



Digital DevOps

Using DevOps practices to accelerate your IT capability.

An Advisory Services PoV





Digital DevOps

An end-to-end solution lifecycle model, using a combination of traditional IT operations along with development tooling and methodologies.

Traditional IT is generally built using a timely, manual provisioning process which has the potential to introduce errors. As a result, many organisations have implemented some DevOps processes into their work through the adoption of agile and scrum approaches.

The aim of DevOps is to remove the cultural and organisational silos between key stakeholders in an organisation (business, development, security, QA, IT operations), introducing a high degree of process integration and tooling automation throughout to make delivery and operations faster, streamlined and consistent.

However, with this need to move faster, organisations might find they are simultaneously introducing more errors into the release process. Furthermore, there is no “one-size-fits-all” DevOps implementation process.

We have therefore developed a comprehensive approach and methodology to support our clients’ digital DevOps journeys, providing the appropriate advice along the way to ensure their operations reap the benefits of an effective DevOps transformation.



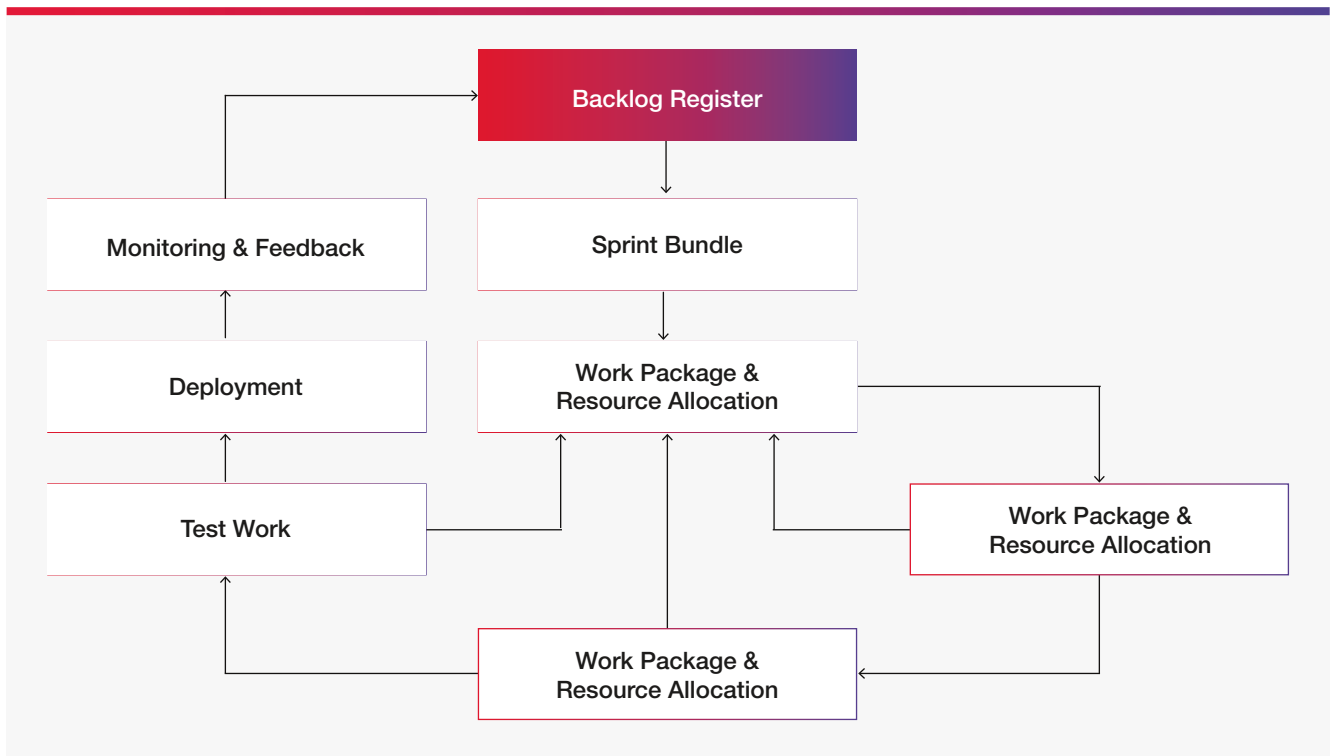
Transitioning IT Ops to DevOps

With the right DevOps processes in place and combined with features such as AIOps, it is possible to build and transition new services at pace using reusable “patterns” that automate deployments into service without manual intervention.

