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### WHAT IS SHAPING THE INDUSTRY?

IT is the most rapidly evolving industry in the world and technology is shaping the way people live and do work, unlocking new business models and creative possibilities.

The adoption of new technologies shaping careers and trends for IT workers, makes new models and services possible for businesses of all sizes, in all locations.

What are the **five main trends** transforming the industry today?



# Artificial Intelligence

## A booming industry that's driving change

Many companies are integrating AI into existing platforms while others make AI the core of their business offering.

With more businesses seeing the potential of AI to enhance productivity, solve problems, and improve customer experiences, this is only the beginning.

Al specialists are already in demand: according to LinkedIn's Al At Work Report, **global job postings** have significantly increased along with a surge in LinkedIn members adding Al skills, leading to a **21x rise** in job posts mentioning new Al technologies and a **9x increase** in **members with Al skills** between 2016-2023.

# Big Data Analytics

## The key to data-driven decision making

The global big data analytics market size was valued at \$271,83 billion in 2022 and is projected to grow from \$307,52 billion in 2023 to \$745,15 billion by 2030, exhibiting a CAGR of 13,5% during the forecast period.

Big data analytics is becoming increasingly accessible—and important—for **businesses of all sizes**. As more organisations move online and digitise their operations, they gain more real-time access to data-driven insights

With AI and Big data working hand-in-hand, modern businesses are increasingly using analytics in order to gain a **competitive advantage**.



# Cloud Computing

### A new era of business and collaboration models

As businesses become increasingly digitised, the amount of data they need to gather and analyse is **growing exponentially**. Cloud computing innovations facilitate businesses in storing and accessing this data without heavy upfront investment.

By 2026, **75% of organisations** will adopt a digital transformation model predicated on **cloud** (Gartner, 2023).

The global cloud computing market size is expected to reach **USD 1554.94** billion by 2030.



# Cyber Security

## A growing requirement across industries and sectors

Cybercrime is an ever-present threat to businesses, **costing** the global economy around **\$445 billion every year**.

- Businesses are increasingly digitalising their operations and adopting cloudbased systems and IoT devices. These technologies store and transfer huge amounts of sensitive data, giving cyber criminals more avenues of attack.
- While cyber criminals have previously focused more on large corporations, they are now attacking businesses of all sizes.
  - Small and medium businesses are most at risk, with only 18% taking appropriate security measures.



## 5G

## The foundation for ground-breaking technology ecosystems

Since its launch in 2019, 5G has seen the fastest generational roll-out of any mobile technology, far outpacing 3G and 4G. The global spread of advanced smartphone increased the demand for the technology, and this was greatly amplified by the rise in remote working.

- Experts expect the global **5G services market size** to reach **\$2,208 billion by 2030**.
- The **5G economy** will create between **3.8-4.6 million jobs** in the USA alone by 2030.
- Mobile subscriptions to 5G networks will reach 4.4 billion by the end of 2027.

### WHAT IS SHAPING THE INDUSTRY?

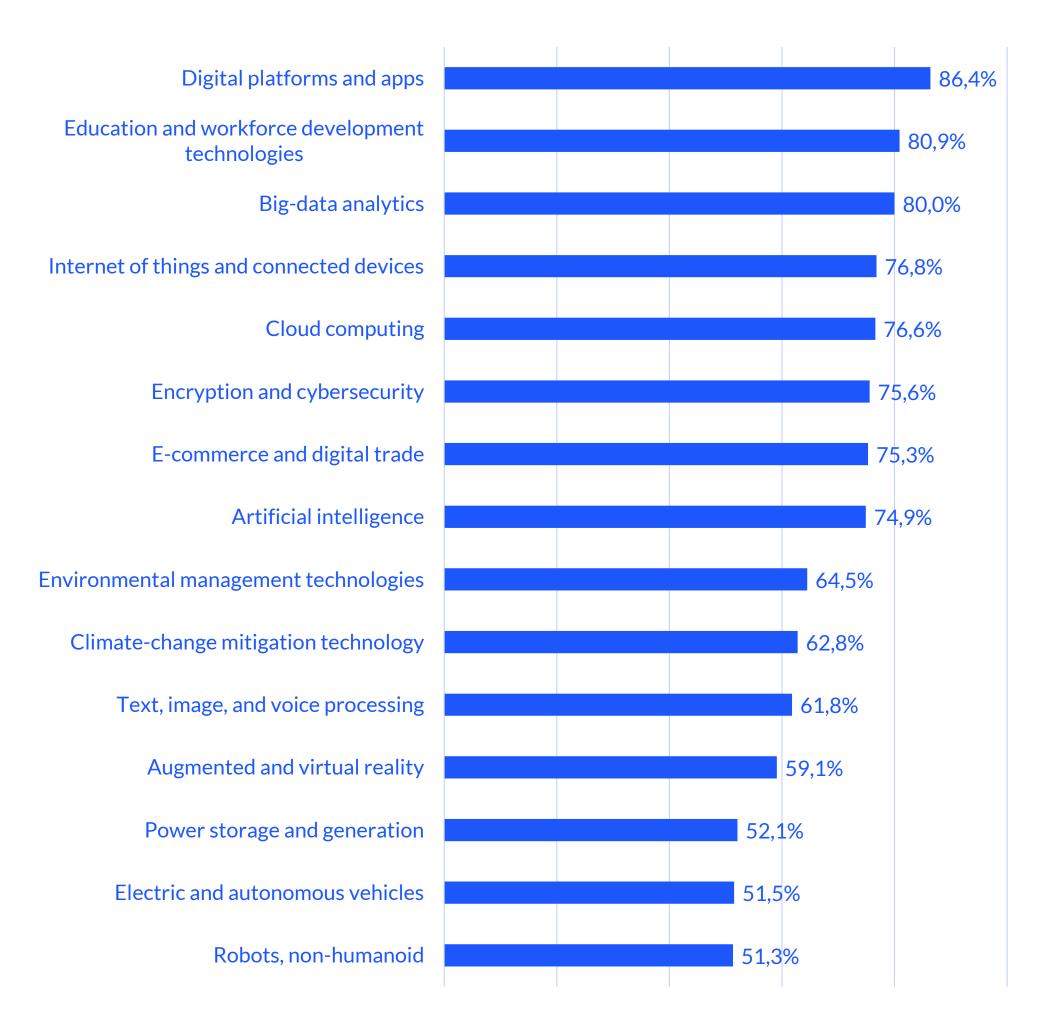
# Which technologies are businesses adopting the most?

