



**Digital platforms
accelerate delivery of
modern applications**

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A discussion of the important role digital platforms play in software development, release and operation

Enterprises are turning to digital platforms to drive positive business outcomes such as lower costs, faster speed to market and increased consistency. This paper details the role digital platforms can play in application development and provides real-world examples of how they are delivering significant benefits to companies.

In this paper we specifically discuss platforms in the enterprise technology context. DXC Technology researchers in “[The Science of Digital Platforms](#)” assert that “... platforms have become environments of technology, processes and people that create change through digitization.”

A critical success factor that DXC has identified in the delivery of today’s modern applications is the use of platforms that are enablers for development and runtime activities. Because digital platforms provide improved consistency, the business benefits of deploying them include faster development cycles and increased productivity.

Improved consistency

On the development side, the most effective platforms deliver outcomes that include improved productivity, faster speed to market and higher-quality software. The runtime outcomes drive conformity in operations that reduce complexity and cost when managing applications across modern hybrid environments.

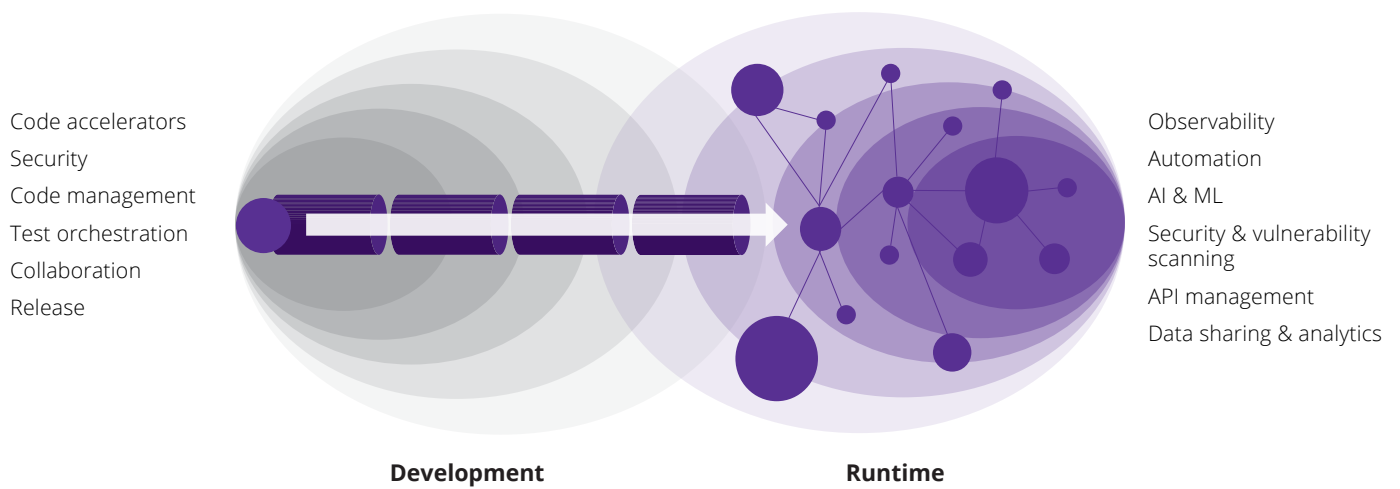


Figure 1. The digital platform automates progression of code from development into the runtime ecosystem.

“Bayernwerk AG will be able to generate growth outside the regulated market and help our customers become more sustainable.”

— Matthias Leitl, Business Product Owner, Bayernwerk AG

Key digital initiatives are now operated through [Bayernwerk’s] Digital Delivery Factory model, which assimilates leading technologies and providers in a vibrant co-creation environment.

Today’s digital platforms play an important role in the process of developing, releasing and operating software. In contrast to the past, where application development could best be described as pockets of individual scripting and almost no orchestration over the entire build, test, release and operate process, modern application development is defined by the introduction of a common foundation — sometimes called the “pipeline” — that underlies and orchestrates this spectrum of activities. It is this foundation that provides consistency, repeatability, speed and quality to the overall process.

Enterprises developing software have choices in their approach. They can do a one-off project using unique assets that are not well integrated and no built-in operational management. Or they can construct a digital platform architecture that provides a solid foundation for driving consistency.

A good analogy to today’s digital platforms can be found in modern homebuilding, where plumbing, ductwork and electrical components are integrated into the foundation, which is delivered to the building site, creating efficiencies that enable rapid construction of the rest of the house. If you design and create the foundation with all the pipes and plumbing embedded in it, the house can be completed in a consistent, repeatable way.

Digital platforms in practice

Evolving from a physical construct and shifting into software, data and processes oriented toward specific business outcomes, platforms are now integrating the ways of managing the fluidity of data. The result is the formation of a services-based ecosystem that fosters new ways of operating.

This is the case at [Bayernwerk AG, a subsidiary of E.ON](#), which supports utilities across more than 1,200 municipalities in southern Germany. In partnership with Bayernwerk AG, DXC was the core developer and platform integrator of Socrates, an ISG award-winning solution that serves as a platform enabling DXC, Bayernwerk, E.ON and their partners to deliver new business services that can be automated through application programming interfaces (APIs) that share data.

Socrates addresses many of the nonfunctional requirements that can slow the development and delivery of applications, such as security, scalability, availability, manageability and accessibility, exposing them as common services that all applications inherit. It provides access to the legacy data platforms and a proven path for testing and release management, which ensures that all applications deployed into Socrates have a certain degree of reliability and will not have a negative effect on the ecosystem. This is a powerful benefit when multiple development teams are working in parallel on unrelated business services.

