IT INDUSTRY OUTLOOK 2024: BENELUX

INTRODUCTION

Strategy and tactics. As we enter 2024, those two main ingredients to success will feature heavily on the minds of business owners, tech workers and the industry at large. On the strategy side, you have the enormity of cybersecurity issues and the meteoric rise of generative AI to consider with almost every decision. Tactically speaking, it's more about the little things: the refinements, new takes on old initiatives, and other decisions aimed at running a better business or fostering a fruitful career in technology.

CompTIA's IT Industry Outlook 2024 explores various aspects of the strategic and tactical sides of the technology industry, workplace and society today. No doubt, it's been a challenging time globally. World events in Ukraine and the Middle East, in addition to economic and social challenges at home, are undoubtedly influencing decisions being made at the organizational level in the U.S. and abroad. Fears about cyberattacks, the business struggles wrought by tech skills gaps and talent shortages, and uncertainty about where something as explosive as AI technology will lead us will continue to weigh on minds in the year ahead.
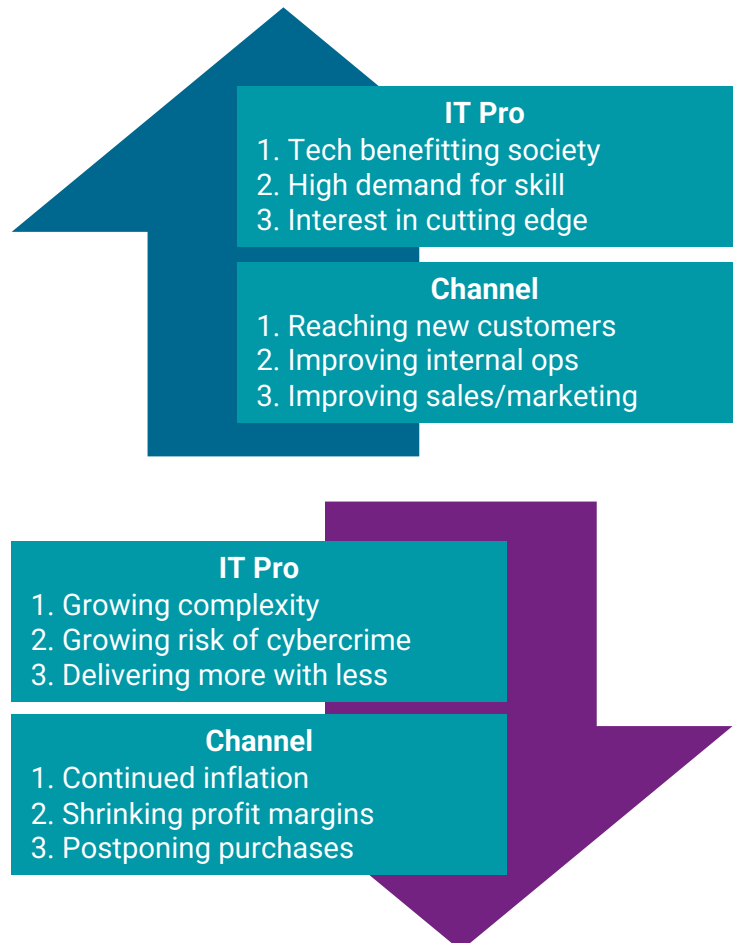
But as this report details, there is much to be optimistic about, in spite and because of these challenges. Cybersecurity planning and AI deciphering might seem headache-inducing, but both promise tremendous opportunities across areas ranging from new and updated job roles to productivity and innovation gains for individuals and organizations. Companies and professionals that jump to the front on both these vectors will set themselves up for growth and a successful future path. Other opportunities are coming from attention to details: businesses in the IT channel embracing marketing sophistication, employers doubling down on a multigenerational workforce, or IT departments finally cracking the code for digital transformation's real promise: productivity.

As we enter 2024, matters both big and small will take center stage. Companies and individuals in the technology arena will have to decide for themselves which focus areas make most sense for the goals they are trying to accomplish, whether that's revenue growth, professional development, product innovation or more. The tools and the knowledge, however, are there for the taking.

Before diving into the top trends for 2024, it's always good to a get a read on how respondents are feeling generally about the year ahead.

IT professionals report a mainly rosy outlook. A third of them say they are very optimistic about their career paths, their company's trajectory and the broader technology industry, while 4 in 10 take a slightly more tempered view and report being fairly optimistic about all three. Another 19% have mixed feelings, while just 7% acknowledge more negative concerns about the upcoming year's prospects.

On the IT channel side, the main consideration when it comes to gauging sentiment is how their business is going to fare in the year ahead. Will it grow? Meet profitability goals? Acquire new customers? Most take a positive view of their prospects, with a net 68% saying they feel very good or pretty good about business in 2024. About a quarter (23%) have mixed feelings, while just 8% say they are uneasy.

IT Pro
1. Tech benefitting society
2. High demand for skill
3. Interest in cutting edge

Channel
1. Reaching new customers
2. Improving internal ops
3. Improving sales/marketing

IT Pro
1. Growing complexity
2. Growing risk of cybercrime
3. Delivering more with less

Channel
1. Continued inflation
2. Shrinking profit margins
3. Postponing purchases

