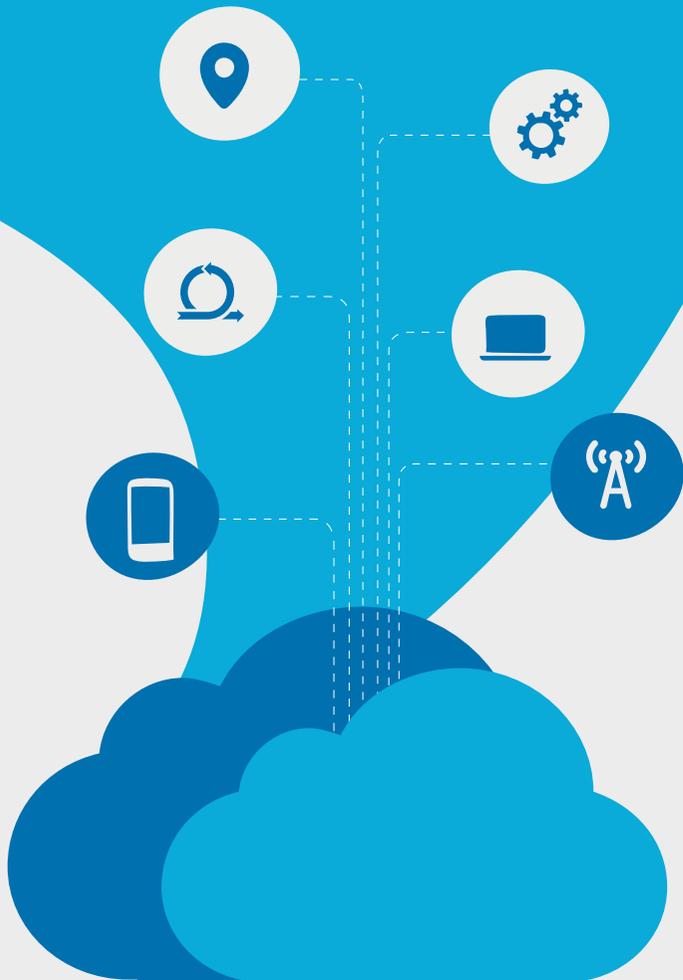


GUIDE ON
HOW TO UTILIZE THE
CLOUD MATURITY MODEL
Support to increase your cloud capability



A guide on utilizing the cloud maturity model - support to increase your cloud capability



1. Introduction.....	3
2. The cloud maturity model is a multidimensional approach to cloud transformation.....	4
A tool for assessing a company's cloud readiness	4
Maturity level: 0 - No cloud readiness at all.....	5
Maturity level: 1 - Initial readiness, ad hoc	6
Maturity level: 2 - Repeatable, opportunistic.....	6
Maturity level: 3 - Systematic and documented	6
Maturity level: 4 - Measured and measurable.....	7
Maturity level: 5 - Optimized	7
3. The Cloud Maturity Model takes into account business and technology perspectives	8
The cloud maturity model is divided into 30 different capability sub-areas	9
People.....	9
Processes.....	9
Technology.....	9
4. Benefits of the Cloud Maturity Model.....	10
A clear description of the current situation and areas for development.....	10
A systematic path to utilizing cloud services.....	12
The cloud maturity model is flexible according to the organization's needs.....	12
5. Utilizing the Cloud Maturity Model - Tips from Our Experts.....	13
Support for the renewal of the company's operations and know-how.....	13
Management is emphasized in the assessment of cloud maturity.....	14
Remember: this is not just a technical transformation.....	14
6. Do you want more information?.....	15
7. Experts.....	16
8. Capgemini in brief.....	17

Introduction



The benefits of cloud services no longer need justifying, as every organization interacts with the cloud in one way or another. Your transition to the cloud is often driven by the need to innovate and become more agile as a service company. Today's customers are strongly digitized and prefer agile service regardless of the industry.

Old-fashioned legacy systems rarely support digitization and agile modes of operation. Although the Nordics are already quite advanced in utilizing cloud services (up to 65% of companies use paid cloud services), being successful in digital projects is not self-evident or easy. According to our research, 93% of companies are in the midst of digital change, but only 18% are confident that they will meet their digital project objectives. In addition, 64% of business leaders stated that their transformation schedules are delayed. **Due to this, many companies feel that they have failed in their digital transformation.**

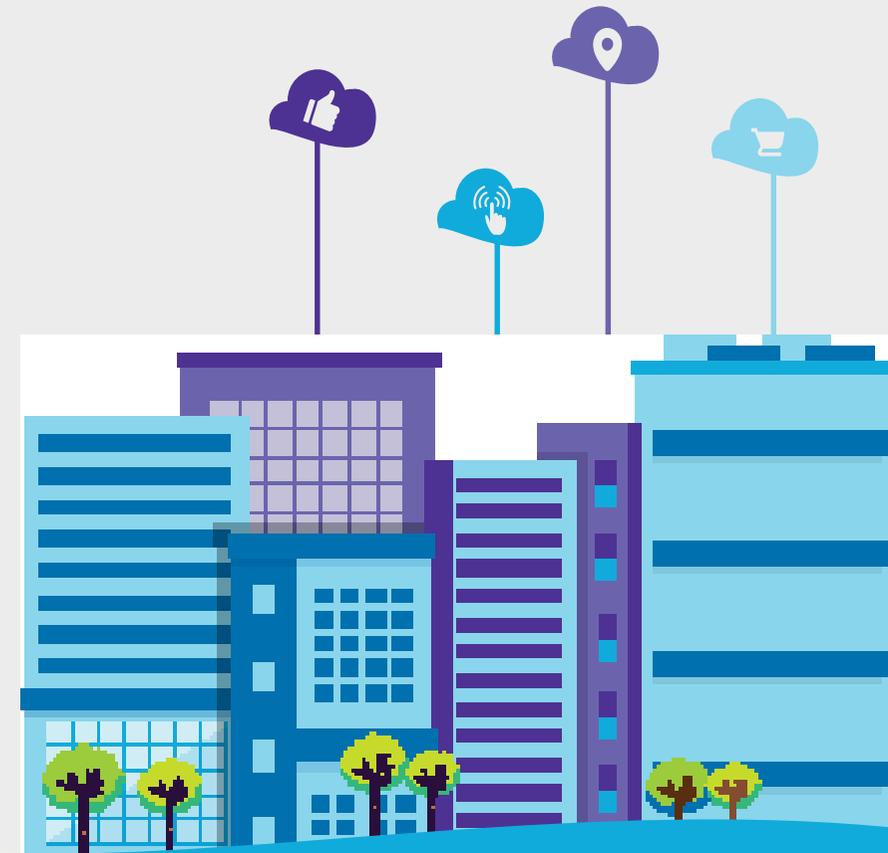
We believe in the ability to succeed in digital transformation – whether introducing cloud services or new innovative ways of working – based on a comprehensive approach to change. A change in which staff, business areas, and IT commit to a common goal.

