

CEIG Report No.3/2023



‘TRANSFORMATION TRIANGLE’ FOR SME PRODUCTIVITY AND GROWTH

Deniz E. Yoruk

Birmingham City Business School
Centre for Enterprise, Innovation
and Growth (CEIG)

Mark Gilman

University of Derby
Regional Economic Observatory

February 2023

CONTENTS

1. Introduction	3
2. A new perspective on SME Growth	9
2.1 SME Characteristics: Particular attention to Static SMEs	9
2.2 SME Needs: Strategic Direction and Technological Capabilities.....	10
2.3 Continuum of Growth States	11
3. A Growth Framework for SMEs: Transformation Triangle	12
3.1 Why this framework?.....	12
3.2 Strategy Transformation	13
3.2 Mindset Transformation	18
3.3 Digital Transformation	23
4. What can regional economies do to help SMEs implement Transformation Triangle (Figure 7)?	30
References	33
Appendix	35

1. INTRODUCTION

In the aftermath of the Covid-19 pandemic and Brexit, there is an increased urgency to focus on how we can help SMEs to address the crucial issues of productivity and growth against a growing economic trajectory of soaring energy prices, supply chain problems, labour/skill shortages, and increasing inflation and interest rates.

To date, most of the empirical research has focused on factors that enable or hinder SME growth. While there is a robust evidence base, studies do not particularly bridge the gap between this evidence base and its practical use through applied frameworks. This link is important not only to support managerial decision-making but more importantly for policymaking. This study is an attempt to develop a comprehensive growth framework that is built on the findings from our research while taking the most recent economic developments into consideration.

Based on an analysis of key economic data on SMEs in the West Midlands, [our first report](#) highlights a paradox that was happening in the West Midlands economy up until the start of the Covid-19 pandemic.¹ We call it a ‘drag effect of SMEs’ in the West Midlands’ burgeoning economic growth since 2012. We have shown that while the West Midlands is among the few regions in England (with London and East England) to successfully surpass the adverse economic impact of the 2008 Global Financial Crisis (GFC), it has nonetheless continued to suffer productivity problems like the rest of the UK.


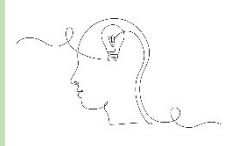

Our secondary data analysis of the West Midlands SMEs substantiated the results of an ONS study on the differences in labour productivity across the regions in 2015 (ONS 2018a).² The ONS study displayed the West Midlands as the only region in England presenting an unhealthy balance between positive but small size industry-mix effects on productivity and large and negative effects on firm-level productivity.³ Our findings confirmed that the shift from production to services sector in the last twenty years might have contributed to improving the West Midlands’ economy, but in terms of productivity, the outcome is not so conclusive. Our findings also established the link between low firm productivity in the West Midlands and the SME economy (i.e. the latter being less productive than it could have been), which called for an exploration of the shortcomings within the SME sector that might cause a drag effect.

¹ For the detailed analysis of the origins and the conceptualisation of the drag effect of SMEs in the West Midlands, Yoruk and Gilman (2021a).

² The Figure A.1 in the Appendix sums it up visually.

³ In Figure A1, while Scotland presents a similar trend, as opposed to Scotland, in the West Midlands the rising productivity level due to the changing industry structure is not sufficient to reverse the drag effect created by the low firm-level productivity.

Table 1. The difficulties SMEs experience and their association with three key areas

KEY AREAS FOR CHANGE	IMPEDIMENTS TO GROWTH
<p>STRATEGY</p> 	<p>BUSINESS STRATEGY</p> <ul style="list-style-type: none"> • creating an effective competitive advantage • efficient management of finance and investments • making use of performance measures to develop appropriate and efficacious strategies for the relevant business operations <p>MARKET STRATEGY</p> <ul style="list-style-type: none"> • promptness in spotting opportunities and acting on them • operationalising expansion into international markets <p>INNOVATION STRATEGY</p> <ul style="list-style-type: none"> • transforming the abstract notion of innovation (what innovation really is) into concrete products and services (how it is managed) <p>NETWORKING STRATEGY</p> <ul style="list-style-type: none"> • converting their supply chain to value chain • effectively cooperating with their suppliers and customers <p>HUMAN RESOURCE STRATEGY</p> <ul style="list-style-type: none"> • strengthening Human Resources, empowering employees by investing in their training and development (even only when an owner-manager)
<p>MINDSET</p> 	<ul style="list-style-type: none"> • understanding what growth means for their organisation, • understanding leadership • applying management and leadership skills into practice • comprehending the importance of technology use for their business • understanding what strategy entails • understanding the importance of collecting and utilising information and advice for improved performance
<p>TECHNOLOGY</p> 	<ul style="list-style-type: none"> • finding the right technologies for their business • finding the right technology supplier for their needs • integrating the right technologies into their operations • introducing a variety of performance measures via the use of technology

[Our second report](#) presented findings from our PSP survey in 291 GBSLEP and BCLEP SMEs during March 2018 - March 2020.⁴ We distinguished the underlying reasons behind the SME drag effect in the West Midlands by analysing our primary data through statistical analysis of four groups of SMEs, namely high growth, low growth, static and declining SMEs, against a wide range of indicators that emerge out of multiple academic disciplines that range from management and strategy, external relations, innovation and technology, human resource and knowledge management.

We found that SMEs' difficulties are rather complex and wide-ranging. However, while the recent dramatic changes in the national and global business environment have been affecting the operations and performance of SMEs, firms that focus primarily on overcoming internal impediments manage these external hurdles better.

Our research identified the impediments SMEs face en route to growth (Table 1) and the fact that small businesses fail to address these problems in a timely manner turns these drawbacks into drag effects in improving their productivity and achieving growth.

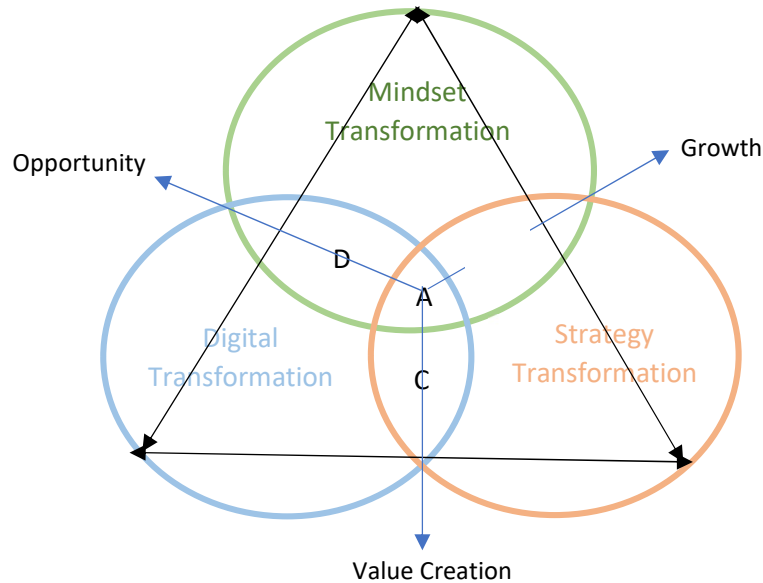
Deeper analysis of these drawbacks indicates that:

- (i) how SME managers perceive and influence the business operations and strategies affect the level of growth in their organisation, and more often than not leave no room for change (i.e. 47% of our sample are static growth SMEs),
- (ii) the fact that most businesses do not have a full understanding of what strategy entails becomes an obstacle for successful organisational transformation that could pave the way for a swift/rapid increase in efficiency and productivity,
- (iii) under-investment in technology and a lack of understanding of how to implement new digital technologies hold back most SMEs from becoming higher-growth SMEs that will otherwise help to improve business productivity and growth in the SME sector.

Consequently, successful handling of these drawbacks requires a systematic and transformational change within the organisation in three key areas, namely strategy, mindset, and digitalisation.

⁴ Yoruk and Gilman (2021b).

Figure 1. Transformation Triangle



This report generates a framework that addresses possible interventions to overcome the SME drag effect based on the insight we derive from the SME growth processes, as examined in detail in our second report. The framework focuses on the *transformational effect* of the identified three key areas, namely mindset transformation, strategy transformation and digital transformation (Figure 1).

The interdependent but dynamic relationships between these three areas are framed through what we call a 'Transformation Triangle' to achieve and sustain SME productivity and growth. The triangle is composed of:

1. transformation of business strategy development, as strategy is at the core of firm growth,
2. transformation of mindsets to enable the ability to understand and overcome barriers and transition to different stages of innovation and growth
3. the adoption of digital technologies, which constitute the technological paradigm of a new industrial revolution that cannot be ignored by any size of business.

