

GlobalConnect IT Insights:

Digital infrastructure

Opportunities, Challenges, and Key Enablers from the
IT Manager's Perspective



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About the survey

The survey was conducted by Demoskop on behalf of GlobalConnect. Data collection was carried out using a mixed method combining qualitative and quantitative elements through telephone interviews.

The target group consisted of IT managers and Security leaders operating at a Nordic and/or national level in companies with 150 or more employees active in the markets of Sweden, Norway, and Denmark.

A total of 225 telephone interviews were conducted (75 interviews per country) during the field period of September 3–20, 2024.

Preface:

How is the Scandinavian IT environment doing?

Without stable and well-functioning IT solutions, no business can operate efficiently. This is hardly a new insight, especially in the Nordic countries, where digitalization has long been an integral part of the business landscape. However, with development come challenges. Many organizations today have IT environments that are a complex mix of legacy systems, in-house solutions, cloud services, and components from multiple vendors – often not fully compatible with each other.



Does this sound familiar? If so, you are not alone. At GlobalConnect, we commissioned the research firm Demoskop to interview over 200 IT and cybersecurity managers in Sweden, Norway, and Denmark. The results show that far from everyone is fully satisfied with their IT environment – or with their ability to meet organizational demands. While the challenges vary between countries and different types of organizations, common patterns emerge.

In this report, we present insights and analyses from the survey, along with commentary from our own experts. We hope the content provides you with valuable perspectives for your role. IT infrastructure is a strategic investment that requires continuous development and adaptation – especially in an era where AI and quantum technology are rapidly reshaping the playing field.

Happy reading!

Anna Granö
Executive Vice President,
B2B at GlobalConnect

"I hope it provides you with valuable
new perspectives to apply in your
professional role"



Part 1

– The current situation

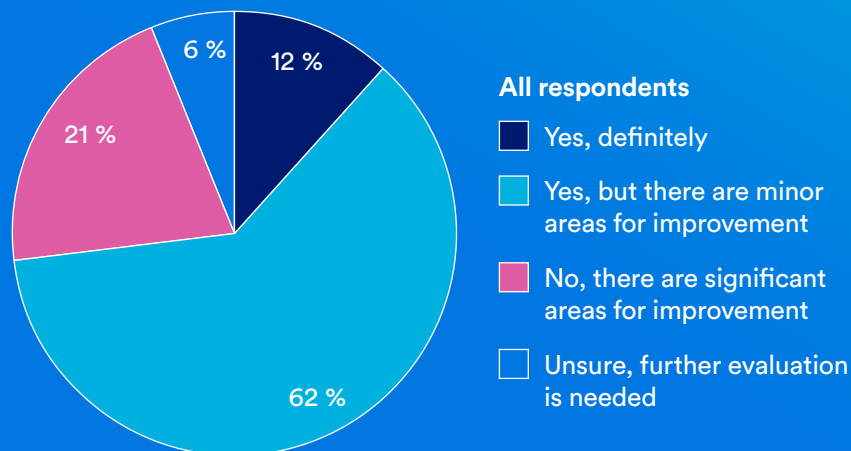
How do IT managers view their overall IT infrastructure?

1 in 5 sees significant improvement needs in the IT environment

How do IT managers evaluate their overall digital infrastructure? According to the survey, as many as one in five reports significant improvement needs. Only slightly more than one in ten is completely satisfied with their current IT environment.

The responses differ somewhat between the three countries. In Norway, 17% state they have the best possible IT environment, compared to 11% in Denmark and 7% in Sweden.

Do you feel that you currently have the best possible integrated IT environment?



IT managers in the private sector are more satisfied than those in the public sector

16% of IT managers in the private sector, compared to only 5% of those in the public sector, believe they have the best possible IT environment. Furthermore, while only 2% in the

private sector say they are unsure and require further evaluation, the figure rises to 13% in the public sector.

Larger companies = Greater need for improvement?

In terms of company size, smaller and medium-sized businesses appear to be more satisfied with their IT environment than the largest companies. The proportion of IT managers who are completely satisfied with their IT environment is highest among companies

with 150–200 employees and lowest among those with more than 300 employees. Organizations with the largest workforce and highest revenue are also the most likely to report significant improvement needs.

Expert commentary:

“Many companies have reduced their internal IT departments in favor of purchasing IT solutions as services from external partners. This approach has several advantages, such as better cost efficiency and reduced dependency on individual staff members. However, it can also lead to challenges, even if the services work perfectly on their own. The more providers you involve, the more complicated it becomes to coordinate between them and ensure everything functions seamlessly and securely. This puts IT managers in a tough position, as reflected in the survey results. We are currently observing a clear trend toward reducing the number of providers and instead consolidating services and products with fewer partners to avoid this complexity.”

Johan Thews
Sales Director, Large Accounts at GlobalConnect

How is the cloud strategy progressing?

Most organizations combine different methods for data storage

data storage and management are foundational elements of any organization's IT infrastructure. According to the survey, the most common approach is a combination of different storage methods, such as data centers, cloud

storage, and in-house servers. The highest proportion of organizations primarily relying on cloud storage is found in Norway (33%), while the lowest is in Denmark (9%).

