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Entrepreneurial Leadership, Capabilities and Growth

Andy Lockett, James Hayton, Deniz Ucbasaran, Kevin Mole & Gerard P Hodgkinson

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Entrepreneurial Leadership, Capabilities and Growth:

A review of existing evidence

Andy Lockett, James Hayton, Deniz Ucbasaran, Kevin Mole

& Gerard P Hodgkinson

Enterprise Research Centre and Warwick Business School,
University of Warwick, Coventry, CV4 7AL, UK.

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Executive Summary

SME growth depends upon substantive growth capabilities, which are shaped by the upstream issues of leadership and capability development. There are four main vectors of growth, which are supported by a large number of growth-oriented actions and processes. Management processes facilitating growth include those that support market penetration, innovation, new product development, new market development and internationalization. Growth is further supported by a foundation of solid general management processes without which, viable growth is less likely to occur. Management processes supporting alliances, joint ventures and M&A serve to further accelerate growth.

The key resources supporting growth capabilities include financial and intellectual capital. Financial slack allows for greater exploration, risk taking and pursuit of uncertain outcomes. Intellectual capital (intellectual property, organizational, human and social capital) is important as the acquisition and exploitation of new knowledge lie at the heart of growth.

Leader's prior knowledge of the domain (i.e. industry) and prior entrepreneurial experience exert a strong positive influence on the number of market opportunities identified. The nature and diversity of knowledge among the entrepreneurial leadership team has a positive bearing on growth, both directly and indirectly via opportunity identification.

Entrepreneurial cognition, in the absence of motivation, however, may result in knowledge not being put to the most productive use. The motivation to grow, reflected in leaders' growth intentions and goal setting, is an important determinant of growth. Fear of failure represents a potential barrier to growth.

Dynamic capabilities are central to the development of a sustainable growth path. Evidence suggests that dynamic capabilities have a positive effect on firm performance, both measured in terms of market and financial performance relative to firm's main competitors and industry averages.

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Qualitative evidence suggests that dynamic capabilities are positively linked to the substantive capability development, and that capability development is a mediator of the relationship between dynamic capabilities and firm performance.

Leaders need to be both willing and able to grow their firms. Therefore, policy should promote growth-oriented training programmes that develop leaders' entrepreneurial cognitions and motivations, as well as their knowledge and abilities. The programmes should disseminate best practice for opportunity identification, growth capabilities and goal setting. Leaders of SMEs, however, are often unable/unwilling to invest in growth. Therefore, additional support may be directed towards assisting SMEs in accumulating both the financial and intellectual capital required for growth. Also, since such investment is often motivated by important customers, policy should focus on supply chain development to indirectly promote capability building in SMEs.

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1. Introduction

Our knowledge of the factors influencing SME growth has increased dramatically over the last two decades.[1] Yet, while a number of scholars have pointed to factors influencing business growth intentions,[2] we still have limited understanding of the context and conditions under which business growth is, and is not, viewed as desirable and feasible by the leaders of SMEs.[3] For SMEs to grow requires owners and employees to engage in both leadership behaviours and management practices. We view leadership as being associated with taking an organization into the future, through the identification and exploitation of opportunities; requiring vision to produce useful change. In contrast, management relates to a set of well-known process (e.g. planning, budgeting, problem solving), which enable an organization to predictably do what it knows to do well; i.e., produce products and services of consistent quality, on budget, day after day, week after week.[4]

Growth capabilities are an outcome of leadership behaviours and management activities combined, developed through the result of interactions and complementarities among individuals, processes, and structures.[5] Existing evidence suggests that there is a positive relationship between growth capabilities (such as innovation and exporting – as reviewed in WP5) and growth, however, much less is known about the determinants of these capabilities.

In this review we focus on entrepreneurial leadership and capabilities for growth, and identify two broad forms of capabilities.[6] Substantive (growth) capabilities, which enable a firm to compete in its market on a day-to-day basis; and dynamic capabilities, which extend, modify or create new substantive (growth) capabilities. To illustrate the distinction, new product development constitutes a substantive capability, whereas, a dynamic capability would be ability to build, direct and enhance the capability for new product development.[7]

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In order to understand how growth is achieved in practice, and how policy may influence growth choices and actions within firms, we examine the upstream issues of leadership and capability development, and how these translate into a venture's growth capabilities. Research on the cognitive processes of strategic decision makers suggests that a critical element in the pursuit of growth opportunities is in the framing of strategic issues and the motivated choices of leaders and leadership teams.[8] However, knowledge of the role of entrepreneurial leadership, cognitions and motivations in SME growth remains limited.[9] We suggest that an enhanced understanding of the determinants of growth capabilities can provide new insights into the design and evaluation of policy interventions and support mechanisms.

The work complements three other work packages within the current Enterprise Research Centre (ERC) program.

- WP1 focuses on the ambition of entrepreneurs in the early stages of firm evolution. The present work addresses the coevolution of growth ambitions and the organizational capabilities necessary for realizing these ambitions.
- WP4 focuses on a venture's ability to acquire and exploit access to finance. The present work focus on the organizational and managerial capabilities that both underpin and complement such activities.
- WP5 focuses on the contribution of innovation and exporting to organizational growth. This work addresses the sources of those capabilities and the interdependencies among leadership, resources, and processes, which firms must master to achieve growth in practice.

The structure of this paper is as follows. In Section 2 we examine evidence for the processes, routines and resources underlying substantive growth capabilities. In Section 3 we review evidence relating managerial cognitions, motivations and decisions to invest in growth. In Section 4 we review what is known about the dynamic capabilities that support the sustained pursuit of new opportunities. In the final section we highlight the policy implications that emerge from our work, and motivate the research in WP2 through aligning it with the current gaps in our knowledge. Figure 1 summarizes the focal points of our review, and their interrelationships.