The digital transformation in this framework is a fluid process, as it will be replaced with new paradigms as they emerge. For instance, once one phase of digital transformation is successfully achieved, SMEs can address others e.g., green transformation with net-zero economy goals. While these emerging paradigms seem to be in their infancy and rather far away goals now, businesses can soon find themselves as laggards if they do not initiate a timely planning and gradual implementation process for it.

We argue the joint application of these perspectives to organisational transformation can produce economic benefits that are greater than the individual sum of the parts. Formal strategy planning reinforced with adopting new mindsets and strategic agility with new technologies can create a competitive advantage that carries the SMEs to sustainable growth. Yet, small firms tend not to realise how beneficial the *complementarities* between these transformations are for their organisations. Instead, they may choose short-term solutions such as replicating the behaviour of successful firms which seemingly are presented as a recipe for success (a la ‘mimetic isomorphism’ by DiMaggio and Powell, 1983). For instance, our findings suggest that declining firms tend to imitate the activities of high growth firms in the areas of collaboration, innovation, and human resources, yet they only address the surface issues expecting an abrupt change without realising that the major source of success in these areas is dynamic capabilities developed within the firm via organisational learning. Hence, their short-term efforts do not necessarily lead to higher performance.

Although our empirical research was conducted up to the start of the Covid 19 pandemic, we have continued to work with many of the companies throughout Covid 19. Therefore, we build this transformation approach, not as a temporary response to the Covid crisis, but rather as a systematic approach to organisational transformation that forward-looking SMEs can adopt. **The resilience of organisations towards externally generated barriers or shocks (e.g. Brexit, Covid-19 pandemic, floods, etc.) largely depends on their strong internal capabilities.** So, we suggest an approach to SME Growth that derives from the sources within the firm while taking the effects of their external environment into consideration. SMEs that have started the application of this framework found themselves in an advantageous position when the Covid pandemic came.

Successful implementation of the transformation triangle by the SMEs supported by the targeted SME policies in these areas by the local and national governments promises to create higher productivity and sustainable regional and national economies. Therefore, we believe it will be useful to SMEs and policymakers as a new tool in the aftermath of the Covid-19 pandemic.

In the following sections, we will explain each node of the Transformation Triangle in detail and show how SMEs, policymakers and practitioners can utilise our framework for building increased productivity and growth in the 21st century.



2. A NEW PERSPECTIVE ON SME GROWTH

Growth is an aspiration for all SMEs. Despite the focus of the SME literature being on high growth firms (HGFs), we postulate that growth should encapsulate many different growth trajectories. While we learn a lot from the findings of extant empirical research on HGFs, due to firm heterogeneity, these studies are not so conclusive on what drives HGFs' success. As we cannot expect all students in a classroom to excel in every subject, it is common sense that not all organisations can become HGFs. Nor do all HGFs remain so over sustainable periods with some research highlighting that the majority of HGFs are not in that position 3 to 5 years later. So, it is only natural to expect variety in the performances of SMEs. Yet, it is realistic to expect that companies can scale up, improve the productivity and performance and thus enhance overall economic performance. So, we need to take heterogeneity among SMEs into account, not only regarding their varying characteristics and needs but also the states of growth they aspire to.

In this study, we adopt a *process* approach to SME growth (McKelvie and Wiklund, 2010), and concentrate on the importance of increasing productivity levels within an organisation to achieve growth. By “productive,” we mean a workforce, use of technology, or introducing innovations that produce a higher and growing level of output, hence creating more value than is consumed. High levels of productivity (at firm, sector, or country level) lead to high levels of savings, which leads to high levels of investment, which leads to high levels of growth, which leads to more jobs in the overall economy. Aiming at increasing productivity levels through the existing processes within organisations is an initial response for SMEs considering the financial constraints and the crises they have been exposed to. However, we anticipate that the changing technological dynamics of the business world will force SMEs to create resources for catching up with the digital advances.

2.1 SME Characteristics: Particular attention to Static SMEs

Our recent research highlights that when you break SMEs down into differing growth characteristic – high growth, low growth, static, declining – the largest single group are static SMEs. These static SMEs are less likely to utilise sophisticated business practices than high or low growth and generally tend to focus on day-to-day business operations and increasing sales. They focus much less on strategy, innovation, technology, value chain relationships, internal capabilities, etc., inadvertently creating a *drag effect* on our economies (Yoruk and Gilman, 2021). In the literature, these static SMEs are often compared to high growth firms as ‘stumblers and stars’ (Hambrick and Crozier, 1985), ‘mice and gazelles’ (Birch and Medoff, 1994), or simply referred to as a ‘lifestyler’, ‘trundler’ or ‘economic core’ business (Storey, 2011), Main Street entrepreneur (Audretsch, 2015) or everyday entrepreneurs (Welter et al. 2016). By focusing our attention on HGFs, we ignore

that our economies around the world are actually made up of these kinds of small firms (Storey, 2011; Kuratko, et al., 2021) and that they are a necessity for a sustainable economy as a major source of net job creation (Davidsson et al., 1996, 1998), and if we do not put the effort to help to improve their productivity and promote their future growth, we cannot solve our very own low productivity problem.

We tend to treat these static SMEs as 'invisible' as if they do not exist or never in need of assistance. As if they are in sleeping mode, operating on a day-to-day business that helps keep our economy going but not growing. The reason for this is that they display a relatively passive presence and a lack of active engagement in many business areas (Yoruk and Gilman, 2021). One thing that is highly possible is that they are in fact performing way below their potential due to escaping the attention of policy priorities (Audretsch 2015). Hence, studies also recognise that these firms can move from one state to a higher growth state (Smallbone et al. 1995, cited in Storey 2011), with some guidance. Similarly, firms with low growth need to be considered as companies with the potential to higher growth if they can address the obstacles they face, particularly with support from policymakers. Static SMEs stand out as by far the largest group and deserve more of our attention than research so far has concentrated on (Welter et al. 2016). When the proportion of static SMEs operating in our economies is considered, one realises how we sit on one sleeping giant's potential for economic growth but do little about it.

2.2 SME Needs: Strategic Direction and Technological Capabilities

The intention to grow the business is an essential characteristic of entrepreneurial behaviour (Sadler-Smith et al. 2003). Every entrepreneur, however, they are defined – as survival, lifestyle, managed growth, high growth entrepreneur (Morris et al., 2015), aspires to grow their business. Turning aspiration into achievement is a difficult leap for many SME owner managers, who most of the time do not know how to do it rather than not wanting to.

Even if an SME comes into being because of necessity, there is an underlying ambition of its owner manager to make things work, to keep going, and never to give up. What the owner managers lack is not ambition, determination, and resilience, but the strategic direction, knowledge and technological capabilities for developing and sustaining competitive advantages. This particularly shows itself in management, where sole traders may find it relatively easier to lead at the onset of the business because they know the product/service very well, but often fail to see the necessity of changes required in managerial skills and approaches as their business transitions and grows (see also Dimitriu, 2019).

Hence, for a long time, the focus has been on the role of strategic management in firm growth. Nowadays, it also involves technological changes and their indispensable impact on businesses from various perspectives such as operational management, market entry, supply chain, etc. For instance, two decades ago, it would have not made sense to turn our attention to static SMEs and talk about their potential growth possibilities. We are able to do so today because of the technological paradigm we are living in. Digital technologies are a means to increasing productivity and route to growth even for today's static firms, which may be tomorrow's growing firms. Certainly, the Covid-19 pandemic highlighted how many small businesses used digital transformation to sustain themselves and adapt through shock and crisis.



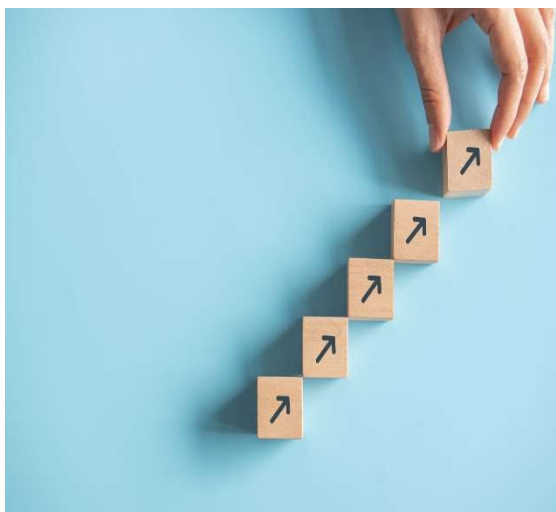
2.3 Continuum of Growth States

We strongly believe that the SME drag effect can only be eradicated by guiding SMEs in their transitioning from one growth state to a better growth state because we argue that firms are in a continuum of growth states and every little positive change in their growth rate (not necessarily over 20%, but 2%, 5%, or 10%) is a contribution to our economy.

