



By **PREMKUMAR SHESHADRI**

RIDING THE DIGITAL WAVE

WHAT WOULD you do if you were by the seashore and a giant wave came rolling towards you? Fighting against the tide is not an option. The only viable approach would be to ride the wave and become part of the action. Doing so is not only about the surfboard, but also knowing exactly how to ride. We know digital is necessary but are we sufficiently aware of what to do in this space? The giant wave of digital disruption is on the roll, so you better make up your mind – fast and learn sufficiently about it. Artificial Intelligence (AI), Internet of Things (IoT), Cloud, Machine-to-Machine (M2M) communication, Blockchain, Cognitive technologies are aggressively and permanently disrupting business as usual.

A colleague recently described his experience at a reputed hospital. The MRI scanner had broken down and the hospital staff was helpless. Such a frustrating ex-

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perience can now be significantly minimised. The hospital could have implemented IoT-enabled monitoring and proactive maintenance of its sophisticated medical devices. In healthcare, IoT is becoming the standard integral enabler of enhanced patient care. MRI and CT scanners or even lab test equipment can now be remotely monitored to predict possible problems. More importantly, such technologies are enhancing device and equipment utilisation and delivering higher RoI and better customer/user experience.

According to a World Economic Forum Report, 500 million devices were connected to the internet in 2005. This number is expected to be a trillion by 2030. This hyper-connected world signals a tectonic shift for companies and industries. Little wonder then that IoT has already been labeled as the next "digitised industrial revolution" with massive adoption across healthcare, manufacturing, logistics etc.

In the area of cognitive learning, consider what a super computer can do. Super computers can leverage their own IOT and AI capabilities to integrate with cars for a richer driving experience. They can not only enable vehicles in 'self-healing' to prevent break-downs, but also collect localised weather data from the car's sensors to significantly enhance the driving experience and driver safety. A further extension of this technology-enabled capability are self-driving cars.

AI on its own is making inroads into places and professions that were traditionally dependent on human intervention. For example in the near future, AI platforms are expected to correctly diagnose diseases and become arbitrators and 'argue' legal cases. This is certainly not science fiction; it's already happening, much sooner than we would want to believe.

Another technology, Blockchain, though still at a nascent stage, is at the peak of the Gartner Hype Cycle for Emerging Technologies 2016. With its ability to store multiple bank transactions in one centralised ledger, ac-

cessible by all parties and regulated by a decentralised network, Blockchain is poised to have a transformational impact on businesses. The far-reaching effects of cloud and mobile connectivity are breaking technological barriers and reducing the costs associated with establishing global platforms. These platforms are major enablers of innovation and are geared to deliver on-demand, any-device, simplified and personalised services.

Each of these technologies are transformational. But imagine the impact and potential when they converge. And imagine the power of businesses that embrace and implement them effectively. The distributed ledger technology behind Blockchain can fast-track IoT's scalability by supporting huge IoT ecosystems of the future. In the telecom space, we will see Blockchain technology successfully leveraged to secure smart home IoT ecosystems. As most smart home devices are controlled through mobile apps, user biometric information will be added to the Blockchain hashes to tie in user identity and prevent compromised mobile devices from taking over the network. This way, Blockchain will be able to verify both the identity of IoT devices and the people interacting with those devices.

The future of devices will see IoT transitioning towards a network of autonomous devices that can interact with each other and with their environment to make smart decisions without human intervention. Blockchain technology will support a shared environment based on Machine-to-Machine communications. When shopping with an IOT device, for instance, other connected devices will track what you are shopping and finally bill your digital account.

These technologies offer limitless possibilities for a seamlessly connected world, where the consumer will truly be the king. It is up to businesses to ride the wave or get swept aside by the digital tsunami. ■

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