Source: CompTIA IT Industry Outlook 2024 survey
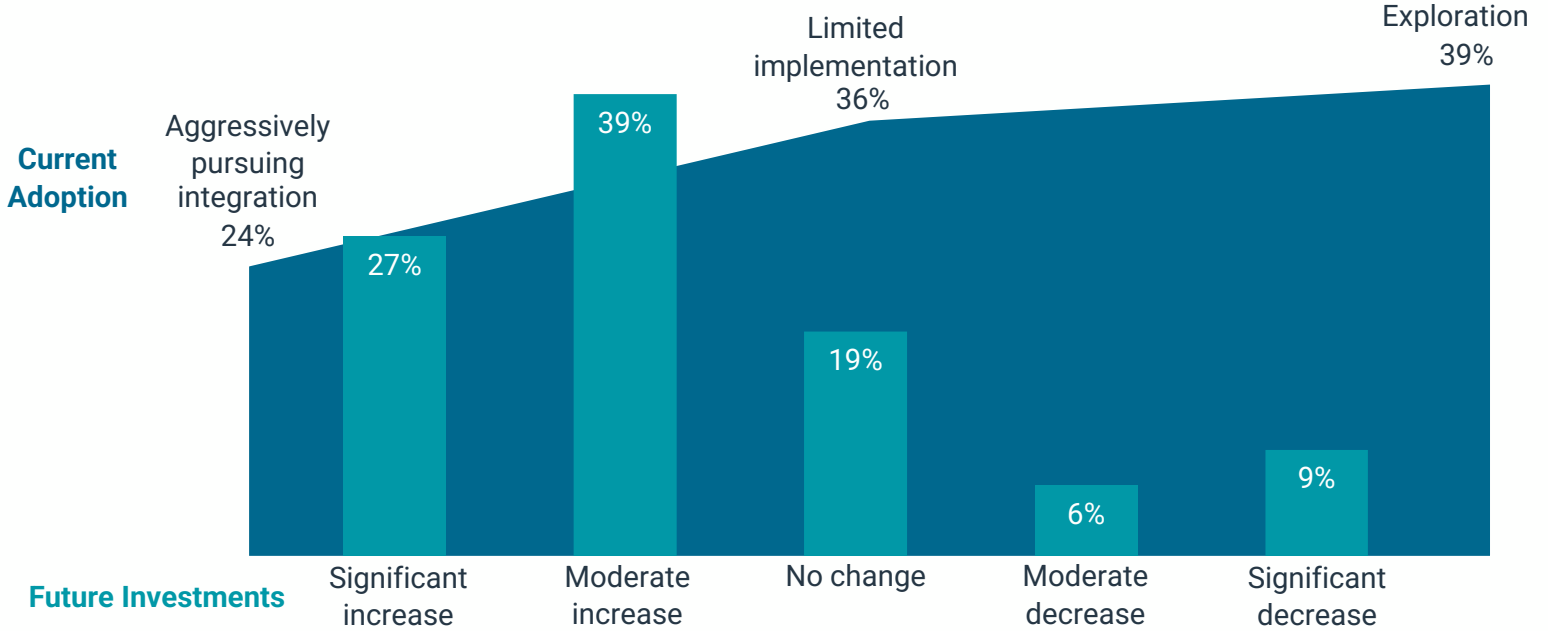n=132 DACH tech professionals | n=127 DACH tech industry professionals

AI HYPE FADES, BUT WORFLOWS CONTINUE EVOLVING

It's hard to believe CompTIA's IT Industry Outlook 2023 didn't mention generative AI—that report was released the week before ChatGPT launched. In the time since then, hardly a day has passed without a news story speculating on the changes AI will bring or announcing even more capable products and features. The hype cycle has been as intense as any trend in recent memory, and for good reason; large language model (LLM) algorithms are producing output that would have been in the realm of science fiction just a few years ago and raising questions about the future of work. As with all technology trends, the initial hype around generative AI will likely wane in 2024 for a variety of reasons. The first products, while amazing, are not standalone business solutions outside a few select cases. The data needed to properly train an LLM is in short supply at most organizations. The challenges in dealing with probabilistic output are just beginning to surface. Most companies will have to take a step back to build the proper prerequisites for modern AI operations, but that doesn't mean that exploration and pilot programs will grind to a halt. Along with new standalone products, a wide range of business applications will begin to incorporate AI as a feature. As this happens, companies will address AI skill gaps among the workers using these applications. The end result will be workflow evolution, using AI to handle routine tasks or accelerate automation while reimagining the roles and responsibilities of employees. This early stage of workflow evolution may not make as many headlines as the introduction of generative AI, but it will likely set the stage for a full workplace revolution in the years and decades to come. History shows that new technology can have far-reaching effects, and the potential of AI layered on top of modern digital operations is likely to drive significant economic disruption.

TECH PROVIDERS USE AI TO RUN BETTER BUSINESSES

While the AI market is indeed one huge hype-a-palooza today, there is almost certainly going to be ripe revenue opportunity for MSPs and other tech channel providers to cash in. That said, most would agree that, today, the average channel firm is still in the tinkering and discovery phase with generative AI—at least when it comes to actively selling solutions to customers, making vendor selections, assessing skills, etc. While that work is revving up, the more immediate benefits will come from applying new AI capabilities internally to enable a better-run, more efficient business. Automation aims have always been a part of an MSP's quest, to be sure, but today's AI will only accelerate and improve those efforts. Consider some of the use cases: AI-powered chatbots and virtual assistants to speed and bolster customer service; AI algorithms to analyze customer data and predict buying patterns for more effective sales and marketing campaigns; AI tools to automate repetitive tasks and optimize workflows and as a result free up human resources to pursue more strategic goals. These are all benefits companies are starting to see today and that hold great potential for the future. Even those channel firms that choose not to sell AI solutions as part of their business can nonetheless boost profitability and reap positives by deploying AI functionality across their internal operations. And lastly, the fear that AI's automation capabilities will replace humans might not be as scary as is projected. In a workforce study this year by CompTIA, two thirds of MSP respondents said that use of AI by their company would either result in no change to their staffing levels or a net gain.
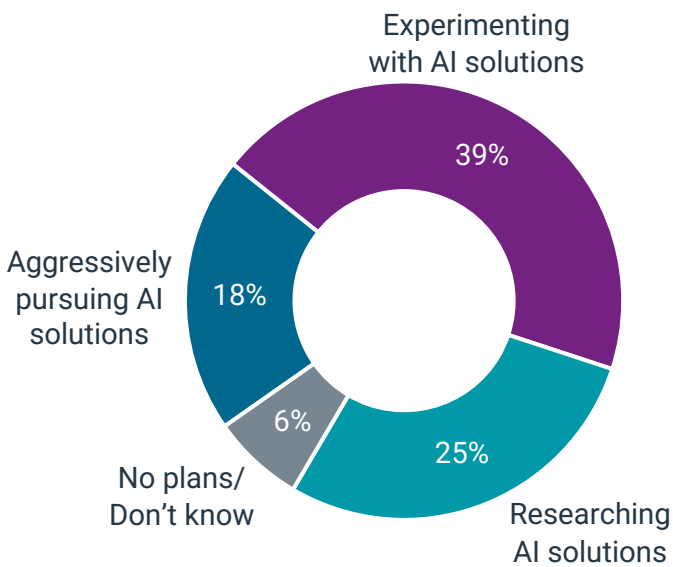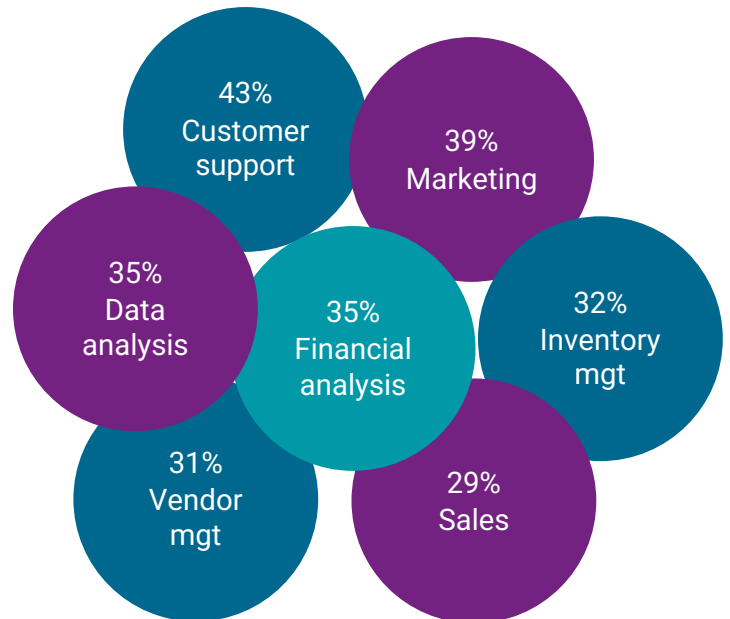
Current AI Efforts and Future Investment

