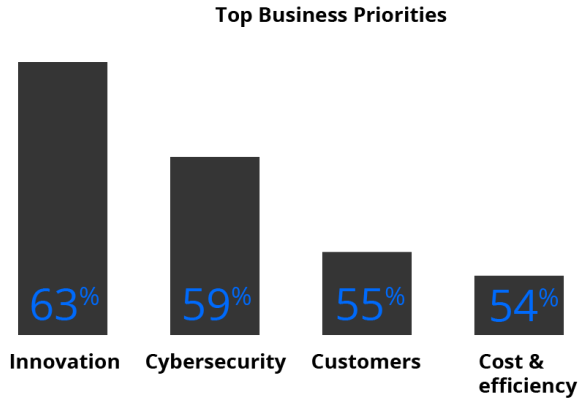
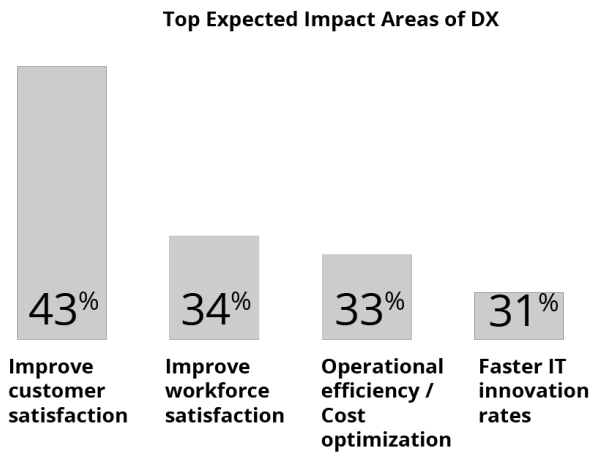
Market Context and Key Drivers

The expectations and requirements IT organisations face continue to evolve as businesses become more dedicated to and dependent on digitised business processes, customer engagements and business models.

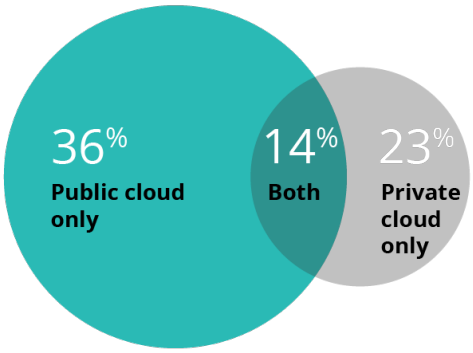
The infrastructure transformation journey is fuelled by organisations' digital transformation endeavours. Nordic organisations' main business priorities are innovation, customers and cost optimisation which also top the list of expected achievements from digital transformation.





Cloud adoption is high and multiple deployment models are often used. However, the use of true hybrid and multicloud architectures remains low.

What type of Cloud [infrastructure] solution does your organization deploy?



There is however, a prevalent interest, driven by the need to scale and integrate digital, which today is difficult due to challenges related to control, fragmentation, and legacy.

Best in Class Cloud (Nirvana)

The ultimate state of a hybrid multicloud platform is one that supports existing business processes and enables innovation. It leverages cloud-native technologies like containers, micro services and APIs, spans multiple clouds and allows for fast services deployments and secure and efficient provisioning of resources.

The hybrid multicloud platform is based on open standards so that applications can seamlessly move between on-premises and public cloud environments, depending on cost, performance and regulatory compliance requirements.

Optimal use of cloud however, is more comprehensive than establishing a platform of modern technologies. Organisational structures and competencies must revolve around cloud, an application modernisation road map need to be in place, and application development processes must be agile to take advantage of the opportunities a hybrid multicloud platform provides.

The dimensions that have to mastered to reach an ultimate cloud maturity stage are: move, build and manage.

Three Dimensions of Cloud Mastery

Move

Building a hybrid and multicloud-based digital platform for application modernization is a key step in digital transformation, because older infrastructure approaches and applications do not provide the agility and adaptability necessary for today's business environment and customer expectations. Moving applications into a cloud environment, be it private or public cloud, is an important step in application modernization. There are different strategies for application modernization that make sense for different applications. The maturity stage for this dimension is dependent on the cloud deployment model used, the chosen cloud migration strategy, and the motivation for modernizing applications.

