



Information Economy Strategy

amee's Consultation Response to the
Department for Business, Innovation &
Skills

March 2013

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amee

amee's mission is to provide credible environmental data on every organisation in the world, starting with 2.1 million in the UK. We believe that providing free access to this information will enable businesses, governments and consumers to make better decisions about the use of our planet's resources.

Open access to information has long been a key driver of innovation and prosperity. The Internet has accelerated this trend by improving the flow of information and catalysing networks for collaboration.

amee leverages these forces to improve sustainability by creating a unique and open network where every organisation can update, compare and share environmental data for free. We are confident that organisations which use this information will become more efficient, responsible and resilient.

We provide:

- Complete coverage using open, credible data
- Statistical methods and big data analytics
- Free access and sharing
- Collaboration tools for suppliers, customers and peers
- Insight into efficiency, resilience and competitive advantage



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Introduction

amee is pleased to have an opportunity to contribute to the UK Government's consultation on the 'Information Economy'. As the consultation paper recognises, the information economy is a sector in which the UK is a world leader. Not only does this sector continue to develop in its own right, it also enables vital growth in a multitude of other sectors at a time of economic difficulty.

We believe that we are only beginning to truly understand how the key themes outlined in this consultation will change the world, and that it is timely for the UK Government to focus on this important area.

amee's key points for the consultation are:

1. Include sustainability/climate change as a 'most important sector'
2. Encourage businesses to partake in the efficiency gains available from sustainability/climate change by promoting enabling technologies and online networks
3. Allow the information economy to drive SME's ability to compete against larger corporations
4. Provide the best global incentives for technology businesses to be located in the UK and promote technology learning throughout the education system
5. Ensure the government is leading by example on:
 - (i) transparent data
 - (ii) environmental reporting
 - (iii) use of SMEs

Overall Questions

Q1. Are the following five sectors the most important – smart cities; cloud computing; internet of things; big data; and e-commerce – and do they present the biggest opportunities for growth in the sector? Are there other growth opportunities in the information economy that Government and industry should consider?

While we believe that these five sectors are hugely important we would add a sixth sector: sustainability/climate change. As energy prices continue to rise and awareness of the tangible threats posed by climate change grows, the information economy will help to provide innovative solutions to the fundamental challenges of our time.

The UK Government has taken a global leadership role in addressing climate change with initiatives such as the Carbon Reduction Commitment (CRC), Mandatory Emissions Reporting and the Green Deal. We believe that leadership in climate change combined with the internet and big data will enable the UK to differentiate itself in a powerful and unique way.

Q2. What are the drivers of change that will create opportunities for the sector, in particular in relation to these five areas?

We believe that the internet is still at an early stage of development and offers huge opportunities to disrupt existing business models. The internet enables the creation of powerful networks of influential users which can drive disruptive change and progress. This is at the very core of the internet and big data.

With regard to sustainability, rising commodity costs such as energy, water and waste disposal, are forcing businesses to become more efficient in their consumption of environmental resources. We believe that government and businesses will increasingly look to the internet and big data to drive transparency of environmental efficiency within their supply chains.

We believe that the UK Government can play a key leadership role in promoting the use of information technology by encouraging businesses to transparently share efficiency improvements in the use of environmental resources.

The government must also ensure that businesses of all sizes have access to enabling technologies such as smart meters, in home displays and energy management software, so that they can efficiently measure and improve their own environmental performance.

Q3. How should Government and the sector work together to build on the UK's strengths in the information economy, including in relation to the five areas?

SMEs are famous for their innovation and will remain integral to the UK's successful information economy. Supporting them wherever possible is essential and we therefore welcome the Government Procurement Service's (GPS) recent announcement that 10% of total government procurement now comes from SMEs.

However, our analysis of government spend suggests that large businesses are still disproportionately favoured in terms of winning procurement contracts. We used the internet, big data and Machine-to-Machine (M2M) processing to analyse government spend by department as reported on www.data.gov.uk.

We would welcome greater clarity on how the government will measure its stated aim of a 25% increase in SME procurement in an effective and transparent way. Large organisations often find it hard to obtain high quality data on departmental spend with SMEs.

The government should continue to lead the way by ensuring that all data is aligned with open data principles (addressable, structured, traceable, and reliable). This will help ensure that the UK makes full use of the high-quality ICT services that its SMEs provide.

Q4. For businesses seeking to exploit opportunities in the information economy, what are the main benefits and barriers of the UK business environment? How could benefits be built on and barriers addressed?

The English language, ideal time zone and popularity of London as a European business centre give the UK huge advantages. The UK should build on these natural advantages by placing much more emphasis on providing education and tax incentives to invest in new technological and creative ideas, particularly around the internet and big data.

