

The emotionalisation of energy

Wolf Ketter foresees a future where consumers have an emotional connection to the energy they use, and a smart pan-European market allows them to work directly with volatile pricing



Utilities are just beginning to “discover the customer”, says Wolf Ketter, professor of next generation systems at the Erasmus University's Rotterdam School of Management, . Although they have talked about customer service for many years, in reality they regarded each family or user as simply a “connection point”, he says, and that “was passive. Now it has to be active and change from consumers to prosumers” – who are also producing power.

At the moment, Ketter told *New Power*, utilities think about the smart grid and smart meters “in the same way we spoke about the internet ten years ago. But in that time it has moved on from being a way of reading information. People started to blog, or provide information, and have become an active part of the net. The same must happen in energy.”

European customers will have smart meters, he says, but “if you only use them to do what you already do” they will be a failure. He thinks consumers should be exposed to the full volatility of power prices – and given the tools to deal with them. “There is already a competitive wholesale market in Europe. .. prices are volatile but they don’t pass that on. The end-customer always sees the same prices”. Even “time of use” pricing to shift usage out of peak times will be out of date, he says, noting that already central Europe is seeing a mid-day generation peak from solar panels. “We need to pass on that volatility,” he says.

How will that work for customers? “An aggregator will pass information on prices back and forth with the customer,” he says. “Then we need a much more intelligent grid, and software agents or avatars for the consumer who will learn about the consumer’s preferences – whether it is for green power, local energy, etc – and act on their behalf. Smart metering is not enough, dynamic pricing is not enough, we need intelligence”.

How do you feel about power? The need to learn about consumer preferences as well as about the cost and source of power is fundamental, Ketter says, because the nature of the energy purchase is changing. “Previously it was a commodity and we didn’t think about it so much”. But he notes how the German government switched from planning life extension for its nuclear plants to immediate shutdown after Fukushima – saying the government’s position changed “over a weekend”.

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At the other extreme people feel a connection when they have their own PV panels or electric vehicle, he says. Both issues are about “the emotionalisation of energy,” which will make consumers – by having preferences to guide their avatars or aggregators – active consumers.

Are we on the right track to deliver this flexible industry where consumers have a personal connection with their usage? Ketter says we are on the way,

but there is more to be done – and some of it is about providing old-style wires and capacity. “We need more flexible infrastructure and more dynamic pricing between different countries,” he says. And he wants a “single energy policy” for the EU, because at the moment development is crossing borders: Bavaria is spilling excess solar generation into Poland, for example, and wind power is being exported from Germany to the Netherlands. That should be welded together.

Will consumers welcome Ketter’s active energy market? He thinks they mostly will by the time it is a reality – which he puts at the middle of the next decade, although he notes that net-enabled appliances and technologies are already being used in a small way.

“Most younger people are open to technology,” he says, comparing their lives on social media. “Older people are more afraid of the technology”. But he notes it is an important lesson for old-style utilities – whose “business model and existence are both threatened”. Consumers will need to have confidence and trust that an avatar can learn about them and act on their preferences – and sometimes take decisions on their behalf.

That is a tall order for existing utilities, but Ketter warns that it is one they will have to fulfill. Entertainment providers like Nintendo and Sky “are trusted as connected devices and these companies are already working in the smart grid,” he says. Traditional utilities need to respond.