Every SME has its own business journey, and no SME goes through the same journey as the other, merely because their understanding of growth differs, and hence, each interpretation of growth harnesses different levels of objectives, aspirations and anticipations for achieving firm growth (Dutta and Thornhill, 2008). SMEs should be allowed to grow at their chosen path, rate and speed. If given a chance to grow efficiently at a rate higher than before, all SMEs have the potential to contribute to the economy. For each SME choosing the right growth path at the onset is as important as aiming for high growth. Also, continuity in small but constant growth is the key. Therefore, our efforts should go into creating support mechanisms for SMEs' business environment to grow healthily, steadily and continuously. Hence, it is not a trade-off between quantity and quality; it is a question of having both by implementing the right strategies.

3. A GROWTH FRAMEWORK FOR SMEs: TRANSFORMATION TRIANGLE

Our growth framework aims to guide SMEs, regardless of size, age or state of growth, to determine and pursue the growth path they aspire to achieve in terms of future growth. **It is designed to enhance their productivity levels by changing their perception of the growth of their business now and in the future.** It envisages what types of intervention may be required to improve SME growth in general, particularly how to accomplish short-term growth aspirations and to create businesses capable to cope with future crisis and transitions in the long term. By taking the emerging business environment in the post-Brexit, Covid-19 pandemic and inflationary era into consideration, it aims at assisting the revival and growth of SMEs.



3.1 Why this framework?

The motivation behind this framework is rooted in the urgent need for bringing internal and external aspects of SME growth together for *the changing nature of the business environment*, and to help SME owner managers and local policymakers start *thinking differently about SME growth*. Enabling SMEs to build strong foundations for the future rather than finding themselves in need of help to survive crises.

The profound impact of the Covid-19 pandemic on businesses is a timely reminder of why businesses need to consider adapting sustainable production and services. It has taught us that we need to consider making dramatic changes in the way we do business and better prepare for crisis and transition.

Simultaneously, we experience the increasing impact of revolutionary technologies on our lives, economies and societies. Businesses are compelled to rapidly understand and integrate digital technologies into their strategies and operations to achieve higher productivity and performance. The times we are living in does not afford us having a *laissez-faire* approach to organisational transformation. We need to provide small businesses with direction and support from multiple stakeholders. This framework aims at assisting SMEs to **find their own ways** of managing **the scale of growth they aspire to achieve** by asserting the importance of *strategic re-positioning of their businesses* and their *changing mindsets at the organisational level to introduce radical and strategic changes* such as digital transformation.

The barriers derived from the external environment to small business growth are not just about changing market needs and adaptation of market strategies or lack of government policies. These barriers are shaped by global social and economic changes, technological developments and climate change-related events, such as disasters, and pandemics. While they seem to be beyond the capacity of small businesses to overcome these barriers, the key to developing resilience and adaptability is by developing internal capabilities in alignment with these changes in the external environment. So, a growth framework needs to prioritise SMEs' internal capability development or the elimination of any barriers to such development. Our framework aims at helping SMEs to balance their focus on effective short-term performance management with long-term planning for growth, to invest in and effectively use advanced digital technology, and develop capabilities for innovation while managing resources and knowledge on a constant basis through comprehensive strategic management. In other words, our framework balances the trade-off between short and long-term approaches to strategic management.

3.2 Strategy Transformation

Our findings reveal that the success of high growth firms is concealed in their **comprehensive** approach to formal and effective long term **strategy development and planning**. Their ability to move beyond a focus on 'market growth' assists in viewing firm growth as a function of **internal capability development** that supports their adaptive capability (defined as a firm's proficiency at altering its understanding of market expectations, Lockett et al, 2011; Eshima and Anderson, 2017) to the changing business environment. They are acutely aware of the importance of developing a portfolio of competitive advantages to appropriate value from the opportunities, or to overcome identified threats. This is possible with multi-aspect strategy development, not just market development. Such strategy transformation is what most SMEs lack but need for strategic revival, and it is the starting point to overcome major barriers to small businesses, such as financial planning and projections, building performance systems, etc.

Most SMEs attempt to cover distinct business aspects from a narrow perspective often by relying on standard accounting data analysis with no written strategy and objectives and by aiming for profit without addressing growth. They can gain strategic leverage over large firms if they build strategies on their agility and flexible structures, however, neither the concept of strategy, though widely used, is clearly understood by the owner-managers, nor how to link various aspects of the strategy to each other. The former emanates from mistaking a business plan (which, often, is little more than a plan to secure loans or investment funds from banks, etc.) for business strategy. While having a business plan is the starting point for small firms, it focuses on short-term goals, relies on an analysis of the product market in the short term and has no depth to cover strategic areas such as value

creation through supply chain activities, networks, innovation, and sustainability for long term growth. The latter is related to strategy development and implementation, which is a management matter, owner managers often need to learn and/or delegate. They tend to mistake their structural advantages such as their smallness and flexibility, which allow quick decision making and response to their markets, as the core of their strategy, because these characteristics give them the best tools to deal with problem-solving during turbulent times. Yet, they detract their attention from increasing efficiency and productivity. As a result, they show reluctance, for instance, to introduce formal management structures that clarify the operational boundaries, or to systematise their business's overall strategies in every aspect for the fear of losing attention on one aspect, i.e., their market and their cost leadership. In the absence of strategic management, they also feel vulnerable to pursuing risky innovation projects or undertaking transformation to become a more sustainable business because they fail to evaluate the true risks and opportunities.

Figure 2. Components of Strategy Transformation



Strategy transformation is mainly related to developing the ability to start new strategic initiatives by matching the firm's strategic or core competencies and resources to market opportunities (i.e. new product and market development), using the firm's strategic or core competencies and resources to overcome any organisational weaknesses and external threats, which in turn generates a series of critical success factors. Strategic management of long-term growth aspirations entails prioritising the elimination of barriers related to their internal capability development over market-related barriers, which eventually helps alleviate any external barriers originating from their market, industry, or the overall

economy (e.g., economic instability, Brexit or coronavirus). Hence, SMEs that look inside the firm realise the features of strategic planning are manifold and linked to each other.

Growing markets lead to SME growth, but not all SMEs operate in growing markets. Where markets are not growing, that may lead to an excessive focus by SMEs solely on increasing their sales turnover. Some SMEs engage in developing relationships with customers through improving in-house sales and marketing operations (e.g., low growth firms). Some SMEs put more emphasis on relationships with suppliers to develop higher quality products at a lower cost to gain a competitive advantage over their rivals in the market (e.g., declining firms). A holistic approach to market development that comprises long-term relationships with both customers *and* suppliers turns simple supply chains into value chains where knowledge management becomes the focal strategy (e.g., HGFs). This follows *purposeful collaborations* that seek not only knowledge on markets, but also professional, scientific and technical knowledge via links with universities that may lead to improvement in managerial skills, innovation activities, and access to the newest technologies and so on.



