THE STATE OF THE
DUTCH CLOUD MARKET, 2022

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Introduction

This IDC White Paper looks at the evolution of the Dutch cloud market. It assesses organisations' progress on their digital transformation (DX) journeys and where they see themselves in terms of cloud and DevOps maturity.

The paper is based on survey data and research and analysis conducted by IDC on behalf of Capgemini. It also compares some of the findings from a previous report published in 2019.

As well as looking at which industry sectors are seeing the most progress in their DX strategies, the paper examines the role cloud plays in all this. It discusses current and planned cloud usage, which cloud services and platforms are most commonly used in the Dutch market, and where local organisations are in terms of cultural and organisational change to support their digital and cloud initiatives.

AT A GLANCE

WHAT'S IMPORTANT
The top 3 roles for cloud in digital transformation include improved security, providing flexible IT infrastructure, and shortening the time needed to build and test new ideas.

KEY TAKEAWAYS
» Dutch organisations are currently using hybrid clouds, either extensively or in some lines of business.
» By 2024, they will work less with global cloud companies and more with local providers.
» The biggest challenges and obstacles are around risks associated with business continuity and controlling cloud costs.

It also assesses how organisations can scale and continue to develop digitally, what they perceive to be the key challenges in migrating to cloud environments, and how these can be overcome. Issues of cost control, management and optimisation are also discussed, along with how Dutch organisations view sustainability in a cloud context.

Executive Summary

In line with the trends seen across Western Europe, many public and private sector organisations in the Netherlands are looking to migrate to cloud to support their key business objectives.

Almost a third of Dutch organisations are using cloud daily, while around a fifth are migrating workloads and integrating cloud with their own IT resources. The remainder are either running proofs of concept or have now been using cloud long enough to start optimising its use across their organisations.

In contrast to the thinking during the early days of cloud, Dutch organisations believe better security is actually one of the biggest advantages of moving to cloud. Added to this, when asked which technologies or solutions they needed to efficiently run DX projects, just under half cite security and/or digital trust.

When using cloud, local organisations apply various strategies depending on their current needs and workloads in question. While most have adopted a multicloud approach for extensive use, more than half have adopted a hybrid model across particular lines of business as part of limited

cloud usage. Almost a third of users plan to extensively use the hybrid approach moving forward, and this would be in keeping with the trends observed across Europe.

Only a handful of Dutch organisations have developed more than half of their apps specifically for cloud, and although growth is forecast over the next two years, this is not expected to be huge — only 4.7% are likely to have developed most of their new apps as cloud native by 2024, a small rise from 2.7% today. Modernising enterprise apps is essential if organisations are to realise the business benefits of migrating to cloud, as identified later.

To progress onto the next stage of their DX journeys, organisations will need to overcome a variety of challenges and obstacles that include cultural and organisational changes, risks associated with business continuity, and employing better tools and methods to manage, control and optimise costs. In terms of the latter, this was the only expected business outcome that failed to materialise for Dutch organisations after a cloud migration.

Attitudes towards sustainability will also need to be improved. While Dutch organisations believe cloud delivery models will enable them to achieve a number of sustainability benefits such as lowering carbon footprint, when asked about their organisation's stance towards the importance of sustainability, there were mixed views. Only around 18% say they either verify if their business partners have sustainability strategies or include sustainability requirements in their RFPs. Fewer than that say they have a well-developed sustainability strategy and make sustainability a key decision criterion for any investments. Most of the rest say they have yet to identify their strategy goals, consider sustainability only as a "nice to have", or, worse still, prioritise business goals over sustainability.

The Netherlands' Place in Europe's Cloud

Many businesses are transforming to become digital enterprises. IDC predicts that 70% of CEOs in large organisations in Europe are aiming to generate at least 40% of their revenues from digital by 2025.[1]

Cloud-based IT services are a key enabler of a DX strategy, and the benefits they bring to enterprises are now well proven. IDC research[2] shows that organisations in Europe are able to achieve a variety of positive business outcomes following a public cloud migration. These include higher business and IT productivity, faster application/digital services development, better customer experience and loyalty, access to cloud-based ecosystems, new business models, increased revenue, faster time to market with new products and services, new revenue streams, better insights from data and an agile organisational culture.

On average, 46% of organisations in Europe are extensively using cloud computing technologies and services, with the UK, France and the Czech Republic emerging as the top markets.
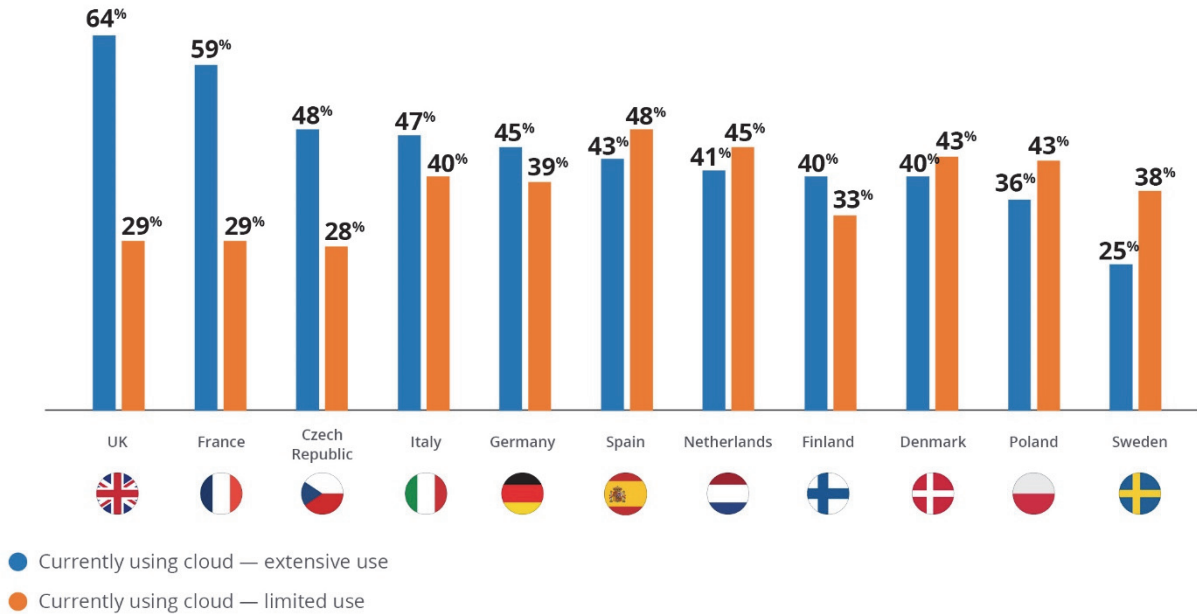
[1] Source: IDC EMEA Future Enterprise Resilience Survey 2021/22, Wave 12
[2] Source: IDC EMEA Multicloud Survey 2021

FIGURE 1

Does Your Organisation Currently Utilise Any Cloud Computing Technologies and Services?

