

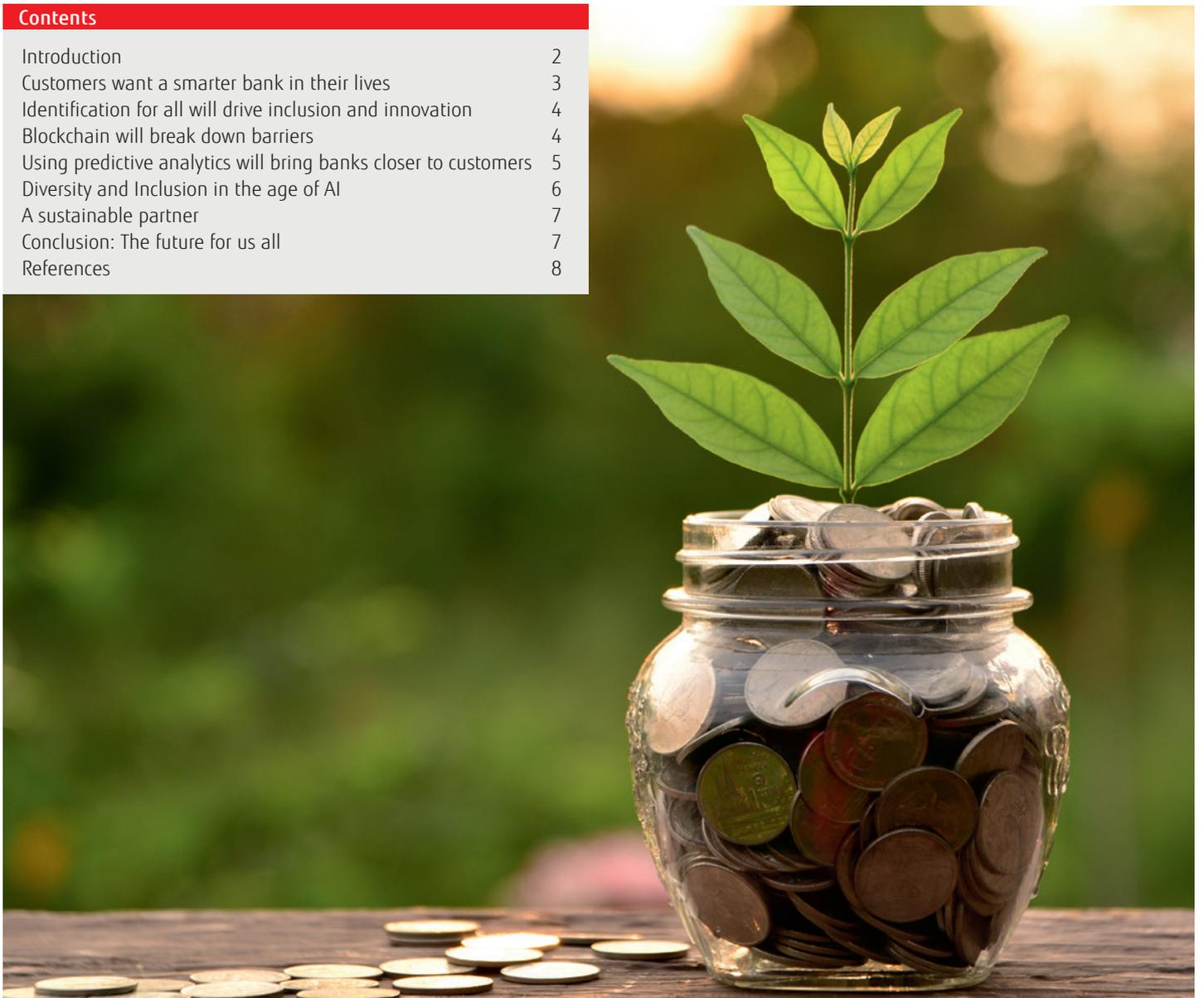
Co-creating The Sustainable Bank

How to use innovative technology to make sustainable banking work for everyone

Regulatory failures, mis-selling and cyber-attacks – banks across Europe have suffered repeated criticism in the media and seen their reputations eroded. The global financial crash of 2008 has left many consumers confused about the role of banks and distrustful of their motives. More than half (55 percent) of British consumers don't trust banks to work in their customers' best interests¹.