Figure 1: Research Framework -

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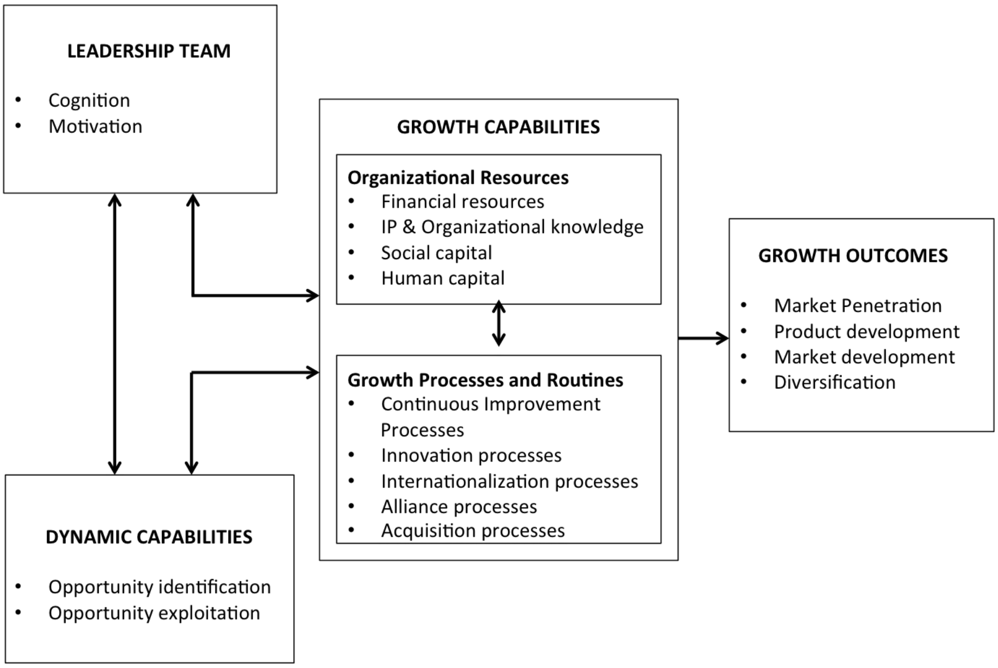

2. Substantive growth capabilities

In this section, we describe current knowledge concerning the components of growth capabilities and their contributions to firm growth. We distinguish a number of interrelated concepts, which build upon one another cumulatively. Specifically, an organization is described as having growth capabilities if over time it achieves growth along one or more dimension (e.g., size, market share, profitability, assets). While growth may well occur as a result of luck rather than judgment,[10] since our interest is in the possibility of practical and policy recommendations, we focus on deliberate growth. The notion of growth capabilities implies that the growth-creating processes can be successfully repeated over time, and form routines.[11]

Underlying growth capabilities are resources (e.g., knowledge and financial assets) and organizational processes as well as managerial decisions with respect to those resources and processes.[12] Processes transform inputs into outputs (e.g., export market identification; new product development), and very often rely heavily upon intangible resources such as knowledge, intellectual property, human and social capital. Organizational processes “evolve” over time as a result of learning-by-doing, trial and error, experimentation and improvisation.[13] When specific processes are found to be effective, they tend to be repeated and become routinized. Although the notion of routine is somewhat abstract, it may be defined as “repetitive, recognizable patterns of interdependent actions, carried out by multiple actors”.[14]

Because they are based upon learning, intangible resources, such as human and social capital, are key to the creation of new routines. Thus, growth capabilities involve combinations of complementary resources and processes. However, both managerial choices (Section 3) and the capacity for organizational learning and adaptation (i.e., dynamic capabilities, Section 4) are essential sources of the development of growth capabilities. After describing the different growth vectors in the following section, we then turn to the processes and resources that have been found to be empirically associated with firm growth.

2.1 Growth vectors

It is generally acknowledged that there are four fundamental vectors for growth (see: Figure 2) that reflect newness in the two dimensions of products and markets.[15] Growth achieved by increasing revenues from existing product/market combinations involves greater *market penetration*. In contrast, growth through the introduction of new products or services to existing markets implies *new product development*. Alternatively, existing products may be introduced to new markets through either *internationalization* or domestic *new market development* activities. Finally, firms may attempt to grow through the pursuit of new markets with new products or services. This vector for growth implies the *diversification* of organizational activities away from existing “knowns” in terms of both products and markets. Developing new ventures in unfamiliar markets is therefore the most uncertain and risky, although provides the greatest opportunity for new growth by extending a firm’s activities.[16]

Figure 2: Ansoff’s Product/Market Growth Matrix[17]

These four growth vectors may be pursued organically through internal development only, or through external, acquisitive growth. Although there are exceptions, younger and smaller enterprises tend to emphasize organic growth, while more established and larger organizations more frequently emphasize acquisitive growth.[18] Growth may also be accelerated through corporate venture capital investments, alliances and joint ventures, which create access to sources of external knowledge and capabilities.[19]

2.2 Organizational processes supporting growth

Underlying these vectors of growth there are several identifiable organizational activities and processes.[20] Examples include: internal process improvement activities; market intelligence and sensing processes; new product development processes; market development activities; joint ventures and alliance formation and management processes; merger and acquisition processes; and corporate venture capital investment activities. These and other growth-oriented processes are supported by organizational capacities for knowledge acquisition and transformation.[21]

The processes and routines that support growth develop as a result of organizational learning.[22] Initially, the establishment of a new process may be the result of an improvised or experimental response to a specific opportunity. If a process is successful it is more likely to become planned and repeated, and eventually the most successful processes develop into organizational routines. Strategic capabilities refer to a firm's capacity to routinely deploy resources including knowledge, in combination with strategically important organizational processes, to affect a desired end.[23] Thus, when growth oriented processes become effective routines they can be said to contribute to *growth capabilities*[24] and their influence is evident in one or more dimension of *growth outcome* such as increases in sales revenues, profitability, market share, employment, or assets.[25]

Research has identified a wide range of specific organizational processes underlying growth. While there is significant variation in growth processes in practice, there are also common elements and best practices.[26]

2.2.1 Market penetration, new product development and new market development

Market penetration through organic growth is dependent on the expansion and continuous improvement of existing activities. A market orientation and/or focus on continuous improvement in terms of product or process increases quality or productivity or both, which enhance the value proposition and lead to increased sales.[27] Several organizational processes are supportive of growth through market penetration, for example:

- Customer feedback processes
- Strategic positioning and pricing
- Continuous improvement processes
- Strategic supply chain management

Innovation and new product development is central where the desired growth involves new products and services, whether in existing, or new markets. Successful new product innovation is associated with organizational growth in both sales and employment and also supports internationalization.[28] Several best practice processes support the knowledge acquisition, knowledge creation, and knowledge integration required for the creation of innovative new products and services, for example:

- Customer intelligence and market sensing[29]
- Systematic acquisition and exploitation of new external knowledge[30]
- Brokering knowledge from one application or context to another[31]
- Formal new product development processes[32]

New market development and internationalization expands the potential sales of existing products into new markets as well as opening opportunities for the creation of new products and services tailored to new market demands. Systematic growth driven by internationalization rests upon several organizational processes, including[33]:

- Strategic analysis of countries, markets, competition and risk
- Entry-mode choice (e.g., exporting; licensing; joint ventures; foreign direct investment)
- Entry mode execution

The three generic vectors of market penetration, new product development and new market development themselves may be accelerated through the acquisition and exploitation of resources beyond firm boundaries in the form of alliances and acquisitions.

