



Enabling digital
transformation
through the
intelligent cloud

In February 2017, Microsoft and IDC hosted an exclusive roundtable luncheon for chief information officers. The event explored how digital transformation can be enabled through the intelligent cloud.

Guests were given the rare opportunity to hear insights from Scott Guthrie, the Executive Vice President of the Cloud and Enterprise Group at Microsoft, who was visiting Sydney that day. Guthrie has been with Microsoft for over a decade, granting him a unique perspective on the evolution of cloud technology – and where it's headed.

This paper identifies the key challenges organisations are facing as they look to the cloud to enable their digital transformation, and offers advice on how to overcome those challenges. Guthrie also shared stories of several organisations who have successfully used the cloud to transform their business.



About Scott Guthrie

Guthrie is the Executive Vice President of Microsoft's Cloud and Enterprise Group, managing key aspects of the company's cloud, security and development tools businesses. His team builds Microsoft Azure, Windows Server, Power BI, Visual Studio and the Enterprise Mobility Suite, among others. He was the co-creator of ASP.NET and ran the teams that built the .NET Framework, which helps users create mobile, desktop and web applications that can run on multiple devices.

What's the situation?

“There's change that's happening across the industry. Everyone is trying to figure out how to take advantage of the cloud and how to go from where you are today to the way that will deliver ROI and deliver business outcomes that your organisation is looking to achieve.”

Scott Guthrie

The future is in the cloud. Around the world, more and more organisations are considering the potential of the cloud to revolutionise how they do business. What is driving this change? Guthrie believes one reason is the increasingly global work environment. The boundaries of distance have faded to reveal a global market of business partners, products, stakeholders, customers and employees. While this offers businesses a range of exciting new possibilities, it also means they must transform how they operate to stay competitive.

Customers who are considering the cloud as a transformational tool, often tell Guthrie that they're not interested in the latest technological tools, data or the Internet of Things. Their driving motivation to transform with the cloud is about people. Organisations look to the cloud to help employees better collaborate and connect, to improve productivity, to create apps that help customers and to enable their businesses to interact with those customers in a meaningful way. So, what's holding them back?

Challenges facing businesses today

“It’s not enough to have infrastructure, data or AI [artificial intelligence]. They’re all necessary but if you can’t take data and insights and turn them into intelligent actions, you don’t get value out of that data or the business outcomes you want.”

Scott Guthrie

The challenge for businesses lies in knowing how to turn knowledge into action. According to Guthrie, many organisations can collect increasing amounts of data, but are unclear how to use it meaningfully to their advantage. Organisations also don’t know how to integrate new data analytics or data intelligence tools into their existing systems to make the best use of data. Another challenge is employees’ perceptions that adopting new intelligent technology means replacing people with robots. Perhaps the largest concern is security – how can we trust the cloud?

Your journey to the cloud

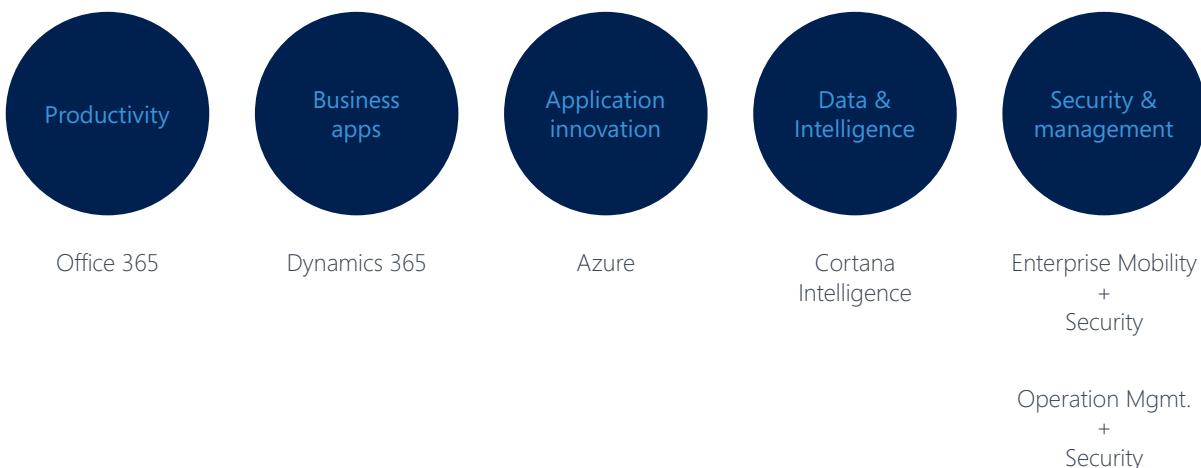
“The cloud is about a number of different scenarios and, importantly, how when interposed together they really deliver business outcomes and solutions.”