Some of the key pre-requisites for this successful integration and delivery include establishing the delivery mechanism, environment and code management, and ensuring these are aligned.

To enable the pace required, it is also essential to carefully define all work packages and allocate skilled resources.

By using the backlog register as the initial source, IT can organise outstanding tasks and combine them into a sprint bundle, with the potential for multiple tasks to be delivered as part of a single package.



1. A sprint bundle is a set of defined packages of work, either standalone or required to be integrated with other work packages.
2. Each work package has allocated/assigned resources with the appropriate skills to undertake the work.
3. Each work package includes a detailed list of tasks and activities which determine the complexity (and therefore the duration) of the work.
4. Feedback from the assigned resource will trigger movement to the next step of the process, and indicates they are available for next assignment.
5. Work package tracking and management ensures optimal performance and pace.

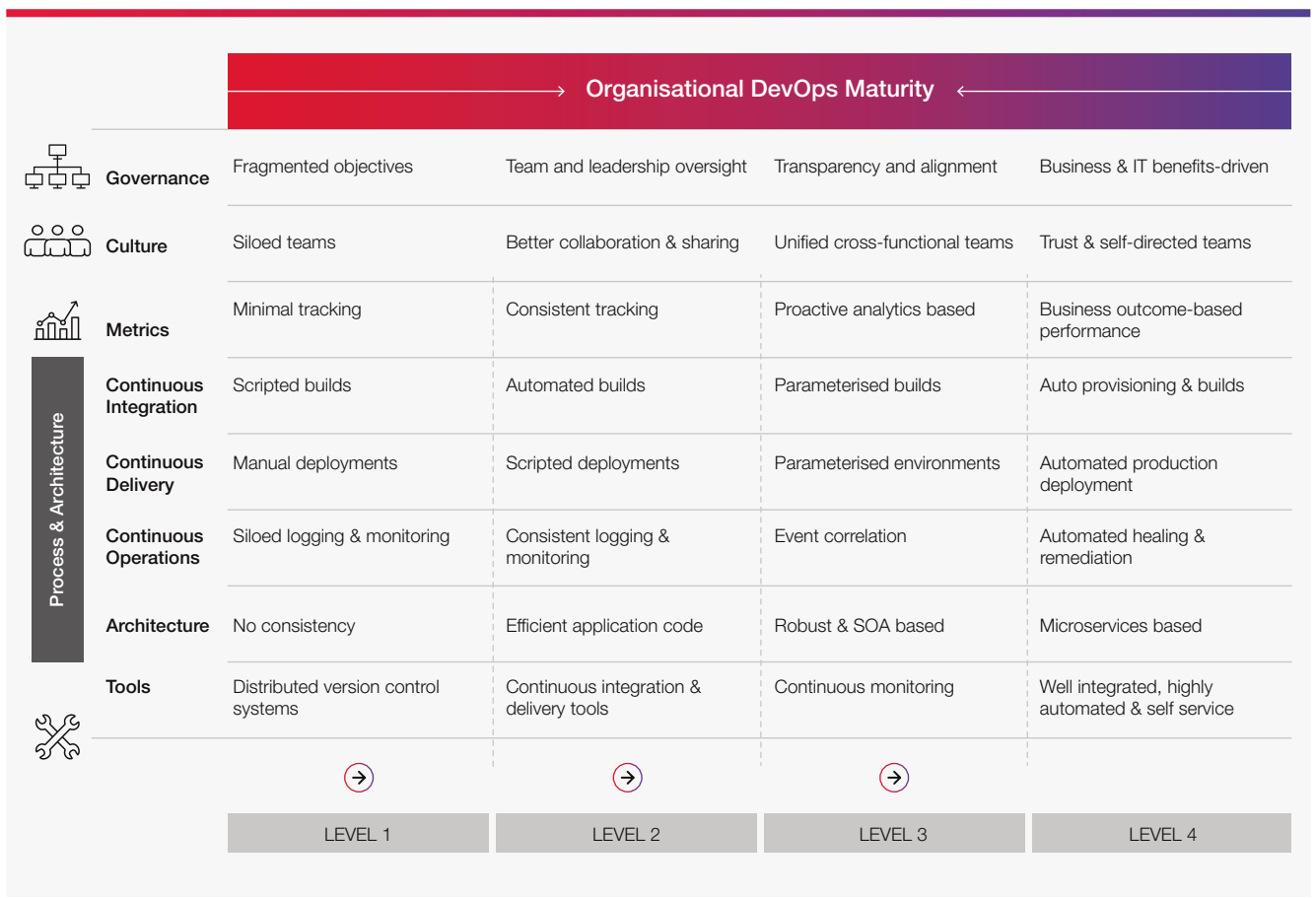
Integrated tool management

DevOps includes a strategic blend of methodologies and tooling that allow you to track, verify, deploy and revert code in an agile way to enable quicker delivery times than traditional IT allows.

Using agile development and DevOps practices and tools, we help clients successfully transform to digital operating models that achieve more rapid, frequent software releases.

Our industry expertise and unique frameworks combine in solutions that address all the challenges clients face along their journeys to adopting agile processes and tools.

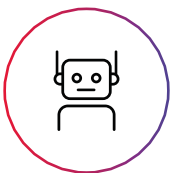