● Currently using cloud — extensive use
● Currently using cloud — limited use

Source: IDC Multicloud Survey, August 2021

The Netherlands potentially finds itself in a strong position here, particularly as the UK is no longer part of the EU and is arguably a less attractive cloud option for those who have commercial interests in the European bloc; France's cloud market is facing potential complexities following greater calls for digital sovereignty; and Germany, which is only slightly ahead of the Netherlands in terms of extensive cloud usage, has yet to reach cloud maturity.

While the Czech Republic, Italy and Spain also appear to have either more extensive or limited usage than the Dutch, these markets tend to be driven more by smaller, local cloud demand, and organisations here all scored lower than the Netherlands when asked if they were planning to lift and shift their business applications to cloud.

Digital Transformation Starting to Take Off

While cloud usage in the Netherlands is still slightly below the European average of 46%, it is expected to rise steeply over the next few years as many local organisations are now starting to plan for DX or are running pilot projects.

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FIGURE 2

Thinking About Your Organisation's Digital Transformation (DX), at Which Stage do You See Your Company Now?

We are starting to plan for digital transformation

29%

We are running proof of concept/pilot projects

20%

We have already built new digital business models and/or generated new revenue streams

19%

We have introduced an organisationwide DX strategy but are still waiting for results

16%

We are running independent projects in various lines of business without an organisationwide DX strategy

14%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

Compared to other industries in the Netherlands, the government, healthcare and education sector lags and is still in the early stages of digital transformation, with 39% of organisations starting to plan for DX, 22% running pilots and 20% having already built new digital business models (see Figure 3). This may seem at odds with the government's ambitions. Like most countries in mature markets across the world, the Netherlands aspires to be in the digital vanguard, and one of the policy initiatives stated in the government's Dutch Digitalisation Strategy[3] published in 2018 is a "broad agenda for the digitalisation of public administration", with cloud computing highlighted as one of the driving factors.

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[3] https://www.nederlanddigitaal.nl/documenten/publicaties/2019/09/30/english-version-of-the-dutch-digitalisation-strategy

FIGURE 3

DX Progress by Vertical Market Sectors

	Financial Services, Professional Services	Comms, Transport, Energy	Manufacturing, Resources, Construction	Retail and Wholesale	Government, Education, Healthcare
We are starting to plan for digital transformation	19%	32%	30%	20%	**39%**
We are running proof of concept/pilot projects	21%	18%	20%	20%	**22%**
We have already built new digital business models and/or generated new revenue streams	19%	18%	**20%**	**20%**	**20%**
We have introduced an organisationwide DX strategy but are still waiting for results	**26%**	14%	10%	20%	14%
We are running independent projects in various lines of business without an organisationwide DX strategy	16%	18%	**20%**	**20%**	5%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

While public sector organisations are still setting out on their DX journeys, the financial services and professional services industry has progressed beyond the initial stages, with 26% of organisations now having implemented a strategy. In many markets around the world, banks and financial institutions have often been the first-movers when it comes to adopting cloud as, for example, they switch to ebanking business models and digitise their customer-facing services. Compared to other industries in the country, the Dutch financial sector has been slower to adopt cloud-based services, most likely due to longer IT refresh cycles, budgetary constraints, limitations on the ability to experiment with innovation due to regulatory and compliance issues, or a combination of all of these factors. But that has not prevented organisations in the sector from planning a DX strategy, and things have clearly changed over the last few years as many have now shifted a considerable amount of their business applications into cloud environments.

That change was partly influenced by COVID-19. The pandemic has meant that organisations have had to lean more heavily on digital services and third-party providers to maintain operations and support remote workforces. As a result, many businesses in Europe have accelerated their DX plans, and 47%[4] say that responding to the pandemic has forced them to quickly shift to a digital-first strategy that they continue to extend.

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[4] Source: IDC EMEA Future Enterprise Resilience Survey 2021, Wave 11

While public sector organisations are still setting out on their DX journeys, the financial services and professional services industry has progressed beyond the initial stages, with 26% of organisations now having implemented a strategy.

Leadership is vital for DX strategy success. 37% of DX initiatives in Dutch organisations are started by lines of business with support from the IT team, and this is the more favoured approach in the government, education and healthcare sector (46%).

34% of DX initiatives in the Dutch market are started by the IT team, which proposes new solutions to lines of business. This was most prevalent in the communications, transport and energy sector (50%), and among larger organisations of 5,000 to more than 10,000 employees. In such organisations, the IT team plays a more significant role in kickstarting and heading up transformation, indicating a more mature phase in the DX journey. Because of their size, these organisations have more time and resources to drive initiatives and are more likely to have started their DX journeys earlier. With IT departments that typically have more responsibility and accountability than their smaller counterparts, larger companies need less engagement from the executive board and will already have certain strategies and operational processes in place to spearhead initiatives.

30% of initiatives are started and sponsored by the board or executive leadership team, and the financial services and professional services sector leads the way here (40%).

Cloud Considered Crucial for Improving Security

For Dutch organisations, the top 3 roles cloud plays in DX is that it offers better security than can be built in-house, provides the flexible and reliable IT infrastructure needed, and shortens the time necessary to build and test new ideas.

Security was not previously considered to play a role, let alone the top role. In fact, for many years, concerns around security were cited by many enterprises as the main reason for not adopting cloud. This thinking is now very much outdated. By leveraging cloud technology's strong, next-generation security capabilities around infrastructure, as well as end-to-end data encryption and robust access controls, organisations find they can mitigate many data protection risks and instead focus on their business priorities.

As further testament to cloud's security benefits, when asked which technologies/solutions they needed to efficiently run DX projects, 40% of Dutch organisations cite security and/or digital trust. This is highest in the retail and wholesale sector, where 44% thought security and/or digital trust were needed, followed by the manufacturing, resources and construction sector (43%) and then government, education and healthcare (41%). Organisations in these sectors are often subject to strict regulatory regimes as they process sensitive personal data or maintain critical production systems. They are therefore more cautious about their data localisation and seek relationships with platform providers based on a greater degree of trust.