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In the UK banking market, challenger banks are consistently outperforming the big 5 incumbents on growth, cost-to-income and return on equity. As they march to stronger profits, the big banks are stumbling on remediation costs and legacy issues².

As Business in the Community's (BITC) Responsible Business of the Year for 2015, we at Fujitsu believe that great product ideas and smart technology are only parts of any business success story. Being a responsible and sustainable business is key to winning and keeping the trust of consumers, employees and regulators – which, in turn, leads to increased profitability. It's central to corporate survival as a new generation asserts its values and looks for them in its suppliers' behaviour.

Globally, 73 percent of millennials say they will spend more on a product which comes from a sustainable brand³.

Banks are scrambling to develop and integrate digital technology into their organisations, with the aim of delivering better customer experiences and reducing operating costs. This is absolutely necessary – but it's not enough. For banks to thrive in the digital age, they can't afford to ignore how their activities impact the sustainability of the business, the environment, the economy and our wider society.

We have used our experience of acting as a responsible business to develop a vision for sustainable banking supported by technology. In this paper we explore the main sustainability challenges facing the banking sector and offer our ideas on how the industry can become a leader in the responsible business movement.

Working with Business in the Community

Business in the Community (BITC) is a business-led, issue-focused charity with more than 30 years' experience of mobilising business. It is one of The Prince's Charities, a group of not-for-profit organizations of which HRH The Prince of Wales is President.

BITC works with over 800 UK member companies committed to improving their impact on society. It seeks to positively shape business impact on the environment, in the marketplace, in the workplace and in the community.

Fujitsu was named Responsible Business of the Year at BITC's 2015 Annual Responsible Business Gala in London. The award recognized Fujitsu's role in effectively influencing others to collaborate and create the conditions for long-term sustainable change. We were commended for embedding sustainability into our business strategy, and displaying exceptional leadership and reach within and beyond our own sector to help build the wider movement of responsible business.

BITC's Corporate Responsibility Index was launched in 2002 and is the UK's leading benchmark of responsible businesses. We are proud to have achieved an Index score of 98%, placing us in the top six organizations to enter. Fujitsu colleagues work with young people facing social disadvantage through BITC's government-backed Business Class scheme. We're currently supporting schools and colleges in Basingstoke, Bracknell and Telford.

We also led the way in piloting ConnectFirst, BITC's experiential learning secondment model for graduates, apprentices and future leaders. In May 2017, we seconded two talented graduates to deliver social impact through assignments in the London Boroughs of Southwark and Waltham Forest. They gained a wealth of enhanced skills and insights while creating sustainable change within their local communities. We're looking forward to providing this opportunity again in early 2018.



Customers want a smarter bank in their lives

The financial crisis of 2008 had complex causes. But experts agree that the economic meltdown was triggered by banks lending to consumers with poor credit ratings. When US house prices started to fall in 2006, it became clear that too many homeowners were unable to pay their mortgages – which were sometimes 100 percent or more of the purchase price. The growing trade in mortgage-backed securities left investors exposed to falling values and credit default swaps – a kind of insurance – weren't able to cover the losses⁴. The highly interconnected nature of international finance led to a worldwide infection, the effects of which are still being felt today.

Commentators and regulators are now flagging risk factors which look eerily similar to the sub-prime mortgage problem. Consumer debt has risen as people borrow to compensate for stagnating wages. In the UK, outstanding debt on credit cards has reached a record level of almost £68bn, leading to warnings from the Financial Conduct Authority, the Bank of England and debt charities⁵. Meanwhile 82 percent of new car registrations are now financed by personal contract plans (PCPs), which make higher-price models affordable to a wider group of customers, but which may also lead to repayment problems if inflation or unemployment rise⁶.