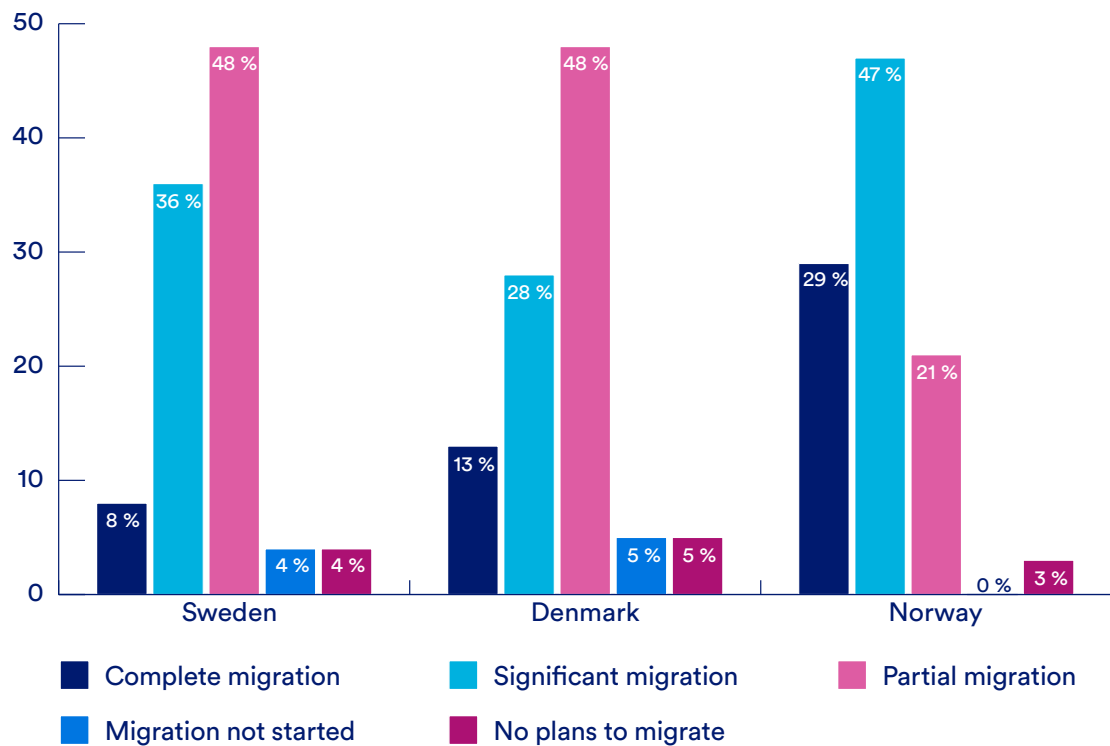
3 out of 4 Norwegian IT managers have completed their cloud migration

Today, the cloud is used for much more than just data storage. Cloud migration has been one of the biggest trends in the IT sector in recent years. Many organizations have adopted a clear strategy to move more parts of their operations from local storage and management to various cloud services. This is reflected in the survey, where only a small percentage report that they have not started – or do not plan to undertake – a cloud migration.

As with cloud storage, Norway stands out: 76% report that their organization has achieved significant or complete cloud migration, compared to just over 40% in Sweden and Denmark.



How far along are you with cloud migration?



Expert commentary:

“Norway’s standout position here is linked to a strong desire among Norwegian companies to be ‘first movers’ and to adopt new technology early. The fact that Norway is outside the EU could also play a role, as it influences the considerations that need to be taken in this type of decision. Additionally, suppliers have adjusted their pricing models, making it more cost-effective for companies to transition from local management to cloud services.

In Norway, it has long been common to consolidate nearly the entire IT operation with a single trusted partner, who in turn sees benefits in shifting maintenance costs to a cloud provider. However, there is now an ongoing discussion about the wisdom of placing such a large part of the IT environment with a few major American cloud companies. We are starting to see a more conscious approach to data storage decisions.”

Øystein Snekkerlien
Security Strategist at GlobalConnect

Public sector stores more in the cloud than private sector

Cloud storage is more common in the public sector, whereas private companies seem to rely slightly more on their own servers than public organizations.

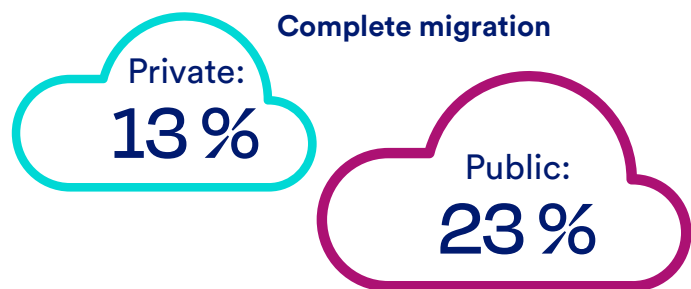
In the public sector, 25% of IT managers say they mainly use the cloud for data storage, compared to 16% in the private sector. Private companies, on the other hand, seem to rely slightly more on their own servers (9%) than public organizations (5%).

...and has progressed further with cloud migration

Nearly one in four (23%) IT managers in the public sector report that their organization has

completed a full cloud migration, compared to 13% among those in the private sector.

Do you feel that you currently have the best possible integrated IT environment?



Expert commentary:

“Municipalities and other public organizations often operate with predetermined annual budgets. This makes it easier to have predictable costs, such as when purchasing cloud storage as a service. Another reason why cloud services and storage have gained such traction in the public sector is that these organizations form a relatively uniform customer base for providers to target. A cloud service provider that develops a solution suitable for one municipality can most likely offer it to others as well. In contrast, private companies often require customized solutions, which cannot be reused to the same extent.”

