QS

The skills gap:

What employers want from
business school graduates

> # Employers are witnessing a paradigm shift in the skills they value.

Nunzio Quacquarelli
Founder and President of
QS Quacquarelli Symonds

Foreword

In an era marked by rapid technological advancements and evolving business landscapes, the expectations from Graduate Management Education (GME) graduates have never been higher. Employers are witnessing a paradigm shift in the skills they value.

While traditional management skills remain crucial, there's an increasing emphasis on adaptability, digital proficiency, and cross-functional collaboration. This report underscores the importance of graduates possessing not only a deep understanding of their domain but also the ability to integrate this knowledge into diverse settings. It's heartening to see many GME graduates excel in areas like data-driven decision-making and ethical leadership. However, there's a growing need for them to be more attuned to global market dynamics and to demonstrate resilience in the face of unforeseen challenges.

As the business world becomes more interconnected, the ability to navigate cultural nuances and foster inclusive environments is paramount. We believe that business schools have a pivotal role in bridging these gaps, ensuring that the next generation of leaders is well-equipped to steer organisations towards a promising future.

Introduction

According to a report from McKinsey, 87% of companies expect to experience or already have a skills gap, meaning there is a disparity between the skills they need and the capabilities they find in those they hire.

This global skills shortage, which encompasses both hard and soft skills, has the potential to cause massive economic losses (The Lost Workforce: Upskilling for the future), with G20 countries facing a potential $11.5 trillion GDP growth loss and the United States an $8.5 trillion loss by 2030.

Employers must continue to prioritise workforce education and development to bridge this gap and ensure a skilled and adaptable workforce that can thrive in an ever-changing business landscape.

This report examines the perspectives of more than 16,000 employers identified as employing business graduates who responded to the QS Global Employer Survey between January and April 2023.

We explore what employers are looking for in business school graduates and provide recommendations to business schools on how to address the skills gap.

Thank you to our partners at MBA Careers Services & Employer Alliance for their support in supplying expert perspectives for this report.

Contents

Soft skills: explained

Soft skills, also known as 'real skills', are vital in business education. They encompass communication, teamwork and time management and enhance employability, foster effective leadership, and contribute to building a positive personal reputation.

Examples of soft skills

Effective collaboration
- Understanding team dynamics
- Communication skills

Resourceful problem solving
- Analytics and creative thinking
- Depth of subject matter knowledge

Business development and ESG
- Entrepreneurial negotiation skills
- Business management
- Ethics and social responsibility

The soft skills in demand in 2023

What are the most in-demand soft skills from business school graduates?

1. Ability to work in a team

In 2023, teamwork is highly valued for its role in fostering collaboration, diverse perspectives, and effective problem-solving.

2. Communication

Strong communication skills benefit graduates in the job market, impressing employers and enhancing marketability.

3. Problem-solving

These skills are essential for enabling effective decision-making and innovative solutions amid increasingly competitive and complex work environments.

4. Active learning

Continuous improvement and adaptability are all skills which employers highly value and help them adapt and respond to different and unexpected situations and outcomes.

Which soft skills are employers satisfied with among business school graduates?

1. Ability to work in a team

2. Ethics and social responsibility

3. Interpersonal skills

4. Communication

> The findings from QS reinforce the increasing need for industry partners, academia and entrepreneurs to closely collaborate in order to build programmes that address these changing needs and skills gaps while developing a future-proof workforce that is more agile, flexible, resilient and capable to rapidly adapt to these disruptive technologies