The UK should brand itself as the "Silicon Island" where innovative ideas are proactively promoted through support from business, government and educational institutions. The themes in this consultation are directionally correct, but should also include sustainability/climate change where the UK Government has already taken steps to differentiate itself from the rest of the world.

We are concerned that certain issues on the green agenda are being side-lined due to the economic slowdown. New technologies can support the lead already taken by companies such as M&S to improve sustainability and security throughout supply chains, particularly relevant in wake of the horsemeat scandal. Initiatives such as the National Sustainable Public Procurement Programme must be backed and fully implemented across all government departments.

The UK should try and find a way to emulate New York City's (NYC) approach to encouraging innovation. There are a number of excellent examples that Mayor Bloomberg and the NYC Government have promoted, such as a partnership with Cornell University to create a dedicated technology campus.

NYC has also invested directly in funds supporting small innovative businesses and has developed various tax incentives to support SMEs. The NYC Government encourages a strong and vibrant Venture Capital (VC) community which is investing in new creative ideas.

The Mayor of London's 'Smart London' board is a good first step in achieving this.

Q5. How can we ensure that the UK's research and innovation in the information economy field is translated into commercial success? For example new business start-ups, innovative products and services, R&D supporting growth of established businesses.

In addition to greater procurement from SMEs, we encourage the government to continue implementing tax incentives for SMEs and VC firms whose activities are related to the themes outlined, such as the Enterprise Investment Scheme. Other SMEs, such as Funding Circle, have already suggested that a reduction in income tax on individuals wishing to lend to UK businesses would result in greater investment in a wide variety of SMEs.

There should also be greater recognition from other government departments of the role that the information economy can play in helping to meet their objectives. SMEs in particular are crucial in enabling the successful implementation of policy initiatives such as the CRC.

DECC, for example, should work with SMEs to find innovative solutions to reduce carbon emissions from industry supply chains and transportation. Only by fully quantifying these emissions can we make genuine progress in terms of meeting binding commitments on reducing the impact of climate change.

The UK should also leverage its university system to attract students and investments from around the world. While not directly linked to information technology, the UK should not create barriers where it has real and meaningful competitive advantages.

Q6. What are the key skills needed for the UK to build and maintain a strong information economy? Do we have sufficient people with these skills, now and in the pipeline? If not and there is a skills deficit, how can this be addressed, and what is the role for Government, industry and others?

The UK must strongly encourage the combination of creativity with numerical and ICT skills in its education system. This unique blend will be vital if the UK's information economy is to stand up to increasing competition from Asia and other developing regions.

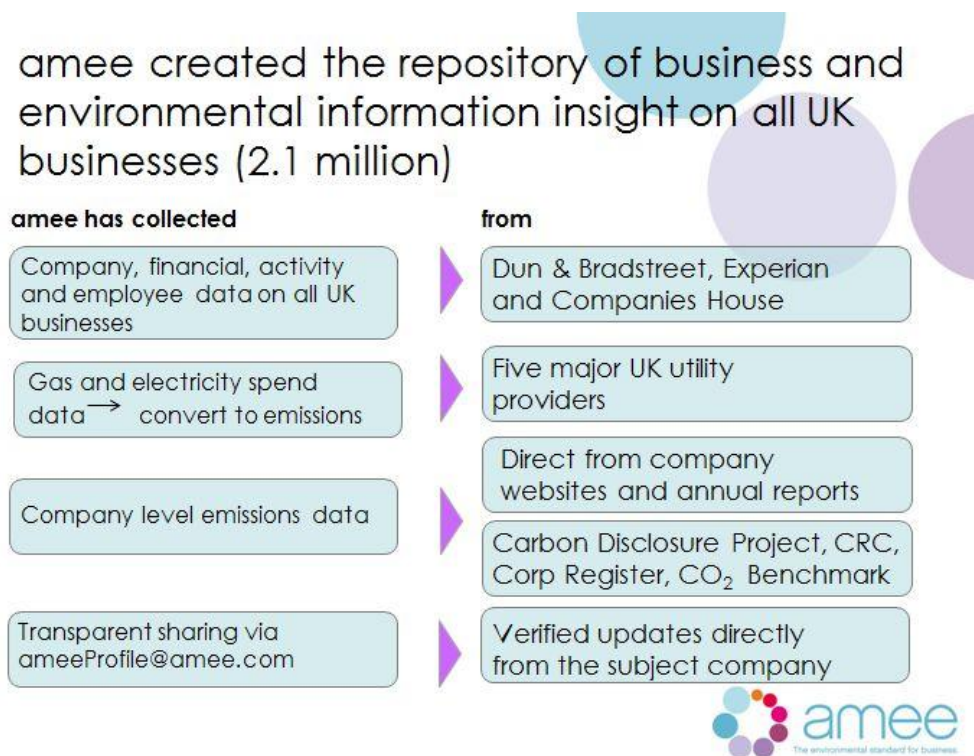
In particular, programming, computer science and statistics should be encouraged in secondary education. Training more statisticians and 'data scientists' is critical.

