technology, & Human Values*, 18(3), pp.362-378.
- Wolf, C. and Floyd, S.W. (2017), "Strategic Planning Research: Toward a Theory-Driven Agenda", *Journal of Management*, Vol. 43, pp. 1754-1788.
- Wood, S. (1979), "A Reappraisal of the Contingency Approach to Organization", *Journal of Management Studies*, Vol. 16, pp. 334-354.
- Wrapp, H.E. (1984), "Good Managers Don't Make Policy Decisions", *Harvard Business Review*, Vol. 62, pp. 8-21.
- Wright, R.P., Paroutis, S.E. and Blettner, D.P. (2013), "How Useful are the Strategic Tools we Teach in Business Schools?", *Journal of Management Studies*, Vol. 50 No. 1, pp. 92-125.
- Wu, J. and Boateng, A. (2010), "Factors influencing changes in Chinese management accounting practices", *Journal of Change Management*, Vol. 10 No. 3, pp. 315-329.
- Yin, R.K. (1994), *Case Study Research*, 2nd ed, Sage, Thousand Oaks, CA.
- Young, R. A., & Collin, A. (2004). Introduction: Constructivism and social constructionism in the career field. *Journal of vocational behaviour*, 64(3), 373-388.

*Appendix A***Table 2****Frost's (2003) List of Strategic Analysis Tools and Techniques**

Balanced scorecard	Internal factor evaluation matrix (IFE)
Benchmarking	Key success factors
Brain storming	Learning curves
Breakeven analysis	Life cycle concepts
Business definition	Management profiles
Business process re-engineering	Market opportunity analysis
Company capability profile/analysis	MCC (Mission and Core
Competitor analysis	Competencies) decision matrix
Competitor profiling	Net present value
Core competencies	Nominal group techniques
Corporate modelling	PEST (Political, Economic, Social,
Corporate social performance matrix	Technological) analysis
Cost–benefit analysis	PIMS (Profit Impact of Market Share)
Critical skills analysis	Portfolio analysis
Critical success factors	Process modelling
Decision trees	Product/market matrix
Delphi technique	Profits graph
Discount rate of return	Quality analysis
Discounted cash flow	Risk analysis
Diversification matrix	Risk matrix
Du Pont chart	Risk–return matrix
Economic model	ROI chart (Return on Investment)
Environment assessment: Neubauer SOFT (Satisfactory, Opportunity, Fault, Threat)	Scenario planning
Environmental assessment: facing up to change	Segmentation: strategic
Environmental turbulence matrices	Sensitivity analysis
Equilibrium analysis	Spreadsheets
Experience curve	Strategic audit (analysis)
External factor evaluation matrix (EFE)	Strategic group mapping
Financial ratio analysis	Strategic position and action evaluation
Gap analysis	Strategy cube
Generic strategy matrix	SWOT (Strengths, Weaknesses, Opportunities, Threats)
Global strategy	Synergy matrix
Group competitive intensity map	Technology grid
Growth analysis	Technology-based resource allocation
Growth vector analysis	TOWS matrix (Threats, Opportunities, Weaknesses, Strengths)
Historical analogy	Trends projection
Industry analysis	V matrix
Industry attractiveness analysis	Value chains
Industry mapping	Value-based strategy
Industry structure analysis (Porter's 5- Factor Model)	Variance Analysis

*Appendix B*

**Table 3**  
**Attributions of Respondents**

Respondent	Role/ Position	EDUCATION			Main Activity	SIZE*		TYPE
		Formal	Management			Employees	Turnover	Profits
C1	Contracts Director	Technical graduate	Institute of Directors qualification	Retail devment	90	£8M - £10M	£2M - £3M	family owned
C2	CEO	Post 16	Short courses	House builder	Not stated	Not stated	£19.4M - £13.9M	sole owner
C3	Managing Director		Short courses	Public sector	95	£15M - £17M	£0.59M - £0.7M	family owned
S1	Chairman		Not stated	Private Health provider Service provider to Paints Industry	10 plus pool labour	£1M	Posted a loss	start- up
S2	Managing Director	Science related degree	Institute of Directors qualification		50 to 44	£2.25M - £1.4M		family owned
S3	Majority Share Holder		Short courses	Hotel	14 to 16	£0.55M	£0.7M - £0.44M	family owned
M1	Financial Director	Professional accounting qualifications	Short courses	Paints	Not stated	Not stated	Not stated	family owned
M2	Managing Director		Not stated	Catering equipment	25 to 27	£1.3M - £0.9M	Not stated	family owned
M3	Managing Director	Technical degree	Institute of Directors qualification	Chemicals	23 to 20	£2M	loss to 10% net	family owned

\*Size: Figures given are for the period of the longitudinal study