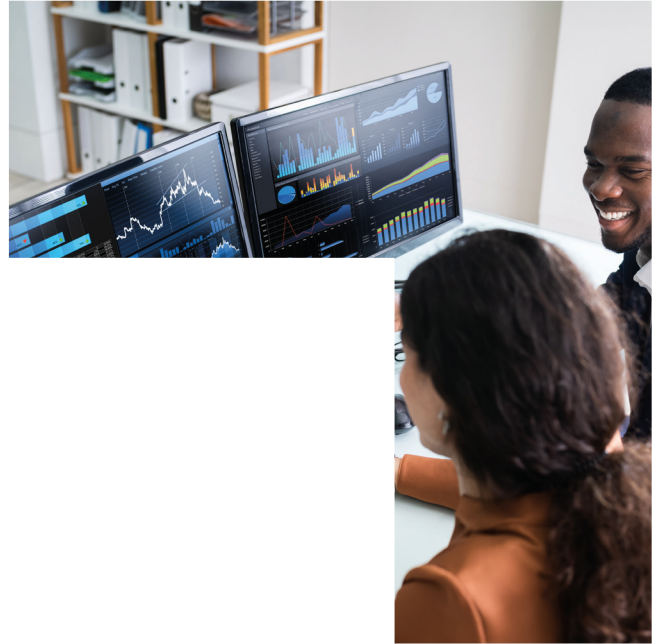
Using our DevOps maturity model, we create a strategic roadmap based upon each client's specific culture and tooling, and use their current investment as a foundation for development. So, whether you are looking for support on initial integration, or are looking to develop maturity and advance your utilisation of already adopted tools and processes, we are here to help.



Collaborative approach

By using DevOps tools and processes, you can centralise process flows, time management and code repositories for developers and managers, thus enabling efficient collaboration across teams and knowledge.

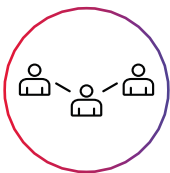
It is essential to automate processes that are manual and slow. Using DevOps technologies and tooling not only enables quick, reliable operations and the evolution of applications, it also helps team members independently accomplish tasks (for example, deploying code or provisioning infrastructure) that would traditionally require the support of other teams, thereby increasing a team's velocity.



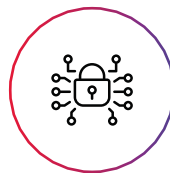
Automation connects the activities of teams together under a DevOps model, with continuous integration enabling the **optimised delivery** of higher **quality** operations.



DevOps promotes **reliable** and **stable** operations as performance is monitored in real-time by better connected teams, ensuring **continuous improvement** and **quality delivery**.



More effective, **collaborative teams** are built under a DevOps model, enabling **productivity, efficiencies** and higher **quality** outputs.



Retain control and preserve **compliance** whilst maintaining fast, innovative operations using a **DevSecOps** approach that puts **security** at its core.