2.2.2 Growth accelerators

Alliances and Joint Ventures offer opportunities for firms with limited resources to access capabilities (e.g., in production, marketing, distribution) and grow more rapidly than purely internal growth would allow. Alliances and joint ventures enable risk sharing and are particularly advantageous where outcomes are uncertain.[34] Several alliance processes have been identified[35] including:

- Identification of partners
- Alliance formation and structuring
- Maintenance of productive alliance relationships
- Acquisition and integration of new knowledge and capabilities

Although much extant research on alliances and joint ventures is based on samples of larger and publicly traded firms, a significant proportion of all alliances involve large firms partnering with SMEs.[36] Furthermore, evidence indicates that management processes observed in the context of large firms (e.g., identification of partners, alliance structuring and governance, managing the relationship, integrating new knowledge) are equally relevant to SMEs.[37] However, there are unique challenges for SMEs arising from their inherent resource constraints (particularly less experience and managerial capital) and weaker bargaining power.[38]

Acquisitions offer a faster route to growth by providing access to new capabilities, markets, or both. In addition, acquisitions may enable a re-combination of resources that liberates new potential growth paths for a venture.[39] Acquisitions, however, very often fail to achieve desired results.[40] While defining and assessing performance of merger and acquisition (M&A) activities is not an easy task,[41] a meta-analysis of post-acquisition performance across 93 studies suggests that, when the declared objectives of the acquisition are taken into account, only 56 per cent of M&A are successful.[42]

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Current evidence on M&A performance is predominantly derived from the study of large publically listed companies,[43] and does not necessarily hold for smaller private firms due to the nature of the acquisition bidding process and the existence of private information in the valuation of companies.[44] One study of the population of Swedish companies with 20 or more employees found that prior acquisitive growth spurred current organic growth. These and similar conclusions from other reviews[45] have led to the development of a "process perspective",[46] whose central proposition is that the capacity of the acquiring organization for identifying and exploiting M&A opportunities rests upon a set of managerial capabilities,[47] including:

- Establishing strategic fit of targets, including industry, market, customer, financial analyses
- Assessing organizational fit – including culture, structure and human capital
- Managing integration and/or transition
- Assimilating and exploiting new knowledge and capabilities

General Management: Firm profitability precedes value-creating growth.[48] Therefore, effective management is expected to form a foundation for successful growth regardless of the vector pursued. A number of functional management processes have been associated with organizational effectiveness, which is expected to facilitate growth along any one of the vectors. For example, the HR function has the potential to play a significant role by developing human capital, influencing motivation, and communicating organizational goals in support of successful growth strategies.[49] Key strategic and functional management processes include:

- Strategic decision making and resource allocation routines[50]
- Exit routines[51]
- Financial management[52]
- Marketing and customer development[53]
- Human resource management[54]

There is, however, evidence of a “knowing-doing gap” with respect to many of these general management practices. For example, the majority of SMEs do not engage in strategic planning,[55] and therefore are unlikely to have developed clearly defined ‘value-disciplines’ (i.e., competitive strategies).[56] Similarly, there is extensive variation in the application of HRM practices in these firms.[57]

Although not conclusive, there is considerable evidence to suggest that general management processes are supportive of growth in SMEs.[58] However, further research is needed with respect to their prioritization (e.g., developing customers versus managing people; strategic versus financial management), the barriers to their development, and their interdependence with other growth processes and organizational resources. All reflect important questions that remain to be addressed in the context of firm growth.

2.3 Organizational resources

Organizational processes influence growth when they create or leverage valuable resource stocks. From the perspective of growth, the most significant categories of organizational resources are financial resources, especially financial slack,[59] and the three components of intellectual capital: intellectual property (unique product and market knowledge embedded within products and processes); human and social capital.[60]

Slack resources, particularly financial, are essential for supporting inherently uncertain entrepreneurial growth strategies.[61] Too little, or too much slack inhibits innovation.[62] Too little slack serves as a resource constraint whereby risky or uncertain, long-term projects cannot be supported while maintaining existing operations. Too much slack undermines a disciplined approach to exploratory investment that supports effective growth.[63]

Human capital, intellectual property and organizational knowledge represent different forms of intellectual asset stocks that promote the capacity to learn and profit from alliances and acquisitions[64] and are supportive of innovation and growth.[65] One study shows that in high technology new ventures in the United States, top management team human capital diversity is associated with both incremental and radical forms of process and product innovations, as well as the ability to derive value from alliances, joint ventures and acquisitions.[66] In general, existing knowledge stocks in the form of intellectual capital assets increase the extent to which acquisitions, corporate venture capital investments, and alliances can be successfully exploited to produce both profitability and growth. [67]

Social capital and the position of the firm in knowledge networks is central to the assimilation, integration and exploitation of organizational knowledge[68] and therefore can be expected to impact the effectiveness of learning-intensive growth strategies. The promotion of networking activities inside and outside of the firm has been found to be positively associated with performance in innovative organizations.[69] Furthermore, choices regarding HRM, such as training and incentives, positively influence the creation of social capital and knowledge sharing within organizations.[70]

In sum, organizational resources are an essential consideration because it is only in combination with resource stocks that specific organizational processes can create value.[71] For example, without slack financial resources, processes of innovation remain underfunded and less likely to succeed.[72] Relevant knowledge is critical to the successful exploitation of alliances and acquisitions because it creates organizational capacity needed for the absorption, assimilation and exploitation of new knowledge and capabilities.[73]

In addition to leveraging existing resources to create capabilities, successful organizational growth processes create or expand resource stocks, especially intellectual and financial capital. Hence the arrows depicting relationships in Figure 1 move in both directions. For example, acquisition processes create opportunities for financial leverage by generating new sources of organizational efficiency. Similarly, by increasing the intangible value of a firm, innovation processes can attract further investment capital. In general, there is a reciprocal relationship between organizational resources and growth processes. The combination of resources and processes jointly determine capabilities and ultimately growth.[74]

2.4 Summary

Although it is dispersed across a range of literatures and sub-disciplines in strategy, entrepreneurship, international business, organizational theory, economics and management, the evidence suggests a number of processes and routines that support organizational growth. The major categories that we have identified here include processes for continuous improvement, innovation, internationalization, alliance formation and acquisition. Growth processes are supported by financial and intellectual capital. They are also a source by which these resource stocks are enhanced. However, there remains a substantial gap in our understanding of how these processes and routines develop the context of SMEs.[75]

