2016 REVIEW
“A SHIP IS ALWAYS SAFE AT THE SHORE –
BUT THAT IS NOT WHAT IT IS BUILT FOR”

ALBERT EINSTEIN
PA is a consulting, technology and innovation firm. We define success as achieving exceptional results that have a lasting impact on businesses, communities and individuals worldwide.

This principle has remained the cornerstone of our ethos since 1943 – and it continues to underpin everything we do.

Our clients choose us because we challenge convention to find the solutions that really work – in practice, not just on paper. Then we roll up our sleeves and get the job done.

At PA we don’t just believe in making a difference. We believe in making the difference.
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CHAIRMAN’S STATEMENT

“This is a defining time for businesses and governments alike ... As a leading consulting, technology and innovation firm, it is our mission to guide our clients as they navigate these changes.”

MARCUS AGIUS, CHAIRMAN

Political, economic and technological developments have all contributed to making 2016 an extraordinary year for many organisations worldwide. While the implications of these developments are still yet to be fully understood, one thing is clear: this is a defining time for businesses and governments alike. And because of the resulting challenges and uncertainty, there is a huge amount of opportunity to improve and change how organisations interact with customers, consumers and citizens. As a leading consulting, technology and innovation firm, it is our mission to guide our clients as they navigate these changes.

With the majority of our business in the UK, our performance in 2016 was affected by uncertainty in the period leading up to the UK’s EU referendum and by the shock of its unexpected outcome afterwards. While this impacted revenues in the middle of the year, we responded well in the second half and ended by delivering a strong fourth quarter. We are well placed as we enter 2017.

There were many major changes to the world as we knew it

Major political shifts around the world have significantly changed the landscape for businesses and individuals, with as yet untold economic and social effects. Meanwhile, and perhaps more predictably, the development of new technology continues apace. The robots are now here, with intelligent chatbots already the norm; blockchain is revolutionising the financial services industry; and the Internet of Things is bringing everything from mousetraps to fridges online. At the same time, people everywhere are redefining how they want to interact with businesses and with public services. And Agile is no longer an IT fad but a whole new way for organisations to work.

But with change comes opportunity

Across industries, many organisations face a ‘fight or flight’ choice. And while there are no simple answers, we believe fortune favours the bold. Our experience from advising clients through previous downturns and periods of uncertainty shows that the highest-performing companies were those that acted fast, protected their core advantage and made bold and positive decisions. I can only think that the same will bear out again.

Our mission is to help our clients navigate their challenges

At every level of our organisation, our mantra is to make the difference. To help our clients with their most challenging problems – whether new or long-standing, foreseen or unexpected – and to deliver long-lasting, sustainable benefits.

As a firm, we continue to improve and to innovate so that we can support our clients and attract the very best talent. Our active partnership with The Carlyle Group underpins these aims, providing a strong platform and enabling us to fulfil our potential.

With over 70 years in the consulting business, and a unique combination of business consulting and technology leadership skills, we know what it takes for us - and more importantly, our clients - to succeed.
CHIEF EXECUTIVE OFFICER’S STATEMENT

“Our clients face exciting new choices about their future; the convergence in business and technology consulting that we see in the market plays to our strengths; and I continue to be impressed by the quality, knowledge, focus and enthusiasm of our team.”

ALAN MIDDLETON, CHIEF EXECUTIVE OFFICER

The events of 2016 highlighted just how important it is for organisations to innovate, and our experience and expertise have been in high demand throughout the year. We have helped our clients achieve their goals and overcome their challenges – whether that is creating new products, services and markets or transforming for a more agile and digital future.

In 2016 we recognised £391.2 million of fee income and £51.6 million of adjusted EBITDA, our key measure of performance. At the same time, we made significant investments in our firm and our people as part of our commitment to offering the highest-quality consulting expertise to our clients. We are well prepared for growth in 2017.

We have achieved exceptional results for our clients

We achieve exceptional results that have a lasting impact on businesses, communities and individuals worldwide. Innovation is at the heart of everything we do – from helping organisations and leaders create a culture of innovation to designing, developing and delivering the new products and services that create lasting value for consumers and citizens.

This year we are proud to have worked with hundreds of organisations worldwide, readying them for the future. This review offers a few highlights of our work, where we:

• helped improve customer experience and double revenue from online sales for John Lewis through our ongoing support to their digital transformation
• supported innovation in public health and care services for the Norwegian Directorate of eHealth
• enabled the Mexican Ministry of Economy to balance the need for long-term investment in the oil industry with the need to develop the country’s own economy
• worked closely with the United Nations to drive sustainable development by helping business leaders understand new technologies.