This is also true for a company's cloud strategy. **A company's cloud transformation can't succeed only via technical change but**

requires improving employees' skills, change management, and development of operations.

This guide will deepen your knowledge of the cloud maturity levels according to the Cloud Maturity Model (CMM) and how technology, processes, and people relate to different aspects of cloud maturity. The cloud maturity model is a multidimensional approach that provides the right tools for every company to examine its actions and future designs critically. Not every business needs to strive for the highest level of cloud maturity in all areas.

Happy reading!



“In cloud transformation, staff, business areas, and IT commit to a common objective.”

The cloud maturity model is a multidimensional approach to cloud transformation



A tool for assessing a company's cloud readiness

The Cloud Maturity Model (CMM) is a tool that assesses a company's readiness for utilizing cloud services. The model helps the company travel the journey to the cloud efficiently and in such a way that cloud services are in line with the company's business objectives.

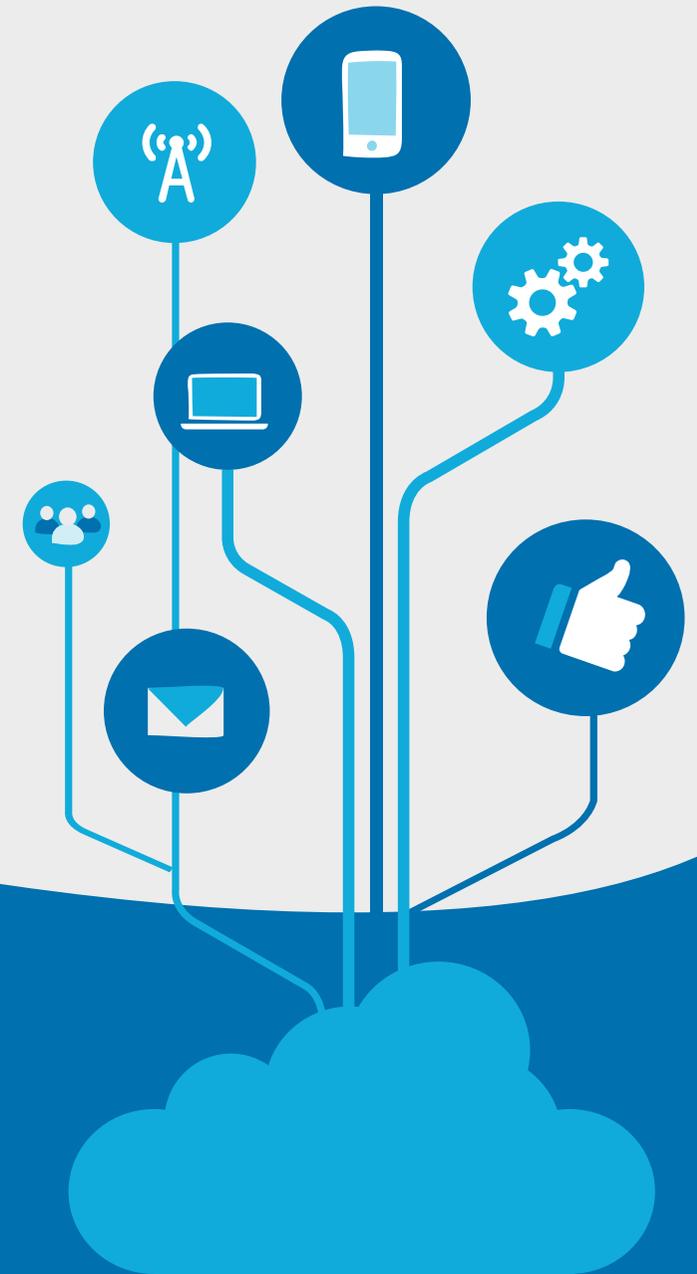
There are many models for business development, but the CMM model examines an organization's different business areas, specifically from a cloud perspective.

The cloud maturity model is a multidimensional approach to how you can identify concrete development targets for your cloud transition. The cloud maturity model includes the notion that people and processes are as important as technology in cloud maturity.

We now introduce the Cloud Maturity Model maintained by the Open Alliance for Cloud Adoption. [link: <https://www.oaca-project.org/>]