Current Adoption

Aggressively pursuing integration
24%

Limited implementation
36%

Exploration
39%

Future Investments

Significant increase	Moderate increase	No change	Moderate decrease	Significant decrease	
27%	39%	19%	6%	9%	

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals

Channel Firms Explore AI Externally and Internally

Current Portfolio Activity

Experimenting with AI solutions
39%

Aggressively pursuing AI solutions
18%

No plans/ Don't know
6%

Researching AI solutions
25%

Current Internal Integration

43% Customer support

39% Marketing

35% Data analysis

35% Financial analysis

32% Inventory mgt

31% Vendor mgt

29% Sales

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech industry professionals

GOVERNANCE BECOMES A FOCAL POINT FOR CYBERSECURITY AND DATA OPERATIONS

There are four primary disciplines involved in IT operations. Infrastructure and software development are the most well-established, with cybersecurity and data as the newer kids on the block. Across all four disciplines, the primary focus tends to be on implementation details. As technology becomes more strategic, though, there is a growing demand for governance to ensure that implementation is following best practices. The more mature IT disciplines have governance frameworks that have been defined, such as the Information Technology Infrastructure Library (ITIL) standard for IT services and support, the enterprise architecture framework set by The Open Group Architectural Framework (TOGAF) for infrastructure and DevOps practices for software development. The fields of cybersecurity and data operations have some examples of governance frameworks that target specific areas or offer early outlines, such as Service Organization Control Type 2 (SOC 2), Health Insurance Portability and Accountability Act (HIPAA) regulations or the Data Governance Institute (DGI) framework. The next stages of progress will be to develop standards that are more comprehensive, then drive widespread adoption. Proper governance serves several purposes. First, it establishes an operational baseline that can be used to get different business units on the same page. Cross-functional communication is becoming a critical part of digital strategy, and a common language is a necessary part of that. Governance also helps ensure compliance with government regulations; highly regulated industries such as finance or healthcare have dealt with these issues for years, and now companies in nearly every industry need to pay attention as new laws are passed. Finally, governance defines metrics for successful operations. With technology shifting from a cost center activity to a strategic driver, organizations need a structure for measuring the potential impact of technology investments. An emphasis on governance in the dynamic areas of cybersecurity and data will help align technology initiatives with organizational objectives.

BEYOND-THE-BASICS CYBERSECURITY BECOMES A CHANNEL SKILLS IMPERATIVE
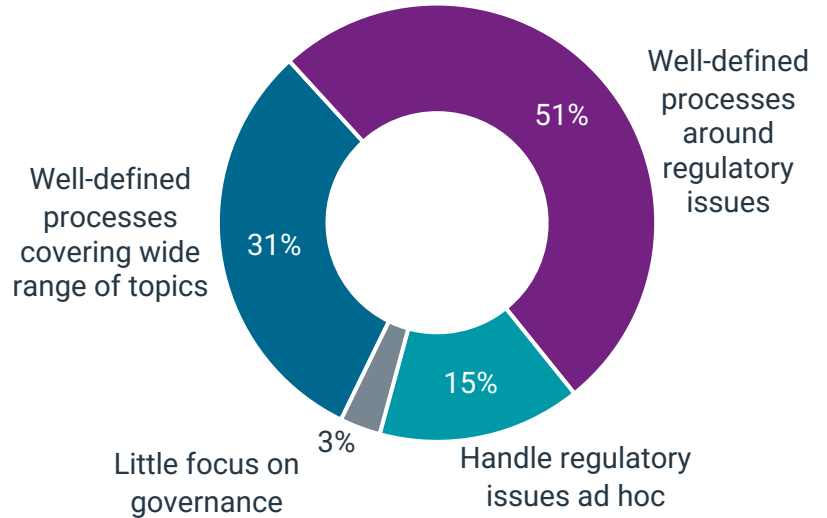
AI might be grabbing the attention these days, but the real center of gravity—and gravitas—for tech providers is cybersecurity. Yes, basic cybersecurity services have long been part of many tech engagements, typically with providers offering antivirus, firewall, patch management and other fundamentals needed to help protect devices and networks. But those table stakes have often been where the cybersecurity discussion between providers and customers has ended. Today, that's not enough. The increasingly sophisticated threat landscape plus the high-wire act of managing IT across cloud and on-premises environments is pushing tech providers to stretch far beyond those basics. To remain competitive today, companies must prioritize cybersecurity fluency across their organizations. At a technical level, that means organizations need to deepen their skills to, among other things, support a zero trust approach to data protection and privacy, while providing core and adjacent services such as risk analysis and cyber insurance, respectively. Operationally, this means addressing cybersecurity skills gaps with the right mix of hiring, training and partnering activities, while keeping abreast of the latest and greatest in cybersecurity products, best practices and user education strategies. It's a lot, to be sure. The skills aspect is particularly acute. CompTIA's *Cyberseek* tool shows that there were over 660,000 cybersecurity-related job openings in the United States between May 2022 and April 2023, representing a 28% increase from the same time period in 2020. Meanwhile, CompTIA's *State of Cybersecurity 2024* study cited internal skills gaps as the top challenge to end user organization's cybersecurity initiatives. Alas, fluency is not just for the technical on staff. Everyone from sales teams to internal operations should be able to speak cybersecurity as it pertains to their in-house protection, customer needs and business goals. With MSPs themselves saying demand for cybersecurity services is their No. 1 customer ask this year, companies in the tech channel ignore the discipline at their peril.