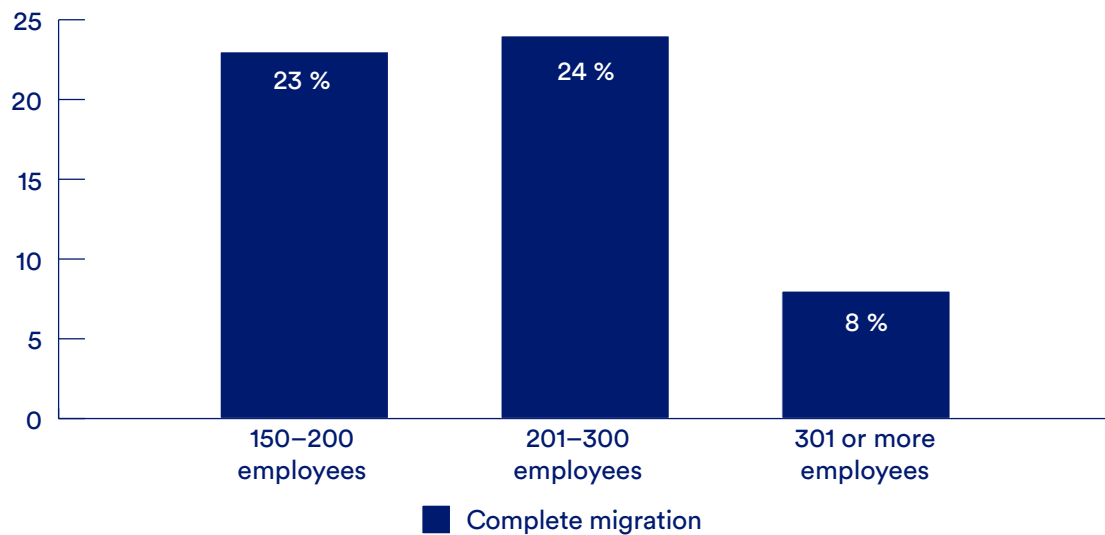
Uffe Traberg
Commercial Director at GlobalConnect

The smallest companies use the cloud the most

Among IT managers in smaller companies, nearly one third report that they primarily store data in the cloud. This is roughly twice the proportion compared to larger companies. Among the largest organizations, more tend to use a combination of storage methods instead.

IT managers in smaller companies also report to a much greater extent that their organization has completed a full migration to the cloud.

How far along are you with your cloud migration?



Expert commentary:

“Cloud services are an attractive choice for smaller companies because they allow for a quick start without large upfront investments or long-term commitments. These services are also continuously updated by the provider, which suits organizations without access to a large internal IT department. However, as the organization and its data volumes grow, needs and requirements become more complex, and companies often prefer to mitigate risks by combining external services with in-house storage and management.

Many larger companies also value the security of long-term partnerships, where the provider commits to maintaining the same quality level – such as a specific recovery time for backups – over a contract period of several years.”

Johan Caripson
Business Manager at GlobalConnect

Will there be more or less outsourcing in the future?

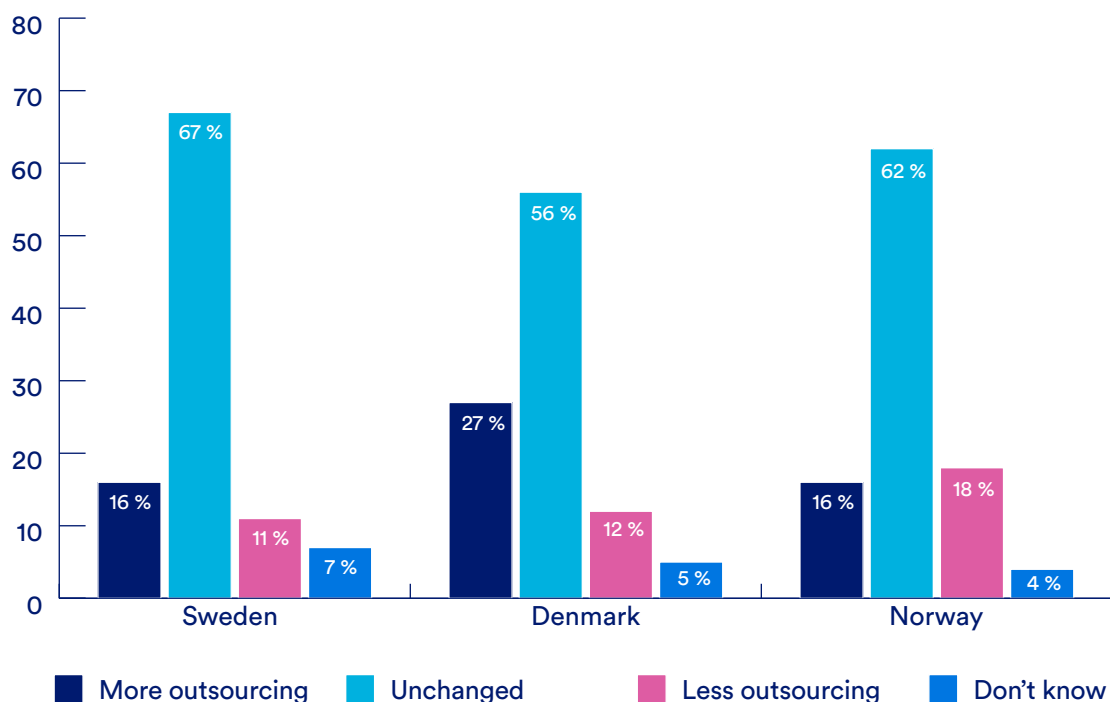
Danish IT managers plan for more – Norwegian IT managers for less

Alongside the increased use of cloud services, it has also become more common to rely on external providers to manage local networks and other fundamental IT infrastructure.

When the IT managers in the survey look ahead, how do they view the balance between in-house management and purchasing services? In Denmark, there is a

clear trend toward increased outsourcing. Norway, however, is moving in the opposite direction, with more managers expecting less outsourcing in the future (though the difference is relatively small). Perhaps this reflects the already high degree of outsourcing among Norwegian companies, as noted by our expert?