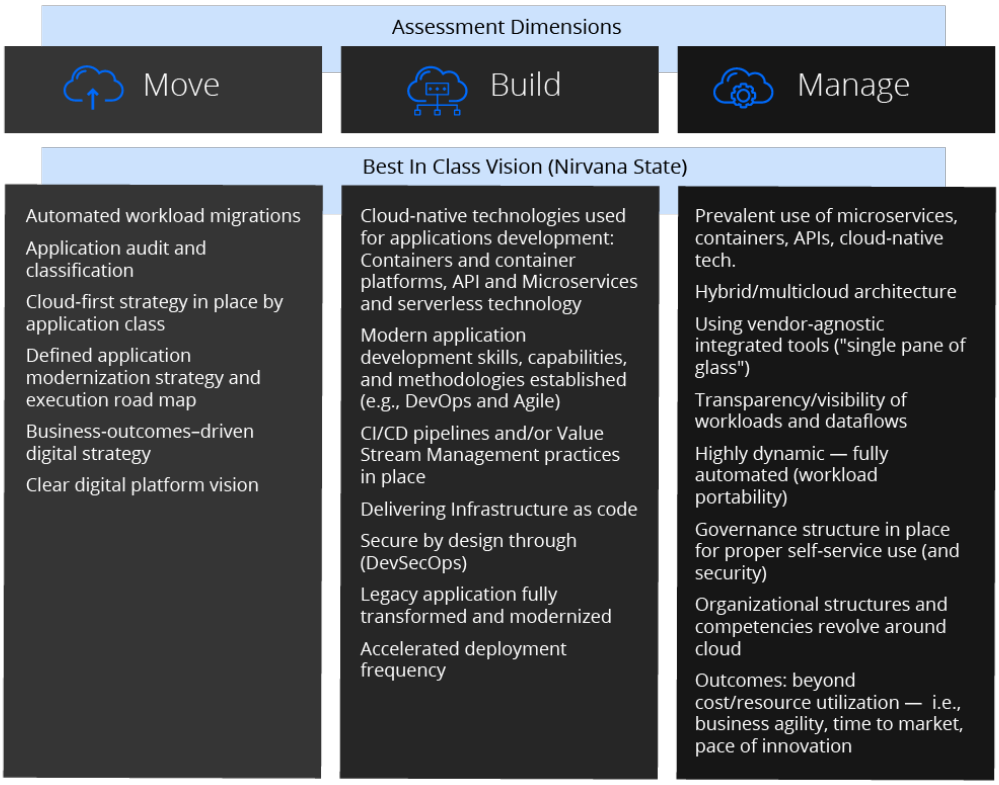
Build

Digital transformation is mainly done through digitizing business processes and supporting them with digital applications developed in the cloud. Many innovative services are also provided from the cloud first and developers are using cloud-native tools and processes. The maturity stage for this dimension is dependent on tools and processes used for cloud-native application development

Manage

Running workloads in a cloud environment is a dynamic discipline. New services are continuously deployed, and new functionalities are made available by vendors. Moreover, prices fluctuate, regulations change, and IT security threats constantly evolve, making it essential to persistently shift workloads to the most applicable platform. The maturity stage for this dimension is dependent on the tools and processes in place as well as the motivation driving the orchestration.

Evaluating Your Cloud Journey

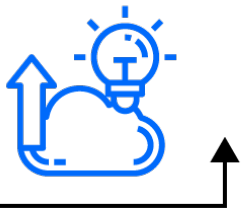


Your Ranking Overall

The overall cloud maturity level is decided by an organization's ability to leverage cloud. In addition to technology adoption, high-level maturity requires tools, processes, and organizational alignment that supports modernization of the existing application estate, development of new applications and services, and dynamic orchestration of cloud resources for continuous optimization.

