Greening of and by IT

Creating a sustainable enterprise with modern IT

IT and sustainability in Germany, Austria, and Switzerland 2022

IDC

IT and Sustainability Influence Each Other Mutually

Never before has the impact of consumption and the economy on the environment and society attracted more attention. In recent years, awareness of societal issues with a global impact on the future has risen rapidly, with far reaching consequences. Enterprises in Germany, Austria, and Switzerland (DACH region) are faced not only with a change in consumer behavior, but also with tougher regulations and investor requirements with regard to sustainability. A scarcity of resources, increasing energy prices, and political tensions additionally exacerbate the situation and heighten the desire for resilience to external influences.

The resulting challenges and tasks that must be tackled by corporate management, IT, and departmental heads as part of their sustainability drive are formidable. In terms of sustainability, IT in particular has a special role to play. As value creation becomes increasingly digitalized, IT controls the use of resources and can support measures to improve sustainability while as a consumer of resources it also has an impact on the environment. Against this background, in December 2021, IDC conducted a primary market survey to examine how enterprises and their IT departments are addressing the subject and establish what plans and challenges are afoot in relation to IT initiatives that improve sustainability. Based on a structured questionnaire, IDC interviewed decision makers, influencers and employees with extensive knowledge of their enterprises' sustainability strategy from 300 organizations with more than 50 employees across all industries in the DACH region. All the enterprises surveyed have actively engaged in the planning, shaping and implementing of initiatives and solutions relating to sustainability.

Lack of Transparency Hampers Sustainability Initiatives

By definition, sustainability is a principle aimed at satisfying needs with due respect for the environment, social justice, and governance. The sustainability principle has an influence on all corporate sectors, as the IDC Sustainability Framework illustrates:

- **Business strategy.** Corporate strategies need to be developed and extended to include non-financial aspects and goals to satisfy the requirements of sustainable management.

- **Operative business.** If goals are to be attained, sustainability must be incorporated in routine operations, for instance in production, supply chain, HR, and IT processes.

- **Products and services.** Product and service portfolios are also affected, because the manner in which products are used and services performed is optimized by sustainability goals.

For around a quarter of the respondents in the DACH region, and Germany in particular, significant drivers include the possibility of improving operational and production efficiency as well as customer demand for environmentally friendly products. In Austria, the main driver of sustainability is employee loyalty, motivation and the recruiting of new talent, while in Switzerland, public pressure and the acquisition and retention of business partners is most pressing. The pandemic has also changed views on the importance of sustainability and the environment.

For instance, 77% of the organizations interviewed cited fragile supply and value chains as having prompted an increase in the importance of sustainability, revealing the need for greater independence and resilience. In the future, 70% of respondents assume that closed resource loops created by a circular economy or higher requirements for energy efficiency in products and operational processes will have a significant impact on their business processes.

Figure 1: IDC Sustainability Framework

© IDC, 2022

Sustainability is therefore already a fixture of many decisions in a large number of enterprises. 35% of the organizations in Germany, Austria and Switzerland already follow a holistic strategic to ensure that anything that affects sustainability is fully taken into account in strategies, processes, and products. A further 58% actively pursue the topic of sustainability, but still do so selectively. This means that some enterprises, especially in Austria, are still on the threshold of their sustainable transformation. In IDC's view, these enterprises should develop their fragmented initiatives towards more integrated approaches to promote synergies between sustainability and value creation. 70% of respondents also confirm that when aligned with ecological aspects, corporate governance and corresponding investments lead to better financial results in the medium to long term.