What are your plans moving forward - will there be more or less outsourcing of network solutions, such as local networks?

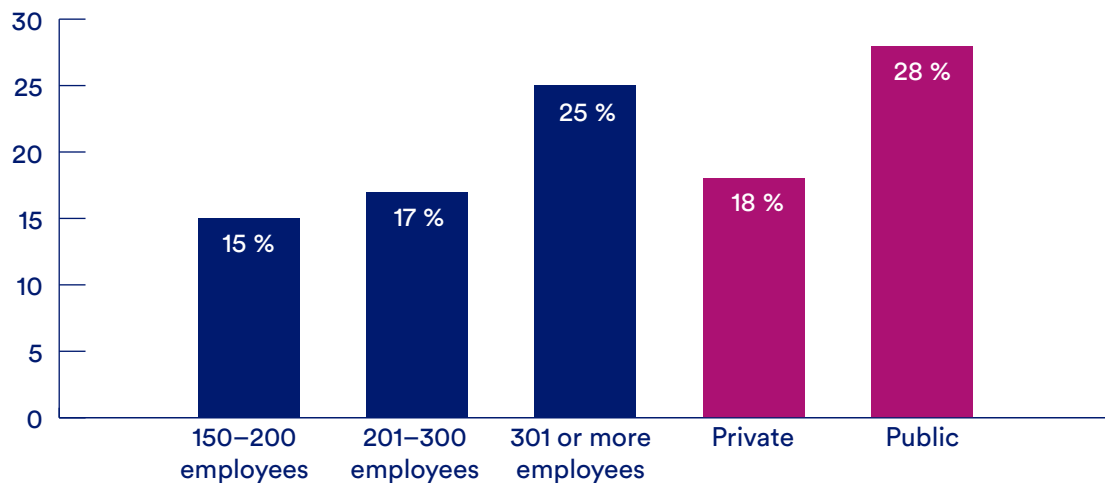


Outsourcing plans more common in larger companies and public organizations

IT managers in the public sector appear to plan for increased outsourcing to a significantly greater extent than their counterparts in the private sector. In the private sector, there is a more cautious trend, with a higher proportion responding “don’t know” compared to the public sector.

Larger companies also seem somewhat more inclined to plan for increased outsourcing compared to smaller businesses.

Do you expect to increase outsourcing of network solutions, such as local networks?



Expert commentary:

“The interest in outsourcing through managed IT services has definitely increased in recent years. Companies and organizations face increasingly complex needs, with more connected devices and rapidly evolving cyber threats. The global shortage of IT expertise makes it challenging to manage all this internally.

By collaborating with trusted partners who focus on these issues full-time, organizations can leverage the latest technology and expertise while focusing on their core business. As long as IT managers have the ability to monitor the status of their network and security solutions and receive detailed reports, they feel confident outsourcing the operations to an external partner.”

Emma Helton
Security Product Manager at GlobalConnect

How is the cybersecurity holding up?

High confidence in security levels – but concerns about attacks remain

Cybersecurity and IT infrastructure are inherently interconnected. Below is a summary of how IT managers in the survey perceive their cybersecurity landscape. The results show some discrepancies. While participants

express relatively high confidence in their own security levels, many are also concerned about cyberattacks, which their organizations are frequently subjected to.

On one hand:



8 out of 10 believe they have a high level of security

79% of IT managers consider their organization to have a high or very high level of security. In Norway, this proportion is 87%, in Denmark 80%, and in Sweden 69%



86% are prepared to recover lost data

A large majority of IT managers (91% in Norway, 89% in Denmark, and 79% in Sweden) state they have good or very good preparedness to restore data lost after an attack.

On the other hand:



More than 6 out of 10 are worried about IT attacks or failures

64% of IT managers express concern about IT attacks or failures. The proportion is highest in Denmark (83%) and lowest in Sweden (52%). IT managers in larger companies are more worried than those in smaller ones.



Over one-third of organizations have been attacked recently

35% report that their organization has experienced an IT attack in the past two years. Among companies with the highest revenue, this figure rises to 52%.



More than 1 in 10 have business-critical data stored insecurely

11% report that their organization has business-critical data stored insecurely. In Sweden, this figure reaches 17%, compared to 9% in Norway and 5% in Denmark.



More than 1 in 10 have inadequate security solutions

12% of IT managers perceive shortcomings in their security solutions, such as firewalls, intrusion prevention, and antivirus protections.



Expert commentary:

“Many senior IT managers remain focused on security strategies centered around firewalls and other network-focused solutions. Unfortunately, this can lead them to overestimate their organization’s security levels. Modern cybersecurity is primarily about protecting data, which is often stolen in ways other than direct intrusions – such as through leaked user credentials. The architecture and segmentation of the IT environment, with a focus on Zero Trust, are therefore becoming increasingly important.”

Øystein Snekkerlien
Security Strategist at GlobalConnect

Further reading:

Download the report [GlobalConnect IT Insights: Cybersecurity](#) to gain more insights and analyses from the study from a security perspective.



