jade
digital

GOING
CLOUD-NATIVE

Re-platforming in the cloud to enable
customer experience

Contents

Introduction
Digital transformation leads to the cloud

Effective digital transformation is widely regarded as a do-or-die necessity for businesses of all kinds: those that do not exploit digital technologies to the maximum extent possibly are doomed to fail.

However, success in digital transformation does not come easily. In a global survey by McKinsey, 80 percent of respondents said their organisation had begun digital transformation projects in recent years, but only 14 percent said their efforts had made any sustained performance improvements, and only three percent reported complete success in creating a sustained change.[1]

McKinsey attributed this lack of success to outdated technology environments. "Quarterly release cycles make it hard to tune digital capabilities to changing market demands. Rigid and brittle infrastructures choke on the data required for sophisticated analytics."[2]

According to McKinsey, the use of cloud services could eliminate or reduce many of these barriers and bring the speed to market aspect to every business and lay the foundation for customer excellence. But the transition to cloud brings its own set of challenges.

If cloud is to support and enable digital transformation, an organisation must take a strategic, but deliberate approach to realising maximum value, not one that only seeks to solve individual problems and create efficiencies without regard to the 'big picture'.

Most organisations start with a comprehensive 360-degree assessment of existing systems, processes, tools, business goals and expected future IT requirements to determine the most appropriate cloud architecture.

Then a migration strategy must be developed and prioritised to ensure transitions to the cloud do not disrupt business operations and incur unnecessary expense. Milestones should be assigned to each stage of the process.

The impacts of these changes on both internal and external customers are likely to be significant, and customers can also provide valuable insights to aid the transformation. So, to maximise the positive and minimise the negative, it is essential to keep them informed and involved throughout the process.

It all adds up to making cloud-enabled digital transformation a considerable challenge. The right tools and technologies, and most importantly the right partners, can help with every stage of the transition and ensure a successful migration to cloud-based applications.

[1] https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/five-moves-to-make-during-a-digital-transformation
[2] https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-cios-and-ctos-can-accelerate-digital-transformations-through-cloud-platforms

Cloud Migration Starts and Ends with Customers

What do customers need in today's market?

> "Visualising end-user interactions, mapping user journeys, understanding users' perceptions and goals are essential insights if an eventual solution is to achieve the right business outcomes.

User experience should be the starting point and provide the goal for the modernisation of any application, and cloud-native migrations are no different. What do customers need in today's market? What barriers and pain points do they experience that limit their ability to fulfil their roles and serve the goals of the business? How can technology help them become more efficient and effective?

These questions can only be answered by direct engagement with customers and users. Immersive workshops should be held to identify the biggest problems and most promising opportunities, uncover key user goals and differing user perceptions.

Visualising end-user interactions, mapping user journeys, understanding users' perceptions and goals are essential insights if an eventual solution is to meet the needs of all users.

Whatever cloud services and applications are put in place, they are experienced through the user interface, which is critical for ensuring an optimal user experience. Optimal user interface design enables users, and the organisation, to make full and effective use of cloud applications and services. The typical entry point for applications is through search and with more than 50 percent of searches being performed on a mobile device it is important to design for mobile experiences.[3]

A good user interface starts with human-centric design: understanding the details of customers' emotions, thought processes, behaviours, wants and needs; how they want to interact with a business and its applications, and how that can be translated to a smarter, better user experience.

The user interface should not be an afterthought to application design and development: how users interact with applications and their expectations should be assessed and incorporated into applications at the design stage.

[3] https://techjury.net/blog/mobile-vs-desktop-usage/

Making the Journey to the Cloud

Migrating an established business' IT operations to the cloud involves a number of processes, each critical to the overall success of the program.

Successful transformation of an enterprise requires moving to a digitised platform and then exploiting that platform to create value.

The process of re-platforming is an opportunity to re-evaluate business models and organisational design, because re-platforming is more than just a technology change. It's a shift of a mindset from product first to customer first, and often you need to bring your executives and board along for the journey by painting a picture or vision for the business. Often, this involves showing the business what is possible through smart migration decisions that demonstrate success incrementally and quickly.

There are several different approaches to re-platforming:

- adding APIs to exchange data between systems. Create a hybrid cloud setup by giving a lifeline to your legacy technology components

- lift and shift some of the technology components to as-is cloud infrastructure but choose to run in a similar tech stack

- creating a parallel technology platform/business model to make customers offers and migrating to it

- replacing entire legacy systems with a modern flexible core platform or a provider.

Discovery and audit

A process of discovery and audit is needed to determine the fit for purpose cloud infrastructure and architectural considerations. Options canvassed should include single or multi-cloud, the use of microservices, serverless computing and security, performance and reliability strategies, with chosen options tested through proof-of-concepts prior to full development.

Cloud migration planning

The "six Rs" of cloud migration should be followed through a series of structured workshops to develop a digital transformation pathway and drive a successful cloud migration strategy: Rehosting, Replatforming, Repurchasing, Refactoring, Retiring, and Retaining.

