

Megatrends are driving opportunities for business growth through advanced services

> CHRIS OWEN, UTE STEPHAN, ANNICK PERRY

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Research paper

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Written by the Research Team of

Noventum Service Management Ltd



in collaboration with the Advanced Services Group, a centre of excellence at Aston Business School, Aston University, United Kingdom.





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"Every single social and global issue of our day is a business opportunity in disguise"

Peter Drucker

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This research is a co-creation of Noventum Service Management Ltd (hereinafter 'Noventum') and the Advanced Services Group.

The Advanced Services Group is a centre of excellence at Aston Business School, Aston University in the United Kingdom. It provides education, training, research and an international network of like-minded professionals on advanced services and servitization. Its team of over twenty researchers and industry practitioners helps manufacturers and technology innovators to develop services-led strategies. The group's executive director is Professor Tim Baines, a globally-renowned expert in servitization. www.advancedservicesgroup.co.uk

The centre works in partnership with Noventum to achieve its mission by connecting with its network of industry practitioners and helping to inspire them to adopt advanced services.

Noventum thanks all participants for the value they brought to this research.

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Annick is a Senior Project Manager at Noventum. Annick is experienced in project and programme management in the areas of service strategy, service design, customer experience design, service delivery model design, people development and change management. She has over the course of the last few years helped a significant number of customers successfully transform their service business.

CHAPTER 1: INTRODUCTION

Objective of this research

The objective of this research was to identify how five societal megatrends may be driving opportunities for manufacturers, taking into consideration an efficient avenue to compete and grow through advanced services. The research gathered opinions from a range of sources such as large Original Equipment Manufacturers (OEMs), small and medium sized manufacturers and opinion leaders. All the participants were chosen for their knowledge and expertise in advanced services.

Let's start with defining what Megatrends are and which of them we have explored.

A megatrend is a long-term change that affects governments, societies and economies permanently. Megatrends drive other trends in markets in terms of sales, growth and innovation. Some Megatrends that have altered the global economy include urbanisation, transportation, communications and technology.

Introducing the 5 societal Megatrends

 Value change: the increasing importance of transparency, diversity, individualisation and freedom of choice, as well as demand for meaning and connectedness.

- Green and Resource Scarcity: the increasing consciousness of manufacturers when providing products and services to fulfil human development and at the same time take care of the natural system.
- Health and Aging: An aging society and increasing importance of healthy living and lifestyle.
- Globalisation and the need for community: The increasing emphasis on communities, localities, etc. to foster identity in light of a globalised world.
- Inequality and Social Exclusion: the increasing market share of poor customers means reducing the complexity and cost of a good and its production. Designing products for emerging countries may also call for an increase in durability, and when selling the products, reliance on unconventional distribution channels. Globalisation and rising incomes in emerging countries may also drive frugal innovation, which implies that services and products need not be of inferior quality but must be provided cheaply.

The impact of Megatrends differs per sector. Some Megatrends were more relevant than others for different participants. However, the participants all agreed that these are important developments and that they are being and will be significantly affected by them. This research involved indepth interviews with some key opinion leaders in the manufacturing industry. The purpose of these interviews was to identify how certain Megatrends may be driving opportunities for manufacturers. It is also part of a wider stream of work which has been exploring how manufacturers can become financially sustainable and operationally scalable in the current challenging environment.

Research Participants

The research gathered opinions from a range of sources such as large OEMs, small and medium sized manufacturers and opinion leaders. All the participants were chosen for their knowledge and expertise in advanced services.

The following companies and individuals were interviewed as part of this research:



Company: UKCeB



The UKCeB mission is to transform secure information sharing for through life collaboration in defence acquisition and support. Via the Joint information Group (JIG), UKCeB activities support the Defence Suppliers Forum, the major conduit for MOD-Industry relationships, chaired by the Secretary of State.

Research participant: Steve Shepherd, Executive Director and Managing Director

Company: MNB Precision

MNB Precision provides manufacturing and precision engineering services to world leading companies across the Oil & Gas, Power Generation, Aerospace, Rail and other manufacturing industries that may require precision engineers.

Research participant: Luke Benton, Managing Director

Company: Nicklin Transit Packaging



Transit Packaging

Leading Providers of Bespoke Transit Packaging Products and Services. We aim to provide each of our customers with the safest, most cost-effective and environmentally responsible transit packaging solution to fulfil the exact and individual requirements of their application.