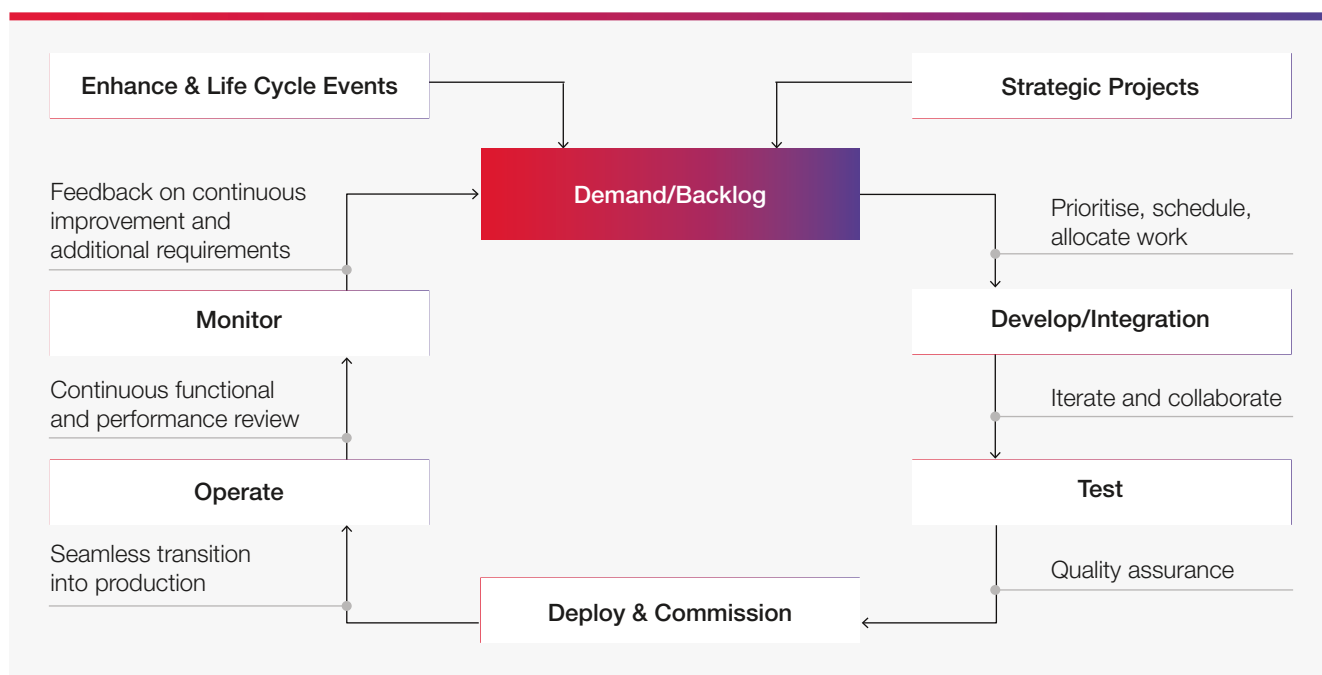
Structured testing and release control

By blending DevOps culture with digital DevOps, our Advisory Services experts provide a rigorous, proven approach to testing, driven by key business, operational and technical risks. When combined with our process of continuous improvement, this builds increasing effectiveness and efficiencies into operations, enabling your organisation to maximise upon the value delivered.

Our approach is ITIL-aligned and consistent with the ISO9001, 27001 and 29119 standards, as well as the IEEE 829-1998 standard for software test documentation, BS7925-1 glossary of software testing terms, and BS7925-2 standard for software component testing.

Furthermore, our release process is governed by our robust change management procedure, which includes the thorough formal checks necessary to protect live environments from untested, unsafe, unfunded changes.