Cybersecurity Changes Drive Demand for Governance

Top 3 Cybersecurity Priorities for 2024

1 Greater focus on employee education

2 Determining proper response to incidents

3 Creation of dedicated resources/team

Current Approach to Governance

- 51% Well-defined processes around regulatory issues
- 31% Well-defined processes covering wide range of topics
- 15% Handle regulatory issues ad hoc
- 3% Little focus on governance

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals

Challenges in Building Cybersecurity Skills

A variety of factors make it difficult for channel firms to find and develop cybersecurity skills

57% Working to improve internal cybersecurity

44% Trying to grow portfolio of cybersecurity offerings

37% New to cybersecurity market and building expertise

30% Difficulty finding cybersecurity training

10% Facing competitive pressure in the market

Source: CompTIA IT Industry Outlook 2024 survey | n=63 Benelux tech industry professionals

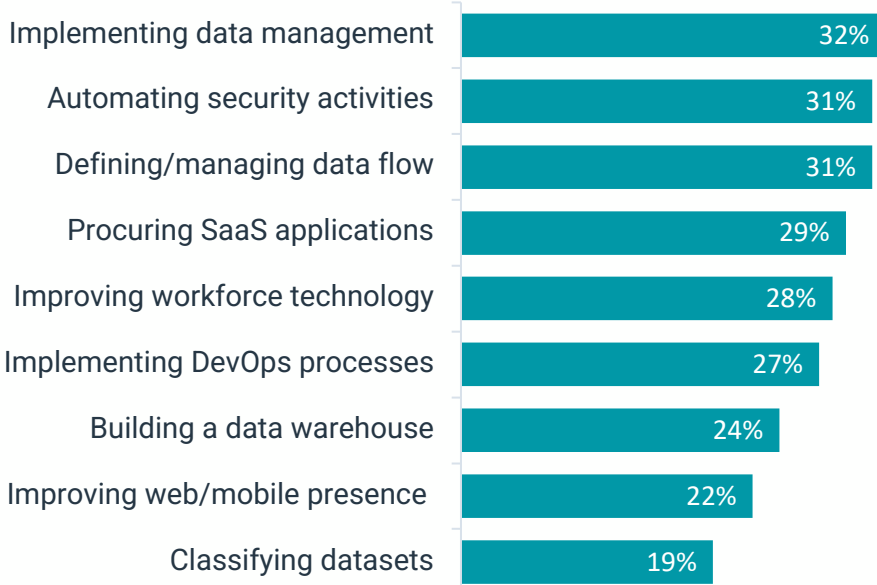## CLOUD ARCHITECTURE ACCELERATES SOLUTION COMPLEXITY

One hallmark of modern technology is that solutions are rapidly growing in complexity. For decades, most of the energy and investment in building out a technology footprint went into establishing foundational capability. This meant increasing the compute power that was available, which went hand in hand with performance gains driven by Moore's Law, and expanding the accessibility of computing resources, which leapt forward with home broadband and advanced cellular networks. During this time, applications placed on this foundation were relatively simple standalone solutions, especially outside the largest enterprises. The introduction of cloud computing, along with mobile devices, marked a shift in this model. Nearly every organization now had as much computing power as it desired, and that power could be tapped from nearly any location. Extra effort toward improving the foundation had diminishing returns, so energy started going into applications. Rather than being content with packaged software, companies started hiring their own software developers to customize and automate software installed on-prem or procured in the cloud. Data became an integral input to solutions, with feedback loops improving the quality of the output. Most emerging technologies, from internet of things to blockchain to all the different variations of AI, are typically parts of a comprehensive solution instead of being individual products. With the lion's share of the focus being placed on building these intricate solutions, it can be easy to overlook the importance of the foundation. Although growth in performance or accessibility may not be a primary goal, properly implementing and managing a cloud architecture is a prerequisite to having a suite of tailored solutions. Most organizations have moved past the first stage of cloud adoption, where pilot programs or selected migrations helped establish a working knowledge of cloud operations. The second stage of adoption will involve more depth, as companies build best practices around multi-cloud systems, financial operations (FinOps) and resilient architecture. As this foundation grows stronger, the ability to craft custom applications will grow broader.