Prioritisation and process options

A successful transition to cloud depends on plotting the most effective / quickest path, testing architecture options and accurately sizing projects and the resources needed to complete them, and defining the benchmarks and milestones that represent progress on the journey.

It's Time to Go Cloud Native

Cloud-native computing, based on containers, is rapidly gaining momentum as a highly efficient way to run applications in the cloud. Any plan to transition IT to public cloud services should aim to take advantage of cloud-native facilities available on services such as AWS, Azure and Google.

A key feature of cloud-native computing is the loosely coupled microservice architecture, in which applications, rather than being large monolithic entities, are structured as collections of services owning separate aspect of the business value chain. If done right, it will give you the benefits of:

- highly maintainable and testable software solutions
- independently deployable immutable infrastructure
- lower cost of ownership and change
- business agility to react quickly to the market.

This microservice architecture enables large, complex applications to be more rapidly and reliably developed, enabling organisational IT to be more nimble, flexible, and responsive to business needs.

Bringing Cloud Intelligence to your Customer Data

Once applications and their data have been moved to the cloud, the data becomes accessible to many powerful cloud-based tools that can be used to gain insights previously unobtainable, and extract value from that data to support business goals.

Machine learning tools can be employed to automate manual business processes. Artificial intelligence tools such as image recognition can be used to support the business in ways previously not possible.

For example, Jade developed an application for DB Cargo, the UK's largest rail freight company, that applies machine learning to historical train timetable data enabling customers, via a mobile app, to get highly accurate estimated arrival times of trains.[4]

---

4   https://hubs.ly/H0yn4cw0

Achieving Optimal Cloud Performance
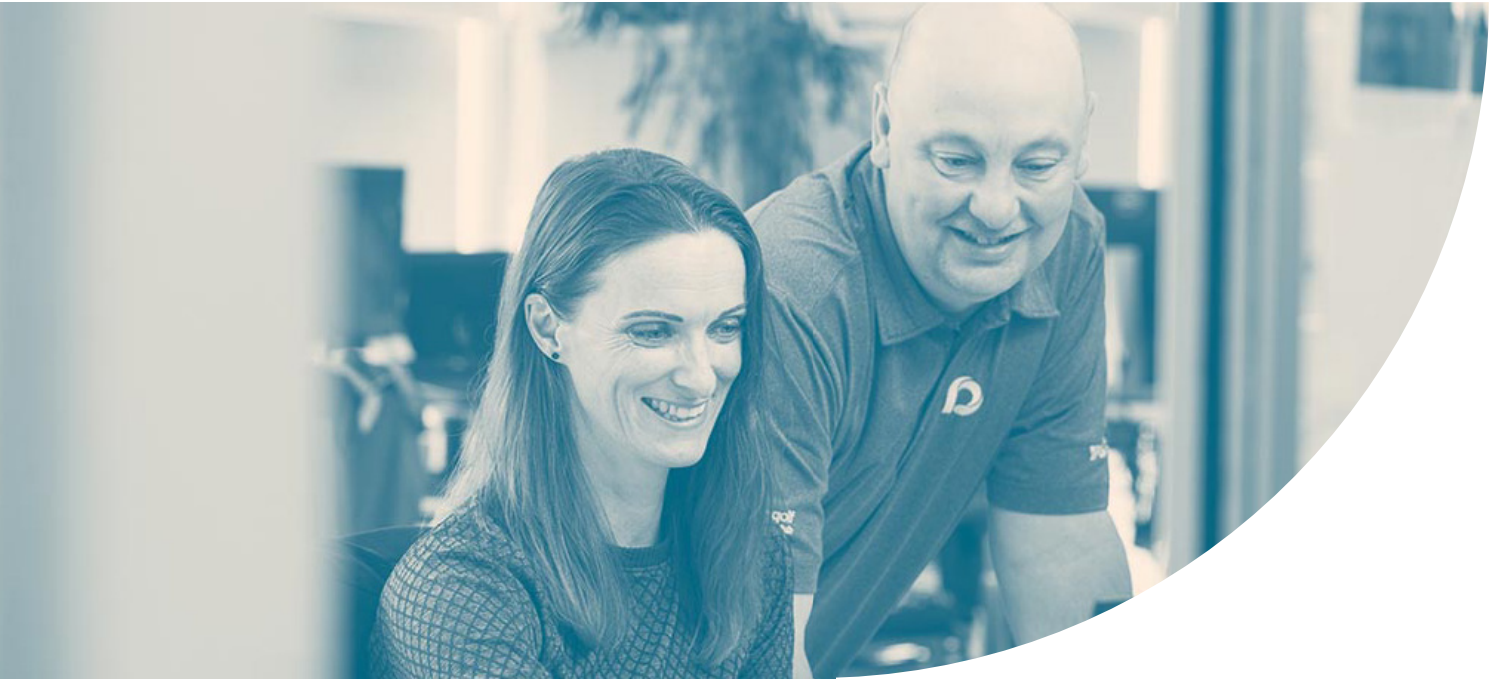
Two methodologies are essential to ensure cloud-native applications and systems run effectively and efficiently: DevOps and CloudOps.

