Do you speak Human?

Theories suggest that the myriad of global languages might one day die out – spelling the decline of translation and localisation services. But for now, these businesses provide critical support to CROs engaged in trials, although technology is changing the stakes.

The 50th Drug Information Association (DIA) conference that took place in San Diego, June 2014, encouraged delegates to ‘celebrate the past and invent the future’. But by inventing the future, could we be consigning ourselves to the past?

Invention is what drives the human race forward. It is what sets us apart from other species and brings with it untold benefits. Yet, for some, invention also creates fear for their own basic needs – there is concern that new technologies, for example, will replace their jobs and livelihoods.

This dilemma is, of course, nothing new. Some 50 years ago, when the first-ever DIA conference was being planned, the same concern was highlighted on the cover of LIFE magazine (July 1963), with the headline ‘Point of no return for everybody’ stating that ‘Automation’s really here; jobs go scarce’.

However, according to industry trend-spotter and futurologist, Magnus Lindkvist, the ‘will our jobs disappear?’ question is not necessarily something that should be tied to technology, but perhaps more to the underlying economic climate of the time. Lindkvist believes that, while technology will replace the jobs that are highly repetitive and consist of boring tasks that can easily be automated, it can also be viewed as an enabler and empowerer. So it may be accused of stealing some jobs, but other roles will emerge in its wake.

Language Prediction

One such industry that has seen huge changes over the last 50 years is that of translation and localisation. According to applied futurist, Tom Cheesewright, the emergence of tools such as Google Translate could see a lingua franca – a bridge language – begin to emerge. He takes the view that as new words are created, they will spread like memes across the connected globe, becoming established in each language before local equivalents can be created.

But could we ever see a future where, if aliens landed on our planet 100 years from now, they could find us speaking only one language, Human? This is Cheesewright’s prediction, arguing that technology – in particular, the internet – is helping to break down the barriers, such as language and currencies, that once divided people.

He says that, just as disruptive finance businesses like PayPal have made the movement of money across borders easier – enabling everyone to forget what currency their partner was dealing in – languages will follow the same path.

Similarly to national currencies, Cheesewright believes that different languages will disappear from our daily lives over the next century. While they will not stop being used altogether, as technology abstracts us away from the complexity of translation, we will begin to forget that such great differences ever existed.

Business Impact

Exciting? Far fetched? Whichever way you look at it, it could be worrying for a business that services the CRO sector by supplying translation and localisation services. The implication is that such companies might become obsolete.

However, Gary Muddyman, Chief Executive Officer of Conversis Medical, is reassured that Cheesewright’s prediction means there is still a market for companies such as his, for the short to medium term at least. This confidence is, in part, because of the industry’s ongoing focus on emerging markets such as the Middle East and North Africa (MENA) region, where the population is expected to reach 598 million by 2050. More than 1,000 different languages are spoken in Africa alone, and it is estimated that up to 7,000 languages are spoken around the world.
A recent white paper published by Quintiles stated that, while the MENA region (excluding Israel) currently hosts only about 0.4% of clinical trial sites and patients, its percentage of global clinical trial patient-related R&D spend could increase by a factor of 8-10 in the next decade – building an annual market of around $1 billion.

Translation and localisation therefore becomes a vital part of the clinical trial process. As Ann Van Dessel, Head of Global Clinical Operations at Janssen Research & Development, explains: “It is very important that we provide high-quality translations so the information is understandable and clear for patients participating in the study. As required, we submit the translations to regulatory authorities and independent ethics committees for review. These steps help ensure patients have appropriate information to guide their decisions.”

**Human Survival**

Muddyman also believes that, while the process of converting content from one language to another will get more automated, it will never completely replace humans. “Things will evolve, they will change, and faster, more accurate, effective and cheaper translations will always be the challenge. But humans and machines will continue to coexist, and I think we will continue to have a viable business for the foreseeable future,” he says.

**Tahar Bouhafs**, Chief Executive Officer of Common Sense Advisory, agrees. “Machine translation can be used as a pre-translation step to help speed up the work of human translators, but there is no evidence that the technology will ever eliminate the need for human editing or translation.” Bouhafs adds that: “No information publisher can afford the business risk of unedited machine output. The financial and brand damage that ensues from mistranslation is already a significant liability, even with fully vetted human translation.”

**Matthew McCarty**, Senior Director, Health Engagement and Communications at Quintiles, thinks that use of language is only part of the challenge when localising information for a clinical trial, all of which is vital to help accelerate the study’s timeline. The visuals used in patient recruitment materials, for instance, can be just as crucial in ensuring the right image is used in context of the cultural characteristics within the region you are working.

He uses differences in healthcare in the US and India as an example: the latter is much more about a relationship with your doctor who may have looked after your family for years, compared to what could be seen as the competitive nature of how medical advice is provided in the US.

