



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

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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

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2 dependent on SMEs (Boateng and Abdulahman, 2013), the factors that underpin and
3 influence their strategy formation processes remain largely under-developed (Wu
4 and Boateng, 2010).
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6 **Research Aim/Objectives**

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

39 The normative strategy literature suggests the rational and structured approach to strategy
40 development and the strategy concepts and frameworks are tools that assist in this process
41 (Ansoff 1965, 1991; Bryson 1988). Clark (1997) noted the use of the generic term “strategic
42 tool” as concepts, analytical frameworks, techniques and methodologies that assist strategic
43 managers in making decisions, simplifying and representing a complex situation, and thus
44 informing the strategy development process.
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46 In relation to this, a number of tools and techniques to assist analysis are proffered in
47 leading strategy textbooks used in the instruction of strategic management (De Wit 2017; De
48 Wit and Meyer, 2014; Johnson et al., 2014; Lynch, 2012) and research has examined how
49 tools are used in organisations (Rigby and Bilodeau, 2015; Jarzabkowski and Kaplan, 2015;
50 Tassabehji and Isherwood, 2014; Jarzabkowski et al., 2011; Jarzabkowski and Balogun,
51 2009; Jarzabkowski and Spee, 2009; Gunn and Williams, 2007; Frost, 2003; Rigby 2001;
52 Clark, 1997; Hussey, 1997; Day, 1990; Prescott and Grant, 1988).
53

54 Most of these noted studies into strategic tools have tended to focus on what tools are
55 being used, and to a lesser extent the reasons for use and values for the organisation as an
56 important activity (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al., 2011; Gunn and
57 Williams, 2007). Although over five decades of studies have produced inconclusive results
58 of the relationship between strategic planning and performance (Ghobadian et al., 2008;
59 O'Regan and Ghobadian, 2007; Gumbis and Lussier, 2006; Grant, 2003; Brews and Hunt,
60 1999; Goll and Rasheed, 1997; Ansoff et al., 1970; Thune and House, 1970), it is argued by

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2 some researchers and theorists that strategic planning still remains an important activity
3 within organisations (Wolf and Floyd, 2017; Whittington and Caillaet, 2008; Jones et al.,
4 2007; Hodgkinson et al., 2006; Perrott, 2005; Grant, 2003; Miller and Cardinal, 1994).

5 One of the reasons for the inconclusive nature of the value of strategic planning has been
6 the propensity of researchers to suggest this activity is part of the macro-economic narrative.
7 For this reason, strategic planning and its surrounding activities have been used as
8 reductionist models in order to hedge against the turbulences and unpredictabilities of the
9 business environment (Poister and Streib, 2005; Pellegrino and Carbo, 2001; Porter, 1973).
10 Such reductionist models of strategic planning where strategy tools and frameworks form
11 the basis, posit that strategy tools are vehicles in a rationalist and structured way by which
12 organisations should be analysed and operated (Thompson and Strickland, 1981; Steiner,
13 1979; Hofer and Schendel, 1978; Uytterhoeven et al., 1977; Andrews, 1971; Ansoff, 1965).
14 This view is supported by the much-used definition of what strategy tools consist of. Clark
15 (1997) for instance referred to strategy tools as instruments required by managers for
16 decision making. A comment echoed by Rhaman and de Feis (2009).

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19 Such views hinge heavily on what is considered in the normative literature as an
20 organisation whose performance is predominantly determined by quantitative parameters
21 (Kim and Mahoney, 2010; Jacobson, 1992; Borch and Arthur, 1995) which are then seen as
22 a more neo-Classical perspective in strategy research. After the rejection of the most
23 dominant organisational theories, which were based on closed-rational system models, such
24 as Taylor's scientific management approach (Taylor, 1911), Weber's model of bureaucracy
25 (Weber, 1946), Fayol's administrative theory (Fayol, 1949), Barnard's theory of cooperative
26 systems (Barnard, 1938) and Mayo's human relations model (Mayo, 1933), most recent
27 theories have viewed an organisation as an open system (Sheldrake, 1996; Hendry, 1979,
28 1980; Wood, 1979). In its most simplified form, the open system view of an organisation
29 considers it to have an input that goes into the organisation. The organisation itself is made
30 up of formal and informal processes and the enacting of these inputs, and the external
31 environment enables the organisation to produce an output, but it is contingent on a number
32 of contextual variables as well (Fiss, 2011; Donaldson, 1987; Drazin and Van de Ven,
33 1985).