Scott Guthrie

Guthrie identified five ways organisations can approach their journey to the cloud. Importantly, each focus can drive an effective digital transformation on its own. However, when combined, they enable a comprehensive and powerful business transformation.

1. **Productivity:** Use cloud-based applications, such as Office 365, to empower employees to collaborate better and work more efficiently.
2. **Business applications:** Leverage cloud-based infrastructure to deliver new applications.
3. **Application innovation:** Determine how new applications can enable deeper interactions with customers and optimise business processes.
4. **Data and intelligence:** Turn the data that fuels cloud-based applications into intelligent action that delivers ROI.
5. **Security and management:** Securely manage and deploy cloud-based applications and infrastructure while capitalising on existing investments and merging all tools into one cohesive environment.

To encourage businesses to start their journey to the cloud, Microsoft began a mission to create a global trusted hybrid solution that would help overcome any challenges.





Global

Microsoft has 34 Azure regions – or clusters of data centres that provide software, platforms and infrastructure as a service – and six more are planned (more than Google and Amazon Web Services combined). These regions allow businesses to access a virtual network anywhere in the world, through which they can conduct business and interact with customers – achieving global reach.

What is an Azure region?



An Azure region is a cluster of data centres.

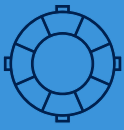


Microsoft aims to have 38 regions around the world.



Regions are 100% carbon neutral.

One region can be the size of four football fields and have enough network cable to circle the Earth twice.



Trusted

“Trust is table stakes for doing anything in the cloud. If you don’t have a secure environment or system you can trust, all other cool things are moot. They’re not viable.”

Scott Guthrie

Security is essential when you manage more than a million servers. Microsoft has attained more certifications than any other cloud vendor to give customers confidence in the cloud. It also regularly meets with regulators to conduct audits. By meeting the most stringent security requirements and ensuring each Azure region meets the certifications specific to its location, Microsoft makes it possible for businesses to meet any unique requirement and compete in any market.

Microsoft has also invested heavily in building security into its own infrastructure, so users have to only opt in. When a guest asked what could stop an employee maliciously or accidentally exporting confidential data from the cloud, Guthrie detailed the built in security capabilities for such a scenario.

Application management: ‘Copy’ and ‘paste’ functions can be disabled for employees who use cloud-based apps such as Outlook on their phones. This means they can’t copy private information outside the app. However, copy and paste can be approved for information moving between secure apps such as Office 365 or Dynamics 365. This ensures data doesn’t leave an organisation’s cloud environment.

User authentication: When certain suspicious conditions are detected, such as a user being in an unexpected location, the user is automatically prompted to provide multiple forms of authentication, potentially including a fingerprint.

Integrated protection: If you have integrated multiple apps and platforms into your cloud environment – for example, Salesforce within Office 365 – Microsoft-built ‘connectors’ can ensure security capabilities follow and protect you when using each app.



Hybrid

“It’s not just one individual element. How do you deliver these things together? Data, Internet of Things, business processes, productivity. When you put it all together, the combination is super powerful.”

Scott Guthrie

To support employees onsite and offsite, the best solution is hybrid. Organisations can enjoy the mobility of cloud while leveraging existing on-premises equipment. This is particularly relevant for financial organisations, where some departments may require on-premises equipment while other staff members prefer to use the cloud.