**Digital platforms and apps** (86.4%) are the most common, followed by with Education and workforce development technologies (80.9%).

- 74.9% of businesses will adopt Artificial Intelligence.
- 51.5% of businesses will adopt Electronic and **Autonomous Vehicles.**
- 51.3% of businesses will adopt Robots and Nonhuman Technologies.

The IT and Digital Comms industries are only expecting an 8% growth in job openings.

#### TECHNOLOGIES LIKELY TO BE ADOPTED BY COMPANIES BY 2027



Source: World Economic Forum 2023

#### THE FIGHT FOR TALENT

Technology is evolving quickly, and individuals with advanced digital skills are in high demand. As a result, many businesses are struggling to find the qualified IT specialists they need.

What are the real-life impact of these trends and how they affect different industries?



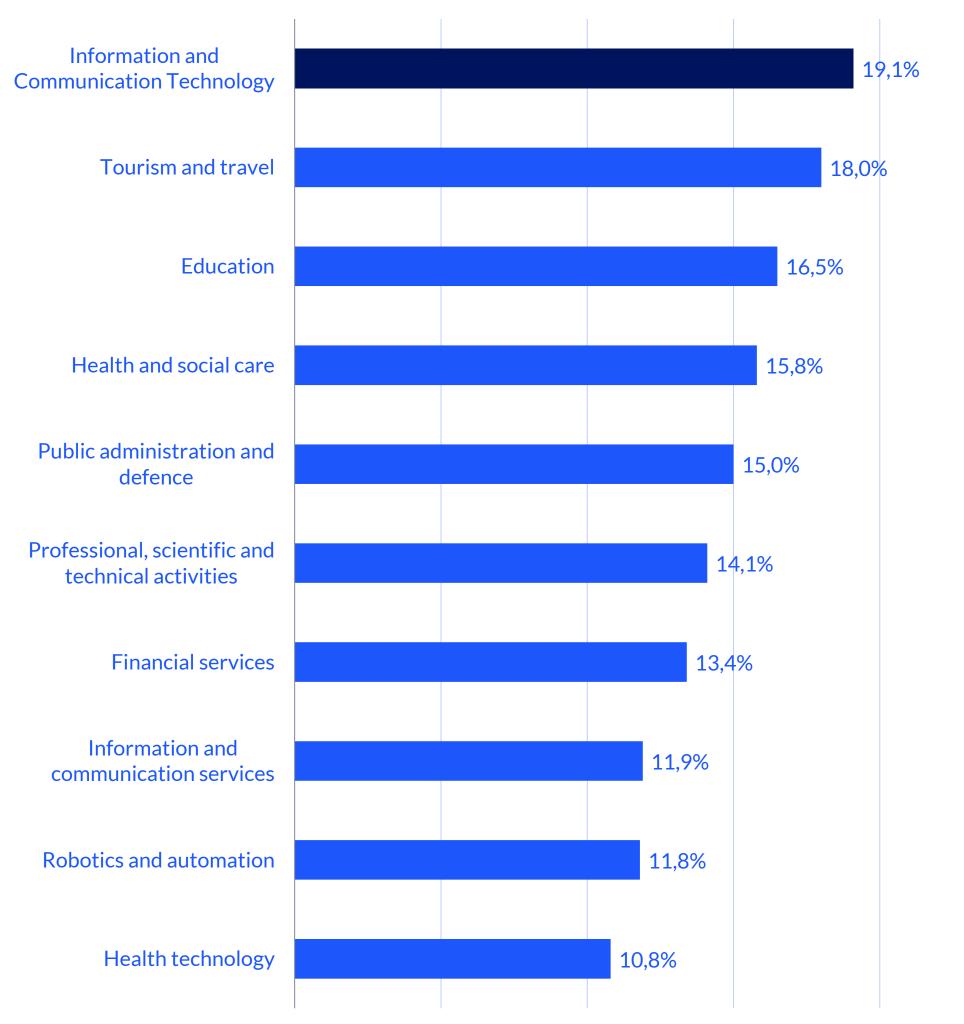
### THE FIGHT FOR TALENT

# How does the public view the IT sector?

When asked interviewed professionals which sector they prefer to work in, on average respondents most commonly gave **IT as their top answer**.

Interestingly, IT came out ahead of other sectors that offer high earning potential, such as financial services.