Alessandra Rober Christensen,
US Head of University Relations, Talent Acquisition, Novartis and Board Member, MBA CSEA
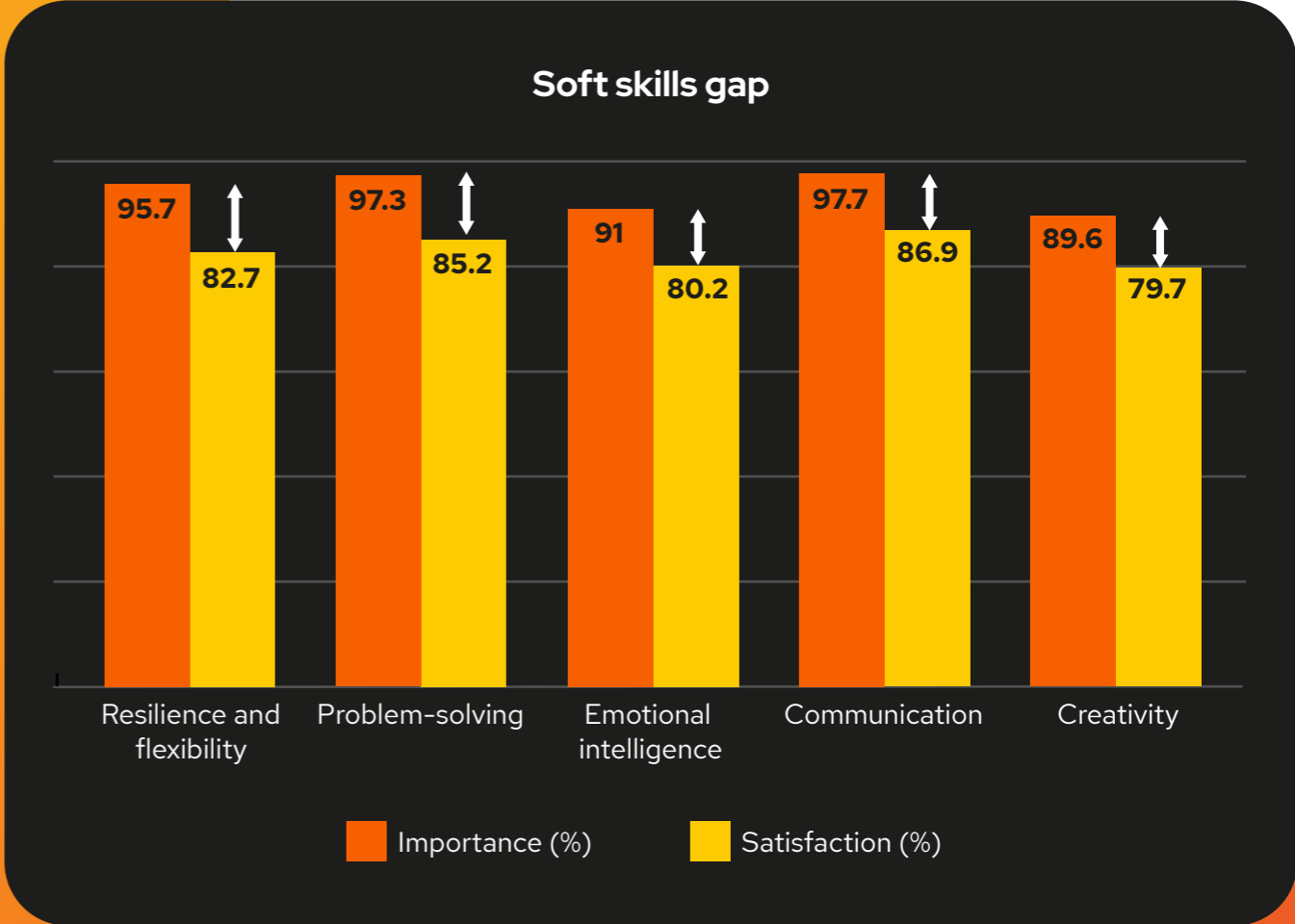
The soft skills gap

The largest gap between employers' perceived importance of a skillset and satisfaction with that skillset is in resilience and flexibility.

The shift in educational focus towards equipping students with technical skills, such as coding, data sciences, and analytical skills, might be sidelining softer yet essential skills like resilience and flexibility. The accelerated need for these skills and the potential delay in their integration into business school curriculums may indicate that a more balanced approach between hard and soft skills development is required.

> Identifying and addressing the needs of a workforce that's in constant flux can be challenging for businesses and educational institutions alike. Business schools and employers can work together in continuous partnership to ensure students are well-prepared to meet workforce challenges through case studies, meaningful internship opportunities, employer advisory boards, and project-based experiences

Megan Hendricks, Executive Director, MBA Career Services & Employer Alliance

Soft skills gap

	Resilience and flexibility	95.7	82.7
	Problem-solving	97.3	85.2
	Emotional intelligence	91	80.2
	Communication	97.7	86.9
	Creativity	89.6	79.7

Importance (%) | Satisfaction (%)

Soft skills gap

1	Resilience and flexibility	13%
2	Problem solving	12.1%
=3	Emotional intelligence	10.8%
=3	Communication	10.8%
5	Creativity	9.9%

Hard skills: explained

Hard skills encompass a blend of technical proficiency, creative thinking, and strategic management. Technical skills enable data-driven decisions, while creative expertise fosters innovation in products and marketing. Strategic competencies ensure effective project oversight. Together, they equip business school graduates to excel and lead in a rapidly evolving industry.

