

Digital transformation enables Horizon Nuclear Power to build with confidence

Cloud computing and digital services provide a dynamic infrastructure and collaborative environment for an emerging global energy business

Meeting the energy needs of UK publicly listed company

Horizon Nuclear Power was established in 2009 with a commitment to play a major role in delivering secure, low-carbon, and affordable energy required to meet the future needs of UK plc.

Acquired by global technology giant Hitachi in 2012, Horizon developed plans for a new generation of nuclear power stations, on Anglesey in north Wales and in South Gloucestershire, with the potential to power 11 million homes for the next 50 years.

The two power stations, which are projected to cost more than £15 billion to build, would feature the UK's first Advanced Boiling Water Nuclear Reactors, developed by Hitachi and thought to be the most advanced in commercial operation in the world. The two sites would provide employment for around 9,000 people during construction, with many more in the supply chain, and, upon completion, create up to 1,700 permanent jobs.

Overview

Customer: Horizon Nuclear Power

Industry: Energy

Location: United Kingdom

Challenge: Horizon wanted to transform its IT capacity and capabilities, ensure successful delivery of new, ground-breaking power stations, and provide a technology platform for long-term growth

Solution-at-a-glance: Through its partnership with Capgemini, Horizon completed a digital transformation, that involved strategic consultancy, collaborative team building, and implementation of diverse IT solutions and services, featuring cloud and hybrid environments

Results: A robust, secure and agile technology platform delivering short-term performance and productivity improvements, and a long-term engine for growth and prosperity



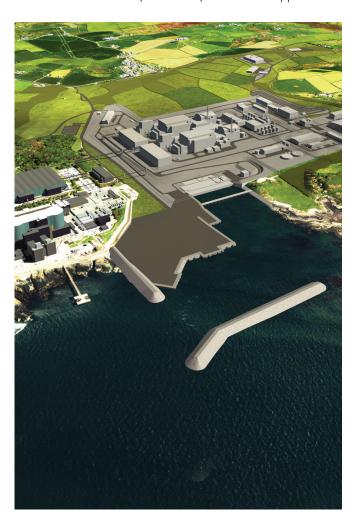


Managing rapid growth in a fast-moving sector

After establishing itself as an important new player in only 10 years, Horizon required rapid growth of its corporate and operational infrastructure to achieve the critical mass essential to operate successfully on the national and international stage.

Following its acquisition by Hitachi and the subsequent detailed development of its plans for ground-breaking new power stations in England and Wales, Horizon decided that it needed to transform the scope and scale of its IT capacity and capabilities. By doing so, the organisation intended to deliver better, faster, and more reliable data that possessed more business-relevant information and insights to its business users. This was essential to handle the increasingly demanding requirements of its design and build programme in a challenging and fast-moving sector and to provide the agile and resilient technology platform that was essential for its own long-term growth and prosperity.

With multiple technology providers and solutions already in place and business continuity non-negotiable, Horizon knew that in order to make this change on an aggressive timeline, it would need a transformation partner that possessed global expertise in energy and utilities as well as a strong and proven culture of collaboration, teamwork, and mutual support.



Within the first few months of its appointment, Capgemini delivered the foundation from its Digital Operations offering:

- implementing Capgemini's Digital Workforce
 packaged solution to provide a multi-channel service
 desk and service integration, facilitating first class
 end user experience embracing voice, mail, chat, text,
 instant messaging and virtual agent, enabling lower
 transactional costs, improved productivity and faster
 approval and fulfilment
- a state of the art, security operations centre, featuring 24/7 managed security services, developed specifically for nuclear industry requirements.

Building a digitally-enabled, next generation energy business

Horizon decided that Capgemini had the mix of experience and expertise required to provide the flexible, scalable and secure infrastructure, digital tools and techniques, innovative IT services and solutions that it needed. In particular, Horizon wished to tap into the success of Capgemini's French Nuclear Centre of Excellence (NCoE), to utilise its sector-specific skills, experience and technology.

Once appointed, Capgemini worked with Horizon to apply its Collaborative Business Experience approach to develop a blueprint for partnership working, in which all parties united to create a One Horizon IT team with shared values and goals.

This established methodology, tailored from hundreds of individual scenarios, is proven to achieve better, faster, and more sustainable results, in which all team members are empowered to challenge and innovate.

Collaborating with Horizon and its multi supplier ecosystem Capgemini helped to establish clear, accessible communications methods so that all transformation participants understood Horizon's goals and the important roles of everyone involved. The teams also accessed Capgemini's Applied Innovation Exchange to enable Horizon to plan for the technology and business challenges ahead.