With DevOps, software development moves away from the inflexible waterfall methods to encompass the entire operational life of an application.

DevOps aims to optimise the development lifecycle of IT solutions, reduce management costs and produce high quality results through continual testing and validation, and facilitate a culture of shared ownership, knowledge and accountability in an organisation.

However, DevOps can cause problems if not expertly implemented. Security risks may not be front of mind for development teams tasked with developing new applications at high speed. Working with a partner like Jade can ensure key issues are identified and key stakeholders given adequate time and information to respond to risks.

CloudOps or Application Managed Services is the formalisation of best practices and procedures that allow cloud-based applications to function well long-term. This is important because moving workloads to the cloud, no matter how well executed, is not what matters long term; it's the ability of these applications to meet business needs.

An experienced services and operations partner like Jade will use CloudOps to monitor, maintain, and support applications in the cloud, and bring significant security expertise and 24/7 support to give businesses confidence that their cloud applications are both supported and optimised, long term.

Customer Experience Uplift with Cloud

All these operational efficiencies introduced with cloud computing allows the business units to focus their energy on what really matters to them, their customers. Traditional IT/OPs running costs will focus more on how to deliver value to the customer faster and more frequently. Cloud becomes the operational backbone to scale your business and expand as the business transitions away from an IT culture where you are always putting fires out to a modern, digitally native, value driven organisational culture.

Cloud-led digital capability uplift around practices such as user testing, market research, prototyping, applied innovation and data-driven insights make a significant impact on the customer. The customer will always be part of the technology journey starting from research to testing.

In a highly competitive environment, the name of the game is to 'fail fast' rather than trying to build the perfect feature, product, or the business anymore. Nine out of 10 start-ups, new ventures are not successful, and it is all about perseverance, resilience, and keeping the cost of experiments manageable.[5]

Following the design thinking process together with cloud-native infrastructure and architectural choices will give your business the agility and the platform to create a 'fail fast' culture within your organisation.

---

[5] www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10

Cloud-native Computing in Action

Jade has exploited cloud-native computing to provide business solutions to companies of all kinds around the world.

Allianz Australia

Allianz Australia provides workers compensation services to around 25 percent of Australian employees. The company realised that its small business customers had only two options to obtain workers compensation insurance: use a broker or call the Allianz contact centre.

It decided calling the contact centre was no longer an acceptable option for time-poor small business owners in an age when most things can be purchased online. So Allianz engaged Jade to develop an integration layer that enables a workers compensation insurance quoting and purchasing platform for their small and medium business customers.[6]

To do this, the portal had to enable Allianz to gather sufficient information to determine its risk and price the policy accordingly, but without burdening the customer with too many questions.

Jade was able to develop a system to meet these requirements and easily integrate front and back end systems. Usage has exceeded Allianz' expectations and it is looking to leverage this technology to hook into other customer platforms in the future.

TAL Australia and Rest Super

Australian superannuation fund, Rest Super, selected TAL Insurance in 2019 to provide group insurance to its members. TAL then needed to integrate with Rest Super's systems over an aggressive six-month timeline to enable it to insure and support Rest members. It engaged Jade to support this integration.[7]

Jade's consultants provided technical leadership and execution capabilities to progress the Rest Super integration, showcasing progress to business stakeholders on a regular basis to ensure that emerging outputs were aligned with the expectations set for Rest Super during the tender process and to minimise the need for rework on the ambitious schedule. The result was an on-time, high-quality technology delivery that will contribute to TAL's continued digital transformation.

[6] https://hubs.ly/H0yn1wL0
[7] https://hubs.ly/H0yn4DT0

Make Jade your Cloud-native Partner

To sum-up: investing in a cloud-enabled digital future is no longer an option. This entails leveraging cloud infrastructure, trusted partners, and your existing investment in technology to derisk your future and regain your competitive advantage in today's rapidly evolving digital landscape.

A trusted partner for your journey

Jade gives you the perfect blend of cloud experience and technical ability to uplift your internal teams to achieve sustained results when it comes to digital transformation and cloud modernisation.

We combine people and data-driven insights to create engaging, user-friendly software that delivers a premium customer experience. Designing and building cloud-native applications to enhance your existing business ecosystems and differentiate your

business from competitors is our bread and butter. Our cloud providers of choice are Amazon AWS and Microsoft Azure, but we will work with any of your cloud service partners.

Ultimately, working with Jade is about taking on board a trusted partner who cares about your customers, is invested in achieving your outcomes, and delivering you a true digital difference in today's era of cloud technology.

All of this aims to allow you to exploit cloud infrastructure to modernise and scale existing processes, rapidly transform customer offerings, and create user experiences that help you win and retain customers, without having to abandon previous investments.

Contact Jade today, and discover how Jade can take your business on a digital transformation journey to a cloud-native future.

jadeworld.com/services/jade-digital

jade
digital