**Specialist Roles**

But what of the future of language and translation services in particular? Muddyman disagrees with the notion that languages will continue to die out and that global communications will become homogenised. In his view, technology will allow us to protect and evolve minority languages, like many of those spoken in certain MENA countries. However, Cheesewright states that “the intermediaries will come first, who will insulate us from each other’s languages, seamlessly translating one to another”. Of course, technologies will only get faster and more nuanced as the inexorable, exponential advance of computing power continues.

There is, however, room for optimism. Lindkvist believes jobs will simply evolve. He says there will be fragmentation of roles that will include specialist translators within the medical industry. Such a move has already been taken by Conversis, which has recently employed a scientist, Dr Mark Hooper, to oversee translation projects specific to the pharmaceutical market. This optimises workflow by ensuring that medical terminology is translated correctly – something that machines can only do a certain percentage of, and that human translators would, understandably, not be aware of, being language experts rather than medical specialists.

**Dion Wiggins**, Asia Online CEO, believes it is ‘smart’ of Conversis to have recruited Dr Hooper. He said that having someone who can optimise the workflow and understand the issues is key, as that will then enable you to do things you would otherwise not be able to do. It’s the same reason he
brought in Professor Phillip Koehn as his company’s Chief Scientist. Koehn was the 2013 European Patent Office European Inventor of the Year Runner Up with his advanced method of automated computer translation.

**Different Thinking**

With all this thought about how technology can improve our lives, it is also important to remember how new inventions come about. Lindkvist uses the example of the aeroplane. He explains that for a long time in the late 1800s, we tried to make machines fly by imitating birds – but, of course, the flapping mechanical 'wings' did not work as they were unable to generate the lift required. It was only when looking at other dynamics that the likes of the Wright Brothers started to see progress, eventually leading to their first flight in 1903.

Lindkvist therefore says that when we ask the question whether technology can do human activity ‘x’, we are usually posing the wrong question. Arguably, it does not need to be done in the same way. So, in terms of translation, perhaps we should stop trying to teach machines to 'flap their wings'. Lindkvist also reminds us that some of our most valuable discoveries, particularly in the pharma industry, are the results of mistakes or by-products, citing penicillin and Viagra as two classic examples.

While the pharma industry cannot afford any mistakes, Lindkvist makes an important point that language is often about interpretation and ensuring we engage the audience who is reading or listening to us. McCarty stresses, for example, that when Quintiles prepares materials for adult patients in a clinical trial, it aims for a reading age of 10-12 years old so as not to exclude people. Similarly, it would not look to make its visuals too scientific as otherwise potential patients will not understand them, which would ultimately impact on patient safety.

**Local Delivery**

But it is not always about literal translation, as Angela Radcliffe, Vice President and Director of Clinical Trials at Vio Global, advises. She believes that localisation is just as important in the delivery of a project; without foregoing quality, this can mean a difference of millions of dollars to the pharma company developing a new drug. You cannot translate conceptual nuances, she says. Similar to McCarty’s view, Radcliffe makes the point that we need to take account of cultural differences when presenting information in different territories.

One area where this is becoming increasingly important is social media, where consumers – in particular, patients or sufferers of diseases – look to pharma companies for immediate information. Radcliffe says that while the public may tolerate some mistakes on social media, the pharma industry simply cannot afford to make any. According to Van Dessel, the important message her company’s founder, Dr Paul Janssen, gave was “the patients are waiting”.

She adds: “That sense of urgency inspires us to get our medicines to patients, regardless of where they are, as fast as we can. Bringing a medicine to market faster can have a significant financial impact for our company, but what is most important is the difference it can make in the life of a patient.”

**Evolving Approach**

According to Wiggins, at present 50-70% of machine-translated documents will not be changed by humans, but to get to a point where humans are not needed to translate at all, we will need machines to understand and think. At the moment, machines learn patterns and then repeat them.

Automation is a must for companies translating huge documents. One of Asia Online’s clients has 1.1 billion words translated every day, and Wiggins predicts that leading language service providers to CROs, such as Conversis Medical, will soon be translating more content in one year than in the previous five years combined.
However, even as technology develops over the next 30-50 years, Wiggins still believes humans will do a better job in many areas – machines will not out-think a human. In addition, Muddyman agrees that companies like his will need to evolve with better segmentations and analysis of the roles of humans and machines in their processes. It may therefore be some time before Cheesewright’s prediction of one global human language comes true.

This article first appeared in International Clinical Trials, November 2014.

About the Author
Russell Goldsmith is an independent Digital & Social Media Consultant and Founder of Audere Communications. You can follow Russell on twitter at @russgoldsmith and email him at russ@auderecommunications.com

About Conversis Medical
Conversis Medical was formed as the pharmaceutical-facing business unit of Conversis Global in 2007 and has achieved a world-wide reputation for supplying accurate and timely translated copy to the medical industry, providing not just specialist information and expertise but also peace of mind. With a strong reputation for building solid client relationships and offering support through regulatory and compliance challenges, Conversis Medical is more than just translation – it is a trusted advisor and offers authoritative insight into the challenges of the medical market.

For more information visit www.conversismedical.com or call +44(0)845 450 0805 and speak to Dr Mark Hooper, mark.hooper@conversismedical.com