#### WHAT DO YOU TJINK IS THE BEST SECTOR TO WORK IN?

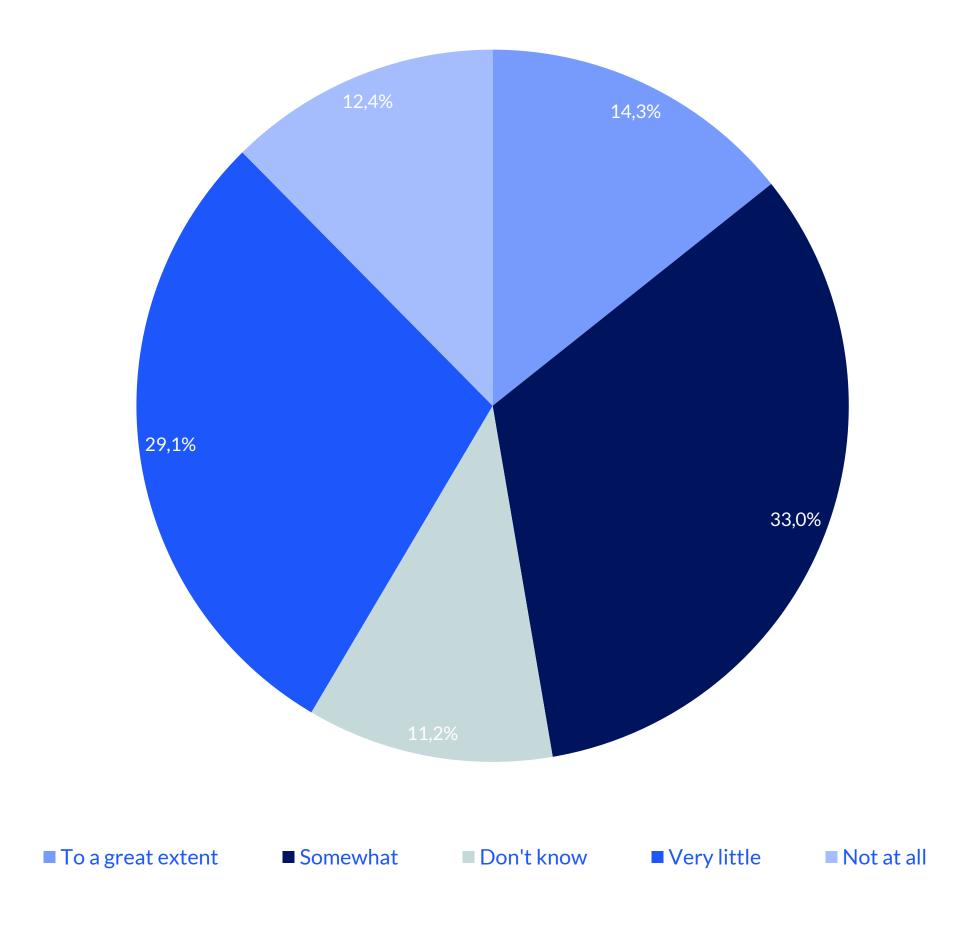


## The lack of workers

Almost half of companies struggle when recruiting for advanced digital skills

- 47.3% of interviewed companies reported either 'somewhat' or 'to a great extent' encountered difficulties in finding staff with advanced digital skills.
- Only 12.4% of interviewed companies did not encounter difficulties in hiring IT workers.
- Only 5.8% of interviewed companies did not look for any candidate in the last three years.

### HAS YOUR COMPANY FACED CHALLENGES IN RECRUITING CANDIDATES WITH ADVANCED DIGITAL SKILLS OVER THE PAST THREE YEARS?

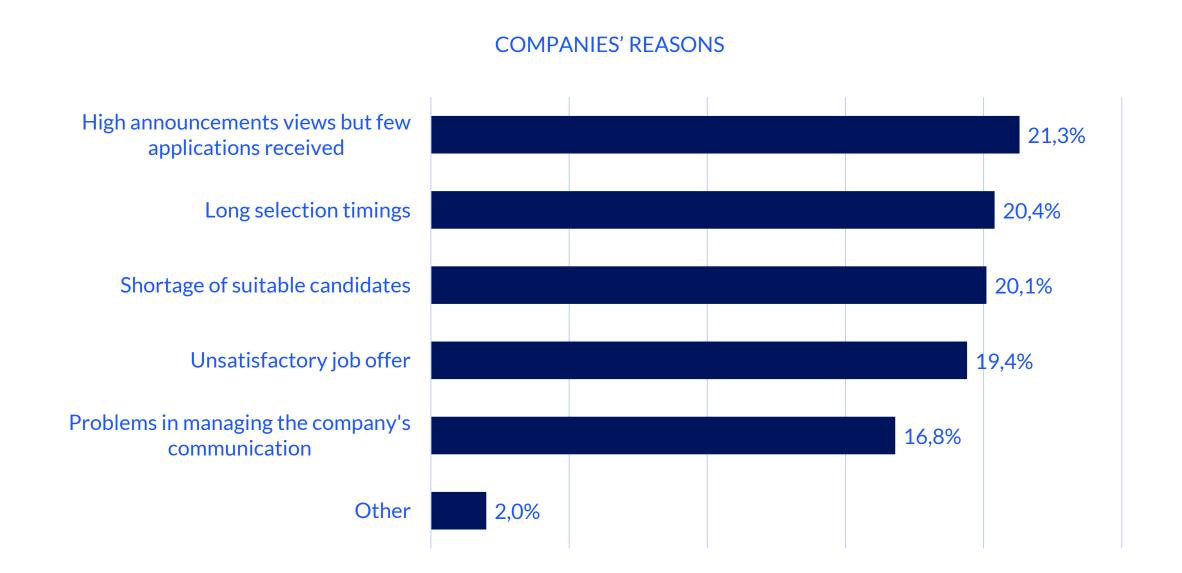


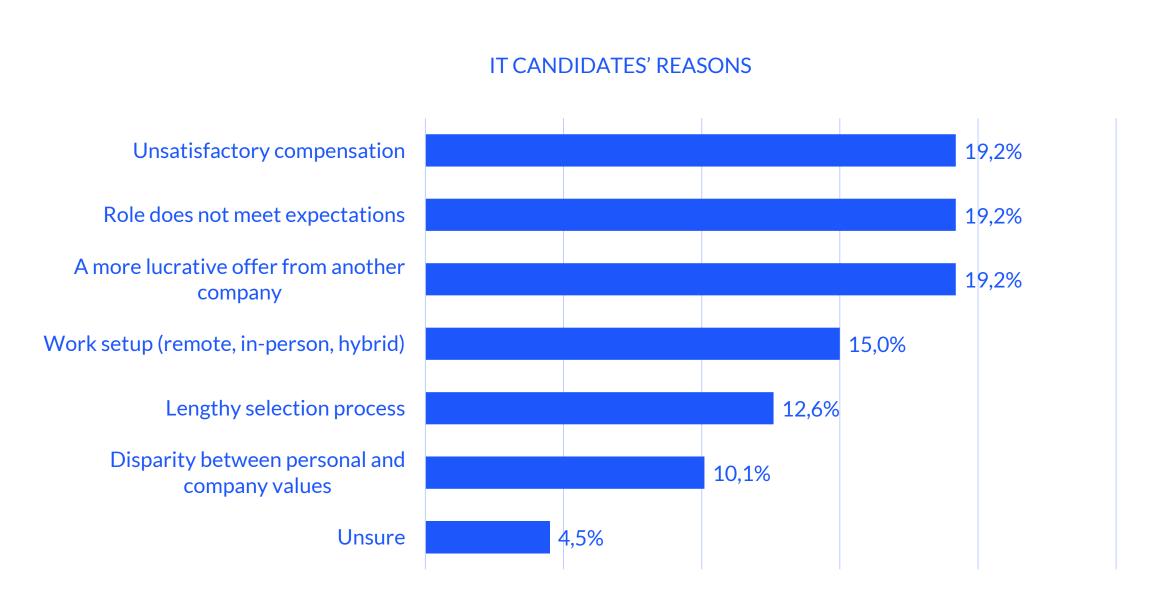
# Job Search dynamics

## Companies face high competition for the best candidates

Globally, businesses are expressing difficulties due to **limited application influx**, **lengthy** selection timeframes, and a **shortage** of suitable IT professionals.