The UK should encourage (not discourage as is the current practice) the best and the brightest in ICT skills to seek their education in the UK and give them good reasons to stay after their studies are complete.

Q7. In what innovative ways does your company use ICT and/or the internet to improve business performance? For example, using the internet to sell goods and services; improving business processes, customer service, efficiency or management; using cloud computing or data exploitation.

We have used the internet, big data analytics and M2M integration of data to develop a powerful and innovative way for businesses to report, share and compare key environmental data in a free and open way. Over time this will help produce more efficient use of the planets resources.

We have aggregated data from various sources to create unique insight, as depicted in the below image:



We have then used this data to model how businesses compare with each other in terms of environmental efficiency. We use our ameeScore to compare the relative energy intensity of businesses of similar size and sector. Most importantly we make the information open and free to all businesses in the UK. This enables comparison, education and greater efficiency.

We invite each and every business to go to amee.com, claim their ameeProfile (see image below) and share in a transparent and consistent way their environmental credentials. We are giving business the opportunity to freely share environmental data so they can learn, compare and improve.



amee's online directory of environmental data provides a number of services for professionals dealing with supply chain management and environmental standards compliance, specifically:

For sustainability professionals in large organisations:

- Report and assess their organisation's sustainability in one place
- Compare performance with competitors and industry leaders
- Collaborate with other organisations to learn best practice and improve

For procurement managers in large organisations:

- Quickly assess suppliers' performance and compare their peers
- Qualify prospective suppliers and easily identify new suppliers
- Assess their supply chain to reduce risks and increase efficiency

For small businesses:

- Save time reporting sustainability using amee's quick and credible tools
- Increase revenue by promoting their business to leading organisations seeking sustainable suppliers
- Reduce costs by learning best practices from other businesses already using sustainability insights to become more efficient

Q8. How does your company ensure it has the right technology and staff with the right IT skills?

We use rigorous IT hiring practices to ensure that the team has a deep knowledge and capability of data management and analytics. We spend considerable resources to ensure that we have the latest IT equipment whilst also making use of cloud computing throughout our production and operations.

We also have VC investors who are well-skilled at how the internet and big data can be used to fundamentally disrupt an industry.

Cloud Computing

Q9 – 11

We believe that cloud computing is a cost effective way for small businesses in particular to source IT infrastructure. The UK Government should promote cloud based solutions.

Big Data

Q12. What do businesses need to do to in order to exploit and expand the use of Big Data?

They should actively join online networks in order to learn from one another and encourage best practice. After all, big data works best when businesses pool their data. amee enables such data pooling in a transparent way as all the contributed data is accessible to other users.

Big data has the potential to save time and money, for example with supply chain insight, provided it is presented and communicated in a user-friendly format. Businesses must be well connected to the internet and be willing to share key environmental data for free.

Q13. Where can Government add most value in promoting the success of Big Data analytics? For example, the role of Open Data and the need to balance security and privacy with increasing access to data.

Government must help the private sector communicate the immense benefits that exist for SMEs and supply chain owners if they accurately collect and share big data. As such, government must also be at the forefront of efforts to secure the growing provision of data so that businesses and individuals continue to engage with the big data movement.

Government must lead the way by being open and transparent about all aspects of its supply chains. Where appropriate it should integrate its own big data platforms with relevant partners in the private sector to make all-encompassing, user-friendly online networks. An extension to mandatory environmental reporting would also help the success of big data analytics in field of sustainability.

Open Data, whether big or small, helps everyone pool knowledge. Although issues regarding privacy and security are well known, by working with organisations such as the Open Data Institute (ODI) businesses can implement best practice.

E-Commerce

Q16 – 18

No response.

Internet of Things (IoT)

Q19. What are the potential benefits for your business or sector, or for the economy more generally of Machine-to-Machine (M2M) communication, and why?

We strongly agree with the government's belief that the Internet of Things is an enabler of increased efficiency for business, especially in regard to supply chain management. More advanced online networks provide a new lens regarding supply chain risks and connect businesses that want to be transparent about sustainability. In the wake of the horsemeat scandal this is as important as ever.

M2M communication can help large-scale matching of supplier records and bring together financial and environmental data in a manageable way.

Q20 – 21

No response.

Smart Cities

Q22 – 24

No response.