And our global technology and innovation teams have worked with many of the world’s leading brands in consumer, automotive and life sciences to help them revolutionise their businesses, products and offerings.

Our passion for innovation extends into our not-for-profit work

We are now in our third year of partnership with Land Rover Ben Ainslie Racing. In our role leading the Technical Innovation Group, we have helped the team harness the advanced expertise and technologies needed to achieve unprecedented levels of success in their bid to win the America’s Cup.

More broadly, we continue to support the development of young people. Through our annual Raspberry Pi competition, our partnership with Teach First and our work with Beanstalk, we are helping students from a variety of backgrounds develop their skills, prepare for the future and fulfil their true potential.

We have strengthened our firm to ensure that we have the very best people to support our clients

We continue to make strategic and operational investments in our firm to ensure we are, and remain, the consultancy of choice for our clients and our people. Well-being, diversity, opportunity and professional development underpin our commitment to our people. In 2016 we welcomed over 500 new people into the firm, from the sharpest young talent to seasoned industry experts.

Looking ahead, I am excited about the future. Our clients face exciting new choices about their future; the convergence in business and technology consulting that we see in the market plays to our strengths; and I continue to be impressed by the quality, knowledge, focus and enthusiasm of our team.

As always, my thanks to our people for going the extra mile and to our clients for choosing to work with PA.
CONSULTING
Developing leadership skills to make the UK’s largest infrastructure programme a success

HIGH SPEED TWO

With construction work about to begin on the new high-speed railway, High Speed Two (HS2) saw that strong leadership would be essential to getting their 1,400-strong workforce performing effectively. HS2 asked our people and talent experts to help them develop and set expectations for a key group of more than 300 senior leaders and line managers.

After careful analysis of HS2’s needs, we designed a blended solution with three elements. First, an online learning portal with checklists, video shorts and ‘how to’ guides people can use to get practical support whenever they need it. Topics cover everything from conducting an interview to running a performance review.

Second, a two-day leadership course, incorporating our ‘20 days later’ habit-building programme. After each session, participants take a series of daily challenges to embed their learning and report back 20 days later. It could be to delegate an activity to a colleague or initiate a coaching conversation, for example.

Third, a series of experiential learning events focused on a single theme – such as ‘leading your team through change’ or ‘employee well-being’. We put participants in immersive, and sometimes uncomfortable, environments so they can experience how people actually feel in the face of different attitudes and practices. It’s highly effective for changing mindsets and behaviour.

This innovative approach to development helps give leaders and managers the exceptional skills they’ll need to drive this ambitious and complex infrastructure programme.
Balancing the need for foreign investment in the oil industry with the need to develop the country's own economy

**MEXICAN MINISTRY OF ECONOMY**

The Mexican government wants to make sure the country gets the maximum benefit from its natural resources. So they need to specify the extent to which energy projects run by foreign investors should use Mexican goods and services, labour, technology, training and infrastructure.

If the requirements are too high, that would deter foreign investment – especially if there are fears Mexico wouldn’t have the capacity. If too low, Mexico would attract international investment, but at the expense of developing the national energy industry.

The Ministry of Economy asked us to help work out targets for ‘national content’ in 2025 for deepwater and ultra-deepwater projects in terms of goods and services. To establish a baseline, we looked at how Pemex, the largest national oil company, spent their money on projects like this in 2014. Then, to work out what Mexico could aim for in terms of expanding its capacity, we analysed the situation in four countries that are pioneers in this field: Brazil, Nigeria, Norway and the USA.

We identified the main barriers that constrain expansion and the policies successful countries have used to overcome them. Using that information, we constructed a mathematical model that we then asked leading energy companies to validate.

The government now has a clear picture of the impact investment in various policies might have and how long they’d take to work. With that concrete evidence, they know the level of national capacity they can expect to achieve in years to come and what it’s realistic to stipulate foreign companies should use.

"PA has given us a methodology and the information we need to set targets for national content in deepwater and ultra-deepwater projects. More than that, they’ve given us a tool to evaluate and measure how different policies will boost our industry, and how quickly."

HECTOR MARQUEZ SOLIS
HEAD OF THE ENERGY UNIT
MEXICAN MINISTRY OF ECONOMY
Designing a blueprint for future growth

**ETIHAD AVIATION GROUP**

Etihad is one of the fastest-growing airlines in the history of commercial aviation. They started life as a small regional carrier and, in 12 years, have grown to become one of the world’s leading passenger and cargo airlines, winning ‘World’s Leading Airline’ for five consecutive years at the World Travel Awards.