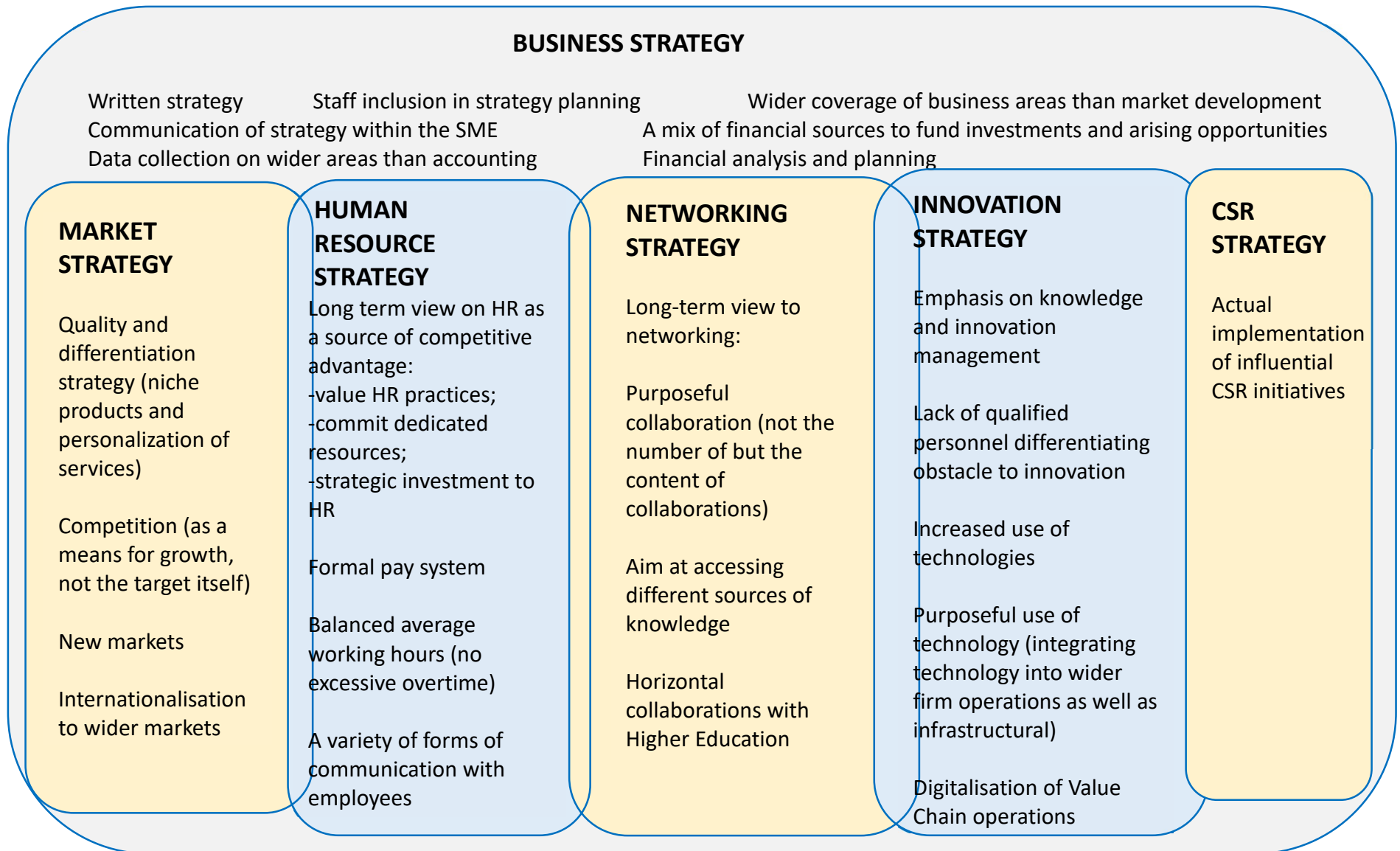
The growth of the internet and digital technology means that companies may be able to broaden their markets from local to regional to national, etc. SMEs can reinforce long-term growth aspirations with an export strategy that favours *wider experience in differing international markets* than focusing on one or two international markets for many years. Learning effects from a variety of markets positively affect the innovativeness of the firm in its core markets. The need for innovation is a widely recognised concept, but its application is not as easy as it sounds. Getting innovations from the idea stage to the market can be complex for small businesses. Having the motivation and finance for innovation is not what promotes firm growth (as reported by most SMEs in our sample as a factor and barrier to innovation respectively). It is the strategic planning behind the innovation activities such as establishing links with universities and/or other firms in the industry as a source of knowledge, hiring qualified people, and training in-house personnel (e.g., HGFs). A sound

human resource strategy secures and leverages employee skills as embedded competencies of the firm. In addition, evidence from HGFs suggests that the presence of a proper business strategy gives leeway to the *focussed knowledge and innovation management* within the firm, rather than vice versa. Strategic planning may also allow rapid growth if there are minimal financial constraints - a barrier SMEs commonly report. Having a risk-averse attitude, most SMEs prefer organic growth through reinvestment of internal capital. Evidence from HGFs also suggests that using *a mixture of externally sourced finance* strengthens the growth possibilities of SMEs by increasing the ability to finance arising opportunities (Yoruk and Gilman, 2021b). Employee training that focuses only on compulsory training such as health and safety rather than developmental training does not prove to be efficient. If SMEs pursue *human resource management* that can effectively turn human resources into a *firm's competitive advantage*, then HR strategy becomes the glue that integrates other strategies into the core business strategy.

Moreover, unlike many small firms, HGFs do not let a short-term focus take precedence over the long term. They understand that growth requires long term planning, and it does not mean developing a strategy and pursuing it no matter what. As the markets and industries are fast changing, the strategy needs to evolve to accommodate these changes with a recurring process of strategy development. Concerns over regulations, economy, competition, and market demand can pull SMEs into a vicious cycle of single-mindedly pursuing a market-oriented strategy in the short-term. They tend to concentrate only on increasing sales revenue (which positively associates with growth) or profit (which negatively associates with growth) (Yoruk and Gilman, 2021b).

Strategy transformation is the starting point of organisational transformation, and for this, SMEs need guidance in perceiving firm growth not merely as 'market growth' but seeing business aspects as a comprehensive whole (Figure 3). Then they can learn to develop a *structured and written* strategy that is not only *inclusive* but also *integrated* into the strategic areas within the boundaries of their firm. However, few SMEs understand what a comprehensive strategy looks like, let alone have one. Strategy should not be an academic theoretical exercise. Rather, it should drive an organisation long term and day-to-day. It should start with the purpose, vision and values of the organisation and drive down through strategic outcomes, to strategic objectives, to individual goals and activities.

Figure 3. Characteristics of a comprehensive SME strategy that brings about high growth, based on our findings



3.2 Mindset Transformation

Often those organisations and entrepreneurs who begin to understand their transitions will need to build a different mindset to envisage the changes, capabilities and challenges to their new worlds. Mindset is the set of knowledge, attitudes and beliefs we hold. It is powerful in influencing our perceptions and ways of doing. Nowadays everyone talks about mindsets; growth mindset, entrepreneurial mindset, positive mindset, and so on and the fact that to achieve certain goals we need to change our mindset and develop the ability to perceive certain situations from different perspectives. By changing mindsets, we instigate radical changes in our lives.

In the business context, changing mindset is not a new concept (see Kedia and Mukherji, 1999; Gupta and Govindarajan, 2002). When globalisation took hold in the early 21st century, managers were recommended to develop a 'global mindset' to become effective global managers. In the entrepreneurship literature, developing an entrepreneurial mindset is viewed as a key to having more of high growth ventures, as it 'allows and empowers us to come up with new ideas, solve problems, generate creative solutions, and take action to pursue opportunities' (Kuratko et al., 2021).



The mindset we talk about here is more than moving into one state of mind. We talk about mindset change in terms of transforming the approach to the way owner managers organise their business, starting with themselves but gradually involving their employees and expanding the whole transformation to the organisational level to create high performing work systems ((HPWS) Martinez-del-Rio, Pingshu and Guthrie, 2022). In our framework, mindset transformation is about *the vision* for what the organisation expects to create value for and the kind of *culture* the organisation can thrive on. Therefore, changing mindsets does not only concern the owner-managers in building new instincts and to adopt new behaviours, (as is commonly discussed under the concepts of an entrepreneurial mindset (Kuratko et al., 2021), entrepreneurial orientation (Wiklund, 1999; Wiklund and Shepherd, 2005), entrepreneurial style), but also the management teams and even employees. It relies on the creation of strong leadership effects and culture within the organisation. It is about changing the individuals' (i.e. everyone involved in the firm) perceptions and attitudes towards how the business is managed, how well the business can perform, what level of growth the business aspires to achieve and their role and responsibility to achieve it all. The latter brings in the *inclusivity* of the employees and helps create an organisational culture in which employees feel motivated and engaged. Staff who are involved and developed become more willing to build innovation, efficiency and productivity within the firm. This all requires a change in approach to human resource management. As Harney et al. (2022) argue, the resource-constrained and hierarchically contracted nature of SMEs mean that the impact of HRM is all the more telling. SMEs offer a perfect platform to work with contextual issues, and their resource poverty and labour-intensive nature mean that they have a greater reliance on the effort, engagement, and the discretion of employees. Our research found the lack of qualified personnel as a pronounced barrier to achieving high productivity and growth even in HGFs (Coad, Pellegrino and Savona, 2015). Since this is an issue deriving from the rigidity of UK labour markets, the partial solution is for SMEs to assume an important role in creating their very own qualified personnel by investing in their human resource management with the right mindset.

In terms of the relationship between mindset and organisational culture, Argyris (2004), whose seminal work on organisational learning changed perspectives and deepened our understanding of experiential learning, argues that some organisations suffer from an underground culture of covering things up to protect the existing system of doing things. This kind of defensive reasoning mindset setbacks progress and an open-minded approach to new ideas, new ways of doing things and new learning. Argyris (2004) shows how the lack of a productive reasoning mindset brought the end of big corporations such as Enron and Arthur Andersen; previously awarded year after year for good management practice but ending up with scandals and high-profile bankruptcies due to their below-ground management rather than above-ground.

