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THE POWER OF
INNOVATION
CAN...

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A submicroscopic infectious agent has forced the world to experience an unprecedented level of disruption not seen since World War 2. Coronavirus or COVID-19 has generated uncertainty and fear of the unknown. Governments around the world have taken extraordinary steps to protect their citizens lives and livelihoods. Propping up businesses through various policy and financial measures, thereby ensuring continuity of economies when the virus eventually diminishes.

The Cambridge dictionary terms disruption as the action of preventing something, especially a system, process, or event, from continuing as usual or as expected. Disruption takes different forms such as political (e.g. the UK's exit from the European Union), behavioural (e.g. the increased application of online shopping, meetings and learning using digital platforms), technological (e.g. the application of autonomous systems and artificial intelligence) and expectational (e.g. single-click and biometric purchasing over devices and one-day/same day delivery timeslots). Disruption generates a flux of threats and opportunities with varying levels of impact. Living in these times of seismic shifts, disruption has become the new normal or even the never normal! It generates what economists call an *S-Curve* (a curve that resembles the character S). At the bottom part of the 'S' it often feels like not much is happening at all. But then things start to pick up, and once the curve crosses its first inflection point (the bottom curve of the 'S' moving upwards), things suddenly start to go wild. After a while, something changes, and the curve flattens once again, and then drops.

At the present time, COVID-19 is going through its own S curve. It started with hardly any impact, trundling along at the bottom, with people saying 'it's a bit worse than the flu', and then the virus took off, and in parallel the innovations sparked, new testing kits, new ways to oxygenate patients; keeping them out of ICU, and the race is now on for the covid-19 vaccine. As a nation, we're racing up that 'S' curve, throwing innovation after innovation, to find a way out of the mire this virus has hurled us in. Conversely from a normal market 'S' curve, where everything is done to avoid plateauing and dropping off, in the case of the covid-19 'S' curve, we're doing all we can to reach that flattening point. For it will mean cases of those infected will have dropped, and we'll have won against the virus.

'Engineering a Crisis' is something that we speak of in a business-sense regularly. As a professional body responsible for driving innovation, we often encourage companies suffering from business lethargy to 'create a crisis' to disrupt their 'business as usual' complacency and reinvent themselves. Such a radical approach in organisations has witnessed dividends; mobilising a sense of urgency in people, suppliers, partners and other stakeholders within its

ecosystem. Businesses should seize the opportunity and use these current disruptive signals positively, to reflect and transform their business models; embracing and embedding innovation in every aspect of their operations.

Accelerating the pace of innovation to deliver desired outcomes whether at policy level or at business level, is essential in mitigating the negative impact of a crisis like Coronavirus. Challenge-propelled collaboration through Open Innovation activities deliver ideas and solutions at a much-needed transformational velocity, giving the edge and confidence to turn around the statistics.

Evoking change at a scale, however, requires those in charge to demonstrate active leadership for innovation. Exhibiting key critical behaviours such as experimental ethos, growth mindset and an appetite for risk taking, along with the ability to communicate with clarity, impact, and audience empathy is essential.

We at the Institute of Innovation and Knowledge Exchange (IKE Institute) define *innovation as the development of new, or improvement of existing products, services, processes and/or business models. Innovation represents*

the transition process from idea generation all the way to value creation. Innovation in the context of value creation can be represented on a value-spectrum that includes incremental improvements at one end of the spectrum through to transformative innovation, that subsequently results in a dramatic impact on other areas in the spectrum, and how innovation is thus, treated (e.g. transformational innovation of the touch screen transformed the way we interact with devices and systems, and thus changed innovations involved with these devices and systems as a result).

In line with IKE Institute's drive to professionalise and promulgate effective innovation more widely, we have been an active participant in the development of international standards for Innovation Management through the BSI (British Standards Institution) and the ISO (International Standards Organisation). Recently, a new standard guidance – ISO 56002 Innovation Management System has been published as part of the ISO 56000 Innovation Management guidance series (available from BSI). It advocates the need for organisations to engender environmental conditions within their places of work, to support openness, curiosity, creativity and user-focus.