To build on these phenomenal achievements, the airline created a new structure, the Etihad Aviation Group (EAG), making the transition from a single entity airline to a wider global aviation group with annual revenues of US$9 billion. EAG brings together Etihad’s core airline and subsidiary businesses, and enables them to work closely together to meet ambitious group targets on revenue, cost and synergy benefits.

As a long-standing partner of Etihad, PA was engaged to design an organisational structure for the new group that reflects industry best practice and supports EAG in delivering sustainable long-term growth. Combining an in-depth understanding of the aviation sector with our business design expertise, we worked with EAG’s board to understand their vision and design a structure that aligns 27,000 employees across the group. This included producing as-is and to-be capability maps, which clearly showed the activities EAG should focus on and highlighted where they could reduce duplication and create efficiencies, optimising operations across the entire business.

As a result of our work, EAG has the right organisational design to deliver an outstanding customer experience, today and in the future. This is crucial to further strengthen their position as the world’s foremost airline.

“PA’s deep experience with the world’s leading airlines means the blueprint they’ve created for Etihad is both refined and practical. This highly deliverable design will play a key role in helping us achieve our growth ambitions.”

SINEAD KILKELLY
VICE PRESIDENT HR OPERATIONS
ETIHAD AIRWAYS
“PA did an outstanding job to help SIA deliver this transformation programme. Their pace, skills and commitment were instrumental in successfully launching our new ways of working. They were a core part of our team, working in partnership with our suppliers, and ensured that all areas of our operation transitioned successfully.”

STEPHEN McCORMICK
DIRECTOR OF OPERATIONS
SECURITY INDUSTRY AUTHORITY

Launching a new digital licensing service for 350,000 people working in private security

SECURITY INDUSTRY AUTHORITY

In the UK around 350,000 people work in the private security industry, escorting cash in transit, for example, or working in close protection. The Security Industry Authority (SIA) is responsible for making sure they’re all licensed. They planned to switch from a largely paper-based system for licence applications to a fully digital service – to make them more cost efficient. They asked us to manage the switchover.

We defined and delivered a programme that put all the right preparations in place. This included establishing how the new technology would affect the way SIA employees work and developing processes, policies and training to reflect this. We helped prepare the whole industry for the changes ahead and ran pilots with users to test the new service. We also used our technical expertise to help the SIA to work effectively with the IT partner building the new system.

With our support, and following a successful pilot that built confidence in the new system, the SIA launched their new digital service. The new service is expected to cut the cost and time taken to process a licence application. Just as importantly, it will provide private security businesses with clearer, more up-to-date information about the status of their staff – and help make sure that everyone providing private security services has the right licence.
Starting a revolution to improve every aspect of customer experience

PUGET SOUND ENERGY

When customers are forced to call their electricity or gas company, it usually means they’re disappointed, dissatisfied or unhappy. Puget Sound Energy (PSE), a major utility based in the north-west of the USA, has ambitious plans to make sure they always keep their customers happy.

Last year they received four million calls from their 1.4 million customers, many of which were queries about bills and basic services. That isn’t efficient for the customers or the company and they asked us to help them transform the experience they provide for customers.

We worked with PSE and a combined vendor team to develop a plan to prevent problems and improve efficiency. Together, we designed a five-year road map setting out the investment and activity PSE would need to make these changes. These range from projects to transform self-service options and establish new data analytics to improvements in the way field staff are scheduled and interact with customers.

We’ve given PSE insights into best practice for sourcing vendors who can provide the systems and services PSE wants to give their customers. We’ve helped them understand how best to structure the programme to deliver the new elements they want to offer. That involved working with them to develop standards and governance arrangements for working with partners. And we’ve supported them in developing skills in disciplines including managing projects, managing change and designing target operating models, for example.

PSE has now embarked on this transformation: one of the biggest and most complex ever undertaken by a US utility. And we’re helping them make it happen.

“PA’s support has been invaluable. This is a huge and complex undertaking, and their breadth of expertise gives us confidence in every area – from customer experience to programme management, and sourcing through to data analytics. We’re looking forward to making this programme a success together.”