Research participant: Danny Harrison, Business Development Manager Company: Schneider Electric



Global specialist in energy management and automation. At Schneider Electric[™], our role is to make sure that Life Is On[™] for everyone, everywhere, at every moment. As such, sustainability is at the heart of our company strategy. We are convinced that better climate means better economy and that energy access is a basic human right.

Research participant: Cyrille Godinot, Solar Service Director

Company: Scania Trucks



alliantus

Headquartered in Sweden, With the aim to be the leader in sustainable transport, Scania builds its business while creating value for customers, employees and society. Delivering customised heavy trucks, buses, engines and services, focus is always on efficient, low-carbon solutions that enhance customer profitability.

Research participant: Anders Mossberg, Product Manager

Company: Aliantus

We help innovators to maximise their potential by providing high-level expertise in marketing and management. We work nationally and internationally with those who are looking to improve their company's performance, expand markets and make the best of their teams' skills

Research participant: Kevin Coleman, Managing Director

CHAPTER 2: EXECUTIVE SUMMARY

Key findings

Value Change

Changes in the consumer world are affecting people's perception of value and consequently their perception of what is a valuable manufacturing service and a good B2B customer experience. It is therefore critical to stay close to your customer and your customer's customer to understand their needs, and how they define value.

"Talk to your customers' customers because they are the ones that will drive the trends in the future." - Anders Mossberg, Scania Trucks -

Successful advanced service providers are proactive in approaching customers with new proposals, and creative in taking their own capabilities to the customer to define new ways to add value and take the lead in redesigning their customers' value chain. Changed value perception not only affects how companies treat customers but also how they treat employees. In order to attract and engage talents it's more and more important for manufacturers to be known in the market as 'a great place to work'.

Green and Resource Scarcity

The Green agenda and sustainability remains a key focus for many companies, although this is sector dependent. Societal changes mean that Generation Y (the Millennials) are themselves more environmentally conscious and demand more sustainable products and services - in many cases voting with their feet. **The 'Circular Economy' is becoming more important and there are several opportunities to be more creative in this area.**

"We can actually go to a customer and say, 'Well, we've analysed what kind of pack you need and simulated what will happen to it under various circumstances, and we can confidently say that this item of packaging is using the optimised amount of materials.' Now, for us that's massive because there is an environmental benefit and if we're dealing with a company who are ISO 14001 accredited, it's great for them to say, "Our supplier supplies us with a pack that's designed with the optimised amount of material in it."

- Danny Harrison, Nicklin Transit Packaging Ltd -

Health and Aging

Advanced services may require high levels of technical skills, both in terms of equipment operation and product support. There is an increased need to embed more 'know-how' and technology into products as customer requirements become more sophisticated. In addition, increasing the reliability and uptime of the assets requires more sophisticated technologies built into products to enable the collection and analysis of the relevant data regarding the use of those products. In several engineering led sectors, the workforce is aging and knowledge capture and management has been highlighted as a critical capability in this area.

"...people were used in industries to run machinery in a certain way, they were very skilled in doing that, and it worked perfectly fine. And now those people are retiring, so there is the problem of the workforce getting older, all the people with technical skills leaving, and the complexity and nature of machines changing, I believe..." - Denis Bouteille, Fives -

In Healthcare, opportunities exist for developing and delivering advanced services, but key challenges and 'get-rights' remain such as data security, data ownership, and achieving connectivity and standards.

Globalisation and the need for community

Many companies that operate globally report that delivering customer focused advanced services requires them to **'think global and act local'**. This may mean developing new advanced technical capabilities to deliver support to assets all over the world, from a remote location, but still thinking about taking local needs in terms of customer experience into account. Not only technical skills but also customer facing skills (used in any kind of way, phone, video, face to face) are key for global manufacturers to deliver a superior customer experience on a local level.

"Our competitive edge is our workforce, and within that workforce, it's the heritage, the experience and the knowledge of years, decades, you know, of how to be a good engineer, and I see globalisation as the best possible spotlight to showcase the UK's engineering talent and actually show the world what we're capable of doing." - Luke Benton, MNB Precision Ltd. -

Recruiting and retaining highly skilled staff required remains a key challenge, but there is a global market for these skills.