Examples of hard skills

Strategic competencies
- Project management oversight

Creative expertise
- Design fundamentals
- Multimedia creation

Technical skills
- Analytical processing
- Cloud computing
- Security management

What are the most in-demand hard skills from graduate management education graduates?

These are the top four hard skills that employers find important when recruiting graduate management education graduates in 2023:

1. Digital competency

Enables business school graduates to leverage technology effectively, enhancing productivity, decision-making, and strategic competitiveness in today's digital age.

2. Project management

These skills demonstrate a graduate's ability to lead, organise, and execute tasks effectively, ensuring business success.

3. Data analysis

These skills unveil hidden patterns, enabling graduates to predict trends and strategise, offering companies a competitive edge in a data-driven world.

4. Business development

These skills embody persuasion and relationship-building, turning graduates into revenue drivers who can convert opportunities into tangible business growth.

Hard skills which employers are satisfied with among graduate management education graduates

These are the top four hard skills which employers are satisfied with from graduate management education graduates in 2023:

1. Digital competency

Business schools impart comprehensive IT skills, equipping graduates with the knowledge and experience to drive innovation and operational efficiency.

2. Data analysis

Business schools excel in teaching data analysis, empowering graduates to derive valuable insights, make data-driven decisions, and boost business performance.

3. Visual proficiency

Business schools nurture visual proficiency, enabling graduates to create compelling designs that effectively communicate complex ideas and enhance brand presence.

4. Project management

Business schools foster strong project management abilities, equipping graduates with organisational prowess to successfully deliver projects, meet deadlines, and exceed client expectations.
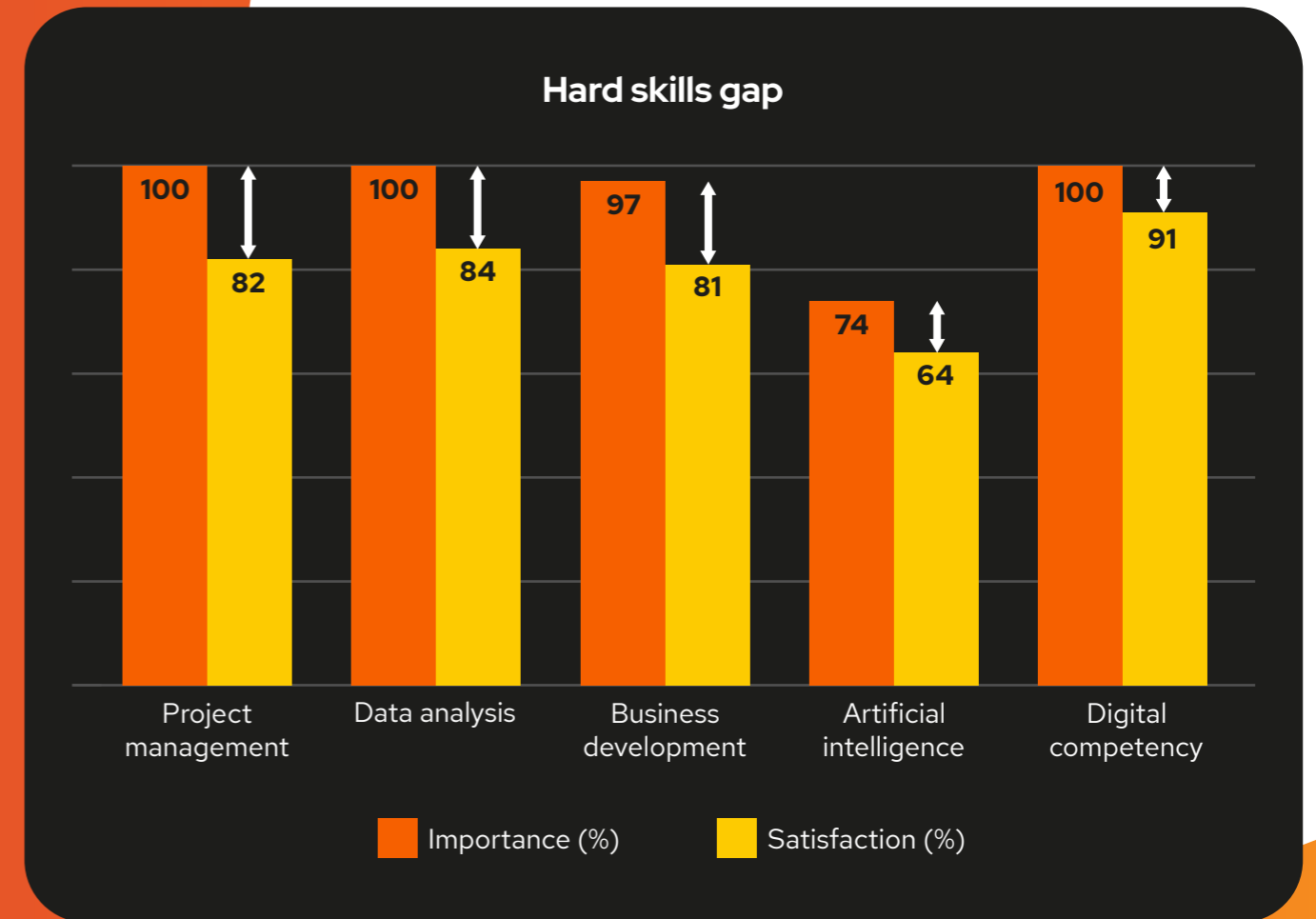
The hard skills gap