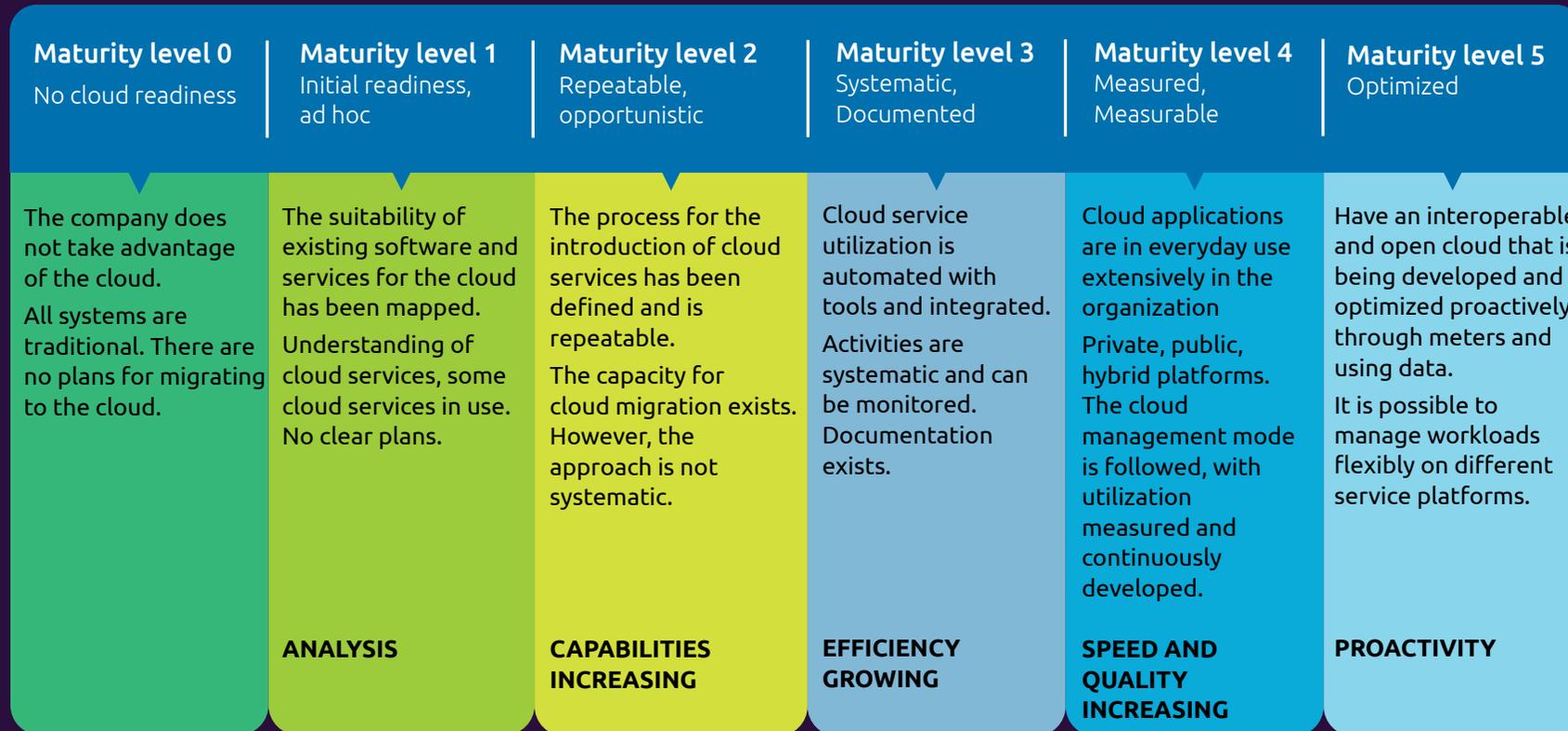
The model has been developed through the practical experience of large international corporations in which organization-wide digital transformations are typically challenging. This makes the cloud maturity model well suited to assess organizations' cloud readiness and developments of all sizes.

The cloud maturity model includes levels from zero to six. Some levels can also overlap, and a company can be at level 1 from one perspective and another perspective at level 3.





Different levels of the cloud maturity model:



Maturity level: 0 - No cloud readiness at all

The company doesn't take advantage of the cloud at all. Instead, it only has legacy systems. There are also no plans for taking cloud services into use. At this level, starting various projects is slow and laborious. In the Nordics, large 0-level companies have become a rarity. Almost all companies are either taking advantage of the cloud or have

conducted surveys about taking it into use. If a company is at the 0-level, it is not necessarily due to a lack of cloud readiness or plans to move to the cloud. Still, often there is a regulatory reason behind it—for example, stricter than average security and data sovereignty requirements.

Maturity level: 1 - Initial readiness, ad hoc

The company has mapped and analyzed the suitability of its existing software and services for integration with the cloud. The company already has preliminary experience of cloud services, and some migrations may have taken place, but for the most part, it has both legacy- and non-virtualized systems. The cloud is mainly being utilized as SaaS services or limited business unit-specific ad-hoc procurement. The company is still in the early stages of using cloud services, and there is no clear plan.

Nordic organizations on this level of cloud maturity differ a lot from their US counterparts. For example, Nordic companies have not been using private clouds to the same extent. Few companies have their own data centers, but they usually rely on service provider data centers/servers and virtualization. Of course, there are industry-specific differences: for example, the financial sector is still often using its own physical capacity, but otherwise, these organizations can be defined as having a higher level of cloud maturity.

Maturity level: 2 - Repeatable, opportunistic

The company has prepared its IT and procurement process for taking cloud services into use, such as deciding who can subscribe to such services and how. The processes are defined and are repeatable. The utilization of cloud services is already relatively high at this level, but the approach is not yet systematic and comprehensively defined.

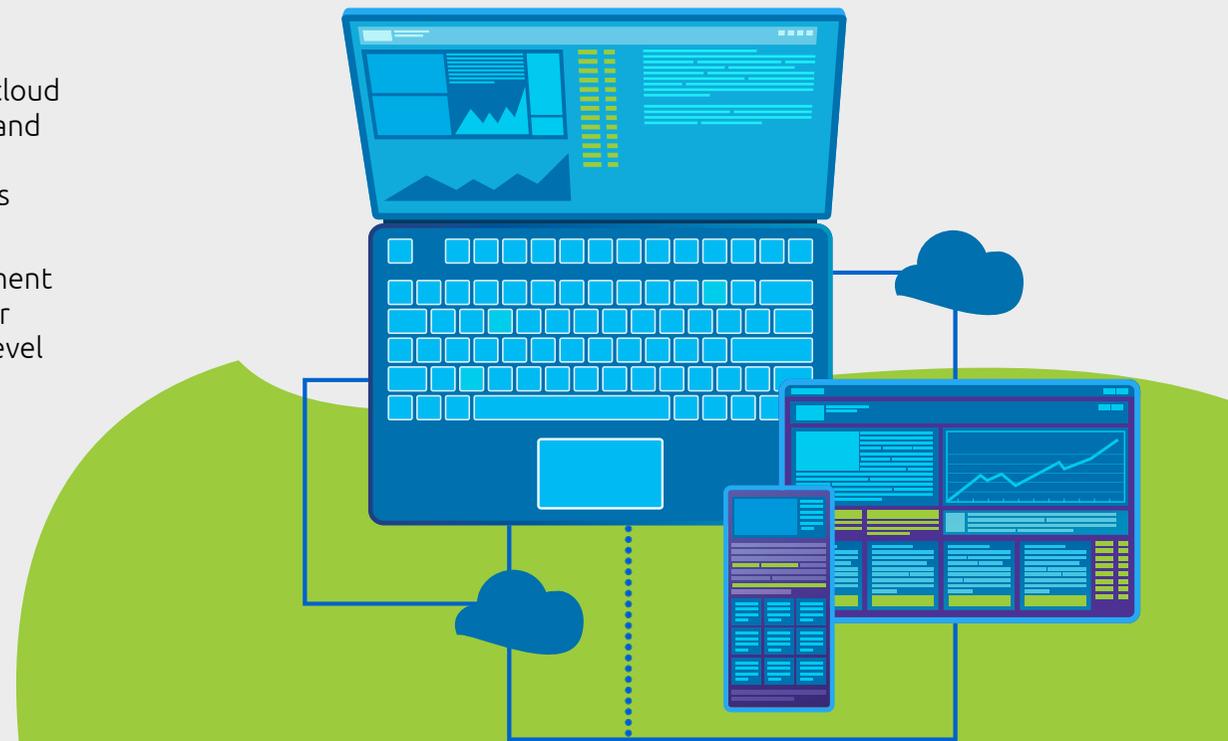
In Nordics, features of this level, such as formalization of the procurement process, often occur later in the cloud journey, when parts of the other maturity levels' have already progressed further, leading to maturity level two rarely being uniformly achieved.

