The 2017 futurist forecast

Renowned futurist Graeme Codrington shares his top tech predictions for 2017 with us.

Robotics, Artificial Intelligence (AI), machine learning… the subjects of science fiction are fast becoming the reality of IT decision-makers.

Working with organisations across the public and private sector through 2016, and helping build their plans for this year, we thought an objective view on the increasingly complex and rapidly evolving ITC landscape would be of value.

And so, in conjunction with our own internal trend-watchers, we interviewed internationally recognised futurist Graeme Codrington on what he thinks our world will look like in 2017.

This is a high-level summary of the top trends he foresees affecting large organisations over the next 12 months, and some ideas on how we think you can practically respond to these predictions.

Graeme specialises in the 'future of work' and has helped companies across the world understand the forces that will shape our lives in the next ten years.

He has five degrees, five best-selling books and lectures at five international universities including London Business School and Duke. He is also one of the founders of strategy consulting firm TomorrowToday Global.

He works in over 20 countries every year with some of the world's top companies.

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No more 'wait and see'

Communications services

Data centre systems

Software

Devices

IT services
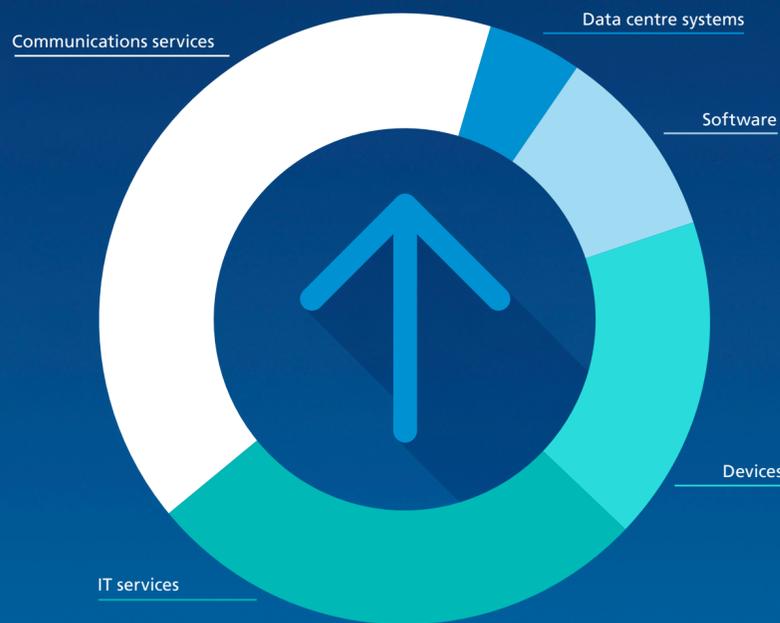
Gartner says global
IT spending to reach
$3.5 trillion in 2017.*

While you're 'hunkering
down', **your competitors
might be upgrading.**

2017 is going to be more of the same, but we'll be less surprised by everything.

I think we're going to look back on 2016 in 30 or 40 years and recognise that it was a remarkable year for some significant technological breakthroughs. I'm not anticipating any major new trends and technologies in 2017, but people will be looking for the ROI on the advances that were made in 2016.

Unfortunately for the companies who hunkered down in 2016, they're going to discover that **'waiting and seeing' isn't a viable business plan**. I think that quite a lot of companies delayed the implementation of new strategies, technologies and systems in 2016, amidst all the uncertainty. But they're not going to have much more clarity in 2017.

The default setting for enterprises is going to be to delay new tech implementation for as long as they can afford to. Instead, they'll spend more time planning, and this is an ideal time for enterprises to engage consultants who can help them meet their 2020 goals.

However, despite the ongoing uncertainty, now is the time for investment; now is not the time for belt-tightening. **Companies who hunker down and just cut costs will come to regret it in three to four years' time.**

- The speed and ubiquity of mobile connectivity is going to make us more comfortable with virtual

assistants and using AI on the move. Believe it or not, we're about to be even more connected to our mobile devices.

- Virtual reality (VR) and augmented reality (AR) are going to progress from being last year's favourite Christmas gift to the mainstream. In particular, I think these are going to have an impact on conferencing and training within enterprises. These are easy areas to cut costs from in the short-term, but can't be ignored forever or there's the risk of creating a skills gap within an organisation.

- Security is a massive issue and in 2017, I think we'll see a flood of security issues. The Ministry of Defence recently revealed that nearly 800 computers had been lost or stolen from the department in 2015–16[**]. No sophisticated hacking necessary. It highlights that all areas of security need attention. Every piece of technology we use can and will need to be more secure.

This is a pivotal moment in history, and you cannot expect to move forward if you refuse to invest in trying new things. And that's going to mean some failures and some mistakes. A lot of companies are holding back because they are afraid of failure, but this fear is also holding them back, and leaving them more vulnerable to a volatile, changing world.

In 2016 the U.S. Presidential election and the E.U. referendum back home sent waves of volatility through markets, and an uneasy legacy of uncertainty for enterprises, employers and entrepreneurs.