IT plays a key role in this through the "greening of and by IT." On the one hand, optimizing IT usage per se has high potential for greater sustainability. Due to the high demand for raw materials for IT equipment and for the energy to run it, the "greening of IT" in particular has an influence on the ecological aspects of sustainability.
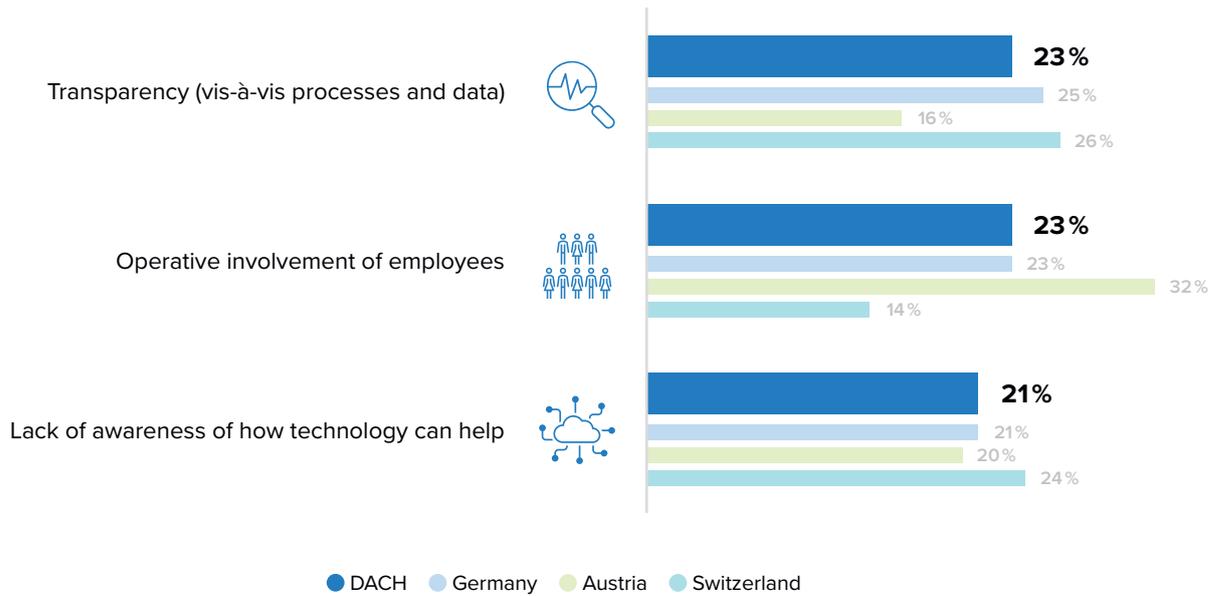
On the other hand, greening by IT can support and facilitate the implementation of initiatives aimed at improving sustainability. For if enterprises are to successfully define and implement strategies and initiatives to increase sustainability, they need as much transparency as possible across all data and processes. They require information and an overview of where there is potential for sustainability in the enterprise and which initiatives are potentially most expedient and effective. However, almost one in four enterprises cites creating transparency as a key challenge in implementing sustainability goals — especially in Switzerland and Germany. Since success or failure hinges on transparency, enterprises should do their utmost to improve it. Yet transparency in the enterprise is only the first step. In a second step, it must be extended to all value and supply chains. They hold a lot of potential, but also risks for their own sustainability.

35% of the enterprises surveyed in the DACH region have an overarching sustainability strategy. Another **58%** actively pursue the topic of sustainability, but still do so selectively.

in IDC's view, innovative technologies such as IoT and modern software support are essential in achieving transparency, visibility, and traceability. They also enable enterprises to measure the success of their initiatives. Although technology therefore has a key role to play in successfully focusing on sustainability, one in five respondents admit to a lack of awareness in their enterprises as to how technology can help to create transparency, for instance. So, in many enterprises awareness of the significance of technology and IT for sustainability must be increased to promote its use.

Figure 2: Top 5 challenges in the implementation of sustainability goals in the DACH region

Transparency (vis-à-vis processes and data)
- **23 %**
- 25 %
- 16 %
- 26 %

Operative involvement of employees
- **23 %**
- 23 %
- 32 %
- 14 %

Lack of awareness of how technology can help
- **21%**
- 21 %
- 20 %
- 24 %

● DACH ● Germany ● Austria ● Switzerland

N = 300; up to three answers possible; figure abbreviated
© IDC, 2022

Integrating Sustainability in the IT Strategy as a Starting Point

Transparency in operational processes is not created simply through the use of technology, but by linking technologies, generating data and information as part of a holistic approach to digitalization and data strategy. Two-thirds of the companies surveyed in Germany, Austria, and Switzerland say that a holistic approach to digitalization is an important prerequisite for implementing their sustainability measures. Digitalization does not in itself support sustainability, but adds value to an enterprise and thereby ensures a growing use of IT resources, increased demand for terminals, computing, and storage capacities and ultimately, higher energy demands and potential ewaste. This poses organizations with the difficult task of striking a balance between necessary IT performance and sustainability. The greening of and by IT connects those business priorities — digitalization and sustainability. IDC therefore expects the increasing convergence of digital and sustainable transformation to become one of the hot topics for innovation and growth in the coming years.