Mindset transformation becomes a *sine qua non* to move an organisation's structure, process, people, and culture. Growth after all is not only a responsibility of the entrepreneur/owner manager, but a collective activity of the whole organisation, and mindset transformation can only be fully transformative if it is achieved at organisational level. The whole business becomes entrepreneurial collectively, continuing to take risks, be innovative and proactive towards market needs and changing circumstances. Such mindset change can be in line with the chosen business model, in other words, can be informed by strategy transformation in the organisation.

Figure 4. Mindset Transformation: Illustrative examples



With these strong organisational support systems for mindset transformation, the way SMEs observe growth barriers or challenges changes to a more positive approach. The changing business environment, market needs, technological advances, the Covid-19 pandemic, Brexit, and anything that would be a challenge before can now be seen from the lens of opportunity. Such mindset change would allow them to revise and re-strategise what growth means to their organisation under those particular circumstances and make conscious choices of strategies, partnerships, technologies and people. Hence, mindset transformation goes beyond the cognitive styles entrepreneurs display, e.g. analytic versus holistic (Sadler-Smith et al. 2003) or adaptor versus innovator (Kirton, 1989), which is an entrepreneur's inherent way of gathering, organising and processing information to solve problems and make decisions (Sadler-Smith and Badger, 1998). It is also not like the concepts of entrepreneurial orientation or entrepreneurial leadership, where the focus is solely on the entrepreneur/owner manager. Mindset transformation is not confined to one critical resource, the entrepreneur/owner manager, but to the whole organisation.

Having said this, one of the biggest barriers for SMEs still tends to be the confinement of entrepreneurs/SME owner managers to one state of mind or defensive reasoning mindset (Arygris 2004), namely the well-known 'busy fool syndrome'. This cognitive style often serves as the pretext for the overwhelming day-to-day operations where SME managers hardly find the time to direct their attention to growing their business. Working greater hours to compensate for this is also not the way to solve the problem. Our research findings suggest that having longer than usual working hours and excessive overtime do not prove to be efficient and are associated with declining rather than growing firms. Changing from this 'busy fool' state to 'strategic leader' state requires mindset change towards a more open mindset, for instance, to collaborate with others, delegate roles and responsibilities and systematise management, all of which lead to higher productivity with significant implications for strategy development and human resource management, as explained below.

First, managers need to learn to prioritise planning for growth in the long term rather than ad hoc reactions in the short-term. Favouring short-term achievements, solutions and returns often stems from lack of confidence or ability of the owner managers in strategising especially when buried under the current workload. Their mindset is shaped by reactionary business decisions, and fear of transitions to business stages where they feel they might lose control. What was once a strength in nurturing one's business alone in the early stages can turn into a disadvantage once the business has room to grow. More precisely, often blinding owner managers to the inherent potential in their employees, which with the right investments in human resources and technological improvements can be turned into a competitive advantage. Planning for long-term growth requires mobilising today's scarce resources and making investments for the long term, many of which may not show visible returns in the short term.

Second, a growing business needs leadership and a structured system of management. The lack of capability to transform into a leader who can delegate roles and responsibilities, involve managers and employees in decision making, and inspire employees for further learning and development, etc., requires a significant mindset change in owner managers. Only then can they transform their businesses. An ability to change mindset when a new approach is required for organisational transformation is a progressive development that cannot be expected to happen overnight. While there are many barriers to growth - lack of finance, human capital, infrastructure, social capital, or resources - mindset is often at the top of this list. Mindset becomes a barrier especially when there is a wish to maintain the status quo and when there is resistance to change. So, the mindset may block potential for growth at different levels in a business i.e., owner manager level or employee level. Once this barrier is overcome, the transformation of mindsets will enable the ability to overcome other barriers and allow the transition to different stages of development, innovation, and growth.

Third, for successful and sustainable firm growth, SMEs are frequently recommended to develop and sustain competitive advantages, but they are not explicitly guided on how to do so with their limited resources (especially compared to large firms). Smallness is often said to produce an advantage of greater discretion and swift decision making and therefore greater impact on firm behaviours and outcomes than large firms. Yet, the advantage of being small is often overtaken by the rather wide-ranging, complex, and long list of shortcomings (see Table 1). Most of these shortcomings can be overcome through leveraging existing resources to create capabilities, e.g., by making effective use of their human capital, through effective development, incentives, and rewards. If financially viable, expanding resource stocks through consulting, hiring, or employing a team of professionals who would guide, clarify and simplify these processes within the firm, and/or recruiting, selecting and planning the right kind of workforce for long-term growth is not only a part of strategy transformation, but also reinforced by mindset transformation. Similarly, if expanding internal resources is not possible, developing the social capital of the firm and positioning in valuable networks will be instrumental. However, only the right kind of mindset, in combination with strategy transformation will create the necessary processes for turning external resources into firm capabilities for long-term growth.



Mindset transformation has therefore significant implications for developing *resilience* against unexpected crises, and external shocks. Resilience can only be part of the organisational culture when mindsets are transitioned into a state where crisis is understood as a norm and failures are seen as opportunities. Our research found that half of today's HGFs are in their second and third ventures, indicating that successful growth is often a result of lessons learnt from successive failed ventures: instead of giving up, grasping new opportunities and building a better experience.

Finally, a mindset that embraces openness to radical changes, such as the use of state-of-the-art technology, comes only if SMEs are aware of the emerging challenges in their business environment. Yet, a quarter of SMEs in our research reported that they are not sure or do not know whether they are aware of these challenges.

Without mindset transformation, neither strategy transformation nor acquiring digital solutions can prove to be effective and yield the expected productivity increase.

3.3 Digital Transformation

The changing local and global business landscape and the introduction of technological advances are bringing about new opportunities and very different ways of doing business: a new digital revolution. If we had asked before the Covid-19 pandemic, few SMEs would know what their technological needs are: now and in the future. Our research, concerning the two years just before the Covid-19 pandemic, found not only underinvestment in the use of technology by most SMEs but also a lack of understanding of how technology would help their business (Yoruk and Gilman, 2021b). With the Covid-19 pandemic, however, the business environment has been so dramatically transformed digitally (e.g. raised awareness) in such a short time that digital transformation (DT) has become a must-do for any organisation.



Digitalisation refers to the integration of digital technologies into the core business operations to improve the existing business model and create new revenue and value adding opportunities (Fitzgerald et al, 2013; Matt et al, 2013), and enhance the productivity of organisations by bringing efficiency to the processes (OECD, 2019). These digital technologies range from the simple use of the internet and social media and the creation of a website for online sales to buzzwords such as Big Data, Artificial Intelligence, Industry 4.0, and the Internet of Things. Most SMEs use digital technologies to extend into online markets. However, the wider use and benefits of digital technologies are not well understood by SMEs which they either find financially beyond their capacity or they may not know where to start.

Digital transformation is distinguished from digitalisation as a more overarching concept and it refers to the implementation of new digital technologies to radically improve the performance of organisations (Westerman et al., 2014). It is concerned with the changes that digital technologies cause in a firm's business model, products, processes, and organisational structure (Hess et al. 2016). It goes beyond developing social media presence; it allows brand rejuvenation in online/ digital markets and can even lead to opening up new international markets.



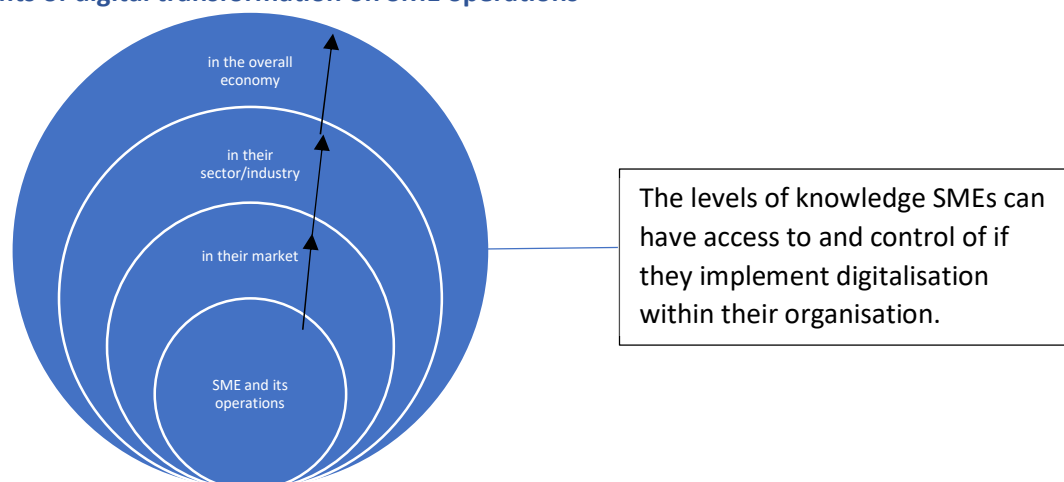
Digital transformation assists with increasing productivity and business efficiency via optimising existing processes by establishing a strong technology foundation that facilitates the integration of the use of digital technology tools into the entirety of firm operations. Most importantly, to collect and use data for sensible and accurate strategy development. Such data may be all around the SMEs but may not be utilised effectively to optimise processes (e.g. average time needed for the execution of a complete business transaction, etc.) or to effectively manage supply chain operations through exchanging data in real time.

