LEVERAGING BUSINESS DEVELOPMENT SERVICES FOR SME PRODUCTIVITY GROWTH International Experience and Implications for United Kingdom Policy

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Organisation for Economic Co-operation and Development Centre for Entrepreneurship, SMEs, Regions and Cities (CFE)



Background

This report offers insights into the role that business development services can play in supporting productivity growth in small and medium-sized enterprises (SMEs). It explores potential lessons for policy development in the United Kingdom (UK) from international policy experiences in offering business development services to SMEs. The report includes a focus on the potential and role of business advice for productivity upgrading in the UK's "long-tail" of established SMEs with low productivity.

Internationally, business development services have been evolving rapidly in the last 5-10 years. In this context, key challenges faced by policy makers include the following:

- How to build SME demand for business development services that could help stimulate their productivity growth?
- How to differentiate business development services across different types of SMEs, for example firms with strong or weak productivity growth?
- How to exploit the new opportunities offered by digital technologies for business diagnosis and advice?

The report addresses these questions from the perspective of international experience.

Part one of the report offers a summary of the key issues and policy messages. It is based on discussions at an international expert workshop on this topic held by the Organisation for Economic Co-operation and Development (OECD) and the Department of Business, Energy and Industrial Strategy (BEIS) in the United Kingdom (UK) in London on 26-27 April 2018, together with background papers prepared for the workshop.

Part two presents the background papers on the key themes of the workshop, namely challenges for business development services policy in the UK, and international approaches to building demand for business advice among SMEs, differentiating business advice support across different types of SMEs, and developing and using online business diagnostic tools as part of approaches to stimulate demand for advice and to guiding the services provided.

As well as identifying key opportunities and challenges in stimulating business development services as a lever for SME productivity growth, the report seeks to provide selected international examples of good policy practices.

This project forms part of a wider UK review of what works in business support as part of the UK Industrial Strategy development process, including how to address the challenge of increasing the productivity of the 'long tail' of low productivity SMEs. It is also part of the programme of work of the OECD Centre for Entrepreneurship, SMEs, Regions and Cities on the evolution of policy for business development services internationally.

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Part I. Main Findings and Messages

Key take-aways

The role of business advice in SME productivity development

- SMEs account for 99% of enterprises and more than 50% of employment in the UK business economy. Their performance has a major impact on the UK's productivity.
- Weaknesses in managerial capabilities in SMEs may hamper productivity growth, particularly among firms in the 'long tail' of low productivity.
- Several robust evaluations provide evidence that publicly supported business advice can have an impact on improving SME productivity and growth performance when it is of high quality.
- Various work has shown that policy support for business development services encourages businesses with better growth, innovation and export record and absorptive capacity for knowledge. The impacts tend to be more positive for productivity and output than for employment.
- In the UK, out of 23 robust evaluation studies reviewed by the What Works Centre, 17 found that business advice positively impacts on at least one business outcome. Outside of the UK, a recent review of business support policies across low and middle income countries concludes that business advice generally has a positive impact on firm performance, but with some caveats.
- However, the overall body of robust international evaluation evidence on the impacts of business advice points to a mixed picture, with some programmes performing well on some metrics but others having a negative or zero impact.
- There are a number of weaknesses in the existing evaluation evidence base, including a reliance of some studies on self-reported impacts and a possible positive publication bias. To improve understanding of what works it is therefore important to increase the numbers of business development services programmes that are robustly evaluated.

Building SME demand for business advice

- SME managers often lack ambition to grow their businesses. It may not be effective to propose business advice aimed at productivity growth to these firms.
- Business trigger points can offer effective entry points for business advice, such as when an SME is faced with a challenge such as market change, rapid growth, or survival.
- A barrier to demand for business development services is lack of awareness among many SMEs of the nature and quality of business advice services available and the existence of opportunities to improve their business practices by taking business advice.
- Business development services are 'experience goods' making them difficult for SMEs to value in advance. SMEs can have concerns about the quality of the advice they will receive.
- Focusing public support on a nationally recognised brand offering business advice through a single entity can help address problems of lack of awareness and trust in business advice. The workshop included a discussion of the Cluster Innovation

Programme in Norway as an example of establishing a strong national brand for services that helps to build demand.

- Public support should aim to complement and enhance the supply of private business advice rather than crowd it out. Internationally, public programmes typically practise brokerage, whereby the public sector takes responsibility for business needs diagnosis identifying problems and potential solutions in the SME and then signposts the SME to existing suppliers for project delivery.
- SME managers are often over-optimistic about their firm's performance and often struggle to identify best practice. Offering managers information on the relative productivity performance of their SMEs compared to peers and their relative strengths and weaknesses can play a role in building SME demand for business advice.
- Offering business advice from within the 'comfort zone' of SME managers can also help strengthen demand. This includes offering peer-to-peer learning and mentoring and offering services through established and trusted relationships (e.g. banks and accountants already working with the firms). SME managers consistently cite accountants as the most popular source for their business advice and public programmes that support the provision of advice through existing connections can have a ready access point.
- Policy may also be able to tap into established business networks to identify and reach out to companies that are interested in business development services but may go to other entry points.

Targeting SMEs for advice and segmenting the market

- The level of SME demand for advice that could raise productivity is likely to vary with type of SME. For example, demand is likely to be higher from firms with high productivity growth or high productivity growth ambitions than from firms in the long tail of low productivity. Demand for advice may also be higher in start-ups, technology or knowledge-intensive firms and firms that export or seek to export. The economic and social impacts of business advice may also be greater for certain types of SMEs, including those with high demand.
- This suggests that it may be effective to target advice or differentiate advice to certain types of SMEs. For example, policy could distinguish by firm size, age, stage of development, sector, technology or geographical market.
- To maximise benefits from advice, it could also be targeted on areas of strong social concern, e.g. the introduction of green technologies or social innovations or SME development in less prosperous regions.
- Many business advice programmes in OECD countries focus on firms with growth ambition and potential. The workshop discussed the examples of business advice offered by BPI in France and the enterprise development programme in Estonia, which both focus on growth-oriented SMEs. Growth-oriented firms are more likely to demand advice, which may need to be quite sophisticated.
- Ordinary SMEs in the 'long tail' of low-productivity firms can also have business advice needs, and a business advice policy could miss significant opportunity if focused exclusively on firms with growth ambition and potential. For low productivity SMEs, the required focus of business advice is likely to be on getting the basics right (e.g. management best practice; adoption of already tried-and-tested technology).

- A differentiated approach could reserve the most costly and intensive support to SMEs with high growth ambition and potential while offering more widespread and less expensive support to other SMEs.
- Public support for business development services to low productivity SMEs should be needs based and driven by the willingness and enthusiasm of the SME manager to take part in a programme.
- While the cost of intensive and sophisticated support for growth-oriented SMEs is likely to be greater than generic support for low productivity SMEs, the impacts are also likely to be higher.

Using digital business diagnostic tools

- Several governments have developed digital business diagnostic tools. For example, the workshop presented initiatives from the USA, Singapore, Portugal and the Netherlands.
- Digital diagnostic tools often operate by presenting data from business tax and social security records and government business surveys in a way that enables a firm to compare itself, after entering its own data, with the distribution of results for similar firms, e.g. grouped by business size, sector and so on, on productivity and other measures such as sales, employment, and profitability.
- The tools can also include elements to support SME managers to self-reflect on aspects of their business practices where there may be potential to make changes that improve productivity.
- On completion of the digital diagnostic, the tools can point the SME manager to further information, advice and resources that they can use to help improve their firm's productivity performance, around possible areas for improvement that they identify themselves based on their use of the tool.
- The tools can also encourage firms to make better use of their own data on productivity and other measures. This can be useful for low productivity SMEs, which often struggle to make sense of basic metrics on their performance.
- Online business diagnostic tools represent a low-cost approach to encouraging and supporting SMEs to benchmark their business performance and to identify potential areas for improvement.
- However, they mostly require relatively codified information for their operation and produce only generic advice. The impacts are also likely to be low unless combined with additional face-to-face diagnostic support and face-to-face advice.
- One of the key uses of digital diagnostic tools can therefore be as an entry point to other business advice services, through self-referral by SME managers.
- Although digital business diagnostic tools may appear in the private market, public agencies can have a significant role to play in their development because of the importance of firm-level benchmarking data from official sources and the need for data protection.

Potential implications for the UK from international practice

Ensure a coherent system of business development services under a recognised single brand. The experience of several countries, including Denmark, Norway and the Netherlands, emphasises the need to reduce fragmentation in existing business advice offers and better align support, rather than adding more programmes. A key recommendation is therefore to build a brand that unifies different programmes under a single roof to guarantee system coherence and accessibility.

Strengthen networks, mentoring and peer-to-peer learning. Many SMEs face similar challenges and would profit from closer exchange with peers in their ambitions to enhance productivity. Programmes aiming at building networks for SMEs should be further stimulated. Existing touch points of companies, such as accountants and banks should be included in these networks.

Focus services with high unit costs on businesses with growth ambition and potential. The growth ambition and potential of the SME is critical in achieving productivity improvements from business advice. Ambitious managers are more likely to experiment with new ideas and adopt best practices. Public business development services support should therefore be targeted at SMEs that are willing to improve, especially when the services are costly.

Strengthening management is key to improving productivity in the long tail of low productivity SMEs. Strengthening management capabilities is often the key enabler for productivity-enhancing activities in the SME, including technology adoption and IT engagement. There is evidence that business development services can strengthen management capabilities and productivity performance in a range of SMEs when designed effectively.

Make better use of the potential of digital business diagnosis and guidance tools. Digital business diagnostic and advice tools help firms to increase their awareness of performance and performance relative to peers and market competitors, revealing potential opportunities and actions to develop their businesses. They can also reach out to larger numbers of firms in the long tail of low productivity than face-to-face interventions and increase the demand for business advice. Public agencies have a key role to play in developing and disseminating these tools, and in integrating them with existing business development services offers.

Building demand for business development services

Key policy issues

Business development services can have important benefits for SME productivity

UK SMEs account for 99% of all enterprises and more than 50% of employment in the business economy (OECD Structural and Demographic Business Statistics database) and their performance has a major impact on the UK's productivity.

SME productivity can be constrained by many aspects of firms' internal capabilities, for example in the areas of human resources availability and utilisation, access to finance for investment, and innovation practices. Central to this is managerial capability within the SME. Business advice can help SMEs to identify the most significant obstacles to their productivity growth and actions they can take to overcome them.

Several robust policy evaluations provide evidence that publicly supported business advice can have an important impact on improving SME productivity and growth performance when it is of high quality (e.g. Van Cauwenberge et al. 2013; Breinlich et al., 2012; Roper et al., 2001; Calderon et al., 2013; Robson and Bennett, 2000; Autio and Ranniko, 2016).

Various studies have shown that business development services policy encourages better businesses, in the sense of businesses with better growth (Johnson et al. 2007), innovation and export record (Bennett and Robson 2003) and the absorptive capacity to utilise advice effectively (Mole et al. 2008, van Doorn et al., 2017). However, impacts tend to be more positive for productivity and output than they do for employment.

The What Works Centre has reviewed the UK evaluation evidence on the impacts of business support. Out of 23 robust evaluation studies reviewed by the What Works Centre, 17 found that business advice positively impacts on at least one business outcome (What works growth, 2016). Furthemore, Piza et al's review of business advice policies across developing countries concludes that they generally have a positive impact on firm performance, but with some caveats (Piza et al., 2016). However, several evaluations have found zero or negative impacts of business advice on a range of measures related to the performance of supported firms. There are also important caveats needed when interpreting the overall evaluation evidence, related to the absence in several studies of the use of control groups or of allowance for selection effects and a possible positive publication bias.

The evidence base needs to be expanded in order to better understand what works in the design of public business advice interventions. This includes taking evaluation concerns into account upfront in the design of policy schemes, for example in establishing a theory of change for the intervention and collecting data against pre-established goals, and using more sophisticated evaluation methods to give a better picture of what works in business development services support.

Both supply and demand side issues matter in the provision of business advice

Low uptake of business development services can be an indication of gaps on the demand side of the market. Policy-makers need to be concerned not only about ensuring an adequate volume and scope of services, potentially with public programme measures, but also about the recruitment of SMEs into service provision. There is evidence that larger firms are more associated with advice seeking than SMEs (Mole et al., 2008).

There are multiple reasons for low take up of business advice by SMEs

Reasons for low demand for business advice from SMEs include:

- Limited SME ambition to grow and develop the business: SME owners may not want to grow their business beyond a certain level, for example when the company becomes successful enough to pay for an attractive life-style (also referred to as the "BMW syndrome" in the literature). They therefore may not seek out business advice oriented to achieving business growth.
- **Doubts on the usefulness of the advice**: Some SME managers may doubt the ability of external advisors to be able to add value to their decision making. For example, some of the traits associated with entrepreneurs may not be helpful in encouraging the take up of external business advice, such as desire for independence, overconfidence, and use of intuition. SME managers might not be comfortable with the idea of "going back to school". Furthermore, business development services are 'experience goods' making them difficult to value, particularly at the level of the individual firm.
- Lack of awareness of available business advice: SME owners may be unaware of the existence of business advice services and SME owners may be too preoccupied with the daily operations of their businesses to actively seek out advice that may help increase their productivity. The awareness problem can also be an issue where public business advice systems have complex structures and overlaps. For example, recent UK evidence suggests that only 3-in-10 SME employers had heard of Growth Hubs, one of the government's major business advice operators (BEIS, 2018).
- Legitimacy issues around public operators: SMEs may consider public business development services operators as less efficient and competent than advice provided by private sector firms such as regular accountants and consultants or peer companies.
- Need for complementary investments: Implementation of the actions recommended by advisors may require investments (e.g. in innovative projects), that are associated with up-front costs, uncertainty and risk. They may also imply less control over daily activities, increased managerial responsibilities and time-consuming recruitment procedures. Some SME owners may not be willing to undertake such investment with uncertain outcomes.

SMEs may be particularly stimulated to take advice at business trigger points

There is research evidence that firms can be spurred to seek public and private business advice by growth challenges (Johnson et al., 2007; Mole et al., 2017). A number of other business concerns may also stimulate advice taking, such as business survival.

SMEs can be encouraged to take business advice in topics within their comfort zones

SMEs are more likely to take business advice when offered within the "comfort zone" of the SME manager. The introductory focus of advice services could therefore be on issues such as enhancing product quality, customer service, or personal development, i.e. issues identified by the SMEs as of immediate interest to them. Demand for other support could be built through these interventions.

SMEs like to take advice through their existing networks

SME managers are more likely to take advice from people that they trust and are familiar with and consistently cite accountants the most popular source for information and advice. These actors can be engaged to connect SMEs into public business advice programmes.

It is important to build rather than crowd out the private market

Public business development services programmes tend to use brokerage, where the public sector takes responsibility for diagnosis, problem identification and potential solutions, then signposts to external experts for project delivery. This helps to build the private market rather than substitute for it.

Programmes can tap into existing firm networks

It can be effective to identify and support SMEs through existing enterprise-led networks, such as regional clusters or chambers of commerce. In addition, initiatives could be developed to encourage the emergence of enterprise-led networks for business advice provision, whereby related firms can identify common needs for advice and consultancy and share in the costs of provision. For example, the PLATO programme in the Netherlands provides business advice through peer firms. Similarly, the Syntens 'Futurised Businesses' initiative in the Netherlands actively recruits firms in local clusters to take business advice.

A national brand can increase the awareness and trust of SMEs in business development services

A nationally recognised and trusted brand can be important to the success of public business development services by building awareness of SMEs of the availability of services and trust in their quality (Bennett and Robson, 1999; Greene et al., 2008). A strong national brand can be encouraged by the use of a single agency to supply or co-ordinate services. For example, the Cluster Innovation Programme in Norway has achieved a strong brand and awareness of services among SMEs.

A Danish government assessment identified the following business development services design principles

- **Be careful in stimulating demand where the cost is high**. Research by the Danish government has shown that resistance to growth, a limited demand for business advice, and risks of self-selection of "the wrong" SME managers into public programmes entail a significant risk of over-investments in public business development services programmes. The cost effectiveness is likely to be greatest where companies have ambition and potential to grow.
- Leverage existing linkage points: As most SMEs are unlikely to demand business advice, even if they would benefit from it, significant effort is required in stimulating them to seek out services. Existing touchpoints, such as the firm's existing bankers and accountants, can serve as an important way of "nudging" the SME managers to taking advice.

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International policy trends and inspiring practice models

Box 1. PLATO, Netherlands

Description of the approach

PLATO is a government supported network to provide guidance and support to SME managers to increase their productivity and competitiveness. The network itself is organised as a group of SME managers who are supervised by highly qualified managers of large companies. PLATO is organised around three types of meeting: team building, fixed group and co-ordination. Each PLATO project begins with two team-building meetings. The first is for coaches to receive training in structured meetings. The second is for participants and coaches over a weekend to build group identity and a trusting atmosphere. Following this, monthly fixed group meetings are held for ten to fifteen SME managers and two coaches, who facilitate joint problem solving and critical reflection on management practices. Direct competitors, suppliers, and customers are excluded from the same fixed group. Three to four times a year, co-ordination meetings bring current and previous PLATO members together with guest speakers on current management topics. The intent is for participants to exchange intensive knowledge and experience on various management topics (e.g., marketing, lean production, finance, and cost price calculation). Results for the first PLATO programme carried out in Ireland reported 34% increases in turnover and 15% increases in employment. More modest impacts were found in version of the programme adopted in the Netherlands with a 7.5% increase in turnover and 14% increase in employees attributed to the programme (Sheikh et al., 2002).

Key success factors

Several factors are associated with the success of the PLATO programme including: standardisation, trust, relevance, organisation and monitoring. The coaches are trained at the beginning of each round to build atmosphere and coaching ensures a level of consistency and standardisation that ensures the 'brand'. To enable the intensive exchanges of information the team building must result in team bonding so that the required levels of trust are present. The fixed meetings can choose their own topics to ensure that the problems are those that reflect the group's management practices and experiences and are highly relevant. The organisation that delivered PLATO was an association of enterprises putting it at arm's length from the government, however a requirement that the programme be evaluated ensures public monitoring that helps encourage the high participation rates (Schoonjans et al., 2013; Van Cauwenberge et al., 2013).

Challenges

A challenge for the programme is to organise information exchange and learning across involving different types of businesses with knowledge to share. Foreign-owned businesses are often more likely to engage with the academic and other institutions (Criscuolo et al., 2010). There may be an opportunity to increase connections between FDI and domestic SMEs outside of the supply chain in this type of networking approach to business advice.

Box 2. The Cluster Innovation Programme, Norway

Description of the approach

The Cluster Innovation Programme of the Norway Innovation Agency is an example of an initiative that has driven an increase in demand for business advice by SMEs by building a strong national brand for advice combined with active outreach to SMEs. The initiative identifies SMEs in key clusters and offers them subsidised business advice and mentoring branded as part of the programme and provided by other actors in their cluster, including other firms, research institutes and higher education institutions (HEIs).

The Programme offers advice and mentoring to strengthen SMEs in the clusters in two key competence areas: digital technologies and advanced production (robotics, etc.). Its intended outcome is to help SMEs start or accelerate change processes that will renew their products, services, processes and business models. 2 700 companies are currently supported in 30 clusters. Six cluster areas have been chosen, including bio-economy, clean energy, and creative industries.

Key success factors

Regional clusters with a relevant technology base in one of the selected focus areas of the programme are invited to apply for the support through an open call. Regional clusters within these fields are selected to participate on the basis of a proven capability of key cluster actors (HEIs, research institutions, large firms, consultancies etc.) to share their resources and long-term experience with SMEs. Candidate firms within these clusters can be supported if they meet certain criteria, including market potential and profitability, innovation, adding value to Norway and the ability to complete the task. The selected firms in the selected clusters are offered tailor-made advice and mentoring from other cluster actors.

Box 3. Syntens "Futurized Businesses" Programme, Netherlands

Description of the approach

Futurized Businesses is a campaign to boost SME participation in networks and encourage them to attend innovation seminars and avail themselves of business advice. The initiative is delivered by Syntens, a not-for-profit organisation collecting consultants in regional offices across the country.

First, the campaign tracks down companies with more than five employees that are not part of any previous programme, and are in manufacturing, construction, wholesale, transport or business services. Next, the team prioritises this list based on the importance of the sectors they are in and the potential of the companies. Then, small local areas, based on travel to work areas, are selected for a campaign which connects with local representatives and the local media to increase awareness of the programme. Finally, the SMEs are telephoned by consultants, who listen to the challenges that the owner faces and try to arrange a meeting with the SME manager (consultants had a 50% success rate whereas a call centre had a 1-in-10 success rate) to provide business advice.

Key success factors

The first contact seems to be very important and the experience of the consultants appears to make a very large difference to the outcome. The Syntens network reports that 55% of firms followed up their contact to take advice. The network argues that: "...it is sound policy to invest time and effort in less innovative companies but only if you work in a demand driven ("listen") way and ensure that the visits are performed by experienced consultants" (Peutz et al, 2013).

Challenges

The Futurized Business programme has used a relatively high cost approach since the outcome requires experienced consultants to make the first call. This can be a challenge in business advice systems that have sought to standardise the offers to clients so that the customer-facing staff are less experienced.