Two-thirds of respondents in the DACH region consider a holistic approach to digitalisation to be an important requirement for implementing their sustainability measures.

A first step towards convergence is to include sustainability in IT strategies.

› In almost all organizations, sustainability is taken into account when making strategic technological decisions in some cases at least. Almost one in four enterprises has even implemented a holistic IT sustainability strategy that includes sustainability in all decisions. German enterprises in particular already pay more attention to sustainability compared to those in Austria and Switzerland.

› Overall, more than 60% of respondents expect that taking ecological matters into account in strategic IT decisions will have a positive impact on the enterprise's success over the next two to three years.

› In IDC's view, this assessment is absolutely realistic if, for instance, you reflect on the savings on energy consumption as a yardstick for the amortization of new, more energy-efficient IT equipment. The strategic incorporation of sustainability in IT decisions should therefore be a goal common to all enterprises.

This will have practical implications for the weighting of sustainability criteria when purchasing and procuring IT. They already have a significant to very significant influence on IT purchasing and procurement decisions for more than half of the German respondents, 40% of the enterprises in Switzerland and no less than one in four enterprises in Austria, and as such are equally important or in some cases more important than price and performance. On the other hand, taking sustainability into account also has an impact on IT budgets. Over the next two years, half of enterprises plan to spend between 10% and 29% of their IT budget on sustainable IT products and services such as energy-efficient equipment, IT equipment with longer life cycles, recyclable IT systems, and software to calculate the carbon emissions generated by their IT. More than a quarter even plan to earmark over 30% of their IT budget for this. In IDC's estimate, these are already very ambitious budget allotments. However, there are pragmatic reasons for this and for the frequently strong emphasis on sustainability when it comes to IT, illustrating the clear link between sustainability and economic efficiency. Steeply rising energy costs alone and uncertainties regarding future energy policy, added to the shortage of IT equipment due to challenges in the procurement of raw materials and important components such as computer chips, are compelling enterprises to focus on energy savings in long-term IT operations, intending to support processes digitally on a reliable and permanent basis. IDC therefore expects enterprises to earmark increasing shares of their budgets for sustainable solutions.

Major Potential for Greater Sustainability in Hardware — Focus on Software in the Future

Currently, there is major potential for greater sustainability in the greening of IT equipment, that is of IT products and services currently in use. Just by looking at how long IT hardware is used speaks volumes. For 29% of enterprises in the DACH region, the end of the usage period is defined based on the expiry of the agreement term or, for 28%, on the end of the write-off period, due for instance to internal corporate guidelines, fixed refresh cycles, or tax reasons. In IDC's view, this approach gives cause for concern from an ecological point of view, because the end of a device's life cycle is not determined by performance or wear and tear, but by financial advantages. Currently, ecologically sound reasons for terminating use such as performance or an actual defect tend to be of secondary importance. The financial and fiscal benefits are also deceptive. Not only does new IT have to be set up and old IT properly wiped and disposed of, which results in higher costs for the IT management, but the purchase of new hardware is generally expensive and its added value is often debatable, for example when purchasing new smartphones or laptops. More sustainable procurement strategies with supporting management solutions can help track the life cycles of IT equipment or enable end-of-life schemes to prolong the life span of hardware by using older models for less exacting tasks.
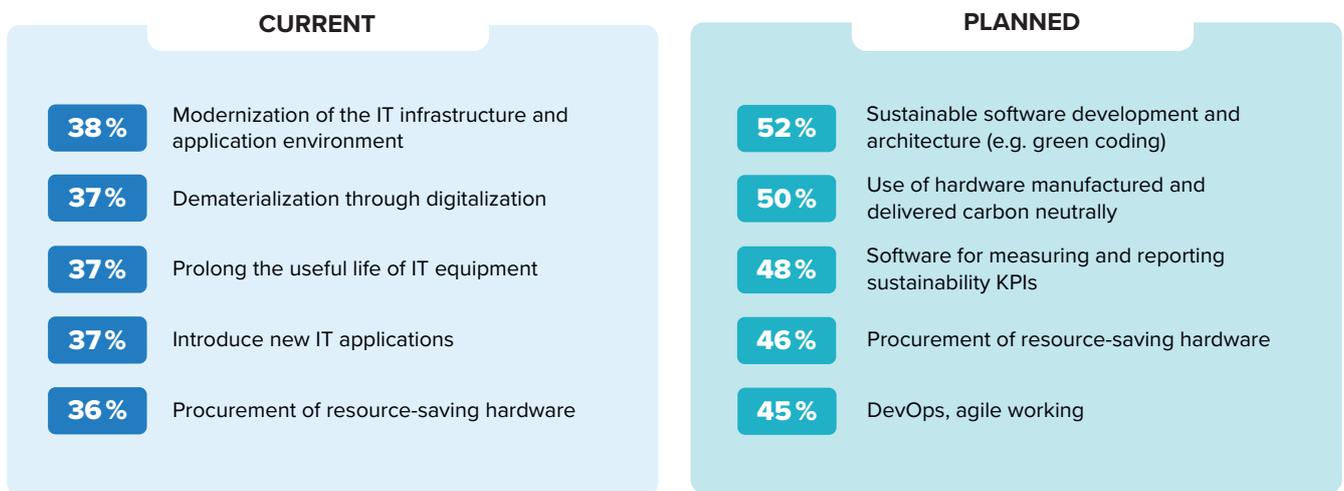
One in two enterprises plans to invest **10–29%** of its IT budget in sustainable IT.