Another finding regarding globalisation is that populist politics will go against globalisation which will make manufacturers think of and apply alternative ways to export their products; services can be a good substitute for the loss of product revenue. "Through our Access to Energy programme, Schneider Electric enables access to reliable and clean energy to some of the 1.3 billion people worldwide living with limited or no access to electricity. Schneider's offer is to provide access to reliable, affordable and clean energy. Investing in the development of a market, supporting vocational training to develop sustainable skills and innovating with adapted offers and business models." - Schneider Electric Website -

Inequality and Social Exclusion

Companies are increasingly recognising their role in tackling social and environmental challenges globally. This role as a good corporate citizen improves the reputation and standing of the organisation, and may deliver a number of benefits, both tangible and intangible.

Conclusions

This exploratory research concludes that societal megatrends can drive opportunities for manufacturers to compete and grow through advanced services. To realise those opportunities, it's important that companies exploit the implications of new trends together with their customers and explore what the impact of societal trends might be on future needs. The megatrends explored in this research show a significant potential for companies to develop advanced services and strengthen the competitive position of companies. However, some key factors need to be taken into mind when manufacturing companies take the decision to invest in developing advanced services:

- 1. Before you can start developing advanced services...
- Top-management needs to support the development of advanced services and provide clear leadership to staff in the mind-set appropriate to the development of the new capabilities
 - 2. Stay close to your customers to identify opportunities for advanced services by understanding how societal trends impact value perception and needs. Ensure that you:
- Understand your company's role in tackling global social and environmental challenges
- Explore the opportunities of the 'circular economy'
 - 3. When you are developing the business models around advanced services make sure that:
- The tacit knowledge of the very experienced but aging workforce is captured for future reuse to enable the delivery of advanced services

- Your company thinks global, but acts local and delivers a superior customer experience
- You look not only at the cost and benefits of your business case but also at the intangible value of the environment and its impact

CHAPTER 3: Why the Manufacturing Industry should keep up to date with these Megatrends



Megatrends push you to adopt a new way of thinking, a new way of approaching customers, and to change

Demographic changes include aging people or areas with a younger populace. Resource limitations in certain areas drive industry trends, such as mining operations, oil production, solar collection, and hydroelectric power. Technological innovations, such as computers, internal combustion engines and power generation facilities, have significantly altered modern countries.

The Value Change Megatrend

- Generation Value
- Economy Value
- Social networking value

Value is not limited to the ownership of the asset supplied to customers, but is created in the usage of the product.

Context

Generation value changes: Generational labels are somewhat arbitrary, but it is generally accepted that Generation 'Y' or the Millennials were born between 1980 and the end of 1994 putting them in the 21-35 age group. This group were brought up in relatively affluent circumstances (in the developed West) and are technologically aware. They are reported to be less wedded to conventional career goals than their generation 'X' parents. This combination of being techsavvy and perhaps less wedded to conventional models of career and life means that this generation have been early adopters of some innovative business models, for example, new ways of consuming music and film (Reference vi).

Economy value changes: The global financial crisis of 2008/9 has arguably changed the economic and social conditions within which business and organisations operate. A new era of austerity has challenged the traditional consumer approach. This combined with more awareness of the green agenda and sustainability means that **consumers are more willing to consider alternative business models to achieve their goals.**

Social networking values: "The convergence of social networks, a renewed belief in the importance of community, pressing environmental concerns and cost consciousness are moving us away from top-heavy, centralised and controlled forms of consumerism towards one of sharing, aggregation and cooperation" (Botsman, 2010b). The conditions for the shared economy may include the interaction of several key drivers (Reference iii). **The increasing global population, combined with a scarcity of resources creates the need for more creative ways to deliver value to consumers.** Traditional ownership models may be quite inefficient. For example, (<u>Botsman</u>, 2010a) show how 50% of US households own power tools which are used for 6-12 minutes on average in their lives. There are many examples of the shared economy, essentially in a peerto-peer relationship enabled by the Internet and smartphones. Sometimes the relationship is in effect B2C where the business side provides the platform for the interaction to take place.

Key insights

Advanced services providers already understand the need to stay close to customers and understand how they define value. Several research participants referred to the importance of understanding the needs of the customers' customers as well. The need to understand how value is created throughout the supply chain is also critical. This new approach requires deep empathy with the customer to identify their pains and gains and may require the development of new capabilities to deliver advanced services to meet customer needs.