Part 2

– IT managers' challenges

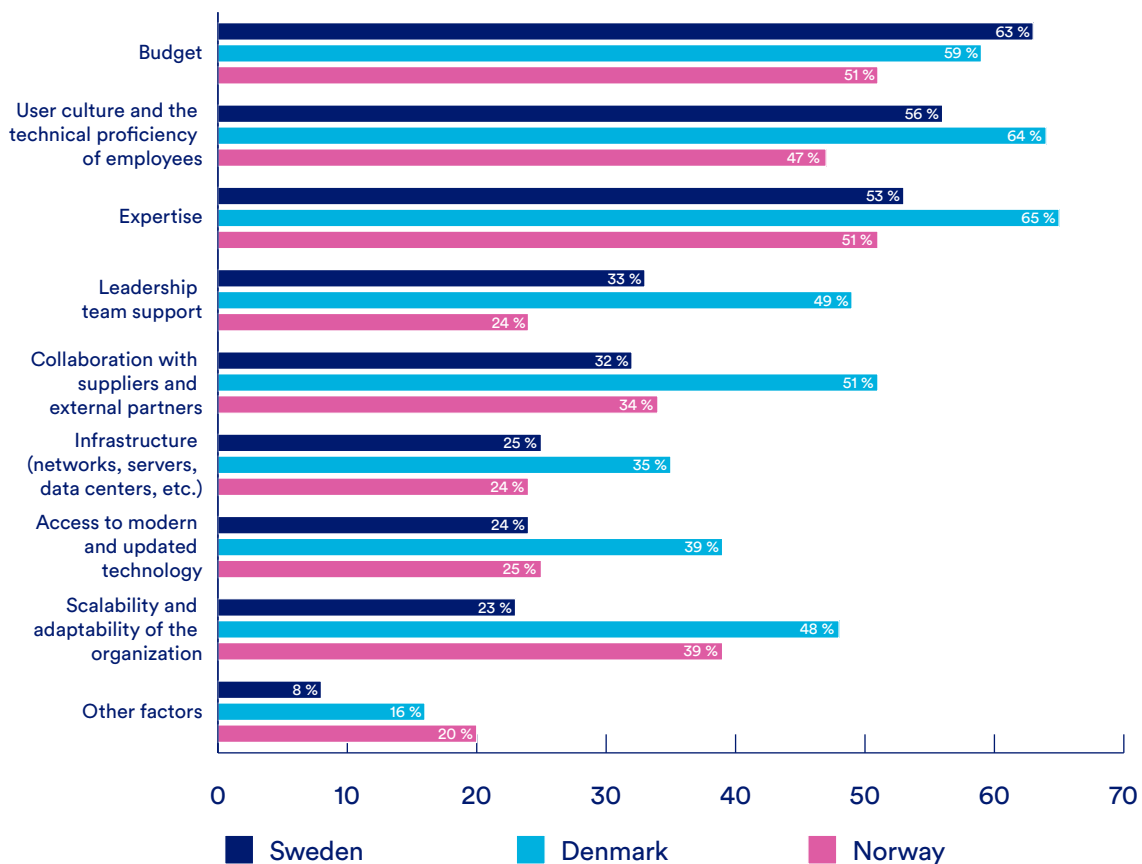
Challenge 1: Insufficient conditions to meet organizational goals

Factors affecting the IT department's delivery capability

Functioning IT is a fundamental requirement for running any organization today, regardless of industry or size. Yet, IT departments are not always recognized as the strategically critical assets they truly are. A clear indicator of this is that only just over half (56%) of the participants report that the IT manager is part of their organization's management team.

But what factors do IT managers themselves believe have the greatest impact on their ability to deliver in alignment with the organization's goals? Budget, user culture, and expertise top the list. Leadership support, collaboration with suppliers, and IT infrastructure are also seen as critical factors.

Which of the following factors affect your/your IT department's ability to deliver in alignment with organizational goals?



User culture is especially important in Denmark

Budget is by far the most important factor in Sweden but holds slightly less significance in Norway and Denmark.

In contrast, collaboration with suppliers and external partners is more important in both Norway and Denmark than in Sweden.

User culture and employees' technical skills, along with expertise, stand out as particularly important factors in Denmark. Additionally, leadership team support ranks higher in Denmark than in its neighboring countries.

Budget weighs heavier in the public sector

Budget, along with access to modern and updated technology, is seen as significantly more important for the IT department's ability to deliver in the public sector compared to the private sector. Infrastructure, leadership team support, and user culture, as well as employ-

ees' technical skills, also have a greater impact for IT managers in the public sector. Scalability and growth are the only factors that weigh more heavily in the private sector than in the public sector.

Expertise has a greater impact in larger companies

In terms of company size, expertise and leadership team support stand out as more important factors for organizations with the largest

number of employees. The same applies to scalability and growth.

Expert commentary:

“Budget and expertise are closely connected. Many organizations underestimate the cost of running solutions with their own resources. When calculating TCO (total cost of ownership), they often focus on factors like hardware and power consumption but overlook personnel costs. It is both challenging and expensive to build and maintain a high level of internal expertise. At the same time, there's a risk of creating a dependency on individuals, which can make the organization vulnerable.”

Johan Caripson
Business Manager at GlobalConnect

Challenge 2: Issues with daily operations

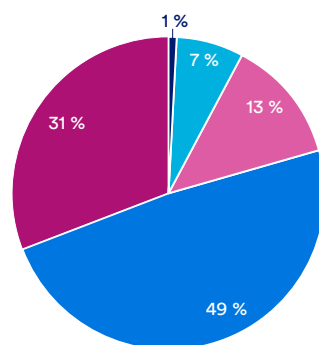
1 in 10 experiences recurring operational problems

A little more than one in ten IT managers report frequent issues with cloud-based and local business systems and applications. Near-

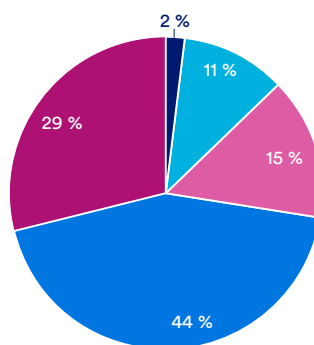
ly one in ten also reports recurring problems with central infrastructure such as networks, servers, and switches.

