

The Future of Cloud Migration

Lessons from the past and present to help your organization increase the value, efficiency, and efficacy of your cloud migration projects.



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A brief history of all things cloud

Rapid advancements in technology have taken the cloud from pipe dream to a permanent fixture in the business world in just a few short decades. From the 1950s to the 1990's Cloud Computing became a more formalized concept, with most companies adopting the concept in the early 2000's. Between 2012 and 2022, cloud computing became the expectation, offering solutions for storage, computation, and artificial intelligence. In a 2022 survey, Flexera reported that 100% of respondents (to its [State of the Cloud survey](#)) use some form of cloud for their business.

The past two years have accelerated the digital transformation trend. Companies looked to maintain operations with remote staff while meeting the changing demands of consumers. Many of these consumers expect to interact in new and varied ways within ecommerce, social media, mobile apps, and digital ads.

This book will examine the evolution of cloud use cases, the changing priorities affecting cloud adoption and migration, and how organizations can increase the value of their cloud migration investments to better prepare for changes still to come.

How has the way we use cloud changed?

Before we can prepare for the future, we need to examine where we've been. Let's look at how corporate cloud use has shifted over the last five years.



Cloud adoption

2017

Just 33% of companies (28% of enterprises) were heavily invested in using cloud and looking for ways to optimize their cloud use. A further 25% were exploring cloud use, with multiple cloud projects deployed. **A full 20% of businesses (18% of enterprises) had yet to use the cloud.**

2022

Once a relatively innovative idea, cloud has gone mainstream. **100% of businesses report using at least one cloud.**

96% use public cloud

84% use private cloud

80% use both public and private

Goals for cloud use

2017

Most enterprises (70%) have defined what they want to achieve using cloud technology.

Only a little more than half (53%) have a timeline for implementation.

2022

Efficiency and optimization have become the primary focus.

59% of businesses want to optimize their existing cloud usage

57% want to move more of their processes to the cloud

42% are embracing SaaS models

(Source: [Rightscale 2017 State of the Cloud Report](#))

(Source: [Flexera 2022 State of the Cloud Report](#))



Roadblocks and challenges

2017

Cloud maturity is low and primary challenges are the most commonly cited.

- 25%** of businesses say they lack the resources or expertise needed to implement a cloud strategy
- 25%** are concerned about the security of their data in the cloud
- 25%** worry about managing cloud spend

2022

Today's businesses have much higher levels of cloud maturity, and concerns are now related to more complex issues.

- 53%** struggle to understand application dependencies
- 48%** need help with assessing the technical feasibility of projects
- 41%** cite estimating cloud costs vs.on-premise costs as a concern

Measuring success

2017

The actual viability of cloud was still a key measure of success:

- Faster access to infrastructure (68%)
- Scalability (61%)
- Availability (56%)

2022

Cloud success metrics are now more closely tied to business outcomes:

- Cost savings (74%)
- Delivery speed of new products or services (68%)
- Increased rate of innovation (48%)



