

Rich Hampshire Vice-President Digital Utilities, CGI UK

The utilities sector is fast becoming one of the most vibrant and exciting sectors in which to work, and Rich Hampshire, vice-president digital utilities, CGI UK, says the pace of change in both energy and water is now accelerating.

"Companies are seeking to adjust to changing demands, achieve more from their existing investments and seek advantage through investment in new technologies. Delivering value from the spiralling volumes of data being generated by increasingly intelligent assets and devices will be vital to sustained success.

"The flow of '1s' and '0s' is becoming as important to the delivery of the desired customer experience as the flow of electrons and molecules."

Amid this dynamic, turbulent time for the industry does he think utilities are keeping up with the pace and adapting swiftly enough? There have been some huge strides, says Hampshire.

Competition

"The introduction of competition into the non-household water market is continuing to mature with lots of activity. By the end of August there had been approaching 165,000 switches, equating to 13.1 per cent of volume, with 3.5 million transactions having been processed by the central systems to support this activity.

"August also saw the number of supply points switching supplier increasing at a faster rate than the switching of consumption-weighted supply points – indicating that a greater proportion of smaller sites are starting to engage in the market.

"With 18 months of learning, the focus is now on efficiency and making it easier for market participants to operate in the market and to keep costs down, so that savings can be passed on to customers."

The opening up of the household market to competition however remains an unknown, although a question of much discussion and interest, says Hampshire.

"Ofwat has delivered the business case for doing so, identifying up to £2.9 billion of net benefit as well as enabling better customer service, greater levels of innovation and improved resilience. If Defra [Department for Environment, Food and Rural Affairs] takes that decision, then CGI is ready to support the

creation of that market and the flow of benefits to household water customers."

Meanwhile the energy sector, he says, continues to embrace smart technologies to enable the transition to the so-called, 'smart, flexible energy system'. "The number of homes benefiting from smart meters has grown dramatically over the last 12 months, both through the competitive foundation market and the enduring central solution.

"We're seeing increasing use of time-of-use tariffs in the market, as well as consumer access devices pairing with smart meters to enable new and innovative energy services."

"The information and communication infrastructure that the deployment of smart meters creates is enabling both new and incumbent market participants to offer customers increasingly meaningful choices about how they satisfy their energy needs. We're seeing increasing use of time-of-use tariffs in the market, as well as consumer access devices pairing with smart meters to enable new and innovative energy services."

But there are still barriers to realising the 'smart, flexible energy system', he says.

CGI's research report in partnership with Utility Week into demand-side energy flexibility, and entitled 'Embracing Flexibility: Transforming the Power System by 2030', found the lack of a commercial or market framework to be the most significant barrier, being identified by 71 per cent of those responding to the survey. This was closely followed by the inability to stack value, which was identified by 69 per cent.

"I might argue that identification of the need for a market framework is really the market identifying how to enable value stacking. The ability, or lack thereof, to stack value is an economic barrier – and economic barriers remain the highest category of barriers at 50 per cent.

"After these economic barriers, customer-side barriers were identified as the second most significant area, which was driven by a lack of

customer awareness, identified by 86.7 per cent of respondents"

In terms of regulation, Hampshire adds: "It will also be interesting to see how the moving of personnel between Ofgem and Ofwat will inform the future of regulation in both those sectors. The experiences and learning gained from regulating to encourage innovation and competition in both water and energy will undoubtedly have provided some valuable lessons that can benefit consumers in those respective sectors."

Looking at and learning from others' experiences will be key for the future, he believes.

"Here at CGI we're working closely with our colleagues around the globe to understand the lessons from both other territories and other sectors that can enable our clients to succeed in their chosen markets here in the UK, and bring the best and most appropriate solutions to these challenges here."

Opportunities ahead

The UK utilities sector, he says, has established itself over the last three decades as 'the most consistently competitive and innovative market globally'.

"But that doesn't mean that there aren't valuable opportunities to gain insights from the ways that utilities operating in different market structures have addressed similar challenges, or how other sectors have succeeded in generating value from analogous opportunities or market changes.

"The systems at the heart of Britain's competitive water market build on CGI's experience of designing, delivering and operating data hubs in competitive energy markets around the world. And as the distribution network operators transition to become distribution system operators, CGI is bringing learning from Europe to help our clients evaluate the impacts of changing demands on their assets in nearer and nearer real-time, preparing the way for that 'smart, flexible energy system'.

"When someone first said to me, 'may you live in interesting times', my reaction was, 'what a cool thing to wish for someone'. It wasn't until almost a decade later that someone pointed out that it was an apocryphal Chinese curse.

"Well, our sector is certainly in interesting times, and I still consider that to be far more of a blessing than a curse!"