Maturity level: 3 - Systematic and documented

In addition to the previous level, the company has introduced a process or purchased an external service that can manage its cloud service subscriptions and, for example, monitor its existing services. At this level, efficiency increases as operations are systematic, and the processes can be repeated. There must be documented practices and compliance with them:

- The company has documented, for example, its cloud management processes and expansion of the organization's operating model to cloud services.
- Operational policies have been documented for cloud
- Processes have been described, and their functioning has been verified.

Businesses often attempt to skip changes related to level 2 or 3 and try to jump directly from level 0 or level 1 to level 4 with technology solutions. This is often due to the very technology-focused cloud transformation frameworks offered by cloud providers. It's tempting to assume that a fast technology-focused change is sustainable.





Maturity level: 4 - Measured and measurable

At the fourth level, cloud-native applications are in everyday use: they are widely used and utilized in the organization. You can use private, public, and hybrid platforms.

Even with the above level of cloud platforms, many organizations are only partially at level 4. Often some parts of their cloud capabilities are on level 2 or 3.

At level 4, the company should have a transparent model for cloud governance through which its clouds are managed and measured. For solution development, it is essential to measure the end-to-end throughput of processes and data utilization.

The Achilles' heel of companies often lacks a governance model when cloud services are quickly deployed. Also, data utilization still requires development as it does not occur by itself but requires different skills and tools.

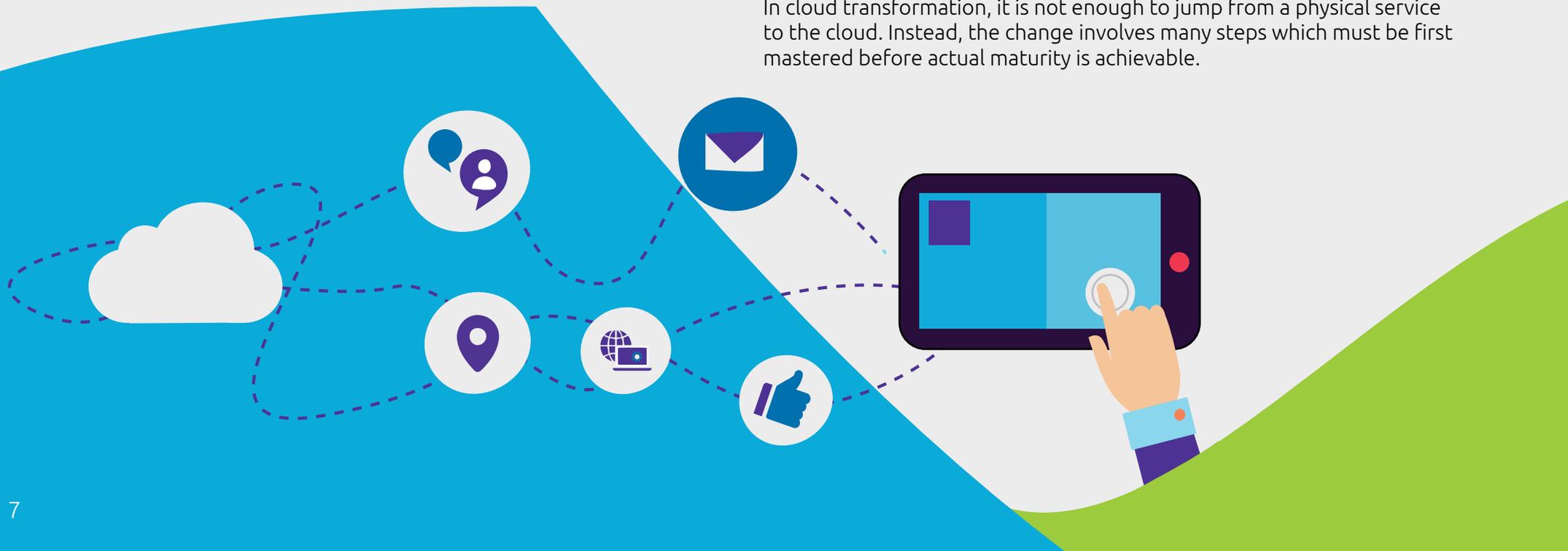
Maturity level: 5 - Optimized

At the top level, a company should have an interoperable and open cloud that is being proactively developed by utilizing metrics and data. The company optimizes its processes and effectiveness, and most essentially, the development of processes if based on data. In addition, the company has full production maturity to use different cloud platforms and the ability to move workloads flexibly between the platforms.

The fifth level is often aspirational rather than an actual state of maturity. The development of an interoperable and open cloud can still succeed, but process optimization and data orientation are usually lagging. Also, level five may be an overinvestment compared to the actual business requirements. If you plan to utilize one cloud platform and avoid hybrid systems, there is no need to invest at this high level.

However, it would be helpful to pick suitable elements from the final, optimized level and utilize those where it makes sense. The absence of many lower-level features such as management and process definitions can cause problems and, for example, unnecessary costs at a later stage in the maturity model.

In cloud transformation, it is not enough to jump from a physical service to the cloud. Instead, the change involves many steps which must be first mastered before actual maturity is achievable.



The cloud maturity model takes into account business operations and technology perspectives



The maturity model helps a company to examine its cloud readiness from a business and technology perspective. The business perspective includes aspects like the company's strategy, financial management, compliance, business processes, and development portfolio management. The technical perspective consists of aspects like IT architecture, security, applications, IT processes, IaaS, PaaS, and SaaS.

The current state of each perspective is evaluated and is assigned a target level. This target level needs to be achieved for the company to succeed in its cloud transformation.

The company's overall situation provides a comprehensive picture in which the company's technical and business aspects are estimated regarding people, processes, and technology.