A bespoke governance model was developed at Capgemini's Accelerated Solutions Environment, accessing the combined experience of more than 1000 IT transitions. Using Capgemini's DELIVER management methodology, experienced facilitators helped to define roles and responsibilities, collaborative working methods, success criteria and delivery acceleration.

Highlights

Capgemini provided a diverse range of digital infrastructure solutions and services, cloud and technology capability and wider business consultancy services.

Achievements included:

- a wider cloud transformation strategy mapping out the essentials of a future proof target operating model, along with architectures and deployment roadmaps, for identity management, security and end user transformation
- managed growth of employee numbers from 470 to 700 in less than six months by:
 - designing and implementing a new SAP SuccessFactors cloud-based human resource management system, which, in only five months, delivered a full core HR solution based on a single set of best practice processes covering everything from payroll to employee engagement.
 - successfully rolling out a Windows 10 environment with new devices cutting build times from multiple hours to minutes, to enable quick onboarding of staff.
- a Microsoft Business Intelligence reporting solution for company-wide decision tracking replacing spreadsheets with dynamic views and hours of compilation with simple data refreshes that took minutes
- a best-in-class GDPR compliance programme
- support for Horizon's development consent order (DCO) process and ground work to support the financial investment decision (FID) phase
- development of a digitally-enabled asset lifecycle management proof of concept.

Fully documented, transparent, and auditable IT systems were put in place, demonstrating control and oversight of systems, processes, and users. Thorough planning and execution ensured a controlled, seamless, and disruption-free transition from the incumbent lead supplier, with all relevant residual value captured.

Together, the team established an integrated, scalable, digitally-enabled service that transformed IT capability and performance for end users. SaaS-based onboarding, employee management systems, cost and project control reporting enabling business modelling and decision support, and cloud transformation strategies and roadmaps were all put in place to enable the company to achieve the necessary exponential growth in a controlled and efficient environment.

Benefits at speed and for the long term

Operating within Horizon's existing ecosystem, Capgemini formed positive, productive relationships with important global partners such as IBM, Microsoft, and SAP to form one, mutually-supportive team with shared goals and complimentary ways of working.

Moving the business towards cloud and hybrid architectures and technologies, this collaborative effort delivered operational efficiencies, confidence, and clarity across HR, data services, management tools, and reporting, while also improving day-to-day services and the user experience for those consuming IT and systems.

To address the lack of an organisation-wide data view, a central data platform, and limited data science and analytics capability, Capgemini deployed a team of specialists to deliver a roadmap to meet Horizon's immediate and long-term objectives. This team created an Azure data lake with Microsoft Power Business Intelligence as the reporting tool, allowing Horizon to extract and blend data from sources across its estate.

New graphical and clickable dashboards enabled users to quickly drill-down from a programme or project level, with data relating to performance, cost and forecasting accessible from one place and viewed from different angles to model scenarios for business decisions.



Overall, the experience was very smooth. The team were fantastic, so friendly and knowledgeable - and able to explain the technical 'stuff' in human terms. There was also a lot of involvement in the process and the team allowed me to be part of the set- up, which was useful to learn and not just have a new tablet thrown at you!"

End user Horizon Nuclear Power.



Windows roll out boosts productivity

The business-wide implementation of a Windows 10 standard operating environment delivered multiple benefits across the Horizon estate. Users received smaller and lighter devices with the latest operating platform. supporting mobility and providing a faster, more agile experience for team members accessing information, which was imperative during the fast-moving design and build lifecycle.

Teams overcame a challenging timeline and difficult early stages to deliver a project with performance benefits at every stage of customer log-in and user activities. In all:

- 440 new devices were implemented
- programme managers saw significant savings in days through faster boot up
- a return on investment was achieved in less than 12 months.

Enabling a fast and efficient re-start

In January 2019, Horizon announced that work on the two power stations was to be suspended pending discussions with the UK Government on future financing and associated commercial arrangements.

At this point, Capgemini had already helped to set the digital strategy, foundations and infrastructure for Horizon to successfully manage the further significant growth in the organisation's size, as all contractors—around 9,000 people in all—were activated to deliver each milestone of the construction phase, and to achieve its objectives in the coming years.

Following the announcement of the suspension, Capgemini worked closely with Horizon to deliver a managed programme to decommission or mothball all systems, assets and data to enable Horizon to embark on a fast and efficient re-start once they have completed discussions with Government and investors.



Capgemini's broad range of strategic and technical skills have proved ideal for the challenges we face, now and in the future. The ability to create the right environment in which everyone works productively together was especially valuable. When difficulties were encountered, we have always been able to fall back on constructive, open dialogue and firm foundations to find ways to move forward."

Roy Irvine

IT Commercial Director Horizon Nuclear Power.

About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

Learn more about us at www.capgemini.com