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36 This view of the organisation also recognises the complexities on both the internal and
37 external process. This process confronts the organisation and strategy models, methods,
38 frameworks and tools used in simplifying and representing this complex situation, informing
39 the strategy development process (Tassabehji and Isherwood, 2014; Rahman and de Freis,
40 2009; Jones et al., 2007; Frese et al., 2000; Tushman et al., 1986; Hrebiniak and Joyce,
41 1985; Weick, 1979). Central to this view is the ability of organisational strategists to analyse
42 using environmental-based (EBV) or resource-based (RBV) view strategy tools and
43 frameworks; and if the sum (mostly measured in economic or accounting terms) of the
44 output is higher than the input it is then said that the organisation has performed or it is
45 "successful" (Johnson and Schaltegger, 2016; Rowe and Morrow, 1999; Jennings and
46 Beaver, 1997, p.64; Watts and Zimmerman, 1990).

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49 However, most of the theories in organisational architecture and its strategy have been
50 developed and tested in large organisations (Gibbons and O'Connor, 2005). It is
51 acknowledged SMEs have certain attributes that in comparison with large companies will
52 suggest a mis-match between organisational theory and strategy. For example, the adaptive
53 approach of SMEs compared to predictive of larger organisations (O'Regan and Ghobadian,
54 2004); the characterisations of bureaucracy and hierarchical features; and the use of
55 expensive existing information systems that cannot be extended to SMEs (Liao et al., 2003).
56 Additionally, SMEs have a greater reliance on individual influence on strategy (Gibbons and
57 O'Connor, 2005); some taking a bottom-up rather than top-down approach (Barnes, 2000).
58 The need for contextual strategy development, catering for the differing level of socio-
59 cultural relations (Ghobadian and O'Regan, 2002; Rauch et al., 2000; Borch and Arthur,
60

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

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

- 4 • In relation to previous research, how do SMEs differ in their application of strategy
5 tools and techniques?
- 6 • How do SMEs deploy strategy tools within the strategy formation process and how
7 does this inform our understanding of SME strategy formation?
- 8 • How can strategy-tools deployed in SMEs be related to the traditional macro-
9 economic model when establishing practice-based views of strategy processes in
10 organisations?
- 11 • What is the potential for the deployment of strategy tools within SMEs to enhance
12 organisational performance?
13
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15 16 **Methodology**

17 Two of the authors of this paper emanate from strong positivistic and analytical
18 backgrounds, with vast experience in engineering and project management. However, in this
19 paper we recognise the frustration that typically exists in strategy research of always taking
20 the ontological positivist position which is now a major criticism of findings emerging from
21 strategy research (Gunn and Williams, 2007). Other researchers, such as Mir and Watson
22 (2001), argue for other perspectives to be used in strategy research other than the realist
23 positivist approach. In recent times, strategy planning investigations and publications has
24 been conducted by academics coming from a more qualitative background and this work
25 continues that trend (see e.g. Jarzabkowski, et al., 2015).
26

27 We embraced the assertion that ‘Researchers, in their “humanness,” are part of the
28 research endeavour rather than objective observers. Their values must be acknowledged by
29 themselves and by their readers as an inevitable part of the outcome [...]’ (Mills et al., 2006,
30 p.2). Hence, the worldview for this strategy work on SME’s is social constructivist. In a
31 similar vein to social constructionist (Berger and Luckmann, 1966), social constructivism as
32 a research paradigm that queries the existence of an objective reality (Mills et al., 2006) and
33 enabled us to see different things, explore through contrasting lenses, perhaps arrive at
34 different conclusions, and because “... Multiple and even conflicting versions of the same
35 event or object can be true at the same time” (Rubin and Rubin, 2005, p.27). Social
36 constructivism was preferred over social constructionism, due to its individualised focus on
37 knowledge construction in situ, and because we had less pressing concern for cultural and
38 historical influences on knowledge construction and meaning (Young and Collin, 2004). Our
39 research approach thus addresses both Leisering and Walker’s (1998) concern about the lack
40 of dynamic research methods catering for an increasingly intricate social world and
41 Proctor’s (2005) call for qualitative approaches that relate to lived human experience. The
42 epistemological stance for this study seeks to unearth emergent social processes and co-
43 produced, shared meanings that reflect social reality (Burrell and Morgan, 1979) and seeks
44 to gauge human sense-making in situ, whilst acknowledging its deeper complexity and
45 ambiguity (Kaplan and Maxwell, 1994). For instance, social constructivism, in our case,
46 assumed that SME owner-managers made sense of their social world through the use of
47 strategy tools and frameworks in the strategy formation process and thus attached
48 intersubjective values to their experiences of events and activities within SMEs. This
49 enabled us to probe deeper in order to ascertain the true meaning to strategy tool usage in the
50 unique context of SMEs (Gunn and Williams, 2007).
51