Project management presents the largest hard skills gap for employers in 2023.

AI is rated the lowest in importance out of the skills presented but also the lowest in satisfaction. Rapid AI advancements over the past six months mean it is likely that AI will grow in importance and business schools will need to ensure they keep pace with the rates of change in this technology.

"The continued growth of AI in the workplace will change the skills employers will seek in their employees. As AI continues to evolve and take on more transactional workplace tasks, the need for employees to possess creativity, critical thinking, resiliency, and a capacity to work well with others will only continue to grow in importance as these are skills yet to be replaced by machine learning."

Phil Heavilin, Director, Internships & Applied Learning, William & Mary and Board Member, MBA Career Services & Employer Alliance

Hard skills gap

Importance (%)	Satisfaction (%)
Project management: 100	82
Data analysis: 100	84
Business development: 97	81
Artificial intelligence: 74	64
Digital competency: 100	91

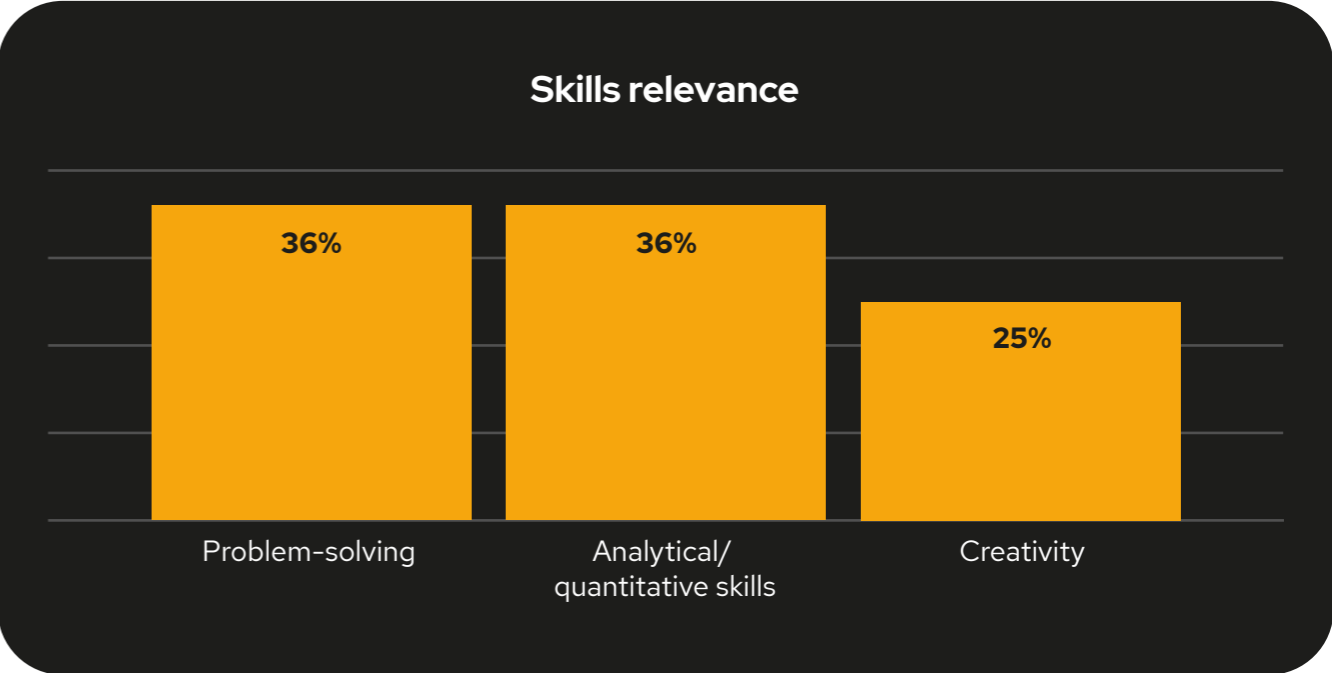|	Hard skills gap	Gap
1	Project management	18%
=2	Data analysis	16%
=2	Business development	16%
4	Artificial intelligence	10%
5	Digital competency	9%

The role of AI and the emerging skills gap

As AI continues to evolve rapidly, the gap between what's taught in business schools and the real-world demands of the industry is widening. According to data from Salesforce (2023), just **one in ten workers globally have the necessary AI skills**. Since the rapid boom in AI usage in early 2023, the demand for AI skills has surged. Both business schools and employers are now under increased pressure to ensure that graduates are adequately prepared with the necessary AI skills.

In the evolving landscape of business education, the integration of AI has underscored the importance of specific skill sets for graduates. In the QS Gen AI Employer Pulse Survey – using responses from over 1,000 employers – a significant 36% of employers prioritise problem-solving abilities as a key skill to effectively work with AI. This is because AI often presents complex challenges that require innovative solutions. Similarly, another 36% emphasise analytical and quantitative skills. As AI systems generate vast amounts of data, the ability to analyse and interpret this data becomes crucial for making informed business decisions.

