

FINANCE ON WINDOWS

MICROSOFT TECHNOLOGY IN BANKING, CAPITAL MARKETS AND INSURANCE



"Soaring technology costs are holding financial institutions back from providing the best possible service to their customers"

Hans Tesselaar, BIAN

SUMMER 2014



The modern data centre

Doug Hazelman explains how Veeam is helping financial services organisations to mitigate risk and enable the Always-On Business



Insurance | Cloud-based core systems
Risk analytics | Gaining deeper risk insight
Smart Banking | Innovation with Accenture, Avanade and Microsoft

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Welcome

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Reimagining financial services

The financial services industry is transforming to meet the needs of increasingly empowered customers, demanding regulators and more aggressive competition from traditional and unexpected sources. With this highly dynamic omni-channel landscape, combined with narrower margins and cost reduction imperatives, few still need to be convinced of the inevitability of digitisation and the need to reinvent business processes.

As the industry seeks ways to innovate with new business models, the cloud offers a compelling promise to massively shrink IT infrastructure costs, while opening doors to a new era of agility. At this year's Gartner Symposium ITxpo, analysts predicted that the majority of new IT spend will be focused on the cloud by 2016, and that nearly half of large enterprises will have hybrid cloud deployments by the end of the following year.

In our feature on page 26, we explore how the cloud presents insurance carriers with the opportunity to modernise core systems, run compute-intensive simulation and modelling, lower IT cost ratios and bring agility to the business. On page 32, we then move on to look at how financial services organisations can combine modern cloud and big data solutions with their traditional risk reporting tools to get faster access and deeper insights into a wider range of risk data.

I hope you enjoy this issue.



Karen Cone
General Manager, Worldwide Financial Services
Microsoft



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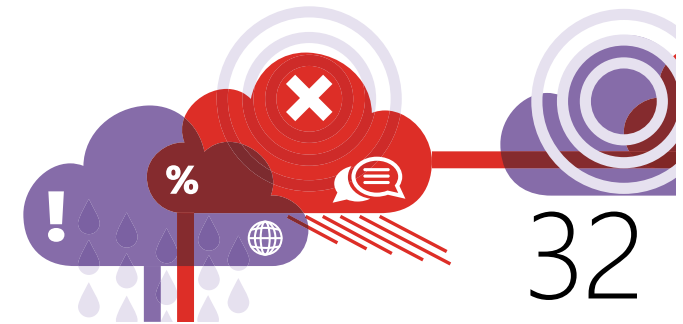
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Microsoft drives new enterprise culture with data-analysis tools

Satya Nadella outlines the need for enterprises to establish a culture of ambient intelligence to analyse data and drive business insights



Satya Nadella highlighted the need to create a data culture that encourages interaction with all employees in organisations

Big data and the internet of things (IoT) were top of the agenda as Microsoft released a limited public preview of its new Azure Intelligent Systems Service at the Accelerate Your Insights event in San Francisco on 15 April.

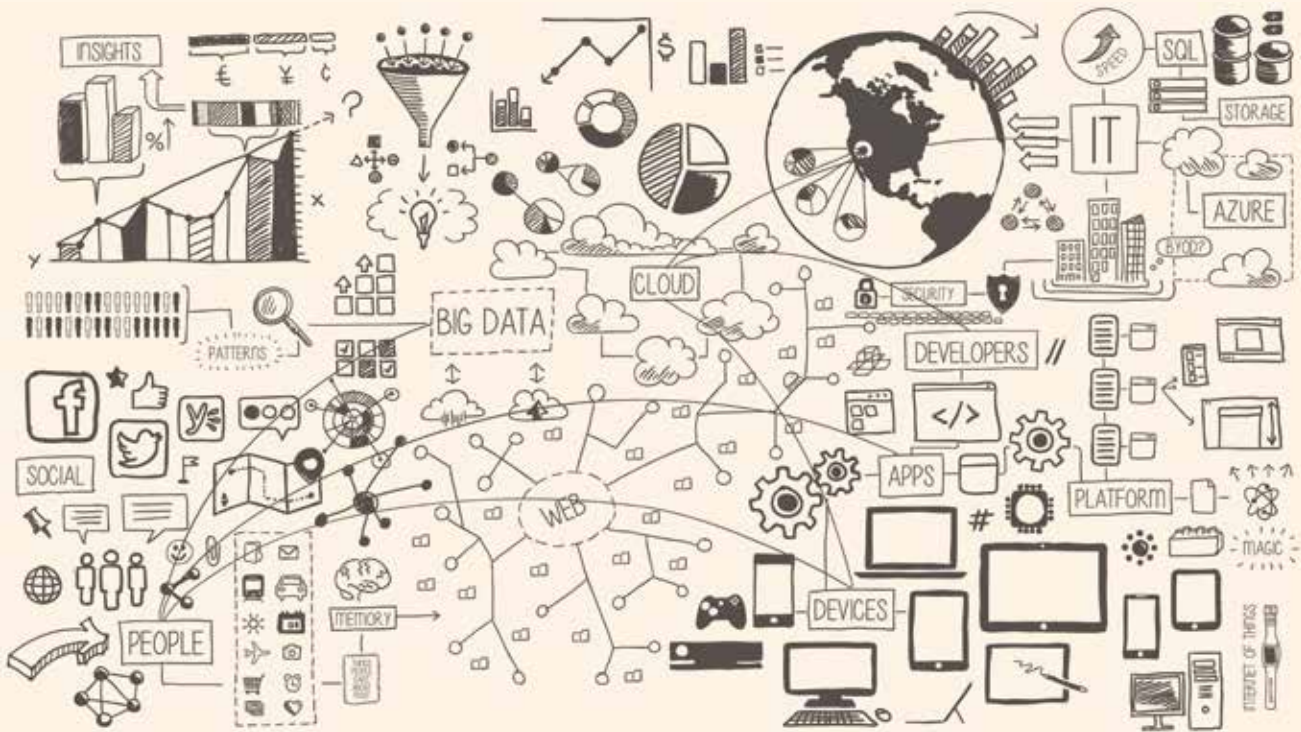
Creating a platform for customers to capitalise on the IoT, the Intelligent Systems Service provides the necessary cloud and business intelligence tools to connect and manage large volumes of machine-generated data from devices and sensors, regardless of

the operating system. Customers can use the cloud-based service to extract key data from their various IT systems or devices, enabling them to identify new business insights and opportunities to optimise processes and increase revenue.

Built over the last 12 months, the Intelligent Systems Service leverages various Microsoft platforms including Power BI for Office 365; Azure HDInsight for Hadoop; PolyBase, which combines structured and unstructured data in a data warehouse

appliance; and Power Query for Excel, which makes it easier for users to discover data.

Speaking at the event, Microsoft CEO Satya Nadella explained that as both human and technological interactions become digitised, it will become increasingly important that companies are able to access and manipulate information to achieve a return on data, or a data dividend. He also added that the new solutions will enable customers to embrace the IoT and benefit from the era of so-called ambient intelligence.



Intelligent systems help companies to connect and manage large volumes of data from devices and sensors

In a later blog post, Nadella explained Microsoft's concept of ambient intelligence. "The opportunity we have in this new world is to find a way of catalysing this data exhaust from ubiquitous computing and converting it into fuel for ambient intelligence," Nadella said. "This fuel will power improved experiences, understanding and interactions. When these devices around us gain the capacity to listen to us, respond to us, understand us and act on our behalf, we enter into an entirely new era. The era of ambient intelligence."

In addition, Nadella highlighted the importance of creating a data culture that encourages interaction with all employees in organisations.

"A data culture isn't just about deploying technology alone, it's about changing culture so that every organisation, every team and every individual is empowered to do great things because of the data at their fingertips," said Nadella. "This means bringing together people, IT and developers to create a cultural shift that is just as important as systems and infrastructure. This is especially true when every employee can harness the power of data

once only reserved for data scientists and tap into the power of natural language, self-service business insights and visualisation capabilities that work inside familiar apps such as Office."



@kdnuggets
Microsoft @SatyaNadella is very eloquent on new tools to empower people to get the data dividend #InsightsAwait #AmbientIntelligence

Microsoft also released two other updates to its current data platform across Office 365, Azure and SQL Server. These include SQL Server 2014 – which delivers built-in memory technology and public cloud scale and disaster recovery with Microsoft Azure – and Analytics Platform System. The solution combines the SQL Server database and Hadoop technology to help businesses take advantage of big data.

US\$7.3tr

The expected value of the IoT market by 2017

Source: IDC

26bn

The number of units that will be connected by the internet of things by 2020

Source: Gartner

Marketwatch

The latest news in banking, capital markets and insurance

Etronika debuts BANKTRON in MENA

Etronika used a dual-approach method when it showcased its BANKTRON solution at the Arabian Banking Technology Exhibition and Conference 2014, held in Bahrain this April.

BANKTRON was presented as both a tool to enable banks to establish a multi-channel banking system, as well as a customer-centric business ecosystem platform, which enables the bank and its partners to share data to create a complete customer profile. The solution can enable companies in the Middle East and North Africa region to respond to some of the biggest challenges in the financial services industry.

BANKTRON allows companies to provide customers with a customer experience, whether they are accessing financial services via the internet, self-service terminals, mobile devices, or by visiting a physical branch. In addition, the solution is designed to foster data sharing and comprehensive data analysis between competitors. This allows the bank to offer personalised services, while providing its partners with a new channel to contact customers. The bank's clients can also access the service they need through a single provider.

New features for BANKTRON

Etronika's BANKTRON dual solution has been updated with several new features that will enable financial institutions to offer customers a multi-channel environment. They include:

- Personal approach: users can create a personal banking system or customise the user interface with integrated widgets and shortcuts
- Ease of use: management of finances is simple, intuitive and easy
- Unified user experience: provides a secure, responsive and familiar interface across all e-banking channels
- Powerful functionality: all banking functions can be accessed on every channel.

BIAN releases new industry standard framework

The independent not-for-profit organisation BIAN has released the latest version of its industry standard framework, which is designed to help banks adopt a standardised IT infrastructure.

Service Landscape 3.0 introduces more than 180 new business scenarios into its reference structure, including back-office, trade finance and sales.

"Soaring banking technology costs are holding financial institutions back from providing the best possible service to their customers and making updates complex, time consuming, risky and costly," said BIAN executive director, Hans Tesselaar. "Implementing the BIAN standard will encourage greater business efficiency across banks, so that they can compete in the areas that really matter."

Accenture opens Innovation Center in Jakarta



Beat Monnerat, senior managing director of financial services in the ASEAN region, opens the Innovation Center

Accenture has opened an Innovation Center for Financial Services in Jakarta to help Indonesian banks and financial service providers improve their digital and mobile-banking services.

Showcasing a range of Accenture solutions, the centre enables industry executives to participate in interactive workshops and see examples of new technologies that could be implemented in Indonesia and throughout the Association of Southeast Asian Nations region. Financial service providers can learn

how to capitalise on Indonesia's growing mobile devices market to attract new customers, improve customer satisfaction and reduce costs. Representatives at the centre will also demonstrate how financial service providers can provide peer-to-peer money transfers between mobile wallets; increase mobile banking services for existing clients; and offer additional payment options, including contactless payments at the POS, international remittances using a mobile phone and redemption of loyalty coupons.

NIC Bank standardises systems with Microsoft suite



Integrated financial services provider NIC Bank Group has deployed a suite of Microsoft solutions to standardise its operating systems and minimise costs.

Working in collaboration with Microsoft Premier Support Services, NIC Bank – which has branches in Tanzania, Kenya and Uganda – implemented Microsoft Office 2013, Windows Server 2012, System Center 2012 and SQL Server 2012.

The Microsoft suite has also centralised the bank's management of all software applications and decreased downtime for maintenance. In addition, the bank has improved patch, inventory and baseline PC management, which has increased operational efficiency and employee productivity.

David Igweta, the bank's head of IT services, said: "This approach allows us to resolve IT support issues much more quickly and minimise disruption to the business."

Triglav Insurance opts for Office 365



Serbian insurance company Triglav Insurance has deployed Microsoft's Office 365 and cloud-based Exchange platforms to improve the security and reliability of its communications systems.