"Talking to the customer, we need people who can really develop the empathy, the listening and the deep understanding." - Denis Bouteille, Fives - Research participants mentioned the need to be innovative in developing new capabilities and services for customers. Value is not limited to the ownership of the asset supplied to customers, but is created in the usage of the product. The use of the product provides additional opportunities through Big Data for companies to understand how to provide value.

Changes in the consumer and business to consumer (B2C) world are changing people's perception of value and what good looks like in terms of customer service. This is changing customers' perspectives.

"So if you say in the consumer areas the people want to do everything through their handheld device and they want applications they can do things through, that is spreading into more of this service industry. Even aerospace and defence, I think, would start to get into that, where you want to book something in to have something done to it, you would use more of these applications. So there are definitely opportunities in that front." - Steve Shepherd, UKCeB -

New developments in technology are enabling the value chain to be redesigned. Embedded sensors and processors in assets and devices are increasingly capable of transmitting data to control centres to signal the need for repair or refurbishment. Research participants cited the introduction of driverless vehicles, some of whom mentioned that this is already a reality in some situations, and will increasingly be the case in the future. It will provide the opportunity for companies to take leadership and redesign the value chain to increase efficiency and added value. New configurations of networks allow companies to redefine their role in the value chain.

"How do we make sure we have a complete and natural ecosystem where all the stakeholders along that value chain are able to talk together? And this is a transformation of the relationship within the value chain which may likely result in a lot of change for some of the middle men in there. This is going to reshuffle the relationship between the parties, and the question of who is able to take some leadership role and who is able to take the central position here and provide the right concept and services that are used for all the people in the value chain will be very, very critical."

- Cyrille Godinot, Schneider Electric -

Whilst these new developments provide new opportunities, they also open new challenges, for example, in the area of data ownership and protection. In this era of Big Data, who owns the data produced and collected, how is this data protected and kept secure? These changes will require a new mind-set and mentality in leadership.

The Green Trend and Resource Scarcity Megatrend

Increasingly, sustainability is no longer a luxury, but an essential aspect of a humanic charge and operation.

Context

Concerns about the environment are not new and in fact some opinion leaders are suggesting that we are becoming inured to the impact of climate change. For example, February 2016 recorded the highest global monthly surface temperature since records began, but as James Dyke in the Guardian comments "...we appear uninterested, either through denial or desensitisation, in the environmental changes happening right in front of our eyes. February didn't break climate change records – it obliterated them. Regions of the Arctic were more than 16C warmer than normal – whatever constitutes normal now. But what is really making people stand up and notice is that the surface of the Earth north of the equator was 2C warmer than pre-industrial temperatures. This was meant to be a line that must not be crossed." (Reference vii).

For nearly 20 years some businesses have been recognising the fact that they have responsibilities not

only to their shareholders, but also to the environment and society, the so called 'triple bottom line' (Elkington, 1997). Porter and Kramer (2011) introduced the idea of shared value, that companies can access a new wave of innovation and growth by attending to a broader set of societal needs. Some authors have challenged whether the sustainability actions of companies do in fact make any difference to the global environmental crisis. Whiteman et al. (2013) introduced the idea that there are hard ecological limits to growth on planet Earth. They call these limits 'planetary boundaries' and argue that there are nine of these limits which will, if crossed, lead to permanent, irreversible damage to the environment. They argue that companies' sustainability efforts need to be measured in terms of how they limit the impact on these nine limits.

Dyllick and Muff (2015) argue that the nature of a company's sustainability efforts can be defined on a scale from 'business as usual' through to Business sustainability (BST) 3.0. The definitions are:

- 1. BST 1.0 a refined version of shareholder value
- 2. BST 2.0 Triple Bottom Line
- BST 3.0 how it can create a significant positive impact in critical and relevant areas for society and the planet

On top of the climate change and environmental concerns, the issue of resource scarcity is becoming ever pressing. Although definitions of scarce resources vary, it is generally accepted that the increasing global population and burgeoning middle classes are adding pressure to the world's resources. For example, Roland Berger (ix www.rolandberger.com) identify three key resources that may be at risk - namely energy, water and food (and 'other commodities'). Interestingly, some commentators (Reference viii) see resource scarcity as an opportunity for business growth and innovation rather than something to be feared per se.