It may be within different IT systems such as the customer relation or contract management system (CRM, CMS) but not used to develop products or services according to market needs or demand. It might be obtained from external sources, such as social media, but not processed to structure the market strategy of the firm and to prepare them for external shocks such as the financial crisis or the Covid-19 pandemic.

We found that the integrated use of such technology by SMEs is very limited and restrained to isolated purposes such as finance, IT, advertising, and marketing, etc. For example, a company may already be monitoring market trends, but when utilised together with other digital transformations, this awareness can empower them to set the trends in their markets. Growing SMEs effectively use technology to collect data on customer satisfaction, quality of product and services, training and development and productivity. Additionally, high growth firms adopt digital technology use in areas such as management information, strategic thinking, and human resources, and use technology in analysing these data to influence their strategic decision-making. The drawback of poorly performing SMEs in having limited performance measures is to have standalone data analysis with no link whatsoever to the whole business operations of the firm. Data is only useful when it allows the integration of business operations at every level to develop a systematic strategy that takes every possible aspect of the business into account.

Digital transformation is an important step of organisational transformation that complements efficiency in business assessments with performance measures. Digital transformation has the power to structure business assessments via a wider range of performance measures than firms may realise. It is completed when SMEs bring together the designated technologies that originally seem to be unrelated and construct a comprehensive data analysis. This approach not only integrates knowledge about the SME and its operations but also about what is happening in their market, sector, and the economy (Figure 6).

Figure 6. Benefits of digital transformation on SME operations

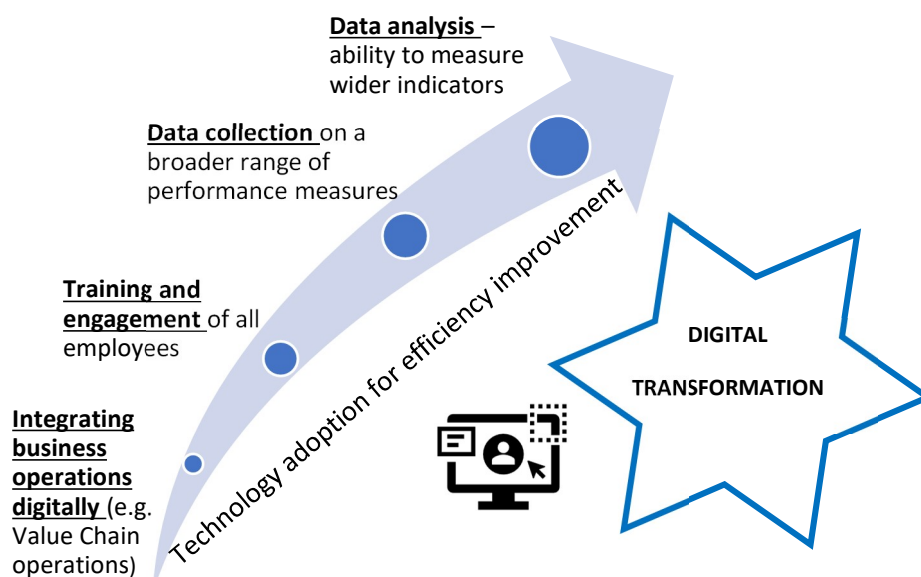


Digital transformation also improves time management. Only when SMEs acknowledge the influence of widespread and systematic use and analysis of performance measures on their operations in both internal and external business environments, will they appreciate the time-saving characteristics of digital transformation.

Digital transformation involves the broader adoption of technology in association with people and processes. In particular, assimilation of digital technology use within the firm can improve the capabilities of employees via purposeful training and development in the use of these technologies (digital capabilities) and nurtures the internal ability to turn data collection and analysis into sensible strategies by taking into account not one, but many factors (external & internal). Such internal capability development, an invaluable asset to SMEs, allows employees to understand how the business is run more efficiently so that they find their own role from which to contribute within this new structure.

Hence, the use of digital technologies depends on the maturity of the level of organisation with respect to processes and capabilities, and therefore there are discernible differences in digital transformation processes and rates between large and small companies as well as between manufacturing and services sector (Rummel et al., 2021; Frank et al., 2019).

Figure 5. Digital Transformation



Digital transformation becomes a part of organisational transformation when it is closely linked with changes in strategy, management and organisational behaviour. Both academic and practitioner-based studies emphasise the role of strategy in driving digital transformation and creating value and competitive advantage for organisations. However, in practice, gaining these transformational effects from new digital technologies prove difficult for many SMEs (Capgemini Consulting, 2011).

Digital transformation is no ordinary transformation, and often requires a clean break from past and present ways of doing business. It enforces the development of new strategies, structures, routines, and capabilities (e.g., digital). It requires strong strategic leadership, changes in organisational structure, dynamic capabilities for innovation, and receptiveness of employees for cultivating a different kind of culture within the firm.

Digital transformation not only has close links with strategic elements, but it situates at the nexus of technological, organisational and market elements of strategy. Because it requires a redesign of organisational processes and routines, it needs alignment between firm strategies and firm employees' acceptance and adoption of new digital technologies, and it keeps customer needs and expectations at the centre of attention. As it induces a change in organisational culture internally (e.g., employees) and externally (e.g., networking relations with partners), digital transformation involves the management of many inter-related actors at individual to organisational levels, whose mindsets need to align with initiatives of digital transformation and strategies (Solberg et al, 2021).

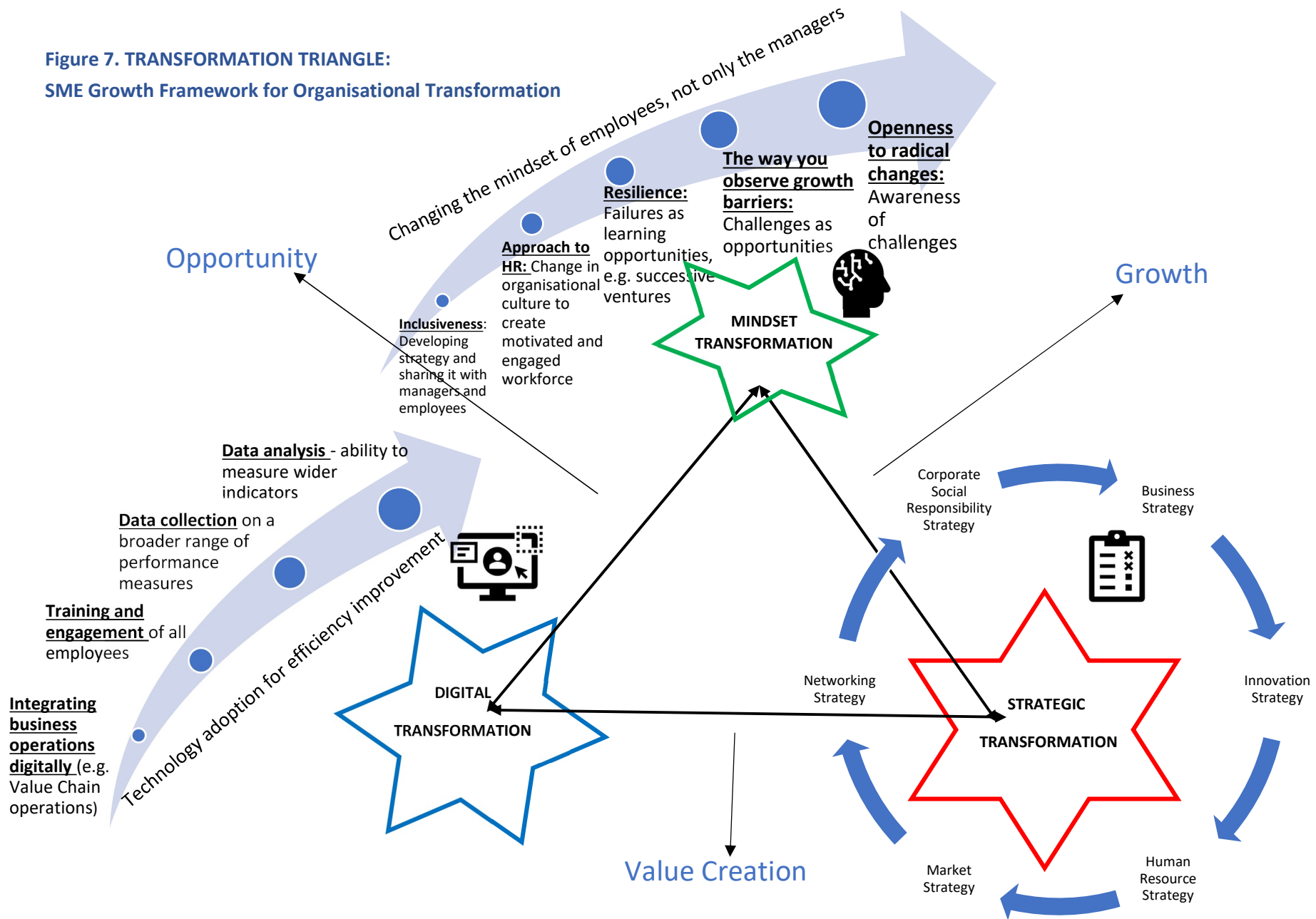
Hence, we argue that digital transformation is not a simple prescription of strategy but requires cognitive mechanisms that support its success. Mindsets observing growth barriers, not as challenges but as opportunities for change, may lead to *transformative strategies*, such as transforming the firm digitally. Yet, mindsets approaching digital transformation as a technology initiative driven by IT departments or specialists undermine the complexity surrounding digital transformation in an organisation. There are several implications of this approach. The first and most often discussed implication is the human side of it. It not only creates fear among the employees but also defeats the whole purpose of digital transformation before it starts (i.e., creating efficiency, improving productivity). When the employees are not convinced by the digital transformation, how can an organisation solely rely on computer-generated data management for efficiency improvement? An open-minded approach to changes, in some cases a complete transformation of mindset, go naturally hand-in-hand with digital transformation. Such mindset transformation not only refers to changing the mindsets of employees but also of the management who are not