On the other hand, root causes leading prospective employees to reject job offers include dissatisfaction with proposed **salary** structures, mismatched **job expectations**, and the allure of more enticing offers from **competitor** companies.





### **ATTRACTING TOP-NOTCH CANDIDATES**

IT is currently seen as an exciting field to work in, with great opportunities for qualified professionals.

The rapidly evolving landscape gives aspiring specialists countless paths for employment and personal development.

But what do potential employees actually want from their jobs?



### **ATTRACTING TOP-NOTCH CANDIDATES**

# What do IT candidates look for?

## Income and work-life balance the top priorities

We asked our respondents what aspects are most important to them and measured how frequently they gave specific answers.

- **Income** (49%) was the most important factor.
- Work-life balance (31.2%) and stress (21.1%) ranked high in the list, reflecting that IT professionals want to avoid long hours and heavy workloads.
- Career advancement (25.3%) ranks third on the list, training and skills development (13.1%) is much lower.

## WHAT DO YOU CONSIDER TO BE THE MOST SIGNIFICANT FACTORS WHEN SEARCHING FOR A JOB?



### **ATTRACTING TOP-NOTCH CANDIDATES**

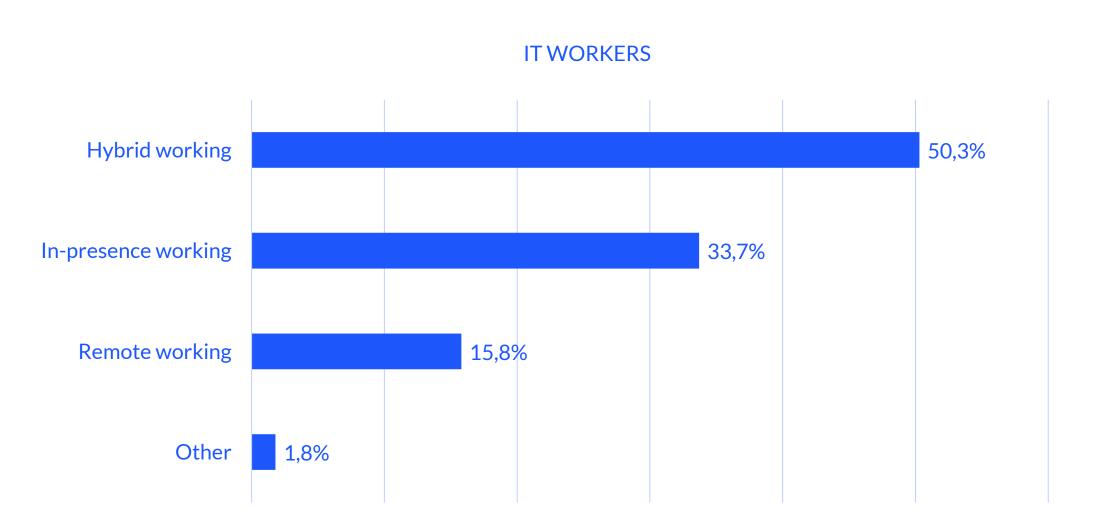
## The Transition Towards Flexible & Hybrid Work

### Trends are sculpting organisational models

While the percentage of fully remote workforces has dropped dramatically since the Covid-19 pandemic, hybrid working is becoming more popular - 39% of new hires will join teams with hybrid work arrangements.

**GENERAL WORKERS** 66,2% In-presence working 23,3% Hybrid working Remote working 8,7% Other 1,8%

Surprisingly, only 15.8% of IT workers are fully remote. The greatest difference is that 50.3% of IT workers enjoy hybrid working, compared to 23.3% of the overall population.

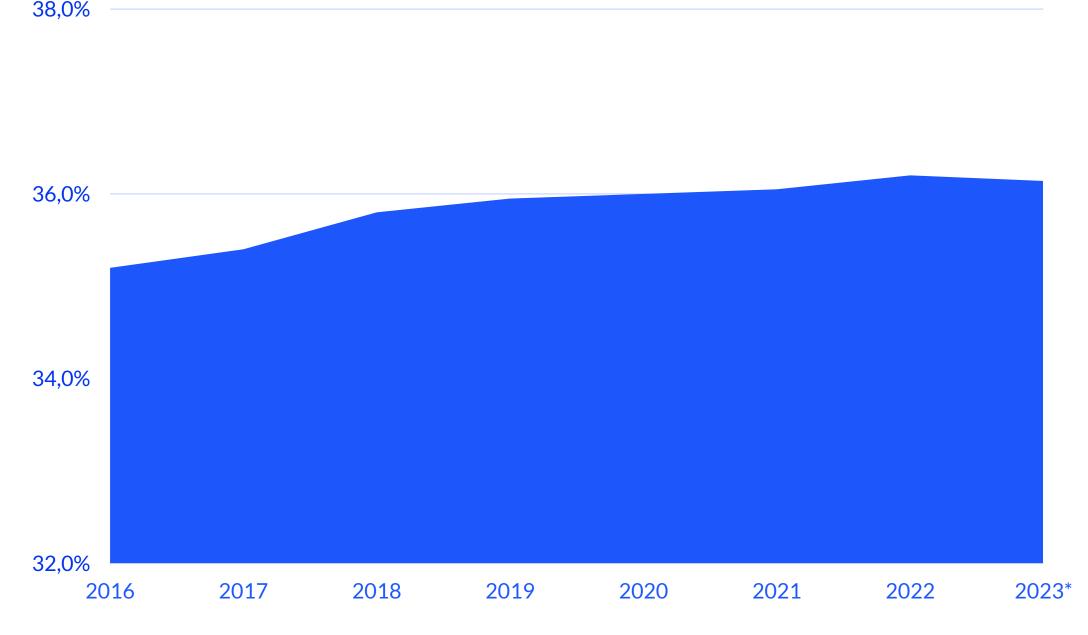


## Moving towards equality

## Women's participation within the Information Technology field

According to the 2023 Global Gender Gap Report from the World Economic Forum, women's representation in the Technology, Information, and Media industry has seen a **significant rise** since 2016, **increasing by 0.94%**. Women's presence in senior leadership roles has also escalated, surging from 30.8% in 2016 to **33.2%** in 2022. However, the gender balance in STEM jobs across sectors still demonstrates significant disparity. For instance, in the Technology, Information and Media sector, **women stand at just 23.4%** in STEM occupations compared to men's 43.6%.