JOSH JACOBS
GET TO ZERO – DIRECTOR
PUGET SOUND ENERGY
TECHNOLOGY
Transferring data for three million policyholders safely and smoothly

ROYAL LONDON

Life insurance policyholders expect the insurers that run their policies to take proper care of their data, and give good customer service. The regulator has more than a passing interest too. When Royal London acquired the Co-op’s life insurance business, they needed to transfer the systems and data for more than two million policyholders. They planned to do this by first untangling them from the Co-op’s General Insurance business (which they hadn’t bought) and transferring them over to their own IT systems supplier.

Royal London asked us to provide assurance that their planned approach was robust and credible. They also asked us to make sure the five major partners were engaged effectively and delivering their part of the plan.

Our IT assurance experts analysed a range of options to confirm Royal London’s preferred approach as not just the most effective, but also the best way to make sure they complied with regulatory and contractual obligations. Once the programme moved into the delivery phase, we undertook a series of reviews to check it remained on track and highlight action needed to address any deviation from the plans. We nurtured a trusting and open relationship between all the parties, helping to smooth delivery.

The programme culminated in a single ‘cut-over’ event, when all the data and systems were transferred over the course of a weekend, exactly as anticipated three years earlier. The transfer went without a hitch, allowing continuous service to policyholders and protection of their data.

With successful delivery of this major programme, Royal London can independently pursue their strategy to give excellent customer service. They’ve also proved to the regulator they can handle the complex IT and data challenges that come with acquisitions.
“PA remained a trusted partner throughout our transformation journey ... I always got the sense that we were in it together and it was that strong team ethic and true strategic partnering that made the real difference.”

CHRIS DAY
VICE PRESIDENT IT STRATEGY AND TRANSFORMATION
ASTRAZENECA

Transforming IT to reduce costs by a third

ASTRAZENECA

Global pharmaceutical company AstraZeneca began a three-year journey in 2014 to transform their IT services.

They asked us to help them:
- reduce spending on IT from 5% to 3% of total revenue so they could invest more in research
- make it easier for the sales force to do their jobs and bring business growth
- create a great place to work by simplifying processes and boosting collaboration.

AstraZeneca reorganised the IT function, reskilling some staff and creating 250 new roles. They established a global technology centre in India, bringing capability and control back in-house, cutting the number of external suppliers and simplifying IT operations. This meant the company outsourced only 40% of services to suppliers in 2016, compared with 70% at the start of the programme.

We helped AstraZeneca redesign their operating model to bring IT closer to the business. Business-facing IT teams now have end-to-end accountability for IT solutions and software applications that support their staff and new, local IT teams to provide a single point of accountability at every company site.

We helped them introduce cloud-based software for the sales force, finance and HR to make systems easier to use and save money. In parallel, they launched a programme to replace out-of-date, legacy IT infrastructure with industry-leading new technology. This decommissioned or migrated over 50% of servers, and cut major service outages by 30%.

With our help, AstraZeneca has exceeded their original target. They’ve cut their IT costs by 30% a year compared to equivalent spending in 2013. Crucially, staff perception of the IT department has improved year-on-year from a low of 56% to 75% in 2016.
Improving customer experience and doubling revenue from online sales

JOHN LEWIS

Retailers can’t stand still. Customers’ expectations for shopping in different ways are changing all the time.

We’ve helped John Lewis keep pace with what customers want. We started with one of the largest digital projects in the company’s history: delivering a new e-commerce platform that has handled unprecedented increases in website traffic and supported record-breaking sales. We’ve made it easier for customers to search and navigate the website, significantly reducing failed searches and generating an uplift in completed purchases. And we’ve implemented secure encryption services to improve data security.

To bring this success, we worked closely with John Lewis staff. We took on leadership roles to drive change and efficiency. And our specialist project managers carefully managed relationships between in-house teams and the external organisations involved in the projects.

Over the course of our relationship, we’ve provided expertise in digital transformation, security and regulation, Agile methodology, project and programme management, service management and mobile software development.

We’ve been at the heart of implementing John Lewis’s digital strategy and successful transformation. With our support, this leading high-street retailer doubled online sales in just four years – and significantly improved their customers’ shopping experience.
Transforming technology to accelerate science and improve productivity for the benefit of patients

ARIAD PHARMACEUTICALS

With increasing demands placed on IT, growing biopharmaceutical company ARIAD was facing intensifying challenges with their existing IT infrastructure, systems and services – constraining their ability to operate and, importantly, launch a promising new lung cancer drug.