While it is not a requirement that a platform enable applications to be deployed in the cloud, an added benefit of Socrates is that it is itself a cloud-native platform. That is, the platform delivers its value by orchestrating across cloud services. Therefore, applications deployed on top of Socrates are by default cloud-native and can leverage hundreds of cloud-adjacent services.

Socrates exemplifies the acceleration that is possible by disaggregating the surrounding technical frame from the business capability. This is the key to helping Bayernwerk AG introduce new services at a rapid pace.

A platform such as Socrates adds significant value in the delivery of modern applications. However, development platforms today are playing an equally important role in providing proven paths to success for the development, testing and release management of software into the digital ecosystem.

Practicing a good health regimen

Many enterprise customers come to DXC with symptoms that they believe affect their ability to adopt Agile development methods or DevOps practices. We work with customers to identify the root causes and first address the underlying issues that keep them from successfully adopting Agile and DevOps.

From a business perspective, the root cause is not so much about addressing the symptoms, but looking more systemically at the larger context of the end-to-end delivery chain and hoped for business outcomes. To achieve them, enterprises need to engage in emerging best practices that provide a proven path and deliver consistency.

The business benefits are that your organization will be more productive, you'll deliver higher-quality code, and you'll deliver it faster. As your organization matures, you will become more predictive about your performance, which will allow you to manage your resources better. That affects the economics of building and running your software, as well as your ability to run more projects successfully.

Many organizations struggle with the myriad decisions about tooling, frameworks, integration patterns, testing constructs and nonfunctional requirements, and their choices may lead to inconsistency. This inconsistency drives up the cost and management burden and will very quickly become tomorrow's technical debt.

Recognizing this pattern, DXC has invested in evolving technical and delivery capabilities that help customers in multiple industries solve this problem. Among these customers is Lloyd's, the world's leading marketplace for commercial, corporate and specialty insurance solutions. DXC is leading the creation of a [new digital platform for Lloyd's](#) that will fundamentally change the operating model of the London market.

The solution will see the insurance marketplace transformed from one that is largely paper-based and reliant on analog sets of processes to one that is data-focused, automated and cost-efficient. DXC will rearchitect the market's entire IT system and develop a cloud-native digital platform running on AWS to replace the legacy mainframes, while automating manual processes.

“This is a significant step on the journey to digitize the Lloyd's and London market. We look forward to working with our Managing Agent members, DXC, Lloyd's and the wider London market, as we build a faster and more cost-efficient, data-driven future for the market and its customers.”

— Sheila Cameron, CEO, Lloyd's Market Association

Learn more about
Lloyd's transformation plans.

“Digitizing the process enabled us to achieve modernization goals that had been discussed for many years. DXC was a true partner in this effort, showing us how to make the impossible possible for our teachers and students.”

— Gianna Barbieri, Director General for Information Systems and Statistics, Ministry of Education, Italy

Learn more about the **Italian Ministry of Education’s technology transformation.**

Greater agility

Like many enterprises, public sector organizations, including [the Italian Ministries of Education and Labor](#), and [the municipalities of Rome and Milan](#), want to gain the benefits of cloud in terms of agility, reduced time to market and cost savings.

DXC has built a fully managed end-to-end application platform using containers. Because the platform serves multiple customers, it needs to be flexible, and this is achieved by having the components loosely coupled via APIs. This makes it easy to add and remove components as needed for different customers.

As an example, the Ministry of Education uses GitLab for version control and another uses GitHub. This is handled by a single cohesive platform as the CI/CD service can communicate with the version control system over API, meaning that the underlying tooling can be interchangeable. The same approach is followed for all parts of the platform stack, thereby avoiding vendor lock-in.

The platform has helped drive accelerated innovation, providing the structure within which organizational change at scale has been achieved.

These examples demonstrate that the most successful transformation initiatives are executed within the boundaries and enablement provided through an application-centric platform-based approach. To deliver such transformations at scale, DXC addresses both the technical capability and the DevOps organizational construct that optimizes the flow of work through the system.

How DXC can help

DXC flexibly incorporates partner IP, open-source technologies and our own IP. The framework decisions, interface definitions, preconfigured automated testing packages, observability construct, non-functional features, versioning, security scanning and tagging standards are all handled by the platform.

DXC typically manages the platform as an independent product, with its own backlog of features that enable the business applications with services to deliver change faster and with higher quality. We build on our reference capabilities and tailor solutions to each customer’s needs, tooling preferences and target cloud landing zones.

Delivering a digital platform creates a proven path for developers that leads them in a guided, governed way to achieve a specific outcome. Through the platform-centric approach, software delivery and operational excellence follows a consistent path within guardrails that drive conformity. This leads to faster feature development, higher-quality code and operationally stable systems that result in greater value for customers.

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JP Morgenthal



JP Morgenthal is global director, Modern Application Development, DXC Technology. He is an internationally renowned thought leader in digital transformation, automation, modernization, integration and cloud computing. JP has served in executive roles at major software companies and technology startups. His areas of expertise include software strategy and architecture, application development, infrastructure and operations, DevOps, microservices and IoT. He routinely advises C-level executives on the best ways to use technology to derive business value. JP is a published author of four trade publications.

Matt Kay



As global product manager, Application Services, DXC Technology, Matt Kay orchestrates the development, sales and delivery teams for a significant portion of DXC's Application Services portfolio. He specializes in application development and application management and has built next-generation services that have been productized and sold at scale to Fortune 500 organizations. He works on some of DXC's largest opportunities and has led major deals as solution executive.

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