We often experience issues with

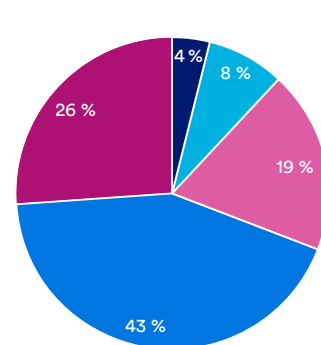
central infrastructure such as storage networks, servers, and switches.



cloud-based systems and applications.



local systems and applications-



All respondents

Fully agree

Agree

Neutral/Don't know

Disagree

Do not agree at all

In Sweden, nearly 1 in 5 often faces issues with central IT infrastructure

When it comes to central infrastructure, such as storage networks, servers, and switches, Sweden stands out. Nearly one in five IT managers (17%) in Sweden report recurring problems, compared to 4% in Denmark and 3% in Norway.

The same trend is evident in responses about issues with local and cloud-based business systems and applications: IT managers in Sweden report recurring problems significantly more often than their counterparts in Norway and Denmark.

Operational issues more common in the private sector

Despite private-sector IT managers being more satisfied with their IT environments, they report recurring issues with their networks, servers, systems, and applications more often than their public-sector counterparts.

This is particularly interesting given that IT managers in the private sector are not planning

to increase outsourcing to the same extent as those in the public sector. Outsourcing operations to external partners could otherwise be seen as a potential solution to reduce the need for internal IT resources to handle operational disruptions.

Larger companies face more issues with central IT infrastructure

When comparing responses based on company size, issues with central IT infrastructure appear to be most prevalent in companies with the highest revenue and largest number of employees. Larger companies also tend to plan

for more outsourcing compared to those with fewer employees. For cloud-based and local systems and applications, the situation is more varied.

Expert commentary:

“Frequent operational disruptions have a direct impact on organizational productivity, as well as on trust from customers and other stakeholders. They are often a sign of insufficient redundancy. Modern IT infrastructures can be highly complex, with hybrid setups and multi-cloud environments involving several different providers.

This makes it especially important to have processes in place to prevent systems from becoming vulnerable. Clear incident response plans are also essential to ensure swift action when something goes wrong.”

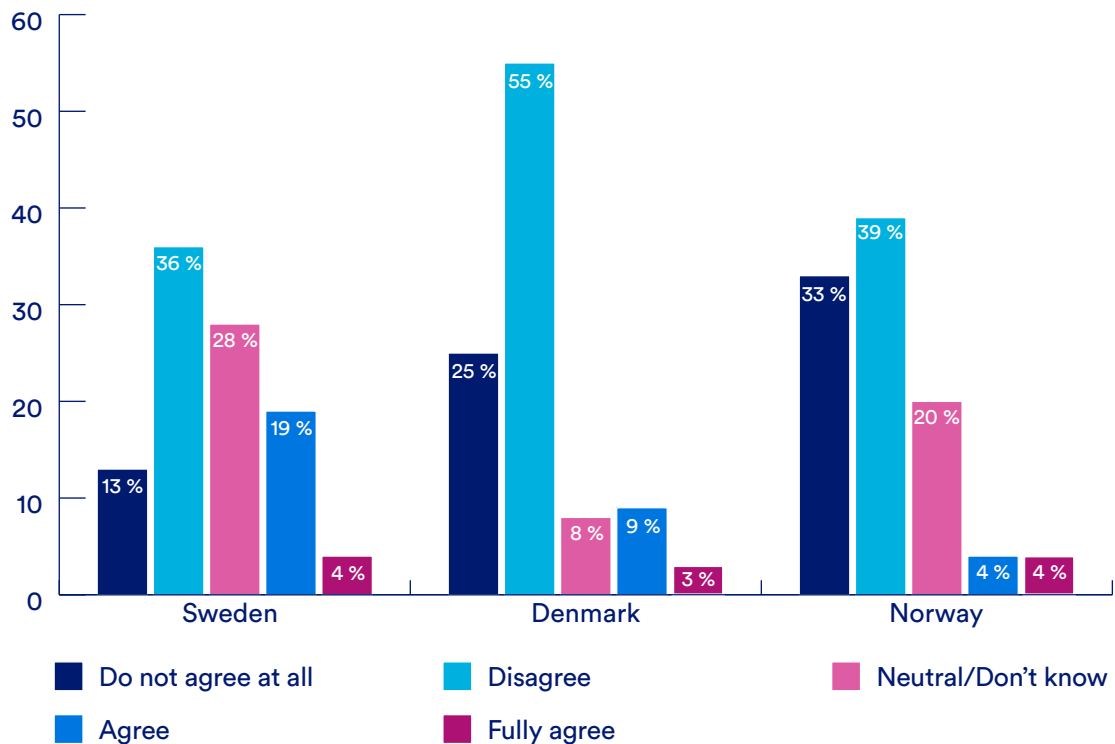
Emma Helton
Security Product Manager at GlobalConnect

Nearly one in four Swedish IT managers are affected by resource shortages...

Among Swedish IT managers, 23% report that they often struggle to resolve IT or IT security-related problems with their existing resources.

In Denmark and Norway, the figures are 12% and 8%, respectively.

How much do you agree with the following statement:
"We too often experience IT or IT security-related issues
that we struggle to manage with existing resources"?



...as well as nearly 20% in the largest companies

Responses to this question do not differ significantly between the private and public sectors. However, when considering company size, the largest organizations with the most employees

and highest revenue stand out. Nearly one in five in these companies report that their resources are insufficient to handle recurring problems.