For **60%** , hardware end of life is defined by specious economic factors rather than ones that make ecological sense.

Purchasing new IT products is of course often necessary and unavoidable — especially if modernization can significantly reduce energy consumption, for instance. Therefore, 38% of organizations already opt for regular modernization of the their IT infrastructure and application environment. In particular, energy-efficient processors and the procurement of mobile devices of adequate size and performance can have a major impact on the whole company. In addition to updating, various initiatives can be deployed to make IT operations more sustainable. In this respect, 37% opt for dematerialization through digitalization, such as the virtualization of physical value creation processes and the prolonging of IT life cycles. To prolong the useful life of IT devices effectively, IDC recommends that IT sustainability certificates including national seals such as the Blue Angel or the Austrian Ecolabel, as well as pan-European certificates such as the EU Ecolabel should be considered as a reference when selecting equipment in the first place.

Figure 3: Current and planned Top 5 sustainability initiatives focusing on IT

CURRENT	
38%	Modernization of the IT infrastructure and application environment
37%	Dematerialization through digitalization
37%	Prolong the useful life of IT equipment
37%	Introduce new IT applications
36%	Procurement of resource-saving hardware

PLANNED	
52%	Sustainable software development and architecture (e.g. green coding)
50%	Use of hardware manufactured and delivered carbon neutrally
48%	Software for measuring and reporting sustainability KPIs
46%	Procurement of resource-saving hardware
45%	DevOps, agile working

N = 300; figure abbreviated
© IDC, 2022

The present identifiable focus on sustainable hardware must and will increasingly be extended to include software. Software design and programming has a significant influence on the required hardware performance and its energy consumption. Optimum results hinge on the interplay of the two. In the future, more than one in two enterprises in Germany, Austria, and Switzerland plan to pursue sustainable software development and architecture (green coding) and want to incorporate software longevity and resource efficiency in their sustainability measures. IDC recommends enterprises to treat software products as they do hardware and to take into account their entire life cycle from development to end-of-life in order to achieve the best possible results.

The Cloud as Enabler of More Sustainability

Cloud architectures are an example of how hardware and software work together optimally to make more efficient use of IT resources. They enable the on-demand use of computing power, storage capacity, and IT applications. By centralizing physical IT resources and creating a software-based control layer, IT infrastructure in private clouds can be operated more efficiently and is easier to scale. By using public cloud services and hybrid cloud architectures, IT resources can also be shared with other enterprises to avoid internal surplus capacities. Cloud architectures therefore count as a key technology in achieving central IT sustainability goals. For this reason, cloud operating models are already deployed for more sustainable business processes by 36% of organizations in the DACH region, and a further 32% are planning to use them over the next one to two years.

Enterprises operating their own private cloud infrastructures is a complex business and not always practical from the point of view of sustainability. For instance, 61% of respondents share the opinion that large cloud datacenter providers can run their datacenters more sustainably than they could do themselves. The reasons they quote are that the providers deploy the most energy-efficient technologies through economies of scale and that they draw benefits from economies of scale and from higher average server utilization. When taking any IT decision, enterprises would therefore do well to always consider whether doing it yourself or using professional cloud services or co-location providers is the better option.

