

Is it time to break out of your silo?

In this guest column, Megan Phipps, head of design and production at the Institution of Engineering and Technology (IET), describes an initiative to transfer technologies and ideas between different sectors.

The UK is renowned for its creativity, research and innovation, but often it seems that new technologies or processes can get locked into one sector, an industry, or even one specific company. As an industry and as a society, we don't tend to work together to fully exploit the potential of new technologies – which means that we are missing out on the rewards that they could bring.

The IET has joined forces with the Motorsport Industry Association (MIA) to address the current lack of widespread exploitation of "horizontal innovation" in the business technology community. For the IET, the initiative is about addressing the barriers to sharing ideas and ensuring that more of our innovations are used where they are needed, and not just in the sector in which they are created.

We are looking to recognise, encourage and reward horizontal innovation – the effective transfer of knowledge and technology from one sector to another – which we believe could deliver huge economic and societal benefits.

By working with the MIA, we are able to highlight best practice exemplars of horizontal innovation, some of which were showcased at the launch event in January.

For example, the motorsport and technology business Prodrive is taking technology and skills gained in motorsport and transferring them to Britain's 35th America's Cup entry. As technical supplier to the Land Rover Ben Ainslie Racing boat, the team is developing electronic and hydraulic control systems, and has already produced the hydraulic actuation system for the foils on the first prototype boat. Building on this, it is now working on other areas of the

design, as well as manufacturing unique components for the yacht.

In another example, Formula 1 technology is being trialled at St Mary's Hospital, Manchester, which could transform the care of critically-ill new-born babies. And Williams Advanced Engineering is working with

consumer innovations are coming together and developing something incredibly powerful and new, but we need to create even more opportunities to share ideas.

Therefore, in addition to a planned series of brokerage events, the IET has announced a new Horizontal Innovation category in its

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Sainsbury's and Asda to retrofit aerofoil systems to supermarket refrigerators to help cut energy consumption. Initial energy savings of 21% have already been achieved.

As an interdisciplinary organisation, the IET is ideally placed to promote horizontal innovation between industries and is encouraging more sectors to get involved and consider how the technology used in other areas could benefit their industry. There is a genuine opportunity through the initiative to drive growth, create jobs and opportunities for future engineers and, most importantly, make sure that solutions that already exist are used to address some of our greatest challenges.

Engineers and technologists within automation, motion engineering and power transmission really should strive to share information and think about how to transfer knowledge and technology from one sector to another. The IET can help by creating connected communities where we can foster knowledge exchange and generate new solutions with existing technology and know-how.

Speaking at the launch event, which marked the start of a long-term programme of knowledge-sharing activities between the IET and the MIA, IET president Naomi Climer explained that commercial and business innovations have begun to merge with consumer electronics know-how and trends to push technology in new directions. Business and

annual Innovation Awards, and a funded r&d programme for SMEs, to be delivered by the Manufacturing Technology Centre. Also announced was a new online engineering forum dedicated to horizontal innovation.

If we are to drive this initiative forward effectively, we need to reach out beyond the engineering world to the people that are experiencing the problems and challenges that we, as engineers, are trying to solve, and include them as an integral part of this

new horizontal innovation initiative. ■



To learn more or to get involved, visit www.theiet.org/horizontal-innovation or email horizontal-innovation@theiet.org