Triglav also purchased Microsoft Lync with hybrid Enterprise Voice functionality and SharePoint. The new system has increased the efficiency of Triglav workers by providing a reliable and secure communications platform that can be managed easily, while offering increased capacity for inbox items and archived data. Office 365 has also reduced maintenance needs, lowered licensing costs and can be used on employees' personal devices.

Retail banks need to focus on the customer

By 2020, successful banks will be those that develop a complex understanding of their customers, according to a PwC study.

The *Retail Banking 2020: Evolution or Revolution?* report indicated that banks need to analyse customer data more fully and must also simplify their product set to deliver enhanced customer experiences with lower levels of operational risk. To do this, they must remain agile and have the ability to adapt to the rapidly changing landscape, which will continue to be shaped by customer expectations, regulatory requirements, new technology, demographics, emerging competitors and shifting economics.

PwC's six key steps for banks:

- 1. Develop a customer-centric business model** by acquiring, integrating and analysing multiple sources of internal and external data to provide customers with the right product at the right time
- 2. Optimise distribution** through shared platforms that distribute products and services across all channels, including online and in-branch services
- 3. Simplify and automate their business and operating models** to enhance the customer experience, structurally reduce costs, decrease operational risk at a customer level and streamline compliance processes
- 4. Obtain an information advantage** in underwriting and pricing, operations, risk management and financial or cost management areas by analysing and acting upon data
- 5. Enable and foster innovation** by engaging with third parties and attracting employees with new skills and competencies, which will help them to develop new products and services quickly
- 6. Proactively manage risk, regulations and capital** to ensure they remain compliant with stricter and less flexible industry requirements.

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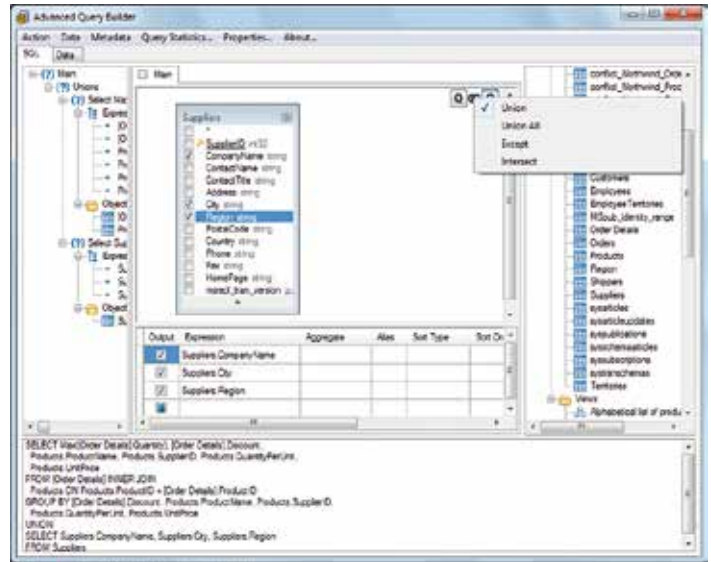
Dell acquires StatSoft

Dell has acquired StatSoft, a provider of advanced analytics, data mining and visualisation solutions.

Boosting the company's growing portfolio of information management solutions, the acquisition enables Dell Software to offer customers a complete set of information management tools that allow them to manage, integrate and analyse data on-premise and in the cloud.

Recently positioned by Gartner in the 'Challengers' quadrant of the Magic Quadrant for Advanced Analytics Platforms, StatSoft adds advanced analytics to a robust set of software capabilities including database management and optimisation, application and data integration, and big data analytics. This helps organisations forecast future trends to identify new customers and sales opportunities and mitigate risk. As a Microsoft Gold Partner, the company also develops products that support and extend Microsoft's operating system platforms and technologies.

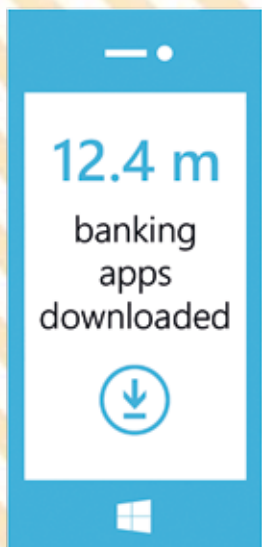
"The acquisition of StatSoft gives Dell's customers access to a proven advanced analytics solution that delivers the predictive and prescriptive analysis capabilities businesses need in order to make faster, more accurate decisions," said Matt Wolken, vice president and general manager of information management at Dell Software.



StatSoft's software enables users to enhance database management

Britain embraces mobile banking

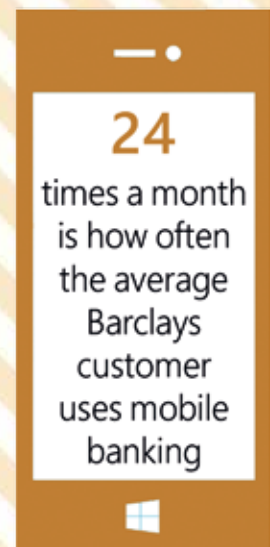
British customers almost doubled their use of mobile banking services in 2013, according to figures released by the British Banking Association's *Way We Bank Now* study. Here are the key findings recorded by five of the country's biggest retail banks last year



more customers downloaded Santander's mobile banking app between 2012 and 2013



302 m the number of text alerts sent to Lloyds Banking Group customers



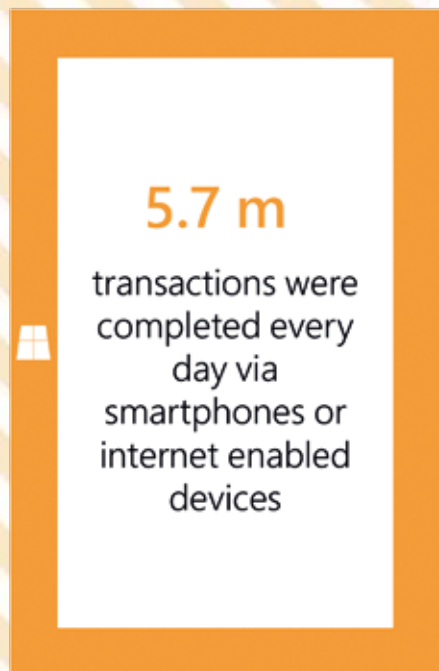
arvato could save customers €27 million

European credit rating and fraud detection company arvato Financial Solutions could save clients up to €27 million annually after increasing its data capacity with Microsoft big data solutions and business intelligence (BI) tools.

During a four-month pilot test, internal business customers replaced manual analysis of fraud-related data with automated data analyses through Excel BI tools, including Power Pivot to create and run data models; Power View to create visual, interactive charts and graphs; and Power Map to help identify fraud patterns through geospatial data. Users also gained access to data from Microsoft's SQL Server and non-SQL Server databases, while Microsoft SharePoint was used to host data dashboards and share reports.

arvato will now launch a new generation of international fraud detection services powered by its risk management platform, which is built on SQL Server 2014 and big data technologies. The company expects to record several benefits including:

- Potentially fraudulent transactions are now identified in less than a millisecond, rather than one or two days, which is a reduction by a factor of 1,000
- Faster fraud analyses could help to identify and prevent 75% of fraudulent orders, meaning arvato clients stand to save €27 million a year in fraud losses
- Enables more accurate fraud detection services, which can be adapted to develop new client-specific models in a short time frame.



4 million customers are expected to use RBS Group's app by the end of 2014, an increase of one million in just 12 months

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Interview

cleversoft extends integrated CRM SharePoint solution

René Blaschke, managing partner at cleversoft CRM Services, explains how the company's integrated Dynamics CRM SharePoint solution will benefit financial services organisations

Why did cleversoft develop the integrated Dynamics CRM SharePoint solution?

Customers using Microsoft Dynamics CRM can use the existing standard SharePoint interface – Microsoft's document management platform – but to manage documents for their clients, contacts and accounts in the customer relationship management (CRM) systems, they need additional functionality. Hence, cleversoft has developed an extension of the standard integration, which offers a range of features and is compatible with Dynamics CRM 2011, as well as SharePoint 2010 or 2013. By the third quarter of 2014, we plan to make the solution compatible with Microsoft Dynamics CRM 2013.

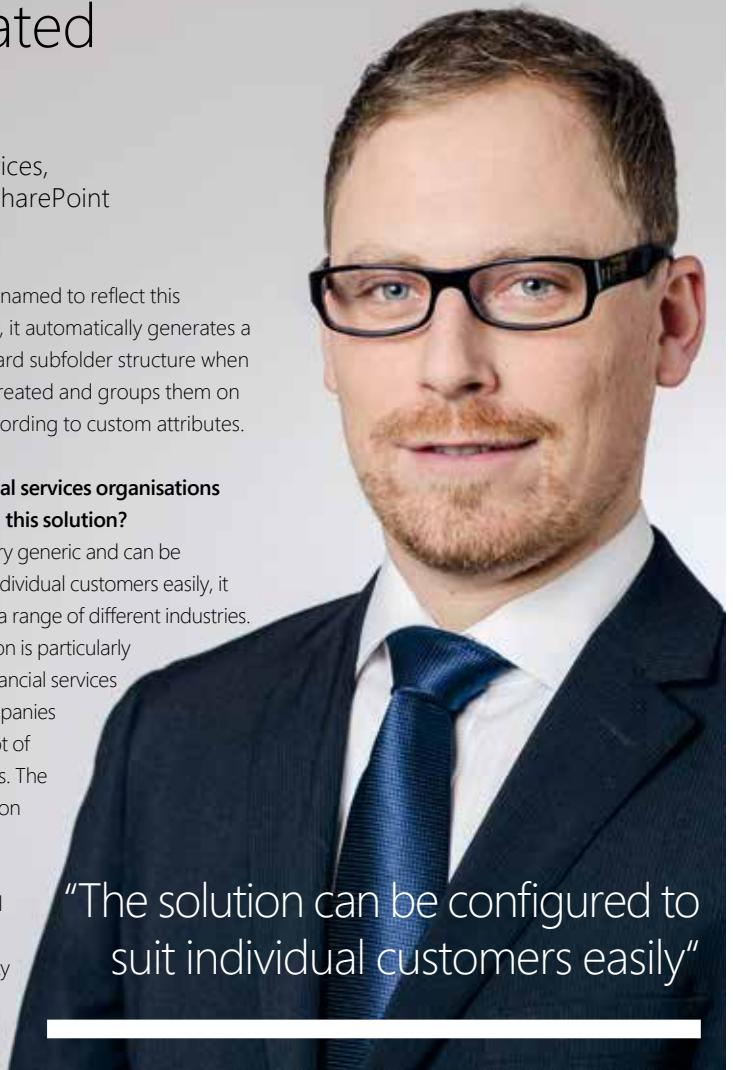
What new features does cleversoft's extended solution offer?

Our expanded solution offers users several new features, such as the ability to synchronise their own individual CRM permissions with SharePoint. It also automatically renames folders connected to the same CRM records, so if one of the contacts got married, all of the corresponding

folders would be renamed to reflect this change. In addition, it automatically generates a configurable standard subfolder structure when the main folder is created and groups them on the upper-level according to custom attributes.

How might financial services organisations benefit from using this solution?

As the solution is very generic and can be configured to suit individual customers easily, it can be deployed in a range of different industries. However, the solution is particularly applicable to the financial services sector because companies have to observe a lot of regulatory standards. The SharePoint integration enables financial services companies to easily gain central permissions and auditing acceptability of regulatory documents.



"The solution can be configured to suit individual customers easily"

Veeam records 150% growth in EMEA market

Veeam Software, which provides solutions that deliver Availability for the Modern Data Center, has recorded 150% growth in the EMEA enterprise market since January 2014.

The year-over-year growth of the number of enterprise deals closed in the first quarter of 2014 compared to the same period in 2013 also rose by 105%. Veeam's new enterprise customers include PriceWaterhouseCoopers, Game, OEDIV OetkerDaten- und Informationsverarbeitung and SCOTT Sports, among others.

