

The Benelux Branch of the IMechE has launched a series of evening events in the format of a Discussion Café. What is a Discussion Café? In an informal setting, with drinks and snacks, members of the IMechE and other professional institutions can discuss and share opinion about a topic that affects all branches of Engineering.

All of the Discussion Cafés planned for 2017 will be investigating the topic of

## **Generations in the Workplace.**

Each Discussion Café will break the overall topic down into themed debates, and the first event was held in Rotterdam on Thursday 9<sup>th</sup> March and debated the point of view of older workers' skills. The opinions gathered in the debate on the 9<sup>th</sup> March were augmented by quotations from senior company and HR leaders and replies to an online survey.

### **Older workers doing fine on their own**

After some fascinating debate the first Discussion Café concluded that senior technical professionals already have many of the skills needed for the future, but it also concluded, surprisingly, that there is little that the older generation can learn from the younger workers.

The reasons for this controversial conclusion are detailed in the remainder of this report, and the second Discussion Café will re-examine this from the point of view of younger workers. It will take place on the 11<sup>th</sup> April 2017 at the Van der Valk Hotel in Maastricht from 6:30 pm. You can participate in the next debate either in person (see the IMechE Near You page for this event) or via the online survey (click [here](#)).

### **Setting the scene**

As an introduction to the overall topic Paul Bennington, the Chairman of the Benelux Branch, gave an impulse presentation which is summarised as follows: The demographics of the population of Europe shows a huge population bubble that is rapidly approaching retirement with significantly fewer younger people behind them who will support this social cost. Many governments have already introduced changes to the statutory retirement age, and for many of us, it is already a fact that we will have to work longer into our old age than our parents did. It is also clear that we have only just seen the start of this trend. The younger people who will start their careers in the next few years will see themselves working with increasingly older colleagues.

There is another elephant in the room that is going to play an increasingly significant role in the lives of everyone in the years to come: Artificial Intelligence. It has been building slowly with increasingly clever software and apps. If you want to plan a trip, you can now just type where you want to go into an internet search engine and you will be given navigation direction with real time traffic information or public transport timetables with options to book your ticket online directly. In the

workplace, similar data based support systems are finding their way into marketing and sales, medical diagnostics and even law practices. In the engineering sector, smart machine monitoring and selective maintenance is already widely available. We can all see endless opportunities where machines can help. The exponential rise of computer power predicted by Moore in the 1970's maybe slowing, but it is not predicted to stop just yet.

The consequence? More people will have to stay in work, but will there be work available for them alongside artificial Intelligence? What types of jobs will be eliminated, and which of the generations will be most affected? Will there be competition between the generations for the work that remains and who will be best placed to survive in the workplace of the future?

This is the challenge!

### **What can experience offer for the future and what additional skills are needed?**

The findings of this first Discussion Café coalesced into two sub themes. The first was from the point of view of the older workers; what skills do they have and what will they need for the future and what can they offer that Artificial Intelligence cannot.

***"The ability to not go through the 'official route'. What do I mean? Young people want to 'touch' you directly and spontaneously on short notice. How do you learn to do this? Just do it! Forget your old habits; don't get them to make an appointment with your secretary, to send you questions in advance... Just let young people talk to you - it can be fun!"***

Global Head, Production & Technology, multi-national plastics company headquartered in Germany

### **Risk of specialisation**

Older workers have a wealth of past experience of how things were done in the past, but it was quickly noticed that this pure historical knowledge will be one of the first targets for Artificial Intelligence systems. The goal of some engineers is still to become a technical specialist, but the debate saw a risk in this approach because this skill could soon be replaced by computer systems. On the other hand, the experience of dealing with people is something that takes time to build up and is, as yet, beyond artificial intelligence systems.

### **Trust and the human touch**

Where ever there will be situations where there needs to be trust between people, or where there is uncertainty in the final decision process, then computer systems will struggle to adapt. You cannot programme "gut feel". This is the domain that humans will continue to occupy in the work place. It takes time to understand the politics, culture and the nuances of human interactions. People with more years behind them will have an advantage over both younger workers and computers.

