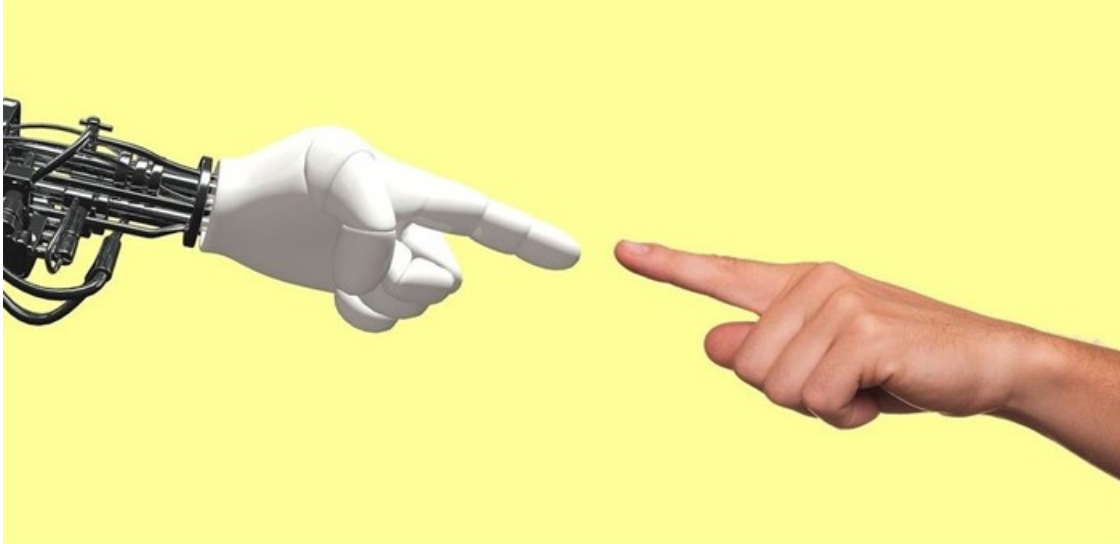# Tech trends that are part of our daily lives

At the beginning of 2018, technology concepts and concerns such as cybersecurity, artificial intelligence (AI) and cloud computing were on the tips of everyone's tongues.

Source: pixabay.com

Looking ahead to the coming year, these are still very relevant, and they're just getting better, smarter, faster and set to be more efficient in 2019. But they're no longer just trends because they're becoming embedded in our lives, and will be for a long time to come.

Advances in computers, machines, "things" and algorithms will allow these technologies to handle more mundane tasks, increasing productivity and efficiency in the workplace, allowing time to focus on more important business issues such as product development, innovation, efficiencies and increasing profitability. In short, enabling organisations that embrace advances to increasingly focus on core value proposition.

Tony Walt, chief solutions and operating officer at Internet Solutions looks at these technologies that will continue to make waves in 2019.

- ## Artificial Intelligence

  The idea that AI is simply a robot programmed to perform everyday tasks fails to give this technology enough credit.

  > We've been talking about AI for a while but now we're seeing the promises of this technology come to fruition. Arguably, this should no longer be considered a "trend" since it is already established and will continue to become more entrenched.

  AI is starting to change various sectors, including retail, healthcare, manufacturing and more. In the healthcare industry robots are being taught to use data to create new, minimally invasive, surgical techniques.

  The big 3 questions on healthcare and AI
  Karen Feldscher 21 Nov 2018

In agriculture, drones are being used to review fields for signs of stunted or damaged crops allowing farmers to enhance their production models to decrease risk, waste and liability. The next step for AI is contemplating the ethics associated with this technology and how companies should approach this responsibly.

There are few amongst us that have not engaged with AI in one form or another, and probably were not even aware of it!

- ## The Internet of Things (IoT)

Gartner expects that 20.8 billion "things" will be connected by 2020, excluding smartphones, tablets and computers.

This will make the dream of smart cities and businesses a reality – but only if connectivity advances at the same pace. IoT promises a myriad of new business opportunities for non-traditional device makers that connect "things" to the Internet that have never been connected before.

IoT is as simple as ABC...D!
16 Nov 2018

As new types of IoT devices are introduced, the ability to automate critical functions and gather vital physical-world information, and so reduce the risks of business loss and human error, increases exponentially.

The merging of the "physical" and "virtual" world by becoming "instantly aware" provides the opportunity for business to fundamentally change their business processes and in many respects reinvent themselves in a world where continuous reinvention is a necessity, not a luxury.

- ## The Digital Twin

A Digital Twin is a digital replica of physical assets (physical twin), processes and systems that can be used for various purposes. The physical twin can be a car, jet engine or bridge.

Sensors on the physical twin collect data that can be mapped onto the virtual model. Once both twins are active, this allows businesses to gather crucial info about the physical twin via the virtual twin.

New realities beyond traditional IT that embrace Industry 4.0
17 Oct 2018

For South African businesses the digital twin provides them with an opportunity to monitor how they streamline operations, plan, make decisions and implement strategies at a virtual level.

Through the use of digital twins, businesses can identify how consumers are using their products or services and use these insights to anticipate customer preferences.

• Cloud Edge

The future of cloud technology is at the edge. It's estimated that by 2025, 60% of cloud services globally will be located at the edge to meet consumer expectations. Sometimes referred to "fog computing", Africa has already demonstrated an appetite for new technologies which solve long-term issues especially in the financial services industry with algorithmic trading by way of example.

As IoT and connected devices become more commonplace consumers are beginning to demand quicker solutions to their problems. In an interconnected world, this means cutting down on processing times to react quickly to changing environments and demands. In order to do so, edge computing has a major advantage.

Edge computing will come of age in 2019
15 Nov 2018

Traditional processing in the cloud can introduce additional latency as a result of long-haul connectivity between the endpoint and the cloud, especially when the transactions are micro-transactions. Using edge computing and processing as close to the "end point" as possible significantly reduces latency and reduces the time taken to make transactional decisions.

For ISPs it will present an opportunity to provide their services in new markets and across new computing models.

• Cybersecurity

No list of trends would be complete without mentioning security. Quite simply, the more devices that are connected to the Internet, the greater the risk of security breaches. According to ISACA, a non-profit information security advocacy group, there will be a global shortage of two million cybersecurity professionals by 2019.

Forcepoint reveals cybersecurity predictions for 2019
23 Nov 2018

This is not ideal when one considers that cyber attacks are increasing every day. Pursuing talent acquisition strategies in this area of skill will ensure a competitive advantage for organisations.

Further to this, interrogating and remediating the security posture of a company's estate is no longer an annual "event", but rather a continuous process which should be embedded into the organisation at all levels.

There are some exciting possibilities on the horizon for 2019. The key is to have an early awareness of these opportunities. These and many other innovations will undoubtedly change how we do business and how we live our lives. It is the

businesses that leverage these digital advancements that will stay ahead.

And if anything, it's not just about making the most of a single trend, it's about identifying how these different trends fit together and how one innovation enables another.