52 Considering how social constructivists ‘...promise to deliver a veritable gold mine of
53 those most highly valued of academic treasures: case studies’ (Winner, 1993, p.366), a
54 cross-sectorial qualitative case-based examination of nine organisations was undertaken,
55 across three sectors: Manufacturing, Service, and Construction. In the case study
56 discussions, these sectors are denoted as M, S, and C respectively (see Appendix B, Table 3,
57 for respondent attributes). The case study examinations were longitudinally undertaken, with
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2 primary data gathered through interviews and triangulated with secondary data where
3 available (company and environment specific). Riege describes how the: 'case study's
4 realistic modes of inquiry lead to the discovery of new relationships or realities and build up
5 an understanding of the meanings of experiences rather than verify predetermined
6 hypotheses' (2003, p.77). A total of five pilot scoping interviews were conducted with two
7 manufacturing companies, one construction company and two service companies (a training
8 organisation and a hotel), before full data collection commenced. A further 34 interviews
9 were then conducted within nine main study organisations. All respondents were directors or
10 owner-managers. Within the manufacturing, two were owner-managing directors and one a
11 financial director. Within construction, one was an owner-managing director, and both an
12 employee-manager director and contracts director. Within services, two were owner-
13 managing directors, and one a chairman with a partnership arrangement. The semi-
14 structured interviews engaged to gather the bulk of the primary data allowed some degree of
15 latitude by the researcher to explore the topic, verify points made and gain greater insight
16 into the subtleties of the situation examined (Jankowicz, 2000). Rather than simply adopting
17 a purely historical approach (Honig and Samuelsson, 2012; Steinmetz, 1998) or a
18 snapshot/black-box form of analysis, we investigated the process through time, and
19 discovered and recorded the facets of the socially constructed process as they developed.
20 This reflects Bhide's (1994) assertion that aspects of analysis, choice and implementation
21 will emerge over time, irrespective of their order, making data capture at a single point
22 potentially problematic. This multiple-case, longitudinal type of approach allows initial
23 observations to be tested within an alternate organisational context and modified by an
24 ongoing review and reflection process, where we cognitively started to construct how these
25 managers are using strategy tools and frameworks. The objective was to understand the
26 world in which senior decision-makers formulate and implement strategy and use strategy
27 tools, and to develop subjective meanings of experience which are themselves directed at
28 certain objective things. NVIVO was employed to support the coding process and structure
29 the primary data. Data analysis packages used within '...constructivism...can track and match
30 every phrase of every perception in a transcript' (Sobh and Perry, 2006, p.1206). The
31 multiple case study approach (Yin, 1994) allowed triangulation to occur within firms
32 through time, with other firms within the sector, across sectors and, where appropriate, with
33 secondary data. This helped to ensure an elevated degree of validity and reliability from the
34 project. To achieve conformability, we took steps to demonstrate that the findings emerged
35 from the data rather than our own predispositions (Shenton, 2004).

42 **Research Design**

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

49 Intrinsic to the designated research approach was the leveraging of a range of general
50 strategic management models and typologies, in conjunction with selected SME theory to
51 develop a context-rich examination of strategy formation in the chosen organisations,
52 including a granular examination of constituent parts of the strategy process. We also sought
53 to understand the context through an examination of the overall operations of the firms
54 under study. The diversity of the SME sector, the complexity of strategy formation and the
55 human-centeredness of the planning process lends itself to the use of qualitative tools and
56 techniques and encompasses the traditional focus on quantitative approaches. Hence, our
57 cases illustrate different perspectives of the problem, process and event. The longitudinal
58 cross-sectorial aspect also helped to capture emergent changes (Silverman, 2005) through
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2 the strategic nature of the research topic. We have produced findings that were not
3 determined in advance and are applicable beyond the immediate boundaries of the study. In
4 essence, knowledge was cognitively constructed about the 'human' and more implicit side
5 of the strategy making business of nine SME businesses.

6 The models considered in the literature review (for example: SWOT, PEST, and Porter's
7 5 Forces Analysis) indicate the utilisation of structured strategic analysis. In relation to this,
8 a number of tools and techniques to assist analysis are proffered in leading texts (De Wit,
9 2017; Lynch, 2012; Johnson et al., 2011; De Wit and Meyer, 2010). Frost (2003) developed
10 a list of tools and techniques of strategic analysis as an extension of previous work by
11 Hussey (1997). Table 2 (refer Appendix A) was compiled within an Australasian context
12 and there may be some variance in terminology, but content is in general agreement with
13 leading instructional texts available within the UK, the setting for this research, and in much
14 more recent studies on strategy tools (Jarzabkowski et al., 2013a; Write et al., 2013;
15 Hodgkinson et al., 2006; Rigby and Bilodeau, 2007b).

