Beca

Digital Transformation

Providing agile solutions to complex challenges
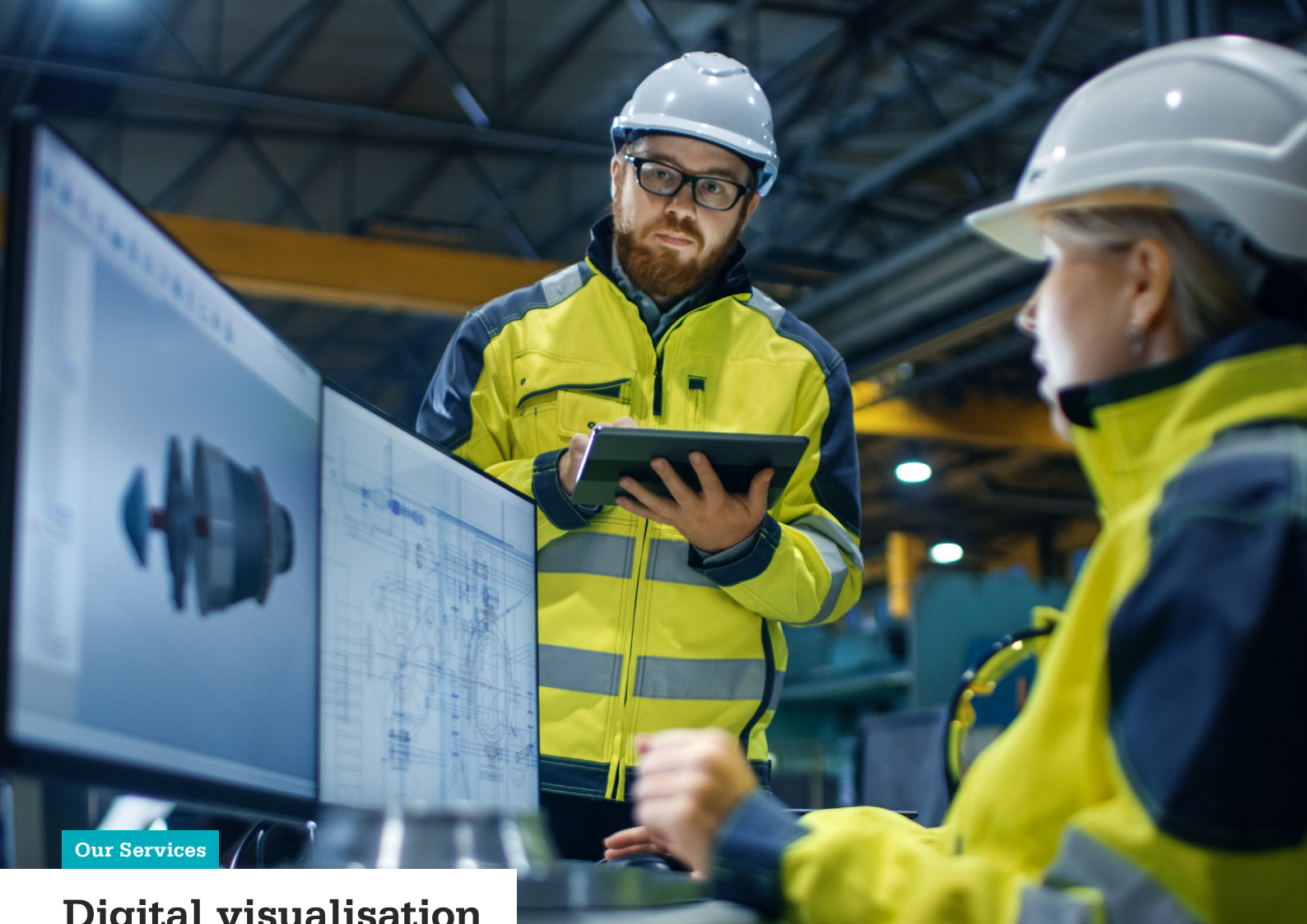
make
everyday
better.

We're here to make everyday better

...by connecting your assets, operations, people and processes; transforming your physical world into an integrated digital ecosystem tailored to your unique needs.

We work with you to understand and explore your strategic goals, providing a clear assessment of the ways digital technology can help you develop a sustainable competitive advantage.

This could include working with your technology and ecosystem partners or bringing in our partner products - we're platform agnostic and focus on determining the best option. What's more, we have the expertise to deliver much of the build and/or integration ourselves, alongside a suite of our specialist SaaS products that have been designed specifically with your industry needs in mind.

For 100 years now, we have been helping transform our world. We understand industries and assets, and the operating and engineering technologies that support those assets. We also understand the broader digital domains – which means we can cut through the hype and credibly bring them all together, linking the real world into the digital world. Contact us to find out how we can make a real difference to your business today.

Digital visualisation

Bringing your assets to life across your full value chain and building visual solutions to make complex information intuitive and easy to understand - enabling you to make better decisions and collaborate more effectively with your stakeholders.

Integrated analytics solutions

Unlock the real value of your data and visualise your physical assets through our integrated analytics solutions. We collect data through drones, field data capture services and sensors, and tools like Bliptrak - just to name a few options. We can also provide analysis, visualisation and management services for complex industries and businesses with spatial, multimodal, multisource and/ or Big Data needs. Data from numerous sources can then be integrated into a user-friendly dashboard to make it easy for you to understand.