A new chief information officer engaged us to help plan and manage a programme to modernise and improve all aspects of IT. Around the same time, ARIAD management decided to move their offices to a purpose-built, state-of-the-art premises, which would also have the benefit of bringing all their people into a single building.

We started with an application architecture and infrastructure blueprint, which allowed us to understand the current environment, identify application gaps and duplications and see which problems were a priority.

We also decided on some fundamental changes, including moving much of what had been stored and managed in-house to the cloud.

We recommended the latest technology, including Microsoft Surface Hubs that allow people to collaborate in real time. We also helped ARIAD to identify, negotiate with and transition to new suppliers for their IT services.

For ARIAD, we managed the introduction of the new and improved services, infrastructure and technology without any break in services while maintaining their legacy environment. It was important to take a coordinated approach to make sure people would accept changes, adopt different technologies and stick with them. Now that the move is complete and ARIAD are in their new offices, we’re decommissioning their old technology. As a result of the changes, ARIAD are continuing their scientific discovery while preparing for the potential launch of a new cancer drug.

“PA brought the right people to address our challenges. From strategic thinking and planning to operational implementation, they were pragmatic and worked shoulder to shoulder with us, fundamentally changing how IT was used within the company. They made our team successful, and we aligned around a patient-centric approach to IT solutions.”

NICK VENTRESCA
SENIOR VICE PRESIDENT AND CHIEF INFORMATION OFFICER
ARIAD PHARMACEUTICALS
Building a global Agile organisation

SCHRODERS

Schroders is responsible for £397.1 billion of assets for investors and institutions worldwide. They had seen technology bring about enormous changes in financial services markets and wanted to make sure their whole business was set up to help the firm keep pace with rapid change on a global scale.

They planned a full-scale transformation of their technology team to make it more in touch with what the business needed, and able to develop and deliver value from projects faster and more flexibly. The firm asked our IT delivery specialists to provide Agile expertise to launch this transformation.

We started by organising the team to include people in IT and the business and gaining their commitment to accomplish the global transformation programme. The initial three-month plan included establishing Agile communities across Schroders worldwide.

We reconfigured working environments so people could collaborate more easily. We ran workshops and training events, and launched a social network for teams to share experiences as they began to use Agile techniques.

After four months, half of the technology team have been trained in a consistent version of ‘Scaled Agile’. The teams have improved the quality and speed of the projects they complete. Around a quarter of the global IT organisation have signed up as change champions, and the Agile social network has become the second most-used site within the whole organisation.

Schroders now has a strong platform from which to roll out Agile across the whole organisation and keep increasing the value they get from their investment in technology.
Driving sustainable development by helping business leaders understand new technologies

UNITED NATIONS

In 2016 the United Nations (UN) launched the Sustainable Development Goals (SDGs): 17 pledges to overcome some of the biggest challenges the world faces by 2030. Challenges like poverty, inequality and environmental degradation.

Business has the potential to drive progress in those areas. The UN Global Compact (UNGC), the UN’s global business network, has launched ‘Project Breakthrough’. They’re helping business leaders understand new technologies that will bring exciting commercial opportunities – and how those could affect progress towards the SDGs. Our expertise in technology and innovation, and ability to fuse this with practical business design know-how, is at the heart of the project.

The UNGC asked us to identify the technologies most likely to transform business in future. And to explore how those technologies could help businesses do business in a better way – minimising waste to protect the environment or having a positive impact on society for example. Working closely with the UNGC, technical specialists from our network and 150 companies attending the UNGC’s ‘Breakthrough Innovation’ symposium, we agreed on 12 to focus on. These include unmanned aviation systems (drones), robots, the Internet of Things, digital agriculture and gene editing.

We’ve developed a clear, concise briefing for businesses on each. These briefings explain the technical features, point out the potential impact on business models and look at how those could bring the advances needed to meet the SDGs.

We’re now working with the UNGC to develop practical support for businesses so they can take advantage of the opportunities these technologies bring in a sustainable way. The ambition of these innovators – and this support – will be key to a better future for all.
Supporting innovation in public health and care services

THE NORWEGIAN DIRECTORATE OF EHEALTH

Telecare is becoming a more and more important part of health and care services. Connected devices such as cameras, personal alarms and patient monitors can help governments meet the challenge of providing care for a growing population of older people and those living with chronic conditions. Services built around telecare will become even more vital as the shortage of people working in health and care personnel is expected to grow.

The Norwegian Directorate of eHealth launched a national programme to help health and care authorities across the country develop innovative services incorporating telecare. We’ve been an adviser to the programme since 2014.