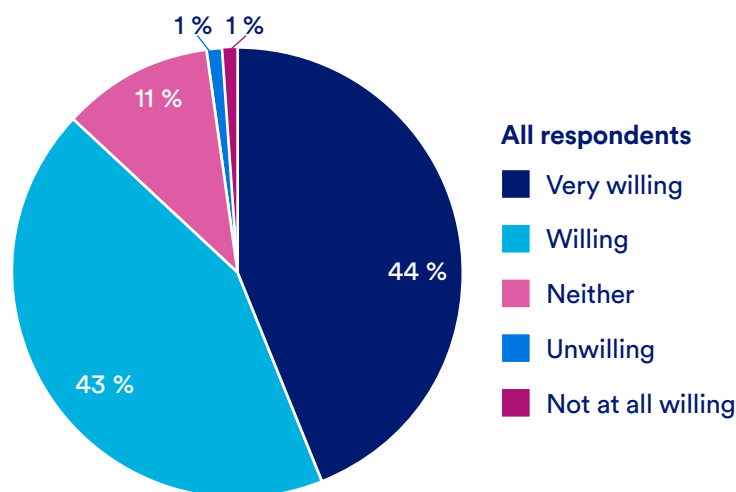
Challenge 3: System legacy

9 out of 10 continuously replace outdated parts of their IT environment

The condition of the overall IT infrastructure is closely tied to an organization's cybersecurity level. Therefore, it is encouraging that a large

majority of IT managers in all three countries report being willing or very willing to replace outdated components of their IT environment.

How willing are you to replace old hardware and expired licenses?



"All three countries report being willing or very willing to replace outdated components"



Small difference between private and public sectors...

Among private-sector IT managers, 90% report being willing or very willing to replace old hardware and expired licenses. The corre-

sponding figure for public-sector IT managers is 85%.

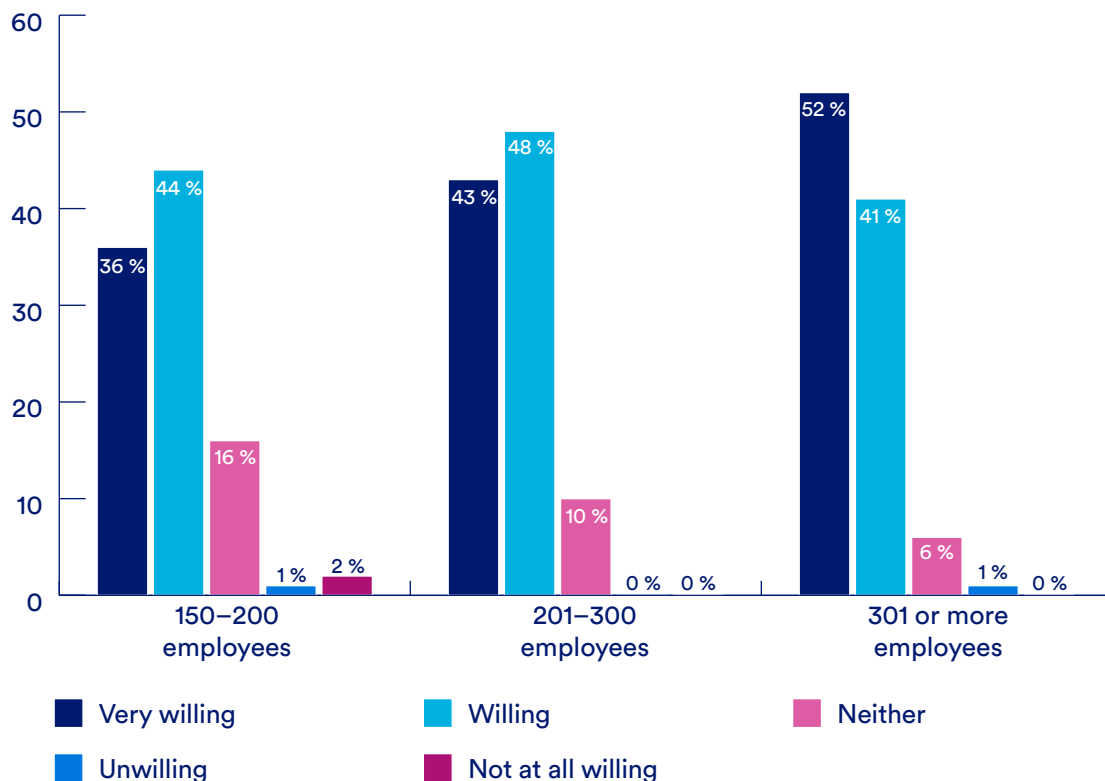
...but a slightly larger gap between small and large companies

Larger companies appear more willing than smaller ones to continuously replace outdated parts of their IT environment, although the proportion is over 80% even among the smallest companies in the survey.

This difference somewhat reflects the question of outsourcing. There, 25% of IT managers in

companies with more than 300 employees indicated plans for increased outsourcing. Among those with fewer than 200 employees, the corresponding figure was only 15%. Does this suggest that smaller companies have yet to recognize outsourcing as a way to keep their IT environment up to date?

How willing are you to replace old hardware and expired licenses?





Expert commentary:

“IT maturity, both in terms of legacy management and cybersecurity, tends to be lower in smaller companies compared to larger ones. The focus is often on immediate costs rather than on developing long-term strategies or establishing continuity plans. This can lead to shortcuts being taken to save money, without realizing that it may end up being more expensive in the long run.”