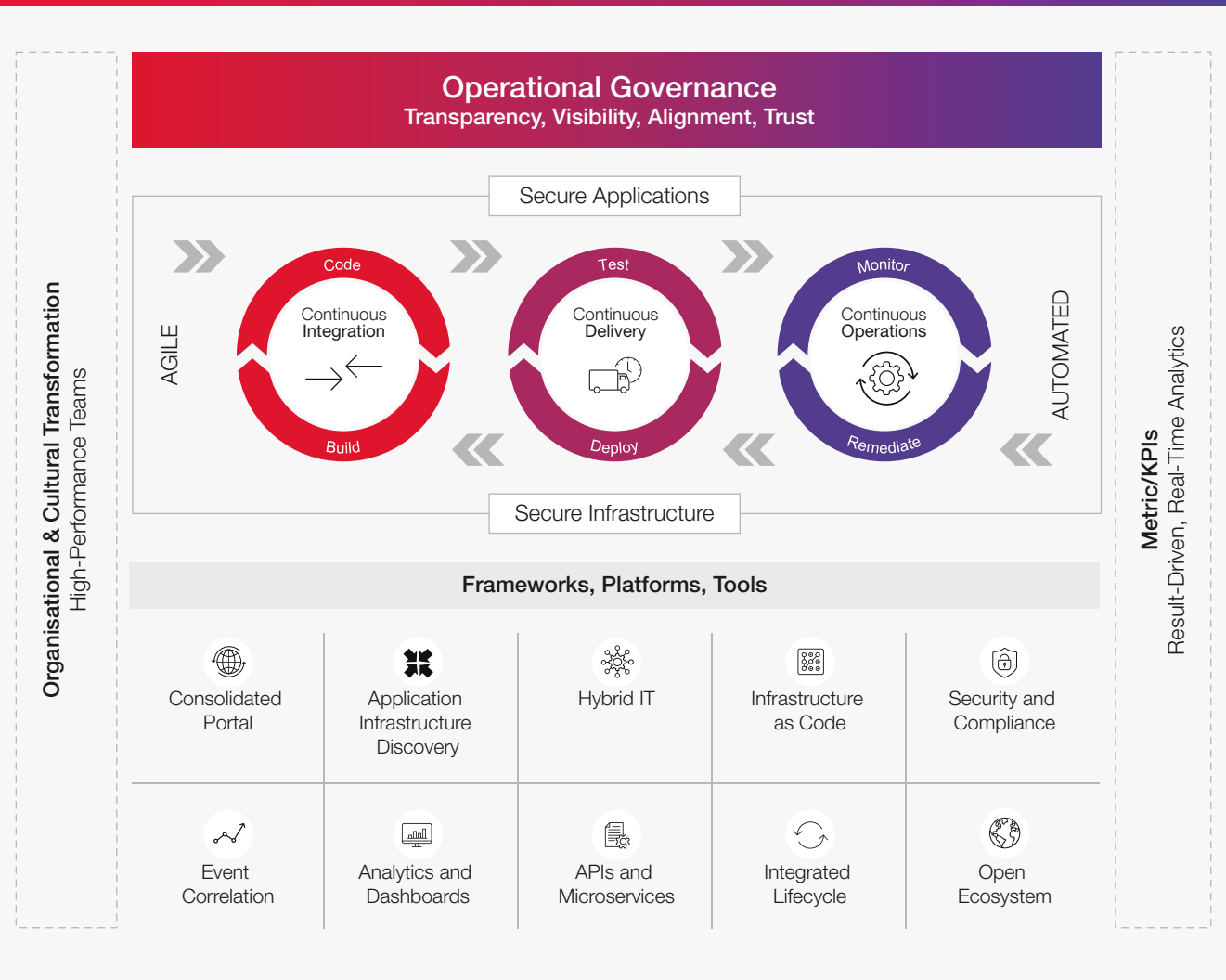
Continuous integration and development (CI/CD) incorporates the continuous lifecycle of a project, from inception to live service. When the project is delivered, the cycle is then repeated for any additional enhancements or bug resolutions required.



- **Demand** is generated by several different routes. Each needs to be assessed, prioritised and grouped into the current sprint.
- **To achieve pace**, multiple projects need to be in-flight in parallel. Clear task and activity work orders need to be assigned to the relevant development resource.
- **Integration and testing** provide the key measurement of quality assurance.
- **Deployment** needs to be seamless and provide no risk of business disruption, whilst commissioning ensures that the outcome is as expected with the right functionality and performance.
- **Operations** should be built into the developed capability, making it supportable by operations.
- **Monitoring** the functional capability and performance, and capturing enhancements to enable fast-tracked continuous improvement.

Our solution blueprint

The diagram below provides an overview of our digital DevOps strategy for transforming the way our clients' organisations work.