#### REPRESENTATION OF WOMEN IN THE WORKFORCE, BY INDUSTRY, 2016-2023



\*The 2023 data points only include data for Q1 2023.

WEF Global Gender Gap Report 2023

# Intensifying efforts to close the gender gap

Diverse perspectives and inclusive teams foster more innovative, resilient, and successful businesses.

Corporations are taking proactive measures to ensure that women have equitable opportunities for success in the IT industry and beyond.

- Funding STEM training for employees' daughters as an incentive for women to join their organisations.
- Employing specific tools to guarantee that job advertisements are **void of any discriminatory language**.
- Hosting or contributing to university talks where successful female IT professionals
  are invited to share their inspirational journeys.

### **UNLOCKING TALENT LOYALTY**

New technologies are creating countless business opportunities and companies seeking the highest quality candidates face stiff competition.

Understanding the needs and perceptions of the candidates themselves is vital for companies who are creating **strategies to** retain the best talent.



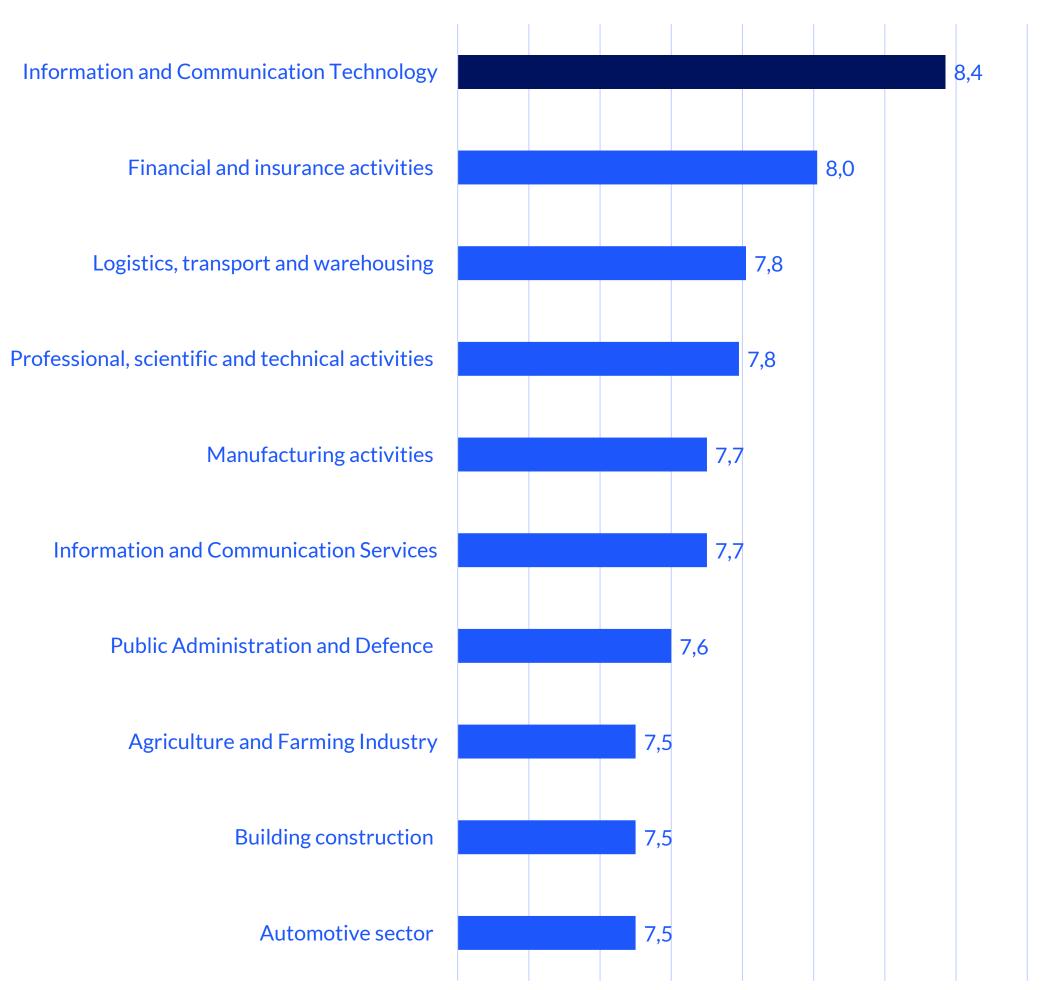
### **UNLOCKING TALENT LOYALTY**

# Workers' satisfaction by sector

## IT workers have greater job satisfaction than professionals in other industries

IT appears to be the sector offering the most job satisfaction, with an average score of 8.4/10 from people working in the industry.

