Materials Processing Institute

A DIGITAL AND EXPORTING FUTURE FOR UK SMEs

A speech delivered at the launch of Google Market Finder
Google, 1-13 St Giles High Street, London.

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Introduction

Thank you for the invitation to speak this evening. I am here as a representative of the Federation of Small Businesses and specifically in my role as chair of the FSB's policy committee for innovation and enterprise. The Federation has over 170,000 members and so is well placed to reflect the needs of the UK's wider SME community.

I am also the leader of a UK based exporting business. I am the CEO of the Materials Processing Institute, an independent research and technology organisation, specialising in the upscaling and commercialisation of new technologies, working in advanced materials, low carbon energy and the circular economy. I am also the innovation lead for the UK Metals Council.

The focus for this evening is around exports and it is interesting to consider the global trade landscape from the perspective of a UK based SME. Digital technologies can be particularly useful in reducing non-tariff barriers to trade, such as those associated with distance, access to information and managing market risk. To show this I want to discuss how the application of digital technologies is radically transforming the world of global trade and consequently we need to redefine two aspects entirely: our understanding of global markets and the distinction between goods and services.

Redefining Global Markets

It is rightly acknowledged that the volume of trade declines sharply with distance. SMEs often have highly specialised products, or services. If the whole global market could be viewed as one then the SME could demonstrate its capability in this market. What the SME may lack, is the specific geographical understanding that enables it to collect the various pockets of the market that exist in different regions around the World. This is about access to information and as distances increase, information flows become more difficult to manage, the barriers to entry become higher and so the trade flows dry up.

To overcome this distance effect, companies need to shrink the apparent length of global trade routes. Digital technologies can do this and it can be seen how, by reframing the global marketplace as communities of expertise, rather than as communities of nations.

To understand how radical this is, consider that the first company in Britain to be granted limited liability was the East India Company. A trading company named not after its purpose, but its geographical remit. For much of the next 400 years, large trading businesses have been organised along similar lines, with continental based divisions. Most still are. How many of you here tonight have a colleague, or are yourself, responsible for a geographical region within a large business?

Small companies do not have the resources to appoint divisional directors in this way, instead they focus on selling their specialist products, to a global community of interested buyers. Consider now, the thousands of highly specialist, UK based SMEs, trading widely in terms of geography, but in a narrow window, of the specialised goods and services they supply. Increasingly, digital technologies enable them to do this and so level the playing field between large and small companies.

This observation is confirmed by research undertaken by FSB, which found that 76% of member exporters were 'reactive exporters'. By this I mean that they began exporting as the result of a request from an overseas buyer, rather than making a strategic decision to enter a particular export market. This research also showed that those companies exporting to emerging markets, have a significantly higher turnover than those exporting to 'anglosphere markets', which in turn have a higher turnover than those exporting to the EU single market.

With finding customers highlighted as the most common challenge facing small firms that export, what may appear at first like an overly passive approach, is very much a rational strategic choice for a small business in a well-connected world.

All of us who use social media are fully aware that digital technologies enable like minded people to come together from across the globe. These so-called epistemic communities of users are established, based primarily on knowledge and interest, rather than geography. When applied to trade, the effect is to reduce the apparent distance to the market, giving an SME the same level of access as a much larger company and increasing the ability of small specialist firms to compete for business in far flung territories. Increasingly we must remember – **no firm is too small to export.**

Redefining Goods and Services

Less than one week after the vote to leave the EU, I published a paper outlining the opportunity for international trade for the UK and I identified specific actions that need to be taken by Government to bring this opportunity to reality. However, in writing the paper I fell into an assumption about trade that is often made, I focussed almost wholly on trade in goods. Yet, 45% of the UKs exports by value are services and this is a concern in a post Brexit world as the World Trade Organisation is less well developed in terms of services as compared with goods. This makes the use of data enabling digital technologies even more important to service biased economies, such as the UK.

There is a natural tendency when considering exports, to focus on trade in goods. These leads to a discussion around the barriers and solutions to increasing trade associated with the movement of physical objects. Consequently, debate is dominated by discussions around logistics, freight capacity and new initiatives, such as free ports.

All of these aspects are important and it is right that they receive attention. However, it is also important to prioritise the 'soft' infrastructure of trade and this includes the digital tools that can enable small companies, from wherever they are in the UK, to generate global reach. Aside from the obvious discussions about broadband availability, still very much a 'hard' infrastructure issue in my view, the wider debate around the 'soft' digital infrastructure to enable trade, such as the application launched by Google this evening, is yet to take place.

International trade, with digital technologies cannot only be an enabler of trade through connectivity, but also act as a mechanism of delivery. I have mentioned already the tendency to focus on trade in goods over services. Indeed, this is a natural inclination even amongst UK SMEs, who report a view that 'proper' exporting, involves 'shipping'. This insight was reached by the FSB during research for a report called 'Destination Export', which you can download from the FSB website and where one member was quoted as stating that exporting was not for them as they do not 'produce, or manufacture goods'.

Yet amongst the SME community, this distinction between the trade in goods and in services is a false dichotomy. Supply of goods in the advanced manufacturing and materials sector inevitably involves an element of integrated service provision. Training, consultancy and other expert services can be delivered effectively through digital technologies. 1 in 8 of SME exporters are already exporting digital services, with a further 1 in 4 considering to do so. The FSB has found that almost half of small business exporters already use digital channels to market, though some wouldn't themselves consider this activity to be exporting at all.