necessarily ready to fully perceive what a digital transformation means for their business. Hence although trillions are spent on digital transformation not as many successes are forthcoming (Tabrizi et al., 2019).

Mindsets perceiving digital transformation as a 'process' rather than an automatic 'outcome' of technology acquisition become successful implementers of digital transformation. Not only is digital transformation a process itself, but it is also surrounded by other processes that are within the organisation. As our transformation triangle highlights, strategy transformation would help if it precedes digital transformation by clarifying business strategies so that the organisation has a clear and focused understanding of digital transformation and its expected future impact on the business performance. In turn, adopting new digital technologies might entail completely new strategy development and implementation within the organisation, which eventually creates a new business model for the organisation. Digital transformation will lead to new capability development to enact these new strategies. This process naturally will be different for each organisation depending on its idiosyncratic characteristics, conditions, and capabilities: the end product being the same – digital transformation.

Once achieved, digital transformation paves the way for easier transitioning of SMEs in the short term from one state of growth to the desired other. Rather than playing catch-up, SMEs need to start re-inventing themselves to be both resilient and strategic.

**Figure 7. TRANSFORMATION TRIANGLE:
SME Growth Framework for Organisational Transformation**



4. WHAT CAN REGIONAL ECONOMIES DO TO HELP SMES IMPLEMENT TRANSFORMATION TRIANGLE (FIGURE 7)?

Despite the financial difficulties local authorities are facing, they need to prioritise supporting and incentivising SMEs' survival, revival and growth as the engine of local and regional economies. The Covid-19 pandemic created the trigger effect that is required for a radical strategic change, which might help solve productivity problem.

What the SME economy needs is not generalised business support policy for all SMEs, but bespoke policies for SMEs of different sizes and other characteristics than just their turnover or employment growth. For instance, targeted policies or facilitating mechanisms might be put in place to stabilise the presence of sole trader (up to 1 employee) and small-sized (10-49 employees) enterprises in the economy and to facilitate their growth. Our research found a positive correlation between the employment levels and turnover of these SME categories, indicating their capacity to grow in terms of both size and economic effect with the right guidance (Yoruk and Gilman, 2021a). Yet they need support to sustain themselves in the long run. This is not to say that there are no means available for enhancing the contribution of these firms. Physically there are start-up hubs, industrial clusters, science parks, and so on supported by public funding and policies. However, SMEs' needs are more contextualised, complex, and urgent. Academic research intensively investigates the barriers to SME growth. Qualification and skills development is one of the major issues that could be addressed.



We recommend consulting with SMEs and creating opportunities in line with their needs. This is feasible at the level of regional and local economies. Policy makers and stakeholders need to assume the role of coordinating all of the actors who will ensure enabling the bottom-up support systems, such as banks, NGOs, universities, business development and technical assistance providers. They also need to synchronise their SME policies with local and regional factors such as business environment, available opportunities, and coordination capabilities. The interventions need to ideally revolve around our three framework elements but need to include the abovementioned broad range of specific key areas (Table 1) if they are to develop the potential for SMEs' future growth, enhance SME productivity and introduce digital transformation in SMEs. For such interventions, individual and sustainable one to one intervention would be important given the nature of some of the transformations required.

For example, mindset transformation would include:

- understanding human capitals' role in building competitive advantage (leaders & management),
- empowering employees through purpose, mastery & autonomy (Pink, 2010)
- understanding the creation of competitive advantage.

Strategic transformation requires a written strategy:

- understanding how to build strategy and become more strategic,
- emphasis on knowledge and innovation management,
- HR as a source of competitive advantage
- quality and differentiation strategy (niche products and personalisation of services),
- a long-term view to networking - effectively cooperating with their suppliers and customers,
- implementation of influential CSR initiatives which involves understanding Corporate Social Responsibility.

Digital transformation requires:

- an understanding of technology for efficiency improvements (productivity),
- value Chain integration,
- the right skills and capabilities,
- broader integrated measures and ability to measure wider indicators
- comprehending the importance of technology use for their business
- integrating the right technologies for their business into their operations.

Tailored workshops for SME groups with similar characteristics and /or needs, bespoke grant schemes and specialist accelerator programs would also be useful. The question is whether they are achievable, and if so, how? To make this leap, the national government has started to support SMEs through various programmes. SMEs that have a growth mindset are already the frontrunners participating in these programmes. What about the abovementioned static, everyday SMEs which are the backbone of the economy but are largely lethargic, inactive, and seem uninterested in matters other than their legal obligations to run their business?

We take the example of the West Midlands. At the time of the completion of our study, it was among the hardest affected regions by the Covid-19 pandemic outside of London. The West Midlands is expected to suffer the worst economic and social impact in the near future. The region has made investments in business infrastructure and support in innovation over the years, which ranked it high amongst its peers in the EU28. It has progressed at similar levels in technological readiness to the EU28 regions. However, with the Covid-19 pandemic, it is now vital for the region to supplement its infrastructural superiority by prioritising policies that assist with building the digital skills of SMEs, incentivise the adoption of digital technology in SMEs, supporting their digital transformation and aligning their growth processes with the characteristics of the predominant sectors in the local authorities of the West Midlands.

Some of the declining sectors in the West Midlands' economy in the last decade do not present a significant productivity problem. For instance, while the employment levels considerably decline in the agriculture sector and slightly increase in the real estate sector, their turnover dramatically increases, which might be attributed to the use of advanced technology. Similarly, digital transformation in a variety of sectors would improve productivity by boosting operational efficiency (e.g., in manufacturing, finance, healthcare), through keeping up with the competition (e.g., in transportation), or simply by growth (e.g., in retail), as the digital transformation will naturally have a different outcome in different sectors. Hence, the variations in local sectoral distribution and factors need to be taken into consideration by the policymakers in the West Midlands.

If regional economies like the West Midlands continue to thrive, their policies should not just target SMEs with the potential to become HGFs, but to facilitate levelling up as many SMEs as possible to the most efficient and productive forms of growth. Regional policies and funding need to be designed in a way to allow SMEs to grow at their chosen path, rate and speed that stimulates the economy. While every SME is exposed to the same challenges in this environment, some will exit and some will come out of it stronger. To achieve a positive outcome not for the few but many SMEs, the West Midlands local authorities must consider the policies that create the necessary financial, economic and education-related tools for SMEs in their quest to develop strategic resilience through adaptability.