However, customers rarely see their bank as a source of accessible and objective advice. They are more likely to consult friends, family, online forums and money advice websites. None of these sources has the same intimate knowledge of a customer's financial position and behaviour as a retail bank. Independent and peer-group sources can supply excellent generic advice, but no one understands a customer as well as a bank. Banks can make use of their unrivalled data to give valued services to customers, protect them from financial surprises and support them in their personal goals.

We are working with Fukuoka Financial Group (FFG) to help younger Japanese consumers manage their money. FFG's iBank is a platform for smartphone banking based on Fujitsu's private cloud platform and security services. The iBank platform includes an account management app called Wallet+, a lifestyle information service and a debit card. Within eight months of the July 2016 service launch, Wallet+ had recorded 80,000 downloads with around 65 percent of accounts being opened by customers aged under thirty.

Wallet+ lets users check the balance of their debit card at any time and shift funds into special-purpose savings accounts with a single tap. Partner companies can then use data on saving patterns to recommend products and services at the best time for the customer. FFG expects that its three-way local ecosystem – the bank, some 5.5m individual customers and around 220,000 business customers – will also contribute to regional revitalisation.

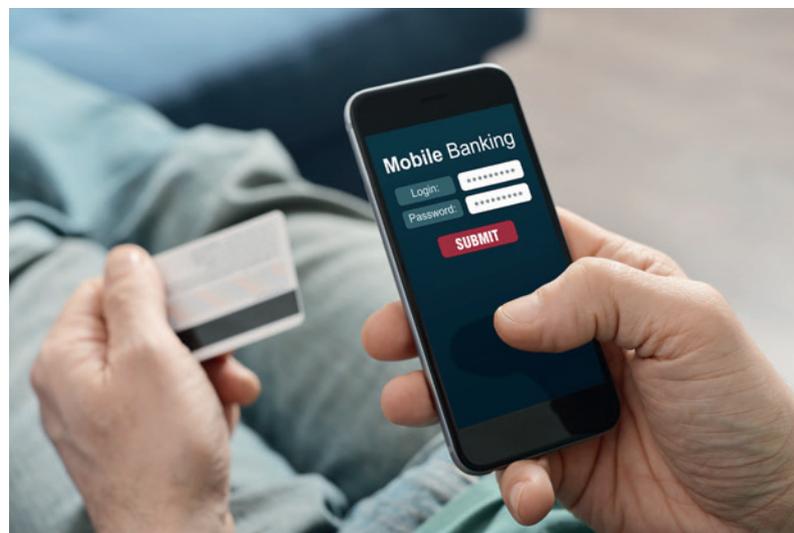
The Fujitsu solution meets the relevant regulatory standards and enables firewall isolation of every segment within the data centre. This means it has high operating quality and rapid recovery⁸.

|| The Financial Conduct Authority must step in to curb the worrying rise in debt – by banning credit card firms from pushing more credit onto people who haven't asked for it, and compelling them to offer support sooner when it's clear people can't pay. **||**

Gillian Guy, Chief Executive, Citizens Advice⁷

One way to avoid a replay of the 2008 crisis is to help consumers manage their money. This can encompass help with control of their daily spending through to saving for weddings or home deposits. With more and more young people priced out of the housing market, supporting their ability to become independent is an important issue for the whole economy.

At Fujitsu, we believe banks must play a key part in helping their customers become financially secure and confident. We're not advocating a return to the restrictive, paternalistic practices of the past. We need a banking sector which cares for the financial health of its customers and recognises its role in ensuring future economic prosperity for all.



Identification for all will drive inclusion and innovation

The World Bank's Principles on Identification for Sustainable Development include the objective of ensuring that every person in the world has the right to participate fully in their society and economy⁹. In order to achieve this goal, everybody needs proof of identity so they can access services freely, open bank accounts, attend school and partake fully in society.

Currently, an estimated 1.1bn people have no proof of identity, excluding them from most of society's functions. That's one in every seven people. The majority live in Africa and Asia, and more than a third are under the age of eighteen¹⁰. Part 9 of the United Nations' Sustainable Development Goal 16 (SDG 16.9) is to provide legal identity for all, including birth registration, by 2030¹¹. Having proof of identity will ensure that everyone has access to the basic human rights many of us in the developed world take for granted. It will also help to stimulate development, trade and innovation.