Key insights

The green trend remains a key focus for our research participants. They see a strong synergy between green and sustainable actions and advanced services. The driver for sustainability may come from the customer or the customer's customer which reinforces the need for customer understanding identified in the Value Change Megatrend. Generation 'Y' are increasingly demanding that their products and services be produced in an environmentally sustainable manner and that organisations behave in a responsible fashion. Increasingly, companies need to engage in this social movement and communicate proactively in this area. "Getting yourself viewed as someone who has a green reputation can lead to being on the right sort of lists from the big investors' point of view." - Steve Shepherd, UKCeB -

The drive for more sustainable products, services and solutions is giving the impetus to companies to innovate and to approach customers with ideas to increase value, to reduce cost and increase efficiency. There is also an increasing trend from customers looking to prolong the life of equipment and to re-manufacture and refurbish.

"In France, it remains a very strong trend. We have internally developed an Eco conception way of working of sorts, to make machines that consume less energy, that have lower pollution emissions and so on. And we've been developing and continue to push the design process to make that happen."

- Denis Bouteille, Fives -

One key area identified as a response in this area is the Circular Economy. This is a key area of opportunity, and one where the capabilities of Advanced Services come to the fore. For example, there is a packaging company that has developed service tracking pallets with high value items for customers using GPS sensors. Within the same company, the use of wood and timber provides an inherently recyclable and reusable material. The material can be reused, and then at the end of its life, be utilised to generate biomass energy.

From an investment perspective, having strong green credentials may influence ethical investors.

"We need to have more circular economy. All of a sudden, that will be a modern word that is, "Oh, we need to have this," and all of a sudden people are willing to pay even more for that, just because it's circular." - Anders Mossberg, Scania Trucks -

"We can actually go to a customer and say, 'Well, we've analysed what kind of pack you need and we've simulated what will happen to it under various circumstances, and we can confidently say that this item of packaging consists of the optimised amount of material.' Now, for us that's massive because, yeah, there is an environmental benefit and if we're dealing with a company who are ISO 14001 accredited, it's great for them to say, "Our supplier supplies us with a pack that's designed with the optimised amount of material in it."

- Danny Harrison, Nicklin Transit Packaging Ltd. -

Energy generation and distribution were mentioned by several research participants as being a sector where disruptive change is happening, providing opportunities for innovative advanced service providers. An example of an innovative approach in this area is the development of a local market in energy generation and distribution in an area of New York. This development uses the Blockchain and Bitcoin concept for the marketplace to buy and sell energy (Reference x). Another example given by an interviewee is the Birmingham district energy scheme. This innovative scheme delivers energy to ten large public and private sector clients in the Birmingham City area. Using combined heat and power technology, the scheme delivers energy with a significant reduction in CO2 emissions. The overall network comprises of three schemes:

- Broad Street a tri-generation (heat, power and cooling) system
- Aston University a CHP (combined heat and power) system
- Birmingham Children's Hospital a CHP system

The Health and Aging Megatrend

Product design and packaging needs to consider the needs of the older consumer

Technology needs to be designed and adapted for this market.

Context

The nature of the world's population is rapidly changing. As life expectancy improves, the proportion of the population that is older increases. Reductions in birth rate alongside increases in life expectancy mean that for the first time, the number of people who are over 65 is set to be larger than children aged 1-4. The older consumer represents a growing market for companies: The over 65s in the UK currently spend around £2.2 billion per week (£114 billion per annum) on goods and services. Assuming their weekly spending rises in line with annual inflation of 2%, they are likely to be spending over £6 billion per week (£312 billion per annum) by 2037. From now until 2037, the 15-64 age group in the UK will, on average, grow by just 29,000 per annum. This is in contrast to the number of people aged 65 that rises by 278,000 on average, each year. The market for older people's products and services does not seem to be working as well as it could. At the same time, older people are put in the "too difficult to reach"

box for many industry groups. (Sinclair and Creighton, 2015).

In parallel with the aging population, due to improved health many people are choosing to continue to work longer. In many European countries, pension ages are being pushed back from an average 65 to around 67. This means that the workforce is also aging. Hence, companies need to take this into account in terms of how they train and equip members of their workforce to not only remain productive and effective, but also in how they treat their customers. The diversity of the future workforce may be a driver for innovation.

This growing population of older citizens will suffer from a range of conditions, including health and mobility problems. There are many opportunities for advanced technology and services to be developed to serve this group. However, there are barriers to the adoption of technology by older citizens as they are not used to for instance using smart phones since the day they were born. Technology needs to be designed and adapted for this market.