Cloud Experimenter

As a cloud experimenter, you are at the beginning of your cloud journey. You have different cloud services in place, but your business-critical applications are still running in a traditional model. You are starting to use cloud-native development tools, but don't have broad adoption yet. You are managing your different clouds in silos.



Cloud Optimizer

As a cloud optimizer, you are well underway with your cloud journey. You have started to move some of your business-critical applications to the cloud. You have started to develop your own cloud-native applications and to implement DevOps methodologies. You are dealing with the complexity of hybrid and multicloud management by moving towards a cloud operating model.

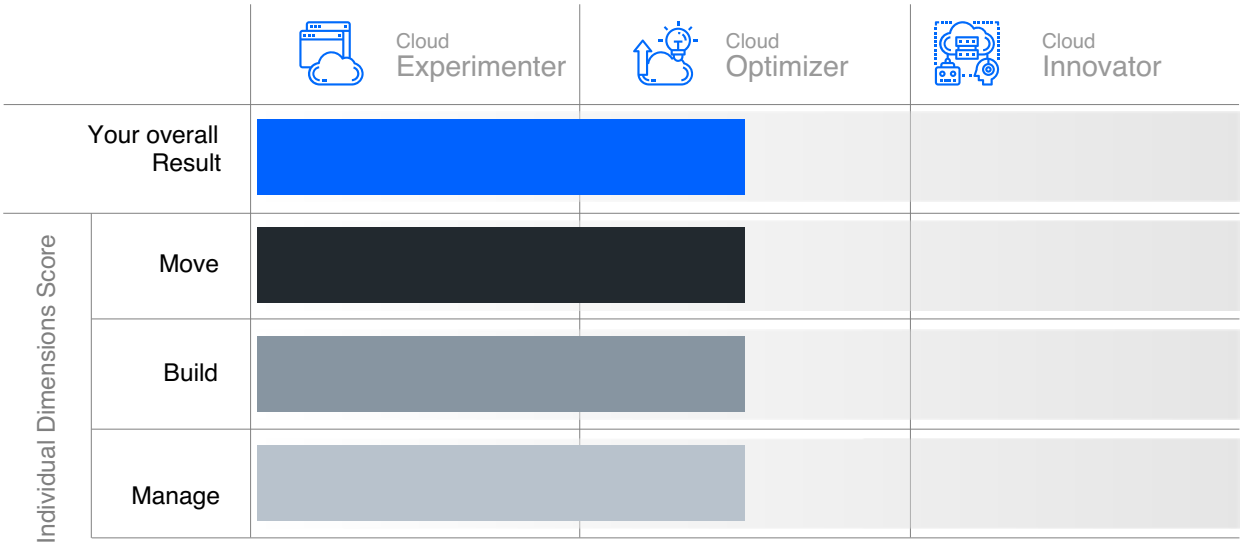
Cloud Innovator

As a cloud innovator, you are mastering the cloud. You can move your applications and data seamlessly between on-premises and cloud environments. You are developing and deploying cloud-native applications using DevOps methodologies and you are managing your various clouds seamlessly from a single pane of glass.

Your Score

Based on your responses, your organization is categorized as a cloud optimizer

This group is characterized by considerable, but incoherent use of cloud. At least some cloud-native technologies have been adopted, and selected applications moved to the cloud, but there is no complete application modernization road map in place, nor set processes for managing workloads across multiple clouds.



Recommendations:

to move to the next level, you need to institute consistency in the approach to cloud. This means defining an architecture, setting a modernization road map for all applications, and demolishing organizational silos.

This will allow you to move workloads between cloud services and deployment models, making your applications more agile and cost efficient, and ultimately better support business optimization and transformation endeavors.

Move

Introduction and Market Context

Building a hybrid and multicloud-based digital platform for application modernization is a key step in digital transformation, because older infrastructure approaches and applications do not provide the agility and adaptability necessary for today's business environment and customer expectations. Moving applications into a cloud environment, be it private or public cloud, is an important step in application modernization. There are different strategies for application modernization that make sense for different applications. The maturity stage for this dimension is dependent on the cloud deployment model used, the chosen cloud migration strategy, and the motivation for modernizing applications.