In IDC's view, efforts by manufacturers, providers, hosts, and users to increase cloud sustainability have made good headway in recent years. The respondents from Germany and Austria therefore currently identify the greatest sustainability benefits in the cloud as revolving around reducing energy costs and improving their carbon footprint. Swiss enterprises see a further major benefit in using the cloud as it enables them to achieve their zero waste targets. At the same time, IDC also identifies a lot of room for improvement, especially where efficacy of use is concerned. Cloud potential to improve sustainability hinges on ensuring that access to cloud resources does not result in the use of increasing numbers of unnecessary applications and calculations. Certainly, this is up to the users themselves, but cloud and co-location service providers must do their part too by providing transparency and advice and optimizing usage if they are serious about their promises of sustainability.

Figure 4: Top 3 sustainability benefits in the cloud as operating model

39% — Reduction of energy costs

38% — Improvement/reduction of carbon footprint

30% — Improved business resilience

N = 300; up to three answers possible; figure abbreviated
© IDC, 2022

As infrastructure and platform for integrating and distributing data, the cloud also serves as a technology base and is a good example of greening by IT. Paired with other technologies, it can enable initiatives to improve sustainability in value creation processes beyond IT. Technologies such as big data and IoT are already being used by one in four enterprises surveyed, and well over a third are planning the latter's use over the next one to two years. The technologies can be used to collect data and perform analysis and to support sustainable innovations. In particular, IDC expects technologies like IoT to become an indispensable tool for enabling sustainable practices such as supply chain transparency and the energy-efficient operation of equipment and buildings.

More than two-thirds of enterprises surveyed use or plan to use cloud operating models for more sustainable business processes.

The Need for Seamless Data Integration Across the Entire Value Chain

The huge potential for improving sustainability is not confined to corporate value creation and processes, but encompasses the entire value chain from extracting resources to the use of products by customers. Enterprises are under pressure both from society and legislators. Take, for instance, the recently passed Supply Chain Act of 2021 in Germany and the due diligence and reporting obligations which came into effect in Switzerland in 2022. A law of this nature is also being tabled in Austria. Enterprises will have to prepare themselves for further measures – The EU Commission, for instance, is examining corresponding European supply chain legislation with even stricter requirements. It therefore not only makes sense, but will increasingly become an economic inevitability that sustainability initiatives will come to focus more on value creation and supply chains.

The survey respondents' initiatives to promote sustainability bears this out. While current initiatives focus strongly on internal processes that are easier to observe, analyze, and influence, those planned in the future have their sights firmly set on supply chains. In all three countries, half the enterprises generally plan to procure components and products from fair and integrative organizations.

The topic of the circular economy attracts special attention. It is the key approach for a sustainable economy based on maximizing the reutilization of products and raw materials in closed loops and is therefore particularly relevant to the DACH region with its scarcity of resources. The planned initiatives to promote the setting up of a circular economy are mainly aimed at optimizing the efficiency of all internal and external value creation processes, but also at focusing supply chains on renewable and recycled materials and on their fundamental transparency.

The success of supply chain measures hinges on the latter, which due to the lack of data availability is generally a complex undertaking. This makes it difficult to track initiatives such as seamlessly recording carbon emissions or supplier compliance with work standards and observance of human rights, and calls for the use of digital tools and software products in support. In the next two to three years, 44% of respondents in Germany, Austria, and Switzerland therefore agree that the greatest demand for

Figure 5: Planned sustainability initiatives relating to value creation

Planned Top 3 of **general** sustainability initiatives

50%	Fair product and component procurement
47%	Smart building
47%	Social sustainability initiatives

Planned Top 3 sustainability initiatives revolving around the **circular economy**

49%	Optimize efficiency
45%	Supply chains based on renewable/ recycled materials
45%	Make supply chains transparent

N = 300; figure abbreviated
© IDC, 2022

software will be for carbon management and tracking purposes. This does not come as a surprise, as carbon pricing using carbon credits has direct and, in some cases, significant financial implications for enterprises. However, almost one in three enterprises also identifies a major need for software to support a sustainable supply chain and circular economy.