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Organisations in the Netherlands believe that an improved security posture is actually one of the big value gains of moving to cloud.

Compared to these industries, organisations in the financial services and professional services sector rank security and/or digital trust the lowest (37%) when asked which technologies/ solutions they needed to efficiently run DX projects. This is perhaps surprising when security is usually the foremost consideration for such organisations given the sensitive nature of the data they deal with. This could be down to who leads the DX initiative in an organisation. As discussed earlier, in some organisations it is the IT team that leads the initiative, and because they also have ultimate responsibility for information security, this is usually given top priority. However, in the Dutch market, we see that only 19% of DX initiatives are started by the IT team — most are either led by lines of business or the board, which may not consider information security in the same way. In fact, where DX is led by the board across all sectors, the importance of security and/or digital trust plummets to 18%. Conversely, where it is led by the IT team, its importance ramps up to 61%.

When asked which technologies/solutions they needed to efficiently run DX projects, the top answer for 44% of Dutch organisations is Big Data, machine learning (ML) and artificial intelligence (AI). This was the most preferred answer for 60% in the manufacturing, resources and construction sector, with communications, transport and energy coming in at 45%, followed by government, education and healthcare at 42%. These industries have an obvious need for Big Data and ML and AI technologies to support applications such as tracking subscriber behaviour in the telecoms market, analysing energy usage for utility providers, robotics in manufacturing, and healthcare and medical research.
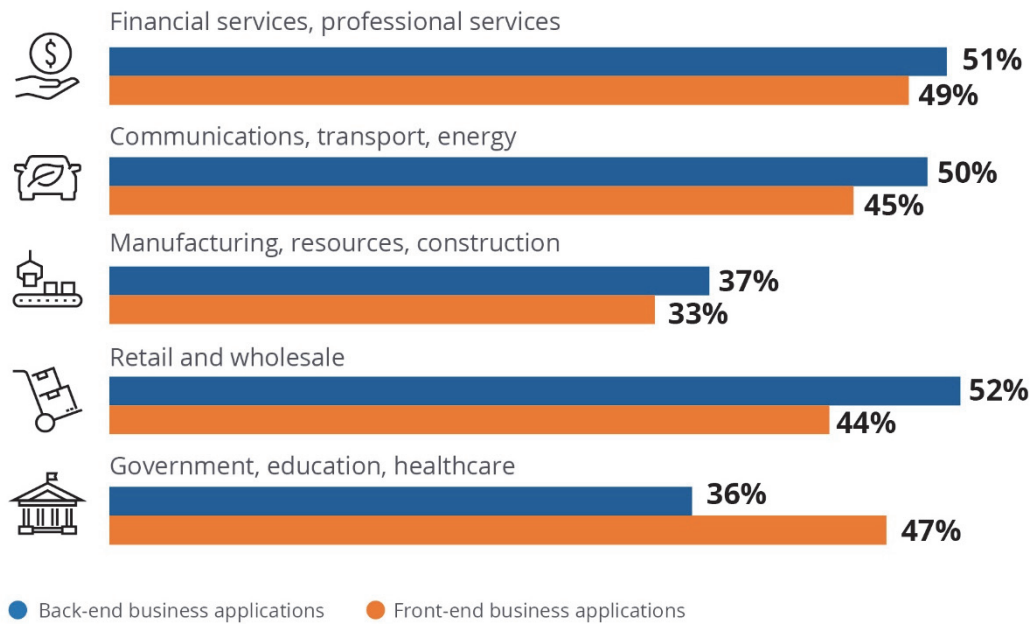
App Modernisation — A DX Keystone

Once a transformation strategy has been established, the DX journey begins in earnest with a modernisation of enterprise applications using cloud. Overall, 45% of Dutch companies have now moved their front-end apps, such as CRM systems (sales, marketing, customer service, ecommerce, etc.), to cloud, while 44% currently have done the same for their back-end apps such as ERP systems (finance and administration, human capital management, etc.).

FIGURE 4a

Which Apps has Your Organisation Moved to Cloud (Public or Private)?

Financial services, professional services

51%
49%

Communications, transport, energy

50%
45%

Manufacturing, resources, construction

37%
33%

Retail and wholesale

52%
44%

Government, education, healthcare

36%
47%

● Back-end business applications   ● Front-end business applications
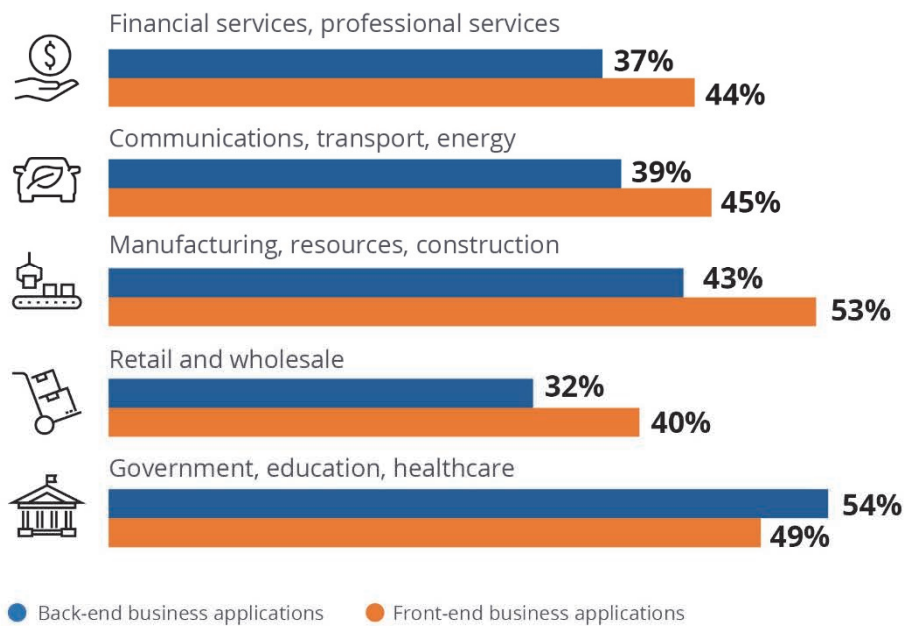
Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

As shown in Figure 4a above, the industry sector that has the most of its back-end apps currently in cloud is retail and wholesale, at 52%, followed by the financial services and professional services sector at 51%.