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

- 19 • Independence of company ownership resulting in lack of applicability of corporate
20 portfolio related activities.
- 21 • Small scale resulting in lack of opportunity to influence the environment through large
22 projects or investment.
- 23 • Scarcity of resource with respect to capacity for extensive corporate planning style
24 research and strategy development activities.
- 25 • The corporate perspective of tools application in representation within texts and in
26 initial conceptualisation.
- 27 • The 'oil tanker' phenomena of large organisations (inability to change rapidly) and
28 possible requirement for more extensive planning horizons to deal with such.
- 29 • The complexity of the tools juxtaposed to the relative simplicity of small firms (Frost,
30 2003).

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

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

51 It is reasonable that *instructional text* in the general field present these tools and
52 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 (EBV¹). 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

¹ 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

1
2 deploy them specifically. S1 displayed knowledge of competitive business factors, typical of
3 Porter's (1985) 5 forces model and the general business environment. When they were
4 further pressed about their consideration of the macro-environmental impact (Grant, 2003)
5 their comment was: "*You know I think we'd be very naff if we just sat there waiting for the*
6 *funnel to discharge on top of us. As much as you can you're actively looking at these things*"
7 (S1).
8

9 This was further explored. When asked about the development of this within their
10 planning and decision-making approach, they conceded no formal action to investigate had
11 taken place. This alluded to a point of resource constraint in developing analytical
12 frameworks, a point echoed by S2: "*...you need to deal with all the government legislation*
13 *and all the documentation that's been put on the industry, the environmental law,*
14 *employment law and all that sort of stuff and whilst you can buy in that expertise it's very*
15 *expensive*" (S2). So here it appeared that resource is a barrier to the systematic collection of
16 external data to inform the strategic decision-making process for these organisations and this
17 resulted in informal approaches.
18

19 In regard to information gathering, associated with the deployment of these tools and
20 techniques, the respondents were asked where they gathered their information about the
21 business environment. There were wide ranging responses here. For example S1 expanded:
22 "*I...read regularly business pages, started reading the Economist, signed up to a thing*
23 *called Northern Businesses... listen to things like Moneybox or you know the business*
24 *programme on Radio 4...*" (S1). This was a general awareness exercise, conducted without a
25 specific contextual purpose and unstructured in its consideration of the potential requirement
26 for information for the organisation. Allied to this, it was clear that respondents did not
27 value the information in supporting their strategy formation, as C3 noted: "*...you can look at*
28 *reference books, you can collect government statistics. I tend not to put a lot of reliance*
29 *upon that*" (C3).
30
31

32 Overall therefore there was a lack of explicit external analysis tool and technique
33 application. This is in keeping with the discussion in our theoretical framework that there is
34 a mis-match of trying to apply organisational theories on strategy in SMEs (O'Regan and
35 Ghobadian, 2004). There was no systematic approaches to data gathering and a more
36 sporadic and unstructured sensing of the macro-environment due to their inability to access
37 and use expensive information systems (Liao et al., 2003). Resource scarcity appeared to be
38 a barrier to implementing these approaches. The respondents noted that often general media
39 and experience dictated information gathering for any business decision.
40
41

42 *Internal Tools*

43 *Internal tools* of analysis were absent for the organisations and they were comparatively
44 weak in expanding upon this area in discussion. Only one organisation, C1, had deployed a
45 technique formally, for a one off exercise during a team building activity facilitated by an
46 outside party. Overall, it was clear that none of the organisations used tools and techniques
47 for internal analysis in an explicit way as part of a strategy formation process (Barney and
48 Hesterly, 2008; Grant, 2003). This is a departure for those who advocate the resource-based
49 view (RBV) is what organisations should use as the determinants for their strategy and
50 strategic position (Barney, 1995; Wernerfelt, 1984; Penrose, 1959). It was also clear that the
51 respondents had relatively little to offer in terms of expanding on this area in comparison to
52 others areas, such as concerns for financial issues or scope for strategic development.
53 However, there were indications of awareness of component parts of these techniques
54 evident, again variable across the group. Given the size of each organisation, the proximity
55 of the owner-manager to the activity could be argued as obviating the need for more formal
56 approaches as SMEs have a greater reliance on individual influence on strategy (Gibbons
57 and O'Connor, 2005).
58
59
60

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.