Growth has been fuelled by Veeam ProPartners and the launch of the Veeam Certified Engineer (VMCE) certification programme in January. Created to establish a more empowered end-user ecosystem, the VMCE programme is designed to support systems engineers and Veeam's ProPartners pre-sales engineers. It enables users to gain high-level technical competencies regarding how to implement and configure Veeam's systems through interactive technical course. Veeam expects 1,000 to 2,000 engineers to pass the necessary proctored exam to earn the VMCE distinction in 2014.



Between 1,000 and 2,000 engineers are expected to earn VMCE certificates in 2014



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Event

Microsoft to showcase cloud platform at IASA



Microsoft is to demonstrate how its cloud platform and services can help to transform insurance companies' business models at the 2014 IASA Annual Conference & Business Show from 8-11 June.

Taking place in Indianapolis in the US, IASA will be sponsored by Microsoft. The company will demonstrate how insurance companies can turn large streams of data into actionable business insights and transform a mobile workforce into a connected team.

Conference attendees will be able to see how they can gain insights from data to mitigate risk, drive innovation and increase their speed to market via the Microsoft cloud. They will also learn how the hybrid platform – which spans on-premise data centres and the cloud – can be deployed to allow insurance

companies to scale easily, giving them the freedom to innovate and grow, while reducing cost and complexity.

In addition, Microsoft will be joined by its partners Accenture, Towers Watson, Milliman, Numerix and Infosys. Together, the companies will demonstrate how Windows 8 devices and apps can be combined with the Microsoft cloud to enable mobile workers to operate as a connected team, provide an enhanced customer experience and fuel business growth.

The IASA conference will also feature keynotes by former US president Bill Clinton, Olympian Dana Torres and Playfair founder Matt Weinstein, as well as more than 80 technical sessions covering technology, finance, risk management and future trends.

Date for your diary

Worldwide Partner Conference



WPC will be held at the Walter E Washington Convention Centre in Washington DC, US

When: 13-17 July

Where: Walter E Washington Convention Center, Washington DC, US

What is it: Open to any member of the Microsoft partner network, WPC will focus on five key areas including big data; cloud; mobility and devices; enterprise social; and leadership, sales and marketing

Why go: Join more than 14,000 attendees to learn how Microsoft platforms and devices – such as Windows 8, Office 365, SQL Server, Power BI and Windows Phone – can be used to drive business revenue and optimise operations

Who will present: retired professional basketball player, Earvin 'Magic' Johnson, will deliver the keynote

Which Microsoft executives will present:

Satya Nadella, chief executive officer
Kevin Turner, chief operating officer
Susan Hauser, corporate vice president, Enterprise and Partner Group.

Bill Gates to close Sibos 2014

Microsoft founder Bill Gates is to deliver the closing plenary speech at this year's Sibos conference, which will take place at the Boston Convention & Exhibition Center from 29 September to 2 October. Gates will explain how the Bill and Melinda Gates Foundation aims to bring financial services to the poor. He will also highlight how digital financial services and partnerships can provide opportunities for financial institutions to sustainably serve people in the developing world.



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Value-based customer relationships

Banks that create compelling, personalised solutions will win the hearts and minds of their customers, says Dell's Sean Breen

These are challenging times for banks as they navigate a hyper-competitive and regulatory charged landscape. Their share of wallet is dropping as customers, lured by financial and non-financial institutions, are apathetic to their commoditised products and service offerings. With looming government regulations that impact mature revenue streams, banks have to redefine their economic framework to build and deliver products and services that address their disparate customer base.

Furthermore, customers have instant access to information via smartphones and an oversupply of competitive offers. If banks continue to offer one-size-fits-all solutions, they will risk diluting their competitive edge and losing what semblance of relationship they have with their customer.

It's imperative for banks to engage customers by delivering compelling and personalised solutions. This is the true foundation of a value-based relationship, characterised by 'fair value exchange' where the customer shares key data and information that the bank can draw on to create befitting solutions.

At the heart of a value-based relationship lie customer data and the ability to derive meaning from it. Today, banks are dealing with in-house data, data that resides with other institutions – such as loans, mortgages, spend and buying patterns – as well as information gathered through social networking and other digital channels. The challenge is to turn the data stockpile into a powerful differentiating advantage. Banks struggle to fully harness the power of analytics and business intelligence technologies to anticipate customer needs. They need to delve deeper into these technologies by making smart operational and technology investments.

Also important is anticipating the needs of the customer in context of their financial footprint – lifestyle, buying patterns, family composition, aspirations and personal needs. By analysing such data meaningfully, banks can offer personalised, high-value solutions that customers will perceive as relevant and timely, and in the process allow for a sustainable value-based relationship.

Getting contextual customer data is a challenge in itself, but how banks analyse these data sets and what they do with them is crucial to building and managing customer trust. Banks should therefore develop strategies to drive value-based approaches. Along with improvement in customer segmentation, banks need to invest in execution technologies to enable effective use of new data aggregation tools, predictive analytics and business intelligence.

Banks need solutions that are more structured, scalable and secure to attract, retain and manage different types of customers. They need to invest in solutions like customer-screening tools, spend-tracking monitors, portfolio analytics and pricing tools to refine product and promotions, map them to predisposed customer sets, and deliver them to customers in the context of their busy lives. Banks also need to drive the programme across preferred customer touchpoints, including mobile and next-generation tablets. It is not enough to have the best products, services and friendly customer support if they get to your customer second. Banks have to move at the 'speed of customer' to add true value to their customer relationship.

Sean Breen is director of Financial Industry Solutions at Dell



“Banks have to move at the ‘speed of customer’ to add true value”

Sean Breen

Dell

Collaboration: turning competition into partners

Banks need to construct data-sharing networks with other organisations that deliver financial services in order to stay ahead of the game, says Kęstutis Gardžiulis

Competition in the financial services industry is becoming tense today. Financial institutions face double competition from direct and indirect competitors, as well as having to juggle pressure to regain customer loyalty and restore their status as a central institution for all financial services.

Due to changes in the market, the majority of competition is no longer limited to direct competitors. The number of players specialising in different financial services (such as payments or leasing) is increasing rapidly, and their activity is becoming more intensive. Retailers and telecommunications organisations are among the strongest indirect competitors today, and they attract customers for their flexibility and good customer service.

This is not a simple task for a bank, which manages a large portfolio of services. Furthermore, customer service in banking became fairly poor after some banks transferred to digital platforms, which is unfortunately the price they paid for providing 24/7 service accessibility. But, if a personal experience is lost and a customer is simply reduced to a nameless statistic, it would be naïve to expect loyalty from them.

So how can banks stay ahead of competition? Should they invest and compete individually, or go into partnerships? My preference would be to create a business ecosystem – a network of related businesses that share data with partners – that puts the client at the centre of its activity. The strength of this business ecosystem lies in the interrelation of its component parts. Related to each other, they behave for the sake of each other with each receiving profit and providing value for others.

When three stakeholders – a bank, a partner (such as a retailer) and a customer – join the ecosystem, they build interrelations based on the data-sharing partnership, comprehensive data analysis and its customer-centric approach.

By creating a partnership with a retailer, banks can turn competition into collaboration and encourage mutually beneficial teamwork. Both the bank and retailer manage large amounts of information about their customers, but there is also specific information that they mine independently of each other – the combination of this information allows both parties to complete the full profile of the customer. By knowing the customer better, banks can deliver them more relevant products and services.

Through this partnership, we could witness a great synergy, where retailers gain an additional channel to contact targeted customers and banks gain new opportunities to deliver personalised services to customers based on a rich client profile. Whereas the customers get rid of irrelevant information, save time in searching for what they need, and get what they are looking for through one provider. This makes them feel happy and ensures they remain loyal.

The most important thing is that in such a context, financial institutions remain leaders in the market, doing what they do best – keeping hold of clients' money.

Kęstutis Gardžiulis is CEO and co-founder at Etronika



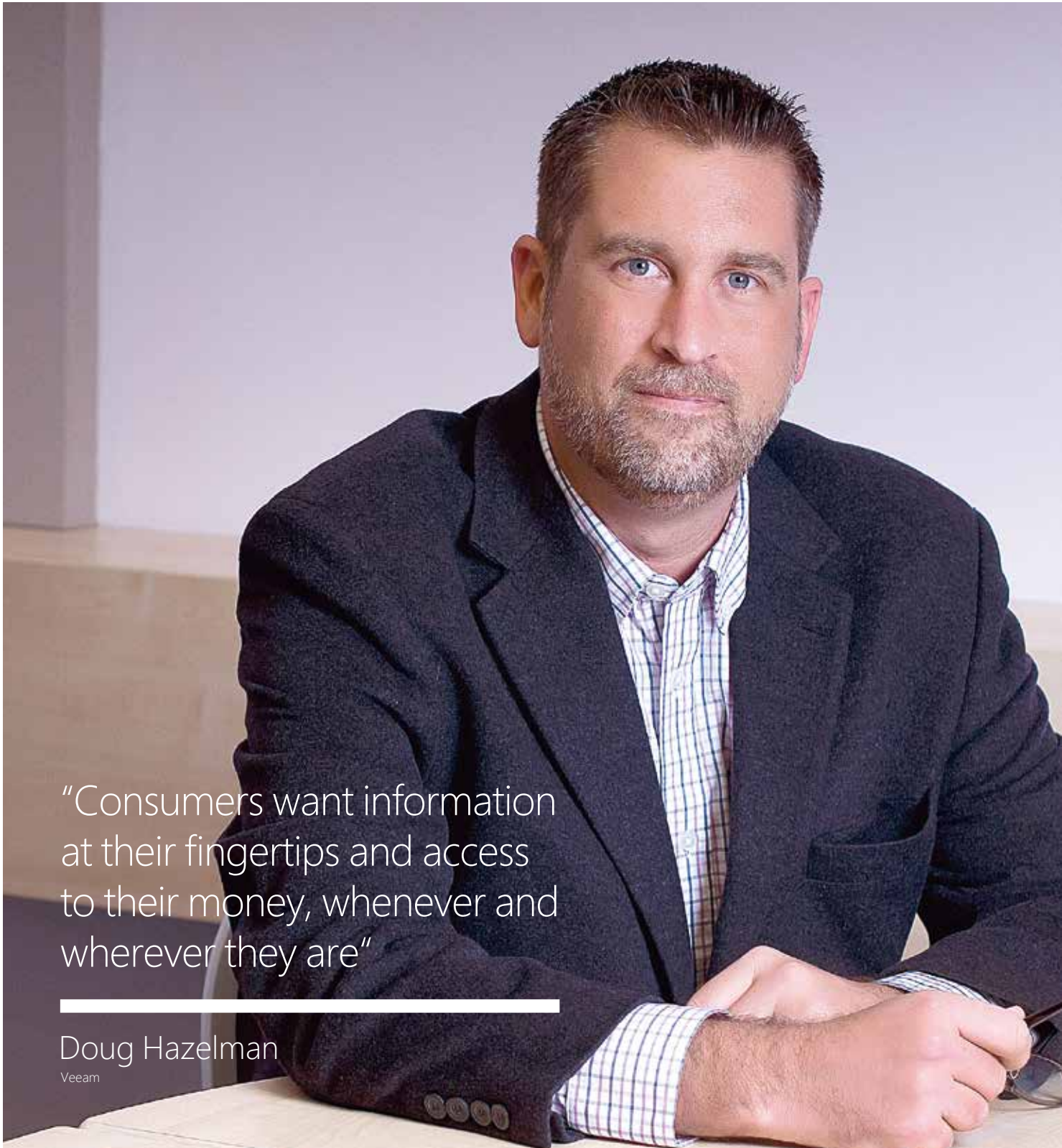
“By creating a partnership with a retailer, banks can turn competition into collaboration”

Kęstutis Gardžiulis

Etronika

Cover story

Veeam Backup & Replication



“Consumers want information at their fingertips and access to their money, whenever and wherever they are”

Doug Hazelman

Veeam



Delivering availability for the modern data centre

Karen McCandless explores how Veeam can mitigate risk in financial services organisations by minimising downtime and enabling the Always-On Business

Financial institutions are modernising the way they run their business and their IT, with virtualisation and the cloud being major enablers of this modernisation. Virtualising data centres can lead to reduced costs and better use of infrastructure, but for many organisations their legacy data backup tools are not up to the job of enabling an always-on environment, especially with the added challenges of exponential data growth and shrinking backup windows. Many of these tools are expensive and complex, difficult to use and don't have the necessary functionality in terms of data backup and

recovery. Backups take too long leading to missed backup windows, data recovery time is slow and downtime lasts too long. As a result, organisations are looking at investing in new tools and software to avoid the major problem of system downtime due to inefficient data and system recovery.