At the other end of the scale, the two sectors that have migrated the lowest number of their back-end apps include government, education and healthcare, and manufacturing, resources and construction. However, when asked if planning to move back-end apps to cloud, both of these sectors are in the top 2, coming in at 54% and 43% respectively (see Figure 4b, below). Given the size of both these sectors and the complexity of their diverse operations, it is likely that they each have large estates of back-end legacy apps that need more time to be modernised and migrated.

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FIGURE 4b

Which Apps Does Your Organisation Plan to Move to Cloud (Public or Private)?

Financial services, professional services
- 37%
- 44%

Communications, transport, energy
- 39%
- 45%

Manufacturing, resources, construction
- 43%
- 53%

Retail and wholesale
- 32%
- 40%

Government, education, healthcare
- 54%
- 49%

● Back-end business applications   ● Front-end business applications

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

One Cloud Does Not Fit All

When using cloud, Dutch organisations apply various strategies depending on their current needs, workloads in question and overall cloud maturity. As a result, they rarely rely on one or two types of clouds for extensive use, and most end up with a limited use of various models. This may lead to increased demand for third-party support, as multicloud environments require a broad portfolio of skills and competences that companies may not be able to provide internally.
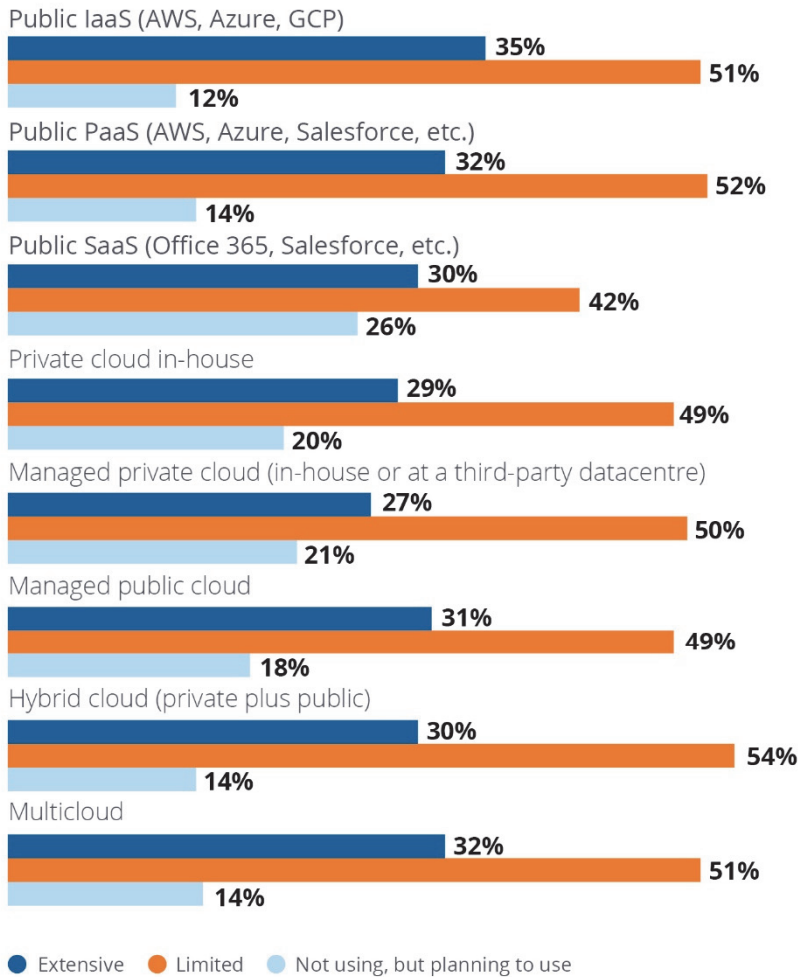
The type of cloud infrastructure that PaaS and other XaaS will be run from will be increasingly hybrid in nature. According to IDC research[5], 23% of organisations in Europe currently have their IT infrastructure services deployed across hybrid clouds. This could entail any combination of public and/or private clouds, and can also include traditional on-premises IT.

Figure 5 below shows that almost a third of Dutch organisations are currently extensively using hybrid clouds, while just over half have limited usage across some lines of business. 36% of Dutch organisations believe hybrid cloud is essential to efficiently run DX projects, compared to 28% that prefer private cloud and 26% for public cloud. In addition, 27% prefer multicloud. While this is often used as an alternative term for hybrid cloud, it should be noted that multicloud actually involves the consumption of cloud services from more than one cloud service provider — even rivals.

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[5] Source: IDC's 2021 Annual Multicloud and Next-Generation Infrastructure Survey

FIGURE 5

Which of the Following Types of Cloud Does Your Organisation Use or Plan to Use?

Public IaaS (AWS, Azure, GCP)
- 35%
- 51%
- 12%

Public PaaS (AWS, Azure, Salesforce, etc.)
- 32%
- 52%
- 14%

Public SaaS (Office 365, Salesforce, etc.)
- 30%
- 42%
- 26%

Private cloud in-house
- 29%
- 49%
- 20%

Managed private cloud (in-house or at a third-party datacentre)
- 27%
- 50%
- 21%

Managed public cloud
- 31%
- 49%
- 18%

Hybrid cloud (private plus public)
- 30%
- 54%
- 14%

Multicloud
- 32%
- 51%
- 14%

● Extensive   ● Limited   ● Not using, but planning to use

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

When organisations start leveraging cloud-based resources for the first time, SaaS and IaaS are typically the first services and platforms they tend to use. But as they progress on their DX journeys and begin to mature, the need for rapid innovation typically requires the development of in-house software in combination with IT operations. This "DevOps" approach can be used to build cloud-native apps and is supported by PaaS. As can be seen in Figure 5 above, interest in PaaS is growing in the Dutch market. 32% are using public PaaS extensively across their organisations, and the two industries that jointly lead (with 37% apiece) include government, education and healthcare, and financial services and professional services.

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There is a much greater number of organisations throughout the Dutch market that are using PaaS in a limited way for some lines of business, indicating that there is a high degree of DX innovation taking place in the local market.

