

Will IoT force every company to be more tech-savvy?

Companies in almost every sector of the economy must become increasingly technology-focused as more devices are connected to the internet.

Devices embedded with smart chips to report on where they are, what they are doing and how well they are performing can be a game-changer for manufacturers and service providers who can collect and interpret that data.

Like insurance companies, which are already examining data transmitted by our cars to skew premiums in favour of careful drivers. That's an example of the Internet of Things (IoT), the much-touted evolution that will see everything connected to the internet.



Eckart Zollner, the head of business development for JSE-listed ICT group Jasco

Until recently it was quite an airy-fairy concept, with people wondering why IT geeks think we need to communicate with our fridge. But it's already disrupting many industries, and companies will need to source more already-scarce IT skills to cope with the inevitable trend.

"It's affecting all sorts of companies and they are having to upskill themselves in the fields of IT, software engineering, data

processing and data management. They are going to have to bring new skills on board to deliver these new technologies,” says Eckart Zollner, the head of business development for JSE-listed ICT group Jasco.

A good example is vehicle manufacturers, which now have to be IT experts as well as engineers. Thirty years ago, less than 2% of the cost of a car went into its electronics. Now in-car technology accounts for about 15% of the cost, with sophisticated control instruments, touch screen navigation systems, and the ability to interact with your cellphone.

The big shift

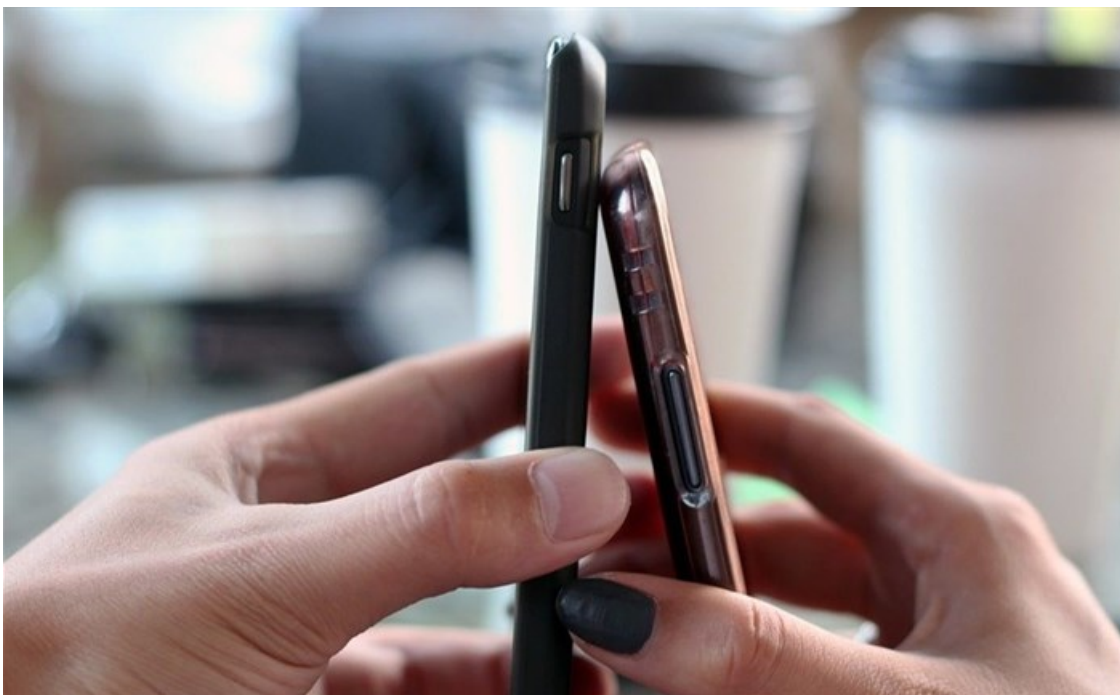
“The exciting part is the level of engagement IoT gives us and the opportunity to adjust the way we have been doing things over the last generation,” Zollner says. “It’s leading to a big shift in how we interact with technology. Computing power, data storage and transmission are developing so rapidly that businesses can adopt more data-driven processes, management and control,” he explains. “In the past we didn’t have affordable technology to put into thousands of devices to collect data, and we didn’t have the networks to transfer the data or the processors or the storage capacity to handle it.”

IoT allows companies to notice and react to events or to customer demands far more rapidly by monitoring what’s happening in the field. For example, checking heavy-duty machinery in mines or factories once relied on field workers to physically examine them and submit a report. It could take weeks to visit each site and was subject to human error in writing up the findings.

“Companies were making their decisions on that, but the information comes too late and could have inaccurate data entries errors,” Zollner says.

The need for human intervention is becoming less

“Now they are building sensors and intelligence into the machine itself, so it tells you when something needs to be replaced or if the operating conditions are not within spec and it shuts down before any damage occurs. Certain processes no longer need human intervention because you can use artificial intelligence to analyse this accurate, real-time data, and put data-driven decision-making in place so a machine can make the decisions and carry out the interventions.”



Source: pixabay.com

This upcoming proliferation of connected devices also enhances the global nature of the marketplace. “If you used to compete with five companies in South Africa, you’re now competing with everybody in the world, but the world also becomes your marketplace,” Zollner says. “The bottom line is that you have the market opportunity, but you also have

competition from everyone. You can't work in a vacuum and insist on doing things the same way you have been doing for 20 years because other businesses are going to steal your customers."

New opportunities

IoT is opening up new opportunities for smart companies to change the way they operate, and the markets they target. But it also requires more IT skills and data analysts to benefit from the information their connected devices will feed them.

Instead of trying to recruit those skills, manufacturers and service providers could work with IT partners that understand IoT and handle the data collection, processing and analysis. The best solution may be a combination of the two, by using an IT partner to collect and process the data, but hiring specialised data scientists in-house to translate the findings and devise specific actions for the future based on this glut of new-found information.

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