A key part of our role has been to develop an online tool for authorities to help them design new services and work through the implications of changing the way they care for people in need. We’ve helped over 30 Norwegian local authorities use the tool to design and implement new services and manage the associated changes, including training and coaching for care personnel and service managers. We’ve also helped these pioneering authorities measure and document the financial and quality-of-care benefits of their telecare projects – vital to assessing project success. The new approach will bring major savings.

This work, by our local government, business design and implementation experts, has strengthened authorities’ ability to develop telecare projects and get them up and running. It has also established a valuable resource for Norway’s telecare programme. Health and care organisations across the country are now taking the experience from these initial projects and using it to inform their own service innovations.
“We had huge confidence that PA could deliver for Rentokil Initial – and that proved to be well placed. The team’s thoughtful, creative and collaborative approach means we have ended up with something much more powerful than we envisaged at the outset. This platform provides extraordinary insight into our operations and our customers’ needs, and opens up new possibilities for future innovation. This is the foundation of our digital business.”

PAUL DONEGAN
DIRECTOR OF IT CORPORATE
RENTOKIL INITIAL

Becoming a more data-driven business using the Internet of Things

RENTOKIL INITIAL

Everyone wants foods and medicines to be manufactured and stored in clean, hygienic premises. Rentokil’s pest control services allow businesses in these sectors to maintain those conditions, meeting strict safety standards and, ultimately, to trade.

The company had already spotted the potential of the Internet of Things (IoT) to improve their services. At 1,000 customer sites, they were using traps fitted with sensors that sent a message whenever the trap needed clearing or maintenance. As a result, Rentokil has the ability to monitor a customer’s location 24/7 and have real-time updates on any infestation. This enables Rentokil to provide a more proactive pest management service based on customer needs.

Rentokil wanted to expand the connected business to 10,000 sites within less than a year – but their infrastructure was already struggling with the volume of data the sensors were generating. The company asked PA’s digital and IoT experts to create a cloud platform to support the expansion.

Time was of the essence so, working with our partner, Google, we chose an Agile approach to develop the platform quickly. With six bursts of activity (‘sprints’) we made rapid progress and showed early on how the solution would deliver value. We launched the new platform successfully in 12 countries. The new platform gives Rentokil the capacity to meet their immediate expansion target and offers effectively unlimited scalability for the future. This will become key as the company takes advantage of their data to build stronger relationships with customers, increase the flexibility, responsiveness and profitability of their operations and become a truly digital business.
Collaborating across borders to make air travel cheaper, quicker and safer

LFV AND NAVIAIR

With air passenger traffic across Europe growing at a phenomenal rate – 180% over the past 20 years – the European airspace needs super-efficient management. But the task is currently carried out by 40 different national air services providers. This fragmented approach creates inefficient flight paths, high costs and significant environmental impact.

One of the exceptions is NUAC (Nordic Unified Air Traffic Control) – a joint venture between the Swedish and Danish air services providers, LFV and Naviair. NUAC manages the Danish-Swedish airspace established under the Single European Sky initiative and has been recognised as one of the EU’s most successful transport programmes.

We’ve been supporting LFV and Naviair with expertise in strategy, business design and implementation right from the start. This began with helping LFV and Naviair identify the best formal structure for their collaboration. We then put together the design for the new organisation before supporting the implementation that brought it to life.

The collaboration has brought clear benefits, including lower prices. It’s reduced operating costs by about 10% a year and aviation liability insurance costs by 40%. It’s allowed shorter routes and reduced flight times. And it’s brought increased capacity, close to zero delays and a smaller carbon footprint. More cooperation, harmonised safety procedures and common training bring improvements in safety.

We’ve advised LFV and Naviair with their plans to standardise technology across their control centres in Copenhagen, Malmö and Stockholm. This is the next vital step in developing a groundbreaking collaborative platform for operations and technology that offers a blueprint for the future of European airspace management.
Using augmented reality technology to make training better, faster and cheaper

**IMI CRITICAL ENGINEERING**

IMI designs, manufactures and services highly engineered products that control the movement of fluids in extreme environments like high temperature and pressure. This could be at power and nuclear plants and oil and gas platforms. High-quality training for the engineers who install and maintain this equipment is crucial for energy businesses to operate safely and reliably.

In order to accomplish highly technical training efficiently, IMI Critical wanted to train engineers in a completely new way: they wanted to use augmented reality technology to give engineers a near-real-world experience of the products they’ll be maintaining. Using headsets would enable a broader use of remote resources while allowing the training team to emphasise points that conventional online or video training can’t.