However, there is a much greater number of organisations throughout the Dutch market that are using PaaS in a limited way for some lines of business, indicating that there is a high degree of DX innovation taking place in the local market. The manufacturing, resources and construction sector is in the vanguard here with 60%, followed by government, education and healthcare (58%); communications, transport and energy (52%); retail and wholesale (44%); and financial services and professional services (42%). Currently, 27% of Dutch cloud users regard DevOps and/or modern agile application development approaches to be necessary for their organisations to efficiently run DX projects. As DevOps activities continue to increase, we would expect PaaS usage to rise in tandem to support the ongoing innovation programmes.
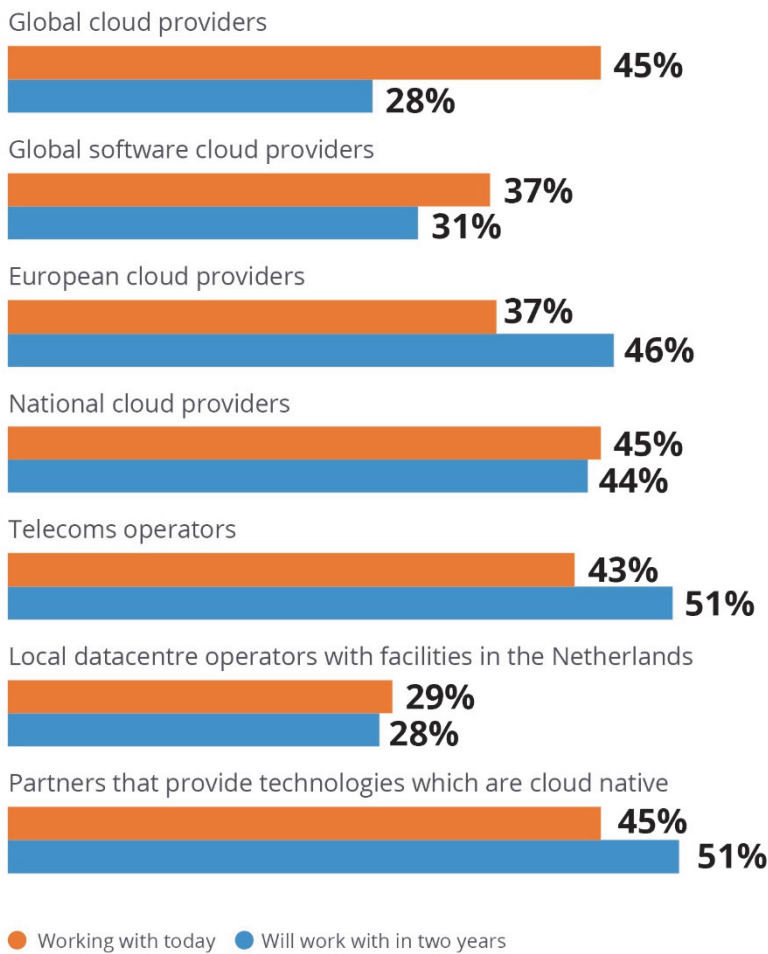
Moving Towards Local and Sovereign Clouds

Over the next two years, Dutch organisations say they will work less with the global, and predominantly US based, cloud companies and more with European and/or national providers (see Figure 6, below). One of the big winners here will be local telecoms operators that offer enterprise services which, as well as cloud and networking, are also likely to include datacentre capacity, managed and hosted options, etc. This is in line with other markets in Europe where telecom providers have launched initiatives aimed at leveraging customer demand for more sovereign and regulatory compliant platforms.

FIGURE 6

Which Cloud Partners Does/Will Your Organisation Work with Now/in Two Years?

Global cloud providers
45%
28%

Global software cloud providers
37%
31%

European cloud providers
37%
46%

National cloud providers
45%
44%

Telecoms operators
43%
51%

Local datacentre operators with facilities in the Netherlands
29%
28%

Partners that provide technologies which are cloud native
45%
51%

● Working with today   ● Will work with in two years

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

As cloud uptake continues to rise generally across Europe, so do concerns about data. When asked about their biggest security, compliance or trust challenges when it comes to cloud, 37% of organisations on the continent say they're most worried about data protection and identity and access management, and then concerns over compliance.[6] More than a fifth are specifically worried about data access by foreign governments.

When asked what capabilities are essential to ensure data resilience, 24% of Dutch organisations opted for data sovereignty. That's one of the highest figures for Europe, with only Sweden (25%) and the Czech Republic (25%) scoring higher. All of this feeds into a narrative about the need for greater digital sovereignty in Europe, with local providers arguably being preferred to those from outside the continent as a result.
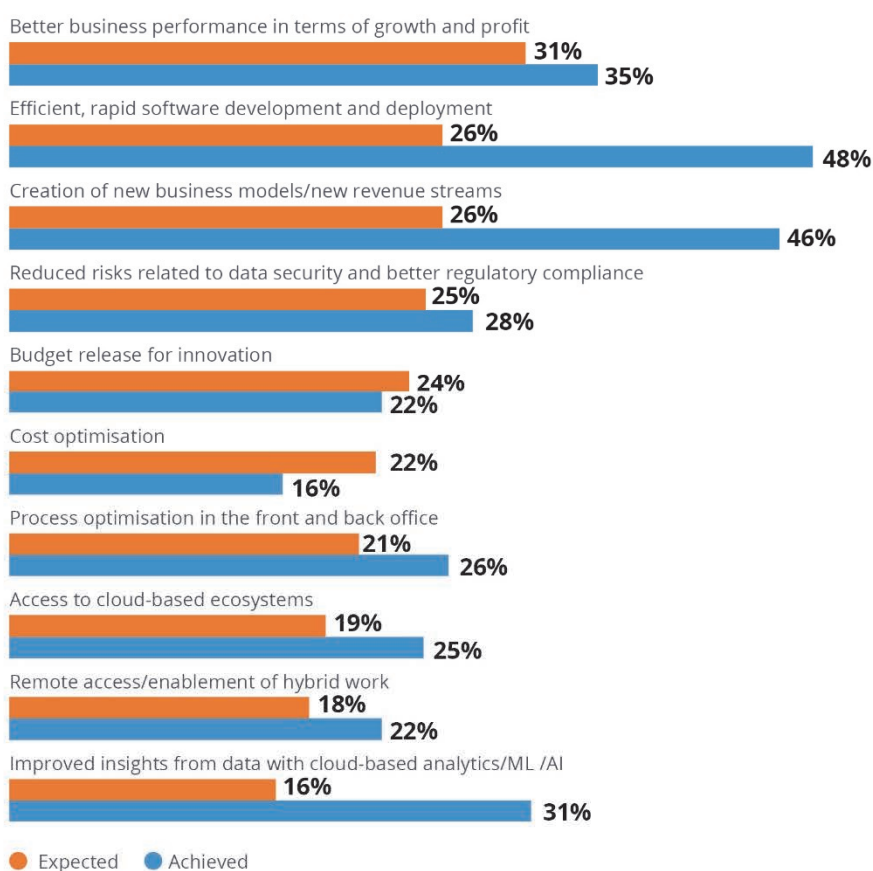
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[6] Source: IDC EMEA Multicloud Survey 2021

Cloud Success — And Failure

The success of a DX strategy is based on previously identified business outcomes. Dutch organisations say the two biggest business benefits that cloud and cloud-native technologies have enabled them to achieve are rapid software development and deployment and the creation of new revenue streams.