Case studies: Organisations transforming through the intelligent cloud

“Every industry out there is taking advantage of Microsoft cloud solutions. It’s a chance to do transformational work.”

Scott Guthrie

90% of Fortune 500 organisations
use Microsoft cloud



BMW

Luxury vehicle company BMW wanted to deliver a more integrated, personalised customer experience so it built a cloud solution that connects the dashboard of a BMW vehicle with data analytics and the Internet of Things. The solution allows a BMW owner to lock the car from inside their house via their phone. A driver can even teach a car their preferences so it alerts them to opportunities. For example, a coffee-lover could teach their BMW to issue an alert when near a café, and even place an order. The cloud solution also allows BMW to update its cars every three weeks, much like updating the software of a phone – consistently improving the customer experience.



Rolls-Royce

Rolls-Royce is a global provider of integrated power and propulsion services for air, sea and land applications. To differentiate itself competitively, it transformed its offering to airlines from a product – engines – to an end-to-end service that includes scheduled and preventative maintenance. Using Azure and Dynamics 365, Rolls-Royce can analyse an engine and use machine learning to detect when it will likely need maintenance. This takes place as soon as an airline lands a plane.

Before it gets to the gate, Dynamics 365 automates a ticket to schedule the maintenance required. It can then assess which mechanic to assign to the job, and even review union legislation to understand who has been working overtime. Powered by the cloud, this system has transformed Rolls-Royce's business operations and customer service.



Real Madrid

Real Madrid football club is the most profitable sports brand in the world, with 350 million fans globally. It wanted to accomplish two things: delight fans and create new revenue streams. Using Azure, it created an online environment for fans that they could access on any device to interact with each other and watch highlight reels and games. This has built loyalty and a sense of community among fans.

Real Madrid also deployed Power BI, analytics and customer relationship management (CRM) infrastructure to collect data within this environment to generate new revenue. For example, when a company designs a new football jersey, its system can analyse customer data to inform Real Madrid which fans are likely to buy it. Real Madrid can convey this information to the company and accordingly earn a part of the royalty for the jersey. By powerfully combining data with action, Real Madrid has ensured it can support future growth.



Metro Bank

Metro Bank is the fastest growing bank in the UK – and it doesn't own a single data centre. As the first retail high street bank in the UK, Metro Bank wanted to create an incomparable customer experience. Now, when you walk into the bank, you can set up a fully operational account, complete with chequebook and credit card, within 15 minutes.

How? Metro Bank created a system in Azure and Office 365 that would help its employees understand customers quickly. It's supported by automated intelligence from Dynamics 365 and Power BI. Employees can access the platform via tablets or other devices to find out about customers' histories in real time. It tells them if a customer has had a negative experience with the bank, their preferences and other information to help create a rich, personalised customer experience. The system has more than 7,000 clients so far.

Beyond Bank

Beyond Bank

Beyond Bank is one of Australia's largest customer-owned banks. To continue to grow it knew it needed to provide a superior customer experience. But its customer service systems were inefficient and time-consuming to navigate. And any new CRM system it implemented would have to meet its stringent security and compliance requirements.

Beyond Bank decided to use Dynamics 365, and became the first bank in Australia to do so. Dynamics 365 collects real-time data from core banking processes to create an accurate 360-degree view of each customer that staff members can quickly and easily understand. Microsoft's cloud certifications ensure that the system fulfils the industry's regulatory and security requirements. Beyond Bank is now looking at using real-time customer sentiment analysis and investing further in the Microsoft stack for greater integration, value and an exceptional customer experience.



KPMG

KPMG, a leading professional services firm specialising in audit, assurance and tax services, wanted to empower its employees with the technology they needed to work effectively on any device. This was a challenging task as KPMG has more than 5,500 employees serving 15,000 organisations. After a competitive tender process, KPMG chose to start its journey to the cloud with Microsoft. It adopted Microsoft Dynamics 365, a powerful combination of ERP and CRM applications, to create a user friendly and comprehensive CRM system that would help its employees keep track of clients and quickly access the latest interactions, updates and opportunities related to them.