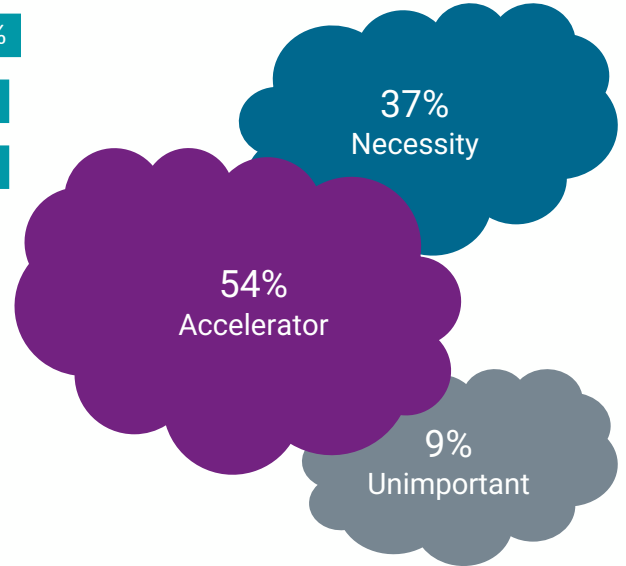## IT DISTRIBUTORS BURNISH ROLE AS ONLINE MARKETPLACE FOR B2B

We've all seen online marketplaces and e-commerce platforms run by Google, AWS, Microsoft, etc., flourish as one-stop-shopping bazaars for technology products and services (and everything else). Vendors can easily park their wares on these platforms for customers to one-click order or use as a gateway to the vendor's own e-commerce site. Either way, the transactions are essentially direct in nature. The one-directional ease and ubiquity of this procurement model understandably unsettles many third-party channel firms. Most MSPs and solution providers simply can't go toe-to-toe against these digital shopping malls for basic transactions. Nor can they replicate the model for themselves in a cost-effective manner—unless, of course, they have a partner with deeper pockets. That's where IT distributors step in. Distributors, long the hardware fulfillment middle piece in the technology go-to-market chain, have been evolving their own business models to meet the cloud wave of computing. A key piece of that evolution has been their embrace of dynamic digital marketplaces and e-commerce platforms. Just as the Googles and Amazons of the world have done for the consumer market, the likes of Ingram Micro and newer, cloud-only companies such as Pax8 are using their ample resources, scale and tech aggregator status to build marketplaces that serve channel firms (and vendors) in a variety of ways. Use of these digital engines is on the rise among MSPs, solution providers and others building complex multivendor cloud-based offerings for their customers. Among the benefits? The capacity to mix and match multivendor products, tools and software subscriptions into a unified solution for customers. The right to choose who handles management of customer billing and payments. And finally, the ability to use distribution's digital platform to white label their own e-commerce site. More exciting are some of the newer capabilities that involve AI and data analytics and allow channel firms to track buying patterns, anticipate demand and predict inventory needs in real time. There are downsides and pitfalls with this approach, to be sure, but the availability of these solutions helps to level the playing field for smaller tech companies.

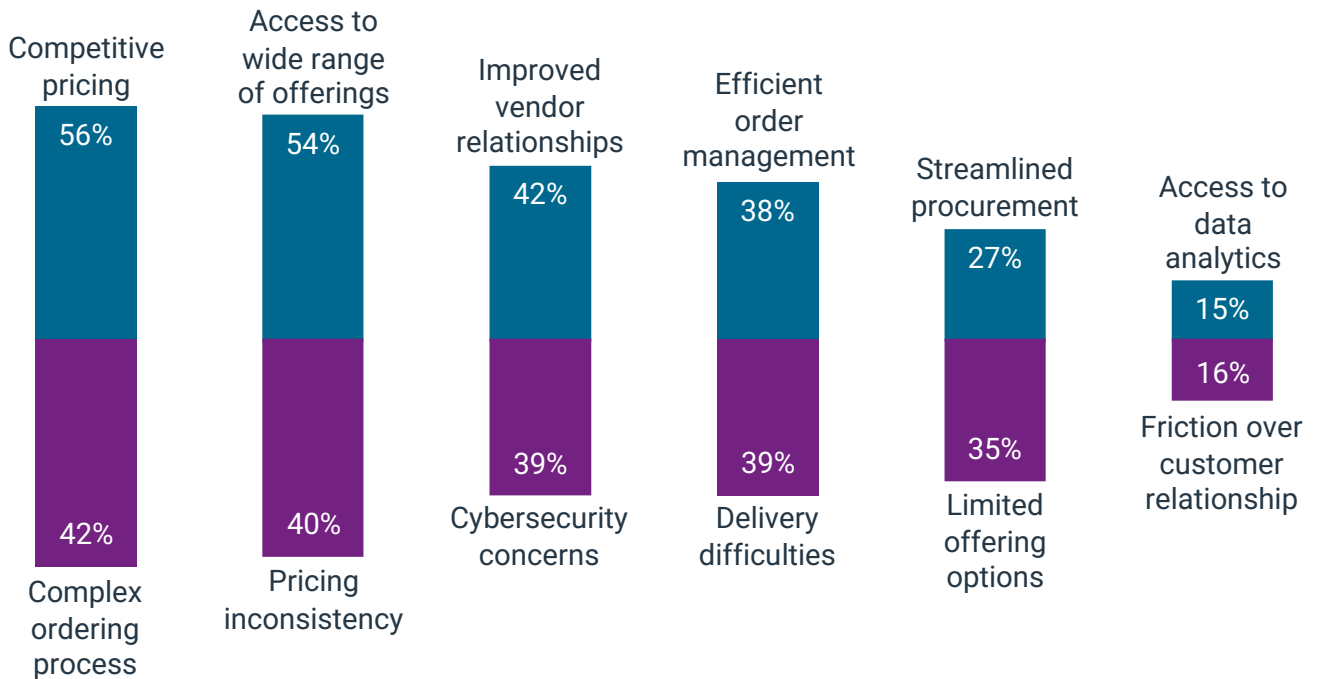# Digital Activities Require Cloud Foundation

Current High-priority Activities

Activity	Percentage
Implementing data management	32%
Automating security activities	31%
Defining/managing data flow	31%
Procuring SaaS applications	29%
Improving workforce technology	28%
Implementing DevOps processes	27%
Building a data warehouse	24%
Improving web/mobile presence	22%
Classifying datasets	19%

Importance of Cloud Systems

37% Necessity

54% Accelerator

9% Unimportant

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals

Benefits and Challenges of Using Distributors

Benefit	%	Challenge	%
Competitive pricing	56%	Complex ordering process	42%
Access to wide range of offerings	54%	Pricing inconsistency	40%
Improved vendor relationships	42%	Cybersecurity concerns	39%
Efficient order management	38%	Delivery difficulties	39%
Streamlined procurement	27%	Limited offering options	35%
Access to data analytics	15%	Friction over customer relationship	16%

Source: CompTIA IT Industry Outlook 2024 survey | n=79 Benelux tech industry professionals