Key discussion points

The following points were a key focus of discussion in the workshop:

Get How to raise the awareness of companies that support exists for their problem?

Businesses take advice at trigger points, e.g. when faced by a threat or challenge. Policy should use such existing trigger points by offering relevant advice at the right time. This implies a need to scan companies for when they perceive a trigger point and to be visible in terms of ability to react to trigger points that SMEs encounter.

Policy should also use existing touch points and relationships of trust to reach SMEs with business advice. This could be through delivering business advice through contacts an SME is familiar with, such as their bank or accountant. These contacts would need special training to be aware of the public support system and what public business advice support to offer to the companies in their network. Policy support for low productivity SMEs should

make use of existing company relationships, such as banks and accountants. However, it is unclear which organisations would best fit this role in the UK, which does not have compulsory membership of Chambers of Commerce.

What is the role of enterprise networks?

Enterprise networks can be an important channel to raise SME awareness of business development services and identify SMEs that have an interest in accessing them. There is often strong demand from enterprises for peer-to-peer learning opportunities. Such opportunities could be offered by organising experience exchange, advice, mentoring and consulting activities within the network. The model of Innovate Norway is a good example of an approach that uses existing networks in clusters to engage companies in business advice programmes offered by other firms, universities and organisation within the cluster under a national brand. Collaborative business advice activities can also be organised through encouraging enterprise networks (e.g. local chambers of commerce, or firms in related sectors) to identify shared business advice needs and providing business advice to these groups of SMEs.

What type of support is needed?

BPI, the French public development bank, outlined its business development services structure, which is based around three pillars of non-financial support: (i) training, (ii) advisory services, and (iii) networking. This includes e-learning programmes, diagnostics and assistance, web platforms, and a business accelerator. It was emphasised that companies need a package that combines training and advice with networking and financial investment.

Targeting SMEs and segmenting the advice market

Key policy issues

There are various options for segmenting the business advice offer

A common approach to segmenting publicly supported business advice involves differentiating between different stages of company development, for example distinguishing support for nascent entrepreneurs, start-ups, established businesses, and businesses engaged in growth or internationalisation. Specific and tailored service offers can be developed for each company stage. These services can marketed to firms in a targeted way.

Another option is to focus business advice support on areas where strong social impacts can be expected. For example, policy could focus on supporting SMEs to introduce green technologies or social innovations or it could focus on supporting SMEs in peripheral areas.

Identifying growth-oriented ventures remains a difficult undertaking for policy-makers

Policy makers often seek to target public business advice schemes on ventures with high growth potential, where the impacts of the assistance on productivity growth may be particularly strong. However, the existing body of research into high growth firms suggests that growth processes are often random and unpredictable, and that identification of ventures with potential for growth is exceedingly difficult. As a consequence, it may be difficult to effectively target business advice programmes to growth-oriented SMEs.

Business advice can be beneficial for established low-productivity SMEs as well as ambitious enterprises

Established SMEs in the long tail of low productivity performance often have what Klofsten (1992) defines as a 'business platform', i.e. a solid base of customers and a working organisation as a basis for potential future growth. It can therefore be effective to target these firms with business advice. These firms are not at the cutting edge of innovative production and business advice would be more appropriately focus on supporting catch up process technologies and incremental changes to their products or business models. A key focus for business development services for low productivity SMEs should therefore be on supporting management to get the basics right, for example introducing best practice management approaches or adopting digital technologies across the enterprise.

The cost and intensity of support could vary with enterprise growth ambition and potential

Public business advice support could differentiate between more costly intensive support to SMEs with high ambition and potential for improving their productivity and less intensive support to other firms that are nonetheless motivated to make changes in their practices. While the more intensive support is more costly, greater impacts are likely to defray the extra costs.

The solution might not lie in 'more' support

An analysis of the Swedish business support system has stressed the importance of better co-ordination and coherence in the existing support structure. The aim should be a system that is easy to navigate for SMEs and that provides targeted support channels through linkage organisations.

International policy trends and inspiring practice models

Box 4. SMIL Business Development Programme, Sweden

Description of the approach

The SMIL Business Development Programme (BDP) aims to promote open learning among growing SMEs. The focus is on advice to growing firms rather than to start-ups because of a view that high growth firms have a stronger impact on generating new jobs. The programme is administered by Linköping University in co-operation with SMIL. Each year, it consists of three one-day workshops for groups of similar growth-oriented SMEs.

Strengths

The BDP originated from a regional network of businesses that asked to participate, and has been run several times, enabling learning and networks to emerge among the firms that have participated. An additional strength is its flexibility, with each edition tailored to the interests and needs of its participants.

Challenges

Initially a challenge was getting the right number of participants to facilitate mutual learning and networking. Some 20 SMEs participated in the first edition of the programme. However, this group was judged to be too large. Hence, the number of participants in the subsequent editions was limited to 9 firms.

Another challenge is that at least one experienced entrepreneur is needed as a programme leader and the programme could not be run by policy actors alone.

Key success factors

Among the key success factors of the programme are a focus on solving problems that the SMEs themselves identify and a friendly and constructive dialogue among SMEs participating in the programme, which supports peer learning.

Key discussion points

The following points were a key focus of discussion in the workshop:

Is targeting high growth a good strategy?

A focus of business advice on high growth potential enterprises is common internationally. This may be important to achieve cost effectiveness in intensive business development services supports where there is a high per company cost of provision. On the other hand, too strong a focus on high growth potential risks missing the potential of advice to stimulate productivity improvements in established SMEs through catch-up support towards business best practices.

Which support for the long tail?

A recent evaluation of the Danish business development services system by the Danish Business Authority proposed a two-tier system. This type of approach would focus expensive programmes on businesses with the highest growth ambition and potential whilst also addressing the long tail of low productivity SMEs with less expensive support. Digital business diagnostic tools offer the opportunity to reach many firms at low cost. This type of intervention could benefit SMEs in the long tail of low productivity to increase their awareness of their productivity performance and compare it with other businesses. Moreover, the impact on low productivity businesses might be substantial.

Using digital business diagnostic tools

Key policy issues

Digital business diagnostic tools are an increasingly common component of SME support. They have been developed and applied across a wide range of countries, including the USA, Singapore, Portugal and the Netherlands.

There are two major categories of tool:

- Generic tools aimed at benchmarking SME productivity and competitiveness: The generic tools aim to assess the level of productivity and competitiveness of an SME in a certain sector or location. User companies enter key values for their own company (profits, number of employees etc.) and the tool provides a benchmarking of the company against records for other companies in the same sector or location.
- **Focused tools**: These are of a more specific nature and aim at providing a diagnostic within a certain area of importance to companies, such as innovation, internationalisation or digitalisation.

These online tools offer relatively generic and passive advice

Digital diagnostic tools are suitable mostly for providing basic business advice. They require relatively codified information from the user firm and from benchmarking data sources. From the benchmarking and self-assessment scores they can then produce generic advice. Compared with face-to-face support, these approaches can be reactive and relatively passive, requiring the SME manager to take the lead. On the other hand, they are useful in getting companies to start to think about their areas of strength and weakness, and in supporting them to use and make sense of the data they have on their own business.

Digital tools can be an important entry point to business advice and support

Using a digital business diagnostic tool can be an important first step for SME managers to reflect upon their company's performance and practices vis-à-vis potential competitors and to focus on how to improve certain key aspects of their business approach, such as their innovation strategy or human resources development. After using a digital business diagnostic assessment, the user can be signposted to appropriate and tailored online advice. The tools have been shown to be quite powerful in motivating the take up of business advice among SMEs.

Digital tools can make business advice more inclusive and accessible

Online support offers basic business advice to firms in a lower cost manner than traditional face-to-face advice, which opens up the possibility to expand the reach of business advice towards greater numbers of SMEs in the long tail of low productivity.

At the same time, more firms may be willing to engage with business advice in an online format. Online tools offer support that is just "one click away" for any SME that wants to explore them. They are relatively easy for the SME to identify, access and use. As opposed to local business advice centres, they are readily available to any interested SME regardless of location, even in remote areas, on condition of having internet access.

Policy has a key role to play in providing digital business diagnostic tools

Many digital business diagnostic tools have been created with public support. Public policies can play several functions in their development and use:

- **Design**: One of the key roles of public agencies is in supporting the design of a conceptual model that can inform the identification of business performance profiles and potential business development priorities.
- Data-driven comparison and benchmarking: The key productivity and other business performance data used in digital business diagnosis tools often come from official sources, such as tax records, social security records, and official business surveys. Given public ownership of much of the data and public responsibilities with respect to data protection, government is a front-runner to develop a diagnostic tool, bringing in additional private data where relevant. Several countries have a single agency in charge of combining different administrative data and supporting their use. The development of a digital diagnostic tool could therefore be the responsibility of such an agency in collaboration with the ministry responsible for enterprise.
- **Dissemination**: Public agencies can disseminate information on the tool to potential SME users through a range of networks. A nationally branded tool can achieve high visibility.
- **Integration**: Policy can play a role in integrating several diagnostic tools (public and private) under a single user-friendly online platform that would provide an entry point towards a virtual toolbox or library of digital diagnostic tools for SMEs.
- **Implementation support**: Even though an SME may undertake a diagnostic on its own, it may be important for public policies and agencies to support SMEs to implement actions to respond to the diagnosis. This could be limited to providing information on potential actions to effect change. However, it could also offer access to subsidised consultancy and mentoring by business advisors who make use of the diagnostic tool and build on its indications.

International policy trends and inspiring practice models

The box below provides a number of examples of different diagnostic tools from different countries.

Box 5. International examples of digital business diagnostic tools for SMEs

- **"Future SME"** Capability Diagnostic Model. This online tool was developed with financing from the European Union for use by SMEs across a range of countries. The SME provides information about the company and responds to questions around a number of indicators (e.g. strategy, performance management, etc.). An output report is automatically generated which highlights key priorities for the SME to address to improve business performance and competitiveness.
- "COTEC Portugal" Innovation Scoring System. This involves an online company self-assessment across five key areas related to innovation management. The system automatically creates a feedback report, which allows comparison with average and top performers that have already used the tool.
- "2SHERPA", Singapore. This self-assessment tool focuses on supporting SMEs that aim to internationalise. The tool highlights strengths and weaknesses in the SME's export capability and potential.
- "SizeUp" (US Small Business Administration). This online tool links up a number of datasets to help SMEs increase their productivity and competitiveness by benchmarking themselves (on wages to employees and output per employee), mapping their competition and suggesting the best place to advertise their products and services.
- "Holistic Industry Productivity Scorecard (HIPS) Calculator" (Singapore Business Federation). This online tool helps SMEs to understand their performance across 10 indicators and shows how they compare to SMEs in other percentiles of the firm distribution. The Scorecard links to further support provided by the Singaporean government after the diagnostic.
- "Singapore Smart Industry Readiness Index" (Singapore Economic Development Board). This self-assessment tool scores SMEs against 8 criteria across 3 dimensions (process, technology, organisation). The resulting performance profile helps SMEs to prioritise and implement improvement on smart industry readiness.
- "Canada Business Productivity" (Canada Business Development Bank). This digital benchmarking tool can be used by SMEs to compare their productivity with peers in the same industry. It is based on five indicators: (1) overall productivity; (2) revenue per employee; (3) profit per employee; (4) labour productivity; (5) capital productivity. The tool uses data from corporate federal income tax returns.
- **"Intellectual Property Simulation"** (Canada Business Development Bank). This online programme guides SMEs on how to protect the company's intangible assets based on certain indicators provided by the SME.
- "e-Estonia" (Enterprise Estonia). This offers a digital tool that helps SMEs to identify how competitive they are, using seven indicators (competitiveness; customers and markets; sales and marketing; products and prices; distribution channels; product development, production and logistics; and resources and knowhow).

Key discussion points

The following points were a key focus of discussion in the workshop:

" What is the role of digital business diagnostic tools for low productivity SMEs?

Most low productivity SMEs lack knowledge to use their business diagnostic data without support and are unaware when they are underperforming. Digital diagnostic tools can help SMEs to better understand their own data and compare it with those of other companies. Such tools can help them to get a realistic evaluation of their productivity and general business situation vis-à-vis peers and provide them with an initial diagnostic of strengths and weaknesses globally or in particular focus areas. They can also be an entry point into other business advice services.

Who should be designing digital business diagnostic tools?

Data protection and regulation issues, as well as the importance of government held data, suggest that a public agency may need to be responsible for providing a large-scale digital diagnostic tool rather than a private provider. Government funding may also be needed to stimulate the development of the tools. Universities may be a good partner if they have protected access to the data.

How can awareness be raised on the existence of the tools?

Efforts will be needed to make SMEs aware of the existence of digital business diagnostic tools. For example, use of the tool could be introduced as part of SME management training programmes, or "ambassadors" could be tasked with promoting the tool to SMEs in particular sectors or places.

General How to make sure that these tools are user-friendly?

Statements and questions in such tools need to be framed in an accessible manner that allows the SME manager to understand the added value of the tool and the actions the assessment suggests they may take. Key basic business concepts, such as productivity and competitiveness, should be explained clearly with links to further online information.

G Are these tools sufficient on their own?

Whereas the tools allow firms to assess their performance, they do not provide the solution. SMEs may need further support to ensure they implement the right actions. The tools could therefore offer links to existing available business advice and business support programmes and explain their benefits. In particular, the tools can serve as a means of raising awareness and appetite from SMEs for other types of support, including face-to-face advice.

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Part II. Thematic Papers

Policy challenges for business development services in the United Kingdom

By Kevin Mole, Warwick University, United Kingdom

Introduction

Business development services for small and medium-sized enterprises (SMEs) can be seen as involving a range of business advice activities aimed at developing knowledge and capability to improve the performance of the business. There is public support for business development services virtually all OECD countries and regions, although the precise provision and approaches differ substantially (Mole and Bramley, 2006).

A tight definition of business development services could be adopted, focusing on the provision of information and advice to SME management (Bennett, 2014). A broader definition could extend to activities including management training, consultancy, marketing information, technology development and transfer, and business linkage promotion, aimed at addressing both short term operational issues and longer term strategic issues (Tanburn, Trah and Hallberg, 2001).

Business development services are typically seen as non-financial, i.e. they do not provide financial resources to the firm directly, although they may enable firms to access finance (Miehlbradt, 2002). Furthermore any social support elements of advice (McPherson et al., 2001) are typically seen as outside the remit of business development services (Kraaijenbrink et al., 2010).

The principle focus of business development services is on assisting SMEs to deal with managerial challenges to business improvement. One of the targets may be low productivity SMEs in the 'long tail' of the productivity distribution. These firms have been highlighted in the recent debate about the causes of the UK's low productivity growth. However, sluggish SME productivity growth has been a long-standing facet of the UK economy, with a long tail of poorly productive firms the focus of reports since the Bolton Report (1971), Bacon and Eltis (1976) and the Commission on Public Policy and British Business (1997). Each of these reports pointed out the long tail of poorly productive firms that sat alongside reasonably successful large firms as the UK tended to favour 'tall trees' (Hannah, 1999; Barsoux and Lawrence, 1990).

This paper examines the policy challenge for leveraging business development services for supporting SME productivity growth in the UK, including SMEs in the 'long tail' of low productivity. It focuses on the evolution of the UK's business development services policies and delivery structures and key UK challenges, with a view to identifying potential opportunities for policy transfer from the experience of other countries.

Past UK approaches to business development services policy

The early evolution of small business policy in the UK

Britain was a laggard in terms of attention and support for small firms in comparison with countries like France and Germany with long standing programmes (Barsoux and Lawrence, 1990), although it must be said that there has been a long tradition of voluntary associations through the 19th century chambers of commerce movement, which in Britain are self-determining (Taylor, 2007). Therefore, effective small firm policy in the UK dates

from the late 1970s. Although the Bolton Report (1971) investigated the role of small firms, it was only with the emergence of high unemployment and the influence of research showing new small firms created a disproportionate number of jobs (Birch, 1976) that a small firms policy developed, initially focused on encouraging greater numbers of entrepreneurs.

The initial step was a grassroots approach, which focused on developing enterprise agencies to provide advice to SMEs. The first of these agencies was established in the city of Bolton in 1976. This policy was later reinforced nationally by the Enterprise Allowance Scheme, which encouraged the unemployed to set up their own businesses by enabling welfare transfers to be retained for the first year and had 565 700 participants during its lifetime (1983-1991). As a policy this may have been judged a success (Greene and Patel, 2013); the number of UK enterprises increased from 2.4 million businesses in 1980 to 3.6 million in 1989 (Greene, 2002), although unemployment was still high and it is not possible to attribute the changes in business numbers to one policy. However, the types of businesses created were often low productivity businesses with low survival rates (MacDonald and Coffield, 1991).

The dissatisfaction with the low value of new businesses and continued high levels of unemployment switched the attention of policymakers towards a focus on quality (Greene et al., 2004). Once again, the role of small firms in job creation was a driver. Research showed that around 4% of small firms created 50% of new jobs (Storey, 1994), so policy developed to encourage greater quality, focusing on growth-orientated existing entrepreneurs. Enterprise initiatives introduced businesses to advice and consultancy, offering subsidies for businesses to avail themselves of a 'taster' of advice. This subsidy was justified on the basis of firms' difficulty in valuing advice, leading to fewer transfers of knowledge and market failure in the advice market (Storey, 2003). Evaluation evidence suggested that the policy was successful for a particular group of businesses) but not effective for micro-businesses with fewer than 6 employees or larger medium sized firms (Wren and Storey, 2002).

The era of the Business Links

Meanwhile an expansion of the degree of intervention occurred with the accession of Lord Heseltine to the role of President of the Board of Trade in 1992. This led to the establishment of Business Links, which were local 'one-stop shop' business advice franchises, in an attempt to make it easier for SMEs to navigate the market for business advice. The Business Link franchises were established with local institutional support, often through the existing Training and Enterprise Councils. They were to be private sector led, with the expectation that they would ultimately be self-financing (Forte, 2011). This policy had support from all three major political parties at the time. Although the hope had been for more, 89 Business Links were established.

The history of Business Links seemed to be a long process of consolidation. Business Link organisations were subject to change both at the level of the programmes they promoted and the actual organisation (franchises) themselves. Initial drivers of change were concerns about the programme quality. These were reflected in variations of performance across the different franchises, as over 10% of Business Links linked to Chambers of Commerce had mean scores of 'very dissatisfied' from clients (Bennett and Robson, 2003). A series of amalgamations from 1992 reduced the number of Business Links to 45 (Mole et al., 2008). When the UK Labour Party won the 1997 election, the Business Link policy remained as a comprehensive service. However, the all-party support for Business Links fell down when

Business Links became part of Regional Development Agencies. In opposition, the Conservative Party published a highly critical report (Richard, 2008). Business Links were phased out when the Conservative-Liberal Democrat coalition came to power in 2010. The responsibility for business development services then passed to Local Enterprise Partnerships (see below).

Table 1 summarises how business advice and consultancy developed in the UK from 1973, highlighting key features: managerial points, delivery managers, fee structures and the intensity of assistance.

Main Schemes	Period	Point of management	Administration	Delivery	Client fees	Intensity of advice
Small Firms Service (SFS) and Business Development Service	1973- 1988	Central government and government regional offices	Civil servants	Referral and market consultants	Free advice, subsidised consultants	Mainly low, a few high
SFS and Enterprise Initiative	1988- 93	Central government and government regional offices	Civil servants	Referral and market consultants	Free advice, subsidised consultants	Mainly low, more high
Business Link	1993- 2005	Local: County and districts level	Contracts to government agencies, partner bodies, and franchisees	Internal, Partnership Brokers Accreditation Scheme (PBAs), and some referral	Complex mix of with fee targets	Targeting high, also low
Regional Development Agencies (RDAs) and Business Link	2005- 2010	Regional and county level	RDAs, partner bodies, and specialist contractors	Internal, PBAs, and some referral	Complex mix with some fee targets	Targeting high, also low, varied
Local Enterprise Partnerships in England	2010-	Local: City- region and county	Local strategy boards	Partners and private sector	Existing supplier fees, with some subsidies	Mainly low, a few high, very varied

Table 1. Business advice and consultancy schemes in the UK, 1973-2011

Source: Bennett, 2012

Challenges identified through past UK approaches

Complex navigation of the advice system

A first challenge is that the development of business advice policy in the UK has tended to create a complex system for SMEs to navigate. All the major UK political parties have consistently supported some small business development services, and funds have been available from European Union sources. This has had the corollary of increasing numbers of schemes. Francis Greene has been most assiduous in counting the number of schemes and suggests that business support continued to be characterised by 'confused, complex and congested delivery' (Greene and Patel, 2013), which is a long-standing theme in the policy field. In 1989 the Audit Commission (1989) suggested there was a 'patchwork quilt of complexity'. There has thus been a long-standing problem for SME managers in the UK to navigate the market for business advice. Simplifying the offer of advice is particularly important given evidence that market failures in business advice tend not be on the supply side but on the demand for advice (Mole et al., 2017; Kautonen et al., 2010).