Achieving the Cloud Innovator status will assure that your application modernization strategy is aligned with your business goals and supports your desired business outcomes. It will also help you to adapt quickly to changing market conditions by moving applications flexibly to the best cloud infrastructure, be it on-premises or in the public cloud, and to scale up and down based on market demand.

Your Score

Based on your response, your organization is categorized as a cloud optimizer. This group is characterized by wide-scale cloud usage, including some core applications.

Recommendations:

To become a cloud innovator, you must become independent of the cloud deployment model. As a cloud innovator, you can deploy your applications where it is most efficient in terms of cost, performance, regulatory compliance, and business outcomes, and you can move them dynamically between on-premises and public cloud environments. That ensures that your applications support your digital transformation and business strategy and that you can respond swiftly and aptly to changes in market conditions.

Build

Introduction

Digital transformation is mainly achieved by building highly scalable digital applications in the cloud and supporting them with digitized business processes. Modern applications built in the cloud can leverage the benefits of the cloud to then capitalize on other innovative technologies such as AI, cognitive, next-gen security, IoT, and so on to become more intuitive, dynamic, and responsive.

Many innovative services and digital features are also provided first from the cloud, and developers using cloud-native tools and processes to build modern applications can leverage these new features early on to build a competitive advantage.

> *By 2021, 70% of new enterprise applications will be developed cloud-native, leveraging cloud, containers, microservices architectures, and DevOps methodologies.*

Mastering this dimension and becoming a cloud innovator means you have the infrastructure, skills, and processes needed to build cloud-native applications at the speed and scale that the business demands. You can also access and experiment with new digital technologies and features released in the cloud and build considerable competitive advantage. IDC estimates that by 2025, about two-thirds of European organizations will become prolific software producers, and your maturity in cloud development will help you to claim a strong stake in the ground in the future.

Your Score

Based on your response, your organization is categorized as a cloud optimizer. This group is characterized by wider cloud-native application development. However, there are still some inconsistencies, and the cloud capabilities are not enterprisewide yet

Recommendations:

You have kickstarted your cloud-native journey and are making good progress. To graduate to the next level, you need to identify the technology bottlenecks, challenges, and

skills gap and address them as an urgent priority to scale your cloud-native capabilities. Fostering deeper collaboration between business units, developers, and infrastructure teams can help identify the challenges and effective mitigation.

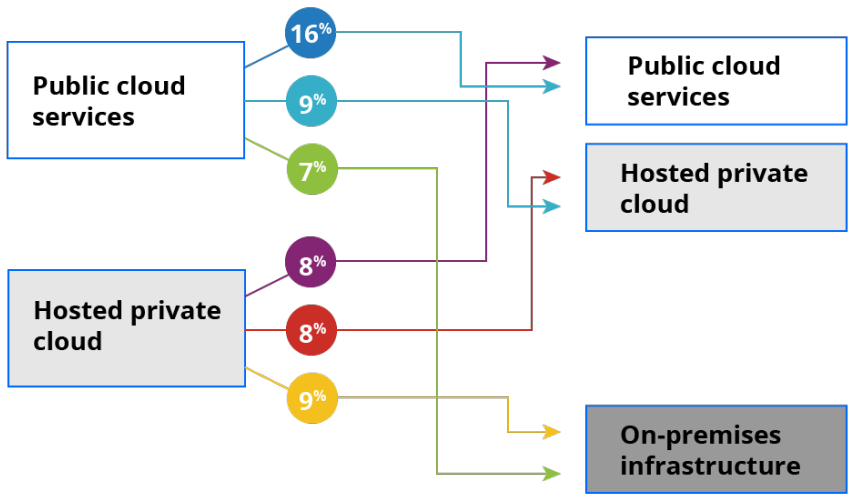
Manage

Introduction

The optimal maturity stage in cloud management is characterized by prevalent use of cloud-native technologies in a multi/hybrid architecture. The IT organization is set up with the cloud operating model in mind and without technology domain silos. Vendor lock-in is insignificant and workloads and data can be dynamically deployed on the platform that is most feasible for supporting the business agenda. The granularity of the architecture allows for comprehensive cost optimization, but the main value is in the agility and faster time-to-market that enhances business agility and resiliency.