MARKETING HAS ITS MOMENT AS AN IT BUSINESS DIFFERENTIATOR

Historically, marketing has played a backstage role in the business plans of most IT channel firms. Technical acumen is always the star, sales skills comprise the supporting cast and marketing/branding fill out the roles of extras. It's ironic, given that the role of marketing is literally to promote the face of the company to the world (aka, customers). Slowly, however, the channel's attention to marketing is changing for the better. Companies are allocating more dedicated budget and other resources to marketing activities, hiring full-time marketing professionals and generally demonstrating far more awareness about the significance of branding. Social media, influencer clout, content marketing, subscription models, decreased reliance on vendor and product as the brand and development of their own IP all factor into this awakening. As does the fact that today's universe of technology services providers isn't monolithic, but rather a multitude of companies and business models that look very different from the nearly uniform hardware resellers of yesterday. As a result, marketing can't be one-size-fits-all. What works for a small-sized MSP in the Midwest will fail for an IT consultant looking to sell digital transformation services to large corporations, for example. Other pressures on marketing include a crowded landscape. In today's cloud world, customers have myriad tech-buying options, including online marketplaces that easily grab attention but often overwhelm with choice. Firms that focus on marketing have a better chance of capturing that customer's eye. There's a cautionary note, however: Attracting a customer and closing the sale are not one in the same. So as exciting as it is to see marketing starting to get its moment, it's important to underscore that it can't be done in a silo. The next stage of effective marketing involves tight integration with sales efforts. Too often, this is not happening. For a simple example, consider a business development team that secures stacks of customer leads at an industry event only to fail to collaborate with the sales team for prompt follow-up post-event. That's money spent for little return. In the year ahead, the most effective channel firms will learn that marketing needs to grace the same stage as the sales players for optimal results.
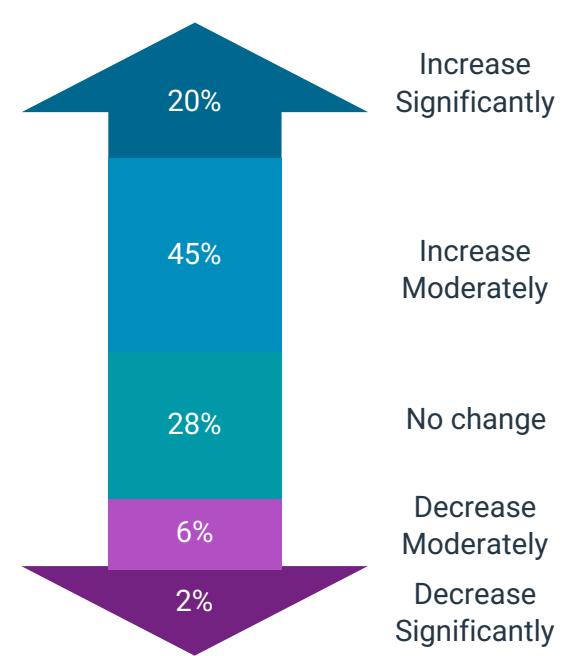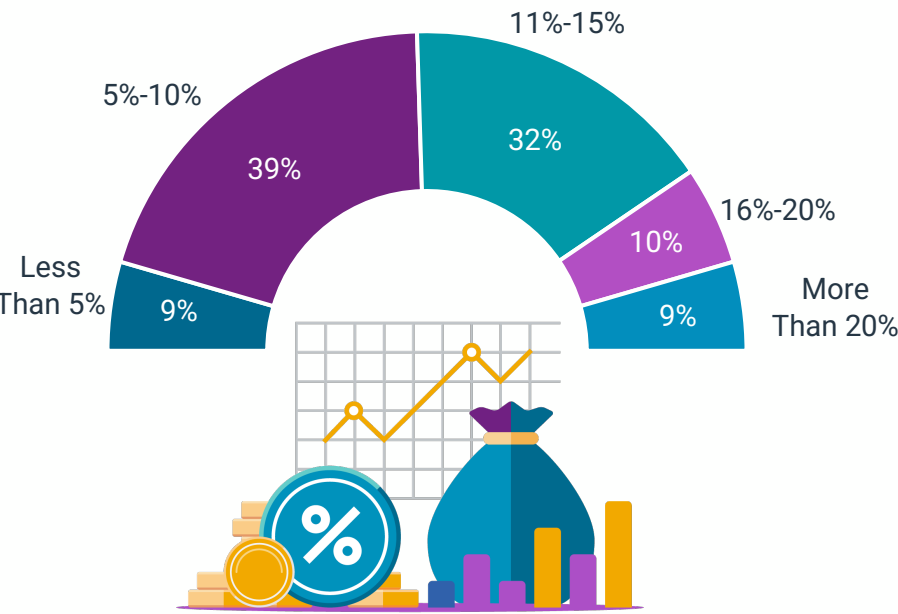
PRODUCTIVITY IS THE DRIVER FOR DIGITAL TRANSFORMATION