Local variations in service quality

There have also been quality issues associated with public support for business advice provision in some local areas. Within the centrally administered schemes, management was decentralised over the period from national towards more local provision, albeit in the Blair years the Business Links were rationalised under the auspices of Regional Development Agencies. Policy under Conservative administrations emphasised sub-regional local areas and private sector involvement. At the same time, there have been associated concerns about variations in the quality of services offered across different local areas.

Crowding out of private sector advice provision

Whilst actual delivery approaches have changed, there has always been some concern over crowding out, whereby public provision may reduce the demand for private sector advice. The public sector is intervening in a market that has only 'partially failed' leading to the under-consumption of business advice and assistance, but private provision is still available (Storey, 2003). Concerns over crowding out led to public support models that emphasise brokerage to involve private sector advisors, and hence ameliorate market failure through measures to increase the demand for private sector advice (Robson and Bennett, 2000).

Difficulty in requiring business advice schemes to be self-financing

Policies that have tried to fund business advice from the client firms themselves have largely been abandoned. Paying fees was expected to be linked to client satisfaction, and there is experimental evidence for this (Gino, 2008), yet the experience of fee payment in Business Link did not match expectations (Robson and Bennett, 2010). The idea that a business advice programme can be pump-primed and then will stand on its own revenue generating powers has been illusory. Nonetheless, while subsequent schemes have been subsidised, some element of payment has been seen as important since it is seen to act as indication of the seriousness of the business in seeking advice (Gino 2008).

The relevance of targeting more capable and impactful businesses

It is quite clear that one size does not fit all in business advice, and that the benefits from advice are unequally distributed, and more likely to result from interactions with more capable and better linked businesses (Mole et al., 2008). Consequently there has been an increasing emphasis on targeting advice at businesses which may exhibit the capability to use the advice or that are in a position where the boost from advice would create significant

spillover effects (Smallbone and Massey, 2012; Smallbone, Baldock and Burgess, 2002). Whilst targeting has always been slightly controversial, there has been a de facto attention recently to high growth potential and high quality businesses. This raises questions about the ability of business advice policy to support the typical SME in the 'long tail' of low productivity. A further question is whether a business advice policy is capable of 'picking winners' in advance. However, this latter issue is avoidable. Although 'picking winners' is inherently uncertain, an alternative has been to work with those businesses that pass certain 'gates', i.e. the policy can retain those that behave in a manner that the policymakers want to emphasise. Such a policy does not pick winners but retains them (Autio and Rannikko, 2016). This all assumes that the evidence supports the benefits of advice; for discussion of this, see Box 6 on 'does advice work'?

Box 6. Does business advice work?

Given the universal public support for business development services in OECD countries, one might expect incontrovertible evidence for its effectiveness. However, robust impact evaluation studies based on methodologies that establish control groups and allow for selection effects (see OECD, 2007) are relatively rare.

Businesses that seek out and avail themselves of business advice are not a random selection of the firm population. They may be more motivated to grow or perhaps threatened in their existing practices. Various work has shown that business development services policy encourages better businesses, in the sense of businesses with better growth (Johnson et al., 2007), innovation and export record (Bennett and Robson, 2003) and absorptive capacity to utilise advice effectively (Mole et al., 2008; van Doorn, Heyden and Volberda, 2017). Robust evaluation studies therefore have to allow for potential selection bias in making comparisons between treatment and control groups for business advice.

In the UK, the What Works Centre has highlighted a number of 'good studies' on the impact of business advice through an adaption of the Maryland Scale (see Madaleno and Waights, 2018), based on the classic book on quasi-experimentation by Cook and Campbell (1979). Essentially, evaluations scoring higher on the Maryland Scale do a better job of matching controls and producing a counterfactual to estimate what would have happened without the intervention. Out of the 23 good evaluation studies, 17 of them found that business advice positively impacts on at least one business outcome (What works growth, 2016). Advice programmes show consistently better results for productivity and output than they do for employment, although there are mixed results for profits and exports. A 'managed brokerage' model performs better than a light touch delivery model, which suggests a 'dosage effect' (see also Chrisman et al., 2005; Chrisman and McMullan, 2004). The weight of evidence therefore appears to favour the view that there are positive impacts on SMEs from business advice in the UK.

Outside of the UK, Piza et al's review of business advice policies across developing countries concludes that "Overall SME support has a positive impact on various measures of firm performance, but with some caveats." (Piza et al., 2016 p.7). In another systematic review, Brody et al. (2015) found business and training courses boost the effects of self-help groups on women's empowerment. In addition, systematic reviews suggest that SME interventions yield superior results in larger SMEs (Piza et al., 2016, Grimm and Paffhausen, 2013). Further, where firms face an array of constraints it is often suggested

that they need a 'big push' in developing countries (Piza et al., 2016). This has parallels with evidence that the benefits from business advisory programmes accrue to the recipients of managed brokerage offering a range of support alongside advice (Mole et al., 2011; What works growth, 2016; Grimm, 2016).

Alongside studies that use a range of statistical methods to allow for selection bias, randomised control trials (RCT) offer a robust way to control for unobservables. One of the important features of these approaches is that they should pre-register the outcome measure that the RCT is supposed to test and report on all the outcomes that it was decided to test for. If the random allocation is truly random this should control for differences between the groups (see Madaleno and Waights, 2018). Many RCTs have tested business development services in less developed countries. In India, Bloom et al (2013) showed a boost to productivity from teaching comparatively rudimentary management practices to large textile firms; moreover the performance impact of business practices has been shown across smaller firms in many developing countries (McKenzie and Woodruff, 2017). In Togo, teaching entrepreneurs personal development skills was more beneficial than traditional management training (Campos et al., 2017). In the Dominican Republic, Drexler et al. (2014) compared managers trained in 'normal' accountancy training for managers with a more heuristic rules-of-thumb approach to accountancy training. Overall, McKenzie and Woodruff (2014) suggest that the impact of business advice has been positive although relatively modest - of course the cost of soft training is also relatively modest, particularly in comparison with financial programmes. At the same time, it should be recognised that RCTs themselves can sometimes be problematic (Madaleno and Waights, 2018). In particular, there may be elements of contamination, particularly in the developed world, whereby control group assigned members may seek out alternative methods to achieve the same objectives, particularly when their interest might have been piqued by an invitation to join a programme.

A sceptic might still question whether the reported econometric and RCT studies are enough to show that there are benefits from business development services policies in general due to a possible publication bias in academia. Since journals want to publish positive results and academics need to be published to advance their career, researchers look for positive results and ignore negative results. If a dataset shows positive impacts it is more likely to be reported. Similarly, if there was a positive effect on turnover but no effect on employment, for example, then it is likely that the stress in the paper will be placed on the positive results might see the light; it is entirely possible that many studies will report positive effects even when there are no 'real' impacts from a treatment. Under these circumstances, for example, the 17 out of 23 UK studies found by the What Works Centre highlighting various positive impacts could conceivably be consistent with no overall impact from business advice, if insignificant results from many other datasets are unreported.

A key question then becomes how likely it is that the overall findings of the body of evidence can be dismissed as due to publication bias. It is possible to assess the amount of publication bias. In a Campbell Review of business support (including some matched funding) in developing countries, Piza et al. (2016) produced a funnel plot and an Egger test suggesting publication bias affects conclusions on employment creation but not on other firm performance measures.

Overall, it is important to generalise the application of robust evaluation methods of business advice policies to increase our knowledge of whether public support for business

advice is cost effective and in which circumstances it works. Indeed, if the public sector itself automatically secures and reports evaluation of its business advice initiatives, this would eliminate the issue of selective reporting because of incentives faced by academics. At the same time, studies also need to identify reasons why programmes work or do not work, using a clear theory of change (Parker and Hine, 2015). Whilst, evaluations typically focus on whether programmes work, they tend to overlook the links in the causal chain. What is required is middle range theory (Hedström and Ylikoski, 2010) where the programme logic can be tested. In this, we might need to look at a wider range of evidence, including qualitative work, to understand the mechanisms that surround the use of business information and advice. In an example where this was not overlooked, Cumming, Fischer and Peridis (2015) showed how publicly supported export promotion programmes increased the firm's internationalisation capabilities. Attention may also be placed on the match between the offer of advice and the capability of the targeted firm to use the advice (Okhuysen and Eisenhardt, 2002; van Doorn et al., 2016).

Key current UK approaches to business advice delivery

A selection of broad (with largely national scope) UK business advice programmes for SMEs is discussed below. It does not cover all advice programmes and mixes initiatives receiving public funding with private and non-profit initiatives with no public funding. Despite the significant and growing number of initiatives involved, the Growth Hubs can still be considered to be the major publicly supported initiative at national level. There are many further smaller programmes, often focused on particular industry sectors or thematic issues or operating in particular regions and localities.

Growth Hubs

Each of the 38 Local Enterprise Partnerships (LEPs) in England (these are private sector led strategic partnerships charged with encouraging economic growth in their local areas) operates a Growth Hub to support SME access to business development services.

One of the key functions of the Growth Hubs is to act as a key local co-ordinator to help businesses to navigate their way through the available offers and to generate the demand for business development services (H.M. Government, 2010), operating a type of 'coupole' or 'hub and spoke' model (Lambrecht and Pirnay, 2005).

As part of this function, the Growth Hubs review the overall state of the local business development services market to support the signposting of SME managers to different sources of advice. The Growth Hubs also diagnose the issues that concern the SME, to alleviate information asymmetries that can lead to businesses being sold support that is not required. At the same time, the Growth Hubs should develop the repeat business knowledge of the private business support providers, again dealing with the asymmetries in information and helping business navigating the business advice market. Some Growth Hubs have used the carrot more than the stick and have developed a trusting relationship with providers, although this brokerage role raises the problem of untraded dependencies (see Turok and Raco, 2000). More heavy handed LEPs have had more difficulty because other stakeholders may question 'who told them they were the experts' (Downes, 2018).

The Growth Hubs may also undertake targeted interventions to fill gaps indicating market failures, focusing on leveraging other public funds outside of their core operating budgets, such as ERDF funding and Regional Growth Fund funding (Mole et al., 2011).

Be the Business

Be the Business offers benchmarking tools, advice, mentoring and executive education to UK business leaders with support from government and businesses. It has adopted three methods to enhance firm-level productivity (Halpern and Broughton, 2017). The first is a self-assessment survey to enable businesses to gauge their relative position in their industry and therefore indicate the extent of room for improvement. The second is an online tool that gives rudimentary advice for simple problems such as how to provide feedback to employees. The third seeks to develop information on the reputable sources of advice and support available to businesses in improving their productivity. Be the Business also supports two courses operated with academic partner institutions Lancaster University Business School and Cardiff Business School.

News Group online platform

The News Group operates an online platform with public support to help people starting and growing business with online training videos, case studies, market research resources, an online forum, business information library, business news and webchat. It offers generic information with a wide scope and fits with people's predilection for online searches for information.

Prince's Trust start-up advice

The Prince's Trust is a non-profit organisation helping people aged 18 to 30 years to start their own businesses in England, Scotland, Wales or Northern Ireland with public sector backing. In addition to loans of up to GBP 5 000 for those who were unemployed or working under 16 hours a week prior to start up, grants of between GBP 1 000 and GBP 5 000 are available to provide support for business planning, training and mentoring. Although evidence indicates an impact from business planning (Burke et al., 2010), an evaluation failed to find a significant impact on recipients' future wages (Meager et al., 2003).

Chambers of Commerce

There are 52 accredited local Chambers of Commerce in the UK operating within the British Chambers of Commerce (BCC) network. There is a large membership. However, in contrast to several other European countries, such as France, Chambers are private and there is no requirement for businesses to join. Rather in the UK, the Chambers deliver services to their members on a commercial basis at the same time as playing a campaigning role to influence government for the interests of business. The Chambers have a long history of offering business development services, and have recently focused strongly on offering advice and support for international trade.

Goldman Sachs 10,000 Small Businesses

The 10,000 Small Businesses Programme is supported in the UK by Goldman Sachs, the Goldman Sachs Foundation and a number of universities. It provides a four-month programme of management education and business support services based around 10 workshops to support growth-orientated businesses. An evaluation of the programme using a regression discontinuity design estimated that participation increased turnover by 19% over two years (Goldman Sachs, 2016). There have been approximately 1 500 participants in this programme since its inception in the UK in 2009. Participant businesses need to have operated for at least three years, have between 5 and 15 employees and a turnover of no less than GBP 250 000. The recipient should be the primary owner or main decision
maker in the business and should not have had any recent management education. A personal interview is an additional requirement.

Challenges for the Growth Hubs

Addressing uneven and short term funding

Most LEPs have found that the basic funding they receive is inconsistent with the goals set for business advice and that the co-ordination role of Growth Hubs is not sufficient to bring forth the scale of private sector resources needed (National Audit Office, 2016). Many of the Growth Hubs have therefore sought additional public funding to deliver business advice directly as delivery partners. The Growth Hubs themselves make the decisions on the extent to which they seek to intervene in the market, although often it is the previous experience of staff in gaining funding that determines the choices that are made.

A key source of additional funding has been national funding contributions through 'Growth Deals', involving a competitive process based on assessment by central government of their local strategies and proposals. LEPs have taken on significant amounts of public spending through Growth Deals, for which budgets have increased from GBP 1.5 billion between 2010 and 2015 to an anticipated GBP 12 billion between 2015/16 and 2020/2021 (National Audit Office, 2016). This Growth Deal process was designed to encourage more entrepreneurial flair among the LEPs (Lord Heseltine, 2012) and has helped to structure their thinking in setting of local priorities.

However, the competitive bidding nature of the funding arrangements have led to a bifurcation among Growth Hubs, rather like that which prevailed prior to 2010. Some develop direct support as delivery partners with various public money. This boosts their presence but can lead to conflict as co-ordinators are also deliverers and may be adding to a cluttered market (Downes, 2017). Others focus on their co-ordination role and have more of a light-touch approach (Mole et al., 2011). The ability of the Growth Hubs to develop consistent and longer-term direct business advice interventions would appear to depend on provision of a longer-term source of funding available across the country.

Combining local experimentation and flexibility with wider good practice

The expectation with the decentralised Growth Hub approach was that it would be able to support business advice provision that matches with local circumstances through local flexibility and local trial and error. As private sector partnerships with local authority support, the LEPs were free to develop their own initiatives. This is associated, however, with the challenge of ensuring that the Growth Hub initiatives follow broader good practice in business advice. The LEPs themselves suggest that the LEP network is playing this role to some extent (National Audit Office, 2016).

At the same time, the public funding model of the LEPs has been significant in supporting local experimentation and flexibility at the same time as providing some central, public supervision of quality. Although it was not the initial purpose, the process of bidding for resources by each of the LEPs from the central government department has also provided some public supervision and scrutiny of the spending and priorities of Growth Hubs. Setting out more quantifiable performance indicators for Growth Hub initiatives could help further in securing good quality, locally adapted initiatives (National Audit Office, 2016).

Assessing the impact of Growth Hubs

Robust evaluation evidence based on econometric techniques or quasi-experimental techniques on the impact of the types of business advice provided by Growth Hubs and the delivery methods they use is weak. Localised sources did not necessarily improve take-up of government sponsored advisory services in the past (Bennett and Robson, 2003). Furthermore, the evidence in favour of gains from business advice in general in OECD countries is not as strong as purists would like, although there is evidence of positive impacts from more in-depth interventions (e.g. What works growth, 2016; Cumming and Fischer, 2012) and in developing countries (see McKenzie and Woodruff, 2014; de Mel, McKenzie and Woodruff, 2014).

More information is needed on the extent to which Growth Hub interventions have positive outcomes and the contexts in which this is achieved. This is likely to be easiest to obtain for specific public funded business advice activities. In contrast, it is harder to evaluate the performance of the Growth Hubs in providing their co-ordination function and the added value of the ability of the LEPs to engage with the private sector delivery organisations (Mole et al., 2011).

Addressing the long-tail of low-productivity SMEs

Although SME is a popular classification, the term covers a wide variety of businesses, with very different objectives, and subject to a wide variety of constraints and opportunities. The evidence indicates that SMEs seeking advice are more likely to be ambitious and oriented to growth. This suggests there may be challenges in reaching established SMEs in the long tail of low productivity. At the same time, a significant share of SMEs do seek advice, although it tends to be in an ad hoc rather than ongoing manner.

Growing and ambitious businesses are more likely to seek advice

The likelihood of SMEs seeking business advice varies with a number of factors. In terms of sector, Bennett and Robson (2003) report "The sectors making least use of advice are chiefly from the relatively traditional sectors with more stable technologies." Similarly, firm size has been found to be the most important determinant of advice use; with firm age, innovation record, and export record as secondary determinants (Bennett and Robson, 2003). The age of the firm also influences advice taking. Much advice is taken early in the life of the firm as the entrepreneur grapples with the unstructured problem of setting up their firm (Chrisman, McMullan and Hall, 2005; Greene, Mole and Storey, 2008). Thereafter the use of advice declines.

However, a further key factor in advice seeking is the growth and ambition of the firm. We generally know that businesses that avail themselves of business support tend to perform better than the average (Johnson et al., 2007; Robson and Bennett, 2000). Growing enterprises are also more likely to take business advice (Table 2). This may reflect a demand from growing companies to access advice to address the challenges of growth, including changing market conditions and changes inside the business (Trends Business Research, Levie and Botham, 2016; Johnson, Webber and Thomas, 2007; Blackburn and Jarvis, 2010).

Given the challenge of addressing productivity issues in the long tail of SMEs with low productivity, business advice programmes that seek to target advice to companies that do not avail generally themselves of advice may offer potential lessons. The Futurized Business initiative in the Netherlands shows the example of a programme that deliberately sets out to engage businesses that had no previous contact with business support (see Box 7).

Box 7. Syntens 'Futurized Businesses'

Description

Futurized Businesses is a campaign to boost SME participation in clusters and innovation networks and avail themselves of business advice through them. It is an example of a regional policy approach that supports clusters and innovation networks to benefit businesses (see Roper et al., 2017) but that requires stimulation of the businesses to participate.

First, the campaign tracks down companies with more than five employees that are not part of any previous programme, and are in manufacturing, construction, wholesale, transport and business services. Next, the team prioritises this list based on the importance of the sectors and the potential of the companies. Then, small local areas based on travel to work are selected for a campaign that connects with local representatives and the local media. Finally, programme consultants telephone the SMEs, listen to the challenges that the owner faces and try to arrange a meeting with the SME manager.

The programme uses a diagnostic to assess two critical aspects of the business. The first assessment examines the innovation potential within the business. The second assesses the level of ambition in the management team.

Factors for Success

The use of experienced consultants appears to make a very large difference to the outcome. Syntens indicates that 55% of firms followed up the first contact of an experienced consultant whereas a call centre had only a 1-in-10 success rate. They report that: "...it is sound policy to invest time and effort in less innovative companies but only if you work in a demand driven ("listen") way and ensure that the visits are performed by experienced consultants" (Syntens, 2017).

Obstacles

Futurized Business has used a relatively high cost approach since the outcome requires experienced consultants to make the first call.

Relevance for UK

This programme shows that there are possibilities to reach businesses that have had little interaction with existing support services. This suggests that there is an opportunity for the UK to bring business advice to the long-tail of low productivity businesses, which are highly likely to fall into this category of firm type. However, over the years of the business advisory systems in the UK there have often been efforts to standardise and make consistent the business advice offers so that the customer-facing people are often less experienced. This programme suggests that it will be important to have experienced customer-facing staff for the first contacts with low productivity businesses.

		Sought information or advice					Not cought
Turnover change Unweighted n=	Panel	Any	Information	Advice	Both of these	Neither of These	information or advice
	5,087	2,044	758	491	556	236	3,043
	%	%	%	%	%	%	%
Increase	37	38	34	38	42*	44	37
Little change	34	31	36	31	30	21	35
Decrease	29	30	30	31	28	35	28

Table 2. Percentage of businesses that changed level of turnover between 2015 and 2016, by whether they sought information or advice in 2015

Note: Base = panel; excludes 'don't know' or refused for turnover for either year. Figures with asterisk were statistically significant at the 95% confidence level against the overall finding (minus the sub-group tested). 'Little change' is defined as 2016 turnover being within +/-1% of the 2015 turnover figure, or in the same turnover band

Source: Longitudinal small business survey (LSBS) 2016 (BEIS, 2017b).

Another major finding of the small firm growth literature is that the growth ambition of the SME manager is important in explaining the impact of the business advice provided (Davidsson, Achtenhagen and Naldi, 2010). For example, work has pointed to differences in ambition (an ambition gap) between firms in the UK and in the USA as an explaining factor in the relative underperformance of UK businesses in terms of growth (Levie, 2014). The mechanism through which ambition translates to future growth is unclear, although it may moderate the relationship between prior sales growth and future growth. For example, if two firms have the same prior sales growth but one is more ambitious and then it will be likely to grow more quickly in the future than its less ambitious counterpart. A consensus in the literature links growth ambition with small to medium boosts to sales and employment growth in established SMEs where one mechanism to produce these effects is via pro-activeness, innovation and a willingness to take risks – often known as entrepreneurial orientation (Covin and Slevin, 1989).