Downtime can also have a major effect on customer relationships. Consumers want information at their fingertips and access to their money, whenever and wherever they are. With the rise of smartphones and tablets, they now have even less tolerance for downtime; they don't accept excuses for why they can't access their accounts,

Cover story

Veeam Backup & Replication



Veeam Backup & Replication enables the recovery of virtualised applications and data, reducing the likelihood of downtime or data loss

view their balance, transfer money and pay bills at any time of the day. If there is a downtime issue that affects them and it's not handled correctly then they are likely to vote with their feet.

"You really see this demand for always-on availability when services go offline, as customers have come to expect 24/7 access to money and services," says Doug Hazelman, vice president of Product Strategy at Veeam Software. "And people now have a platform to complain – they no longer have to write a letter to the bank or local newspaper, they can go to blogs or forums and very quickly gain a following of other dissatisfied customers."

Consumers are also choosier about where they want to keep their money and who they want to do business with, with stories of outages and system downtimes having an effect. "It's all about being an informed consumer," says Hazelman. "For example,

if there is a big storm that takes out a data centre, will I lose access to my money or is there another data centre the bank will fail over to keep the business running? Nobody wants their bank to go offline or to lose their data. There is a lot of pressure on financial institutions when it comes to data loss and downtime – when you're talking about money, it's a critical situation."

These organisations have generally already spent a lot of money implementing technology to protect data and minimise downtime in their mission-critical systems, and they've had these systems in place for years. Hazelman explains: "They have multiple sites they can fail over to in a matter of minutes and the data is synched across these sites so they don't lose important information. As this is the backbone of the business, they've spent millions of dollars to protect these systems because there is a lot to lose if they go down."

But what about all the other – less critical – systems that financial services organisations use on a daily basis? "The way I see it is that there are the really important systems that run the business and then there are the other important, but less crucial, systems," says Hazelman. "For financial institutions, it's key that the mission-critical systems have a high-level of availability and almost no downtime. But the other systems can go offline for an hour and it doesn't affect people's access to money or cause major operational problems. With these systems, they don't have a five-second recovery objective and they will settle for 20 minutes to an hour instead. While companies have already spent millions of dollars to protect their mission-critical financials systems, with these less critical systems, they are on a bit more of a budget."

This is where global data protection technology provider Veeam comes in. The



Veeam Backup & Replication solution provides image-level backups and replications to enable the recovery of virtualised applications and data, as well as reduce the likelihood of downtime or data loss.

“At Veeam, we provide a level of protection at that next layer down to minimise downtime, eradicate data loss and help enable the Always-On Business,” says Hazelman. “We take a look at the broader infrastructure within the data centre to protect the data in the different virtualised systems in place, as well as saving time and reducing risk. This involves backing up the data so the companies can access it when they need to recover it, although it will be on more of a once-an-hour timeframe rather than once a second like they use for mission-critical systems. It also covers replicating the data and servers to another site with our 2-in-1: backup and replication functionality, which provides a copy of a virtual machine

(VM) in a ready-to-start state. This means that if a VM goes down, organisations can immediately fail over to a standby VM.”

Backing up the data is only one part of protecting against data loss; organisations also need to ensure they can successfully recover all the data that was backed up in the event of a problem. “We provide the ability to automatically verify the recoverability of backups through our SureBackup technology,” says Hazelman. “When an organisation has backed up its data, it can carry out a test restore then run the VM in an isolated environment and verify the recoverability of the data. The company then knows it has not only successfully backed up the data, but

also has a good restore point if it needs to recover data. It’s all about mitigating risk, but also making sure that companies have the peace of mind in the event that something does happen.”

It’s not just minimising downtime and protecting against data loss where Veeam can help reduce risk at financial services organisations. If a company needs to update a system or install a patch or some new code, they don’t have to do this in a production environment, but can use Veeam technology to run it on a test system first.

“Our technology can take a backup of the production system, start it up in an isolated environment and test the patch or upgrade on a backup copy of the production data,”

Cover story

Veeam Backup & Replication

explains Hazelman. "This helps eliminate issues when deploying patches or making updates, as all changes are tested before being rolled out into production."

Veeam also has a long history of working with Microsoft technology to help financial services organisations eliminate risk and protect important data. The company was the first vendor to support Windows Server 2012 R2 and it can also help store companies' backups in the cloud using Microsoft Azure, as well as monitor their virtual infrastructure using System Center. "Microsoft technology enables us to provide a level of data protection through virtualisation that isn't possible in the physical world," says Hazelman.

As part of its commitment to using the best possible solutions out there, Veeam added Hyper-V protection in 2011. Hazelman explains: "We always keep an eye on the market and realised that with Hyper-V Server 2008, the platform had really matured so we started building and refining our support for it. Due to our experience working with Microsoft, we knew that the company would be a major player in the virtualisation space."

And this is a strategy that seems to have paid off as, in 2013, the company saw a big increase in its Hyper-V sales. "Our Hyper-V business has been growing every quarter," says Hazelman. "In terms of net new customers, we are adding them at a higher percentage rate of our business than other virtualisation technologies."

Further extending its partnership with Microsoft, the company has added support for Microsoft Exchange and SharePoint recovery, as well as WAN acceleration, deduplication and replication in the latest version of its Backup & Replication solution. Hazelman concludes: "In v7 of our solution, we have added a number of new features that can significantly enhance financial services organisations' data protection capabilities, taking modern data protection to the next level. At Veeam, we are continuing to make it easier than ever to protect virtualised environments with innovative new functionality that provides ever higher levels of security in the event of a failure."



"Hyper-V Server 2008 had really matured so we started building and refining our support for it"

Doug Hazelman

Veeam

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Mission critical cloud

Many insurance firms are using the cloud today to support their non-core office and support functions, but in the coming months and years, even more are expected to take advantage of the cloud to handle their mission-critical operations too. Rebecca Lambert reports



The cloud computing market continues to grow at a significant pace. According to Gartner, by 2016 cloud computing will become the bulk of new IT spend, and, by the end of 2017, nearly half of large enterprises will have hybrid cloud deployments.

In recent years, many companies from all industries have taken the opportunity to leverage cloud computing, and, as a result, change the way they store large amounts of data, and architect, provision for and deploy applications. Some rushed to be early adopters – keen to take advantage of the chance to increase compute capacity or add capabilities quickly without having to invest in costly infrastructure, and instead pay for that infrastructure on a subscription, pay-per-use basis. Others have bided their time, waiting to see how the technology would develop.

The insurance industry, by its very nature, is risk aware. While a long-running user of IT and business process outsourcing, the industry has been perhaps slightly more reticent than

other industries to embrace public cloud computing, at least initially. But this is changing – and fast. Insurance firms are already using public clouds for non-core office and support functions, such as e-mail, financials, HR and customer relationship management. According to the December 2013 Novarica *‘Hot Topics For Insurers’* report, more than half of insurers surveyed already rely on software as a service for these types of applications.

Others have taken the next step and are writing applications to the cloud, using cloud-based infrastructure to support their core applications – including policy administration, claims and billing systems. They are running their actuarial analyses against cloud-based high performance computing grids too. Even more are considering doing the same over the next few years. Novarica reports that around 20% of insurers have active or planned cloud pilots.

“The reality today is that many insurers are held back by their legacy IT infrastructures,” explains Tony Jacob, Microsoft’s managing director of worldwide

insurance. “Much of their IT budgets go towards maintaining their core systems, and these budgets are being reduced. They have limited resources left over to innovate in areas such as distribution channels or new product development.

“The nature of risk and the regulatory environments are changing too, yet insurers often do not have the internal compute capacity to react to these factors,” Jacob adds. “For example, when it comes to quarterly close-outs, it can feel like Groundhog Day as insurers work long days, wait for hours for their models, and ultimately base decisions on risk and valuation data that may be 14 days old. The cloud, though – in this case, as a source of elastic compute capacity – is giving carriers a new opportunity, and one that’s just too good to ignore. We now ask insurers, ‘What would you do with quarterly close-outs that take less than half the time to complete, with near real-time data, greater accuracy, and millions of dollars less in infrastructure and process costs? What would that mean to your business?’”



Feature

Cloud computing: insurance

Cloud maturity

Cloud providers have been doing everything they can to give their customers reason to trust in the services they provide and their ability to store data securely. Microsoft in particular has continued to make some significant advances to its public cloud platform, Microsoft Azure, to prove it's a truly viable, world-class alternative to on-premise IT infrastructures for enterprises.

Security – always a big concern for those considering moving to the cloud – is one area that Microsoft has made huge investments in.

“We recognise how critical data privacy is to enabling our customers to move to the cloud, and Microsoft has been a pioneer in offering privacy protections for its enterprise cloud services,” the Microsoft Azure team said in a blog post. “We were the first to offer contractual commitments for customers subject to the European Union (EU) Data Protection Directive and US HIPAA laws, which call for safeguarding personal data, and have continued to strengthen data privacy through technical, operational and legal protections.”

Most recently, Microsoft's cloud contracts have been validated by EU data

protection authorities as they meet the rigorous privacy standards that regulate companies operating in EU member states. “This ensures that customers can use Microsoft services to move data freely through the cloud from Europe to the rest of the world,” said Brad Smith, general counsel and executive vice president of legal and corporate affairs at Microsoft on The Official Microsoft Blog. “Microsoft is the first – and so far the only – company to receive this approval.”

As cloud offerings continue to mature, industry regulators have also started to take cloud usage more seriously, and

Partner spotlight

Accenture Duck Creek

Accenture Duck Creek has been working with the Microsoft Azure team for the last two years to understand how it could bring its core insurance system suite to the cloud. In the last few months, the company has started marketing its new cloud offering in earnest and has just recently closed its first customer on Azure.

“Our new product is essentially the same Accenture Duck Creek Suite, but it's available as a software-as-a-service cloud bundle,” explains Michael Witt, Cloud Products lead at Accenture Duck Creek. “This is a very attractive offering for our customers, especially in terms of price.”

This is not Accenture Duck Creek's first experience providing software in this manner. For the last three years, it has been hosting a solution for a large insurance carrier in the US, which processes 7% of all auto claims in the country.

“In November 2013, when we began publicising our cloud offering, we thought

that most of our customers would be more interested in using it for development and testing,” says Witt. “But, in fact, we're finding that many more are wanting to move their core applications to the cloud and take an ‘all in’ cloud approach.”

According to Witt, this is down to changing perceptions, as the industry recognises how secure and reliable public clouds like Microsoft Azure are. “Microsoft has made a great deal of investment in Microsoft Azure to make it the robust platform it is today,” he says. “The industry is beginning to trust in this model, and when you take into account the cost and flexibility benefits, it's an extremely strong value proposition.

“I'm really pleased with the level of demand we're seeing from our customers for this type of product,” he adds. “Over the next two to three years, I suspect that insurance companies will need to be taking advantage of the cloud to remain cost competitive.”



identify ways that insurers can take advantage of it and remain compliant. Now, it seems that the real risk associated with cloud computing is the opportunity cost to insurers if they choose not to leverage the cloud.

“Perceptions towards cloud computing are changing,” says Jacob. “Companies understand the value it offers, and they are realising that this IT consumption model aligns with many of their business priorities – lower cost ratios, add agility, enter new markets, or introduce new initiatives to grow premium or improve pricing performance. The cloud allows them to respond quickly to changing conditions or opportunities in the most cost-effective manner.”

In the following months and years, as early adopters succeed and confidence rises, it is expected that insurers’ interest in the cloud will increasingly turn into deployments.

Cloud-based core systems

According to research by insurance strategic advisory firm Strategy Meets Action, 61% of carriers report that their current policy administration system does not respond to new market demands, which results in lost business opportunities. In addition, 60% report that their current system technology restraints are a problem for their business.