The IKE Institute recognises that for the UK to maintain its innovation ranking position globally, we need to ramp up innovation capability, accelerate innovation readiness and sharpen our innovation edge.

In the SIP issue, Spring 2013, we asked the question of "Can organisations afford not to invest in innovation?" At that time seven years ago, we introduced the Investor in Innovations Standard as a systematic framework that helped organisations increase their innovation capability to drive

competitive advantage and achieve growth. We have now inculcated the newly published ISO 56002 Innovation Management System (and the other related parts of the ISO 56000 innovation management guidance series) within our Investor in Innovations Standard, thus, enabling organisations to embrace and apply these new and emerging ISO standards, in an integrated and time-lined manner, with ease.

Last year, and as part of its role in an Erasmus+ project, entitled 'Creative Engine,' IKE Institute conducted a detailed survey of 240 engineering manufacturing enterprises, ranging from small (29%), medium (30%) through to large multinationals (41%), to examine how innovation was organised, developed and supported in their businesses.

The study, in collaboration with four project partners (South West College, Northern Ireland; Dublin City University, Ireland; Tknika, Spain and Thomas More University, Belgium) focused on six key areas – Creativity and Ideas Management; Innovation Process and Planning; Customer Analysis; Management of New Innovations; Business Development; and Communications and Engagement. Some of the key highlights of the survey analysis are shown below:

- 83% admitted they did not have a structured approach to innovation;
- 37% acknowledged they did not have an innovation plan that is aligned to their business strategy;
- 3 in 5 affirmed their Innovation Plan was not communicated across the business nor stakeholders, to gain input and commitment;
- Business Case development was seen as critical in the innovation process, although over two-thirds of companies weren't using systematic

techniques consistently to support development (25% didn't use it at all; 43% used it sometimes; and only 32% applied it regularly).

It was interesting to note that the pattern in the responses to innovation engagement was relatively consistent across all four countries.

We are now seeing governments, public agencies and research organisations using proactively innovation as a strategic instrument, enabling rapid reconfiguring on the way impact is delivered to customers, sponsors, users and citizens, and how value is achieved for all.

Last year, the IKE Institute was asked by the UK's Ministry of Defence to benchmark and assess the innovation capability of the Defence Innovation Network, bringing together all the Innovation Hubs of front-line command (Royal Navy, Army, RAF and Strategic Command) together with the Defence Innovation Directorate (covering the Defence and Security Accelerator and the Defence Innovation Unit). Through this process, it was pleasing to see all these defence innovation entities applied many good practices, had a real sense of urgency, energy and passion for innovation, and had exploited many new and emerging technologies. Multi-skilled teams across the Defence Innovation Network presented diverse innovative and collaborative capabilities underlying the fact that new, faster and cost-effective solutions were getting into hands of the user, and ultimately, to the front-line fighter.

Universities and colleges are also extending and exploiting their innovation capabilities internally (e.g. new ways for delivering educational offerings) and externally (e.g. driving economic development regionally and on the international stage). For example,

our engagement with the City of Glasgow College has demonstrated how innovation transformed their operating model. By adopting a 'blue ocean' strategy on the development of their product/service portfolio, they were able to develop new, differentiated offerings thus increasing employment opportunities for their students, attracting infrastructure investments and forging international collaborations. In the higher education domain, there are many similar examples. Our collaboration with the University of Plymouth's Acceleration Through Innovation (ATI) initiative, focused on energising businesses in Cornwall. The Cornish economy is one that is dominated by micro-businesses. The initiative's aim was to arm these businesses with the innovation tools and techniques to enable them to compete and grow successfully.

The current COVID-19 crisis highlights viscerally, the cultural and behavioural step change in accelerating adoption of digital technologies and applications across all economic sectors. Digital now, more than ever, is forcing us to re-think and work differently, to yield a positive impact. AI in managing financial transactions, predictive autonomous supply chains in logistics and blockchain-based prescription dispensing in health care, are just a few examples of how digital is becoming ubiquitous in our lives. Innovation is the power that continually reshapes our lives, our norms, assumptions, behaviours and expectations. In the quest for combating the impact of COVID-19, innovation is critical and remains to be the only weapon that will protect our health, livelihoods and society.