Although growth ambition seems to be an individual preference, research on the factors mentioned by those who change their ambition point to social and environmental influences. A follow-up study to explore stability and change in growth ambition found those who changed their ambition to attribute it to changes in market conditions; cited by 36% of those who increased their ambition and 28% of those who curtailed their ambition (Trends Business Research et al., 2016). Changes in firm ownership and the environment for raising finance also had minor impacts. Consequently this ascribed individual attitude may actually reflect the environmental influences on the firm.

The importance of firm growth and ambition in the propensity to seek advice and the likely impact of advice raises the question of how to address the mass of existing low productivity SMEs that are not demonstrating growth and ambition, but where some may have potential for productivity increases if offered business advice. Existing policy practice has put a strong emphasis on face-to-face interactions between businesses and experienced advisers to identify which businesses can best benefit from business support, with particular emphasis on identifying enterprises that want to transform their business.

Advice tends to be sought for business growth and efficiency

The type of advice sought by UK firms is dominated by taxation and financial management advice in the domain of accountancy services. Accountants have the advantage of being

called in to firms to meet audit and taxation requirements, which enables them to develop a face-to-face relationship with the SME manager where advice may follow on as a service (Blackburn and Jarvis, 2010). Table 3 indicates the types of business advice sought by SMEs. It suggests that advice is mainly sought to support business growth and to develop the business.

	LSBS Year 2 (2016)		LSBS Year 1	(2015)
	Strategic advice	Information	Strategic advice	Information
(n =)	1,076	1,201	2,121	2,627
	%	%	%	%
Business growth	31	9	36	9
Improving business	18	6	18	5
efficiency/productivity				
Financial advice/info for general running of business	14	13	16	18
Marketing	10	3	10	4
Tax/national insurance law and payments	9	12	6	11
Employment law/redundancies	8	13	10	12
Advice/info on where to get finance	6	4	8	5
E-commerce/technology	6	4	8	5
Legal issues	5	8	7	10
Management/leadership Development	5	3	3	2

Table 3. Type of information or advice sought

What information or advice was sought for in the last twelve months – trends split by whether strategic advice or information was sought (England and Wales only)

Source: Longitudinal small business survey (LSBS) 2016 (BEIS, 2017b).

The desire to improve business growth may cover a number of initiatives within the firm but one of the key processes identified to improve SME has been an emphasis on innovation to enable the firm to compete more effectively. The Canadian IRAP programme aims to promote innovation, emphasising the use of a concierge service to help firms navigate the patchwork quilt of programmes available (see Box 8).

Box 8. The IRAP programme, Canada

Description

Canada's Industrial Research Assistance Programme was established in 1962 to provide innovation assistance to Canadian SMEs in order to boost innovation and growth. IRAP funding was CAD 289 billion in 2015-16. The service works through Industrial Technology Advisors (ITAs) with partners from the regions and provinces. Within the IRAP there is a 'concierge service' accessed online, by telephone and/or in-person that provides a single access point to navigate the available business development services opportunities.

Factors for Success

A recent evaluation found that the service provided positive benefits and that the benefits far outweighed the cost of the programme, by almost 5 to 1 (KPMG, 2017). Part of the

success is attributed to the combination of both funding and advice, which was also a finding of the evaluation of the Business Development Bank of Canada (Ratté, 2016).

Obstacles

An evaluation found firms that accessed the concierge service found it to be important but the resources available hampered impact because it reduced its reach. The evaluation used a methodology that appeared to focus on high impact cases, with the implication that the success of the programme may be dependent on potential for success in the firms addressed. The service has focused on those firms that can provide more spillover benefits as the resources are rationed, the implication being that extending the reach may bring down the average impact although it may increase the overall impact of the programme. There may be ways to implement an approach that both reaches to larger numbers of firms and focuses on stimulating success by having gateways. An example is a Finnish high growth enterprises programme that includes hurdles that the recipients must clear in order to stay within the programme (Autio and Rannikko, 2016).

Relevance for the UK

The use of a concierge service could help address the challenges identified by the UK government and 'Be the Business' in the difficulty that SMEs face in navigating their way around the myriad offering of business support (Halpern and Broughton, 2017; Lord Heseltine, 2012). The approach of linking funding and advice could help support the capacity of business to change following advice.

About one-quarter to one-third of UK SMEs seem to seek advice

It appears that there may have been a recent decline in the rate of advice seeking, although the evidence is not clear-cut. Table 4 from the longitudinal small business survey (LSBS) suggests that almost half of all businesses took advice in 2010 but this has steadily declined to only a quarter in 2016.¹ However, as indicated in Figure 1, small business surveys conducted previously suggest that 2010 may have been a peak in business advice, with the subsequent decline representing to a return to a 'normal rate' of advice received, which might be round one-in-three businesses in the long term (Bennett and Robson, 2003). The exceptionally high level of advice seeking in 2010 may be associated with the challenges firms faced with the effects of the global financing crisis, since we know the number of 'concerns' in a business is correlated with advice-seeking (Mole et al., 2017).

¹ The 2007/8 LBSBS also asked about business advice taking, but the question was not strictly comparable since the earlier survey did not distinguish between advice and information.

Table 4. SME employers who sought external information or advice last 12 months trends by employment size

Survey and sample size (n=)		All SME employers	Micro (1- 9)	Small (10- 49)	Medium (50- 249)
		%	%	%	%
Longitudinal small-business service Survey, year 2 (n=6897)	2016	26	24	34	45
Longitudinal small-business service Survey, year 1 (n=11147)	2015	33	31	40	50
Small business survey (n=4355)	2014	44	43	51	61
Small business survey (n=4768)	2012	45	42	59	68
Small business survey (n=3817)	2010	49	46	59	68

Note: Figures in Bold indicate statistically significant (p=.05) differences against the overall finding i.e. where firm size matters.

Source: Adapted from BEIS, 2017b

Figure 1. SME employers use of information and advice 2005-2016



SME employers % who have used information or advice in the past year

Note: 2008 data are not available. 2006 and 2007 data were combined. *Source*: Source BIS (2006, 2008) Small Business Surveys 2005, 2006/7. BEIS and BIS (2013), Small Business Surveys (2008, 2010, 2012, 2014). Longitudinal small business survey waves 1 and 2 (BEIS, 2015, 2016)

Regular use of advice is relatively rare

It is relatively rare for businesses to take advice on a regular basis. As presented in Table 5, about 15% of the UK Longitudinal Small Business Survey panel sought information and advice in both 2015 and 2016. The numbers of consistent advice seekers are therefore comparatively small.

Unweighted n=5,844		Sought information 201	Total	
-		Yes	No	
Sought	Yes	15	20	35
information or advice in 2015	No	10	55	65
Total		25	74	

Table 5	Percentage	of husinesses	that sought	information	or advice.	2015 at	nd 2016
Table S.	1 er centage	of pusificises	inai sougni	mormation	or advice,	2015 a	nu 2010

Note: Base = panel. Percentages are proportions of the whole table, other than final column and row. *Source*: Longitudinal small business survey (LSBS) 2016 (BEIS, 2017b).

To encourage more regular advice taking, the earlier Enterprise Initiative aimed to provide a 'taster' of advice that would convince the SME of the benefits of on-going advice (Wren and Storey, 2002). In extremis, some researchers have discussed the 'most trusted advisor' concept where advisors, generally from the private sector, effectively become members of the top management team (Arendt et al., 2005; Strike, 2013; Strike and Rerup, 2015).

Advisors need to challenge managers of low productivity SMEs to change practices

The provision of business advice to low productivity SMEs will not necessarily achieve the change in business management practices that the advisor could identify as being beneficial for productivity improvement in the business. One of the significant issues is that advisors may not always wish to challenge existing management practice, since this could jeopardise their support from the customer (McPherson et al., 2001; McDonald and Westphal, 2003; McDonald, Khanna and Westphal, 2008). The role of external advisers to challenge the managers is therefore important (Wright, Sturdy and Wylie, 2012). More qualitative research has emphasised a strategic space where managers and entrepreneurs can reconsider their routines (Jones et al., 2008). One programme that has tried to share information across managers has been the PLATO programme. The PLATO programme illustrates the links between businesses of different sizes and the knowledge transfer that can take place between larger more specialised and professional firms and a group of SME managers, exemplifying the power of networks (see Box 9).

Box 9. PLATO, Ireland and the Netherlands

Description

PLATO is a government supported network to provide guidance and support to SME managers that has been applied in Ireland and the Netherlands. The network itself is organised as a group of SME managers who are supervised by highly qualified managers of large companies. PLATO is organised around three types of meeting: team building, fixed group and co-ordination. Each PLATO project begins with two team-building meetings. The first is for coaches to receive training. The second is for participants and coaches over a weekend to build group identity and a trusting atmosphere. Monthly fixed groups meetings are then held for ten to fifteen SME managers and two coaches who facilitate joint problem solving and critical reflection on management practices. Direct competitors, suppliers, and customers are excluded from the same fixed group. Three to

four times a year co-ordination meetings bring current and previous PLATO members together with guest speakers on current management topics.

The intent is for participants to exchange intensive knowledge and experience on various management topics (e.g., marketing, lean production, finance, and cost price calculation). Results for the first PLATO programme carried out in Ireland reported 34% increases in turnover and 15% increases in employment. More modest impacts were found in the Netherlands with a 7.5% increase in turnover ad 14% increase in employees (Pawson et al., 2002).

Factors for success

Several factors are associated with the success of the PLATO programme including: standardisation, trust, relevance, the organisation and monitoring. The coaches are trained at the beginning of each round to build atmosphere and coaching ensures a level of consistency and standardisation that ensures the 'brand'. To enable intensive exchanges of information, the team building must result in team bonding so that the required levels of trust are present. The fixed meetings can choose their own topics to ensure that the problems are those that reflect the group's management practices and experiences and are highly relevant. The organisation that delivered PLATO was an association of enterprises, putting it at arm's length from the government. However, the requirement for evaluations ensured public monitoring and helped encourage the high participation rates (Schoonjans et al., 2013; Van Cauwenberge et al., 2013).

Relevance for UK

The evidence suggests that the PLATO programme has been effective in providing advice to SME managers by creating peer-learning networks animated by coaches drawn from managers of large companies. This offers a potential alternative route for the provision of business advice to SMEs to existing UK support.

More understanding is needed of how business advice affects SME productivity

Further understanding is needed on how business development services change routines in the business, leading to productivity changes. Figure 2 seeks to trace an expected causal link between the consumption of business development services and changes in the business, through the adoption of new processes or practices, then translated into increased market share or new markets or new products, in turn leading to improvements in labour productivity and other measures of firm performance. At each of these steps, moderating factors can constrain and enable the process.



Figure 2. A long causal chain of connections

Source: Author's elaboration.

A key point brought out by research in this area is that the connections in this process and the outcomes of business advice are a co-production between the advisor and client. Success depends on the firms' ability and desire to implement change, as well as on the nature and form of the advice given (Rice, 2002; Okhuysen and Eisenhardt, 2002; van Doorn et al. 2017)

The evidence that management practices are associated with performance is increasing, from the original work in human resources (Sels et al., 2006; Patel and Cardon, 2010; Sheehan, 2013; Ichniowski, Shaw and Prennushi, 1997; Ichniowski and Shaw, 1999) to the more recent work on standardised management practices (Bloom and Van Reenen, 2010). If this link is consistently found then the question arises; how can firms be encouraged to adopt modern management practices, if not through some form of business development services?

Conclusions

This paper stresses a number of important points about business development services in the UK that should be taken into account when considering how to develop the public support system in this area in the future. Key points are as follows:

- 1. SMEs that avail themselves of business advice generally tend to have better growth performance and be more growth oriented than the average. By contrast, there is a link between the long tail of under-performing SMEs and the non-use of advice. A deliberate outreach strategy might be required to influence management practices in the long tail of low productivity SMEs, although the returns from the public investment in a unit of advice may be lower than with more ambitious and better performing businesses. To enable greater out-reach a national brand may be effective, since the problem of navigating the small business support landscape has been a source of market failure.
- 2. The use to which advice is put depends on a co-production of solutions between the advisor and the SME management and the firm's ability and motivation to absorb new ideas and implement changes. This suggests that attention must be paid to advice that seeks to challenge the SME management to change practices. Capacity may also be built over time by encouraging businesses to take advice more regularly, and to periodically reflect on the performance of their business. Although

networks may not always challenge managers (McPherson, Smith-Lovin and Cook, 2001), strengthening networks through programmes such as the PLATO programme may enable peers to challenge managers. Moreover, the role of intermediaries is another pathway to potential improvements in the firm.

3. The impacts of advice tend to be skewed towards more intensive interventions with certain companies where the relationship with the advisor is supportive of change. It is not easy to know in advance which firms will make the best use of the advice. In these conditions, policy can use gates to open the way to more intensive assistance in the case of SMEs that respond well to advice. More intensive and higher cost advice needs to be matched by the potential benefits that can be accrued suggesting that targets and market segmentation.

The BDS system in the UK has strengths in the supply side where there are a myriad of schemes and a host of management consultancies to choose from. The weaknesses and challenges for the UK system are to enable SMEs to recognise the value in business development services and to be able to navigate their way confidently around the system (Table 6).

Strengths	Weaknesses		
There is no doubt that the market for advice	Many business development services are supply-		
has enough sophistication to meet the	focused, often isolated projects.		
requirement of the most discerning	The information problems persist making the		
businesses.	market difficult to navigate or co-ordinate.		
Many programmes exist, making it quite			
likely that the supply of advice is strong.			
Opportunities	Threats		
The localised Growth Hubs approach means	Loss of funding if the previous ERDF support is		
that experimentation is possible, although the	only partly replaced by the Prosperity Fund. In		
local context might also influence the degree	that case a reduction in the demand for advice		
of experimentation. This experimentation	potentially undermines the market as taking		
can be collated into an inductive knowledge	advice becomes less common, making 'word of		
base for Growth Hubs to draw upon.	mouth' referrals, which are often an important		
	part of the system, more difficult to access.		

Table 6. SWOT analysis of public support for business advice in the UK

Source: Author's elaboration.

The existence of public support for business development services among almost all OECD countries attests to a shared concern with differences in the performance of firms within an economy and the perceived benefits of improvement or catch-up by those left behind (Mole and Bramley, 2006). Some involvement of government funds has been necessary for the operation of business development services due to market failures (Wren and Storey, 2002). The UK has been a laggard in responding to these issues but has had some success in developing state sponsored business development services, even if the evaluation of its impacts has been sporadic. The strengths of the UK approach are that there are good examples of sophisticated services available for those firms who want to develop. The weakness is the continued difficulty for the median firm to find appropriate business advice easily, which limits the potential to address the issues of the long tail of poor productivity SMEs with business advice. The problem seems to be one of market co-ordination, suggesting a need for institutional solutions to help guide and match businesses with appropriate business development services.

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Building the SME business development services market

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Introduction

Although existing evidence suggests that the provision of high-quality business development services and external advice can benefit productivity growth in SMEs, low uptake of these services points towards a demand-side gap on business development services markets. The reasons for this can be many, but likely include legitimacy issues for public operators, considered by many SME owners to be inefficient and incompetent; uncertainty and riskiness of the advice and growth process; lack of ambition to grow and develop the business on the part of the SME owners; and unwillingness or inability to abandon everyday operational tasks to address strategic and managerial activities (Bagere t al., 2015).

In addition to this, the existing body of research into growth in small and new ventures suggest that growth processes are oftentimes random and unpredictable, and that identification of ventures with potential for growth is exceedingly difficult (Coad et al., 2013). As a result, even if it were possible to recruit SME owners and entrepreneurs for business development services programmes in a cost effective manner, it is not given that it is possible to actually deliberately and consistently produce positive growth outcomes.

In this context, this paper discusses the following questions:

- How to build demand for business development services?
- How to support businesses that would benefit from advice that do not get it?
- How to get businesses to see the opportunity and overcome barriers?
- How to nudge them into seeing what they need?

It will draw on insights from current research in SMEs and entrepreneurship and experiences from the local context. In particular, it will include insights from Denmark, where the public business development service system has recently been evaluated by a national expert commission and new guidelines for a revised system were released in April 2018 (Forenklingsudvalget for erhvervsfremme, 2018).

No easy answers exist to the above posed questions and this paper aims to provide a balanced analysis. Generating awareness of and demand for external advice and training, especially from public actors, is made exceedingly difficult by the characteristics of the individuals that self-select into SME ownership and entrepreneurship. Also, actually identifying the firms that will benefit the most and the mechanisms through which growth and performance improvements can be generated, is very difficult. Direct investments in business advice are therefore likely a costly and uncertain endeavour, and there are serious risks of overinvestment or bad investment.

The outline of the paper is as follows. First, policy issues for business development services are discussed based on established knowledge of SMEs and business development services policies. Second, a set of design principles and suggestions are outlined. Finally, a brief summary is provided, outlining a sketch for a possible two-tier business development

services system that would mitigate the issues raised with identifying the firms to invest in and achieving impact from the support.

Growth ambitions and demand for business development services

Existing research suggests that taking advice and taking part in training programmes seems to benefit SME owners and entrepreneurs (Mole & Capelleras, 2018; Mole et al., 2011; Seo et al., 2014). This might not come as a surprise when considering the complexities of running and growing a business. Many entrepreneurs and SME owners may for example have high practical or technical competencies but may lack business and management skills. However, in practice, SME managers are less likely to seek business advice if they do not seek business growth.

Many SME managers do not seek business growth

Many entrepreneurs do not want to grow. This has been shown empirically in several studies of entrepreneurs (Davidsson et al., 2006; Wiklund et al., 2003). A recent study in Denmark has labelled this the "*BMW syndrome*", where entrepreneurs and SME owners stop pursuing further growth when the company becomes successful enough to pay for an expensive car and other goods associated with an attractive life-style (Gramtorp, 2018). Anecdotal evidence from the study suggests that there may be several reasons for this. One overall reason is likely the hassle involved in recruiting more people if it requires more delegation, more managerial responsibility and less control over everyday operations and activities in the firm. Also, many SME owners and entrepreneurs consider themselves specialists and enter their entrepreneurial career from a specialist background (e.g. engineer and not entrepreneur) and feel more comfortable in the daily operations and details related to products or sales than with strategic and managerial work. Finally, many SME owners consider the freedom of the small business to be valuable and are willing to limit growth in order to maintain their experience of personal freedom.

Without the desire to grow, there is very little incentive for SME owners to invest in innovation and productivity. As such investments involve aspects disliked by many SME owners and entrepreneurs (costs, uncertainty, risk, delegation, focus on strategic issues), many will defer from them.

Various behavioural characteristics of entrepreneurs also constrain the market for business development services

A set of behavioural characteristics of SME owners and managers also appear to influence their seeking out of advice and training from outside actors. In a review of the existing research evidence, Shane (2003) identifies a set of psychological and cognitive factors that are associated with a positive likelihood of engaging in entrepreneurship. These include:

- Desire for independence, which entails for example that you are willing to defy other people's judgment.
- Overconfidence, which entails believing in your own judgment without collecting evidence.
- Representativeness, which entails a willingness to generalise from small samples that are not representative.
- Intuition, which means too strong a belief in the accuracy of your judgement given the data.

As such characteristics are associated with a higher likelihood of becoming an entrepreneur, it can be questioned whether this group of people will be willing to spend time taking and advice and training based on what other people think that they should do.

When it comes to SME owners, studies also suggest psychological barriers related to the take up of training activities. Bager et al. (2015) suggest that SME owners may be uncomfortable with "going back to school", unwilling to put the firm through an uncertain development process, or give priority to the concerns of the employees for steady and reliable employment. In their studies of enrollment to an SME training programme, Bager and colleagues (Bager et al., 2015; Nielsen et al., 2018) have indeed found strong self-selection biases. Enrolled SME managers were thus better educated, younger and with less managerial experience. This implies that SME managers with more experience and less formal education are less likely to seek training. This leads to a paradoxical situation in which those SME owners and entrepreneurs that need or could benefit the most from training and advice are the ones least likely to seek it.

Bager et al. (2015) explain how complex behavioural factors intersect and create complexity for business development services provision. They report on a Danish programme that invested EUR 15 million in a three-year training programme for growth-oriented SME managers. The programme sought to enrol 600 SME managers free of charge. Despite the provision of high quality training for free, the programme struggled to recruit enough managers. It ended up relaxing the inclusion criteria to include SME managers who were not growth oriented, and were perhaps not even lacking in the relevant skill set. Instead the programme was used for other purposes such as networking and career advancement. These findings caution future efforts in a number of ways. Firstly, they point out the difficulties in recruiting SME managers and owners for business development services programmes. Secondly, they show the structural problem in setting up this kind of programme. Once the programme is set up, the operator is obliged or incentivised to conduct the promised activities, even if the target group shows limited interest. As a consequence, original recruitment and success criteria are relaxed, leading to the expenditure of resources that could have been better spent elsewhere.

There are heterogeneous perceptions of what growth means

Growth means different things for entrepreneurs, researchers and policy makers. For policy makers, with an eye on economic growth and job-creation at a societal level, growth is primarily considered to be the creation of new jobs at the firm level. Researchers adopt different growth measures including sales growth, turnover growth and other financial indicators as well as employee growth. For entrepreneurs and SME owners, growth is often a more complex and qualitative concept (Achtenhagen et al., 2010). In the recent Danish study by Gramtorp (2018), several of the SME owners interviewed referred to qualitative conceptions of growth suggesting that growth means becoming better at what they do, achieving higher levels of quality in their products, or personal development. All conceptions are largely dissociated with quantitative measures deployed by policymakers and researchers.