### HOW WOULD YOU RATE YOUR LEVEL OF SATISFACTION WITH YOUR CURRENT PLACE OF EMPLOYMENT?



# Employers' performance evaluation

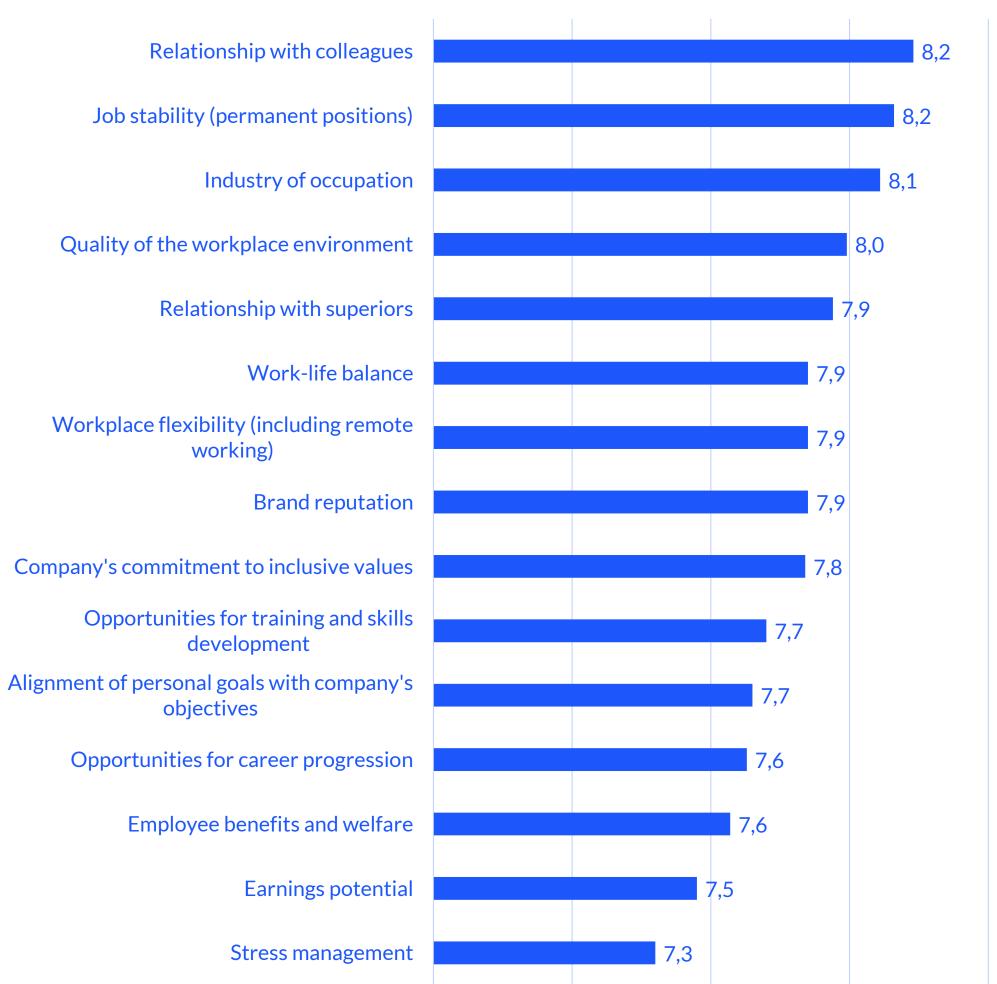
How do IT workers think their employers are performing in key areas?

Relationships with colleagues (8.2) and job security (8.2) are both top of the list of positive aspects, followed by sector (8.1).

**Stress** (7.3) and **income** (7.5) were at the bottom of the list, with **career advancement** (7.6) just above.

The things that employers do worse on—stress management, income, and career advancement—are what employees most want from their next job.