The Microsoft cloud is already being shown to help loosen the constraints. If used as the server infrastructure to support core systems, it lowers IT costs and can add agility. If used for pre-production environments, it can help insurers more quickly and cost effectively stand up new core systems. And if used as the platform for the core systems, it can help insurers get out of the software business and focus more on the business of insurance. In short, companies are using the cloud to build

Partner spotlight

InsteC

InsteC provides policy administration systems and services for the US commercial insurance industry. Today, the company offers its flagship policy administration platform, Quicksolver, as an on-premise solution or on a software-as-a-service basis via the Microsoft Azure cloud.

InsteC recognises that there has been a shift among US carriers and intermediaries to write program business in a bid to differentiate their business and claim niche market areas. This requires agile, scalable IT environments that support their ability to innovate, develop and launch products ahead of the competition.

“Firms need to be able to spin up new programs fast, discontinue or change them if they’re failing, and scale them up or

add complementary programs when they succeed,” says Kevin Mason, VP of product development and management at InsteC. “Unfortunately, many companies are unable to take full advantage of identified market opportunities because they’re constrained by their IT. Making customisations to launch a new program can be very costly and time intensive. This is where Quicksolver and Azure come in. Our solution allows companies to leverage and configure rich, built-in bureau content to quickly and easily customise the rates, rules and forms needed to create their specialised programs. And because it runs in the cloud, they can achieve fast time to market with minimal impact on IT.”

Partner spotlight

GhostDraft

Customer communications management (CCM) specialist GhostDraft has been offering its products on a cloud subscription basis since its launch in the US and Canada.

With a commitment to making CCM a business user driven process, the company’s software enables insurance staff to customise and manage their own policy documents and claims correspondence through the use of rules-driven templates. The result is that they’re able to provide more personalised correspondence and work more efficiently. “Many traditional CCM products require users to have intimate knowledge of the database, but our solution doesn’t,” says Michael Sauber, vice president of marketing at GhostDraft. “We offer plain

language authoring that allows staff to create personalised, rules-based documents in an efficient and intuitive manner.”

Because the solution is available via Microsoft Azure, companies simply pay an affordable monthly subscription fee that includes support and upgrades, anytime anywhere access, and comprehensive security and disaster recovery. “Insurance companies need to find ways of more efficiently using their IT resources, and the cloud takes away a huge burden,” says Sauber. “At the same time, because users are able to assemble and deliver their documents via the cloud, they benefit from high availability and added convenience.”



Feature

Cloud computing: insurance

highly scalable applications without having to invest in costly infrastructure. “They’re moving from a capital-intensive approach to a more flexible, pay-as-you-go business model,” says Michael Witt, Cloud Products lead at Accenture Duck Creek, a leading provider of property and casualty insurance core systems. “The costs for running applications in Microsoft Azure are very attractive – and they’re predictable.”

In a cloud-enabled organisation, business and IT project implementation timelines

are dramatically reduced. This is because the infrastructure is available upfront and it can scale according to business needs. As a result, insurance companies gain the opportunity to bring new products to market much more quickly and, at the same time, have the lowest possible impact on IT staff and capital expenditures.

“One of the key areas that insurance carriers struggle with today is aligning their business and IT,” says Witt. “Moving to a software-as-a-service consumption model really helps tackle this issue. What they’re able to do is gain capacity with a predictable price for scalability. This helps them to successfully forecast business outcomes.”

Microsoft partners such as Accenture Duck Creek are now offering their core insurance systems via the cloud – and demand for this type of service is rising. Companies are realising that they no longer

have to make huge upfront investments to upgrade their IT infrastructures, and they are able to implement a solution that satisfies business needs without overburdening their IT department.

For those not ready to move their core systems to the cloud just yet, there is another option. “Insurance companies can also take advantage of the cloud to carry out all their pre-production application development, testing and staging operations,” says Jacob. “So even if they don’t necessarily want to run their core applications in the cloud, they can at least take advantage of its elasticity to spin up test environments before they go into production. This offers cost and agility benefits, and allows development teams to gain experience working in the cloud without going all the way to deploying core systems in the cloud.”

Cloud benefits

The Phoenix Group is Milliman’s first Integrate customer. In just 18 months, the UK consolidator of closed life assurance funds achieved the following benefits from using the solution:

100%

return on investment

30%

reduction in IT costs from its traditional on-premises system, saving nearly US\$1m

97.5%

reduction in time to produce quarterly results

95%

reduction in labour hours

Partner spotlight

Milliman

Milliman, a leading independent actuarial firm that provides both software and consulting services, brought its core financial modelling system MG-ALFA to the cloud using Microsoft Azure.

Integrate is a revolutionary, cloud-based financial projections solution for the life insurance industry. Delivered as software as a service (SaaS), Integrate replaces patchwork systems and processes with a holistic, automated modelling environment that enables actuarial departments to streamline workflow, facilitate collaboration, tighten governance and control, strategically redeploy high-level talent, and access scalable, virtually unlimited computing capacity.

As Cindy Saccocia, the company’s director of sales and marketing for Integrate, explains, for years, desktop tools, Microsoft Excel, and industrial-grade computing hardware have turned in solid results for actuaries who often developed and coded the models themselves. “But dramatic changes to the regulatory environment and increasingly complex insurance products are putting enormous stress on these systems and processes,” she says. “With Integrate, we’ve shown that cloud-based industrialisation can reinvent risk management for the 21st century and deliver results that are unlike anything seen before in the insurance industry.”



Risk analytics

Many insurance firms find the entire effort around quarterly/end of year close incredibly onerous. "To run the required simulations, businesses face a huge demand for computing power," says Microsoft's Jacob. "With an on-premise infrastructure or traditional hosting provider, these compute-intensive actuarial and reporting tasks can be a massive drain on IT resource and can be very costly to support, especially during peaks in demand."

Because these tasks are only carried out a few times a year, many insurance companies have had to make the choice between whether to spend more on providing enough IT resource to handle peaks in demand or provide a level of capacity that is more cost effective to run on a long-term basis but cannot cope with usage spikes, leading to delays obtaining results.

"With IT budgets strained enough as they are, many businesses have had to compromise on computing power," says Jacob. "This has a negative impact on the business in terms of productivity, but also on the quality of data used in risk assessments and for setting reserving levels. Imagine what a difference it would make if they were working with more accurate and real-time data. Could they optimise their reserving levels? How much money could they put back into the business? How much better would they be in the eyes of the regulators and in the markets?"

According to Cindy Saccocia, director of sales and marketing for Integrate at Milliman, an actuarial firm that provides both software and consulting services: "There is a critical need for insurance firms to have access to ever more computational capacity to address a growing suite of challenges, while satisfying all audit, governance and control requirements. Replacing old tools and protocols with cloud-based solutions delivers substantial benefits in cost, time and labour savings."

"Perceptions towards cloud are changing. Companies understand the value it offers "

Tony Jacob

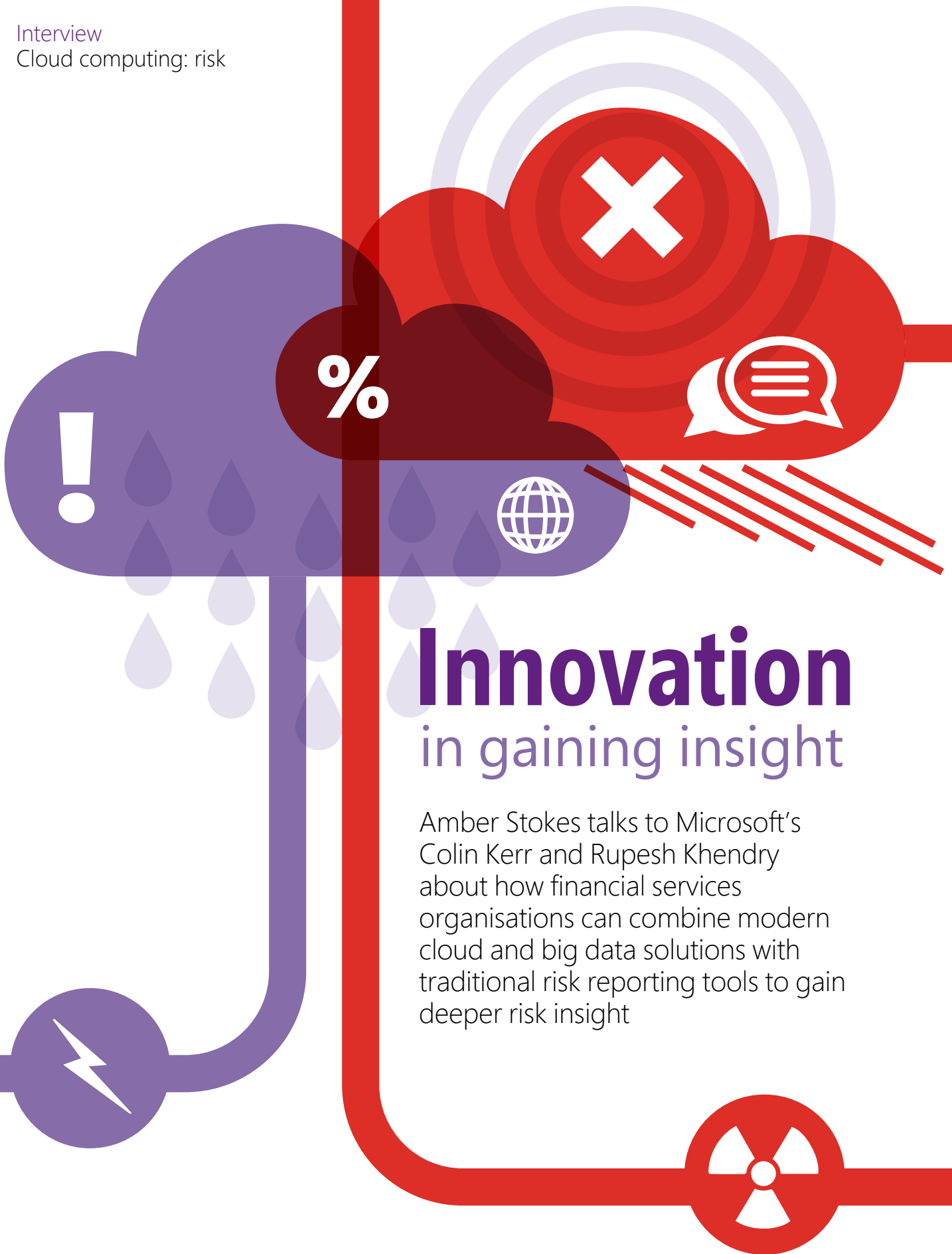
Microsoft

"By taking their financial and actuarial models, and running them against high performance computing grids in the cloud, insurance firms have access to virtually unlimited computing power when they need it, and they can turn it on and off like a utility," says Jacob. "This allows companies to handle the peaks and troughs of compute demand in a cost-effective and agile manner."

This year at the annual IASA Conference in Indianapolis in the US, Microsoft will be exhibiting alongside its partners to demonstrate how the cloud can help insurers scale their business, drive innovation, gain actionable insights and connect their workforce – all while saving costs.

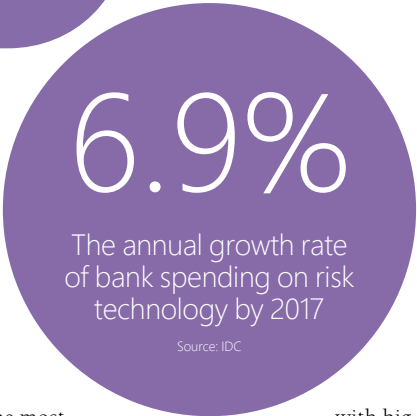
"As we can see, there are many ways that insurance carriers can take advantage of the cloud today," says Jacob. "They can use it for non-core office and support functions, and development and testing, but in the coming months and years we expect to see more companies use the cloud to achieve a dramatic pay-off in their mission-critical areas too."

Turn to the next page for insight into how cloud technology can be used to mitigate and analyse risk in financial services organisations



Innovation in gaining insight

Amber Stokes talks to Microsoft's Colin Kerr and Rupesh Khendry about how financial services organisations can combine modern cloud and big data solutions with traditional risk reporting tools to gain deeper risk insight



How have financial institutions traditionally viewed risk?