This has the potential to make training more effective, more consistent, faster and more affordable. We helped IMI Critical find out if it would work.

In just six weeks our digital experts developed a prototype, using Microsoft’s HoloLens. We packaged IMI Critical training modules into the headsets alongside vital product information. We also tested Skype capability in the application. That means engineers in the field can share a view of the problem they are working on and get support from product experts located anywhere in the world.

When IMI Critical showed the prototype at a global industry conference, it generated huge excitement with visitors wanting to experience it themselves. As a result, IMI Critical is now looking closely at the next steps for development. This innovative project could cut the cost of training by 75% per person and double the speed at which IMI Critical can train engineers. It will result in a broader drive within the business to capitalise on new digital technologies – and keep IMI Critical at the forefront in their field.

― Being able to explore how new cutting-edge technologies can make a difference for our business is a great step forward for IMI. It supports our strategic imperatives and helps us strengthen our position at the forefront of technology innovation.‖

MIKE SEMENS-FLANAGAN
DIRECTOR STRATEGIC PLANNING
IMI CRITICAL ENGINEERING
SUPPORTING INNOVATION IN SOCIETY
Harnessing the best of British design and technological innovation to achieve unprecedented success

**LAND ROVER BAR**

Sir Ben Ainslie and the team pulled off an incredible performance in Fukuoka, Japan, to win the final round of the Louis Vuitton America’s Cup World Series (ACWS) sailing competition, making them 2015-2016 ACWS Champions. For new entrants to the competition, it’s a fantastic achievement. We’re thrilled to have played our part.

We’re working with Land Rover BAR – leading their Technical Innovation Group (TIG) to bring together the best of British industry. We find advanced technologies outside the world of sailing and develop them to bring a race-winning edge to the team. The TIG allows the team to rapidly develop, prove and apply new ideas. Under our leadership, the group provides technological insight and manages innovative projects in areas like boat dynamics, sensors and controls, and data and analytics. Technologies include ultra-lightweight and ultra-strong 3D-printed titanium parts and bone conduction speakers that allow the sailors to hear each other clearly on board.

Our breadth of expertise means we’ve been able to find partners, and work with the team’s existing partners, with the capabilities and know-how the team needs. They come from a diverse set of industries, from highly-specialised IT to more mainstream engineering and from telecommunications to ‘human factors’.

The World Series win means that the Land Rover BAR team takes two vital bonus points into the America’s Cup competition starting in Bermuda in May 2017. This extreme sailing event features high-speed, action-packed, inshore racing with the best sailors in the world competing on hydrofoiling, wing-sailed America’s Cup Class catamarans, ‘flying’ at up to 80kph. Our continued involvement gives the team a great chance to bring the cup to Britain for the very first time.
Challenging young people to use technology to drive innovation

THE PA RASPBERRY PI COMPETITION

Every year we try to find and inspire the next generation of innovators. Our annual contest challenges school and college students nationwide to put their programming skills to the test.

In the latest competition, we asked them to use a Raspberry Pi minicomputer, additional hardware and their coding skills to come up with new ways to use technology in sport and leisure. Teams from over 100 schools and colleges signed up. We’ve seen some groundbreaking and impressive ideas in the past and yet again, we were excited by the response.

Our 2016 winners were:

• a game that tests and improves your reflexes and reaction speeds – it’s affordable, easy to replicate and fun to play in a group

• a robot that gives rugby fans the perfect view of a conversion – it’s controlled by a mobile device, and has a camera fitted that live-streams video and can be driven onto the pitch

• a device to instantly resolve photo finishes in races and accurately record times and training splits – it can send the results of a race or training session, via email, directly to race officials.

Other entries that made the final were a selfie camera to capture drummers in action and a boxing game to improve your fitness in a fast-paced, multiplayer, head-to-head format.

The expert judging panel included Emma Young, Vice President IT – Business Change and Delivery, ARM, and Rory Cellan-Jones, BBC Technology correspondent. They were impressed with the young people’s creativity, technical knowledge and enthusiasm. And we’re delighted to play our part in inspiring the next generation of innovators.
Making sure young people succeed whatever their background

TEACH FIRST

Teach First is a charity aiming to end inequality in education ensuring no child’s success is limited by their background. In 2014 we formed a partnership with Teach First to help accomplish this.