There appears to be an emerging consensus that growth-oriented routines evolve as a result of learning from experience and from deliberate experimentation.[76] Repeated use of successful processes, and rejection of unsuccessful ones, provides a foundation for growth capabilities. However, growth capabilities involve more than the creation and maintenance of effective routines and the creation and exploitation of stocks of resources: entrepreneurial leadership is an essential component.[77] It is the leadership (individuals or teams) that must interpret or frame the environment,[78] make decisions about the desired goals, and therefore where to invest time, attention and resources, and the extent of risk that is acceptable or necessary. These considerations reflect the growth intentions of the leadership team.[79]

3. Leadership: cognition and motivation

Entrepreneurship and the growth of a business requires human agency. Leadership is central to understanding the growth of entrepreneurial ventures since growth opportunities cannot be identified and exploited without the facilitation of individual and collective efforts.[80] The leaders of entrepreneurial ventures can have a strong imprinting effect on the venture.[81] The effects of leadership will be particularly pronounced in an entrepreneurial setting where there are fewer structures and norms surrounding appropriate behaviour than in established organizations.[82] Consequently, leaders in SMEs may have greater discretion than those in established organizations, and thus their leadership is likely to have greater impact on firm behaviours and outcomes.

In many SMEs, leadership is a collective activity. Thus key decisions that affect the ability to exploit current opportunities as well as identify future opportunities are often made by a team. The values and cognitive profile of the leadership team has a powerful influence on firm strategies and outcomes.[83] In order to understand the effects of leadership on the growth of SMEs, we propose that greater attention should be given to the cognitive and motivational profile of the leaders of SMEs.

3.1 Entrepreneurial cognition

Rooted in the field of cognitive psychology, entrepreneurial cognition relates to the mental models "people use to make assessments, judgments or decisions involving opportunity evaluation, venture creation, and growth".[84] The cognitive profile (i.e. mental models) of key decision makers have been shown to influence the formulation and implementation of organizational strategies.[85] Mental models are shaped, to a large extent by knowledge and experience.[86]

In the domain of entrepreneurship, knowledge and experience have been found to influence the entrepreneurial process, particularly with respect to opportunity identification. Prior knowledge of the domain (i.e. industry)[87] and prior entrepreneurial experience have the strongest positive influence on the number of market opportunities identified.[88] More specialist forms of experience such as technical and marketing experience can hinder opportunity identification, though entrepreneurial experience can alleviate this negative effect.[89] Prior entrepreneurial experience allows entrepreneurs to develop broader and more complex mental models which allow them to “connect the dots” between seemingly disparate information.[90] The ability to identify a greater number of opportunities allows entrepreneurs to “look before they leap”.[91] That is, they have a wider ‘choice set’ and can select the best opportunities to pursue. Indeed, entrepreneurs who identify a ‘choice set’ of market opportunities prior to first entry derive performance benefits by doing so, albeit at a diminishing rate.[92] Further, founders who identify a greater number of market opportunities are more likely to engage in diversification within 5 years after the initial entry into the market.[93]

SMEs lead by teams may enhance their opportunity identification capability by being able to draw on a broader and more diverse pool of knowledge and experience. Though evidence is limited, teams comprising both specialists (i.e., those with technical and marketing experience) and generalists (i.e. those with managerial and entrepreneurial experience) identify more opportunities than more homogenous teams comprising predominantly specialists or generalists.[94] The composition of the leading team can also affect growth directly and indirectly. Studies show that knowledge diversity within the team can contribute to team learning,[95] the acquisition of resources needed for growth,[96] and growth itself.[97] Yet, team diversity can be a double-edged sword. Diversity can promote functional (i.e. task oriented) conflict which is focused on judgmental differences about how best to achieve common objectives.[98] Diversity may however lead to dysfunctional conflict which is personally oriented, focusing on interpersonal dislikes and disaffections.[99] The benefits of team diversity for SME growth are not automatic. They are contingent on team cohesion (i.e. the degree to which members of the group are attracted to each other)[100] and strategic consensus (agreement on key goals and strategies within the team).[101]

The above evidence suggests that the nature and diversity of knowledge among the leadership likely has a bearing on growth both directly and indirectly via opportunity identification. Although not discussed here, the prior experience of team members can also influence the ability to access resources. For example, evidence suggests that prior entrepreneurial and industry experience can influence (not always positively) access to human, social and financial resources.[102] While our review attests to the important role played by the leadership team in SME growth, our review also points to the need for further research.

First, the knowledge and experience of team members as well as the diversity of knowledge within the team serves only as a proxy for cognition and cognitive diversity, respectively. Individuals and groups vary in terms of how they make sense of experience, and in terms of their ability to integrate and utilize knowledge, which is likely to be influenced by their cognitive processing strategies. While research is emerging on the cognitive processes of new ventures,[103] we see valuable opportunities to shed light on the cognitive strategies deployed by teams and their individual members and how this relates to SME growth.

In the area of strategy research, scholars disagree on the extent to which there can and should be consensus among the various team members' mental models.[104] Mental models, which are shared with respect to the team's task and environment,[105] can enhance team member coordination and effectiveness in complex tasks that are unpredictable, urgent, and/or novel.[106] However, we are not aware of any research that has explored shared mental models in the setting of SME growth.[107] We conjecture that the extent to which entrepreneurial team members' mental models are shared in terms of venture growth will influence investment in growth and eventually growth itself. Yet, if entrepreneurial team members' mental models are too similar in terms of how they see the world, they may identify fewer growth opportunities, and may struggle to identify alternative ways of exploiting growth opportunities. While there have been calls to empirically explore the optimal level of cognitive diversity and integration in new venture teams,[108] this requires empirical investigation.

Leaders play an important role in interpreting and framing information from the external environment. Cognitive research has shed light upon the process of categorization of strategic issues as opportunities versus threats. When environmental cues are ambiguous, then situations are more likely to be categorized as threats than opportunities.[109] Leaders are quick to acknowledge a threat and quite reluctant to disavow the presence of a threat. In contrast, they are much more reluctant to acknowledge an opportunity, and easily dissuaded of the presence of an opportunity by additional ambiguous information. Furthermore, it has long been established that people will invest more to avoid a loss than to obtain a gain.[110] In addition, once an issue has been framed as an opportunity or threat, this categorization becomes “sticky” and influential in the wider organization. For example, subordinates are less likely to report information that conflicts with the dominant interpretation. Thus, if categorized as a threat, it becomes less likely that contradictory information will be shared by less powerful individuals in the organization, even if this information suggests that there is potential for gain rather than loss.[111] The framing of strategic issues is influenced by both contextual factors such as current economic climate, and individual differences and dispositions such as self-efficacy, locus of control, or optimism.[112]

3.2 Entrepreneurial motivation

The above evidence suggests that the knowledge and experience profile of the leader and leadership team can influence growth directly and / or indirectly. In the absence of motivation, however, knowledge may not be put to the most productive use.[113]

Perceiving and acting upon opportunities for growth is based, at least in part, on intentional behaviour.[114] Intentions capture the motivational factors that influence behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert in order to perform the behaviour.[115] Entrepreneurs differ in terms of their orientation and intentions towards growth.[116] Further, growth intentions (broadly defined to include aspirations, expectations) predict growth.[117] The entrepreneurial intentions literature suggests that intentions depend on two main antecedents; perceived desirability and perceived feasibility.