Will 2017 hold the answers we're all looking for?

How you can approach the year ahead:

1. Decide what strategies you can afford to delay, and which areas are non-negotiable.

2. Look for ways to better monitor, measure and analyse your current operations to help prioritise investment.

3. Create an implementation plan alongside a trusted IT partner that is flexible and allows for experimentation.

Source: *Gartner Press Release.
        **According to data released under the Freedom of Information Act.

Experimentation is the new innovation

70%

70% of companies report having at least one failed project in the last year.*

If failure is so prevalent, why are we still afraid of it?

There are four things companies will need to consider to stay competitive over the next 12 months:

1. **The integration of cloud and mobile:** A lot of companies have seen cloud and mobile as separate technology strands, but in 2017 we'll realise that they must be inextricably linked. You need the power of the cloud with a mobile interface.

2. **Big data for the frontline:** We need to make sure that we give all decision-makers – not just board members and executive leaders – access to data that enables their decision-making. Big data needs to be used to inform micro-decisions at the point of customer interaction. As a result, fast data will be the new big data.

3. **AI is going to continue to be huge:** One of the top trends we're going to see in 2017 is the AI 'chatbots'. This is, simply, an articulation of how people are having conversations with machines. Literally conversations. This comes down to four things: voice recognition, natural language processing, real-time translation and machine learning. In particular, enterprises running Microsoft software will start finding APIs that can incorporate real-time translation in their own CRM systems.

4. **Experimentation:** Successful companies have shifted their mindsets towards experimentation. At the moment, the emphasis in many companies is on making a watertight business case for every single decision, and only proceeding after detailed analyses, multiple layers of approval and total buy-in. In the digital era, we're going to need to be quicker and more confident, even when we don't have all the details. Some of what we need to do can't be fully pre-planned. We're only going to know if it works by actually trying.

Obviously, we need to develop ways of experimenting that don't hurt us too much when we fail. The principle of 'fail fast, fail cheap' rings true, and there are methodologies that allow us to do rapid prototyping and faster development cycles.

'Innovation' is a buzzword in the death throes and yet organisations are still desperate for the silver bullet that will transform their businesses and disrupt their industries.

But fear of failure and a control mindset might be holding them back.

How you can embrace a culture of experimentation:

1. Consider creating a budget for experimentation.

2. Give employees the freedom to try new things – without executive approval.

3. 'Fail fast and fail cheap' and then learn from those failures.
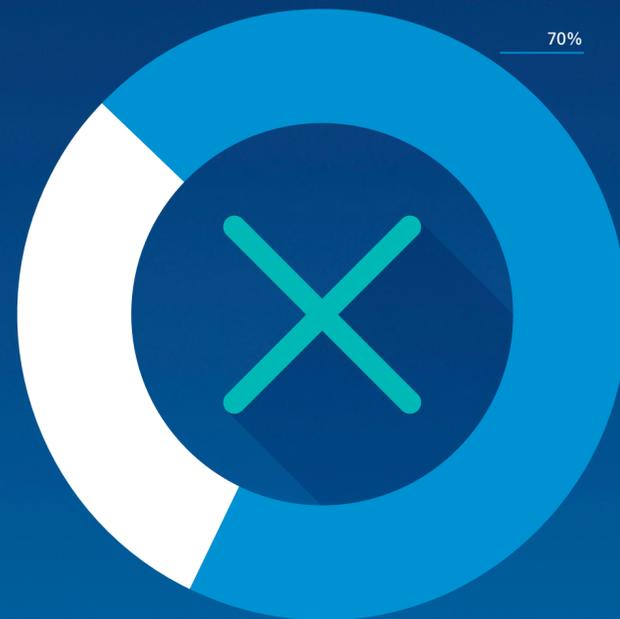
Robots won't replace people

80%

80% of executives believe **artificial intelligence** improves worker performance and creates jobs.*

A workplace where human beings are **rewarded for humanity.**

Robots aren't going to replace people in the next 12 months and probably not in the next 12 years either. No matter how much technology changes, there will always be a hybrid system.

Machines will, in time, replace the analytical, diagnostic and empirical aspects of work. What they cannot replace is the empathetic, intuitive, caring and creative aspects of our jobs. They can't replace 'fun'. Machines don't tell jokes. Not good ones, anyway.

But we do need to prepare for machines to replace certain parts of our jobs, the parts that machines are better at. To prepare for that we need to ask ourselves two questions, 'which parts of my job require humanity?' and 'how can I spend more time developing these 'soft' skills?'. This is so you don't waste time trying to get better at a skill that a machine will be better at anyway.

With regards to people in the workplace, the millennial generation is going to be the single biggest HR issue by 2020, and we're going to start feeling that in 2017. Enterprise HR departments need to start working a lot harder to integrate with IT, because IT infrastructure is a growing cause of dissatisfaction from young talent.