This year we carried out in-depth research into young people’s progression after school. Together we investigated the availability and take-up of apprenticeships, for example. We found that a lack of information and financial barriers could put off young people from low-income backgrounds.

Apprenticeships might be seen as a low-wage option because the headline figure for the minimum wage is just £3.30 an hour. But the average salary is closer to £6 an hour and there’s rapid salary progression within months.

Young people on apprenticeships miss out on the financial support available to those in full-time education or training, such as help with travel costs. And what’s more, their parents can’t claim child benefit, unlike those whose 16- to 18-year-old children remain in full-time education or vocational training.

In our joint report, we recommended that the government should build on its ‘find an apprenticeship’ website and develop a nationwide UCAS-style ‘one stop shop’. This should outline all available apprenticeship opportunities and link directly to employers’ application processes. And we called on the Low Pay Commission to investigate whether financial issues deter less well-off young people from applying.

We also continued to give Teach First direct support – mentoring teachers and entrepreneurs setting up education-related social enterprises, providing CV and assessment training and giving pro bono consulting advice. All this support will help Teach First to remain a vital force giving all UK children the high-quality education they deserve.

“We’ve been thrilled with the support that PA provided on our Progression Report. This report is helping make the case for supporting more disadvantaged young people get the support they need to succeed, and we couldn’t have done it without the expertise and generous support of the PA team.”

JONATHAN DANDO
ASSOCIATE DIRECTOR OF PRESS, PUBLIC AFFAIRS AND POLICY
TEACH FIRST
Transforming children’s lives by turning them into confident, passionate and able readers

BEANSTALK

UK charity Beanstalk recruits and supports volunteers who give one-to-one literacy help to children who have fallen behind with their reading – they’ve helped more than 140,000 children since 1973. They train their specialist helpers to recognise the challenges individual children face and tailor their sessions to support each child.

Beanstalk want to grow and have as powerful an impact as possible. With ambitious plans to reach 30,000 children a year by 2021, we’re helping them make that a reality.

Our business design experts worked with them to create a new operating model. We helped them design the way they work so schools and volunteers have a better experience. They wanted to make sure their service to schools was reliable, for example, and that volunteers wouldn’t find their commitment overwhelming.

We helped them establish plans for activities that will grow awareness of their brand, more effectively recruit new schools and volunteers, and build greater ties with their local communities. At the same time, our IT transformation experts developed a strategic plan for cloud-based IT systems.

We supported their leadership team in creating a pitch that secured them £1 million from the Dream Fund, a part of the People’s Postcode Lottery. It will fund a joint project with Dolly Parton’s Imagination Library and Liverpool University to focus on helping three- to five-year-olds. It’s well known those early years are crucial.

We’re now helping them put plans into action. With a more commercial structure for the organisation and cloud-based IT systems, Beanstalk will be able to make a real difference for more children for years to come.

“It was fantastic to work with PA on this important piece of work, which brought clarity to our thinking and took us a long way on our journey towards our ambition. We were all hugely impressed by the quality of PA’s work and really enjoyed working with you. The dedication and enthusiasm of the team was inspiring.”

GINNY LUNN
CHIEF EXECUTIVE OFFICER
BEANSTALK
OUR YEAR IN NUMBERS

2,657
TECHNOLOGISTS, INNOVATORS, GO-GETTERS, STRATEGISTS, LEADERS AND DEVELOPERS

£391M
FEE INCOME

£52M
ADJUSTED EBITDA

26
OFFICES WORLDWIDE

TEN
WORLD-CLASS SERVICE CAPABILITIES

NINE
GLOBAL INDUSTRY TEAMS

Business design
Business intelligence and analytics
Digital
Implementation
IT assurance and delivery
IT transformation
Operational excellence
People and talent
Strategy
Technology innovation

Consumer
Defence and security
Energy and utilities
Financial services
Government and public sector
Healthcare
Life sciences
Manufacturing
Transport, travel and logistics

Member of the Ellen MacArthur Foundation Circular Economy 100
Make the Difference

An independent firm of over 2,600 people, we operate globally from offices across the Americas, Europe, the Nordics, the Gulf and Asia Pacific.

We are experts in consumer, defence and security, energy and utilities, financial services, government, healthcare, life sciences, manufacturing, and transport, travel and logistics.

Our deep industry knowledge together with skills in management consulting, technology and innovation allows us to challenge conventional thinking and deliver exceptional results that have a lasting impact on businesses, governments and communities worldwide.

Our clients choose us because we don’t just believe in making a difference. We believe in making the difference.