Figure 6: Top 5 sustainability topics with the greatest demand for software products in the next two to three years

Topic	%
Carbon management/tracking	44%
Recording and evaluation of social aspects	30%
Sustainable supply chain/circular economy	30%
Appraisal of employee commitment	23%
General ESG reporting/disclosure/benchmarking	21%

N = 300; up to three answers possible; figure abbreviated
© IDC, 2022

For software products to unfold their full potential, comprehensive data transparency is a must, and in the case of supply chain initiatives, data integration must go beyond the bounds of the individual enterprises. Currently, enterprises are still focusing on collecting data relevant to the sustainability of their own operational processes. In IDC's view, initiatives will enjoy true success once they cover the entire value creation chain. Doing the appropriate groundwork is therefore important. In the future, more than half of the respondents therefore plan a comprehensive exchange of data or full integration with partners and the supply chain.

After all, it is important not only to set up initiatives, but also to ensure that they are implemented successfully. Sustainability related KPIs are the main way of evaluating, controlling, and communicating measures efficiently and should therefore be defined by companies at an early stage in the planning and implementation of sustainability initiatives. At present, established KPIs are mostly used, which can be recorded relatively easily and are often collected in day-to-day business. Almost half of the respondents record energy consumption and 42% their production efficiency in order to check and control their sustainability measures. Ascertaining indicators of greater complexity will be needed to efficiently check and push ahead with measures in the supply chains and partner ecosystems. The use of more ambitious and meaningful KPIs, such as savings indicators for measuring the total savings of a sustainability initiative or the Supplier Environmental Sustainability Index is therefore often planned. These too are partly or completely dependent on external data and require the most comprehensive exchange of data with partners and supply chains possible.

57% of respondents plan a comprehensive exchange of data or full integration with partners and the supply chain.

Conclusion

The topic of sustainability already has a strong influence on enterprises in Germany, Austria, and Switzerland, and it will continue to grow thanks to increasing demands from customers, employees, politicians, and investors. In IDC's view, corporate success in pursuing sustainability also hinges on a well-considered sustainable deployment of technology. This requires IT to not only be inherently sustainable, but also to be able to support and enable sustainability measures. Although enterprises grasp the rudiments of greening of and by IT, their deployment of it needs to be expanded significantly.

It is therefore essential that relevant IT initiatives be implemented that promote sustainability, including the use of more sustainable hardware and sustainable software development and architecture. The deployment of modern technologies such as the cloud, IoT, and big data can secure the necessary transparency both within enterprises and across value chains as the basis for further initiatives. They therefore belong on corporate planning agendas. To make the most of these initiatives, enterprises must ensure comprehensive and efficient data communication with partners in the supply chains, and in IDC's view, they must prepare the ground for this now in order to take part and benefit from initiatives as soon as possible.

Focusing an organization on sustainability is a long-term process that enterprises should get down to without delay. Irrespective of their current situation, they should take the first steps now and push ahead with ongoing initiatives. Organizations that have successfully converged their digital and sustainable transformation will benefit from more efficient processes, improved satisfaction of stakeholder requirements, the securing of compliance, and increased competitiveness.

Recommendations for Users

Interviewees were asked to share their best practices relating to sustainability with other decision makers and to give recommendations on how to best approach the topic of sustainability. Here are some of the unedited answers we received. We intentionally left them uncommented in the interest of authenticity.

"It is important to get all stakeholders on board and to ensure the cooperation of all concerned."

"Competent employees with the right expertise play a key role."

"I think recycling is one of the priorities companies should consider because we need to recycle more. Minimizing waste is a must. Goods and articles need to be recycled to produce new products."

"Don't greenwash, but do things that really promote sustainability. Sooner or later, you will be rumbled if you do the first."

"Achieving more sustainability is not a short-term project, the goals set should be pursued in the long term."

"Everything hinges on supply chains, so they need to be traceable and transparent, so that targets can also be measured efficiently."

"The possibility of being able to implement goals swiftly is important, especially in the beginning as success in the short term motivates."

"Greater sustainability can be achieved through digitalization and the development and use of modern technologies."

"Sustainability in production and delivery, especially with regard to minimizing waste and emissions and sustainable packaging."

"You need to involve and take into account your employees to a greater extent. A lot hinges on motivated, committed employees."

Methodology

In December 2021, IDC conducted a primary market survey to gain insights into current implementation plans, challenges and success factors revolving around sustainability. Backed by a structured questionnaire, IDC interviewed 300 enterprises with more than 50 employees across industries in Germany, Austria, and Switzerland. All the enterprises surveyed have already implemented sustainability initiatives and solutions or are planning to do so.

The following information was supplied by IGEL Technology.