Many SMEs that appear stagnant, unproductive and short on innovativeness, may well be considered thriving and growing by the SME owner and employees themselves. Operating within the "comfort zone" of the SME, allowing a focus on product quality, customer service, employee well-being or personal development, is an attractive proposition for the SME owner, and associated with positive connotations. As a consequence, policy initiatives may need to not only persuade entrepreneurs and SME owners to grow, but also establish a shared understanding of growth that is acceptable to all stakeholders.

At the firm level, growth is a (partially) random phenomenon

Even if the SME owner or entrepreneur actively desires growth and is in a conducive environment, growth is an elusive goal. Recent debates in entrepreneurship research have grappled with the messy nature of growth and the antecedents of growth. A notable study by Coad and colleagues found growth patterns in new firms to be largely random with chance constituting a predominant component (Coad et al., 2013). Firms that grow consistently and linearly over time are few and far between, while most other firms experience incoherent and unpredictable growth trajectories. In this study, factors related to human and social capital were found to have limited effect on growth. Consequently, the factors that lend themselves to manipulation through policy are not likely to have a major effect on growth. A responding study by Derbyshire and Garnsey (2014), using a different dataset challenges Coad and colleague's analysis as overly simplistic, arguing instead that variations in growth outcomes are not random, yet maintain a somewhat skeptical view of the ability to really predict and produce (e.g. through policy) consistent growth outcomes.

An important policy implication of the messiness of growth patterns and uncertainty in identifying antecedents to growth is that even if a situation emerges where entrepreneurs and policy makers agree on the nature and attractiveness of growth, it is extremely difficult, if not impossible, to determine exactly how policies and support programmes can actually create growth in the firms. The factors that can foster growth and be manipulated to produce it more consistently or effectively remain obscured and inaccessible.

Local conditions can affect opportunities for SME growth

The resource and policy environment plays a role in promoting the growth of SMEs and entrepreneurial ventures. Shortages of different forms of human, financial and social capital resources can inhibit new and small firms from growing, and as a consequence of this we generally see lower levels of growth in peripheral regions compared to core regions and metropolitan areas, where highly educated people, investment banks, venture capital funds, and research institutions tends to centralise. The policy environment can also influence growth, as, for example, low levels of bureaucracy, beneficial tax levels and incentives, individual freedom, a strong rule of law and stable economic conditions are all positively related to entrepreneurial outcomes such as startup and growth (Shane, 2003). Where local conditions are healthy growth opportunities and hence the demand for business development services may be greater. This may suggest particular challenges in business development services markets in low prosperity regions.

Policy implications

The three abovementioned problems create an extremely complex and difficult situation for policy makers seeking to improve the overall growth and competitiveness of SMEs and entrepreneurs. There are risks of overinvestment in policies and programmes, as they may well be considered irrelevant or unappealing for the recipient SME owners and entrepreneurs, fail to address a meaningful growth concept for the SME owners or entrepreneurs, or fail to be effective as they target mechanisms of little or no effect in generating growth.

Deriving implications for public support for business development services from this is a complicated task. Yet, it is possible to make a strong case for these results posing a challenge to targeted strategies aiming to "pick the winners" and support only those firms with a high growth potential. Given the indeterminance of growth patterns, policy might instead seek make business advice broadly accessible to firms seeking them, on condition that the impacts of the public expenditures justify the costs.

Complexity in the business development services market for SMEs

Public support for the business development services system in Denmark was evaluated in 2016. One of the key issues the evaluation identified was how complexity impedes the system. Complexity affects the ability of SMEs to navigate the system and access appropriate services, difficulties in co-ordinating efforts across government levels and across regions, and overlapping efforts and services (Forenklingsudvalget for erhvervsfremme, 2018; Ingstrup et al., 2017; McKinsey & Company et al., 2016).

In total, more than 250 actors are involved in the Danish business development services system, organised across three government levels (state, regions and municipalities). Consequently, there is evidence of overlapping activities and programmes. Examples include:

- Local services at the municipal level overlapping with specialised services at the regional level.
- Thematically similar projects undertaken in different regions in parallel.
- Thematically overlapping cluster efforts.
- Similar efforts to supply capital at regional and national levels.

From the perspective of the companies, the system also appears complex. There are too many access points into the system and they appear to be offering similar services. This leads to inflated transaction costs for the companies when engaging with the public business development services system. Also, there are indications that the services are driven more by supply than demand (McKinsey & Company et al., 2016).

Roughly, the evaluation indicates an oversized system with needs for co-ordination improvements, driven by internal interests rather than demand and political priorities. There are probably many reasons for this. Clearly, the number of actors and levels of government is a large part of this. It may be speculated, as this is not part of the evaluation, that there is a shortage of impetus to decide political priorities in this area, if provision of any kind of business development service is considered positive in a political mandate to broadly promote growth through business development. Furthermore, the inherently project-based nature of business development services activities, where money is allocated to projects, has led to the proliferation of actors and activities, without concern for the overall coherence and efficiency at the system level (McKinsey & Company et al., 2016).

One avenue for building SME demand for business development services is therefore seeking to address complexity in the system so that they are able to identify and access relevant services.

Design principles for public interventions in business development services markets

Having outlined the challenges of building demand for business development services among SMEs and of the complexity in the business advice market, it is now possible to outline some tentative design principles for an effective and efficient business development system.

Principle 1: Don't overinvest

Key lessons from the recent review of the Danish business development services system discussed above suggest that resistance towards growth, a limited demand for services such

as advice and training, and risks of self-selection of "the wrong" SME owners and entrepreneurs into programmes entail a significant risk of over-investments in programmes that look highly appealing on paper and promise abundant growth, but are extremely costly and fail to realise their promise. In order to succeed in realising growth among SMEs that would not grow anyway or would not seek relevant advice and training from professional consultants, public programmes would most likely carry the cost of building demand (advertising), recruiting the right SME owners and entrepreneurs (sales) and running the programme. Notably, the programme reported by Bager et al. (2015) spent a staggering DKK 187 000 (approximately EUR 25 000) of public money per participant in the training programme. The recent evaluation of the regional Growth House business development service centres in Denmark (væksthusene) indicated that they generated approximately 656 new full time jobs, but this effort involved 250 employees working in the centres; a good output but at a steep price (IRIS Group, 2013).

In making decisions about public programmes, policy makers could better distinguish between need-to-have services and nice-to-have services. While this may differ across regional and local contexts, high-quality case handling services related to taxes, zoning, various kinds of local permits etc. are need to have services, which, if they do not function properly can get in the way of start-ups and growth. Expensive incubators² and targeted training programmes for SME owners might fall in the category nice-to-have. Whenever the local, regional or national government or administration is an "obligatory passage point" as is the case with tax payments, permits etc. the business service should be top quality. Examples of such business development services from a Danish setting might include the inspectorate activities undertaken by the local municipalities related to e.g. compliance with environmental regulation or the webpage virk.dk where companies can make all the necessary reporting. Notably, the virk.dk website will likely be the platform from which the new IT based business development service platform in Denmark will be based.

Design principle 2: Leverage existing touch points

As most SME owners and entrepreneurs are unlikely to really demand business development services, even if they would benefit from them, significant effort is involved in getting them to seek out services. Here existing touchpoints can serve as an important and cost-efficient way of "nudging" the SME owners and entrepreneurs.

Existing touchpoints can include bankers, accountants and employees. Research has shown that SME owners and entrepreneurs are more likely to take advice from people that are familiar with their businesses (Mole & Capelleras, 2018). Building long standing, trusting and knowledgeable relationships with SME owners and entrepreneurs is costly. Engaging with these actors would likely be a much more effective way of generating interest.

Existing touchpoints of the SMEs are not necessarily equipped to offer good business advice beyond their expertise in accounting or banking. Training and education of bankers, accountants and employees could thus be an indirect but highly effective way of nudging. Competence development might be achieved through "train the trainers" activities, where

² Notably, publicly funded incubators have become a standard in most Danish cities. While from a standpoint of growth and entrepreneurship, they are likely not good investments, they can serve other relevant and appropriate purposes in terms of e.g. branding a city, creating interesting and functional public and social spaces, or create opportunities of marginalised groups to gain meaningful work experience.

the accountants, bankers etc. could be given training in how to support SMEs to become more productive or innovative. As many of these accountants and bankers are experienced already, it should be possible to leverage these existing competencies in the development of business development competencies. For many unproductive and less innovative SMEs even relatively simple tools and methods might provide significant benefits. The springboard format might be an appropriate model for this. The existing touchpoints might even be able to assist in the identification of SMEs with potential for growth, as well as stimulating demand among their SME clients by introducing and promoting the idea of business development for innovation and productivity. Furthermore, if these activities were integrated with the existing services of the banks and accounting firms, a certain level of cost sharing might be achieved between the public and private operators.

Design principle 3: Target areas and industries with direct societal, environmental or local impact

While promoting growth in SMEs and entrepreneurial ventures as a means to increase societal wealth is a worthy endeavour, the effect and outcome of public investments in business development services are uncertain and unpredictable in achieving this objective, and based on Danish experiences probably quite modest.

However, a new job is not just a new job, and a new firm is not just a new firm. Some jobs are more valuable to society than others, and some new firms are more valuable than others. A new job created in an area with low or negative employment growth is more valuable than a job created in an area with positive employment growth, so new jobs created in e.g. peripheral areas or in urban areas with high unemployment are relatively better than elsewhere, especially if the job is taken by a previously unemployed or hard-to-employ person, or makes a highly-educated person move from an urban area to a peripheral area. This may suggest targeting business development services support to certain types of places or entrepreneurs.

Similarly, new firms or growth in existing firms may be relatively more valuable to society if for example they grow market share in foreign rather than domestic markets, or if they help solve difficult infrastructural, social or environmental challenges; such as helping address sustainability goals for example.

It may therefore be worthwhile considering the integration of business development services with other policy agendas and concerns. Targeting SME and entrepreneurial ventures that create direct impact in the form of new green technologies, social innovations and employment of hard-to-employ groups or that support development in peripheral areas appears to be a sound policy choice.

Examples of such investments include targeted investments in green tech ventures, social entrepreneurial ventures, social enterprises, export seeking ventures etc. The recent trend towards impact investment suggests the feasibility and desirability of making investments with multiple aims (social or environmental AND economic returns). And notably, impact investments seek first and foremost direct social or environmental impact and subsequently (and perhaps slightly less likely) economic returns.

The Box below gives the example of a programme that targets productivity development in SMEs in rural areas by supporting an infusion of complementary skills.

Box 10. Rural Growth Pilots, Denmark

The Rural Growth Pilot (RGP) is a recent programme under the public Danish Innovation Fund (*Innovationsfonden*). It is built on experiences from previous projects, where the recruitment of academics (individuals with at least a master's degree from universities) was found to have a positive impact on the growth of SMEs that did not have academics on staff previously.

In the original initiative (*akademikerkampagnen*), the idea was simply to support SMEs and create jobs by getting academics into SMEs. Most academics in Denmark are hired by the public sector or large companies, and about 80% of Danish SMEs do not have an academic employee (Epinion, 2017). Yet the benefits of academic skillsets in SMEs may be quite significant. In particular, the hiring of the first academic employee was emphasised as valuable. A report published in 2017 suggested that these benefits resulted in increased likelihood of firm survival (2.2%), employee growth (4.5%) and value added (38%) over a three-year period (Epinion, 2017).

The effect of the recruitment of (the first) academic was suggested to come about through the infusion of new and complementary skills sets into the SME. This is assumed to lead to innovation and productivity gains, as new ideas and perspectives emerge not only from the new skills and competences, but also through the meeting of academic skills with the practical skills and experiences of the SME owners and non-academic employees. Notably, the recruitment of academics may also create an internal pressure for development and growth, which may help to create awareness of and demand for outside business development services.

In the RGP programme, this idea is extended to SMEs in rural areas, where growth and innovation levels are considered lower than non-rural areas. The infusion of new skills and knowledge in the form of an academic employee is considered to be a possible source of innovation and growth for SMEs in rural areas. In addition, the programme may have the benefit of creating new employment for academics in rural areas, possibly contributing to counter-urbanisation, which is a considered a positive policy outcome in Denmark.

The programme supports rural businesses by providing financial support over a one or two year period to hire an academic. The support amounts to DKK 150 000 DKK (EUR 20 000) per year for a maximum of two years. The support follows a successful application where the firm provides an idea for a new product, market, production method or service innovation as well as a description of the role of the academic in its development. It is a requirement that the academic hire has a different skillset from the current employees.

A total of DKK 40 million (EUR 5.3 million) has been allocated to the project over a fouryear period. The firms can also receive assistance with development of the innovation in the local business support centre (*væksthuse*) and support for the recruitment of the academic from a network campaign designed to bridge academics and SMEs.

Evaluations of similar projects suggest that the process of developing the application is manageable for the SMEs, and that there is a reasonably high success rate from the applications. Furthermore, the programme has a built-in function to offset overinvestment, as firms self-select into the programme. If too few companies apply to spend the full amount, the resources (presumably) remain in the system for other business development purposes.

Design principle 4: Draw on external sources and partnerships

Building the (specialised) capacity to support a wide variety of different SMEs and new ventures is an extensive task. This can be especially true for a public sector operator that might have difficulties competing with private sector operators for competent business developers and advisors. Public operators may also have difficulties obtaining the same flexibility and agility as private sector operators as they operate under political governance. In addition, public sector operators, even when highly competent, might struggle to achieve legitimacy with SMEs and entrepreneurs due to pervasive myths and perceptions of public sector operators as inefficient and incompetent.

In many cases, it will therefore be better to collaborate with external partners for the provision of specialised business development services and services where the target enterprises are not likely to actively seek public sector support. Private sector operators can achieve high levels of specialisation and legitimacy. Further, hiring in private sector operators for specialised and targeted services might shift some of the administrative costs to the private operators.

Partnering with private or non-profit sector financers can also be beneficial. Developing specialised services that are co-financed by public and private sector money can increase the overall effect through greater overall expenditure and help ensure that there is a real demand for the service. So, whenever aligned with political priorities, partnering with private finance can help target and increase the effect of public spending.

Conclusions and policy recommendations

One way of outlining a business development service system that cuts through this highly complicated set of factors and inhibitors in a way that does not invite overinvestment is to install a simple two-tier model of:

- i. a basic "need to have" business development service structure that delivers fast and efficient case handling focused on making sure that public service and government regulation does not "get in the way" of businesses if they are compliant with the regulation, and
- ii. a set of highly specific business development services interventions that target firms that are aligned with political priorities and takes a holistic policy perspective.

Basic business development services have a set of characteristics that are important to highlight:

- SMEs and entrepreneurs seek them out by necessity when the services are needed (in case of relevant case handling).
- They involve basic services that most SMEs and entrepreneurs will need at some point.
- There are no alternatives to public services (only public services collect taxes, decide on zoning permits etc.).
- Public services do not compete with private sector offerings.

Experiences from the Danish business service system suggest that such services can best be offered as one-stop-services where all the relevant offering and services are accessed from one entry point (Forenklingsudvalget for erhvervsfremme, 2018; McKinsey & Company et al., 2016).

Specialised programmes and policies on the other hand may carry costs in terms of company recruitment and marketing of programmes. Where they are implemented, their success is likely to be favoured where they are:

- Developed and co-ordinated across policy areas.
- Focused on SME growth indirectly, through direct value creation related to other policy aims (e.g. rural development or sustainability).
- Developed in collaboration with and operated by specialised external partners.
- Co-financed with private or non-profit sector investors.
- Subject to deliberate, accountable and explicit policy priorities.

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Segmenting the business development services market – the experience of Sweden

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Introduction

Most small and medium-sized enterprises (SMEs) are not high-tech, or radical innovators, or rapidly growing, or new. Instead, the bulk of SMEs are "regular" established firms. They run their businesses as usual and make incremental improvements.

Regular, established SMEs deserve policy attention for several reasons. They have, in many cases, reached what Klofsten (1992) defines as a business platform. This means that they are established, and have a base of customers and a working organisation. This gives them a good foundation and potential for further growth, as they are able to attract crucial resources, such as money from customers, and to manage these resources in an efficient enough way to stay in business. In addition, since they work with established products and markets, they ought to face lower risks of market exit than new enterprises.

However, business support policies typically focus on start-ups and SMEs that are involved in radical innovation or rapid growth, and this is a key focus of policy in the current Swedish business support landscape.

This paper starts by reviewing the differences in business development services needs across different types of SMEs. It then describes the part of the Swedish business development services system that in one way or another focuses on regular, established SMEs. Finally, it draws lessons on how to support regular, established SMEs in business development services systems.

Overall, the paper argues that business support policies in Sweden and other countries should be available to established SMEs as well as other enterprise target groups. In addition, policy should recognise that the business development services required by established SMEs may differ from those required by start-ups, scale ups and radical innovators. A greater focus on support for incremental management, process and market improvements is likely to be needed by the regular, established SME. It also points to the importance of improving co-ordination and coherence in the business support landscape.

Distinguishing types of SMEs for business development services

The main rationale underpinning policy support for business development services to SMEs and entrepreneurs is the potential for the intervention to stimulate firm and economywide productivity increases (see for example North et al., 2001; Audretsch, 2002; 2004; Audretsch et al., 2007; Stevenson & Lundström, 2007; Norrman, 2008; Braunerhjelm & Henrekson, 2012). This rationale emphasises in particular the aspect of support that encourages innovation.

A distinction may be made in the nature of the business development services support for innovation that should be offered to SMEs according to the nature of the innovation they are principally involved with. Rosenbloom & Christensen (1994) distinguish between innovation that is disruptive, sustaining or incremental. Following the matrix of Ansoff

(1965), disruptive innovators (with innovative products) may need help to create new markets, while more regular, established SMEs (working with existing products) are likely to be seeking to increase their market penetration.

Innovation could be defined both narrowly (i.e. Frankelius et al., 2017), fitting more with the concept of disruptive innovation and the focus on radical transformations in products and markets, or more broadly. In the current OECD Oslo Manual provides a broader definition, allowing for incremental and sustaining innovations including technology adoption in firms. In the Oslo Manual, an innovation is defined as:

"the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method, in business practises, workplace organisation or external relations"

This implies that innovation does not need to be new to the firm, but could have originated with others (OECD/Eurostat, 2005; Gault, 2013).

Business development services therefore need to distinguish between support for disruptive innovators and support for incremental and sustaining innovators. The latter support is likely to be of principal importance for established SMEs, whereas the former is likely to be more appropriate for innovative start-ups and scale ups. For established SMEs, the focus of efforts is likely to be on increasing competence and knowledge in the areas of adopting existing best practice process technologies (e.g. in digitalisation or automation), improving existing business models, or expanding markets and customers. By contrast, business advice to disruptive innovator firms is likely to require more support with market establishment.

Another distinction that is important when thinking about how to segment the business advice market is between nascent or new enterprises and existing SMEs (see e.g. Lundström and Stevenson, 2002; 2005; Stevenson and Lundström, 2007). Following Stevenson & Jarillo (1990) entrepreneurship is defined as

"*a process by which individuals - either on their own or inside organizations - pursue opportunities without regard to the resources they currently control*" (p.23).

Schumpeter (1934) considered entrepreneurship as creative destruction and the entrepreneur as entrepreneur only when new combinations were undertaken, implying that entrepreneurs were perceived as innovators (cf Norrman, 2008). This suggests that support for entrepreneurship may need to focus particularly on handling the "risk taking" activity that is inherent in the entrepreneurial process (McKelvey & Zaring, 2016). This again may differ from the types of increased knowledge and competence required to help existing firms to improve and stay competitive (Bager-Sjögren et al., 2003).

Another dimension of the enterprise base that needs to be taken into account when considering how to target and segment support for business development services is the type of origin of the firms. Bergek & Norrman (2015) compared firms from academia with spin offs from industry and found that firms that originated from academia have a greater need for business skills than industry spinoffs generated from a business culture. In addition, age and degree of establishment also play a role in the demands and needs for business advice.

The key point that can be drawn from this discussion is that SME needs for business developments services are different according to the type of innovation they are involved in and whether they are new or established firms, but at the same time support for incremental innovation in established SMEs should not be neglected.

The Swedish business support system

Structure of the Swedish business support system

The Swedish business support system is composed of national, regional and local levels (see Figure 3), and the sources of finance for the public programmes are from European Union, Swedish government, regional and municipal funds (Bünger & Thorstensson, 2015).



Figure 3. The Swedish business support system from national to regional level

Source: Author's elaboration.

At national level, the Ministry of Enterprise and Innovation (*Näringsdepartementet*) is the main policy actor. The Ministry is responsible for the design of SME and entrepreneurship policy and for assigning responsibilities to different authorities involved in business support. The main agencies involved in SME and entrepreneurship support are *Vinnova* (Swedish innovation agency), *Tillväxtverket* (Swedish agency for economic and regional growth) and *Energimyndigheten* (Swedish energy agency). In addition, authorities such as *Jordbruksverket* (the agriculture authority), *Skatteverket* (the tax authority), *Patent och registreringsverket* (the patent authority) and the public courts also play a role in information and counselling and conducting regulatory activities.