REFERENCES

- Audretsch D. B., 2015, Entrepreneurship is the Key to Growth, in Lindsey, B. (ed), Reviving Economic Growth, Policy Proposals from 51 Leading Experts, Cato Institute Press.
- Birch, D.L., Medoff, J., 1994. Gazelles. In: Solmon, L.C., Levenson, A.R. (Eds.), Labor Markets, Employment Policy, and Job Creation. Westview Press, Boulder, pp. 159e167.
- Capgemini Consulting. (2011). Digital Transformation: A Roadmap for Billion-Dollar Organizations, in collaboration with The MIT Center For Digital Business. (last accessed 29/01/2022) <https://www.capgemini.com/resources/digital-transformation-a-roadmap-for-billion-dollar-organizations/>
- Coad, A., G. Pellegrino and M. Savona, (2015) Barriers to innovation and firm productivity, Economics of Innovation and New Technology, 10.1080/10438599.2015.1076193
- Dimitriu, S. (2019), Management matters, Business Stay up, The Entrepreneurs Network, Business stayup.org
- Dutta DK and Thornhill S (2008) The evolution of growth intentions: Toward a cognition based model. *Journal of Business Venturing* 23(3): 307–332.
- Eshima, Y. and B.S. Anderson, 2017, Firm Growth, Adaptive Capability, and Entrepreneurial Orientation, *Strategic Management Journal*, 38: 770–779.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D. and Welch, M. [2013] Embracing digital technology: A new strategic imperative. *MIT Sloan Management Review*, 55, 2: 1–12.
- Gupta, A., K. and V. Govindarajan, 2002, Cultivating a Global Mindset, *The Academy of Management*, 16(1): 116-126.
- Hambrick, D.C., Crozier, L.M., 1985. Stumblers and stars in the management of rapid growth. *Journal of Business Venturing* 1, 31e45.
- Harney, B., M. Gilman, S. Mayson & S. Raby (2022) Advancing understanding of HRM in small and medium-sized enterprises (SMEs): critical questions and future prospects, *The International Journal of Human Resource Management*, 33:16, 3175-3196, DOI: 10.1080/09585192.2022.2109375
- Hess, T., C. Matt, A. Benlian, F. Wiesboeck, 2016, Options for Formulating a Digital Transformation Strategy, *MIS Quarterly Executive*, 15 (2):103-119.
- Kedia, B.L. and A. Mukherji, 1999, Global Managers: developing a mindset for global competitiveness, *Journal of Business Venturing*, 34(3): 230-251.
- Kirton, M. (ed.), *Adaptors and Innovators: Styles of Creativity and Problem Solving*, Routledge, London (1989)
- Kuratko, D.F., Fisher, G., Audretsch, D.B., 2021, Unraveling the entrepreneurial mindset, *Small Business Economics*, 57:1681–1691, <https://doi.org/10.1007/s11187-020-00372-6>

- Lockett A, Wiklund J, Davidsson P, Girma S., 2011, Organic and acquisitive growth. *Journal of Management Studies* **48**: 48–74.
- Martínez-del-Río, J., Li, P. & Guthrie, J.P. (2022) Antecedents of high performance work practices in SMEs: an attention-based view, *The International Journal of Human Resource Management*, 33:16, 3275-3297, DOI: 10.1080/09585192.2021.1991431
- Matt, C., Hess, T. and Benlian, A. [2015] Digital transformation strategies. *Business & Information Systems Engineering*, **57**, 5: 339–343. <https://doi.org/10.1007/s12599-015-0401-5>
- McKelvie, A. and J. Wiklund, 2010. Advancing Firm Growth Research: A Focus on Growth Mode Instead of Growth Rate, *Entrepreneurship Theory and Practice*, 34(2), <https://doi.org/10.1111/j.1540-6520.2010.003>
- Morris, M. H., Neumeier, X., & Kuratko, D. F. (2015). A portfolio perspective on entrepreneurship and economic development. *Small Business Economics*, 45(4), 713–728.
- OECD. (2019). Digitalisation and Productivity: A story of complementarities, *OECD Economic Outlook*, Chapter 2, Volume 2019, Issue 1, Preliminary Version
- Pink, D.H., 2020, Drive: the surprising truth about what motivates us, Canongate Books.
- Sadler-Smith, E. and B. Badger, B., 1998, Cognitive style, learning, and innovation, *Technology Analysis and Strategic Management*, 10 (2) (1998), pp. 247-266
- Sadler-Smith, E., Hampson, Y., Chaston, I. and Badger, B., 2003, Managerial behavior, entrepreneurial style, and small firm performance, *Journal of Small Business Management*, 41 (1) (2003), pp. 47-67
- Solberg, E., Traavik, L. E. M. and Wong, S. I. [2020] Digital mindsets: Recognizing and leveraging individual beliefs for digital transformation. *California Management Review*, **62**, 4: 105–124. <https://doi.org/10.1177/0008125620931839>
- Smallbone D, Leigh R and North D (1995) The characteristics and strategies of high growth SMEs. *International Journal of Entrepreneurial Behaviour and Research* 1(3): 4–62.
- Storey DJ (2011) Optimism and chance: The elephants in the entrepreneurship room. *International Small Business Journal* 29(4): 303–321.
- Tabrizi, B., Lam, E., Girard, K., & Irvin, V. (2019). Digital transformation is not about technology. *Harvard Business Review*, 13.
- Welter, F., T. Baker, D.B. Audretsch, W.B. Gartner, 2016, Everyday Entrepreneurship – A Call for Entrepreneurship Research to Embrace Entrepreneurial Diversity, *Enterprise Theory and Practice*, DOI: 10.1111/etap.12258
- Westerman, G., Binnet, D., McAfee A. (2014). The Nine Elements of Digital Transformation. *MIT Sloan Management Review*. 7 January 2014. (last accessed 29/01/2022) <https://sloanreview.mit.edu/article/the-nine-elements-of-digital-transformation/>
- Wiklund J (1999) The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice* 24(1): 37–48.

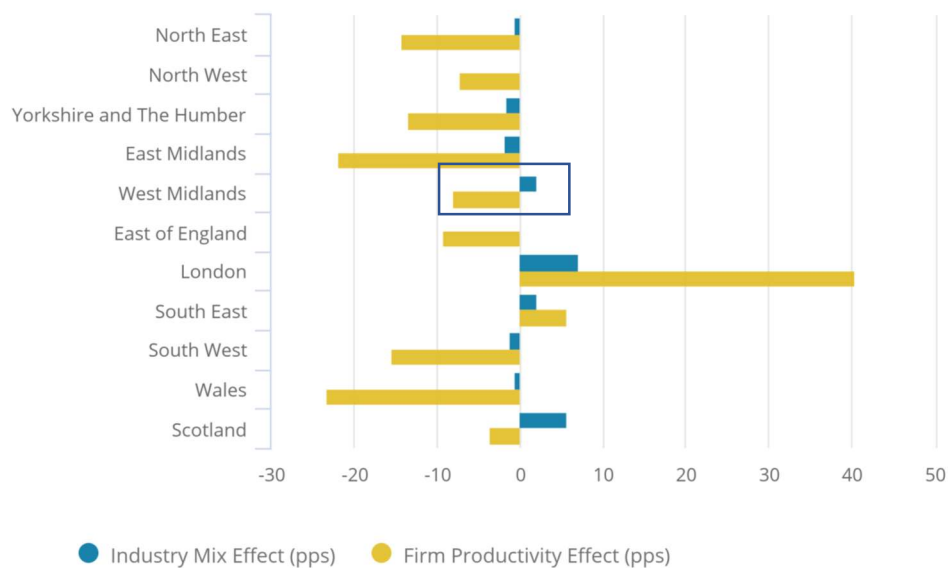
Wiklund J and Shepherd D (2005) Entrepreneurial orientation and small business performance: A configuration approach. *Journal of Business Venturing* 20: 71–91.

Yoruk, D.E. and M. Gilman, (2021a), "[The SME Drag Effect in the West Midlands Economy](#)", Birmingham City Business School, Centre for Enterprise, Innovation and Growth, CEIG Report No.1/2021.

Yoruk, D.E. and M. Gilman (2021b), "[Understanding the SME Drag Effect in the West Midlands Economy – Findings of PSP Growth Diagnostic \(Survey\)](#)", Birmingham City Business School, Centre for Enterprise, Innovation and Growth, CEIG Report No.2/2021.

APPENDIX

Figure A.1. Regional Productivity assessed through firm-productivity and industry mix effects, 2015



Source: ONS, (2018a) Regional firm-level productivity analysis for the non-financial business economy, Great Britain: April 2018.