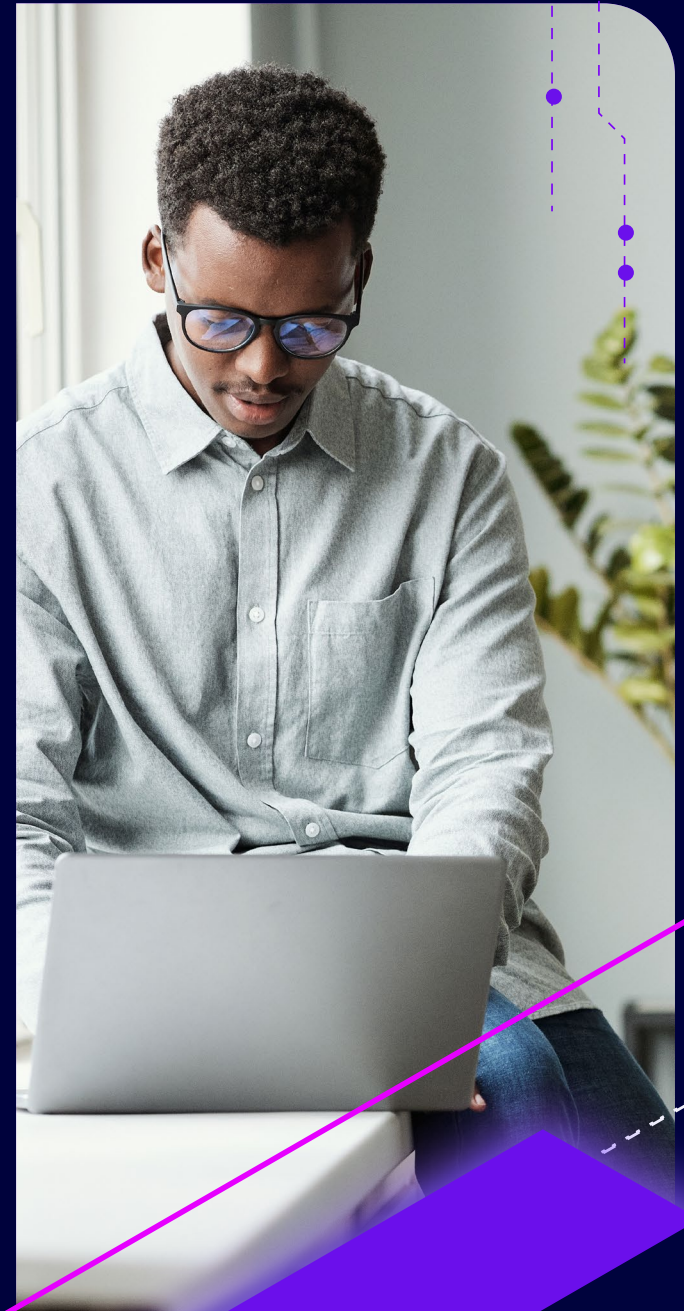
New cloud use cases are emerging

Technical maturity isn't the only factor affecting the way today's companies use the cloud. Corporate priorities are shifting, and new use cases for cloud are emerging as they do.

Crisis response

The last two years have rapidly accelerated changes in the way businesses use technology, and two key priorities have emerged:

- Ensuring the company can pivot quickly in times of crisis
- Addressing [temporary fixes](#) implemented to maintain operations during the pandemic



Retiring legacy solutions

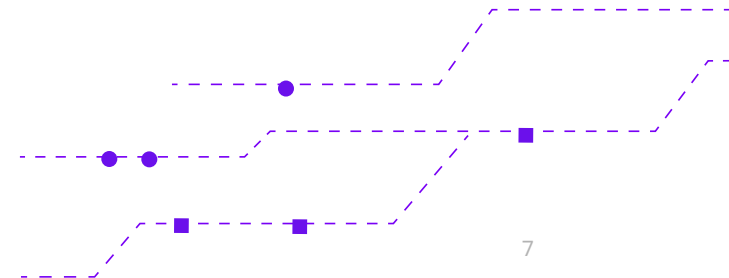
Legacy solutions become more challenging and costly to maintain as time goes on. Solutions providers sunset support for older systems and experts with the skills and knowledge needed to keep them running become few and far between, making shifting to a newer solution imperative. ([The 2027 end-of-support deadline for SAP ECC and subsequent mass transition to S/4HANA](#) is a great example of this.) The importance of remote work capabilities has skyrocketed, and the challenges of maintaining a qualified IT team amid workforce shortages are increasing reliance on the cloud, Big Data, analytics, artificial intelligence, and machine learning.

Consumer demands

Winning the loyalty of today's consumers is more challenging. Customers expect more from the brands they shop from or work with — and are prepared to look elsewhere if the experience falls flat. A growing number of companies are embracing [omnichannel strategies](#) to deliver optimized, personalized experiences for every shopper.

Rising waste

As cloud spending continues to rise, the percentage of cloud spend companies admit is wasted is also climbing, with the average organization reporting [32% of cloud spend is wasted in 2022](#). Organizations that simply “lift and shift” processes from on-premises systems to the cloud are still reliant on legacy approaches that do not leverage the full power of the technology.



Innovation

The act of migration is [inspiring innovation](#). Businesses looking for a competitive edge are finding new ways to combine and use data across multiple systems to streamline operations, reduce time-to-market, cut costs, and improve the end-user experience.