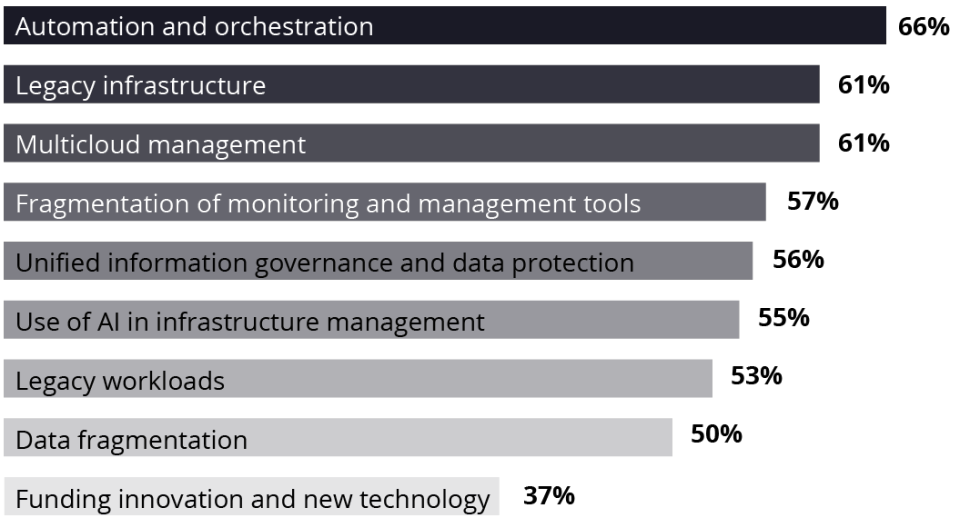
Few organizations have reached this level of maturity, although cloud is perceived as a core technology for supporting business transformation and innovation and shifting workloads between platforms is prevalent.

Share of Organizations Shifting Data or Workloads Off Cloud Services to Other Deployment Models



Cloud competency teams have been established, tools have been deployed, and processes implemented. But legacy and fragmentation have not been fully addressed and still obstruct optimal use of cloud resources and constrain the extent and pace of the business' digital transformation journey.

Share of Organizations Shifting Data or Workloads Off Cloud Services to Other Deployment Models



Your Score

Based on your response, your company is categorized as being a cloud optimizer.

This group is characterized by having a strategic approach to cloud. Cloud-specific competencies are in place, and multiple clouds and deployment models are used with the ambition to establish cost-efficient high-performance infrastructure.

Recommendations:

You should adopt a cloud-first strategy. You have to address your legacy and accelerate the application modernization journey and break down silos in both IT systems and organizational structures.

This will allow you to further optimize your costs and mitigate the risk of vendor lock-in, but more importantly better support your organization's business through enhanced agility and resiliency.

Conclusion

Thank you for taking this cloud migration, application modernization, and cloud orchestration readiness assessment. This demonstrates your ambition to succeed in your digital transformation strategies and is a good starting point to set you apart from your

peers. We hope you have been able to identify the weaknesses and strengths in your approach and have gained some tangible advice to help make progress, while developing a competitive edge.

Final recommendations to progress in the cloud maturity journey.

- Adopt a cloud-first architecture leveraging containers, microservices, APIs, functions, etc.
- Assess your application estate and establish a road map of which applications to modernize and how
- Focus on business outcomes beyond cost and cost structures — e.g., innovation and time to market
- Confront your legacy and break down existing silos in IT systems, organizational structures, and skills requirements
- Embrace a continuous approach, constantly evaluating technologies, reassessing modernization road maps, and orchestrating workloads across multiple platforms

If you want to know more about the role of cloud, especially multicloud and hybrid cloud, in application development and modernization as well as digital transformation, please check out the following report: http://ibmcloud.com