## CONSIDERING YOUR CURRENT COMPANY, HOW WOULD YOU EVALUATE EACH OF THE FOLLOWING ELEMENTS?



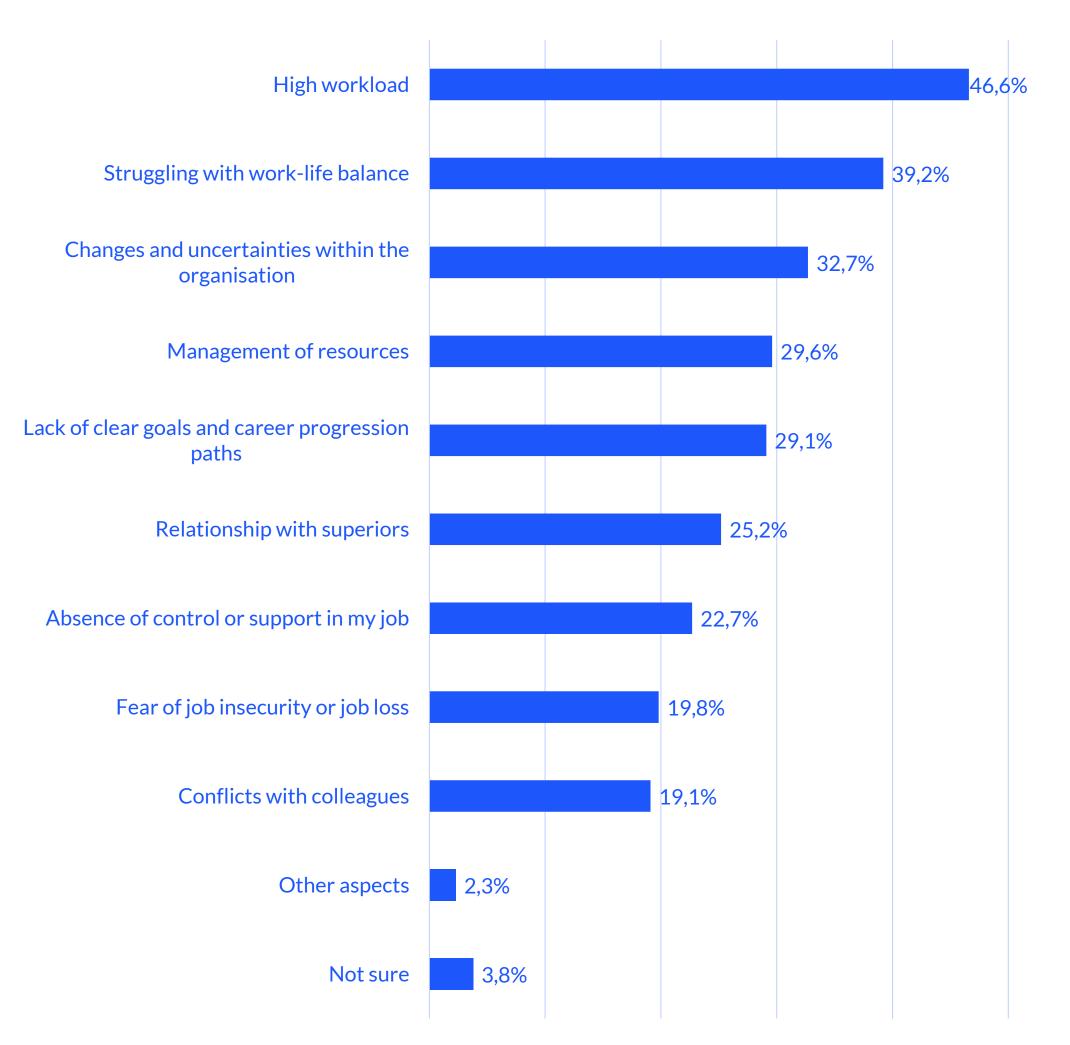
## Work-related stress

## What causes IT professionals the most stress at work?

IT professionals cite stress as an important factor affecting their satisfaction at work—and something that matters to them when seeking jobs.

- Workload (46.6%) and work-life balance (39.2%) are at the top of the list (and are different sides of the same problem.)
- **Undefined goals** and **growth plans** were mentioned by 29.1% of respondents. This ties in with the earlier finding that IT professionals see career advancement as one of their top priorities at work.

#### WHAT ASPECTS OF YOUR JOB DO YOU FIND MOST STRESSFUL?



### **BUILDING THE SKILLS OF TOMORROW**

The skills required for many jobs have changed by 25% since 2015, with that number expected to reach at least 65% by 2030 due to the rapid development of new technologies. These new skill sets will allow businesses to get more out of the innovations they use, while better leveraging the human capabilities within their teams.

How are companies and talents facing the challenge of the fast-changing skill landscape?



### **BUILDING THE SKILLS OF TOMORROW**

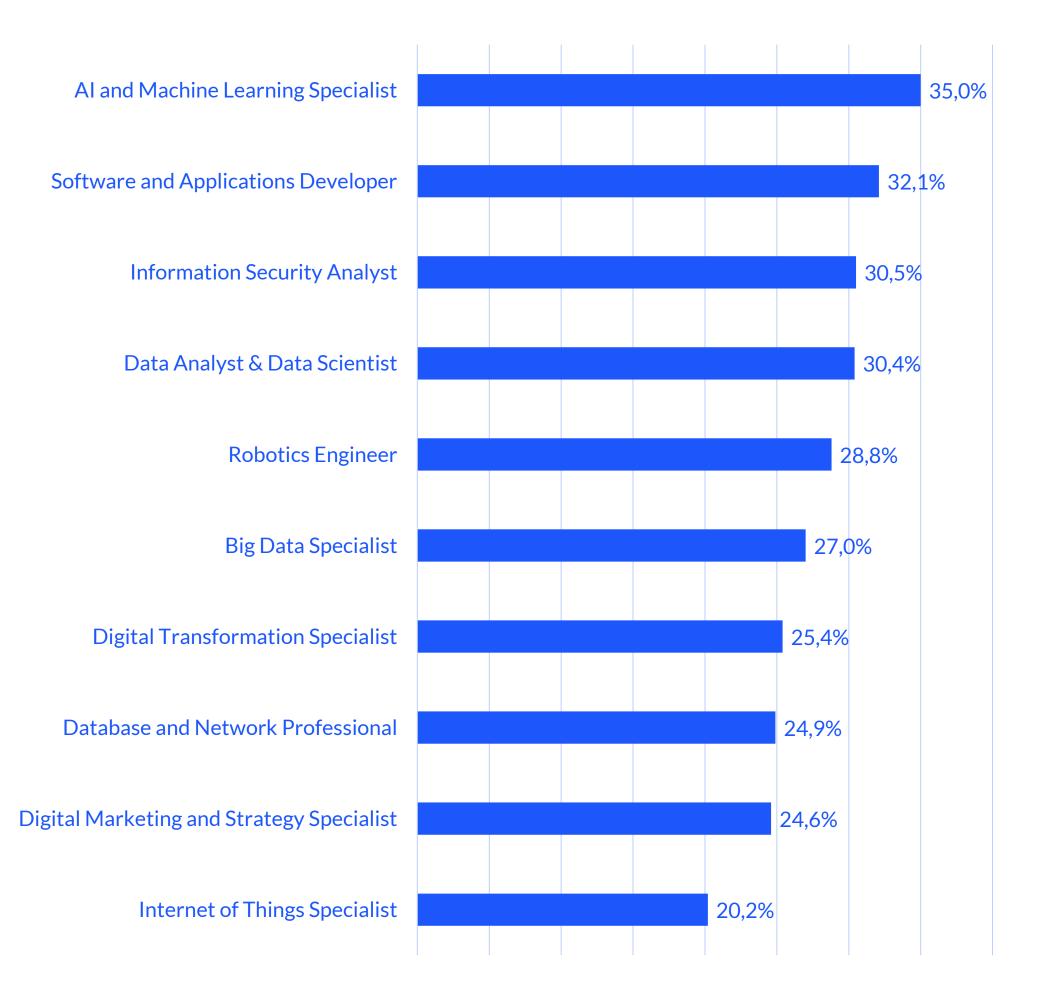
# Which roles and skills will be most in demand?

## New qualified personnel

The fastest growing roles are driven by technology and digitalisation, but also sustainability. Al and Machine **Learning Specialists** (+40%) are on the top of the list of fast-growing jobs.

The majority of fastest declining roles are clerical or secretarial roles, with Bank Tellers and Related Clerks, Postal Service Clerks, Cashiers and Ticket Clerks, and Data Entry Clerks expected to decline fastest.

