Electronics: the invisible technology that's everywhere

The UK electronics sector is twice the size of the automotive sector. But, as Steve Brambley, Gambica's deputy director* argues, with more support from Government this "invisible", yet vital, industry could become much bigger.

On the 27 June 2013, the profile of automation and instrumentation in the UK was raised with the launch of the ESCO report.

The *Electronic Systems: Challenges and Opportunities* document was co-authored by Gambica as a means to represent the views of the electronic sector to government. This has successfully resulted in a government-backed leadership forum, with Michael Fallon as a ministerial co-chair – proof that this is now seen as a key technology for the UK and the economy.

But what is the electronic systems industry in the UK? Here, I will dispel a few myths about it all being off-shored to low-cost economies around the globe.

Let's start with a few facts and figures. There are currently 850,000 people employed in the electronic systems industry in the UK, with a turnover of £80bn contributing over 5% of the GDP. That makes it one of the largest industry segments in the UK – almost twice the size of the automotive sector. About half the people are employed in electronic systems suppliers, with the other half being embedded in businesses that integrate electronic systems into their products – such as aerospace or power companies.

We may no longer have the UK electronics industry of 30 or 40 years ago, but it didn't just disappear, it has evolved. In that period, cars have gone from largely mechanical products to complex systems that depend on electronics to control almost every function within them. Electronics has gone from something that used to be a product in its own right, to something that is so embedded in almost everything we do that it is taken for granted. It has become pervasive, yet invisible.

While the government has been concentrating its embryonic industrial strategy on vertical markets such as automotive, aerospace, defence, life sciences, energy and so on, it has overlooked electronics, represented by technologies such as microprocessors, embedded systems, sensors, automation and instrumentation, without which none of the verticals can function or be competitive.

Clearly, it is likely to put these UK verticals at a significant competitive disadvantage if the suppliers of electronic items that they use only create products and innovate in the backyard of their overseas competitors. We need a strong UK supply chain of key enabling technologies such as electronics and automation to support all UK businesses in all sectors.

We may no longer have the brands of GEC, Marconi or Plessey at the forefront of electronics in the UK, but we do still very much have an expertise and manufacturing base, albeit perhaps less visible and identifiable than in the past. Companies such as ARM and Imagination Technologies are designers of chips that go into millions of products around the world.

If you have a smartphone, the chances are that there are UK-designed components inside. Naim Audio manufactures high-end hi-fi products, Seagate makes more than a million recording heads per day for disk drives, and Calrec Audio makes audio mixing consoles for live broadcast. Within Gambica, we have numerous automation and instrumentation companies that design and manufacture in the UK for worldwide distribution.

Not only is the sector significant, but it is vibrant and has even greater potential to grow. The ESCO report found that a quarter of businesses that had off-shored in the past had also re-shored at a later date. It also found that exports account for 75% of output and that more than 85% of companies are planning to increase the number of products that they manufacture in the UK.

This all contributes to the aim of ESCO, which is to grow the sector by 50% – but more work is needed to make this happen. The report calls for a long-term strategic approach between government and industry to ensure that the right economic and business environment is in place to encourage the investment and entrepreneurship for growth. A major focus of the report is to push for an increase in education, training and apprenticeships in engineering and technology to support the need for skilled people in the electronics sector.

More information on the ESCO report and how Gambica is involved is available from www.gambica.org.uk/ESCO ■

* Gambica is the trade association for the automation, control, instrumentation and laboratory technology sectors in the UK. For more information, please contact the deputy director, Steve Brambley, on 020 7642 8090 or email him at sbrambley@gambica.org.uk