IGEL TECHNOLOGY

Company Profile

www.igel.com

Company Details

For more than two decades, IGEL has been developing solutions that are now used by over 17,000 customers worldwide on millions of employee terminals. Based on seamless access to virtual desktop infrastructures (VDI) and more recently, on desktop-as-a-service (DaaS) environments, IGEL solutions are changing the way enterprises shape the digital workplaces of the future. IGEL thus enables employees to work anywhere, on any device, and in any cloud.

Positioning Products in the Context of Sustainability

Sustainable end user computing means using terminal equipment longer instead of replacing it all the time. Reusing existing equipment not only saves investments in new hardware, but also reduces the Scope 3 supply chain carbon footprint by 60%. Remote work enabled by thin clients reduces Scope 3 commuter emissions by an average of 40%. Thin clients with IGEL OS improve energy efficiency by 22 to 49%, depending on the solution and approach.

Portfolio Presentation Through the Lens of Sustainability

IGEL OS
A highly secure, specially developed endpoint operating system that can be installed on any x86 device. With more than 100 integrated technologies, IGEL OS provides easy and secure access to hosted desktops, applications and web-based applications.

IGEL Universal Management Suite
The IGEL management platform is capable of managing tens of thousands of endpoints and provides simple policy and security settings that can be provided on IGEL OS-enabled endpoints.

IGEL Cloud Gateway
Secure access between IGEL OS and IGEL management so that endpoints can be controlled remotely and securely with IGEL OS via the internet.

Sustainability references

- Ritter Sport
- Standard Life Assurance
- Signal Iduna

Interview

with Niels Keunecke, Chief Revenue Officer EMEA, IGEL Technology

IDC: Until a couple of years ago, enterprises regarded sustainability as a "nice-to-have", a view that many of them have backtracked on completely. To what extent have you taken sustainability into account in your products and services?

Niels Keunecke: IGEL OS lets customers continue to use their current x86-based mobile and stationary terminal devices regardless of their brand.

Studies and long-term tests with our partners and customers have shown that IGEL OS requires significantly less resources while delivering the same or better performance and energy-efficient operation. Furthermore, by prolonging the life cycle of existing terminal equipment, unnecessary e-waste is avoided.

Replacing existing equipment with thin clients at a later date can generate more savings.

IDC: In your experience of talking to customers about sustainability, what are the main challenges in implementing sustainability initiatives?

Niels Keunecke: Customers and partners give us the impression that they regard sustainability as a must-have and also prioritize it as such provided it doesn't compromise the user experience. We help our customers and partners to make sure of this in advance via appropriate services and cooperation between our customers and our pre-sales team. Use cases known to us and in planning are simulated with selected user groups. The results are compiled and serve as a basis for decisions on how to deploy the solution.

IDC: As process digitalization continues, the energy needs and consequently the carbon footprint of enterprises also increase. In your opinion, how can information technology help make enterprises more sustainable?

Niels Keunecke: Abreast of increasing digitalization, for years now, information technology has been trying to deliver more services while keeping energy consumption at an unchanged level. Taking advantage of central computing resources such as Azure, AWS, Google, etc. enables you to use energy more efficiently and tailor it to applications. Enterprises no longer need data centers of their own. Via their existing terminal devices, users simply access these cloud computing resources in the required scale. In our discussions with enterprises across the board, we regard this as the preferred way of best achieving carbon neutrality.

IDC: Sustainability will continue to be a hot topic in the coming years. How will you work with your customers in the future to achieve greater sustainability?

Niels Keunecke: IGEL is already cooperating with customers and partners to create solutions that focus on sustainability. In addition to extending the life cycle of the existing equipment, we are focusing on how to best reduce its carbon footprint and energy consumption during operation and on only using energy on demand. We have a lot of ideas and approaches on how do this and we will be presenting them at the upcoming launch of IGEL OS12.

ABOUT IDC

IDC is the world's leading provider of market information, consultancy services and events in the information technology and telecommunications field. IDC analyzes and forecasts technological and industry-related trends and potentials, thus providing clients with a basis for judicious planning of the business strategies and IT purchasing. Drawing on its network of more than 1,100 analysts in 110 or so countries with global, regional and local experience, IDC can offer clients comprehensive research findings on various segments of the IT, TC and consumer markets. Managers and IT professionals have been placing their trust in IDC for decision-making for more than 50 years.

You can find more information on our websites at www.idc.com and www.idc.de.

COPYRIGHT NOTICE