At regional level, the provincial administrations (*Länsstyrelserna*), the county councils (the so-called Regions and Regions Associations), and academic system actors such as innovation and entrepreneurship support organisations, incubators and science parks, lead and co-ordinate the business support. This implies that there is great diversity in how business support is organised across the regions. In some parts of Sweden, such as the densely populated Gothenburg (*Västra götalandsregionen, VGR*) and Stockholm areas, the

work is rather well organised with a wide range of opportunities for SMEs seeking support, while in the more rural areas, such as some of the northern regions for example, the support system is less developed.

At the local level, the 290 municipalities and their trade and industry functions are the main actors. Co-operations with the regions and regional associations are present.

In addition to these public actors, there are several private and private-public actors present in the system. An example is the research institute RISE. Another example is *Almi Företagspartner*, which has a mother company at national level and acts regionally through regionally co-owned subsidiary companies. A number of foundations also exist, both state owned and privately owned, that supply finance (both equity-based venture capital and research funding), for example the *Industrifonden*, *Almi Invest* and the *Kamprad foundation*. There are also a range of associations such as *Företagarna* (association of Swedish enterprises), the Swedish chambers of commerce, Business Sweden (focus on export), and Connect.

It should also be recognised that the implementation of certain support measures, such as the so called "innovation vouchers", is transferred from agencies such as *Vinnova, Tillväxtverket, Energimyndigheten* and *Jordbruksverket* to regional actors, e.g. *Almi*, which deliver them to SMEs and other beneficiaries.

A closer look at some main Swedish business support actors

Vinnova - the agency for innovation

The mission of the Swedish innovation agency Vinnova is "to contribute to sustainable growth by improving the conditions for innovation." To reach this aim, the agency makes long-term investments in strong research and innovation environments. It follows a triple helix approach that aims to stimulate collaborations between industry, academia, and the public and civil society, based on the belief that innovation occurs through cross-fertilisation between individuals, competences and different domains of knowledge. The agency also strives to reinforce international co-operation.

The budget of *Vinnova* is approximately SEK 3 billion per year. Most of the resources are allocated through dedicated calls for research and innovation projects. The agency funds projects across a broad base in the private and public sectors in order to address wide societal challenges. *Vinnova* also tries to give opportunity to experimentation and initial tests in phases before market launch. Funded projects are followed up continuously and effects are evaluated with regard both to impact and learning aspects.

An example of a *Vinnova* support measure is the centres of excellence, or so called *VinnVäxt-programs*, that support co-operation between academy and industry. The programme centres of excellence issue specialised calls for specific areas or industries, and sometimes direct calls to specific groups of firms and ventures, e.g. support for innovative start-ups or support for innovative product development. Finance for innovation is also allocated through so-called innovation vouchers, which are regionally administered through actors such as *Almi Företagspartner*, regional *IUCs* (industrial development centres) and the regional authorities.

Tillväxtverket – the growth agency

Tillväxtverket, the agency for economic and regional growth, works to promote national economic growth through increasing the competitiveness of firms.³ It is headquartered in Stockholm and employs about 430 persons across several locations in Sweden.

Tillväxtverket's vision is to facilitate the development of firms with growth capabilities and growth ambitions. Its main tools are the provision of knowledge, networks and funding. Some of its efforts involve targeting SMEs or nascent entrepreneurs directly, while others aim at developing business-friendly conditions supporting entrepreneurship in general. In the case of directly targeted programmes, the strategies for selection of the SME participants depend upon the type of programme and the design of the call.

One of the largest tasks of *Tillväxtverket* is to channel European Union regional development funding to promote regional projects. In 2017, the focus areas of *Tillväxtverket* were digitalisation, sustainable growth and competence supply (Tillväxtverkets budgetunderlag 2018-2020). The annual budget in 2017 was about SEK 2.9 billion, with about half of this coming from European Union funds (Tillväxtverkets verksamhetsplan, 2017).

Almi Företagspartner – a national and a regional actor

At regional level, *Almi Företagspartner* is the main actor through which SME support is directed. *Almi* has, more or less, the same structure, aim and scope in all regions, and therefore offers a homogeneous way of supporting firms across the country. It offers business counselling, advice and finance to growth-oriented firms at different stages of development.

Almi Företagspartner AB is best described as a national company group, where the parent company is state owned. There are 16 regional subsidiaries under the control of the parent company, which are 51% owned by the parent company and 49% owned regionally. The group includes the venture capital company *Almi Invest*, which can offer venture capital to enterprises, and *IFS Rådgivning*, which focuses on entrepreneurship among immigrants. The group's activities are financed by governmental grants and from the regional owners, but it also channels governmental funding, regional funding and European Union funding to dedicated projects.

Although the aim of *Almi* is to support innovative firms with growth aspirations, the agency has a broad view of what counts as innovation and supports both radical and incremental innovation. Over time, it has seen a shift from technology-oriented support to service innovation, including the promotion of new business models. The agency includes support for established SMEs, recognising that enterprise growth can happen at different points in time and for various reasons and support may be required to match the challenge faced. For example, an SME could be forced to change because of a declining market or could experience a generational change, where founders retire and a new generation takes over, and business support can be provided accordingly.

Such developments call for stepwise support, which evolves with the company's needs, instead of throwing large sums at single or few occasions. *Almi* therefore designs its support activities to provide small sums to a large number of companies and requires the

³ See <u>www.tillvaxtverket.se</u>

achievement of milestones in company progression prior to allocating additional financial support to individual companies.

Almi recognises that funding needs commonly go together with counselling needs. Responding to this need, the business advisors at *Almi* provide generic counselling, coupled in some areas with specialist advice. For areas where they lack competence, they co-operate with outside actors and consultants. In Östergötland, for example, a long tradition of co-operation exists between support actors. This tradition goes back previously to an organisation called *Growlink* and is taken forward today through the East Sweden Business Region (ESBR), which incorporates a larger geographical area than Growlink.

Complexity in the business support system

Taken together, this plethora of actors on several levels creates a complex and partially overlapping system (Bünger & Thorstensson, 2015). Many firms, irrespective of size and level of development, perceive the system as hard to navigate and understand (Norrman, 2008). However, the support actors are aware of the overlaps, and various measures have been enacted at different levels to increase alignment and co-operation. For example, associations such as the Swedish Incubators and Science Parks association (SISP) play a role in organising co-operations among their members across the country and regional development strategies developed in line with the European Union Structural Funds policies have helped to focus and prioritise policy interventions at regional level.

Box 11 provides the example of a regional approach that has been introduced with the specific aim of improving the regional co-ordination of business support across actors in a rural region of Sweden.

Box 11. ITKL - Innovation for growth in the province of Kalmar, Sweden

Background and rationale

The Kalmar region is located in south east Sweden and includes 12 municipalities. The region has approximately 240 000 inhabitants, the city of Kalmar being the largest city with 40 000 inhabitants. It is a long and thin rural coastal region including the island of Öland, which is connected to the mainland by a long bridge between Kalmar and Färjestaden. Tourism and agriculture are important industries and Linné University has a campus in the region.

In 2015 the ITKL project was started up by Almi Företagspartner Kalmar with European Union funding through Tillväxtverket (2015) with the aim of creating a sustainable regional innovation support system inclusive of all the support actors.

The underlying rationale for the project was the recognition of fragmentation in the region's innovation support system. When the project was designed in 2015, almost no cooperation existed among the support actors present in the region. A large number of actors were working in more or less the same arena, but common competence and structure was lacking. Both firms and people with innovative ideas perceived the system as bureaucratic and hard to navigate.

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Description of the approach

During the project, the regional support actors managed to create a local "Innovation Council", which consisted of representatives from the support actors included in the project. The idea behind the Innovation Council is that it gives SMEs and idea owners the opportunity to pitch their ideas to all support actors at a single occasion. After the pitch, they receive feedback from the Council, including instructions on how to proceed and with which organisations and partners to work.

To test the system, about 22 so called "test pilots" (mainly smaller SMEs) were identified. All of them were given the opportunity to present to the Council and about 17 received follow up support. The support consisted of tailored counselling and of smaller sums of finance, up to SEK 50 000. In addition, a seminar programme was set up in order to educate firm owners. About 12 of the "test pilot" SMEs participated in these seminars, which were organised around themes such as marketing and sales, product development and immaterial property rights. The "test pilots" were also given the opportunity to participate in trade fairs and study visits.

The ITKL project was wound up in April 2018, but the Kalmar Region has decided to make the new structure permanent. It has been proposed that the Innovation Council will be run in the future by the Region Association, as this actor is seen as a neutral part by the rest of the actors.

Source: Norrman, C and Lovén, E (2018) Följeforskningsrapport för projektet ITKL - Innovativ Tillväxt i Kalmar Län (Report "ongoing research") 2018-04-04

How the Swedish business support system distinguishes across SME types

Swedish business support programmes are generally organised according to the model presented in Figure 4. Different actors in the system have different scopes of activity, covering both business development services (information, advice, training, networking, mediation etc.) and access to resources (e.g. finance – loans, venture capital, innovation vouchers etc.; and infrastructure – science parks, incubators etc.).

As recommended in the academic literature (see Storey, 2000; Norrman, 2008), the policies are generally based upon clear goals and have a well thought out programme theory, including clear logical connections from goals to interventions and effects. The programmes also include a selection strategy setting out which firms to support.





Source: Author's adaptation from Norrman (2008).
All phases of firm development are covered in the system, from nascent entrepreneurship to established SMEs. The principal firm development phases addressed are (1) entrepreneurship promotion, i.e. measures to change attitudes about entrepreneurship, (2) start-up, i.e. facilitating the creation of new ventures, (3) business execution, i.e. support to existing firms; and (4) development, which is about the expansion, growth and internationalisation of the enterprise (Bünger & Thorstensson, 2015).

However, many business support policies in Sweden focus on start-ups, including by groups such as females, young people or "innovators", and on SMEs involved in radical innovation or rapid growth. Box 12 gives the example of a Swedish programme for high growth firms, aimed at support to open and peer learning across SMEs experiencing growth.

Box 12. The SMIL Business Development Programme, Sweden

Rationale and approach

The SMIL Business Development Programme (BDP) was created in 1986 with the aim of promoting open learning among growing businesses. The rationale was based on research that has shown that "concentrating on start-ups may not be the most efficient approach regarding policy intervention, as it is the small number of business that grow quickly that create the majority of the new jobs … thus policymakers should focus predominantly on growth firms instead of adopting a non-targeted approach and stimulating brand new businesses" (Klofsten & Jones-Evans, 2013, p. 300-301).

Generally, the programme has been administered by Linköping University, but always in co-operation with SMIL. Each edition normally consists of three workshops, distributed over one year. The first two workshops have been lunchlunch and the last one has been held as a one-day seminar. Informal meetings between the workshops have been encouraged, without a programme leader present. As the participants has been more or less experienced in different areas they have often worked as informal mentors or sparring partners to each other and the relations built during the programmes have often become long lasting.

Some 22 annual editions have been run, with a total of 490 participating individuals representing 194 firms. Some of the firms have participated in the BDP several times.

Strengths and challenges

The main strengths of the BDP are that it originated from a regional network of businesses that asked to participate, and that it has been run several times, enabling learning and networks to emerge among the firms that have participated. An additional strength is its flexibility, with each edition tailored to the interests and needs of its participants.

Initially a challenge was getting the right number of participants to facilitate mutual learning and networking. Some 20 SMEs participated in the first edition of the programme. However, this group was judged to be too large. Hence, the number of participants in the subsequent editions was limited to 9 firms.

Another challenge is that at least one experienced entrepreneur is needed as a programme leader and the programme could not be run by policy actors alone.

Key success factors

From an interview study with participants of the programme, Klofsten and Jones-Evans (2013) have found eight key success factors. These are:

1 Engaged programme leadership – an engaged leader is very important to create and carry the culture of the programme.

2 Openness between participating entrepreneurs -a friendly and constructive climate among the participants implies that problems are taken seriously and that there are joint efforts towards solving them.

3 Willingness to share ideas and experiences – this is something that has evolved and become the essence of the programme. Since some firms have participated more than once, this culture of openness has been inherited through successive editions of the programme.

4 High level of company engagement – despite the fact that some participants have found themselves being almost competitors they have managed to engage to solve common problems.

5 Tolerance of all opinions when discussing problems – this culture has made the participants feel comfortable both to raise problems and suggest solutions.

6 Informality and programme flexibility – because the programme management has been very experienced, it has managed to tailor the programme to the participants.

7 Needs-oriented process -a lot of growth problems have been common to almost all the firms and hence needs have often been easy to identify and the issues chosen have engaged all the participants.

8 Continuous learning by participating companies – bringing together people with common problems builds the foundation for lasting networks.

At the same time, there is a need for support for regular, established SMEs with low productivity. According to both research and practice (Philipsson, 2018; Brown et al. 2017; North & Smallbone, 2012), these firms also have a potential for growth. For example, North & Smallbone (2012) shows that the age of the firm is not a crucial factor determining growth and that older SMEs can also achieve growth. Brown et al. (2017) state, in their study of high growth firms (HGF) that "recent evidence further indicates that the majority of HGFs are in fact older and larger than previously believed" (p 420).

There is no doubt that ongoing trends such as the digital transformation, rapid technological change and demographic ageing call on all SMEs to adapt to constantly changing markets, whether or not they are new or innovative or experiencing growth. The ability to support firms to address these challenges and grow their productivity is therefore crucial. Box 13 gives the example of the European Social Fund Objective 4 programme, which supported large numbers of regular SMEs to address important societal challenges in Sweden, such as digitalisation and globalisation.

Box 13. European Social Fund Objective 4 Programme, Sweden

Rationale and approach

The European Union's European Social Fund Objective 4 programme (*Växtkraft mål 4* in Swedish), was one of the first European programmes run in Sweden after its entry to the European Union (EU) in 1995. Sweden took part in the programme from 1996 to 1999, under the management of the Swedish EU programme office, which had regional offices in all the provinces of Sweden.

The Objective 4 programme focused on the development of the competences of employees in smaller firms and in health and social care within municipal and regional organisations (Abrahamsson, 2017). It had four main areas of activity: analysis of future change, analysis of needs for competence development, training of employees and two initiatives named Employment and Adapt.

The aim of Objective 4 was to facilitate the adaptation of workers to industrial changes and changes in production systems. The Council regulation stipulated that the Member States were to submit plans for operations to the European Commission, describing how to facilitate the adaptation of the workers related to the forecasted industrial changes during the period. These submissions were to include national situation descriptions, national strategies and appropriate measures and actors.

In Sweden, the goal was set to achieve positive attitudes to change and to conduct competence development among employees. There was also an ambition to support organisational renewal within the targeted firms and work areas. The programmes drew upon earlier experience from *Arbetslivsfonden*, where the starting point was that the projects should benefit both the employees and their employers. The total number of projects run was 31 868 and the total cost was estimated to be SEK 180 million, which makes this one of the largest scale programmes of this type during the 1990s.

If public organisations and sole proprietors are excluded, SMEs in the area of labourintensive services was the dominant group that received the support (about 39%), followed by SMEs in knowledge-intensive services (31%) and labour-intensive manufacturing (11%). Regarding firm size, most firms were small or very small. Some 28% of the participating firms had 1-4 employees, 30% had 5-9 employees, and 42% had 10-49 employees. The average number of employees was 11. In total, 10 512 firms participated and representing about 58% of the total number of employees that took part in the projects, and these constitute the sample that was analysed in the evaluation made by Bager-Sjögren et al (2003).

Strengths and challenges

The main strength of the Objective 4 programme was that it reached a large number of SMEs and within these, a large number of employees that could benefit from the competence enhancing activities. According to the evaluation, which used a control group approach, the Swedish Objective 4 programme seemed to have reached most of its goals and to have been beneficial for the participating firms.

Interestingly, the firms participating in the programme showed lower levels of productivity (probably due to the programme) during the programme period than the control group, however, after passing through the programme the productivity increased and in general, the participating firms increased their productivity. Another finding is that participating firms, to larger degree, continued to conduct competence-enhancing activities after the programme.

Conclusions and policy recommendations

This paper argues that it is important for business development services policy to work for low-productivity established SMEs, as well as new, innovative and rapidly growing firms.

In seeking to develop an appropriate support approach for low productivity SMEs, the following key policy considerations can be identified:

- 1. Creating a needs-based system.
- 2. Selection based on willingness to learn and adapt.
- 3. Complementarity to private initiatives.
- 4. Trustful and open climate in a functioning local entrepreneurship ecosystem.
- 5. A stable host organisation, preferably organised in a triple helix setting.
- 6. Monitoring and evaluation.

1. Creating a needs-based business development services system

There is a constant need for new competence development and adoption of new and innovative business models and production processes for SMEs to stay successfully in business. For a low-productivity, established SME to be competitive today it might need to increase its degree of digitalisation, turn towards a more service-oriented business model or even try to come up with a brand-new business model. Frankelius (2009) and Frankelius & Norrman (2013) suggest that innovation could emerge in many areas, for example new solutions, products, services, processes, organisations or business models, methods, concepts, designs, names or experiences. Hence a broad view of what could be supported in terms of innovation in businesses is beneficial. This should include technology adoption, and not only innovations that could be patented.

2. Participant selection based on SME willingness to learn and adapt

The selection of SMEs for business development services should be based on their openness to receive advice and act on it. This is about the firm's willingness to participate in development programmes and willingness to learn (Wolff et al., 2015). Drawing on studies like Klofsten & Norrman (2013) and Stevenson & Jarillo (1990), it is clear that entrepreneurship is about attitudes and strong driving forces. If the willingness to adopt new ideas and learn is missing, it is probably not effective to support the company (North & Smallbone, 2012). The SMIL BDP described above, was created based on needs from SMEs to improve their businesses. Furthermore, even though the programme fees have not been expensive, participating firms have had to pay to be able to follow the programme, and this in turn implies devotion (Klofsten & Jones-Evans, 2013). The assessment of the SMIL BDP also highlights the importance of taking account of group dynamics when putting firms together. If this succeeds, it creates trust between participants and an open mutually-contributing culture.

3. Complementarity across different business development services providers

Public support needs to be complementary to the market and complement the private sector (Parker, 2007). It is also important that the support contains access both to generic support competence and expert support competence related to certain industries or technologies (cf Frankelius & Norrman, 2013). The generic competence is needed during the first phases of development, but when it comes to more extensive and complicated matters, experts will be needed. This was clearly shown in the description of the SMIL BDP, and has also been

the case in the ITKL project, where the Innovation Council established the "diagnosis" and brought in other actors, based on their specific competences and scope.

4. Trustful and open climate in a functioning local entrepreneurship ecosystem

The cases presented in the paper (especially the SMIL BDP) as well as theory show that great ideas seldom emerge in vacuum (Van der Ven, 1993). Hence, networks (Håkansson & Snehota, 1989), innovation systems (Edquist & Johnson, 1997), ecosystems (Adner, 2006; Stam & Spigel, 2016) or however one prefers to name the firms' surrounding environments, have for a long time been regarded as both influencing and benefiting the actors within them. A lot of research (Stam & Spigel, 2016) puts forward the importance of a well-functioning entrepreneurship ecosystem as crucial for firm development. Therefore, network creation or mediation ought to be part of any business support programme. In addition, a trustful climate among participants within the policy programmes are of high importance – with trust follows openness and willingness to share experience. This was one of the main success factors that came out from the analysis of the SMIL BDP.

5. A stable host organisation and close co-operation between industry, academia and government

The business support also needs to be organised by one or several actors. In the case of the SMIL BDP, the programme was co-organised by a business network and a university, and led by an experienced entrepreneur. This way of organising was seen as one of the main success factors of the programme. Similarly, the ITKL project brought several business support actors together. In the Swedish Objective 4 programme, development initiatives had to come from the firms and organisations that needed the support, and had to be inclusive regarding who was involved. Furthermore, it is important to make broad announcements of the availability of business development services support, so that regular SMEs become aware that there is an opportunity for them.

6. Sound monitoring and evaluation

Finally, a common feature of most of the publicly-funded support actions discussed above is that their effects seem complicated to evaluate (Riksrevisionen, 2016:22, Bünger & Thorstensson, 2015). One factor is the programme theory; or rather its absence, which commonly means that there are no clear goals and indicators to evaluate (Norrman, 2008). Complaints over the lack of clear programme goals and properly collected data to enable impact evaluations are nothing new (cf. Storey, 2000; Norrman, 2008, Norrman & Bager-Sjögren, 2010) and it seems that this still is a current problem (Riksrevisionen, 2016:22; Bünger & Thorstensson, 2015). Without a sharp picture of what impacts are achieved from the different policy interventions it is hard to know what works. Therefore, a strong recommendation is to make sure that the policy intervention is designed in such a way that it can be evaluated.

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Digital business diagnostic tools for SMEs

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Introduction

The digital transformation can spur innovation and productivity growth across many activities. It transforms public services and improves well-being as information, knowledge and data become more widely available (OECD, 2017). Over the past 15 years, digital assets have doubled across the OECD economies with firms investing not only in information technology (IT) but also in digitising their physical assets (Gandhi et al., 2016). Digital tools are contributing to changing business models, helping companies embrace new technologies on transactions, customer relationships or business processes.