With the Data Revolution, digital information is becoming more central for development, and this has to also include the population, so that people can participate and assert rights.

Alan Gelb and Anna Diofasi, Centre for Global Development¹²

We believe banks are the perfect homes for the digital identities of citizens. Banks undertake rigorous know-your-customer procedures to verify their customers' identities and guard against fraud and money laundering. The expertise banks have developed in this area makes them prime candidates to act as identification agents. Their long-standing reputation for safeguarding customers' financial assets can be extended to the protection of identity data.

In support of SDG 16.9, Fujitsu is working with a global payments company to build a secure, blockchain-based service enabling citizens to store and use all their critical identity assets including passports, ID cards, medical records, birth certificates and qualifications. Bringing these credentials securely together makes many day-to-day processes simpler and opens the door for new applications. For example, purchases that require an age-based proof of identity – such as buying alcohol – will be much easier, since the debit card used in the transaction will be connected to the buyer's passport. The consumer's bank card becomes a key which unlocks services and removes obstacles.

Blockchain will break down barriers

There's been plenty of hype around blockchain, a technology originating in the crypto-currency world. Blockchain uses multiple, networked computers to share and mutually confirm data such as exchange records.

A blockchain is distributed and has no central management entity, so it is resistant to tampering and attack. It's an attractive technology for financial services providers, promising security, resilience, transparency and low costs – an unusual blend of features.

Many financial organisations have now trialled blockchain solutions. Returns have tended to be disappointing, with analyst Gartner marking the technology's fall into its famous "trough of disillusionment". Organisations in other sectors have been similarly underwhelmed, with projects failing in the face of the technology's complexity when compared to existing systems¹³. Gartner believes market-ready blockchain solutions are still five to ten years away¹⁴.

The bandwagon may have moved on, but Fujitsu believes blockchain can be a game changer for the sustainable banking agenda, thanks to its role in the Fourth Industrial Revolution – the digital transformation which is blurring the lines between the physical, digital and biological spheres. Blockchain can power international settlements, transfers and trade finance, making transactions easier and bringing new communities into the international economic system. Today, many cross-border transactions take days to process

Blockchain's ability to simplify complex processes, their verification and record-keeping is a huge turning point for cross-border transactions.

Ali Adnan Ibrahim and Mohit Joshi, World Economic Forum¹⁵

because of the need to check settlement instructions and transaction content for inconsistencies. This is expensive and time-consuming – and it exposes banks to the risk of price changes if a counterparty becomes bankrupt between execution and settlement. Banks can be deterred from funding projects in countries which have less well developed systems and regulatory regimes.

Mizuho Bank collaborated with Fujitsu to develop a blockchain-based system using our K5 cloud platform in order to enable low-cost, low-risk, cross-border securities transactions¹⁶. Using the system, the bank can share matched trade information in the post-trade process – and that data cannot be compromised or altered. Without blockchain technology, the bank would have had to build a large-scale settlement from scratch. With our solution, cross-border settlement periods have dropped from three days to same-day.

We believe blockchain can be used to reduce barriers to trade and encourage investment in the developing world – a clear example of technology helping to create a fairer and more inclusive world.

Using predictive analytics will bring banks closer to customers

Banks need to regain the trust of customers and develop deeper relationships with them. Paradoxically, providing more ways for customers to connect with the bank can also make relationships more distant and abstract. Fewer customers now choose to interact with their banks face-to-face or over the telephone, preferring instead to use online channels, self-service machines and mobile apps. This reduces opportunities for bank staff to explore customer needs or reinforce the organisation's differentiators in person. For many consumers, the bank is merely a safe place to park their money.

Almost three-quarters (74 percent) of European customers use online banking on at least a weekly basis to interact with their bank, closely followed by self-service / ATM (64 percent)¹⁷.