Colin Kerr, director of worldwide banking, Microsoft: Regulations are constantly changing. Organisations never really know what the next change might be and the impact it will have, and it has become a full-time job to ensure that they comply. It can therefore be very easy to be singularly focused on this. While it is of course important that organisations ensure they remain compliant, there may be other risks that they're missing that can provide additional value.

How else can they assess different kinds of risk?

Kerr: In financial services, data is the business. Banks that can best manage their

data are those that become the most efficient, most profitable, develop the right kinds of products and solutions for their customers, and best manage their risk.

As we all know, enterprises have access to huge amounts of structured and unstructured data, both on premise and externally, and the main challenge is gaining insight from it to help them understand their performance today and also predict their performance for the future. But this is also an opportunity now for organisations to redefine the way they look at risk.

By harnessing the power of big data, financial institutions have the opportunity to gain deeper insight. By combining their current risk systems that build up a traditional risk profile of their business

with big data and powerful business analytics solutions, they can have access to a higher level risk dashboard that introduces other tangential risk factors.

That might be, for example, risk associated with brand perception, that can be analysed by checking what is said about an organisation in the media – not just social media. By scrutinising negative sentiment analysis, organisations can add an extra dimension to their risk analysis.

So how might a bank, for instance, harness big data to gain useful risk insight?

Kerr: After the worst of the financial crisis, many big banks lost the trust of their retail banking customers, and a social movement called Move Your Money





Case study

Royal Bank of Scotland

Leading UK bank improves customer service through deeper insight into economic trends



The Royal Bank of Scotland (RBS) has more than 24 million customers worldwide and is the largest lender to small and midsize enterprises in the UK. The bank's Customer Solutions Group (CSG) provides insight to RBS executives and customer engagement teams by accessing data from approximately 1.5 million business customers. Loading up to 50 terabytes of data from multiple sources meant that queries often took hours or even days to finish, and so the team looked for a solution in 2013 that would provide better flexibility and faster performance.

CSG began a proof of concept with HP AppSystem for SQL Server 2012 Parallel Data Warehouse (PDW) in November 2013. In just two weeks, the team had replicated approximately half of its existing analytics environment, including tables, processes and complex algorithms. The team tested SQL Server 2012 PDW by running large-scale analytical tests with more than a billion table rows and was delighted to discover that

previously long-running queries finished within minutes.

CSG is not only able to carry out simple system prototyping, but faster access to data means RBS can also now conduct effective predictive analytics to gain deeper insight into the UK economy, for instance. RBS is therefore able to show customers in different industries, such as manufacturing, data that they might never have previously seen. For instance, the UK's gross domestic product (GDP) was previously analysed quarterly by the central Bank of England, but the RBS now plans to monitor the GDP on an intraday basis to help customers stay on top of emerging economic trends.

CSG plans to consolidate data from daily account transactions in the future and connect the solution with business software such as Microsoft Dynamics CRM. CSG will also consider ways of working with unstructured Hadoop data and interoperability with Microsoft cloud services.

was created, which influenced people to move their accounts to smaller and local banks. The campaign claims over four million accounts have been closed in major US banks in the first 18 months of their campaign. For many banks, this will almost certainly have had a negative impact on their risk profile, but such activity can now be forecasted and the risk mitigated if the right tools are used to analyse other sentiment data.

Similarly, organisations can gain better insight into their corporate customers' risk profile. For example, a bank managing a manufacturer's cash and trade business could interpret weather data, macro-economic data and even socio-political unrest in countries that form a vital part of a customer's supply chain. Severe flooding could mean the customer's physical supply chain is at risk, which impacts the financial supply chain, and in turn, could impact their profitability in the next quarter. Perhaps if they're close to bankruptcy, this could push them over the edge. But aside from gaining deeper insight for the benefit of the bank's own risk management, they can also use it to add value for their customers, providing risk information as a service, to help them run their business more effectively. The Royal Bank of Scotland recently deployed SQL Server 2012 Parallel Data Warehouse to do just this.

So is traditional IT architecture able to manage this kind of data processing?

Rupesh Khendry, head of worldwide capital markets industry solutions, Microsoft: The change in the landscape has had a huge impact. Until recently, it was easy to run legacy applications to manage risk on complex and departmental architectures, because financial services organisations had time on their side. Huge profits could



allow them to have custom solutions and when an organisation experienced risk or a new regulation was introduced, they threw money at new software to solve it. But, this is of course not sustainable any longer, and with the speed of innovation with movement towards electronic trading, for example, organisations don't have the time or the capacity to keep up.

The models for managing the kinds of risk that are widely known to us, such as standard market and credit risk, can no longer keep up with the speed and complexity of today's world. Per market estimates, 80% of all trading today is algorithmic trading – extremely low latency trades that are automatically triggered in the marketplace – which affords organisations little time to deal with inherent risk. Organisations have to reinvent their architecture in order to scale up their capacity and reconsider how they value risk.

How might a cloud solution help?

Khendry: A huge business benefit is that business users don't need to go through a business case to ask for and provision infrastructure over several months with large capital outlays. Instead, they can leverage Microsoft cloud solutions that offer flexible compute capacity and pervasive business insight.

One area Microsoft clients are delivering compelling benefits from is risk compute grids that are typically investment intensive, and are used to manage an organisation's compute requirements for risk and compliance. However, capacity management is an issue, because usage obviously peaks in bursts when market-sensitive events occur. Typically, on-premise capacity is underused, many times as low as 20% of that capacity is used on average, but organisations must have that capacity

“In financial services, data is the business”

Colin Kerr
Microsoft



“Organisations have to reinvent their architecture”

Rupesh Khendry
Microsoft



invested and ready to be used 100% of the time. A cloud solution provides that flexibility. With Microsoft Azure and the high performance computing pack, banks have the ability to run risk compute grids much faster and have the flexibility of sourcing it on demand.

With Microsoft, banks can also ensure they remain compliant in terms of storing data in the cloud, which is a huge benefit. No other cloud provider can deliver the benefit of a private, public or hybrid cloud continuum. Our vision is to provide the flexibility so that institutions can keep the

customer-sensitive information that they're contractually and morally obligated to keep private on premise, while being able to burst only the compute needed into the cloud, leveraging in-house models and risk analytics or leveraging risk solutions from Microsoft partners. It also provides an end-to-end offering from data sourcing, all the way through data management, analytics, data consumption and monetisation.

60%

of banks worldwide will process the majority of their transactions in the cloud by 2016, driven by poor return on equity

Source: Gartner

Feature
Innovation in banking

Smart Banking

It's widely known that banks need to implement modern technology in order to remain competitive. But where do you start and which technology is the best fit? Accenture, Avanade and Microsoft have pioneered an initiative that answers these questions and more. Amber Stokes reports



According to the 2014 Celent report *IT Spending in Banking: A Global Perspective*, total IT spend across the banking industry in North America, Europe and Asia-Pacific will grow to US\$188 billion this year – up 4.4% compared to last year. Celent suggests that this upward trend is indicative of the emphasis that is being placed on the importance of implementing new technology. Indeed, many organisations predict that if they don't invest, they risk losing customers and falling behind competition.

But for some banks, though, the thought of implementing modern technologies feels like a minefield. "Our customers often ask us how they can be innovative and improve services for the new,

empowered consumer," explains Marcelo Marquez, director of business development for worldwide financial services at Microsoft. "Accenture, Avanade and Microsoft have therefore developed an initiative that illustrates which technology is the right fit for them and how it can transform their business. We call it Smart Banking."

Changes in the banking landscape

"In Europe, many banks are still under cost and margin pressure following the financial crisis. At the same time, the European Union is taking critical next steps to introduce a banking reform proposal aimed at reducing risk through further regulations and stress tests of capital structures at Europe's biggest

banks," says Claudia Hauser, EMEA financial services lead at Microsoft. "Many banks struggle with exaggerated cost-income ratios caused by high-cost legacy infrastructures and decreasing revenues and/or customer retention due to lower trust and loyalty of banking customers.

Hauser says financial institutions need to be agile and proactively embrace innovation through technology, in order to lower the cost of current systems and achieve competitive edge in today's challenging landscape. "New innovative technologies will help to drive richer customer experiences and services across all channels in order to win customer trust," she says.

Morten Steiner, who is responsible for financial services within EALA at Avanade, elaborates: "Banks are experiencing increased customer churn as they simply don't need a strong relationship with their bank any more, and there are a number of reasons for this." These include:

1. The market is becoming more transparent through online price comparison services, making banking products more commodity-based. Customers are therefore 'shopping around' to get the best price, rather than valuing longer trust-based relationships
2. The digital revolution means customers expect to be able to receive products and services when they need them and on any channel. If their bank doesn't meet their expectations, they will take their business elsewhere – a trend supported by the report *Accenture Global Consumer Pulse Survey 2013*, which found that 20% of customers changed some or all of their retail banking products in 2012
3. The industry has also seen an influx of new players entering the market. The new entrants, including retailers and telecommunications organisations, are threatening many well-established banks because they're able to implement modern technology without the legacy costs old players are weighed down by and can subsequently provide products at a lower unit price.



Feature

Innovation in banking

Juergen Pinkl, Accenture's managing director of technology financial services for EALA, explains that it is not so much that the technology is new, but that it has instead matured. "I was talking to clients about the possibility of using video conferencing ten years ago. Back then, it was a rather cumbersome technology," explains Pinkl. "But use of Lync and Skype, for example, is widespread today among consumers and within the banks themselves."

Due to the consumerisation of IT, Pinkl says there is a danger banks will become marginalised, as fewer customers see the value of the bricks-and-mortar branches. "Banks therefore need to reinvent themselves. Instead of remaining on the periphery, handling strictly financing and fund transfers, they should instead strive to become an 'everyday bank': positioned to fulfil all their customers' daily financial and non-financial life needs and being central to lifestyle purchases, in the same way that social media organisations and retailers have become central to retail purchases," he says.

Smart Banking – built for real customers

Accenture, Avanade and Microsoft's global initiative aims to

illustrate to banks how they can use modern technology in order to overcome these challenges and ultimately take a step closer to becoming an everyday bank – winning back customer loyalty and positioning themselves successfully in the market.

While it is important for banks to become innovative and implement modern technology, Ramon Miranda, Avanade's chief technology innovation officer for Europe, Middle East, Africa, Latin America, explains that they shouldn't simply implement technology for the sake of it. "Consumers are setting the trends today and banks have to remain flexible in order to keep up," he says. "So Smart Banking acts as a guide for banks, illustrating how they too can innovate just like the customers we have already worked with, and which technology is a best fit for them."

"We have spent a lot of time connecting with customers that are already using our solutions, in order to develop innovative scenarios that illustrate the value of Microsoft technology across all customer touchpoints," explains Marquez. "The scenarios are then demonstrated to banks, reflecting a day in the

life of the new consumer and bank advisor.

They are focused around three main areas – the advisory centre at the branch, the operational side of the bank and at the customer's home – and through these demonstrations, banks are able to follow the customer's or advisor's journey, witnessing how Microsoft technology can be used to make their experience better."

Key themes demonstrated through Smart Banking include banker mobility, next-generation self-service, remote advisory, social computing and the use of digital signage. "For example, we demonstrate how digital signage and advanced appointment scheduling can improve services to customers on the go, at home or in the branch through the use of modern advisory services that are based on interactive Windows 8 applications running on tablets or touch-enabled walls or tables like the Samsung SUR40 with Microsoft PixelSense, or Xbox Kinect," explains Hauser. "Because Kinect is a sensor, it can, for example, measure heart rates or the current mood of a customer, and depending on that, provide an express service, put them in touch with a remote advisor



over Lync or Skype, or connect the customer directly with their relationship manager or financial expert.”

Accenture, Avanade and Microsoft can also help banks deliver next-generation self-service by enabling virtual greeters and remote advisory services, for example. “Gamification is key to improving customer experiences and deepening customer loyalty. With Kinect, we can provide unparalleled experiences within the branch, outside the branch – like in a shopping centre or sports event – as well as convenient banking from the customer’s living room,” says Hauser.

Miranda explains that a number of banks are starting to experiment with technology in order to improve first impressions with the customers by developing flagship branches. “UniCredit has created a flagship branch in Milan at the base of the UniCredit Tower in Piazza Gae Aulenti as part of its three-year plan to transform 1,000 branches and revolutionise the customer experience,” he explains. “UniCredit has implemented modern technology based on a user-friendly service model that enhances the customer experience. For example, the windows in

the new branch become interactive screens at night, using Microsoft Kinect technology, enabling more personalised and dynamic communications with customer than traditional printed posters.”