Perceived desirability has been measured by the individual's attitudes to incomes, to risk, to decision-making autonomy, work effort and work enjoyment.[118] Growth oriented entrepreneurs have been found to have a more negative attitude towards work enjoyment (than more independence oriented entrepreneurs)[119] and tend to attach more significance to financial success.[120]

Perceived feasibility is frequently measured by ‘entrepreneurial self-efficacy’ (i.e. the strength of a person’s belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship).[121] Put simply, self-efficacy is task-specific self-confidence.[122] Bandura[123] and subsequent meta-analyses by Judge and Bono[124] point to the central role of self-efficacy in causing high performance through its impact on motivation. Self-efficacy enhances focus, direction, persistence, and intensity of action. Without self-efficacy, little will happen.[125] Entrepreneurs with high self-efficacy believe that they have all of the resources within themselves, and at hand, to accomplish their task goals.[126] Entrepreneurial self-efficacy has been found to be a strong predictor of growth orientation[127] as well as both the short-term and longer-term growth of new ventures.[128]

Among motivation theories, one of the most widely accepted theories is goal setting theory[129]. Evidence shows that specific, challenging goals result in higher performance than vague and / or easy goals (given adequate commitment, feedback and knowledge).[130] This has been found to hold true for SMEs.[131]

The evidence above suggests the motivation to grow, reflected in growth intentions and goal setting, is an important determinant of growth. What is less clear from the evidence is how collective motivation emerges in SMEs. We know that entrepreneurs vary in terms of their motivations for engaging in entrepreneurship (e.g. financial wealth, autonomy etc.). This has implications for the extent to which growth is seen as desirable and as a result, growth intentions. If some team members are primarily motivated by autonomy and control and others by financial return, growth ambitions may not be aligned. Further, growth intentions are influenced by feasibility. If only some team members believe they have or can access or develop the necessary resources and capabilities for growth, overall growth intentions may not be high enough to drive growth behaviours. Some individual team members may have high entrepreneurial self-efficacy, and others not. We do not yet know what implications of heterogeneity with respect of entrepreneurial self-efficacy may be. Further, there is an opportunity to explore the development and effects of collective entrepreneurial efficacy in SME leadership teams.

Finally, in light of the evidence that setting challenging goals enhances growth, how do leadership teams set goals? What is the relationship between individual goals and motivations for the business and team goals? What is the role of leadership in setting goals? The limited evidence on the leadership of new ventures is mixed. Directive leadership (whereby leaders instruct and command followers to carry out designated tasks, assign specific non-negotiable goals, and use contingent reprimands to facilitate cooperation from group members) was found to be particularly beneficial to heterogeneous teams (in terms of functional and educational background as well as skills) operating in dynamic environments. In contrast in stable industry environments, heterogeneous leadership teams benefited from more empowering leadership (which encourages selfrewards, self-leadership, opportunity thinking, participative goal setting, and independent behaviour by team members).[132]

Newly emerging research examines the effect of experiences of failure[133] and also the psychology and behavioural impact of fear of failure. Most research on the impact of fear of failure focuses on the decision to start an entrepreneurial venture rather than the decision to grow an established venture.[134] While the body of existing evidence suggests that fear of failure will inhibit entrepreneurs from initiating a venture, recent evidence suggests that fear of failure can also motivate greater striving by venture founders.[135] This preliminary research, involving in-depth interviews with 65 entrepreneurs in the UK and Canada has identified antecedents, moderators and response strategies employed by entrepreneurs. However, this research has not yet been extended to the specific question of decision making pertaining to growth. Nevertheless, it may be anticipated that several of the same concerns that relate to fear of failure in initiating a new venture, such as financial security, the scale of commitments, and perceived ability of the business to execute[136], would extend to decisions to further grow an existing venture. Similarly, possible moderators of the effect of these sources, such as personal traits of the decision maker, social support (both socio-emotional and instrumental)[137] and prior experience[138], would be expected to generalise to the growth decision context. Our understanding of inhibitors of growth decisions is very limited at this time.

Further research into the psychological barriers as well as the drivers of growth decisions is an important objective for future research.

3.3 Summary

In order to understand the effects of leadership on the growth of SMEs, greater attention needs to be directed towards the cognitive and motivational profile of the leader(s) of SMEs. In terms of empirical evidence, we are able to draw the following conclusions.

Prior knowledge of the domain (i.e., industry) and prior entrepreneurial experience have a strong positive influence on the number of market opportunities identified. Prior entrepreneurial experience allows entrepreneurs to develop broader and more complex mental models which allow them to "connect the dots" between seemingly disparate information and better understand the risks and consequences of failure.

The nature and diversity of knowledge among the entrepreneurial leadership team has a positive bearing on growth, both directly and indirectly via opportunity identification. The benefits of team diversity for SME growth, however, are not automatic. The benefits are contingent on team cohesion (i.e. the degree to which members of the group are attracted to each other) and strategic consensus (agreement on key goals and strategies within the team).

In the absence of motivation, however, knowledge may not be put to the most productive use. Evidence suggests that the motivation to grow, reflected in growth intentions and goal setting, is an important determinant of growth. Evidence shows that specific, challenging goals result in higher performance than vague and / or easy goals (given adequate commitment, feedback and knowledge), which has been found to hold true for SMEs. Yet, we know less about how intention formation and goal setting occurs in the presence of a leadership team. Similarly, while related research suggests specific predictors, moderators and outcomes with respect to the

fear of failure, further behavioural research is needed to understand the impact of inhibitions on growth decision-making.

4. Dynamic capabilities

In the early stages of the growth of a firm, a founder or founding team undertakes entrepreneurial behaviours such as the generation and championing of an entrepreneurial idea, and the acquisition of needed resources. However, firms benefit from being entrepreneurial long after the initial founding of the venture.[139] Entrepreneurship promotes the identification of new sources of opportunity and the ability to exploit those opportunities. Importantly, as firms grow in size, the behaviours needed to sustain entrepreneurship may become more broadly distributed:[140] Specialist staff in R&D or elsewhere in the organization may become an important source of innovative ideas and new technological knowledge; middle managers may be asked to champion ideas; while the top management team is responsible for selecting and sponsoring those ideas with the greatest potential.