At the same time, they're not the only age group to consider. Last year, Andrew Scott and Lynda Gratton published an excellent book on the reality of an increasing lifespan in 'The 100-year Life'. What this means is that, in addition to increasing the retirement age, we need to recognise that people in their 80's and 90's are going to be a consuming and working with the tech we create now. Often when we think of IT, we only consider the youngest users, but if you look at Skype, their success as an app lies in how they made it easy to have a face to face conversation with two clicks. Regardless of the age or 'maturity' of the user, it's easy and intuitive. We can't only focus on building technology that only appeals to seventeen-year-olds.

The on-demand workforce is also going to migrate from being an HR to an enterprise IT issue. How do we engage with employees in the future where a significant number of workers are not going to be full-time employees? This is a micro-outsourced workforce, often working virtually. Managing, connecting and engaging this workforce is something that needs to become a consideration.

Are robots going to eventually replace us all? What jobs are safe?

Do we really need to choose between artificial intelligence and real people?

How you can start developing a human-hybrid workforce:

1. Structure your operations to make sure that your people tap into their passion and enthusiasm, and make sure that your customers feel the benefit of their 'human touch'.

2. Invest in training and aptitude testing that makes the most of employees' human qualities, leave the robotic processes to the robots.

3. Start integrating HR and IT with regards to creating a flexible, accommodating working environment that addresses the needs of millennials.

4. Look at implementing hybrid CRM systems can ease the workload of human workers, and provide a more streamlined experience for your customers.
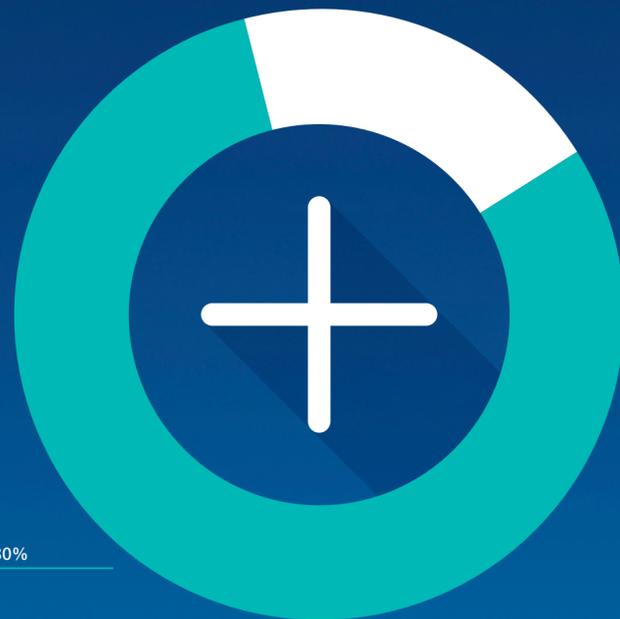
In conclusion....

Graeme's message is a positive and liberating one. Often, our fear of the future can leave us in 'analysis paralysis', and with so much technology moving so quickly in so many different directions, enterprises are under tremendous pressure to not make a wrong move.

However, the insights in this report remind us that we are living in a truly thrilling moment in time. Technology presents us with more tools and opportunities now than ever before. The onus now is on re-imagining our processes, and re-ordering our priorities for a new, digital age.

O_2 has been constantly reimagining how people work for the last 30 years. It's why organisations across the public and private sectors trust and strategically partner with us to help them drive up cost efficiency, productivity and responsiveness.

For more information on O_2, our enterprise offerings, and our experience in digital transformation, please call 01235 433507 or visit o2.co.uk/enterprise.
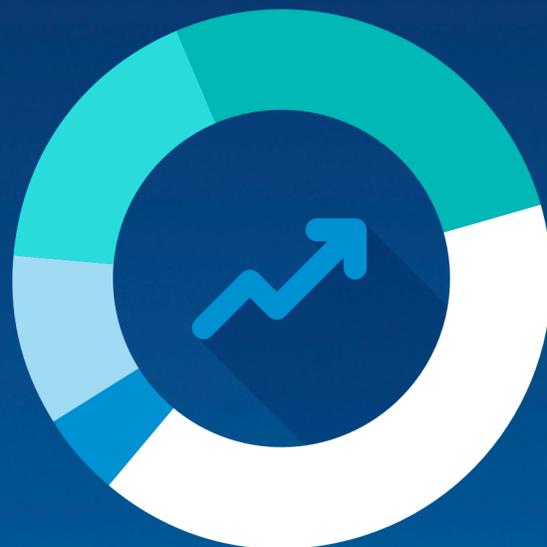
Plan for change

The cloud of uncertainty isn't going to clear up anytime soon. Prepare for volatility by creating a framework for action that accommodates change. Consult with expert partners, stay flexible and invest in priority areas.

Experiment without fear

The telephone wasn't invented through 'optimising' letter writing. And innovation won't come from just 'optimising' what you've always done. Accept that failure is a part of experimentation, and experimentation is a crucial part of digital transformation.

Celebrate humanity

Embrace AI and robotics for the way that they can simplify and improve the lives of your human workers, and your human customers. Look for where a human touch cannot be replaced, and invest time and effort in upskilling workers in these areas.

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