Continuous innovation

Accenture, Avanade and Microsoft have successfully organised several Smart Banking innovation days globally, including in London, Paris, Frankfurt, Japan and New York, where they have presented the initiative to customers. The innovation days have also given the companies the opportunity to get to know the customers and their individual business needs, so that they can then follow up with a tailored workshop demonstrating how certain solutions within the Smart Banking initiative can help them.

“80% of the time, banks share the same problems, and so one reason the Innovation Days sessions have been so successful is because banks can see what other organisations are doing and how they can gain inspiration from their projects to drive innovation themselves,” Miranda explains. “But Smart Banking is really useful because it is a great point of departure to see the art of possible with Microsoft technology and banks can use to find the right solution for them that allows them to get closer to their customers.”

Accenture, Avanade and Microsoft will continue to develop and update scenarios as and when customers implement new solutions, which means that banks can follow the Smart Banking initiative for a continuous reflection of innovation in the industry. “Consumers are used to the benefits of their

“With Kinect, we can provide unparalleled experiences”

Claudia Hauser

Microsoft

connected, mobile lifestyles and forward-thinking retailers have set the standards high. Consumers are used to being able to order a product online one day and see it arrive the next day,” says Pinkl. “They expect this level of service everywhere they go, so banks have to catch up.”

Steiner adds: “Banks are adverse to risk, which might be one reason for some organisations to view the implementation of new technology with caution. That’s why with Smart Banking, we have set out to illustrate not only the ‘art of possible’ – showing how they’re able to develop new capabilities by implementing modern technology – but also how it can be implemented in a secure, low-risk manner.”

“With Smart Banking, we provide banks the methodologies, technologies and solutions to become a digital bank and remain at the heart of their customers’ everyday lives,” says Hauser. “We believe that with our innovative technologies, we can enable banks to lower and streamline bottom-line technology costs, while also enabling seamless customer experiences to improve customer loyalty and acquisition.”

“With technology in the banking industry evolving at breath-taking speed, we see interactions with customers becoming more engaging and dynamic, the workplace becoming more mobile and collaborative and processes becoming more flexible. For customers, this means many more contact points with their bank. For banks, this means having a much deeper understanding of their customer base, and having the ability to offer a customised experience tailored to the individual,” says Karen Cone, Microsoft’s general manager for worldwide financial services. “This in turn is driven by a socially connected and collaborative workforce, a connected view of customer and market opportunities, and the ability to engage customers through seamless, contextual experiences across channels. The Smart Banking initiative enables banks to optimise customer engagement models to drive customer retention with high-quality service experiences, attract new customers with a redesigned sales experience, connect and share with colleagues in real time – and ultimately become more engaged with customers.”



Monitoring goal and investment risk

Ramón Wemsen explains how Figlo Wealth Watch can help financial advisors deliver better customer service and ultimately help clients better manage their finances

Next to goal setting and risk profiling, one of the most important tasks of a financial advisor is to help clients reach each of their goals by proactive monitoring. To do so, they need a monitoring and alert tool, such as Figlo Wealth Watch. With this tool, the financial advisor can proactively monitor the feasibility of each specific goal of the client, as well as the investment risk of the products, in an easy way and on a daily basis.

In the Figlo Wealth Watch, the financial advisor has an overview of the total income, expenses, assets, liabilities and prioritised goals relating to that client. In each category, one or more product card can be assigned to one specific goal, called a bucket. So, for example, there could be a pension bucket and a bucket for the education of the client's children, plus others. For all the client's different goals, the financial advisor will select one or more product cards. By combining the product cards with a database running actual product information, such as expected return and volatility, the Figlo Wealth Watch can calculate the actual average investment risk, as well as the expected feasibility – based on the Monte Carlo simulation – of the future specific goal in real time.

For example, a client might want to save money for their children's education in 2032 and needs €50,000 to reach this goal. By inputting the information into the Figlo Wealth Watch, the advisor and the client can learn that the possibility of reaching this goal currently is only 22%. They can also see that the actual investment risk is moderate defensive. The client may subsequently want to take action to raise the feasibility of this goal. The Figlo Wealth Watch conducts the feasibilities based on actual constraints, such as target capital, premium, realisation data and risk profile.

On this basis, the Figlo Wealth Watch will automatically calculate five ways to reach the goal on a daily basis. The advisor can take each of these variables as a starting point to reach the goal. But after discussing it with the client, the advisor can then change the feasibility to 90% – where the Figlo Wealth Watch will automatically update the outcomes, recommending that the client pays in an extra lump sum of €7,500 – put in a periodic payment of €160 per month, postpone the realisation date from 2032 to 2034 or change the target capital to €35,000. The advisor and the client can now decide which solution is the most appropriate and preferable to the client.

By using the Figlo Wealth Watch solution, financial advisors can provide a more personalised service to customers, and the clients are able to better manage their finances by setting accurate and achievable goals.

“Using the Figlo Wealth Watch solution, financial advisors can provide a more personalized service to customers”

Ramón Wemsen

Figlo



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In practice

Customer relationship management

Citi Private Bank

Global private banking business is improving the experience for its ultra-high net worth customers around the world with the help of Microsoft Dynamics CRM

Headquartered in New York, Citi Private Bank is part of Citigroup and delivers private banking services to ultra-high net worth customers across the world. Three years ago, the company launched Project Sheen – an initiative focused on delivering an optimal client experience across all touchpoints.

“Following the financial crisis, there was a great deal of distrust and we had a lot of things to fix as an industry,” explains Dena Brumpton, global chief operating officer at Citi Private Bank. “During that time, we re-evaluated our target market and made sure that we were focusing on the right end of the spectrum. Ultra-high net worth customers require more bespoke services and so we started to consider ways we could improve their experience through Project Sheen.”

Brumpton explains that in order to provide the best possible customer experience, it is key that the firm understands its clients – their needs, what they want from the organisation – and is able to determine how well its bankers are delivering its value proposition to them. Furthermore, bankers at Citi Private Bank have the lowest ratio of clients than any other private bank, meaning they have an advantage in being able to get closer to and understand the needs of these clients. Citi Private Bank also wanted to ensure that customer information is held in a logical and ordered way that enables bankers to best evaluate clients’ portfolios and to identify investment opportunities.

When it launched Project Sheen, Citi Private Bank decided it needed a customer relationship management (CRM) system to help capture and manage all its customer information. “We started a regional roll out of a CRM system, but

realised that it wasn’t going to meet our global needs,” explains Brumpton. “So our technology team considered Microsoft Dynamics CRM and found that it was everything we wanted and more. Most importantly, it could serve as a global solution and integrate with the platform we were currently using.”

Microsoft Dynamics CRM was implemented across locations in Asia in November 2012 and the full roll out across all regions worldwide was completed by August 2013. The implementation was smooth and the organisation found the new system to be intuitive, requiring limited training to get everyone up and running. “Ease of implementation was important for us. We had already experienced the challenge of trying a new CRM system that didn’t work and so it was important that the switch was seamless – and it was,” says Brumpton.

“Another factor we found to be positive with Microsoft Dynamics CRM was the ability to be compliant with regulatory requirements in each jurisdiction,” adds Tim Tate, head of client management at Citi Private Bank. “Our regulators are particularly stringent in Asia and Switzerland around the housing, storage and protection of client data. This solution isn’t cloud based and so we are able to ensure we remain compliant by storing all client data in our own data centres in key locations.”

Today, approximately 1,000 Citi Private Bank employees are using Microsoft Dynamics CRM. “Feedback from employees has been positive, particularly around how intuitive the new CRM system is to use. We’ve also been able to resolve some of the challenges we previously experienced with the old system in terms of speed and

“Our technology team considered Microsoft Dynamics CRM and found that it was everything we wanted”

Dena Brumpton

Citi Private Bank

performance,” explains Tate. “In Europe, for example, the previous system would run very slowly because of the way we have to manage data going in and out of Switzerland. This is no longer a problem and we’ve witnessed a significant improvement in performance with Microsoft Dynamics CRM.”

A key feature Citi Private Bank employees value is the Outlook client, where bankers can have instant access to Microsoft Dynamics CRM when viewing e-mails. By using the new CRM system, bankers are able to access client information more quickly and ensure they deliver an improved customer experience. “We can deliver solutions to our clients in a much more relevant way because we understand their needs,” explains Brumpton. “We know what they’re interested in and what their preferences are, which means we can target them better.”

When launching Project Sheen, the organisation also looked at how it could provide the banker and the client with the same view of relevant information. Its digital platform – Citi Private Bank In View – achieves this, and Citi Private Bank plans on extending the benefits of Microsoft Dynamics CRM by integrating it with the platform. “This will mean that bankers will have two entry points for the CRM system – one will be through the tool itself and the other will be through the client engagement tool In View,” explains Tate. “This integration will give bankers even more access to information on the go, wherever they are. Subject to local regulations, bankers will be able to view customer and account information on mobile devices away from the office, rather than being limited to their desk, which our basic CRM system required.” The success of Project Sheen and the use of



Microsoft Dynamics CRM is a testament to the partnership between Citi Private Bank’s technology team and its front-line bankers. “The teams have worked really well together across all regions to develop the innovative client-based solutions we have today,” says Tate.

“We have been working with Citi Private Bank for the last few years and have seen the great progress they have made in developing excellent, close relationships with their clients,” concludes Ian Anderson, Microsoft Financial Services business manager. “We’re thrilled that Microsoft Dynamics CRM has played a major part in helping them achieve this and look forward to continuing to work with Citi, identifying how Microsoft technology can further help them meet their goals.”



Overview

Solution: Customer relationship management

Benefits: Improved access to relevant customer information, intuitive user experience, global regulatory compliance ensured, seamless integration with other systems, improved customer experience

Technologies: Microsoft Dynamics CRM

Partner: Microsoft

NASDAQ OMX

Financial trading services company has migrated its data warehouses to SQL Server 2014 to better manage data growth, maintain fast queries and reduce database maintenance time

Established in 1971 as the world's first electronic stock market, NASDAQ OMX owns and operates three clearing houses, five central securities depositories, and 26 markets (including the NASDAQ Stock Market), with a combined value that exceeds US\$8 trillion. NASDAQ OMX is also a technology company. Its infrastructure includes custom applications and a trading engine that's used internally and by 80 global marketplaces.

The volume of transactions and data that NASDAQ OMX manages is impressive. When markets open, the company processes more than one million messages per second. In addition, the company manages many large databases. "Just our US options and equity data archive handles billions of transactions per day, stores multiple petabytes of online data, and has tables that contain quintillions of records about business transactions," explains Stanley Orłowski, director of database structures at NASDAQ OMX. "Uncompressed, the options and equity archive measures two petabytes (PB). With page compression, it measures 1.5 PB."

Financial traders need near-real-time insight into current and historical data to make decisions, in just seconds, that can involve millions of dollars. Analysts also need in-depth insight to understand trends and create regulatory reports. To meet these requirements in the past, IT staff had to constantly monitor and finetune databases so that they could provide the best possible performance, especially with uncompressed data growing by 500 terabytes (TB) each year.

By 2013, NASDAQ OMX recognised that its existing database solutions couldn't support

projected long-term growth. Orłowski says: "Data is the lifeblood of the company – and managing a petabyte of data takes a lot of planning. You can't turn quickly on a dime."

When NASDAQ OMX learned about SQL Server 2014 software and its in-memory columnstore, IT staff decided to migrate data warehouses to SQL Server 2014 Enterprise and the Windows Server 2008 R2 Enterprise operating system. By choosing SQL Server 2014 and taking advantage of in-memory columnstore – as well as other new capabilities – the company can better manage its massive amounts of data, speed queries, and simplify database maintenance. The company can also improve query performance and simplify maintenance by taking advantage of incremental statistics and the changes in the cardinality estimator in SQL Server 2014. With these new tools, table statistics can be updated more frequently and they can be updated for individual partitions rather than for an entire table. As a result, statistics are more accurate, which helps produce better query plans and faster query performance. SQL Server 2014 also supports native backup encryption so that engineers can encrypt data in one step rather than two – and encrypt directly to disk, tape, and the cloud.