The creation of dynamic capabilities within the wider organization requires the development and refinement of routines for identification and exploitation of opportunities.[141] Those organizations that develop the ability to repeatedly and proactively identify opportunity, and engage in sustained regeneration of their knowledge and capabilities, benefit from greater growth and sustained long-run performance, than more conservative firms.[142] In smaller and less established ventures, dynamic capabilities may be based on the skills and knowledge of an entrepreneur or entrepreneurial team.[143]

In focusing on the role of the entrepreneur and entrepreneurial team, we suggest that dynamic capabilities relate to their *perception* of opportunities to productively change existing routines or resource configurations, their *willingness* to undertake such change, and their *ability* to implement these changes.[144] We define dynamic capabilities as “the abilities to reconfigure a firm’s resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s)”.[145]

In synthesizing insights from the strategy and entrepreneurship literatures we suggest that there are two main types of dynamic capabilities. First, is the capability of identifying new opportunities (which Teece terms sensing). Second, is the capability to exploit an opportunity through the mobilization of resources to amend and/or develop new capabilities (seizing).[146]

4.1 Opportunity identification

Although many distinctions have been suggested in the literature between opportunity identification, recognition, perception or creation,[147] we use the term “opportunity identification” to indicate the ability to locate value in some market or technological condition through the application of a new means-end relation framework that is unknown or unavailable to other actors.[148] An opportunity identification capability is one of the signature capabilities of entrepreneurial firms, which are more adept at identifying potential for “fit” between available resources (inside or outside of the firm) and market needs.[149]

Opportunity identification is framed by the firm’s productive opportunity set, which Penrose defines as “all of the productive possibilities that its entrepreneurs see and can take advantage of”.[150] That is, the effective set of productive opportunity is determined by both entrepreneurial perceptions of market demand (latent and actual) and the resources at their disposal. In terms of perceptions of resources, we highlight two main factors. First, entrepreneurs may be able to see that resources have different uses, which keys into the concept of resource duality, with resources and products/services being two sides of the same coin.[151] Second, resources are seldom valuable in isolation, and so it is unlikely that we can attribute the success of a firm to one specific resource. Consequently, we need to examine combinations of resources. By combining resources firms may be able to add value if they are: complementary,[152] related,[153] or co-specialized[154] in nature. Re-thinking the functionality of resources, and re-combining resources, may provide important new opportunities.[155]

The ability of a firm to identify new opportunities for value creation is closely tied to the process of knowledge acquisition.[156] The discovery of entrepreneurial opportunities is aided by the creation of new information channels between the organization and the environment.[157] Establishing networks of connections, internally and externally with customers, suppliers and beyond, and creating “information corridors” facilitates the acquisition of new information that contributes to opportunity identification.[158] Extensive networks allow the organization access to more information and consequently enhance the ability to identify new opportunities. All else equal, organizations that have extensive networks are expected to identify more opportunities.[159]

4.2 Opportunity exploitation

After discovering an opportunity, it is necessary to integrate the new knowledge with existing knowledge stocks, products, processes or strategies in order to exploit it.[160] This process is likely to involve multiple individuals within the organization.[161] After its discovery, an idea or opportunity must undergo a process of empirical validation by receiving the evaluation of a network of people that the entrepreneur creates in order to get his/her idea accepted.[162] The idea may also need to be aligned with organizational goals and activities, or alternatively, the organizational strategy may be adapted to the new opportunity.[163] Therefore, the integration of an entrepreneurial idea is a process that moves from the individual to organizational level.[164]

The involvement of others is necessary in order to acquire resources for developing and testing the opportunity for value creation potential.[165] An opportunity has to be proven viable even before obtaining resources for its preliminary development.[166] In order to receive a positive evaluation and get access to resources, entrepreneurial ideas must be championed throughout the organization.[167] Champions engage other organizational members in the technical definition and development of an entrepreneurial idea and seek legitimacy and sponsorship from the key resource holders and decision makers within the organization.[168] In this way, new knowledge is integrated into a firm's competences, renewing or extending them.[169]

Social interactions, as well as organizational routines, are particularly important in order to integrate knowledge that is more tacit in nature.[170] Knowledge exchange requires an individual has the opportunity to gain access to other parties, the motivation to exchange knowledge, and the ability to combine knowledge.[171] Therefore, managerial processes and systems, organizational structures, culture and values are all potentially influential upon the integration of new knowledge into products or services.[172]

4.3 Summary

Dynamic capabilities enable a venture to move from ad-hoc opportunity identification and exploitation, through developing a systematic and routine-based process for promoting the sustainable growth of a venture. In terms of empirical evidence scholars have measured dynamic capabilities in many different ways, which makes the aggregation of evidence difficult. However, we are able to draw the following conclusions.

First, there is both quantitative and qualitative evidence to suggest that dynamic capabilities have a positive effect on firm performance, both measured in terms of market and financial performance relative to firm's main competitors and industry averages.[173] Second, qualitative evidence suggests that dynamic capabilities are positively linked to the substantive capability development.[174] Third, qualitative evidence suggests that capability development is a mediator of the relationship between dynamic capabilities and firm performance.[175]

We note, however, that there is a noticeable lack of research addressing the micro-process question of "how" managers or organizations can enable dynamic capabilities and improve the organization's ability to perform.[176] Furthermore, existing empirical research has tended to focus on larger more established organizations, with few studies explicitly focused on dynamic capabilities and SMEs. Surprisingly little is known about how dynamic capabilities evolve in emerging ventures.[177] Most importantly, we know very little about the contingencies that allow some new ventures to learn, and build dynamic capabilities, while others do not. We frame the contingencies in terms of the individual entrepreneur and the entrepreneurial team's cognition and their intentions for building high growth enterprises.[178]

5. Conclusions, policy implications and future research

In this section we outline the areas of consensus relating to substantive growth capabilities, leadership and dynamic capabilities. We then employ these insights to develop some policy implications. Finally, we outline the gaps in our knowledge, and motivate the research programme for WP2.