Fujitsu believes banks should be life partners with their customers, offering regular, relevant guidance on every facet of life, not just how they manage their money. Few significant life-events are without their financial aspect and a proactive, customer-focused bank can be a real ally in an increasingly complex and uncertain world.

Take, for example, the issue of extreme weather. Consumers are becoming increasingly concerned about the impact of extreme weather events as records are broken and infrastructure is stressed. The deadly "Lucifer" European heatwave of 2017 was accompanied by research predicting that weather-related disasters could affect about two thirds of the European population annually by the end of the century^{18/19}. Conservation charity WWF has warned that floods, droughts and heatwaves could cost the UK economy tens of billions of pounds and hundreds of thousands of jobs by 2050²⁰.

Sustainable banking must include helping customers to protect their property and livelihoods, as well as safeguarding the wider economy. It's a prime example of the "think global, act local" principle. And it's good business.

Fujitsu has worked with the Environment Agency to develop a "Warning-as-a-Service" platform using virtualised cloud technologies. The platform notifies members of the public, communities and businesses if they are at risk of flooding. The technology interacts with users through a variety of channels including phone, email, text and smartphone apps – giving them the vital time they need to protect themselves, their families and their properties in the event of a flood²¹.

Banks are well positioned to provide data-driven, predictive insight services of this kind – using their knowledge to make real differences to the lives of their customers. Easy-to-use applications based on predictive analytics can be embedded in banking applications to maintain engagement, deepen relationships and shift attitudes. We believe customers will see their bank's interest in safeguarding their assets as a natural extension of the banking function. They are ready to trust: give them relevant, timely and high-value advice, and they will respond.



Diversity and Inclusion in the age of AI

Diversity and inclusion must be at the heart of any sustainable business. Fujitsu is pursuing these goals on many fronts, including SEED, our Disability Employee Network, our programs for recruiting and training armed forces personnel, and our involvement with Digital Pride. Like many organizations, we're working hard to make our business more human – while the rise of AI and robotics is apparently creating widespread threats to jobs. Is this a paradox?

For example, commentators predict that over 10m workers in the UK may be replaced by robots within 15 years²². Professional knowledge workers who have been spared in previous waves of automation now fear for their careers. Fujitsu research suggests the integration of AI and robotics in the workplace is only set to accelerate between now and 2025²³.

AI and robotics promise to create huge efficiency savings and productivity gains for the banking sector. But this does not mean people will become irrelevant. Their roles and skillsets will evolve, but employees will continue to be vital to business success. In the first place, making staff redundant would have a negative impact on the perceptions of any bank which chose this course, leading to recruitment challenges and brand damage. Implementation of AI and robotics must be done in a way that is clearly ethical, supports diversity and inclusion, and augments the human capacity of the organization rather than diluting it.

Fujitsu recommends that an effective workplace strategy for 2025 and beyond should be based on the pervasive use of AI-powered systems throughout the working day. The new technologies will free employees to focus on more complex, engaging and value-adding activities. It will support employees via intelligent assistants and help forge new business relationships based on machine-determined matches.



With more technologies such as AI being readied for prime time, we are starting to see the emergence of a more personalized user experience which dynamically adapts to recognize context, location and preferences. These technologies, when coupled with virtual agents, voice control and wearables, are now leading to a more seamless, immersive and collaborative experience.

Ramanan Ramakrishna, Head of Service Innovation and Portfolio, Fujitsu EMEA²⁴

The sensitive use of AI and robotics will deliver a highly personalized, dynamic and context-based experience for task scheduling. Employees working in offices will be dynamically allocated hot desks close to colleagues with whom they interact the most frequently, and digital assistants will take care of calendar scheduling and administrative tasks such as travel booking. Meanwhile wearable devices will help people authenticate and gain access to information and systems anywhere, any time. By reducing the cognitive load on our people, we will free them to use their intelligence, insight and experience to do the things that matter most: making a difference to the lives of their customers.

The majority of organizations are starting to lay the right foundations to future-proof their workplace – for example by introducing technologies such as digital virtual assistants – while the move towards the 'digital workplace' is being driven by business leaders as well as IT heads.