The new system has enabled employees to deliver an improved service. Its valuable insights, mobile accessibility and integration with other applications such as Outlook has effectively empowered employees to build stronger experiences for clients.



BUPA

BUPA's mission is to encourage longer, happier, healthier lives for all Australians. Yet customer satisfaction was declining after sign-up. It was also grappling with multiple technology systems, which prevented a seamless internal process. It decided to actively pursue digital transformation to improve its customer service and achieve its mission.

Microsoft Dynamics 365, enabled BUPA to understand its customers and their changing needs better than ever before. Now, BUPA can collect customer feedback and sentiment from multiple touchpoints along their journey, including on social media. It's also rolled out a new customer feedback module in its CRM. Most importantly, customer satisfaction has increased and staff feel more empowered and engaged.



McDonald's

'Drive-thrus' are a significant part of McDonald's business operations, but they have remained relatively unchanged by technological advances. There are 10,000 possible variations of McDonald's menu items and it's easy to get combinations wrong. McDonald's wanted to boost the efficiency and accuracy of its drive-thrus and empower its employees with the latest tools. It used Dynamics 365 in the cloud to auto-transcribe voice orders and translate those orders into actions for staff members. The process has considerably sped up the drive-thru experience, enabling McDonald's to serve more customers.



ThyssenKrupp Elevator Australia

Job security is a major concern for employees of organisations implementing artificial intelligence technologies. Many ask: Will a robot replace me? Microsoft believes technology empowers employees and helps them do their jobs quicker and more effectively. ThyssenKrupp Elevator Australia is a powerful example of this. When many of its technicians were about to retire, the business knew it needed a way to support its junior technicians through the transition.

The organisation uses predictive analytics to determine when an elevator may be about to break down, and sends a technician to resolve the problem. Now, when junior technicians are offsite, they wear a HoloLens device that displays information about what they're seeing to help them solve the issue. If they require further assistance, the technician can say "Help". The device recognises the word and automatically connects them to a senior technician via Skype. In this way, technology becomes an integral assistant to the technicians and improves the overall efficiency of the elevators.

"Technology doesn't replace people
– it makes them more successful."

Scott Guthrie



Microsoft

At the Sydney roundtable event, guests were given a behind the scenes glimpse of Microsoft's Azure network. Guthrie's team uses crowd insights, collected via Dynamics 365, to track and report mentions of Azure on Twitter. Intelligent analytics can analyse the sentiment of the discussion – if the user is happy or sad – and automatically feed negative comments to the Azure customer service team to manage. The system also automatically generates a CRM record for the user and can contact them to resolve the issue – all within two minutes.

The future

“There won’t be a single cloud – there will be multiple.”

Scott Guthrie

Guthrie’s insights reveal we are only at the beginning of our journey to the cloud. He believes that to succeed in the future, organisations must be able to integrate multiple platforms, services and apps. This will increase their agility and competitive value. He also believes that instead of a single cloud, there will be multiple versions serving various business scenarios and designed for different outcomes. It will be crucial for businesses to find a technology partner they trust to help them navigate this multiple-vendor economy.

Guthrie is also looking forward to the transformational impact the intelligent cloud will have on customer relationships. He demonstrated Azure’s facial recognition technology, which can determine facial expressions, age, gender and other characteristics. It can provide real time crowd insights and has the potential to radically change how businesses engage with customers. For example, it can detect real-time reactions to products or campaigns, enabling businesses to automatically adjust their product or message. Once it detected consumers of a certain age group, it could also suggest which products would be popular with that group.

Learn more

You can read more about Dynamics 365 [here](#).

The cloud is an integral part of an effective digital transformation journey. But to use it effectively requires the ability to turn data into action. To learn more about how your organisation could achieve this, take a look at some of our case studies and blogs.

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Please contact us to discuss your unique vision and challenges. We'd be delighted to support your journey to the cloud.