5.1 Areas of Consensus

Substantive Growth Capabilities: The evidence is quite robust that firm performance and growth are supported when organizations successfully perform key processes including: continuous improvement; market orientation; internationalization and market development; alliance and joint venture formation and management; M&A processes; and general functional and strategic management. The weight of evidence suggests that these practices benefit SMEs in broadly the same way that they benefit larger enterprises. In some cases specific processes are associated with particular growth vectors (e.g., the process of strategic analysis of countries and markets is relevant primarily to internationalization). In other cases, processes such as innovation can support growth along more than one vector. Effective general management such as human resource management processes provide a foundation for all forms of growth where it contributes to profitability.[179]

Whether intentionally pursuing growth, or finding serendipitous opportunities for growth along one or more vector, there are identifiable and most significantly trainable best practices. The evidence suggests that SME leaders could therefore evaluate their organization's capacity according to these best practices and allocate resources for their development. However, the evidence also suggests that leader cognitions and motivations are a significant driver of the decision to make such resource allocations.

Leadership (Cognition and Motivation): Human capital, both in the form of education and experience, are an important influence upon entrepreneurial behaviour in organizations,[180] and are expected to support growth. In addition to the level of human capital, the diversity of human capital in teams is important for growth.[181] Diversity in terms of education, experience and functional background promotes cognitive diversity, in terms of the pool of knowledge, ideas, and mental frameworks, available to decision makers. However, to harness the benefits of team diversity, leaders will need to be able to overcome the potential for emotional conflict, which is inherent in diverse teams.[182]

Managerial cognition impacts the development of substantive and dynamic capabilities.[183] Leader attention, and the way in which strategic issues are framed and communicated influences resource allocation decisions and the flows of contradictory information in organizations.[184] Like all human decision makers, strategic decision makers tend to be loss averse and this leads to a tendency to frame ambiguous situations as sources of threat rather than opportunity, all things equal.[185]

Evidence on the cognitive and social cognitive processes underlying individual motivation with respect to entrepreneurial goals is robust. This evidence indicates that feasibility and desirability are key beliefs influencing individual behavioural intentions with respect to action under uncertain conditions, such as the decision to grow and exploring entrepreneurial opportunities. Human capital positively influences feasibility beliefs, and the cognitive framing of a situation impacts the desirability of specific actions.

There is less evidence on the inhibitors of pursuing growth goals, especially the effects of fear of failure. New evidence suggests that these inhibitions are the result of a complex set of factors, including financial risks and the scale of commitments, concerns over personal ability and the capabilities of the venture team.[186] This early research also suggests factors that can reduce fear and strategies adopted by experienced entrepreneurs to overcome fear and anxiety. Of these, the pursuit of advice through social ties and mentoring are among the most frequently mentioned. There is a significant opportunity for understanding how psychological factors impede as well as encourage selection of, and striving towards growth goals. Such an understanding holds potential for policy and practical interventions to mitigate psychological barriers to growth.

Dynamic Capabilities: Dynamic capabilities are a well-established phenomenon, which describes organizations' capacity for proactive self-renewal and the successful adaptation to changing circumstances. Organizational capabilities for opportunity identification and exploitation have been found to support multiple measures of performance, particularly over the medium-term. As with substantive capabilities, dynamic capabilities depend upon the investment of time, attention and resources by leaders,[187] and involve specific and identifiable organizational processes and resources.[188]

5.2 Policy implications

This review has highlighted the specific organizational processes that form the heart of growth capabilities. Knowledge of such processes should form the core of growth-focused management development interventions. However, resource constraints mean that SMEs tend to invest less in management development than larger organizations.[189] There is evidence that SMEs often lag behind best practice because owners and managers of SMEs are unable or unwilling to make the necessary investments of time or resources.[190] Perceived competition is not the main reason firms give for adopting new practices.[191] However, SMEs may be more likely to upgrade their skills and capabilities when encouraged by important customers.[192] Therefore, public policies focused on encouraging supply chain development will, in some cases, be expected to indirectly promote capability building in SMEs.

Entrepreneurial Leadership, Capabilities and Growth

This review suggests that entrepreneurial leadership (including senior management) has consistently been identified as a key driver in the creation and maintenance of dynamic and substantive growth capabilities.[193] Leaders need to provide the necessary time, resources and incentives for other members in the organization to engage in knowledge search, knowledge creation, and knowledge sharing.[194] However, these activities are resource intensive, and take key staff away from their day-to-day operational responsibilities.

If government policy is seen as a tool for direct intervention for not only the development of leadership skills, but also their application, then it would need to alter incentives (or costs) for SMEs so that they are more inclined to invest in long-term, uncertain activities. Rather than direct policy intervention, indirect interventions may be more appropriate for altering the perceived value of these investments. Large customers such as original equipment manufacturers play an important coordinating role in their supply chains, which can serve to increase learning and innovation.[195] Policy that supports the development of key supply chains is likely to positively impact SME investments in knowledge-based capabilities that are required for growth.

Financial resources and intellectual capital are key components of growth capabilities. Although SMEs are typically resource constrained, the evidence is quite consistent with respect to the need for a degree of financial slack in order to facilitate innovation and exploration of uncertain opportunities.[196] Therefore, policies promoting access to finance and that encourage lending to SMEs are likely to be useful for developing growth capabilities.

Intellectual capital assets (intellectual property, human, and social capital) are critical underpinning resources for the knowledge intensive processes required to continuously improve current practices, or to learn about new products and market opportunities. Two strands of policy are relevant. First, sustained investments in knowledge and skills, both technical and managerial, are expected to undergird the development and deployment of the needed human capital. However, care is required to ensure that these policies impact the SME sector as well as large organizations.[197] Policies such as the Growth Accelerator program are expected to be valuable in this regard. The Growth Accelerator programme relies on intensive, individual face-to-face coaching which is an effective mechanism for disseminating knowledge to SME managers.[198]

Second, knowledge-oriented policies such as Knowledge Transfer Partnerships, and Innovation Vouchers are potentially valuable in creating the inter-organizational knowledge sharing networks that serve as inputs into evolving capabilities. Previous work on knowledge transfer includes KTPs and whilst these have been shown to have positive returns, the programmes have been captured by a small group of universities who account for most of the output. The application and approval process is widely criticised for being time-consuming and bureaucratic. There remains scope to improve efficiency and reduce administration costs. Nonetheless, anecdotal evidence suggests high levels of satisfaction amongst businesses, academics and associates.[199]

Researchers have emphasized the importance of adviser networks to assist firms in developing capabilities.[200] Bishop and colleagues argue that the links between universities and firms offer many opportunities to develop capabilities such as problem-solving, although this appeared relevant only for those firms that had some R&D capability.