Product design and packaging needs to take the needs of the older consumer into account, for example:

"Increased mainstreaming of inclusive design has made life a little bit easier for all of us. Good examples range from OXO Good Grips tin openers to BT's big button telephones. Amazon's investment in 'frustration free packaging' has delivered both smaller and easier to open parcels." (Sinclair and Creighton, 2015).

Key insights

This trend was interpreted in two ways by our research participants. Firstly, in relation to their own aging workforce, several of whom operate in engineering led sectors. This more experienced staff embody the knowledge and experience required to deliver advanced services. This means organisations have to be better at capturing and managing knowledge as their staff approach retirement. These trends in an aging workforce place demands on management to be proactive in dealing with these issues.

"...people were used in industries to run machinery a certain way - they were very skilled in doing that - and it worked perfectly fine. But now those people are retiring, meaning there is a problem that the workforce is getting older, all the people with technical skills are leaving, and the complexity and nature of the machinery has changed, I believe..."

- Denis Bouteille from Fives -

Secondly, this issue was interpreted to mean the customer's aging workforce or the end customer (consumer) themselves. This may require more innovation in terms of simplifying technology for use, and considering the ergonomics of products so that they are easy to use. This is so that older consumers are not put off by confusing technologies.

Industries subject to sudden changes of fortune may lose skilled labour quickly, skills which can be very difficult or impossible to replace.

In terms of Health as a potential growth area of Advanced Services, research participants see the opportunity, but also point to some key challenges and 'get rights' if this area is to be developed. We can already see the potential of this area in the consumer market with devices which monitor health and activity through various applications. In addition, areas of data security and integrity will be key. Technologies that talk to each other. A company that is innovative in this area is the Hager Group and their Ambient Assisted Living concept. This concept enables older people to live at home for longer because their welfare is monitored through a system of sensors which checks for any anomalies in their behaviour using a new technology called 'my.sens'. This is an example of how technology and advanced services will serve this demand in the future.

"The aging thing is a paradox. We are living longer and therefore need more treatments as we age. However, you've got to reduce health services because you've got to get those (costs) down. You've got to push the health services towards patients as a way of reducing costs and you need to look at prevention and not care. So you're going to have monitoring and to have that, you've got to have some services in place to do that, to make sure that all works together. But then you've got another paradox. How do people who missed the tech generation, engage with this and do we engage them with this?" - Kevin Coleman, Alliantus -

The Globalisation and the need for community Megatrend

The globalisation trend must solve two issues:

- being competitive on a world stage
- hiring talent from all over the world

Context

Since the financial crash in 2008-9 commentators have agreed that confidence and trust in banks, big business and capitalism has reached an all-time low in general. This, combined with social unrest, has caused some serious soul-searching and some have called for a rethink at a fundamental level about the purpose of business and its relationship with society and citizenry. For example, Barton (2011) suggests in his article 'Capitalism for the long term' that business must think and plan on a much longer horizon, moving from a quarterly obsession with results to taking a 5-7 year view.

An interesting development and response to the inequalities of globalisation is the apparent rise of a social entrepreneurship. Social entrepreneurship is a type of entrepreneurial activity whose purpose is to create social value using the tools and approaches of an entrepreneur (References i and v). Many examples of social entrepreneurship involve novel approaches to social challenges and problems which mobilise local communities in new ways (Reference ii). These approaches can empower people to tackle seemingly intransigent and impossible challenges by grounding the solution in the local community and mobilising local resources.

Key insights

The globalisation trend was interpreted primarily in terms of two issues. The first issue concerns competitiveness, the importance of being competitive on a world stage. Research participants recognised that in the sphere of advanced services, people and their knowledge are key capabilities which provide the ability to remain competitive on world stage.

"Our competitive edge is our workforce, and within that workforce, it's the heritage, the experience and the knowledge of years, decades, you know, of how to be a good engineer, and I see globalisation as the best possible spotlight to showcase the UK's engineering talent and actually show the world what we're capable of doing." - Luke Benton, MNB Precision Ltd. -

The second issue concerned globalisation as a route to hiring talent from all over the world. Research

participants recognised that they can increasingly hire world class talent from every country, which may give them a competitive edge by having the capability to serve the customer locally.