Digital transformation has been one of the biggest buzzwords of the past five years, which is somewhat remarkable since there seems to be no consensus definition of what digital transformation is. CompTIA has defined five elements of digital transformation: Evaluation and adoption, cloud-first infrastructure, software-defined processes, data-driven decisions and cybersecurity-aware operations. These five elements help describe what is happening at an organizational level, which is where most digital transformation discussions tend to be focused. However, there is an underlying theme behind all these initiatives that will become more prominent over the next twelve months. Cloud infrastructure, advanced software and data processes are only as good as the people using the technology. At the end of the day, digital transformation efforts are geared toward building a more productive workforce. Even trends like automation or AI, which pose potential threats to certain tasks or job roles, are ultimately productivity enhancers. If a company finds that a workflow enabled by AI doubles the productivity of a worker, then actually adding workers can multiply the effect of the AI investment. This emphasis on productivity suggests a hidden aspect of digital transformation. Along with any implementation of new technology, there must be a matching strategy around building skills. The notion of transformation does not just apply to the technology footprint or the solution stack; it also applies to skillsets. In some cases, emerging technologies may create new job roles, but the more common situation is for existing job roles to evolve. Network administrators need to add cloud skills, software developers need to become familiar with AI algorithms and cybersecurity specialists need to leverage automation. Digital transformation will continue to be a far-reaching aspiration for years to come, and the goal of enhancing productivity will provide more clarity in direction and more metrics for success.
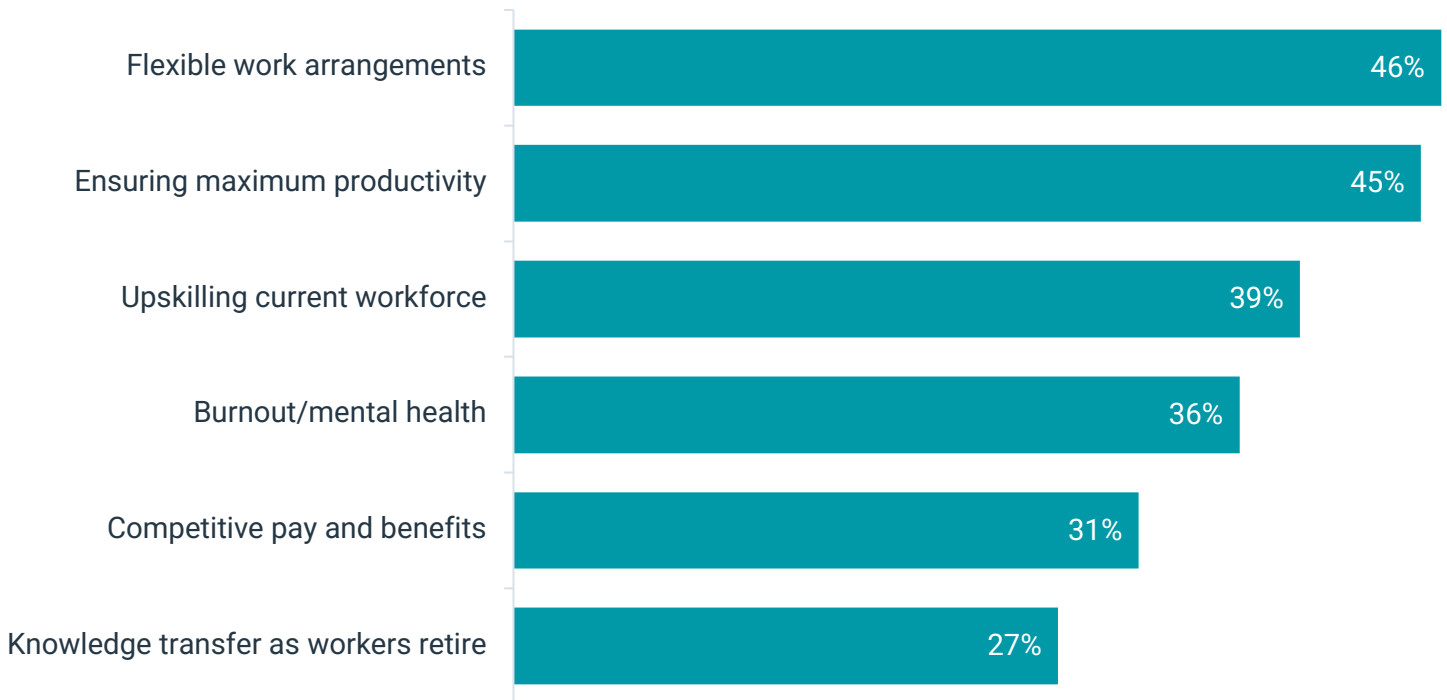
Channel Firms Eye Marketing Budgets

Percentage of Revenue Allocated to Marketing

- 11%-15%: 32%
- 5%-10%: 39%
- 16%-20%: 10%
- Less Than 5%: 9%
- More Than 20%: 9%

Planned Change to Marketing Spend

- Increase Significantly: 20%
- Increase Moderately: 45%
- No change: 28%
- Decrease Moderately: 6%
- Decrease Significantly: 2%

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech industry professionals

Productivity Surfaces as Top Workforce Priority

- Flexible work arrangements: 46%
- Ensuring maximum productivity: 45%
- Upskilling current workforce: 39%
- Burnout/mental health: 36%
- Competitive pay and benefits: 31%
- Knowledge transfer as workers retire: 27%

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals

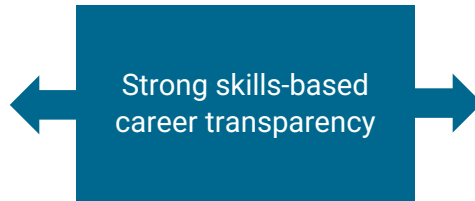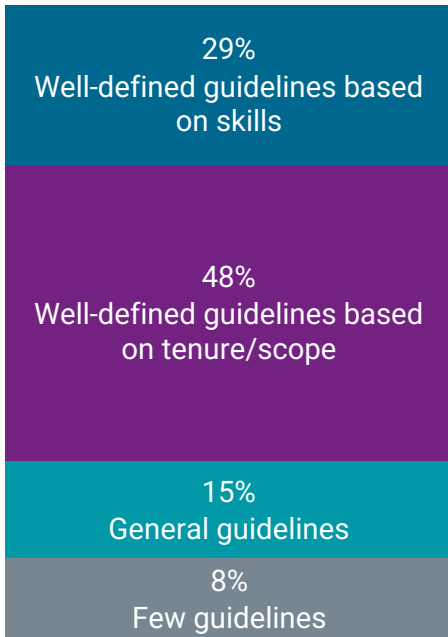## ORGANIZATIONS PRACTICE SKILLS-BASED CAREER TRANSPARENCY

Best practices around hiring have been a hot topic for several years now. The available supply of technology skills has not been able to keep up with explosive demand, and that was before remote work added an extra degree of difficulty to the process. HR departments and hiring managers have moved toward a skills-based hiring approach, where individual skills are clearly defined for job roles and candidates are evaluated on their expertise in those skills. There are definitely some hurdles to that approach, such as building a true understanding of the skills landscape rather than simply attaching a list of hot skills to every job post, but there are also extensive benefits. Companies are finding that they can relax degree requirements in favor of skill verification, using other tools like certifications or boot camps to provide validation. This allows for a broader, more diverse pool of candidates. Getting someone in the door is only the first step, though. Retention is also a major challenge in such a tight labor economy. As companies search for ways to keep the people they already have, extending the skills-based approach from hiring into career development is the next natural step. Managing employee expectations has always been a challenge, and recent changes in workforce dynamics have made that challenge even more difficult. In the year to come, more companies will begin practicing career transparency, ensuring that personnel managers have regular conversations that clearly outline the pathways to promotion or job mobility. Integrating skills into that discussion will provide consistency, eliminating the mandate of tenure or the ambiguity of project assignments. With a skills-based approach, employees can clearly see what the requirements are for the next level and match that against their current skillset, giving them achievable steps for improvement. The needs of the business will still play a role, but there will be less mystery to the process. Of course, a skills-based approach for either hiring or development suggests a range of additional activity, from building a skills library to offering options for training, but as the demands grow for both technical expertise and workforce stability, the effort will reap rewards.