The length of time that support is provided makes a significant difference to the type of outcome. Short-term support often reflects a view that SMEs need to be encouraged to try a specific approach as a “taster”.[201] Such an approach tends to address problems presented by the business owner managers, and the support is provided in response to that. The advantage of this approach is that the costs are kept low, and because of this, the benefits accrued can be widely spread. However, there are limits to the effectiveness of the “taster” approach. Evidence from evaluations of

Business Link showed that more intensive interventions were more effective in producing almost three times as many jobs than the average intervention, even when accounting for the extra costs involved.[202] The intensive interventions tend to rely on trusted advisers, who need to have knowledge of the firm's internal processes,[203] who may uncover underlying problems rather than the initial problems presented by the owner managers. This more intense intervention has been seen to have good long term results.

Longer-term support and information needs to be augmented by a process that enables the firm to take stock. Internal reflection can be facilitated by the business planning process. Although there have been arguments suggesting that business plans have a mainly symbolic use[204] there is some evidence that they are positively associated with performance in new businesses.[205] The process of business planning may be as important as the plan that is produced. One opportunity for policy intervention may consist of a combination of business reflection, brought on by business planning and supported through information provided by networks and advisers.

In terms of the specific development of substantive growth capabilities, leadership (cognition and motivation) and dynamic capabilities we draw the following conclusions:

- Policy interventions should be focused on the ways in which training (e.g., Investors in People, Growth Accelerator), information dissemination and business support (e.g., UKTI) might impact these drivers of motivation. Feasibility beliefs, and therefore individual growth intentions, are likely to be positively influenced by enhanced understanding of the drivers of growth and the mechanisms through which these can be developed. In this literature review we have identified both processes and resources, which are associated with the development of substantive growth capabilities and dynamic capabilities. Support for training and the dissemination of this knowledge would be expected to increase motivation via its impact on individual feasibility beliefs.

- Policy interventions for developing substantive growth capabilities should focus on developing managerial understanding of alternative growth vectors, and the necessary processes and resources to support them. This knowledge can also be expected to influence individual motivation to grow since feasibility beliefs are an important element in motivation and growth decisions.
- The existing work on strategy and knowledge within SMEs found that many owner-managers spend a great deal of time working in their business but managers found little time to reflect on their business. Prior studies have extolled the virtues of creating the opportunity to reflect on their business[206]. One extreme way in which business owners find time to reflect on their business is if that business fails. Business failure as a crisis can promote learning and reflection[207] and can use the information to revise their knowledge. However, this is an extreme example of how learning may occur. The policy challenge is to create the opportunity and space to provide time away from the day to day concerns of the business for the owner managers to reflect on and develop their going concern: for example, one way to create the time for reflection maybe to mandate a basic reflective process as a pre-cursor of access to other support.
- Policy interventions for enhancing dynamic capabilities should focus on knowledge exchange opportunities, and building organizational capacity for exploiting these exchanges. Policies aimed at promotion of knowledge exchange opportunities are expected to enhance opportunity identification. For example, policy may link focal firms with customers, suppliers, universities, competitors or unrelated organizations (e.g., clustering initiatives; KTPs; university partnerships; industry and trade groups).
- In terms of an overall educational training and support, there is an argument for providing programmes that are specifically focused on

substantive (growth) capabilities, leadership and dynamic capabilities (e.g., the Warwick Business Innovation and Growth Programme; Goldman Sachs 10,000 Small Businesses Programme). Such programmes should run in parallel to the Growth Accelerator in providing educational support for entrepreneurs in setting and achieving their growth aspirations.

- Policy interventions that focus upon supporting lead customers and original equipment manufacturers can also serve a valuable role because these firms coordinate knowledge and drive change across their supply chains.[208] Major customers may provide the strongest incentive for developing the capabilities that support growth in SMEs.[209] Therefore, conditional incentives and other policies that encourage investments in supply chains by lead customers are expected to exert a significant influence upon SME development and growth.

The differences between smaller and larger SMEs generally consist of the formality of internal processes.[210] The empirical evidence suggests that issues surrounding leadership, dynamic capabilities, and resources are relevant to all firms from the largest to the smallest. The changes to growth processes and routines may at first sight be more relevant to mature SMEs; nonetheless questions about where and how to compete are fundamental to all businesses[211].

5.3 Areas of Contention

From our review of the literature we know that: (i) organizational capabilities, based upon specific processes, financial and intellectual capital promote growth; (ii) leadership (in terms of cognition and motivation) directly and indirectly shapes firm growth; and (iii) dynamic capabilities enable a firm to enhance and develop capabilities. However, much remains unknown about the precise mechanics of these relationships. We view the main areas of continued uncertainty as follows:

- What shapes entrepreneurial cognition and growth intentions in SMEs? Are there systematic differences across individuals in their growth cognitions and intentions? Are these differences malleable, such that they may be altered by training or incentives? What are the situational drivers of cognitions that are relevant to growth intentions, and do these differ systematically, for example across sectors or business types?
- How do entrepreneurial cognition, and growth intentions, shape the development of dynamic capabilities for supporting sustained growth? A similar set of questions applies to the development of dynamic capabilities as for substantive capabilities.
- How do dynamic capabilities evolve in SMEs? While cross-sectional evidence has supported the critical role of dynamic capabilities, knowledge of their evolution over time is all but absent. While these are understood to be the result of learning processes, few studies have examined their development longitudinally.
- How do dynamic capabilities lead to the re-shaping of the venture's substantive capabilities for growth? Studies have generally ignored the coevolution of organizational leadership, resources, and processes. As a result, our understanding *how* growth is achieved is constrained and possibly takes an overly simplistic, linear view of a complex phenomenon.

5.4 Addressing Areas of Uncertainty

The areas of uncertainty we will focus on relate to the micro-processes that underpin firm growth, which means that there are no existing data sets that we can employ to generate new insights into the uncertainties. WP2, therefore, is designed around two phases of primary data collection:

- A qualitative phase, based on a series of in-depth case studies, which will be employed to help us to inductively generate new insights and develop a model of cognition and firm growth.
- A quantitative phase, based on a large scale survey of around 500

firms, through which we will validate our model of cognition and firm growth. In developing the sampling frame we will draw on existing data sets, including the GEM screening data, which will also provide basic background accounting and governance data to help overcome potential problems with common methods bias.

From our empirical work we will develop two streams of insights. The first will relate to entrepreneurial cognition and growth intentions, focusing on the effects of team composition and leadership. The second will rete to entrepreneurial cognition, entrepreneurial intentions and the development of dynamic capabilities.

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Centre Manager
Enterprise Research Centre
Warwick Business School
Coventry, CV4 7AL
Enquiries@enterpriseresearch.ac.uk

Centre Manager
Enterprise Research Centre
Aston Business School
Birmingham, B1 7ET
Enquiries@enterpriseresearch.ac.uk

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