Karoline Berget
Senior Manager SMB at GlobalConnect

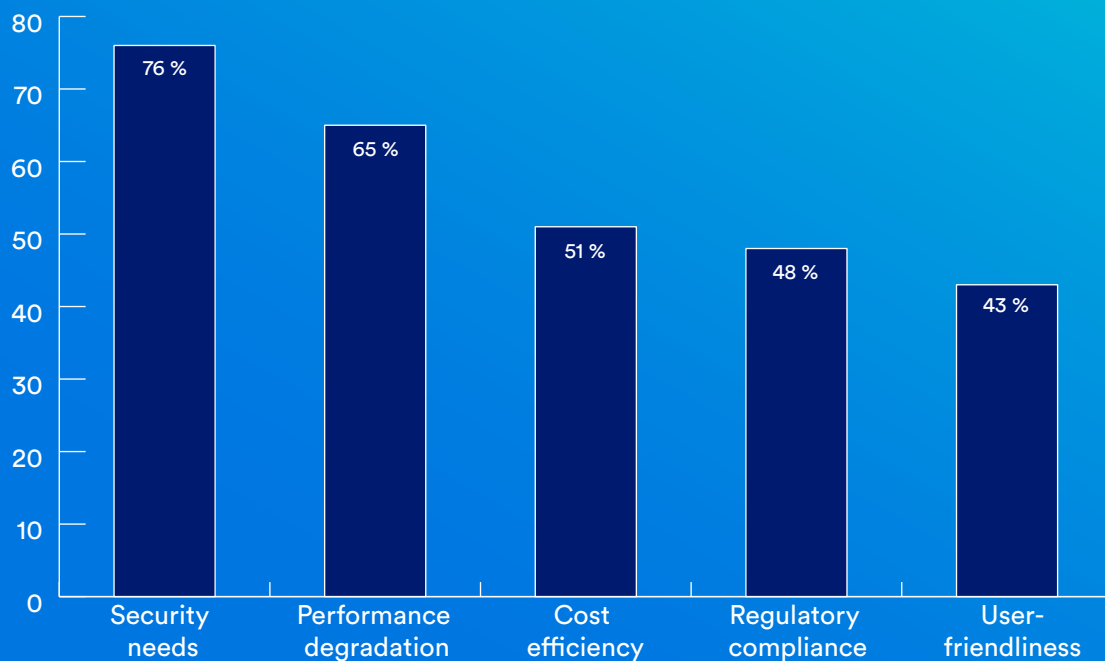
Security is the most important reason to upgrade

Security is cited as the primary reason to keep the IT environment updated by participants across all categories. Other key factors mentioned include performance, cost efficiency, regulatory compliance, and user-friendliness.

Responses vary somewhat between the three countries. For instance, regulatory compliance stands out as a stronger driver in Denmark, while cost efficiency is a more significant factor in Sweden.

What are the main reasons for replacing outdated technology?

(Respondents were allowed to select more than one answer, so the columns do not necessarily add up to 100%.)



Private and public sectors have partly different drivers

In both private and public sectors, security is cited as the primary reason for replacing outdated technology – though public-sector IT managers emphasize this factor more strongly

than their private-sector counterparts. Cost efficiency carries greater weight in the private sector, while regulatory compliance is considered more important in the public sector.

What are the main reasons for replacing outdated technology?

Private vs Public sector



Security:
73 % vs 85 %



Cost efficiency:
54 % vs 43 %



Regulatory compliance:
47 % vs 65 %

Compliance carries the most weight in the largest companies

When comparing responses based on the number of employees, regulatory compliance is viewed as a significantly more important

factor in the largest companies than in the smallest ones.

Additional reasons to upgrade the IT environment

Participants were also able to use a free-text field to describe other reasons for upgrading

outdated technology. Here are some examples:

Access to
support for
hardware and
software

Operational
reliability

Environmental
and climate
impact

Ensuring
future needs

Expert commentary:

“Outdated IT infrastructure poses a significant security risk, with servers and systems that are not updated and therefore not protected against attacks. It is encouraging that the IT managers in the survey are aware of this and have an ambition to replace outdated components. I believe that NIS2 has been a helpful wake-up call on this issue, even for organizations that are not directly covered by the directive.”

Emma Helton
Security Product Manager at GlobalConnect

Conclusion:

IT strategy is business strategy – and should be treated as such

The survey reveals that needs and challenges differ between countries, companies of various sizes, and organizations in the private and public sectors. However, the overarching picture is that too many IT managers experience a gap between how the IT environment should function and the resources available to maintain it. Common obstacles include insufficient budget, lack of authority, and limited access to expertise. Operational disruptions are also prevalent, with internal or external solutions sometimes falling short of expectations.

At the same time, we are in a transformative period where demands on IT infrastructure are constantly increasing, both in terms of capacity and security. Yet, resources do not appear to keep pace with these demands. What does this mean for the IT manager's role and decision-making?

The modern IT manager must translate the organization's long-term business goals into secure and cost-effective technical solutions, while also addressing factors such as risk diversification, redundancy, and scalability – all in a context of a global IT skills shortage. From this perspective, it's unsurprising that a relatively high proportion of survey participants plan to increase outsourcing of solutions like network management.

Regardless of which parts of the IT environment are managed internally or externally, the IT manager faces a balancing act that requires extensive (and continuously updated) expertise to act as a knowledgeable decision-maker. Success requires a strategy firmly anchored in the leadership team and should not be viewed as an issue for the IT manager to resolve alone.

It is no longer possible to separate IT strategy from business strategy.



About GlobalConnect

GlobalConnect is one of Northern Europe's leading providers of digital infrastructure and data communication. With a 235,000-kilometer fiber network spanning Denmark, Norway, Sweden, Germany, and Finland, we deliver fiber-based broadband services to over 830,000 private households and provide network solutions to approximately 30,000 B2B customers. This is how we keep society running and enable tomorrow's innovations.