Increasingly digital technologies also enable the delivery of goods as well as services. Instinctively these goods will be thought of as digital products, software, apps, etc. that can be deployed via the internet.

However, with the increasing use of technologies such as additive layer manufacturing and the ability to generate bespoke designs, for digital deployment and delivery through a 3-D printer in a client factory, our whole idea of what constitutes exports of goods and services is challenged.

The rules and regulations for global trade have still not caught up with the expansion in services and financial services of recent decades. They now need to project forward to a situation where the boundary between goods and services is no longer a hard distinction, but a gradual transition from one to the other.

This phenomenon is known as 'servitisation' and includes for instance the business models based around the leasing of manufactured goods with intensive after sales support, rather than an outright purchase.

The UK clearly has latent potential in the export of services and what is really needed here is a better understanding of why services are not being exported. This should include looking at ways to untangle any complexities around the export of services in order to make it easier. It should also try to clarify confusion over whether certain services can be exported and provide examples of how this could be done. In short it is important to – **expose the myths about what exporting really means.**

Don't Redefine Relationships!

By addressing the areas I have described, digital technologies can help SMEs to act globally and take on large multinational companies, by reducing the apparent distance to market, making trade in services easier.

There are though limitations and it is important to remember this. Trade is fundamentally about a relationship. In the majority of the World this goes further than something purely transactional, particularly where the exchange of sophisticated, high value, goods and services are involved. A relationship develops from how two people get along with one another and that requires investment by both parties, in understanding and getting to know one another. People do not trade with processes and systems. People trade with people.

The digital solutions I have described, when used most effectively, allow small business exporters to develop more trading relationships, more rapidly, more widely and more successfully, but they are not the foundation on which the trade relationship is built. That still comes down to people trusting people and that is why there will continue to be a strong demand for airline seats and hotel rooms, alongside port capacity and digital infrastructure.

Conclusion

Finally then I would like to thank Google, on behalf of the Federation of Small Businesses, for the invitation to speak this evening and I hope that I have left you with something of interest. An optimism for the future of UK trade and the role SMEs within it, certainly, but also an appreciation of what the global trade landscape looks like to the small businesses owner, focussed on developing their business and challenging the notion of trade in goods versus services.

I have described how digital technologies can and indeed are, enabling these small businesses to overcome perceived barriers and shrink the distance to market, to trade more effectively and more widely. Ultimately though, people trade with people and just as you have all so graciously turned up in person to hear myself and others speak this evening, so the interpersonal relationship must be at the heart of successful trade, supported and enabled by digital technologies.

Hopefully I have left you all with desire to expose the myths around what exporting means and the assurance that no firm is too small to export.

Materials Processing Institute

Chris McDonald is the Chief Executive Officer of the Materials Processing Institute. The Institute carries out industrial research and innovation in advanced materials, low carbon energy and the circular economy. Chris's background is in industrial research and manufacturing, where he has worked internationally. He led the divestment and return to independent, not-for-profit ownership of the Institute in 2014, the year the organisation celebrated its 70th anniversary.

In addition to leading the Institute, Chris provides expert consultancy support to companies, Governments and public bodies, in technology strategy and the technical due diligence aspects of mergers and acquisitions. He is prominent in the development of public policy, around innovation, steel and SMEs, where he works to support growth and inward investment. He is the policy chair for Innovation and Enterprise for the Federation of Small Businesses, a member of the CBI Regional Council for the North East and is the Innovation Lead for the UK Metals Council. Chris is also a member of the Steel Advisory Board for UK Steel (EEF).

A graduate of Cambridge University, Chris is a Fellow the Institute of Chemical Engineers and of the Institute of Materials, Minerals and Mining. He sits on industrial advisory boards at a number of universities, including Oxford and Sheffield.

He is often called to commentate in the media on innovation leadership and the steel industry.

> "Chris provides expert consultancy support to companies, Governments and public bodies in materials, technology and innovation strategy"

Chris McDonald
Chief Executive Officer
Materials Processing Institute

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The Materials Processing Institute is an independent, open access and not-for-profit technology and innovation centre working with industry, government and academia worldwide. Support ranges from small scale, site based investigations, through to long term collaborative research programmes.

The Materials Processing Institute is expert in advanced materials, low carbon energy and the circular economy, specialising in challenging processes, particularly those involving high specification materials, high temperatures and difficult operating conditions.

The Institute has over 70 years' experience as a leading UK technology provider. Extensive materials processing knowledge is supported by state-of-the-art facilities with a broad range of equipment, from laboratories through to demonstration, scale-up and production plant.

Scientists and engineers work with industry and apply their expertise to develop and implement robust solutions to research and development and improvements for products and processes.

Expertise is spread across a wide range of disciplines, including:

- Materials Characterisation, Research and Development
- Simulation and Design
- Monitoring, Measurement and Control in Hostile Environments
- Process Development and Upscaling
- Specialist Melting and Steel / Alloy Production
- Engineering / Asset Management
- Materials Handling
- Minerals and Ores

Research and project management teams deliver support across a wide range of industrial and manufacturing sectors including:

- Metals and Metals Manufacture
- Chemicals and Process
- Nuclear
- Oil & Gas
- Energy
- Aerospace and Defence
- Mining and Quarrying

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