Digital asset models

We can create digital representations of your physical assets using location, point clouds, reality capture and 3D models, integrating them into visualisation engines and existing engineering software. We also provide Virtual Reality (VR) models for the assessment and testing of designs, while our expertise in Building Information Modelling (BIM) or our **FACILITYtwin** solution can help you to really understand your asset, improving productivity through providing contextaulised, intuitive information.

Geographic visualisation

Geographic Information Systems (GIS) is a powerful tool that can help you analyse and visualise the physical environment surrounding your built asset or project site. With expertise in GIS Infrastructure master planning, we can also help you develop long-term, integrated asset and infrastructure masterplans using dynamic, conceptual analysis, modelling and spatial visualisation.

Harnessing real-time intelligence

Using intelligent data and analysis tools to optimise your assets and operations in near real-time.

Digital twins

We create and manage digital twins - a high-fidelity representation of the real-world that looks like, behaves like and is connected to the real world. These virtual models can be created for a real product, process or service, allowing you to monitor, analyse and improve performance; aided by the use of past, present and future data, in addition to other powerful digital tools such as Artificial Intelligence (AI) and Machine Learning.

In-field assessment tools

Mobile SaaS platforms enable accurate, efficient and consistent in-field assessments and information capture across your assets and operations. For those hard-to-reach locations, we take to the sky with drones to enable safe, and more regular, assessments of your site. Alongside this, integrated quality control solutions leverage computer vision, augmented reality (AR) and remote expertise, to support your field operations and assessment procedures.

Automated & real time data

We can design and implement mobile automated data capture services across your network using drones, sensors, mobility sensors and an AIIoT setup (Artificial Intelligence + Internet of Things); providing you with critical information about your operation and performance. We can also integrate with your building performance platform and using **B-Tune** technology, continuously monitor your buildings' operations, by analysing data from multiple sources to optimise energy, comfort, maintenance and detect operational anomalies.

Modelling & simulation

We can help you prototype and rapidly iterate potential real-world scenarios in a low-risk and low-cost environment. This allows the comprehensive modelling of entire systems, including transport networks, logistics, operations, production and manufacturing plants, utilities and building performance outcomes before you commit to action - so you can ultimately enjoy a better outcome.

Digital experiences

Creating digital experiences to support complex environments and boost engagement, safety and effectiveness.

Immersive training & simulation

We provide a full range of AR and VR immersive experiences to support training, safety and the simulation of real-world situations. Our reality capture techniques, for example, can create a photo realistic point-to-point VR 'walkthrough' of your built asset, to provide your users with realistic training and inductions.

Other services we offer in this space include development, integration, management and support for both virtual and physical training simulators. These technologies help you provide a more engaging training experience, enhancing learning outcomes.

Immersive in-field solutions

We can combine digital engineering, standard operating procedures and AR to produce an immersive, real-time training experience for employees, linked to workflow and job management solutions. This can include augmented quality control, AI and remote expertise, and augmented inspections, assessments and operations

Artificial Intelligence engagement

Advanced conversational AI can be used for consultation, feedback and the provision of information, increasing breadth and depth of engagement from communities, customers, employees, stakeholders and more.

Examples include the dynamic, interactive and real-time analytics of demographic sentiment, issues and feedback across linguistically diverse communities.

For more information on AI community engagement read **here**.

Integrating digital ecosystems and consulting

Connect and integrate the different elements of your digital technology systems into a cohesive "whole" to enhance your assets and operations by thinking "smart" e.g. smart buildings, smart cities and more.

Industry 4.0

Industry 4.0 is the convergence of the digital and physical worlds, leveraging data, information and knowledge to facilitate informed decision making within an ever-accelerating landscape. By identifying Industry 4.0 applications that can drive efficiencies and benefits in your business or organisation, we can develop and integrate solutions to help you achieve smart manufacturing outcomes that are cutting-edge, yet simple to understand.

Ecosystems consulting & technical services

Using systems thinking consulting, i.e. strategic vision, gap analysis, roadmaps, research and integration planning; we can help you design your systems architecture enabling you to create a roadmap to achieving your smart outcomes – from smart cities, buildings, utilities, hospitals to beyond.

We can also help you with complex requirements testing and management, including technical compliance, systems assurance and safety management, across multiple regulatory, legislation and work instructions.

Systems integration

Optimise your complex 'system of systems' landscapes through systems integration and see the benefits first-hand. Using our systems and software engineering capabilities, we can help you meet the safety, security and mission critical requirements of your projects, including your high integrity, high assurance systems that require specialist skills. We offer full Software Development Lifecycle (SDLC) services, verification and certification, to safety systems assessments and audits, to OT/IT and high integrity SCADA integration.

Software development

Our in-house software development team can help you address any gaps in your asset ecosystem to improve your physical operations. By using our modular Software as a Service (SaaS) platform, we can provide you with the same supportability as off-the-shelf-software, but with complete flexibility to meet the unique needs of your business, while remaining cost effective.

Delivery & transformation advisory

Using our own practical experience gained through our Beca Digital Innovation Hub and our New Ventures Accelerator (to name a few) - we can help drive a fundamental digital transformation of your business/organisation to make everyday better.

Contact us to find out more

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Beca

Creative people together
transforming our world