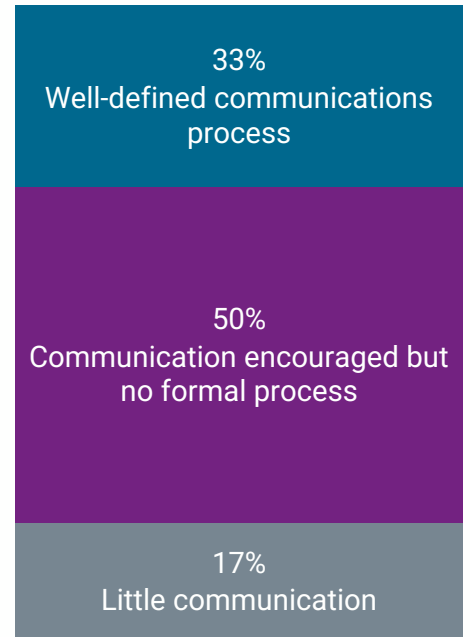## COMPANIES PURSUE EVERY AGE COHORT FOR STAFF, CUSTOMERS

When we talk about skills-based hiring and career development, we are really talking about people. Job candidates, current employees and outside consultants are all in the mix. With people driving corporate success and companies struggling with the overwhelming need for tech talent, organizations would be wise to consider every conceivable age and experience demographic as fair game. A multigenerational approach to the workplace is often talked about from a theoretical benefits standpoint, but the plus side is very real for those companies that take it seriously. Today's workforce needs tech workers in a wide array of disciplines in all industries. Institutional knowledge matters, as do durable skills in a tech job environment that has outgrown its station as a behind-the-curtains cost center that does not interact with customers or play a role in strategy. And while companies tend to look toward early- or mid-career candidates fill open positions, late-career employees hold as much value as those just starting out. Likewise, this same reminder goes for the tech industry and its efforts to target certain consumers. It's evident that Silicon Valley devotes most of its R&D and advertising dollars in the almost single-minded pursuit of all things youth. Yet tech titans are overlooking a demographic cash cow when they focus disproportionately on younger buyers. The 50-year-old-plus cohort has money to spend and is far more tech-savvy than the stereotypes depict. Beyond this group, there lies a ripe market catering to the tech needs of a ballooning generation of retirees and seniors. The so-dubbed "longevity economy" is fueled by 1.6 billion people around the world who will be 65 or older by the year 2050. This group sports a vast array of needs across healthcare, transportation, etc. that would be well-served by tech innovation. It might not be as glamorous as developing the latest trendy app, but these pursuits are likely more lucrative in the long run and certainly more meaningful. Whether it's filling the need for tech talent or innovating the latest tech product, an openness to multigenerational thinking makes good business sense.

Skills-based Career Transparency On the Rise

Guidelines for Career Growth

29%
Well-defined guidelines based on skills

48%
Well-defined guidelines based on tenure/scope

15%
General guidelines

8%
Few guidelines

Strong skills-based career transparency

Career Communications

33%
Well-defined communications process

50%
Communication encouraged but no formal process

17%
Little communication

Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals

Workforce Issues and Selling Patterns Cross Generations

The majority of companies surveyed see realistic career expectations, competency in digital skills and desire for remote work across multiple generational cohorts

Channel firm estimates of customer age

- 25-34 years **24%**
- 20-24 years **6%**
- 45+ years **22%**
- 35-44 years **48%**
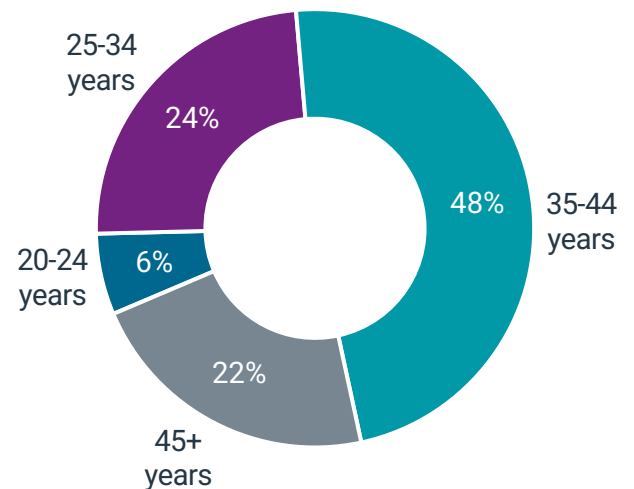
Source: CompTIA IT Industry Outlook 2024 survey | n=127 Benelux tech professionals
n=127 Benelux tech industry professionals

METHODOLOGY

ABOUT THIS REPORT

The quantitative study within the Benelux region consisted of two online surveys fielded to technology professionals and technology industry professionals during October 2023. A total of 127 professionals participated in the technology professional survey, yielding an overall margin of sampling error at 95% confidence of +/- 8.9 percentage points. A total of 127 professionals participated in the technology industry professional survey, yielding an overall margin of sampling error at 95% confidence of +/- 8.9 percentage points. Sampling error is larger for subgroups of the data.

As with any survey, sampling error is only one source of possible error. While non-sampling error cannot be accurately calculated, precautionary steps were taken in all phases of the survey design, collection and processing of the data to minimize its influence.

CompTIA is responsible for all content and analysis. Any questions regarding the study should be directed to CompTIA Research and Market Intelligence staff at research@comptia.org.

CompTIA is a member of the market research industry's Insights Association and adheres to its internationally respected Code of Standards and Ethics.

ABOUT COMPTIA

The Computing Technology Industry Association (CompTIA) is a leading voice and advocate for the $5 trillion global information technology ecosystem; and the estimated 75 million industry and tech professionals who design, implement, manage, and safeguard the technology that powers the world's economy. Through education, training, certifications, philanthropy, and market research, CompTIA is the hub for advancing the tech industry and its workforce.

CompTIA is the world's leading vendor-neutral IT-certifying body with more than 3 million certifications awarded based on the passage of rigorous, performance-based exams. CompTIA's base of certified information technology professionals spans 232 countries worldwide.

CompTIA sets the standard for preparing entry-level candidates through expert-level professionals to succeed at all stages of their career in technology. Through CompTIA's philanthropic arm, CompTIA develops innovative on-ramps and career pathways to expand opportunities to populations that traditionally have been under-represented in the information technology workforce.