Prioritized objectives relating to business perspectives may include the following:

- **From an economic perspective, the change should lower the cost level directly in addition to moving it from CAPEX heavy to OPEX focused**
- From a strategy perspective, using a cloud platform improves the ability to add value for customers through new services

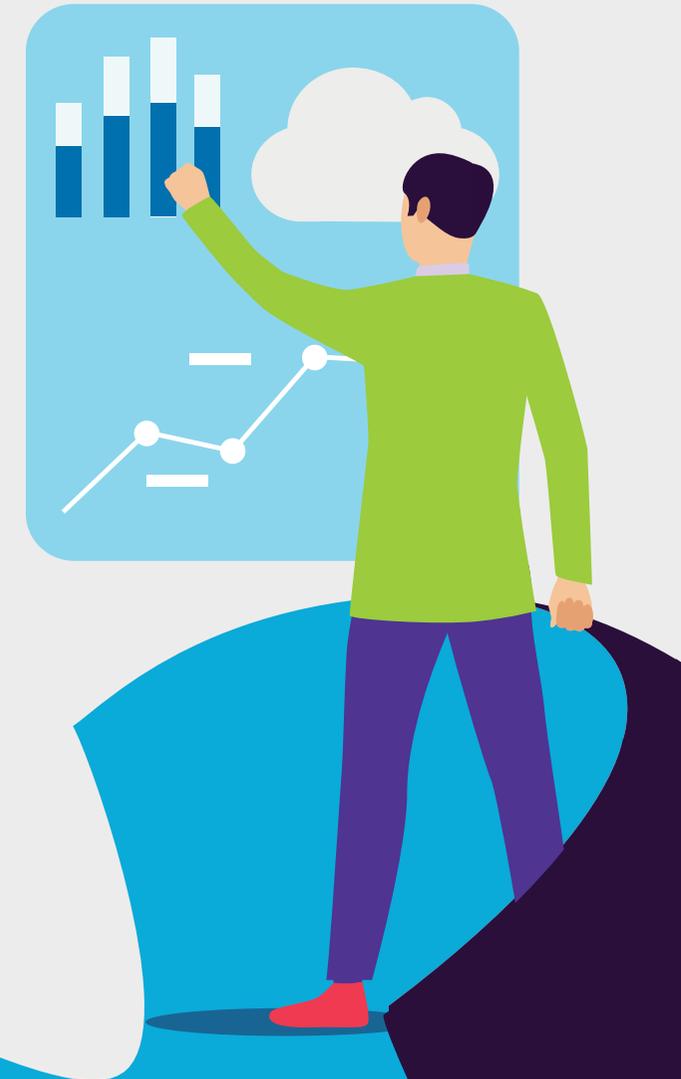
- From a process perspective, the cloud platform should support and improve the quality of the services provided to the company's customers

Prioritized objectives relating to technology may include, for example:

- For IT architecture, it enables automatic scaling and information security services
- For DevOps, it improves productivity development by following agility methods and according to demand in flexible development environments
- In terms of security, the service platform must support the fight against denial-of-service attacks.

All prioritized goals should naturally correspond to the company's strategy and support its business operations.

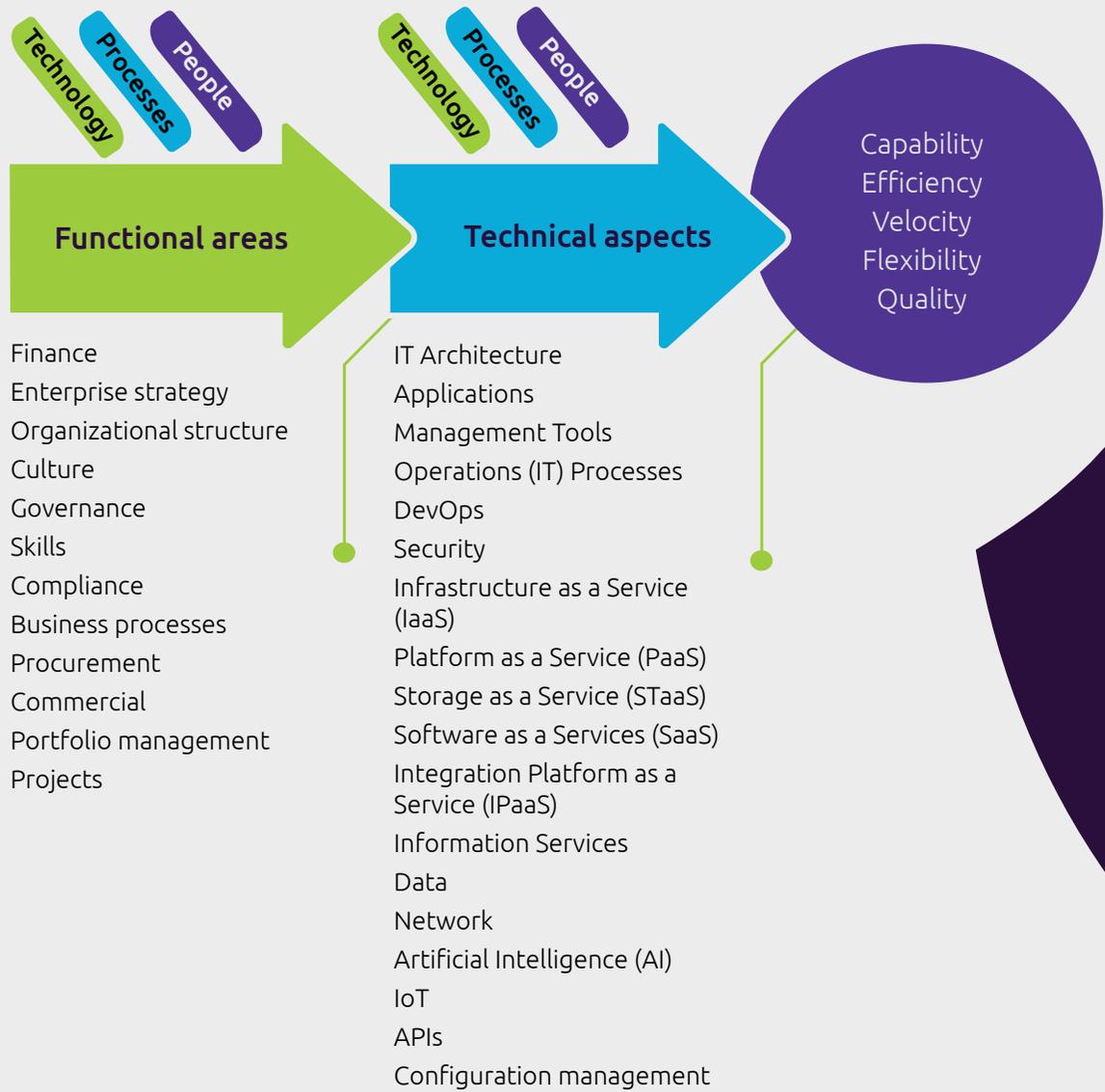
Both the perspectives, business, and technology, cover 30 different areas. You can see these 30 sub-areas in the following diagram. Every aspect is evaluated from the viewpoint of people, processes, and technology.