FIGURE 7

From a Business Perspective, What Benefits do You Expect from Cloud and Cloud-Native Technologies, and What has Your Organisation Actually Achieved?

Better business performance in terms of growth and profit
- Expected: 31%
- Achieved: 35%

Efficient, rapid software development and deployment
- Expected: 26%
- Achieved: 48%

Creation of new business models/new revenue streams
- Expected: 26%
- Achieved: 46%

Reduced risks related to data security and better regulatory compliance
- Expected: 25%
- Achieved: 28%

Budget release for innovation
- Expected: 24%
- Achieved: 22%

Cost optimisation
- Expected: 22%
- Achieved: 16%

Process optimisation in the front and back office
- Expected: 21%
- Achieved: 26%

Access to cloud-based ecosystems
- Expected: 19%
- Achieved: 25%

Remote access/enablement of hybrid work
- Expected: 18%
- Achieved: 22%

Improved insights from data with cloud-based analytics/ML /AI
- Expected: 16%
- Achieved: 31%

● Expected ● Achieved

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

However, it is interesting to note that one benefit that has traditionally been associated with cloud technology — cost optimisation — is not achieved following a migration. This is discussed in "Controlling Costs", below.

To progress to the next stage of their DX journeys, organisations need to realise that the key to cloud success is not all about the technology but about understanding the impact cloud will have across their operations. Skills development and cultural change will be required following the deployment of a new technology platform; to ensure continued and ongoing cloud success, organisations will need a number of key capabilities. These include intelligent monitoring and optimisation, intelligent security and digital trust, access to real-time data, and risk management and governance processes.

Achieving True Transformation

To support the creation and subsequent harnessing of these capabilities, enterprises should consider setting up a cloud centre of excellence (CCoE). While a CCoE belongs in the finance function as opposed to IT, it will be run by a multidisciplined team representing executives, site reliability engineers, developer heads and governance experts who create a balance between speed, stability, IT and business. A CCoE can therefore help to drive cultural change, build performance, align business and cloud strategy, control access to resources and control cloud costs, among other benefits.

IDC data[7] shows that 34% of organisations across Europe have at least partially adopted a CCoE to optimise cloud operations. In the Netherlands, 24% of organisations have established a CCoE, primarily to support the development and delivery of cloud-native innovations and to define playbooks and design blueprints.

However, these organisations are not in the majority. When asked how they manage their cloud initiatives, most Dutch companies say they support users with in-house cloud experts that they have either in the IT operations team (31%) or in the software development team (24%). 21% say they have teams working independently with no single point of management. This goes against established best practices and does not bode well for DX success.

While Dutch organisations can be characterised as innovators, their way of innovating remains relatively traditional. For example, when asked what their current approach to DevOps methodologies is, just under a quarter say they are still mainly using waterfall methodologies and only run individual projects using DevOps. Just 18% say DevOps is their main approach to software delivery and development. But change is expected. 19% are currently assessing or planning the introduction of DevOps, while 21% say they're transitioning to more DevOps-led development, where the activities are relevant.

Currently, less than 50% of enterprise apps have been migrated to cloud in the Netherlands. To go beyond this requires a true digital transformation with the implementation of a new culture and new organisational structures.

As noted in Figure 4a above, currently less than 50% of enterprise apps have been migrated to cloud in the Netherlands. To go beyond this requires a true digital transformation with the implementation of a new culture, new organisational structures and the creation of new roles, such as cloud architects, "FinOps" (financial operations) experts and DevOps engineers to create new, cloud-native apps.

In terms of the latter, only a handful of Dutch organisations have developed more than half of their apps specifically for cloud (see Figure 8, below); although growth is forecast over the next

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[7] Source: IDC EMEA Multicloud Survey 2021

two years, this is not expected to be huge — only 4.7% are likely to have developed most of their new apps as cloud native by 2024, a small rise from 2.7% today.

The most advanced industry sectors here will be financial services and professional services, where 3% have an ambitious target of developing 100% of their new apps for cloud. The government, education and healthcare sector has similar ambitions, with 4% aiming to develop more than three-quarters of their apps as cloud native.

FIGURE 8

What Proportion/Share of Your Organisation's Newly Developed Applications Are Cloud Native Today?

	Financial Services, Professional Services	Comms, Transport, Energy	Manufacturing, Resources, Construction	Retail and Wholesale	Government, Education, Healthcare
0%	0%	**3%**	0%	0%	0%
1%–10%	53%	65%	**73%**	65%	57%
11%–25%	33%	26%	27%	24%	**36%**
26%–50%	**7%**	6%	0%	6%	4%
51%–75%	**7%**	0%	0%	6%	0%
76%–99%	0%	0%	0%	0%	**2%**
100%	0%	0%	0%	0%	0%

... and in Two Years?