The digital transformation has also significantly changed how companies operate. This presents both threats and opportunities for SMEs. Adopting digital marketing approaches and e-commerce means that they can target customers and markets they would otherwise be unable to reach, as long as the business is able to adapt.

The digital revolution has also made a large number of easily accessible and affordable digital business diagnostic tools available online, which now are just a "click away". This is particularly beneficial for SMEs that would not otherwise have the knowledge or resources available to obtain business diagnosis. Such online tools are readily available to any interested SME, regardless of its size or location, and can be used across the world, regardless of where or by whom they were developed. Through their easy to access features, online tools offer the prospect of allowing a larger number of SMEs to detect weaknesses in their productivity and competitiveness than would be possible with traditional face-to-face or telephone-based business advice services.

This paper will look specifically at digital business diagnostic tools for SMEs. Existing online tools allow SMEs with limited resources to carry out a meaningful diagnosis of their organisation. These tools may also provide awareness-raising and learning opportunities with the ultimate aim for SMEs being increased competitiveness and productivity. This paper will first examine some key policy issues in supporting digital business diagnostic tools. It will then outline the current development stage of these tools and present several tools that have been developed in OECD and non-OECD countries. These tools can be categorised as either generic diagnostic tools or tools with a focus on a specific competence area (innovation, internationalisation, digitalisation). Finally, the paper will provide some policy conclusions.

Policy issues in the development of digital diagnostic tools

Digital business diagnostic tools benefit low productivity SMEs in several ways

Digital diagnostic tools can contribute to changing the mindset of the SME owner/manager in relation to the adoption of new technologies and practices within the company. The tools are easy to use and encourage the owner/manager to thoroughly assess their company and evaluate its strengths and weaknesses. They also create awareness and learning opportunities, helping managers and employees to think in new ways about the present and future business. Digital diagnostic tools can also help SMEs to anticipate emerging challenges in technologies, competition and markets and react quickly to changing circumstances according to their strategy, mission and priorities.

Some of the main benefits SMEs can derive from using online business diagnostic tools are as follows:

- To carry out a meaningful diagnostic and identification of priorities in an easy access and low cost manner.
- To change mindsets and offer learning opportunities to owners, managers and employees of SMEs using common, well-supported frameworks.
- To gain data comparisons and benchmarks with other firms, and understand the relevant gaps and set improvement targets accordingly.
- To identify and implement well-defined and prioritised improvement actions.

However, SMEs may face barriers to fully exploiting these online business diagnostic tools, although, to a large extent, they can be overcome with support from public policies and agencies. The main barriers are as follows:

- Lack of knowledge on which online business diagnostic tools are available and best suited to the business, and where to find them.
- Concerns about the reliability of data being used for benchmarking purposes and concerns about privacy and confidentiality of the data SMEs enter into the tool.
- Lack of motivation or resources within the SME to use the diagnostic as a starting point for a continuous improvement journey, complemented by the consequent definition and implementation of improvement actions, thus closing a loop that should be repeated on a periodic basis.
- Lack of alignment among individuals within the SME to build a common understanding of the priorities and initiatives to be pursued following the diagnostic process.

Public policy plays an important role in supporting digital diagnostic tools

Public policies may promote and support these tools, ensuring that they are properly applied and translated into the practical implementation of smart improvement actions by increasing numbers of SMEs.

Public policies and agencies play a key role in the development of diagnostic tools and by offering follow-on support to SMEs.

As the examples later in this paper will demonstrate, among other mechanisms, public policies may support digital business diagnostic tools by:

- Contributing to the development of the tool by collecting reliable, meaningful data to support well-contextualised comparisons and benchmarking and providing information that SMEs can use to reinforce their competitiveness.
- Diffusion of information on existing or new online tools that SMEs can use to carry out a proper diagnostic and obtain follow-on information and support.
- Promoting training to ensure that SMEs have a qualified workforce that can best capitalise on such digital diagnostic tools and models. This training can be provided

more generically or targeted to SMEs using the available diagnostic tools, whichever is most helpful.

- Providing support for SMEs to apply the most appropriate digital diagnostic tools in the most efficient way. This may include training and support of staff in public agencies to help SMEs to use the tool, as well as making technical helpdesk services available. Support, for example in the form of vouchers to SMEs, could also be used to incentivise a range of public or private partners or service providers, such as higher education institutions, to help SMEs to use the digital diagnostic tool.
- Ensuring that support for follow-up actions is available to SMEs after they apply the online diagnostic tools. By offering support, such as tailored advice and consultancy, governments can contribute to ensuring that diagnostics are followed by concrete actions. One possibility here can be to make public financial support, such as vouchers, conditional on SMEs providing evidence of changes made and performance improvements achieved, for instance 6-12 months after the initial diagnostic has been conducted.

Overview of digital business diagnostic tools for SMEs

This section provides an overview of existing approaches for digital business diagnostic tools, presenting brief descriptions for a variety of countries and domains. It covers two types of tools:

- Generic tools that support SMEs to identify their overall strengths and weaknesses and areas for improvement.
- Domain specific tools in the areas of innovation, internationalisation and digitalisation.

Each type of tool may be chosen independently and used separately or combined together by a given SME, depending upon the fit of the tool to the specific business development strategy, goals and priorities of the firm. For instance, one particular SME may first want to get an overall picture of its performance by using one of the digital tools belonging to the generic category, and then may follow up with a complementary effort to focus on one of the tools focused on more specific areas of analysis given the priorities identified: innovation, internationalisation and/or digitalisation. However, another SME having already defined its strategic priorities on driving competitiveness and productivity may, in the first instance, prefer to conduct an assessment directly within a specific domain, such as innovation, internationalisation or digitalisation.

Regardless of how the tools are used, it is important to keep in mind that the practical impact on SME competitiveness and productivity is not achieved by the diagnostic alone. The diagnostic needs to be connected with follow-up support initiatives based on its results.

Generic digital diagnostic tools

France I: The French Chambers of Commerce IT platform

In France, the Permanent Assembly of Chambers of Commerce and Industry has developed an IT platform that automatically draws up a summary report on the situation of any given SME, based on its answers to a questionnaire. Taking into account the results of this diagnostic, it is possible for the SME to revise its priorities and areas requiring further support or allocate additional resources, including in one or more of the following domains: i) administrative and financial management; ii) commercial and marketing aspects; iii) production, purchasing and supplies; iv) human resources management; and v) the future of the business.

This initiative has been quite successful, and its success is considered to derive from its ease of use, the fact that it can be adapted to the requirements of very small businesses and the "bottom-up" approach adopted. To date, it has been expanded to cover more than half of the 104 Chambers of Commerce and Industry in France, covering over 26 regions. So far, more than 10 000 diagnostics have already been carried out, but it is expected that, once this approach expands and becomes increasingly available and better known across France, this digital diagnostic tool will support the assessment of an additional 10 000 SMEs every year (EC, 2010). It is expected that the results of the diagnostic will be followed by the implementation of improvement actions leading to increased competitiveness of the assessed SMEs.

France II: The Bpifrance digital diagnostic tools

Another example from France corresponds to the digital diagnostic tools developed by Bpifrance, a public agency and bank dedicated to supporting SMEs and other companies. With over 2 500 employees and a network of almost 50 regional offices, Bpifrance supports over 7 000 SMEs every year. A digital diagnostic tool entitled *Digitalomètre* allows SMEs to measure their level of digital maturity, identify their progression phases and discover Bpifrance support offers adapted to their needs. Recently, Bpifrance also created the *Mondialomètre* tool, which allows SMEs to measure their level of maturity in terms of exporting or establishing themselves internationally. This platform analyses most of the aspects that the company should take into account regarding exports, including market, culture, regulatory aspects and internal resources available. Bpifrance also provides comprehensive, free online e-learning content to many SMEs and has developed an acceleration programme comprising different assessment tools. After two years of acceleration support, the participating SMEs displayed an average growth of 10%, over 70% of them had entered into new markets, export growth was close to 30% and jobs had increased by 20%.

FutureSME: A European-wide project

An example of a digital diagnostic tool that was developed to foster the competitiveness of SMEs is futureSME's Capability Diagnostic Model, an accredited methodology that uses a Visual Management System to help SMEs achieve better business performance. The futureSME business diagnostic tool analyses the following four key aspects: i) strategy; ii) operations; iii) management; iv) adaptability.

To conduct the diagnostic, the SME provides information about the company and responds to a survey covering indicators and approaches adopted within the following domains: i) strategy; ii) operating model; iii) process management; iv) performance management; v) leadership; vi) governance; vii) agility; and viii) innovation. An output report is automatically generated highlighting the key priorities the SME needs to address in order to improve its business performance and competitiveness and illustrating visually how it compares to other SMEs.

The underlying models, IT platforms and diagnostic tools of futureSME were developed with support from the European Commission and involved a consortium of 26 partners, including 13 manufacturing SMEs, research and development organisations and SME support agencies from eight countries (Czech Republic, Ireland, Italy, Poland, Turkey, the

Slovak Republic, Sweden and the United Kingdom)⁴. Results obtained for a sample of SMEs are shared on the futureSME online platform, including case studies, videos and practical impacts from adopting this diagnostic tool.

The tool's website indicates that Turkish SME, Deka, which has used the tool, offered the following information on the practical impacts of the assessment:

- it helped employees from different departments to communicate on a new basis and to understand the weak links in the business;
- management had the opportunity to evaluate the company with respect to its strategic, operational, managerial and adaptive capabilities;
- going through the visual strategy methodology, the management team was able to align improvement projects with the main goals of the business;
- as an example of the innovation projects which were launched within the transformation process, a production and sales feasibility check project resulted in an 80% decrease on the usual appraisal time, thus enhancing competitiveness in the market.

Similar examples from other countries are also available on the futureSME portal, but the example of Deka highlights some of the most significant benefits that can result from the proper application of this type of online diagnostic tool, ranging all the way from people transformation to well-defined priorities and improvement projects that translate into bottom-line results and increased competitiveness.

Figure 5 illustrates an example of these impacts, demonstrating how diagnostic tools work and what they can achieve in practice.



Figure 5. Example of future SME capability diagnostic results for a hypothetical firm

Source: Author's elaboration of a hypothetical firm results from use of the futureSME tool; see <u>http://www.futuresme.eu/diagnostic</u>

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⁴ futureSME, accredited* methodology. See <u>http://www.futuresme.eu</u>

The EFQM Excellence Model

In 1989, a number of large European companies sponsored the creation of the European Foundation for Quality Management (EFQM) to contribute to the competitiveness of companies and assure excellence as a driver of European business success. Among other activities, EFQM has developed and implemented an Excellence Model that helps public and private entities, including SMEs, to develop a detailed analysis of their organisations in order to achieve outstanding levels of performance and sustainable success. The EFQM Excellence Model can be used by any type of organisation and business sector as it provides a common language to effectively share knowledge and experience.

The EFQM Model covers a total of nine criteria, five of them related to what the organisation does and how (enablers) and four of them related to what the organisation is able to achieve and its outcomes (results) (Figure 6). Over the last 30 years, more than 50 000 organisations have used this model to improve their performance and competitiveness.

The EFQM Model originally related to large companies, attributing the National and European Quality Awards to the organisations with the highest scores according to the criteria and sub-criteria of this excellence model. However, EFQM has since made this approach available to SMEs for diagnostic and improvement purposes. In order to achieve this goal, besides self-assessments conducted by the SMEs according to the model, intermediate levels have been defined on a scale of excellence so that SMEs can qualify to become "Committed to or Recognised for Excellence". By using this approach, SMEs are able to identify their strengths and weaknesses, as well as benchmark their performance according to a common diagnostic tool and model.

According to the World State of Quality (WSQ) results for 2016 (wsq.dps.uminho.pt), the European countries with the largest numbers of companies using and qualified in this EFQM approach are Spain, Austria, Luxembourg, Slovenia and the United Kingdom. The certificates of accomplishment provided recognise, under an internationally common and validated model of assessment, what has already been achieved and what remains to be done in order to reach the next level of organisational excellence. Following consecutive cycles of improvement, the SME may achieve a level of excellence that allows it to be recognised as one of the best national or European SMEs, if it ends up as a winner or finalist in the national or international quality awards that use this model to support self-assessment, followed by an external assessment conducted by experts in the field, qualified by EFQM.

Both EFQM and national quality associations, namely from Austria, Spain and Portugal, have also developed digital tools that allow SMEs to obtain their excellence profiles online according to this EFQM model and approach.



Figure 6. The EFQM Excellence Model and criteria

Digital diagnostic tools for SMEs with specific scopes of analysis

Innovation

COTEC Portugal

COTEC is a network of non-profit entities aimed at promoting innovation in companies and SMEs. Endorsed at the political level by the presidents of Italy and Portugal, as well as the King of Spain, this network is mostly led by private companies and runs a number of innovation-related initiatives in these three countries. As a national member of this articulated international network, COTEC Portugal has developed an innovation model together with an online diagnostic tool that allows SMEs to evaluate and benchmark their innovation performances, named "Innovation Scoring".

"Innovation Scoring" is an online digital self-assessment tool that aims to stimulate SMEs to diagnose and develop innovation in a more systematic, efficient and effective way, contributing to the strategic reflection of companies on their innovation processes. It also allows them to recognise the different dimensions that support such processes and identify areas for potential improvement.

The "Innovation Scoring" system (Figure 7) is based on the diagnostic made by an SME in terms of its innovation performance, according to the following five key areas related to innovation management: i) strategy; ii) organisation; iii) processes of research, development and innovation; iv) enhancers; v) impact. At a more detailed level, 14 different dimensions are considered under the umbrella of these five key areas, and this translates into a final set of 30 questions. Based upon the self-assessment carried out by SMEs according to these 30 innovation-related questions, the IT platform automatically generates a feedback report, including an algorithm which is applied to the data provided, that allows for comparisons to be made between average values and top performers amongst the SMEs that have already used this tool.

Source: EFQM; see https://www.qualityscotland.co.uk/content/efqm-excellence-model

A. Strategy	B. Organisation	C. R+D+I Processes	D. Enablers	E. Impact
A1. Contextual Analysis	B1. Structures and Governance	C1. Ideas Creation and Analysis	D1. External Partnerships	E1. Market
A2. Strategic Planning	B2. Human Capital	C2. Project Management	D2. Investment	E2. Sustainability
A3. Culture and Leadership	B3. Organizational Competencies	C3. IP Protection and Management	D3. Knowledge Management	
9 questions	7 questions	3 questions	5 questions	6 questions

Figure 7. COTEC Portugal innovation scoring digital tool

Source: COTEC Portugal; see <u>https://www.innovationscoring.pt/apresentacao/conceitos/</u> with Author's translation into English

To complement this online digital tool, SMEs can also undergo external assessments, receiving feedback from experts and being recognised by COTEC Portugal as "Innovative SMEs" on reaching a certain threshold of performance in terms of innovation management. So far, over 200 SMEs have already achieved this status in Portugal.

The "Innovation Scoring" platform therefore monitors the evolution of SMEs across the several innovation management criteria and indicators, as well as building a cumulative knowledge base with different experiences of good practices identified across the SMEs that have applied this model and approach.

Inno-biz, Korea

According to several international innovation rankings⁵, Korea is considered one of the most innovative countries in the world. This is the result of decades of effort from both the private and public sectors, as well as broader societal involvement in such an ambitious agenda. It is, therefore, unsurprising that the Government of Korea is intensively fostering the development of innovation drivers, such as its "Inno-biz" programme, which is supported by an online digital tool to assess the technological competitiveness and innovation of Korean companies and SMEs.

SMEs define their priorities based on the results obtained and, according to their technological competitiveness, they may be granted a three-year certificate that provides access to other national programmes supporting further technological development, as well as funding and marketing assistance to compete worldwide. The "Inno-biz" movement is helping Korean companies and SMEs to expand their activities to other countries, such as China, Vietnam and Indonesia (Business Korea, 2015). As part of this movement, over 3 000 SMEs have already been certified as being capable of addressing foreign markets.

⁵ 2018 Bloomberg Innovation Index, World Economic Forum, Global Innovation Index

Internationalisation

The 2SHERPA Network

A specific example of how online digital tools can be used to assess and support SMEs in their internationalisation efforts is that developed by 2SHERPA⁶, an international network of business consultants and service providers based in Singapore, with members also in the USA, United Kingdom, Netherlands, Germany, Switzerland, Poland, Finland, Indonesia, Malaysia and China. This tool allows SMEs to conduct an assessment process to help them expand their business exports and go global. The assessment helps SMEs to understand their strengths and weaknesses with regards to their internationalisation capabilities, performance and potential. By taking this profile into account they can be more successful operating abroad, conducting assessments to determine the gaps and areas for improvement through a benchmarking process. Through its network of partners⁷, located in more than 20 countries, 2SHERPA promotes and applies this diagnostic tool internationally and provides additional local support to SMEs wanting to move into foreign markets and exports. Over 200 companies use the tool every year, located in Asia, Europe and the USA. The results obtained contribute to a yearly updated Global Benchmarking Survey, allowing for comparisons to be made between SMEs, using the online tool and the global results.

The assessment is conducted based on a total of 350 questions and statements that correspond to six areas considered critical to addressing internationalisation issues

- 1. Defining and Executing Strategy.
- 2. Identifying and Incorporating New Legal, Financial and ICT Requirements.
- 3. Reconfiguring and Producing Products for a New User Market.
- 4. Building or Realigning the Organisation.
- 5. Effectively Understanding and Integrating into the Target Geographical Market.
- 6. Building Out an Effective Marketing and Sales Programme.

An Assessment and Report is provided for each of these six areas.

The model and approach adopted allow for analysis of the information collected and provide results which show an SME's capacity and ability to pursue business expansion opportunities. This model can also track the progress made and monitor areas where the SME needs to make further alignments and efforts to achieve its internationalisation goals.

⁶ 2SHERPA is a global portal with online assessments, business consultants and service providers. See more: <u>https://www.2sherpa.com/home/</u>

⁷ E.g. UK-based Lions & Tigers and The Wundaba Group based in Singapore.

Digitalisation

EasyGov, Switzerland

Developed in Switzerland, "EasyGov" is a platform including an online digital tool which contributes to reducing administrative burdens, making business processes easier, simpler and more efficient. Many administrative tasks can also be carried out through this platform, similar to other e-government initiatives. More than 4 500 companies have already used this digital platform which is available at the national level, as well as through local authorities. Based on a set of predefined questions, SMEs receive a summary of recommendations and can move forward with their business taking into account the results obtained.

International Trade Centre (ITC)

The International Trade Centre (ITC) was one of the first international agencies to spearhead e-business solutions in the export development field and also contributes to improving the web presence of SMEs. Established in 1964, ITC is a joint agency of the World Trade Organisation and the United Nations, and the only development agency fully dedicated to supporting the internationalisation of SMEs. As part of its support efforts, ITC provides an online diagnostic of the SME's web presence and, taking this into account, then develops specific web marketing strategies and assists in identifying e-commerce solutions as well e-marketplaces that may contribute to expanding the SME's sales and distribution channels (ITC, 2016). As another example of its activities, the ITC "Trade-@-Hand" mobile solution provides agribusiness producers and exporters with just-in-time price information, market alerts, and a mobile business-matching tool. These ITC online digital diagnostic tools were developed by international e-commerce experts and ITC has teamed up with a range of partners, including large players such as eBay and DHL, as well as smaller specialised firms in related fields, such as legal advisory services. This set of ITC tools provides a good example of how digitalisation efforts and diagnostic tools can also help in achieving the further internationalisation of SME activities.

Improve Academy, Germany

Another concrete example of an online assessment tool that contributes to the increased digitalisation of SMEs can be found in Germany, one of the leading countries in the incorporation of technology in industry and a strong supporter of the Industry 4.0 movement. The "Improve Academy" developed the IMP³rove Approach, which provides digital innovation management capabilities and evaluates the performance of each company using this assessment tool. Based on international standard compliant assessment tools and the world's largest benchmarking database on digital innovation management, companies can use this tool to compare their innovation management capabilities and performance against the average scores of direct or indirect competitors.⁸

Using this online diagnostic tool, each company must address a set of predefined questions, with four types of assessment available: i) a basic assessment to identify the strengths and weaknesses of the company's digital innovation; ii) an assessment that uncovers the drivers and challenges of digital innovation management and performance; iii) an assessment to demonstrate the degree to which a company manages innovation in a sustainable manner; and iv) a structured assessment of the company's current performance in digital innovation

⁸ IMP³rove - European Innovation Management Academy. See <u>https://www.improve-innovation.eu</u>

according to five dimensions (innovation strategy, business model, digital processes, digital ecosystem and organisational culture). According to the results obtained, an overall Digital Innovation Quotient value is also provided. This Digital Innovation Quotient can be calculated for companies of all sizes, ages and industries, allowing SMEs to benchmark themselves in this area and further develop their digital innovation capabilities (Figure 8).



Figure 8. Digital diagnostic tools for assessing digitalisation processes

Source: Improve Academy; see <u>https://www.improve-innovation.eu/our-services/assessments/digital-innovation-quotient/</u>

On completion of the online assessment, the tool automatically generates a customised report comparing the assessed SME's digital innovation management capabilities and performance with the average results available for around 5 000 direct or indirect competitors.