”Cloud maturity goals should support the company's strategy.”



The cloud maturity model is divided into 30 different capability sub-areas.



 **People**

Cloud services help the company move towards more agile ways of operating, requiring people to change their way of working and require new competencies. The cloud maturity model enables the company to find out what kind of skills their employees need to achieve the targeted level; and what kind of activities they should encourage with the help of a reward model.

 **Processes**

A cloud transition can be a complex journey that changes the company's operating models and processes. With the help of the maturity model, you can identify those development targets that need to be considered in your company's operations. If you don't change critical practices in line with your adoption and utilization of cloud services adoption, getting people involved in the change will be challenging.

 **Technology**

The introduction of cloud services will naturally have an impact on the company's technology landscape. Thanks to adopting new technology, you need to consider that your current infrastructure may need to change. The maturity model also helps here.

Benefits of the cloud maturity model



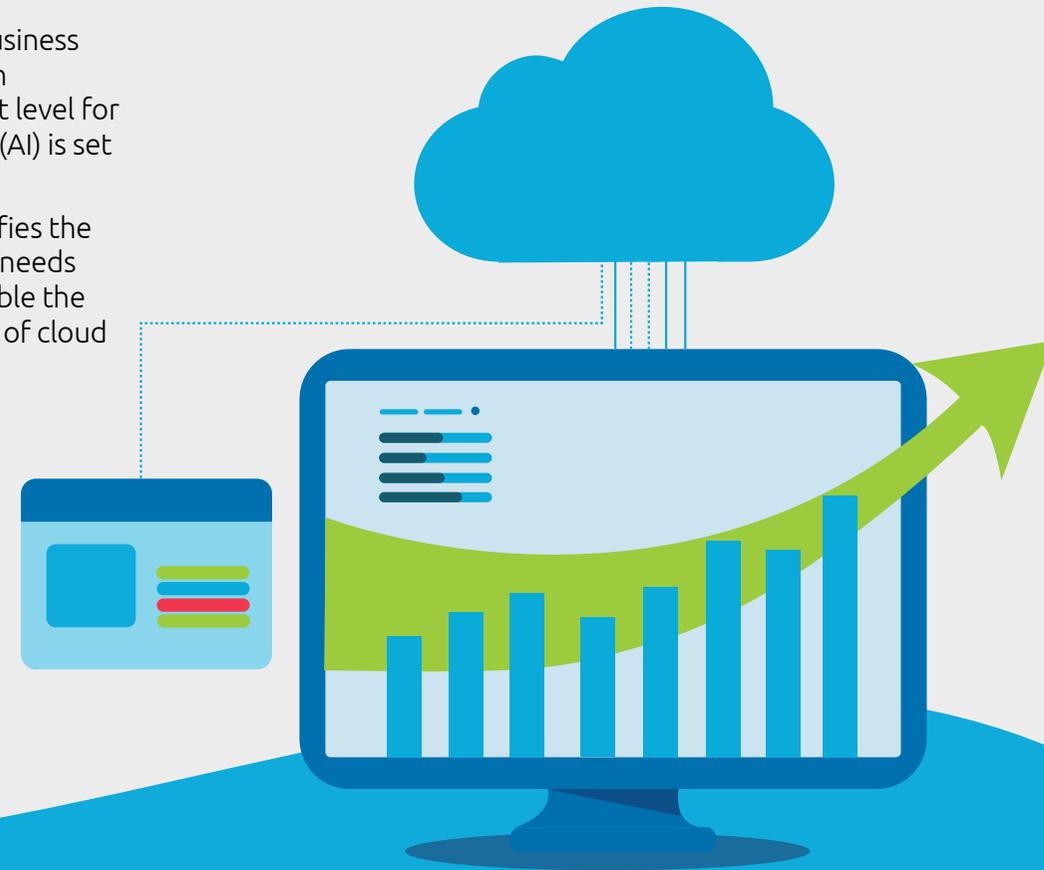
A clear description of the current situation and areas for development

By scrutinizing cloud maturity, including all 30 sub-areas of the five maturity levels and the perspectives of the company's people, processes, and technology, you get a versatile and clear picture of the company's cloud capabilities.

The diagram on next page illustrates the current state of the organization (in black) and the targeted level of cloud maturity (in green). At a glance, for example, you can see that currently, the business areas that are most cloud-ready are financial management, compliance, and integration platforms as a Service (IPaaS). However, there are many other areas still to be developed. Examining your goals may also show that the target level of some areas is higher than for others.

According to the company's business objectives, the goals have been defined with the desired target level for data, and artificial intelligence (AI) is set at level 2.