Pre-pandemic, cloud migration was already often complex... A simple process could often turn into a fog of conflicting goals, broken dependencies, and cost overruns. Post-pandemic, all of these factors will likely be even more challenging. It is critical to ‘disrupt your market without interrupting your business’ during the migration.”

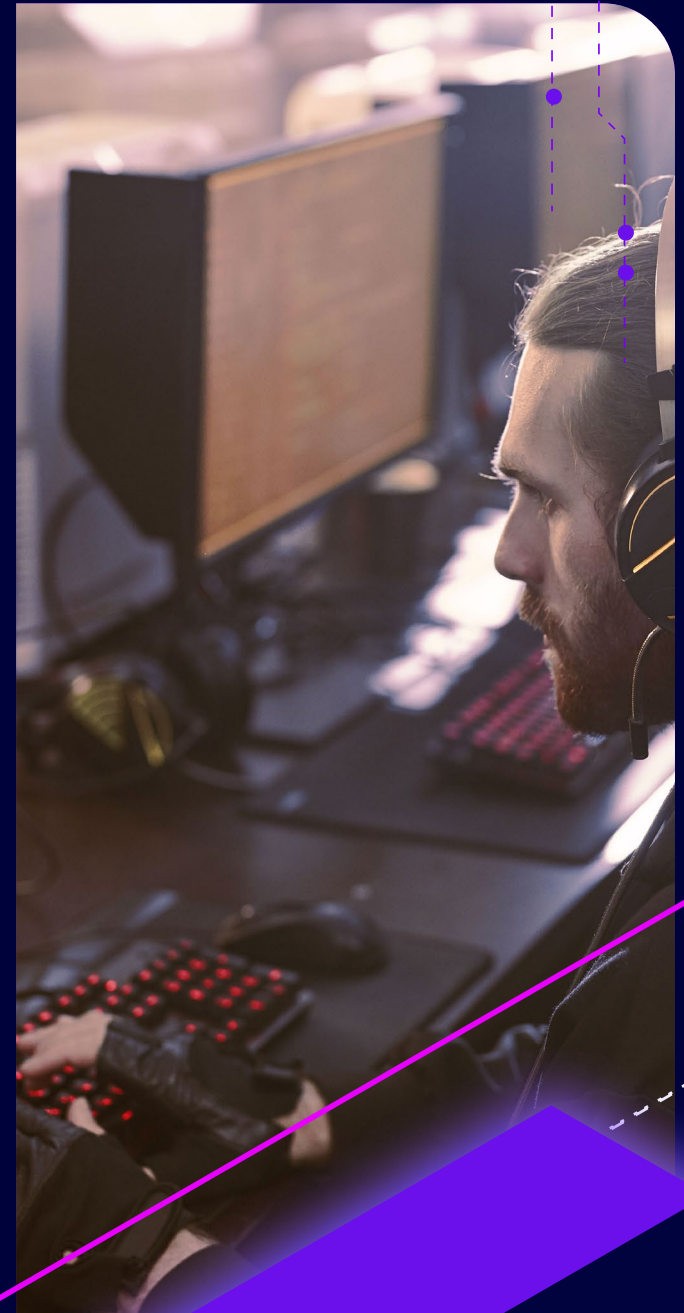
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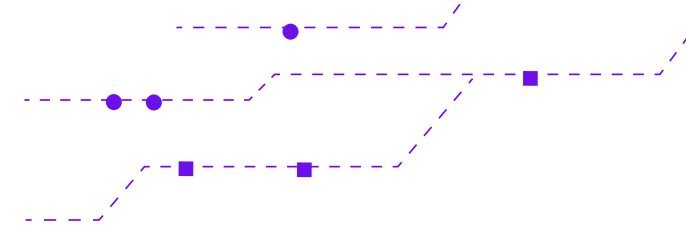
More than moving — improving

Optimizing cloud usage and moving applications to the cloud as part of a digital transformation strategy means traditional migration solutions are falling short. Processes and application have long been rehomed, instead of being optimized for the cloud.

To achieve today's cloud and digital transformation goals, organizations must stop focusing on migration and start thinking about integration.

Connecting systems and data, regardless of where they live, is key to fully realizing the benefits cloud computing offers. This helps to eliminates wasted spend, and delivers new solutions and experiences to consumers. A migration project already entails processing a massive quantity of data — why not take the opportunity to add more value to the process with an integration-focused approach?