Nick Mayes, Research Director, Pierre Audoin Consultants²⁵

AI and robotics need not be seen as sinister tools of exclusion, wielded in the service of cost reduction and homogeneity. We believe these new technologies are allies. Banks need to learn to re-skill staff and allocate them to the right roles, whether that's directing their new AI and robotic capabilities or discovering and delivering services that rely on human understanding and the personal touch.

A sustainable partner

We're a technology company, but we know technology is really about people. The best data, the greatest devices, the fastest networks, the deepest skills – none of it matters unless it's working to meet people's goals, protect their livelihoods and improve their future. It's our privilege to serve many of the world's greatest financial institutions, where we've learned that banking, too, is about people. This is not to trivialise technical skills in either banking or information technology. It's to recognize their inherent human value – and celebrate the contribution they make. That's why we focus on what we call Human Centric Innovation.

At Fujitsu, we've used our accumulated expertise and experience gained in the demanding financial services industry to create a comprehensive catalogue of solutions, products and services aimed at efficient and sustainable business models. Sustainability runs through Fujitsu's history and is underpinned by the philosophy and investment strategy set out in the Fujitsu Way. Our Japanese heritage gives us a natural and genuine focus on long-term relationships which strongly differentiates us.

We see our sustainability values and aims reflected in our banking friends. The sustainable bank, like Fujitsu, wants growth based on a solid foundation which supports the new market norms of continuous, faster change. We protect the reputation of our customers by ensuring all Fujitsu solutions are founded on secure, stable and sustainable technologies – with a clear ethical focus on always doing the right thing.

Fujitsu recognizes the opportunity and responsibility to take a leading role in ensuring that IT plays a key role in reducing society's burden on the environment and in preventing climate change. An advocate for responsible environmental practices for more than 20 years, Fujitsu is transforming its approach to business and the environment in three ways: by focusing on their customer's customer, by adopting a global perspective, and by reinforcing its global commitment to environmental sustainability.

Conclusion: The future for us all

To date, most organisations' sustainability efforts have focused on headline issues such as their carbon footprint or waste disposal practices. These are important activities – but they're only the beginning. As well as recognising our obligations not to harm the environment, we now need to make positive contributions to the well-being of all our stakeholders and the generations to come.

For banks, this means using their expertise, insight and reach to help customers achieve their goals – rebuilding customer relationships by acting as an ally, advisor and enabler. It's a social obligation: society needs much more from its financial institutions than efficient transactions if it's to meet the challenges ahead.

Responsible Business is firmly anchored in our corporate philosophy, the "Fujitsu Way". We act as global citizens, attuned to the needs of society and the environment. Our Global Business Standards govern our relationships with all stakeholders involved: employees, customers, suppliers, governments, other businesses and local communities. Our practice has been recognised and applauded externally in many benchmarks and indices.

Banks can use technology to shrink distances and boost inclusion. They can equip customers to use their resources better and avoid losses. They have the potential to transform individual lives, whole communities – and ultimately the entire human family. This is a vision which can be realised in practical, incremental steps, given the will and the right combination of resources.

At Fujitsu, we recognise our own responsibility to help our friends in the sector build sustainable banking. That's why we talk about co-creation. We work with our customers to innovate with technology, seeking ways to bring about change that flow naturally from their unique cultures and capabilities, and which put technology firmly in the service of the business.

Banking is a relationship business. Sustainability is about the survival of the human family. Sustainable banking is the future – for us all.

// As the role of IT becomes more pervasive in everyday life Fujitsu remains committed to making a positive impact to the society in which we operate. This commitment to responsible business, embodied in our ongoing Responsible Business programme, remains at the heart of our long term strategy. **//**

Duncan Tait, Corporate Executive Office and SEVP, Head of EMEA and Americas, Fujitsu

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Key Facts

- Fujitsu is one of the five largest global providers of IT solutions in the world
- 157,000 employees worldwide
- Over 50 years of IT Service Provision
- Named Dow Jones Sustainability Index (World) Industry Leader in 2016
- Winner of BITC's Responsible Business of the Year 2015–2016

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