1
2 *How do SMEs deploy strategy tools within the strategy formation process and how does*
3 *this inform our understanding of SME strategy formation?*
4

5 Whilst there was a distinct lack of explicit deployment of strategy tools, despite some
6 awareness of these across the group, it is clear that a deconstructed form of deployment is
7 used as part of an ongoing 'sensing' of the organisational environment (Jarzabkowski and
8 Kaplan, 2015; Balogun, et al., 2014). Respondents displayed, to varying degrees, a grasp of
9 a range of external factors related to the organisation and, in an integrated fashion,
10 considered how these may impact and how they should respond. This manifestation of the
11 emergent strategy formation process linked with key decisions articulated around strategic
12 options (Thomas and Ambrosini, 2015; Mirabeau and Maguire, 2014). Rather than
13 undertaking explicit analysis of external and internal environments, SME owner-managers
14 are immersed in the actions of analysis, i.e. the strategic choice and implementation part of
15 an integrated process, which oscillates towards one aspect or the other depending upon the
16 current circumstances and timing of critical 'thoughts'.
17
18
19

20
21 *How can strategy-tools deployment in SMEs be related to the traditional macro-*
22 *economic model when establishing practice-based views of strategy processes in*
23 *organisations?*
24

25 The use of strategy tools in SMEs is part of a micro-process, micro-level and practice-
26 based approach as proscribed by sociological, humanistic and behavioural science
27 represented by more recent debates in strategy (Durand et al., 2017; Jarzabkowski and
28 Kaplan, 2015; Spee and Jarzabkowski, 2009; Gunn and Williams, 2007). An organic and
29 sensing aspect of SMEs management operational emersion and sporadic longer-term
30 strategic thought oscillate with the development of the organisation, stimulating the owner-
31 manager to undertake strategic adjustments to the strategy and direction of the organisation
32 in relation to the unfolding strategic landscape.
33
34

35 **Research Contributions to Knowledge and Practice**

36 Our final research question was stated as: *What is the potential for the deployment of*
37 *strategy tools within SMEs to enhance organisational performance?* As we address this
38 question, we would like to do so in relation to the implications for research, practice and
39 how we make our contributions to bridge the gap between theory and practice.
40

41 The suggestion is for more formulaic approaches to the deployment of strategy tools
42 within respondents' organisations. It is with the intention to enhance consideration of the
43 strategic landscape relative to the potential for application. There is a danger that owner-
44 managers may not consider the breadth of the organisation's position from a simple threats
45 and opportunities perspective, and that their awareness may therefore be limited. It may also
46 be the case, however, that they, in a resource scarce environment and through an incremental
47 approach, discard the aspects from consideration they *believe*, rightly or wrongly, they do
48 not require. Application of the fragments of tools and techniques therefore represent a
49 contextual, lean approach to deployment and one which could leave the organisation
50 exposed due to strategic 'blindspots'.
51

52 The use of strategy making tools (vs operational or short-term financial tools) was, aside
53 from within discrete intervention events (acquisition strategy or start-up), embedded as part
54 of the ongoing emergent strategy formation process and therefore associated with learning,
55 strategic thinking and cognitive perspectives on strategy formation. Within this aspect there
56 is a dominance of micro-processes, with an acknowledgement that these link to the macro-
57 environment. The positivistic and rationalist historical perspectives of the subject, therefore,
58 are generally tempered when consideration of the apparent dominance of behavioural,
59 sociological and humanistic perspectives emerge within this context. To benefit the realised
60

1
2 position, there is the thought of strategy tools as a learning device, where the competence of
3 the strategist in their application could help to improve their strategic thinking.

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

15 Overall, it is at both the micro and the macro level that opportunities for further research
16 exist and this continues to be valuable as an academic debate. One which is drawing
17 considerable interest through the strategy-as-practice research agenda where practitioners,
18 practices and praxis are examined (Jarzabkowski and Kaplan, 2015; Jarzabkowski et al.,
19 2007; Johnson et al., 2007; Whittington et al., 2006), raising the importance of accounting
20 for the connections between the detail of the process and the overall impact. This has been
21 the objective of this research and has been achieved through the detailed understanding of
22 processes operating within context and as related to the organisation and individual.

23 **Limitations and Areas of Further Studies**

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

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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	10 plus pool labour	£1M	Posted a loss	start- up
S2	Managing Director	Science related degree	Institute of Directors qualification	Service provider to Paints Industry	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