"The Microsoft technology stack gives us excellent total cost of ownership, and we have a high degree of confidence in the platform," says Orłowski. "We've also had SQL Server in place for well over a decade on mission-critical systems, and it has a positive track record for delivering reliable performance."

In the past, NASDAQ OMX could compress 500 TB to 250 TB with page compression in SQL Server 2012. However, with SQL Server 2014, the

"The Microsoft technology stack gives us excellent total cost of ownership, and we have a high degree of confidence in the platform"

Stanley Orłowski
NASDAQ OMX

company can achieve even greater compression levels, reducing data to one-quarter of its original size. Orłowski explains: “With SQL Server 2014, we can reduce 250 TB of page-compressed data to 125 TB using in-memory columnstore. After we migrate all of our US data archives to SQL Server 2014, we expect to reduce our storage footprint by half a petabyte. We’ve seen on average a 50% reduction in the amount of data that’s physically stored on disk. And not only does it help us save money, but it also helps us more efficiently and effectively deliver data to our consumers.”

NASDAQ OMX also expects to facilitate faster and more accurate insight into its massive data stores. “After an initial migration to SQL Server several years ago, we were able to rework queries so instead of taking a day or two to run, these same queries run in just minutes,” says Andrew Geaslin, principal database administrator at NASDAQ OMX. “Upgrading databases to SQL 2014 and taking advantage of in-memory columnstore will make it easier for us to hold on to those performance improvements because statistics maintenance is easier.”

IT personnel will also save disk space with in-memory columnstore and new encryption capabilities. “SQL 2014 allows us to save disk space on multiple fronts, making it possible for us to cut our existing storage footprint for the options and equities archive in half,” says Geaslin. “The database itself has a smaller storage footprint on disk due to in-memory columnstore, and encrypted backups reduce the need for swap space on disks used by third-party tools to encrypt data before it’s moved to storage.” IT personnel will also increase efficiency and reduce complexity. “By consolidating multiple indexes



into a single in-memory columnstore, we reduce our maintenance and troubleshooting overhead,” says Geaslin.

Maintaining its ability to deliver rapid and accurate insight into current and historical market data is critical for NASDAQ OMX. With its new solution, the organisation has the platform it needs to effectively manage petabytes of information. “SQL Server 2014 is a game changer for us. Its in-memory columnstore, advanced statistics, and cardinality estimation are the tools we need to manage our very large databases for the long term,” says Orłowski. “By making data more readily available to our customers, we can also help them make better business decisions.”



Overview

Solution: Database platform

Benefits: Better manage data growth, maintain fast queries, reduce database maintenance time

Technologies: Microsoft SQL Server 2014 Enterprise, Windows Server 2008 R2 Enterprise

Partner: Microsoft

Standard Life

Leading UK financial services organisation improves employee productivity and collaboration across worldwide offices with Microsoft productivity solutions

Standard Life is one of the UK's leading providers of savings, pensions and investment products. While 6,500 of its employees work in the UK, a further 2,500 are based in locations around the world. In recent years, the organisation has explored new global business models that provide a consolidated working environment for employees, regardless of their location.

The Digital Workplace strategy is central to this. It's a long-term plan for IT that promotes an always-connected working environment and breaks down the traditional barriers of communication. Sandy Begbie, group operations officer at Standard Life, says: "We wanted to enhance our services in other parts of the world such as Asia and North America. To do this, we needed an infrastructure that could support collaboration among employees no matter where they're based and accelerate business growth."

Over the years, Standard Life deployed a variety of systems, which didn't integrate with its Microsoft Office applications or other existing systems, and were expensive and inefficient to manage and upgrade. While individual deployments resolved issues for some departments, they rarely accommodated all areas of the business. In addition, Financial Services Authority regulations around data security require banks to invest in up-to-date, supported technologies.

The firm aimed to increase the productivity of its employees while keeping costs down. Standard Life decided to deploy a Microsoft technology suite designed to enhance information worker productivity. "Microsoft is the best fit for us. It offers industry-standard solutions and familiar tools, which will enhance the way we interact with our colleagues and customers," says Paul Chong, group IT and commercial director at

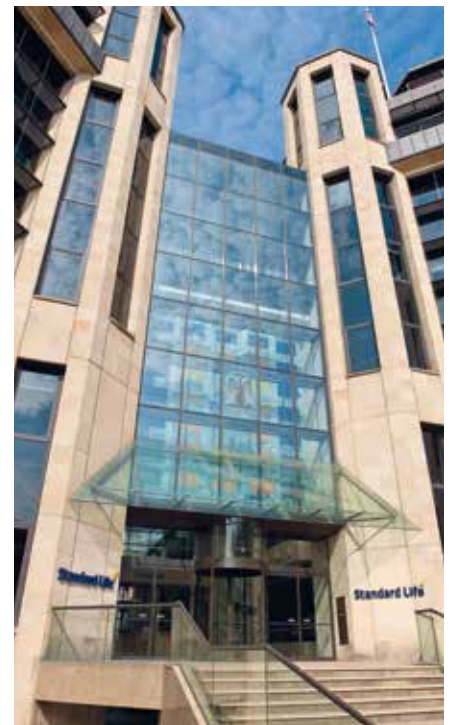
Standard Life. "The Microsoft roadmap also has a strong connection with the cloud, which aligns with our own IT strategy."

The Accenture-Avanade-Microsoft alliance is working with Standard Life on its Digital Workplace transformation programme, including the migration of 8,000 employees from IBM solutions to Microsoft technologies. In time, the company plans to integrate these with Microsoft Office 365 in the cloud through Microsoft Azure, but for now has deployed the Office 2010 suite of applications, supported by the Windows 7 operating system.

Tools within Microsoft SharePoint Server 2010 help multiple teams review and edit documents without risk of duplication and encourage collaboration through discussion boards. Meanwhile, users can create surveys to collate feedback that will help improve business processes.

Microsoft Exchange Server 2010 replaces IBM Notes to offer users secure management of e-mails, calendar and contacts across various devices. Global teams can now work together effectively with Microsoft Lync 2010. It integrates with the organisation's telephone system and gives users control of communications from their computers, offering clear voice-over-IP calls and video conferencing. It synchronises contact lists and status updates with Microsoft Outlook 2010 so employees can initiate instant messages, calls and e-mails.

"For the first time, Standard Life has a global solution that means we can devise innovative new products and release them quickly," says Chong. "Microsoft technologies support our Digital Workplace strategy, helping us improve our services and meet customer needs."



Overview

Solution: Productivity and collaboration

Benefits: Improves productivity and global collaboration, allows employees to improve services and meet customer needs

Technologies: Microsoft Azure, Office, Windows 7

Partner: Accenture

Progressive Insurance

US automotive insurance firm improves data performance in company tests, without the need to upgrade hardware, through the use of Microsoft SQL Server 2014

Based in Ohio in the US, Progressive Insurance is one of the largest automotive insurance groups in the country, managing more than 13 million policies. The online experience of its customers is crucial to its continued success and central to that is the company's policy-serving web app, through which customers manage their policies.

As it updated the app, Progressive Insurance planned to add its Special Lines business, such as insuring motorcycles, recreational vehicles, boats and even Segway electric scooters. However, the company needed to know that the additional workloads wouldn't impair the customer experience. The database runs on a version of Microsoft SQL Server software and holds the XML files that the app writes for every active web page that a customer visits. The app uses the files to synchronise data so the customer sees consistent information, and has a consistent experience across the website.

As it consolidated its data environment on SQL Server, the company wanted to handle increasingly large amounts of data for predictive analysis. Progressive Insurance has long made Microsoft technologies its standard, so it wanted to see whether the newest version of SQL Server – SQL Server 2014 – could address its database issues. In particular, Progressive Insurance was interested in In-Memory OLTP capability, a feature in SQL Server 2014 designed to boost mission-critical data-centre performance. In-Memory OLTP can host online transaction processing (OLTP) tables and databases in a server's working memory, where an application can access them directly without potential bottlenecks of hard disk input and output.

The company tested In-Memory OLTP before SQL Server 2014 became commercially available



and modified eight natively compiled stored procedures, using already-documented code. It then put the application through a range of stress tests designed to simulate increasing amounts of user activity on the website. The tests were conducted on a Cisco UCS B200-M3 server computer with 256 GB RAM, where In-Memory OLTP boosted the processing rate from 5,000 transactions per second to 21,000.

To better support predictive analysis, the company acquired a big data appliance with Microsoft Analytics Platform System (APS) capabilities. The company has moved two of its structured analytics applications to the APS, and plans to move up to 20 more over the next few years. Progressive Insurance sees SQL Server 2014 as a very practical way to increase database performance and promote great customer and employee experiences online. Meanwhile, it uses the SQL Server-based data appliance to expand its work in predictive analytics.

The company will use the throughput gain to support the addition of its Special Lines business to its policy-servicing app and session-state database. With its use of SQL Server 2014, Progressive Insurance can run a single, larger database reliably and avoid the cost of multiple databases.

By using SQL Server 2014 to integrate auto and special-lines business into a single online app, Progressive Insurance will give its customers and employees a better online experience. APS boosted query processing by 1,900% compared to queries on Progressive systems, while concurrent processing on the appliance showed an 807% increase. "There were queries that we couldn't otherwise complete on-premises that ran in just two minutes on the appliance," says Craig Landford, IT manager at Progressive Insurance. "The analyses we'll run on the APS will help us to increase sales and retain customers."



Overview

Solution: Cloud and server platform

Benefits: Increased processing speed, improved customer and employee online experience

Technologies: Microsoft SQL Server 2014, Microsoft Analytics Platform System

Partner: Microsoft

From standards to snow storms

Globetrotter Hans Tesselaar talks to Amber Stokes about his role as executive director at banking standards not-for-profit BIAN, and what he enjoys the most about travelling

What was your role prior to BIAN and what led you to join the organisation?

My role was director of strategy, innovation and sourcing at ING Insurance in the Netherlands, where I worked with several departments including the architectural and finance department. In 2011, BIAN board members were looking for someone with a thorough background in architecture who could help develop the organisation and speed up its delivery. I was approached by the chairman of the board, and I accepted the opportunity because I love innovation and the opportunity to work with different types of people from all over the world. Looking back, I think it's one of the best decisions I've ever made.

What might your average day involve?

I run the association, which means taking care of legal aspects with our legal aid; setting up introductory sessions for prospective members; preparing meetings with board members, analysts and journalists; and fine-tuning the BIAN strategy.

My job involves a lot of travelling. Recently, we had our core team meeting in New York where we met with prospective members to teach them about the organisation. We also met with BIAN members to work on the organisation's deliverables. I then went to Pittsburgh where I met with Steven Van Wyk, who is BIAN's chairman of the board and head of technology and operations at the PNC Financial Services Group. We discussed the possible use of BIAN material within different programmes with PNC's architectural community. We also recently met with a new academic partner to look at how BIAN can contribute to some of their classes in the Autumn.

The best thing about travelling is having the opportunity to meet people from all kinds of cultures. It enriches my perception of how we do things in my culture and how we can benefit from the influences of different cultures and habits.

What has been the most interesting trip so far this year?

I went to Antarctica in March, but for pleasure, not work! My wife and I have always wanted to go there; we love places that aren't over-populated and where nature is at the heart. It took three nights and two full days to get there on a vessel that has just the basics – a shower, food and drink – and I think 60% of everyone on-board were sea sick!

We slept out in the open air (there were tents for emergencies) and had meals back on the vessel because regulations in Antarctica mean that you're not able to take food and drink ashore.


We experienced a few snow storms in the night, but that's what makes it exciting!

We saw a lot of animals including penguins, whales, dolphins and sea lions, but not polar bears – they're only found in the North Pole. We also had the opportunity to go hiking and do photography workshops, and my wife also went mountaineering. It was an incredible experience and we met all kinds of different people from all over the world.

If you hadn't chosen this career, what job would you like to have?

I think there are two things actually! I'd like to be a Formula One driver or a professor at Stanford University. I completed a postgraduate course there called Customer-Focused Innovation, so I'd like to teach something like that.





Perspective

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