### WHICH JOB ROLES DO YOU FORESEE WILL EXPERIENCE AN INCREASED DEMAND IN THE UPCOMING YEARS?



# HowdolT professionals acquire new skills?

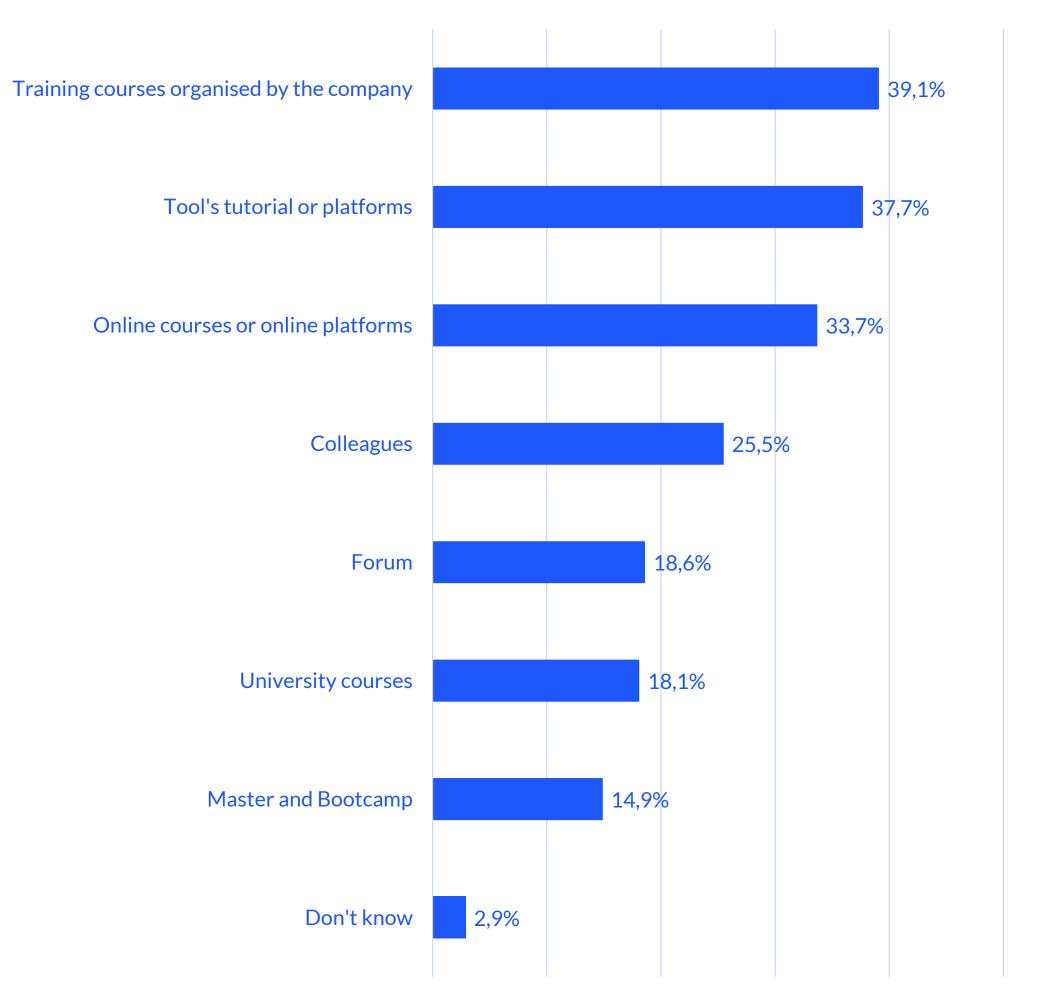
## Online platforms allow new skills acquisitions

IT professionals most commonly learn from training courses organised by their employer (39.1%).

However, many IT professionals use online training courses and platforms (33.7%) outside of their work.

It's clear that many IT professionals are proactive in their development, and self-driven learning initiatives are important for workers who desire an edge in the job market.

### WHICH RESOURCES OR TOOLS HAVE YOU FOUND MOST BENEFICIAL FOR ACQUIRING TECHNICAL KNOWLEDGE IN THE PAST FEW YEARS?



# The rising demand for soft skills

## Businesses are prioritising non-technical and soft skills

Technical skills are not the only important hiring criteria in 2023. With the rise in remote working, and the increased focus on empathising with customers across the business landscape, many businesses look favourably on **cognitive**, **management**, **and technology skills**, along with those that support self-efficacy and working with others.

**Analytical thinking** is the most appreciated soft skill, followed by **Creative thinking**, **Resilience**, **Motivation** and **Curiosity**.

## Methodology

This report is the result of research conducted by the Politecnico di Milano and the Data Intelligence company INTWIG.

The study was conducted in 13 countries (Brazil, China, France, Germany, India, Italy, Poland, Portugal, Romania, Spain, Turkey, United Kingdom and the United States of America) and was structured following a rigorous methodology developed in 3 phases:

### **Desk Analysis**

Collection and systematisation of public data able to provide a broad and articulate reading of the IT sector worldwide;

### **Opinion Leaders interviews**

36 in-depth interviews with Opinion Leaders in the 13 countries surveyed;

### **International Survey**

indicated as "Gi Group Holding, IT International Survey – 2023" a CAWI survey conducted on a sample of 500 residents in each of the 13 countries, aged 18 to 65 (including decision makers, HR manager, IT workers, open-to-work).

### **THE PROJECT**

## Partners





The Digital Innovation Observatories of the School of Management of the Politecnico di Milano were born in 1999 with the aim of creating culture in all the main areas of **Digital Innovation**. Nowadays, Observatories are a qualified reference point on Digital Innovation that integrates Research, Communication, Continuous Updating and Networking activities.

The HR Innovation Practices Observatory was founded in 2010 to address the radical transformation process of competences and of the role of the HR Department resulting from the spread of new digital technologies and organization models. The Observatory is the result of Research activities conducted over 12 years by the Digital Innovation Observatories of the Politecnico di Milano, particularly the Enterprise 2.0 and Intranet and Network Organization Observatories. It aims to support HR Executives in the human resources development and management process generated by the spread of new technologies and organization models. The Observatory is focused on being a point of reference in the development of the innovation culture in HR and foster the coming together and development of a community between demand and offering of technologies for the development and management of Human Resource management.



INTWIG is a **Data Intelligence company** that has been developing data management strategies since 2016.

It offers support to companies to understand the context they move into, anticipate trends, optimise processes and make decisions quickly. INTWIG's method is customised, rigorous and covers the entire Data Lifecycle: collection, analysis, interpretation and visualization.

Customised tools and solutions are developed by a team of researchers, analysts, data managers and communication experts with technical and crossfunctional skills.

# Find out more on gigroupholding.com



