GAMBICA

Industry 4.0: is that like the Internet of Things?

Industry 4.0 is a snappy title given to the "fourth industrial revolution" and a phrase that often starts a conversation about what it means, exactly. Here Steve Brambley, deputy director of Gambica*, gives his version, comparing this

defining period to the early days of Internet adoption.

NTERNET OF THINGS

s with fashion styles and musical genres, when something new comes along, we like to give it a name and attach a label to it. That way, experts can while away long winter evenings discussing whether The Emergency Stops are a trip-hop or dubstep band, and if hi-vis hooded capes are this season's tech-chic.

The automation industry tends to label things in quite a functional way. Programmable logic controllers, human-machine interfaces and overload relays, all do what they say on the tin. However, every now and again we need to label an initiative, a movement, a concept – and Industry 4.0 is one of those phrases that is gaining in currency and column-inches. But it's a concept that is often reduced to a simplified comparison to another *mot du jour* or is explained in meticulous technical depth, backed up by a detailed PowerPoint presentation.

And so we hear a variety of terms such as Industry 4.0, smart manufacturing, machineto-machine, the connected factory and the Internet of Things, and we explore the similarities, the overlaps, the differences and the nuances.

I look at it like this. Imagine explaining what the Internet is to someone who has been

The Internet is to someone who has been stranded on a desert island for 35 years. Do you explain the technology? What it looks like? How it works? What it enables you to do? The societal benefits? You know pretty well what the Internet is, and it is easy to talk about it with other people who have experience of it. It is much harder and will take much longer to explain it to a newcomer.

I'm a child of the 1970s, I grew up with two channels on the TV, and photographs that took a week to develop by post. Calling home meant reversing the charges from a red GPO telephone box. My music collection was recorded on tape from the radio and information was searched for in the index of the *Encyclopaedia Britannica* or the local library. At that time, none of these activities were connected or associated with each other. Now I can do all of them on a mobile phone, instantly and almost anywhere I happen to be. I can't imagine explaining that to my nine-year-old self.

OK, I'll have a go...

"The internet is a connected network of communication technology that allows us to do the things we do better, faster and cheaper whilst at the same time enables us to realise new things that were not possible before." I can't explain how cat videos fit into all of this, however.

Many of us remember the days before the Internet became ubiquitous, and thus also probably remember a time when we asked what was this new "World Wide Web", this virtual world that people are talking about? In the days of the Netscape browser and 56k dial-up modems, we hadn't yet coined the terms social media or cloud storage, but now they are widely used. Back then, tweeting was

We are in the early days of talking about what Industry 4.0 means now, and what possibilities it might open up in the future.

for birds and street view was limited to something you had from your window. I think this is where we are now with Industry 4.0: we are in the early days of talking about what it means now and what possibilities it might open up in the future.

And so back to the parallel with Industry 4.0, which I still haven't attempted to define. OK, I'll have a go...

"Industry 4.0 is a connected network of communication technology that allows manufacturing to do the things we do better, faster and cheaper while at the same time enabling us to realise new things that were not possible before."

I can't imagine how cat videos will be integrated into this, however.

* 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 via sbrambley@gambica.org.uk www.gambica.org.uk