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Press release

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Deloitte Global Predictions 2017: Machine Learning is about to transform society
Technology, Media & Telecommunications

- Over 300 million smartphones to have built in machine learning capabilities in 2017
- Biometric fingerprint reader-equipped devices will likely top one billion for the first time in early 2017, of which one million in Belgium
- IT-as-a-Service expected to become nearly a US$550 billion industry worldwide by 2018

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Deloitte predicts that globally over 300 million smartphones, or more than one fifth of units sold in 2017, will have machine learning capabilities within the device in the next 12 months. Deloitte's 16th edition of the Technology, Media & Telecoms Predictions describes how mobile devices will be able to perform machine learning tasks even without connectivity which will significantly alter how humans interact with technology across every industry, market and society.

However, over time machine learning on-the-go will not just be limited to smartphones. These capabilities are likely also to be found in drones, cars, virtual or augmented reality devices, medical tools and Internet of Things (IoT) devices. "Machine learning is fascinating as it will revolutionise how we conduct simple tasks like translating content, but it also has major opportunities in health care," said Vincent Fosty, Deloitte Belgium's TMT Industry Leader. "Microchips are becoming 10.000 times smaller than the size of a human hair while their computing capacity is multiplying exponentially. This means that almost every portable device will have the ability to become smart in some way, opening great opportunities".

Another innovation with impact to our environment is autonomous braking. Deloitte predicts that in 2022 fatalities from car accidents in Belgium could theoretically fall by up to 470 per year from today (732 according to FPS Economy), considering that 64% of all deadly accidents in Belgium occur at high speeds.

The greatest factor in this decline will likely be automatic emergency braking (AEB) technologies as the risk of fatality is significantly reduced when speed at impact is lower.

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IT-as-a-Service to become 35 percent of IT spend

Deloitte predicts that by the end of 2018, spending on IT-as-a-Service for data centers, software, and services will reach nearly US$550 billion worldwide, at over a third of all IT spending. This shift will begin to transform how the IT industry markets, sells and buys technology across businesses worldwide.

"Up to now we have witnessed a strong evolution in Software-as-a-Service solutions but technology is set to become even more mobile. Combined with smarter and faster capabilities, these innovations will force businesses, governments and consumers alike to evolve how they operate and create opportunities for wide-spread transformation across industries," continued Fosty.

Biometric Security Reaches the Billions

The active base of fingerprint reader-equipped devices will likely top one billion for the first time in early 2017, with each active sensor used an average of 30 times a day, implying over 10 trillion aggregate presses globally over the year. "In Belgium, our Mobile Consumer Survey unveiled that 19% of the population owns a device with a fingerprint reader, of which 66% effectively uses it," said Fosty. "This means that there is a market out there of about 1 million Belgians, which is impressive for a very recent kind of technology. The challenge is now to determine which additional applications could use fingerprint readers and other biometric inputs."

Additional findings from Deloitte's 2017 TMT predictions include:

- **Cyberattacks enter the Terabit Era** - In 2017, Distributed Denial-of-Service (DDoS) attacks, a form of cyberattack, will become larger in scale, harder to mitigate, and more frequent. This escalation is largely due to the growing number of IoT devices and access to ever higher bandwidth speeds.

- **Have We Reached Peak Tablet?** - 2017 sales of tablets will likely be fewer than 165 million units, down by approximately 10 percent from the 182 million units sold in 2016, suggesting we have passed the peak demand for these devices. Also in Belgium there are three consumer devices that are preferred over tablets across all age groups: TVs, smartphones, and laptops.

- **5G: A Revolution in Evolution, Even in 2017** - More steps towards the deployment of 5G, the fifth generation of cellular networks, are expected to take place in 2017. But the move to 5G will be gradual: Belgian operators will first continue to upgrade their networks to 4.5G to acquaint users with several of the most important features of 5G networks, including significantly higher speeds, lower latency, and support for low-power IoT devices.

- **TV Advertising to Remain Flat** – While US TV advertising revenue in 2017 is expected to be flat with 2016, this forecast is a positive outlook for an industry that too often is declared a vanishing business - flat is the new up. Spending will remain steady due to several factors including daily TV viewing remaining robust, ad skipping is relatively limited, older people are watching slightly more TV, and streaming

continues to lack TV's mass appeal for certain kinds of advertisers. "Similar trends are visible in Belgium, but the media industry will need to think about how advertisements can remain appealing to millennials who watch half of the content on-demand," said Fosty.

Deloitte in Belgium

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