	Financial Services, Professional Services	Comms, Transport, Energy	Manufacturing, Resources, Construction	Retail and Wholesale	Government, Education, Healthcare
0%	0%	0%	0%	0%	0%
1%–10%	40%	**56%**	41%	29%	36%
11%–25%	40%	32%	**55%**	41%	40%
26%–50%	7%	12%	5%	**24%**	19%
51%–75%	**10%**	0%	0%	6%	0%
76%–99%	0%	0%	0%	0%	**4%**
100%	**3%**	0%	0%	0%	0%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

The Dutch market is not alone in its slow progress here. Although the cloud journey has been going on for some time, many organisations throughout Europe are still quite a way from having at least 50% of their data and apps in a cloud-like environment. To break this aspirational barrier, organisations that want to truly transform need to think about what else they need to change above and beyond the technology as they rapidly move into the digital-first era.
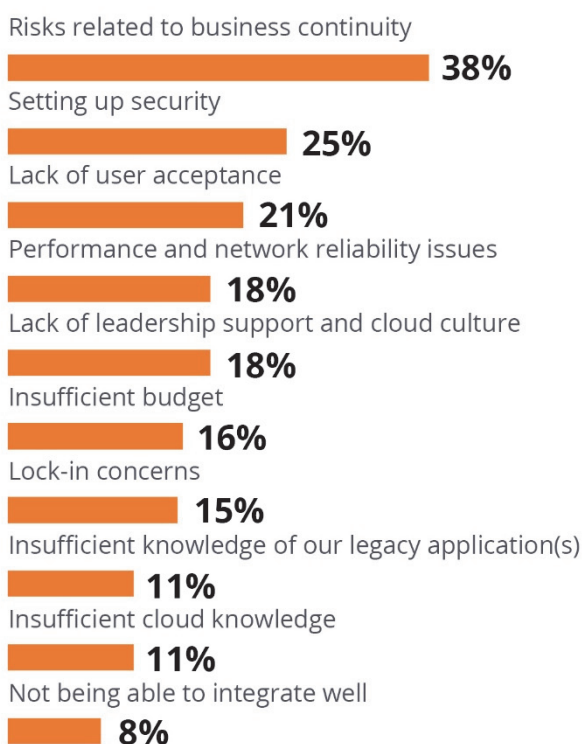
Business Continuity Fears Impede Cloud Migration

IDC research[8] shows that the top 3 reasons for public cloud deployments being considered unsuccessful across Europe are performance and reliability issues, lack of user acceptance of cloud services and tools, and poor integration with the organisation's existing IT infrastructure and services. However, it should be noted that these "failures" are not due to any shortcomings inherent in cloud — performance and reliability issues typically indicate poor connectivity and networking, while the other reasons cited are down to the cultural and organisational changes that are a prerequisite for cloud success.

While all of these also feature as challenges for the Dutch cloud market, the biggest obstacle for organisations when migrating to cloud involves risks related to business continuity (see Figure 9, below).

FIGURE 9

What Are the Key Challenges for Your Organisation in Moving Applications/Workloads to the Cloud and Cloud-Native Technologies?

Risks related to business continuity
38%

Setting up security
25%

Lack of user acceptance
21%

Performance and network reliability issues
18%

Lack of leadership support and cloud culture
18%

Insufficient budget
16%

Lock-in concerns
15%

Insufficient knowledge of our legacy application(s)
11%

Insufficient cloud knowledge
11%

Not being able to integrate well
8%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

In 2019, business continuity ranked fifth as a key challenge in the Dutch market (making apps cloud ready, insufficient cloud knowledge and setting up security were the top 3 cited in the previous report). This broadly aligns with a trend that we have seen since the pandemic began in

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[8] Source: IDC EMEA Multicloud Survey 2021

Europe during the first quarter of 2020. Business operations have been disrupted over the past two years as economies have been impacted by government-mandated lockdowns, staff have had to work from home, restrictions in the movement of goods led to supply chain issues, etc. As a result, many organisations have reevaluated their resilience objectives. Following COVID-19, around 30%[9] of organisations across Europe have expanded their resilience plans to support business continuity and the unique requirements of a pandemic.

In the Dutch market, the challenge of risks related to business continuity increases with company size, culminating in 56% of organisations with 10,000 or more employees citing this as an issue. The industries most affected here are retail and wholesale (44%) and communications, transport and energy (43%); these two sectors are still in the planning stages for DX and are in the lowest percentile when it comes to introducing an organisationwide strategy. They are also most likely to be running legacy IT infrastructure and software in on-premises deployments. Enterprise organisations that are still in the early stages of digitalisation and still reliant on IT that is housed on premises are likely to continue to face resilience and continuity challenges when it comes to supporting remote workloads and workforces.

Establishing a cloud centre of excellence can evangelise the cloud message and mission across the organisation and help to overcome many challenges.

Several of the challenges above highlight the need for cultural change. Lack of user acceptance and leadership support, along with insufficient knowledge of legacy applications and cloud, all indicate that greater collaboration is needed across the entire organisation.

As mentioned, establishing a CCoE can evangelise the cloud message and mission across the organisation and help to overcome many of the other challenges identified above. It can also play a crucial role in supporting cost optimisation by bundling knowledge on cloud pricing and how pitfalls can be avoided to gain advantages in this respect. However, less than a quarter of Dutch organisations currently have a CCoE, and without this or something similar, these challenges are likely to become exacerbated and hamper organisations as they try to progress along their DX journeys.

Controlling Costs

Insufficient budget is only a challenge for 19% of Dutch cloud users, and that figure goes down to zero for the deeper-pocketed largest companies of more than 10,000 employees. Only 10% of organisations in the manufacturing, resources and construction sector cited budgetary constraints, as opposed to 21% in financial services and professional services, which has the highest number here. But it should be noted that each of these industries is at a different stage of its DX journey, with financial services and professional services having made more progress and therefore seeking greater corporate investment to fund ambitious DX plans.

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[9] Source: IDC EMEA Future Enterprise Resilience Survey 2021, Internal, Wave 11

If they want to get a grip on managing cloud costs, organisations need to look at the entire value stream and manage cloud financial operations not only from the outset but across all their operations on a daily basis.

To get a grip on managing cloud costs, organisations need to look at the entire value stream and manage cloud financial operations (FinOps) not only from the outset but across all their operations on a daily basis. A key part of this is to implement tools to monitor and optimise cloud spend. However, in the Dutch cloud market, 30% of organisations say they lack the tooling needed to gain proper insight into cloud spend, and a further 29% admit a lack of knowledge in being able to interpret spend data.

FIGURE 10

What Are the Obstacles Your Organisation Encounters When Controlling Cloud Spend?

Lack of cooperation from application owners and users on making savings

45%

Application owners and users do not consider spend when making changes

33%

We are concerned that we overspend on cloud

33%

We lack the tooling needed to gain a proper insight into cloud spend

31%

We lack the knowledge to interpret the spend information available

29%

We are concerned that we do not use up the committed cloud spending (e.g., reserved instance)

25%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

It should also be note that the top 2 obstacles shown in Figure 10 indicate the lack of a clearly identified and established cloud culture in an organisation where users do not feel responsible and are not held accountable for cloud spending. It may also suggest that while cloud is deployed, internal cost allocation models have not been adjusted accordingly.