"The gap is closing fast, and so basically your Indian engineer, the Chinese engineer, the French engineer, the US engineer, or a technician you send to a customer, eventually you want them to do the same things. And our customers will expect more or less the same things, and they will produce more or less the same things." - Denis Bouteille, Fives -

The engagement in the provision of advanced services must often be global and delivered locally. The provision of technical support will require highly skilled individuals and technical tools that allow them to diagnose problems and provide support, sometimes remotely. About technology, research participants pointed out that technology provides the potential that knowledge and talent is globally shared through the use of communication and information technologies.

"I think the other thing to link up to some of your other objectives is the use of the internet, the global applications on the mobile devices. You don't actually realise where these services are being delivered or controlled from, so people can be local or they can be further apart. Or on the contrary, you could say people want to have a helpdesk or a service number that they ring where they talk to people who are local to them."

- Steve Shepherd, UKCeB -

The Poverty, Inequality and Social Exclusion Megatrend

The ability for companies to build sustainable businesses in emerging economies will require a new and innovative approach ...

Context

Increasing inequalities combined with the restructuring of welfare states in all advanced economies, is resulting in significant untapped business opportunities at the base of the income pyramid (Prahalad and Hart, 2002). Pralahad and Hart (2002) argued that many large companies ignore these markets and opportunities because they assume that they are not profitable and too difficult to service. They argue that there are business opportunities here, but that companies will need to adapt their products and services to service these markets. There are examples of larger companies that have been successful in this area (such as Unilever), by adapting their approach. Another example is the Grameen family of businesses founded by the winner of the Noble Peace Prize, Muhammad Yunus. There are also many small and medium sized organisations in countries servicing this market and some are social entrepreneurs as described previously.

Key insights

Research participants recognise that a business does not operate in a vacuum, and that there are corporate and social responsibilities to respond to. Some companies, such as Schneider Electric, recognise the need to respond to these challenges, and this is indeed a key part of their strategic plan. Their strategy recognises that access to education in Africa, for example, first requires access to energy as an enabler. The ability for companies to build sustainable businesses in emerging economies will require a new and innovative approach however.

"Through our Access to Energy programme, Schneider Electric enables access to reliable and clean energy tobots some of the 1.3 billion people worldwide living with limited or no access to electricity. 1.1 billion people don't have access to energy in the world. 3 billion people have unsafe, expensive and fossil based access. Up to 30% of their revenue is spent on inefficient, dangerous and polluting energy. Schneider's offer is to provide access to reliable, affordable and clean energy, as well as investing in the development of a market, supporting vocational training to develop sustainable skills and innovating with adapted offers and business models." - Schneider Electric Website -

However, fewer research participants could relate to this Megatrend, because several of them mainly operate in developed western economies. "When you are looking at emerging markets you've got to think about how the brand is going to play; how does that brand give you value and how do you then use the brand to grow a long-term, sustainable business? But you've got all kinds of issues about building long-term, sustainable businesses because, I mean, in my industry, investors want a three-year return, for example." - Kevin Coleman, Alliantus -

CHAPTER 4: CONCLUSIONS

This exploratory research concludes that societal megatrends can drive opportunities for manufacturers to compete and grow through advanced services. To realise those opportunities, it's important that companies exploit the implications of new trends together with their customers and explore what the impact of societal trends might be on future needs.

The megatrends explored in this research show a significant potential for companies to develop advanced services and strengthen the competitive position of companies. However, some key factors need to be considered when manufacturing companies take the decision to invest in developing advanced services:

- 1. Before you can start developing advanced services.....
 - Top-management needs to support the development of advanced services and provide clear leadership to staff in the mind-set appropriate to the development of the new capabilities
 - Top management support is also required to gain access to the required resources (both financial and non-financial) to drive the advanced services development programme
 - A steering committee needs to be set up to ensure continuous top management attention and support.

2. Stay close to your customers to identify opportunities for advanced services by understanding how value perception and needs are impacted by societal trends



- Understand your company's role in tackling world-wide social and environmental challenges and develop services that will help to overcome these challenges. This will also help you to improve your competitive advantage by giving more meaning to the company's brand.
- Explore the opportunities of the 'circular economy' and invent services that reinforce this concept.

3. When you are developing the business models pertaining to advanced services, make sure that:



The tacit knowledge of the very experienced but aging workforce is transferred into technical solutions to deliver advanced services



There is a plan to continuously attract new talents needed to deliver advanced services



- Your company thinks global, but acts local and delivers a superior customer experience
- Your company not only looks at the cost and benefits of your business case but also at your intangible values like the environment and its impact

CHAPTER 5: REFERENCES

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