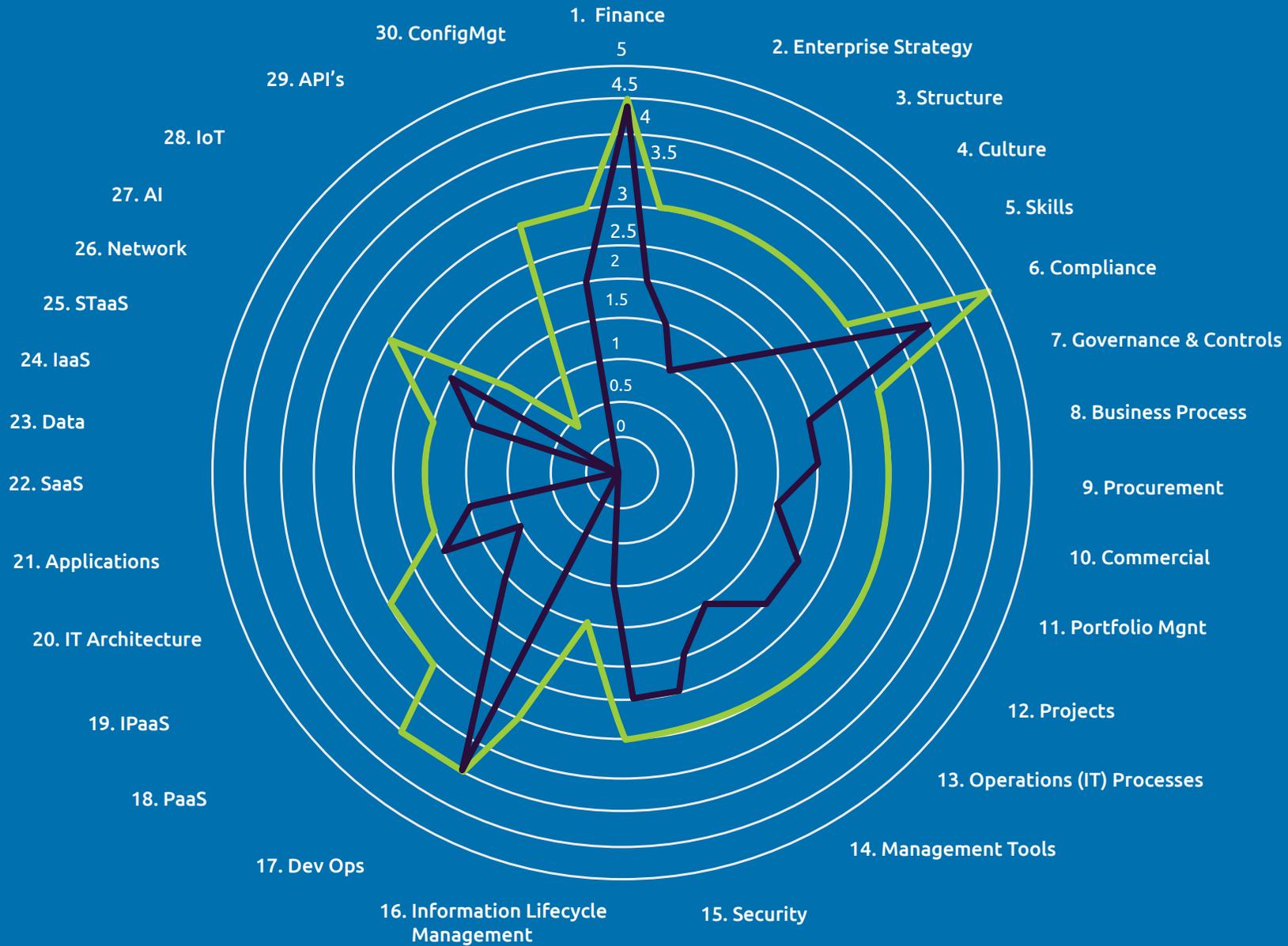
The cloud maturity model clarifies the areas in which an organization needs to develop its expertise to enable the deployment and development of cloud services.



” It is often a surprise that cloud services impact all the operations of an entire organization and are not just an IT project.”



Current vs. target maturity level





A systematic progress path to take advantage of cloud services

One of the most significant benefits of the cloud maturity model is that it **offers a systematic approach to cloud transformation**. The cloud maturity model can help prioritize development areas and projects central to the adoption of cloud services or development. In this way, the maturity model offers progressive support for developing this approach and how the cloud transformation should take place going ahead. Often **this approach is also the most cost-effective** and profitable option.

As a result, the company has a clear path for cloud development, where the various development projects are allocated along the timeline according to their priority and interdependencies. For example, a company wants to migrate its applications onto the cloud. However, the most sensible approach may involve first only moving the development and test environments. The legacy back-end systems that run alongside the newly developed cloud applications can then be integrated into the cloud. This improves the speed and agility of development work before the production environment moves to the cloud.

It is easy to create a cloud strategy based on the cloud maturity model. Change your company to be a cloud-first organization and adapt to the rapidly evolving digital world. A cloud strategy helps a business be more agile and develop its business operations and its IT. Plan your move to the cloud, for example, with cloud strategy tools.



The cloud maturity model adapts to each organization

The application of the maturity model is flexible because it lets each organization define its own target level of maturity. For example, the target level of cloud services for public sector players can differ from companies in the private sector.

So not every organization needs to strive for the highest level in all areas. Instead, it **must determine the desired target level according to its business needs**.

For example, when evaluating your company processes, the cost is one area to review according to the cloud maturity model. At level 1, the budget can be centralized but not managed according to the actual use of the cloud services. At level 2, the cost can be invoiced from the business units twice per year, and at level 3, the cost is assigned according to actual use based on cost centers once a month. At level 4, cost levels, on the other hand, can be analyzed continuously, and you can detect consumption spikes in real-time.

At the top level, you can proactively control the cost level. Aiming for level 3 as the targeted level in your cloud transformation may be enough to succeed from a lower level.

”With the cloud maturity model, you know what you need to control.”



Utilization of the cloud maturity model

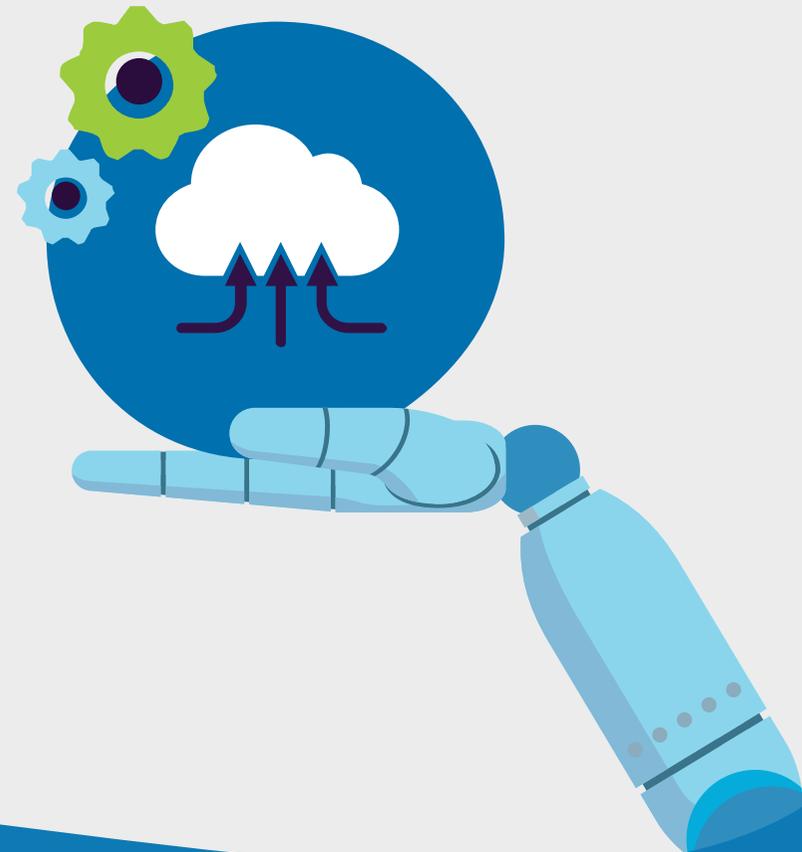
Tips from our experts



Support for business operations and competence renewal

The cloud maturity model is suitable for use when thinking about revamping your business operations and how cloud services are related to this change. The maturity model offers help when you're not quite sure where to start from and how to proceed with the development of your operations.