Sustainability Should Be More Than Just a "Nice to Have"

The Dutch government aims to reduce greenhouse gas emissions by 55% by 2030, which exceeds the EU's ambitions of a cut of at least 40% in the next eight years[10]. In addition to this, and as part of its Energy Agreement for Sustainable Growth, the government plans to make 16% of all energy used in the Netherlands sustainable by 2023.

Despite the government's commitments to reducing greenhouse gas emissions, local companies appear to have a less positive stance on the importance of sustainability issues. For instance, less than a fifth verify if their business partners and technology providers have sustainability strategies and goals, and fewer than that include sustainability requirements in their request for proposals for services they purchase.

Despite Dutch government commitments to reducing greenhouse gas emissions, local companies appear to have a less positive stance on the importance of sustainability issues.

The communications, transport and energy sector has the best sustainability posture in the Dutch market, with 18% of organisations saying they have a well-developed strategy and make sustainability a key decision criterion for any investments. This comes as no surprise as these industries are often in the spotlight when it comes to calls for greater sustainability. The manufacturing, resources and construction sector also comes under this spotlight — 17% of organisations here say they have a well-developed strategy and make sustainability a key decision criterion for any investments. Ironically, both of these industries are also the worst offenders — 14% and 17% of organisations in each sector, respectively, also admit they prioritise business goals and are not ready to invest in sustainability. The only other industry that is also in this category is government, healthcare and education (7%).

However, there is perhaps cause for optimism when Dutch organisations are asked about the importance of sustainability in their cloud-purchasing decisions. Most respondents (36%) say they include sustainability requirements in their RFPs for cloud services, while 35% claim they will switch to providers that have better sustainability credentials.

Furthermore, Dutch organisations believe cloud delivery models will enable them to achieve a number of sustainability benefits. The top 3 here are improving business resilience, lowering carbon footprint and, in joint third position, improving financial indicators and improving ESG reporting.

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[10] https://www.government.nl/topics/climate-change/eu-policy?msclkid=a373a57ab04a11ec90d80d2ea797f1c3

FIGURE 11

What Best Describes Your Organisation's Stance Towards the Importance of Sustainability in the Company?

	TOTAL	Financial Services, Professional Services	Comms, Transport, Energy	Manufacturing, Resources, Construction	Retail and Wholesale	Government, Education, Healthcare
We have not yet identified our sustainability goals	14%	12%	16%	7%	16%	19%
Sustainability is a "nice to have" but we have not introduced it into our strategy	17%	16%	11%	10%	24%	22%
We have a sustainability strategy and set goals, but only with relation to our operations	12%	14%	16%	10%	4%	12%
We verify if our business partner and technology providers have sustainability strategies and goals	19%	23%	9%	20%	20%	22%
We include sustainability requirements in our RFPs for services we purchase	17%	21%	16%	20%	20%	12%
We have a well-developed sustainability strategy and make sustainability a key decision criterion for any investments	13%	14%	18%	17%	16%	7%
We prioritise business goals over sustainability; we are not ready to invest in sustainability	7%	0%	14%	17%	0%	7%

Source: IDC EMEA, State of Cloud Netherlands, Capgemini, March 2022

Recommendations

Many of the challenges highlighted in this paper, including issues around cost optimisation, are to do with the cultural changes needed to get buy-in across an organisation prior to implementing a DX strategy and migrating to cloud.

A lack of user acceptance, leadership support and cloud culture, together with insufficient knowledge of legacy applications and cloud, all indicate weaknesses in the approach to transformation.

As a result, we recommend the following:

- Having the right security, governance and networking in place is essential prior to migration
- Establish a cloud centre of excellence staffed by a multidisciplined team from across the organisation
- Drive cultural and organisational change
- Implement an innovation culture to help drive digital progress

IDC

Conclusion

While cloud usage in the Netherlands is still slightly below the European average, it is expected to rise steeply over the next few years as many local organisations begin their digital transformation.

However, although some industry sectors are moving faster than others in terms of modernising their business applications, this paper highlights several obstacles and challenges that need to be overcome before Dutch organisations can truly harness the potential of cloud as part of their DX strategies. The top 3 challenges are risks related to business continuity, setting up security and lack of user acceptance when it comes to cloud technologies and applications.

To progress to the next stage of their transformation journey, organisations need to realise that the key to cloud success is not all about the technology but about understanding the impact cloud will have across their operations. Skills development and cultural change will be required following the deployment of a new technology platform to ensure continued and ongoing cloud success.

Methodology

This paper is based on the results of a survey conducted by IDC between February and March 2022. The survey covered 201 companies operating in the Netherlands with more than 500 employees and representing all industries (banking, insurance, finance; public sector including education and healthcare; retail and wholesale; manufacturing, resources, construction; and communications, transport, energy). Organisations polled were using cloud solutions at the time. Interviews were conducted using the CATI method with representatives of IT and business departments that have an impact on decisions related to the purchase and use of cloud solutions.

MESSAGE FROM THE SPONSOR

To understand the evolution of the Dutch cloud market, Capgemini commissioned IDC Metri to conduct a survey of 201 senior IT and business decision makers in the Netherlands. With the survey insights, Capgemini aims to better understand the progress of organisations on their digital transformation and support them with challenges on their journey.

Capgemini wants to be the cloud transformation partner that can optimise every step in an organisation's cloud journey. We combine end-to-end cloud services, sector-specific expertise and advanced cloud technologies including AI, analytics and automation, and global resources to guide organisations in their cloud journey and deliver business results.

We can help you build an efficient cloud centre of excellence that will be the backbone of your success. We have worked with clients across sectors to realise multiple benefits — from cost reduction to sustainability to faster time to market — but ultimately it's all aimed at increasing business innovation.

Are you looking for guidance on your cloud transformational journey? Reach out to Pieter Nieuweboer, Cloud CoE Leader, Capgemini Netherlands.

About the Analysts

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Rahiel Nasir is responsible for leading and contributing to IDC's European cloud and cloud data management research programmes, as well as supporting associated consulting projects. Before joining IDC, he was a research analyst focused on the datacentre infrastructure and services markets across EMEA.
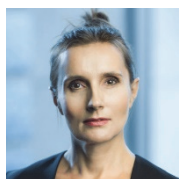
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