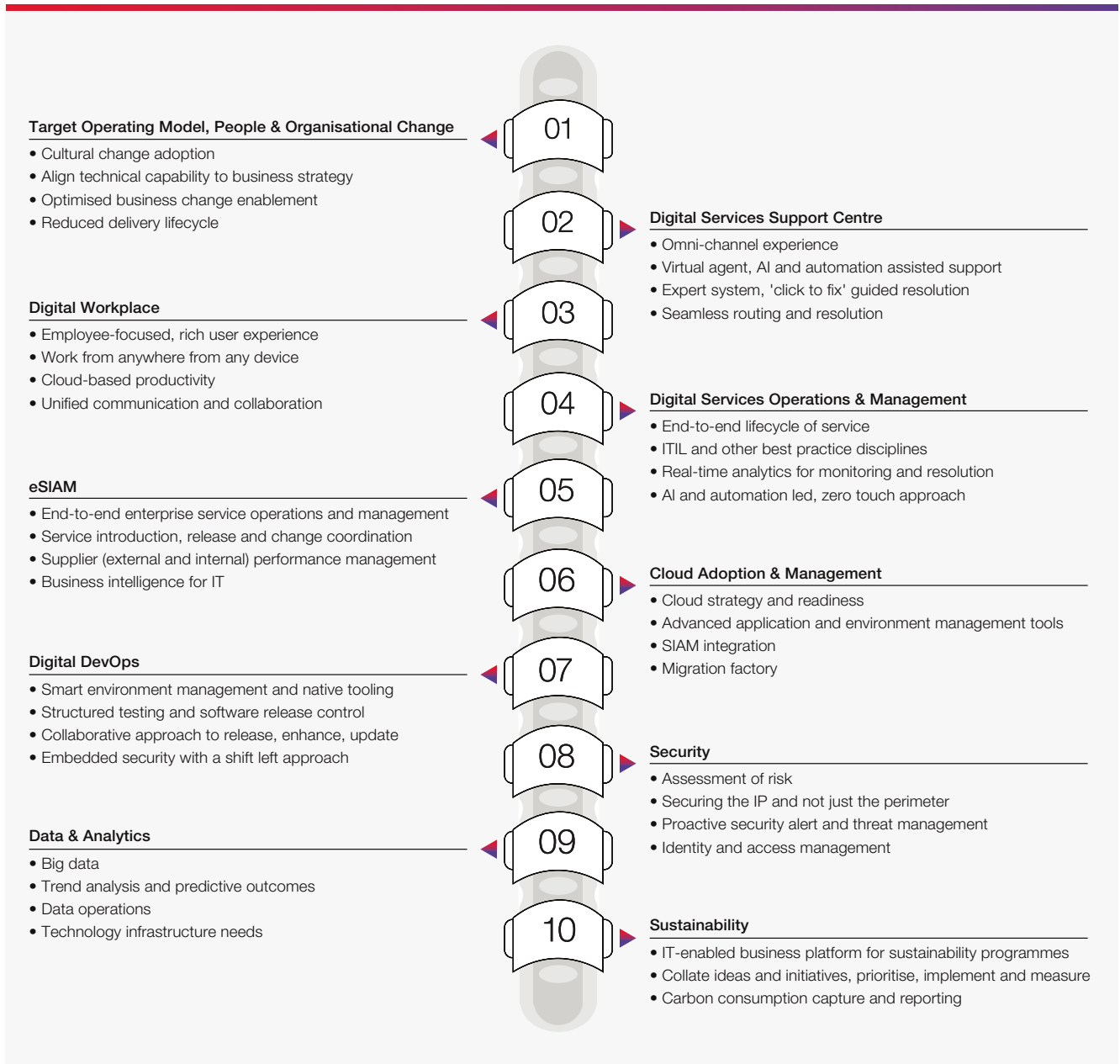


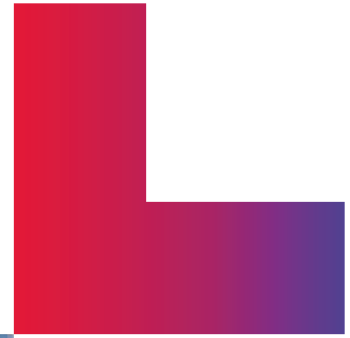
CGI Advisory Services

Technologies can help organisations to unlock their full potential – but only when done right. We understand that digital transformation isn't simple, and CGI Advisory Services is here to help you develop the right solutions which are aligned to your business capabilities, transforming the way your organisation works.

Digital DevOps is part of our broader Digital Backbone

The [Digital Backbone methodology](#) is our portfolio of Advisory Services solutions, designed to encourage digital transformation and enable IT as an extension of our clients' organisations.





About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 88,500 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

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