Accelerate decommissioning

One of the most significant cost factors in a migration project is the amount of time an application must coexist in its on premises and cloud forms, creating duplicate costs. Shortening the migration project duration has a direct impact on the bottom line.

An Enterprise Integration-Platform-as-a-Service (e-iPaaS) makes this possible.

- Integrations can be created using mocked endpoints before the cloud environment is replicated
- Low-code, visual interfaces can reduce development time compared to traditional approaches

Convert to new systems

Connectors in integration platforms can merge, enrich, or transform data in real-time to allow for conversion to new systems or databases.

Modernize architecture

The process of decoupling applications for cloud migration is the perfect time to update architecture to provide the business agility and flexibility needed to adapt to changing situations, new consumer demands, and time-sensitive opportunities. A decoupled architecture dramatically simplifies adding or replacing components to a system.

Audit and archive data

An integration platform can also help companies remove redundant or unnecessary data from systems during the migration process after validating information based on business rules and generating reports on relational integrity or orphaned records. Your migration project may also include archiving data that's no longer needed into a separate space to help improve system performance and decrease wasted cloud spend.



How to organize your cloud migration

Selecting the right integration platform can help your organization securely transition business-critical operations to the cloud and minimize disruptions and downtime during the migration process. You'll gain increased resilience and momentum, and have the agility needed to meet today's digital demands.

But how do you ensure the integration platform you've chosen will help you reach those goals? Here are some key steps organizations can take with the support of an integration partner to optimize the cloud migration process.

Step 1: Design the new environment

Planning and designing a solution is critical to any cloud migration strategy. [Google](#), [Amazon](#), and [Microsoft](#) have extensive documentation on preparing for your cloud migration. Here are a few tips:

- Determine the order in which systems and data will be transitioned based on both their criticality and business priorities
- Start with less critical applications — ones that still add value to the business — to learn and master the technical requirements before moving to core components
- Once initial applications for migration are defined, map the data flows of other systems or applications that affect (or are affected by) the applications you plan to move
- Identify data transformation rules involved in these interactions



Step 2: Synchronize master data

Using existing endpoints in the application you plan to migrate, replicate the master data to verify you have all the necessary elements. This ensures that existing endpoints are reused and allows for differences in data structure to be adjusted in real-time using transformations or enrichment.

Step 3: Decouple

Many companies struggle with decoupling. The tendency to instead transform components of monolithic legacy systems into microservices results in complexities that often increase migration timelines and budgets. Working with an integration specialist can help avert this issue since SaaS business models allow for costs to be matched to projects.

The goal of this step is to create an abstracted layer of “ins” and “outs” of core interfaces that provides endpoint stability and reusability. This maintains the independence of each interface, allowing the use of native or existing endpoints like APIs, web services, or direct database connections. A decoupled architecture also empowers companies to react rapidly to business needs or launch new products or services.



Step 4: **Validate**

Your new cloud environment is now a faithful replica of your production environment, which allows unit testing and integration testing to happen much more quickly than in traditional cloud migration models.

Step 5: **Replicate transactions**

Transactional replication is a process by which you replicate changes between databases. To minimize the impact on business processes and applications, consider migrating data asynchronously. Your strategy here may be determined by the volume of data and the technology housing it.

Step 6: **Go-live**

All that remains is to flip the switch and adopt the replica created in the cloud as your new production environment. Once this is done, you can turn off integrations relating to the on-premises environment and make a plan for decommissioning older technologies and applications.



Make the most of your migration with Digibee

Digibee's Enterprise Integration Platform-as-a-Service (e-iPaaS) helps businesses free their siloes and leverage the platform to increase efficiency, security, and resilience, all while improving the customer experience. Our low-code, visual interface means team members of all technical skill levels can create integrations that help maximize the value of your organization's investment in the cloud.

Our usage-based business model lets companies test new strategies, deploy temporary integrations, and monitor modernized architecture without significant upfront investment or long-term contracts.

To learn more about how Digibee can help you support digital transformation goals with your cloud migration, contact our experts with your questions or book a demo to see our solution in action.

Reach out for a demo

For more information or to arrange a demo, connect with us at [**contact@digibee.com**](mailto:contact@digibee.com) or visit our website at [**digibee.com**](https://digibee.com).