Detailed examples and integrated packages of digital diagnostic tools

This section describes in more detail a smaller set of online digital diagnostic tools that have been developed and deployed to increase the competitiveness of SMEs, some of which are of a generic scope, and others that address more specific topics, such as digitalisation. They cover four notable examples from different countries and regions around the world, including integrated initiatives involving packages of tools and related measures.

Small Business Administration / USA

The United States Small Business Administration (SBA) was set up in July 1953 to contribute to the creation and development of small businesses across the USA. SBA provides a large variety of business support and advice through a network of 1 800 offices distributed across the USA to facilitate a close interaction between its advisers and the business community. This also allows SBA to collect large amounts of data that provide great potential for benchmarking opportunities and for SMEs to learn from such data and knowledge.

SBA has developed and provides a number of different digital business diagnostic tools for SMEs, which may help businesses to understand how they compare against the

competition. One such tool, entitled "SizeUp", is an assessment tool that helps SMEs to map their main customers, find the best places to locate their products/services or to advertise them in a more efficient way, and set appropriate targets. Through a very simple online tool that processes millions of data sets, "SizeUp"⁹ provides three concrete contributions to SMEs aimed at increasing their competitiveness based upon precise, geographically indexed information:

- Benchmarking the business. The digital tool compares the SME's performance with the main competitors in the same region and field of activity. It can also help to identify suggested wages or the cost efficiency the SME should be able to achieve, expected sales and numbers of customers, based on relevant data and information collected from a large number of similar SMEs.
- Mapping the competition. The diagnostic tool identifies the potential main competitors in the region in which the SME operates and can also provide guidance on where to locate its operations, taking into account competition and customers.
- Determining when and where to advertise. The digital platform helps the SME to find the best places and the best times to advertise its products or services, from a wide range of possible options both online and offline. Through this component of the online digital diagnostic tool, it becomes possible to determine where to market and advertise a specific service or product, taking into account the goals and resources of each SME.

Alongside "SizeUp", SBA provides other online digital tools aimed at improving the performance, competitiveness and productivity levels of SMEs, as well as their funding options. In 2015, SBA decided to create an online matching tool to match possible investors with SMEs seeking funding. Entitled "Leveraging Information and Networks to Access Capital"¹⁰, this online tool is very efficient at making capital accessible to any SME across the country. It is accessed by answering a simple questionnaire and then automatically puts SMEs in contact with potential investors and loans (Figure 9).

On another level, SBA partnered with large companies to develop specific digital tools and resources that can be used by SMEs to assess their efficiency levels. Through the initiative, entitled "Small Business Tech Coalition"¹¹, SBA provides digital tools to evaluate the SMEs' efficiency of operations and cybersecurity protection or to find ways to improve their customer service.

⁹ SizeUp. See more: <u>https://www.sba.gov/tools/sizeup</u>

¹⁰ SBA Programme. See more: <u>https://www.sba.gov/lendermatch</u>

¹¹ SBA's Small Business Tech Coalition. See more: <u>https://www.sba.gov/techcoalition/#top</u>

Figure 9. Structure of the US Small Business Association's Tool on Leveraging Information and Networks to Access Capital



Source: US Small Business Administration; see <u>https://www.sba.gov/funding-programs/loans/lender-match</u>

Enterprise Singapore and other agencies / Singapore

Enterprise Singapore is another good example of the integrated role played by a public agency that develops and provides a set of online digital diagnostic tools for SMEs. Enterprise Singapore was created by merging two previous existing entities (International Enterprise and SPRING), and this resulted in a single agency that is responsible for helping SMEs to increase their competitiveness. For this purpose, it provides a large set of assistance services and processes to support the growth of committed companies and develop partnerships with trade organisations.

The "Business Excellence" initiative is a concrete example that illustrates the activities carried out by Enterprise Singapore. Through a simple online digital tool, it is possible to assess the organisational performance of SMEs, according to an internationally benchmarked framework covering the following seven areas: i) leadership; ii) customers; iii) strategy; iv) people; v) processes; vi) knowledge; vii) results. By using this digital diagnostic tool, any SME can identify its own strengths and areas for improvement in order to increase its performance and competitiveness.

The SMEs with good performance are awarded various degrees of recognition to demonstrate their achievements and commitment to sustainable performance improvement (Figure 10). A strategic development roadmap to further improve the performance of SMEs can also be generated by this "Business Excellence" digital tool.



Figure 10. Assessment and recognition of Business Excellence in Singapore

Source: Enterprise Singapore; see <u>https://spring.enterprisesg.gov.sg/Building-Trust/Business-</u> Excellence/Pages/business-excellence-overview.aspx

At a more specific level, Enterprise Singapore has also developed and provides a wide range of other online "Business Toolkits" that allow SMEs to assess themselves and make appropriate diagnostics that take into account how well they are positioned in the following different areas:

- SME Financial Modelling, a digital tool to assess the SME's situation in terms of financial management, through a toolkit that analyses the financial capabilities of the SME, while also addressing the major areas of improvement and identifying specific resources that can be used to improve its financial resilience.
- HR Self Diagnosis¹², another online diagnostic tool that explores the answers provided to a comprehensive set of questions on the maturity level of the SME's Human Resources management. With this tool, any SME can assess its development stage in terms of people, talent and human capital. From the answers given, the platform creates a self-assessment outcome that is generated automatically and that helps the SME to focus on suggested approaches or articles for further development of its human resources. This online tool was developed by Enterprise Singapore in partnership with the National Trades Union Congress (NTUC) and the Chartered Institute of Personnel and Development (CIPD).
- Market Assessment¹³, an additional online diagnostic tool that helps SMEs to assess market forces and development potential, so that they can identify their market and business development opportunities. This framework allows SMEs to evaluate the potential and attractiveness of new markets, both at the local and international levels, for business expansion purposes.

The Singapore Business Federation has also developed a Holistic Industry Productivity Scorecard (HIPS) Calculator¹⁴ that helps SMEs to evaluate the effective and efficient use of resources. HIPS is designed within the scope of SPRING Singapore's Integrated Management of Productivity Activities (IMPACT) framework, which aims to support SMEs to manage productivity in a systematic manner. The HIPS Calculator covers the key

¹² HR Self-Diagnostic Tool. See more: <u>https://hrportal.sg/self-assessment-page/</u>

¹³ Market Assessment: See more: <u>https://web.smu.edu.sg/spring/</u>

¹⁴ "<u>A Guide to Integrated Management of Productivity Activities (IMPACT)</u>", SPRING Singapore

productivity layers that SMEs need to address in order to embark on productivity improvement initiatives. Through 10 key indicators, the SMEs are able to understand their respective performance percentiles compared to industry specific benchmarks. They can also receive support from the Singapore Government and Agencies to further improve their productivity and competitiveness. Although relatively simple, the HIPS Calculator is a powerful tool to help SMEs and their leaders understand and quantify, in a quick but well defined way, what productivity is all about, how it can be properly measured and what action may be needed to improve the competitiveness of SMEs through increased productivity.

On yet another level, the Singapore Economic Development Board launched a diagnostic tool to help companies harness Industry 4.0 potential and maturity in a systematic and comprehensive way. Entitled "Singapore Smart Industry Readiness Index", this approach allows SMEs to understand and define the end states and intermediate measures they need to achieve to reach a certain level of maturity and improve the ways in which they explore digital approaches to gain increased competitiveness. The underlying model and methodology for SME assessment in this area was developed with the support of an advisory panel that comprised 21 academic and industry experts. Scores are given to eight criteria within a set of three dimensions: 1) process; 2) technology; 3) organisation (Figure 11). These results are combined to calculate an overall Smart Industry Readiness Index value, and the performance profiles obtained can guide the SMEs in their priorities and improvement actions aimed at reinforcing the ways in which they can explore digital resources to increase their competitiveness.



Figure 11. Building blocks of the Smart Industry Readiness Index

resources/news/advanced-manufacturing-release.html

Business Development Bank / Canada

The Business Development Bank Canada (BDC) is a public financial institution devoted to entrepreneurs and SMEs, which has been operating for over 75 years. It supports SMEs to grow their businesses through financing, advisory services and capital lending through its network of 118 business centres located across Canada and range of different products (Figure 12). Over the years, it has collated considerable amounts of data and knowledge regarding the competitiveness of SMEs.



Figure 12. Business opportunities supported by BDC

Source: Business Development Bank; see https://www.bdc.ca/en/articles-tools/pages/default.aspx

Besides the support services provided by its offices and branches, BDC has also developed and offers a considerable number of digital diagnostic tools that are available for SMEs to use at different stages of their business development, aimed at achieving increased levels of competitiveness and productivity.

An example of this kind of platform is the Canadian business productivity benchmarking tool, which was created to allow SMEs to compare their performance against competitors and to understand where they stand and how they can further improve. The data used for comparison purposes are provided by the Canadian Center for Data Development and Economic Research (CDER) of Statistics Canada¹⁵, which was created to "provide researchers whose projects are approved with secure access to business and economic microdata for analytical research". Further information comes from the corporate federal income tax returns. This digital benchmarking tool can be used by SMEs to compare the productivity of their business with peers in the same industry and is based on the following five indicators: 1) overall level of productivity; 2) revenue per employee; 3) profit per employee; 4) labour productivity; 5) capital productivity.

On providing its own information, each SME automatically receives a printable report, together with recommendations and information on best practices. This digital tool was designed to provide a general overview of an SME's business situation by measuring its productivity based on the resources used to generate revenues and then comparing this with the overall industry productivity within the same category of activities.

Other online digital diagnostic tools for SMEs, developed and provided by BDC, are as follows:

¹⁵ Canadian Center for Data Development and Economic Research (CDER) of Statistics Canada. See more: <u>http://www.statcan.gc.ca/eng/cder/index</u>

- A website assessment tool to help SMEs outreach to clients and expand their business. The tool provides SMEs with an external evaluation of their digital presence, as well as suggestions on how to improve it.
- A digital tool related to the protection of SMEs' intellectual property. Many SMEs have excellent business ideas and opportunities but are not smart at protecting them from competitors or other, usually large, organisations. With this in mind, BDC provides SMEs with a digital diagnostic tool that allows them to understand how to protect their intangible assets. An online game simulates how ideas can be protected from an intellectual property point of view, thus raising awareness and providing inspiration for more SMEs to consider this possibility and take necessary action.
- A digital assessment tool related to the complex taxation system in place in Canada and also other countries around the world. Many SMEs are not well informed on tax planning and regulations. As a result, they may end up paying more taxes than necessary. To help SMEs handle this situation, the "Canada Tariff Finder" is a digital tool that allows Canadian SME exporters to check what tariffs should be applied to any specific goods being sent to any given foreign market, with a focus on countries with which Canada has Free Trade Agreements.
- A commercial real estate assessment tool to help SMEs decide under which conditions to buy or lease a certain property. Such decisions may have a significant impact on the future development and competitiveness of SMEs, since they usually correspond to heavy financial impacts over the short or long term. Making it possible for SMEs to support their decisions on sound assumptions and good financial management guidelines can have a positive impact on their competitiveness.

E-Estonia and EAS / Estonia

As previously stated in this paper, public policies can play a major role in helping SMEs to explore the benefits of digital tools, such as online diagnostic platforms aimed at increasing their competitiveness. However, this can be further leveraged if, at the same time, public policies also support the creation of much broader digital cultures, environments, citizens and societies.

The Estonian government has invested in expanding the adoption of digital tools within the government and across the country in the areas of e-government and e-citizenship. It offers hundreds of e-services to citizens and thousands more to businesses. Some of them are at the cutting-edge of innovation, such as using a multi-dimensional platform entitled X-Road that allows public access to data while protecting privacy and the online security of personal data (Republic of Estonia, 2014). Estonia has also developed the so-called Real Time Economy (RTE), a specific environment that is digitally structured to facilitate the interaction between citizens, businesses and the public sector.

Under the umbrella of a programme called e-Estonia, a diverse and large number of esolutions can be found, ranging from e-School to e-Health or e-Governance (99% of public services are available online 24/7), to i-Voting (citizens can vote from anywhere through the Internet) and e-Residency, which has been used by 33 000 people since 2014, including citizens from over 154 countries.

Given this societal priority, it is not surprising that SMEs in Estonia can access a variety of digital tools for e-tax (taxes, social security, insurance, pension funds), e-banking, e-

business registration or Industry 4.0, leading to the concept of the "Real Time Factory" that is being implemented and strongly promoted.

Established in 2000, Enterprise Estonia (EAS) plays a leading role in supporting the development of SMEs. One of its key initiatives is the Enterprise Development Programme, with a total budget of EUR 73 million, aimed to ensure the development of at least 20 brand new and globally unique products or services by 2024. Any SME that participates in this programme will go through the following three stages: 1) identification of ambition and readiness for change; 2) preparing a development plan; 3) implementing the development plan. In order to accomplish the first stage, SMEs have access to a range of online diagnostic tools including a self-assessment of around 60 questions that cover the following dimensions of analysis: 1) starting point and ambition; 2) competitive factors; 3) customers and markets; 4) sales and marketing; 5) products and prices; 6) distribution channels; 7) product development, production and logistics; 8) resources and know-how. According to the answers provided, the tool helps SMEs to define their competitiveness profiles, presented visually by the online tool (Figure 13), and these may be used as a guideline for achieving increased competitiveness.

Figure 13. Competitiveness profile obtained from EAS online assessment tool



Example of output of the tool for a hypothetical firm

Source: Enterprise Estonia. Author's own self-evaluation questionnaire based on Enterprise Estonia online tool. See https://www.eas.ee/teenus/enterprise-development-programme-2-2/?lang=en#articleblock-1stageenterprisesambitionandreadinessforchange

The CITIS¹⁶ project provides another good example of how to use data generated by eservices to obtain evidence-based knowledge on the potential impact, uptake and usage patterns of digital services, as well as to make proper use of such data to help SMEs forecast how prepared they are for the future. Jointly funded by the University of Tartu and the Ministry of Economic Affairs and Communications, this project brings together professionals from the fields of mathematical statistics, financial mathematics, data science, econometrics, computer science, psychology and political science to add to the existing technical knowledge on how to build a digital society, by considering specific on how digital services will be taken up information and used by citizens/companies/institutions at an individual level. The focus is on adding value to the

¹⁶ Centre for IT Impact Studies in Estonia. See more: <u>http://citis.ut.ee/</u>

data generated by e-services in Estonia and prototyping new data-driven predictive eservices, at the same time employing machine learning approaches to extract knowledge and predictive power from the big data that is already available to Estonian public agencies. Such an approach can help to predict the digital evolution of Estonia and its SMEs from different perspectives, by combining several data sources and using state of the art statistical and artificial intelligence tools. Within the scope of this ongoing project development, discussions are now taking place on what levels of access will be given to the online diagnostic and prospective tools that are currently being tested, and their results, also taking into account data privacy issues and confidentiality concerns.

Conclusions and policy recommendations

One of the opportunities of the digital transformation is to create and apply online business diagnostic tools to offer SMEs an easy access, basic assessment of their performance and to gain insights on potential areas for improvement and potential corresponding actions. In comparison with face-to-face diagnostics, digital tools can be more timely, more affordable, more accessible and easier to use, and offer some meaningful comparisons, visual dashboards and real time reports that correspond to a smart diagnostic profile.

This paper highlights a variety of digital diagnostic tools for SMEs that are already available and are being actively promoted by public and private organisations. Although they have different scopes of analysis, most of the tools are based on a conceptual model of around 5 to 10 dimensions, which are then cascaded down into 40 to 60 questions or statements that drive the self-assessment of SMEs and lead to the identification of their performance profiles, together with recommendations, priorities and possible areas for improvement. Both generic diagnostic tools relating to overall competitiveness and more specific tools relating to certain pillars that may drive competitiveness (e.g. innovation, internationalisation and digitalisation) are available, have been tested and are being applied.

The paper also shows that public agencies and policies often play a key role in the development and implementation digital business diagnostic tools for SMEs. A number of private companies have also developed online assessment tools, however these tools are not usually accessible to a large number of SMEs due to costs and their proprietary nature. Public policies therefore play an important role in filling gaps that markets are not able to overcome by themselves.

In this context, a number of overall challenges for governments may be identified, and are discussed below: 1) disseminating the tools; 2) integrating tools; 3) filling gaps in existing tools, 4) providing data for comparison and benchmarking; 5) supporting SMEs to implement follow-up actions; 6) creating networking and learning communities; and 7) building a broader digital society for SMEs.

Disseminating the tools

Many digital diagnostic tools have been created with public support and close involvement of public agencies in their development and deployment. SMEs often will not have the necessary resources or skills to research which online diagnostic tools their business may be able to adopt. Public policies and initiatives can therefore play a major role in the promotion and dissemination of the tools, so increasing the number of SMEs that can benefit, including through supporting collections of existing tools. In order to raise the awareness, knowledge and interest of SMEs of the tools, some countries have a single, well-known national agency that is leading the efforts, as is the case, for example, in Singapore and the USA.

Integrating tools

Given the current variety of online diagnostic tools for SMEs, covering competitiveness and all its key drivers, there appears to be scope for public policies to integrate or present these tools within a single user-friendly online platform. This virtual toolbox or library of digital diagnostic tools for SMEs could guide each SME in a customised way to explore the best tool, or combination of tools, according to its specific ambitions, strategic choices and goals. The search could be conducted worldwide, including open online business diagnostic tools developed by both the public and private sectors and, where necessary, under agreements allowing for adaptations to other contexts. Hopefully, this paper may also provide a small contribution to the creation of a digital library of public domain tools available at the national and international levels, as well as by field of expertise, together with recommendations on how to use them.

Filling gaps in existing tools

Policies may also identify gaps that may need to be filled by the development of new tools, or by adapting existing tools to the context of each country or region or to the context of SMEs. It is important to ensure that new and adapted diagnostic tools for SMEs are "SME-centred". User-centric and design thinking approaches can help to improve the effectiveness of these tools. Whenever possible, SMEs should be involved in the development and testing of such tools, and a number of pilot implementations can guide their refinement or validation before they are launched and promoted on a wider scale.

Providing data for comparison and benchmarking

Diagnostic results benefit significantly from being combined with meaningful comparisons of performance, including benchmarking results. As more and more data become available, it is important that public policies and initiatives promote integrated data collection efforts, at the same time respecting data privacy issues and taking into account, for instance, the FAIR Data principles for scientific data management and stewardship (Wilkinson et al, 2016). By combining different data sources with high levels of precision, it becomes possible for SMEs to use digital diagnostic tools to make relevant comparisons and provide well-contextualised targets, ambitions and decision-making support, as demonstrated, for instance, by some of the tools provided by the SBA in the USA.

Supporting SMEs to implement actions related to the diagnostic

SMEs are just a click away from online digital diagnostic tools. Nevertheless, a critical issue is to ensure that SMEs understand that the diagnostic is just the starting point and roadmap for the proper definition and real-life implementation of improvement actions. Closing this loop is essential to ensuring that SMEs benefit from real impacts and increased competitiveness as a result of using the digital diagnostic tools.

Therefore, the online diagnostic tool platforms may also need to connect with platforms providing connections to existing service providers to further help SMEs develop in the identified areas, as well as referring to case studies and online content available to help them in the implementation of the identified improvement areas and actions. They may also be connected with training, mentoring and consultancy services around the use of the tool, provided by public agencies or other qualified organisations, possibly including higher education institutions, and digital vouchers for SMEs. Typically, vouchers with a value of EUR 5 000 to EUR 25 000 are given to SMEs to introduce them to the digital world, and some SMEs have used the vouchers to explore the potential provided by online business diagnostic tools, with positive results.

Creating networking and learning communities

The creation of public agencies and other qualified entities to facilitate the development, deployment and dissemination of digital diagnostic tools for SMEs may also lead to the creation of communities, on several levels, that can learn from each other and share data, results, experiences and best practices related to the development, application and impacts of such tools.

While some pieces of the puzzle may be missing and still need to be completed, globally there are already many tools and entities from which we can learn. One of the key current priorities may therefore be sharing of information across tools and entities, including information on methods and data, and working mutually to increase the visibility of the various tools available to SMEs. Further co-ordination could lead to the creation of interconnected learning communities at different geographical levels, from local to regional, national and international levels.

In particular, it may be worthwhile to consider formal and informal ways of reinforced and networked collaboration between agencies responsible for supporting digital diagnostic tools in different countries, with shared data, knowledge, experiences and digital tools that SMEs can adopt, implement and benefit from.

Building a broader digital society for SMEs

The opportunities for SMEs to become more competitive through the use of digital diagnostic tools will be strengthened if they are part of efforts that promote the creation of a digital society, including leadership in the modernisation of public services, e-government, e-citizenship and smart digital ways for SMEs to engage with people, other organisations and the public sector. Public agencies also have a role to play in this respect by fostering digital literacy and contributing to a newly skilled workforce.

Policy makers should be proactive in this area, changing the policies that are the legacy of an analogue era and ill-adapted to today's digital era, while the regulatory environment should simultaneously attempt to adapt to the changes that many SMEs are facing due to digital transformations. The gap between "Technology 4.0" and "Policy 1.0" needs to be closed. Some countries particularly stand out with their ambitious digitalisation plans, such as Estonia with its e-Estonia initiative.

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