### **Future skills**

***"I would say it is not a skill, but a mind-set of continuous learning. The world is different in every second and we need to learn something new in every moment."***

Online survey response – Senior Engineer, Semiconductor Industry

When the debate looked into the future, at the skills that would be needed by older workers, there was general consensus that adaptability to change would be vital. The pace of change is accelerating and older people need to adopt an attitude of life-long learning and be willing to adapt to the future.

### **What can the older workers learn from the younger generations?**

***"The young will bring new ideas and working methods. The older workers can learn how to use these new methods, and improve them with the benefit of experience."***

Online survey response – Manager, Automotive sector

The second sub theme discussed was where older workers will learn the new skills they need and specifically, what the older workers can learn from the younger generations. There were no end of examples of where the younger generations do things differently, but the debate in the Discussion Café was not convinced that these differences were either better or necessary.

To put this into simple, politically in-correct language, there is little that the next generation can teach older technical professionals to improve the workplace of the future.

As a caveat to this statement, the debate clarified that we are talking about technical professionals, not the population in general. As representatives from professional institutions and organisations, we have a different attitude towards technology compared to the equivalent non-technical population of the same age. The debate also confined itself to the workplace effect, and not society as a whole.

The debate analysed the popular perceptions about what the young do differently and their benefits to the workplace before drawing the above conclusion.

### **Networking?**

An HR manager at a global EPC company headquartered in The Hague quoted "...networking, the youth of today has been doing this since they were 4". While the millennials have indeed been connected with their peers since a very young age, there was a big question mark over whether this was really networking. Sharing, short-lived, photos; boastful or simple life-style posts or short one line texts was not considered networking in a business sense. Connecting to someone in a valuable network requires listening and giving something valuable that the receiver needs. In this respect, giving what you want to push into the world via Facebook was not considered a skill that older workers can benefit from.

### **Innovation?**

The topic of innovation was also discussed: We are told that the young will bring fresh ideas. Again, doubts were expressed about the value to the workplace. The debate in the room highlighted that the younger generation have become reliant on the computer systems that have surrounded their lives. If the computer says the answer is X, then this must be correct. However, the older technical workers who have seen the evolution of computers understand very well, that the quality of the output depends on both the data that's put in, and on the code that does the processing. The more experienced workers have the ability to take a step back and think for themselves.

Another aspect to the innovation debate is that younger generations will make suggestions for change based on ignorance of the past, and will therefore be condemned to repeat past mistakes. This type of innovation is inefficient.

### **Communication and business processes**

With respect to communication, the younger employees have a completely different expectation, and this was seen as positive. Behind this expectation, the Discussion Café asked the question: What fundamental business processes will change as a result of a new generation in the work place? The gathered opinion was that the fundamentals will stay the same, but the tools used will change. In this respect, the young can be mentors to older workers on the tool function, but the older employees should continue to ask what is this a benefit? and what is the added value? based on their experience.

### **Data assimilation**

***"The ability to research and assimilate data, to collaborate with colleagues on rapid data collection and presentation to allow data-driven decisions"***

Director Automotive sector, Global Chemicals Company, European headquarters in Belgium.

On observation was made that the younger generations can gather and assimilate data far more quickly. In some cases, where data-only decisions are needed this is an advantage, but artificial intelligence will quickly replace this need: Data without knowledge has little value.

The Discussion Café put forward the point of view that older workers can slow down the decision-making process and that this was actually seen as an advantage. According to a leading neuropsychologist from CHU in Caen, France, when we slow down and even do nothing, our brains go into a “default” mode and start to rationalise and sort our thoughts and information. This is a healthy and necessary process and it is during this time when experience is built and where new ideas come from.

### **Adaptability to change**

Finally, there was the concept of adaptability to change. For the millennial generation, the phrase “the only constant is change” has never held more meaning. In their lifetime, the world has changed almost daily. What was common yesterday will be replaced next week with something new. They have an ability to accept, learn and move on. If the young have something to offer the older generation, it is coaching in adaptability to change.

### **The next debate – Young Workers**

The next Discussion café will tackle this idea in more detail where the themed debate will be about Younger Workers. The event will take place on the 11<sup>th</sup> April at the Van der Valk hotel in Maastricht from 6:30 pm. You can participate in the next debate either in person (see the IMechE [Near You](#) page for this event) or via the online survey (click [here](#)).

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