A business can't develop in any direction without its employees. In addition to reviewing your company's cloud readiness, it is worth identifying the need for competence development for the future. Ask yourself and your teams: 'Do you lack any essential skills to meet the company's business objectives?' 'How can these skill gaps be fixed?'. Think about whether you can fill the deficit by training existing staff or attracting new talent to the company. In addition, think about what skills your employees need now and what skills they will need, for example, in five years.



“If you are not sure what to do first and where to start, to progress in the development of your business's activities, the cloud maturity model is the right solution.”



Governance is emphasized in assessing cloud maturity

It is good to note that we have highlighted the role of governance in the early stages of the cloud maturity model. Good cloud governance rarely happens early on, but this is when you should invest in it. This saves you money and helps keep your cloud transformation on track. The other aspects are primarily technical details.

A lack of governance, for example, risks different departments buying cloud services without informing one other. When people have personal experience using cloud services, they may stray from traditional procurement methods when purchasing such services. This is known as shadow IT: when the standard procurement model is too rigid, people have sourced new IT solutions by themselves. As a result, information about these services trickles down much later to your IT or business management.

When you know which cloud solutions are being used and where it is easier to formulate better framework agreements and save on costs, the ideal situation is for your company to take a unified approach to cloud solutions. The adoption of cloud services involves more than just cloud technologies. By undertaking cloud adoption across its business units collectively, it is easier for the company to consider the requirements for network connections, data protection, and security, for example.



Remember: it's not just a technical transformation

The most important thing needed to succeed in cloud transformation is that you don't think of the cloud maturity model utilization only as a technical project. Cloud transformation requires business commitment as it requires, in addition to technology, changes in management, business practices, and the development of people's skills.

The cloud maturity model helps you build a comprehensive transformation project.

For example, you need to look at your financial management in the light of cloud transformation, as cloud services affect cost allocations, project payback periods, and general investment calculations. Likewise, you should look at your organization's internal communication and stakeholder communication and make sure your people receive the training they need to understand what cloud transformation means for their work.

All of this **requires strong change management. Development planning and implementation services** may also be helpful in cloud capability development.

“Good cloud management saves money and supports the realization of your plans.”

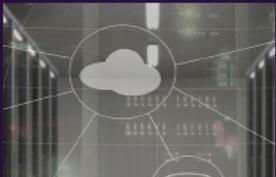
Want more information?



The first step in leveraging the cloud maturity model is introducing the cloud maturity levels and their components to the people working on the company's cloud transformation. Once you recognize where you are now and where you want to go, it will be easier for you to seek more information and support to reach your goal. You can also continue by exploring more of our expert content on cloud transformations. And don't hesitate to contact us!



Also, check out the following expert content, for example:



[Even huge cloud migrations can go smoothly – with a little help](#)



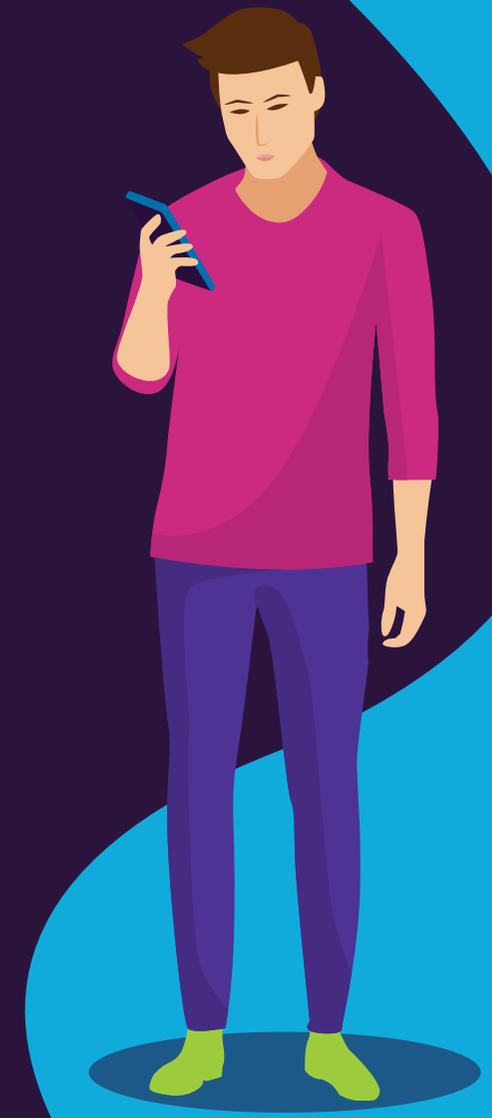
[Top five reasons your business needs a cloud-native strategy](#)



[Bringing your renewable enterprise to life](#)



[The digital supply chain's missing link: Focus](#)



Experts



The expertise in this guide has been provided by:



Pasi Mäkinen

Delivery Architect Director, Capgemini's application business cloud services

Pasi provides consultation services to clients on cloud strategies, transformation, and architectures and leads the application business in cloud services development of supply and delivery capacity.



Timo Wuoma

Head of Center of Excellence
Cloud Infrastructure Solutions
Projects & Consulting Nordics



Mahesh Koli,

VP, Cloud COE Leader
at Capgemini Nordics

Mahesh is cloud strategy adviser, with more than two decades of IT transformation experience in the technology transformation in cloud, security & Dev-ops.



About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fuelled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

Get the Future You Want | www.capgemini.com



This presentation contains information that may be privileged or confidential and is the property of the Capgemini Group.

Copyright © 2021 Capgemini. All rights reserved.