Furthermore, 25% of employers value creativity. While AI can process information and provide solutions, human creativity is essential to envisage novel applications and strategies. Business education must, therefore, adapt to these needs, ensuring that students are not only well-versed in AI technologies but also equipped with the intellectual dexterity to harness AI's potential effectively. By fostering these skills, business schools can prepare graduates to be at the forefront of AI-driven business transformations.

The three primary skills employers believe graduates should possess to effectively work with AI in their organisations are:

Skills relevance

Problem-solving	Analytical/quantitative skills	Creativity
36%	36%	25%

Source: QS Gen AI Employer Pulse Survey 2023

Employers generally accept that AI is here to stay, emphasising that graduates still need to develop skills in individuality, active learning and critical thinking.

Source: QS Gen AI Employer Pulse Survey 2023

Advice to graduates

AI is just a tool but not a replacement of you. You need to equip yourself in logical thinking, problem solving and communication skills. Be open-minded and humble.

Director, Hong Kong SAR

Don't rely on AI to do your 'work' for you - you still need to understand your specialist subject in order to think critically about what the AI generates. It's another tool in your box, it is not a be all and end all.

HR, New Zealand

Use AI to reinforce your authenticity

HR, Australia

It is inevitable and the future. Learn to use and command it, making human work efficient not obsolete.

Coordinator, India

See to it to find your niche that can't be filled with AI

Manager, Germany

Advice to business schools

More awareness and including AI aspect practically within its syllabus.

Analyst, Jordan

Co-op with relevant companies to provide training for teachers and students. Create the environment for discussion and practice.

Manager, Taiwan

Additional feedback

I'm still convinced that traditional critical thinking and creativity mental faculties are fundamental to understand how to use these tools. And also to motivate students to have a curious and experimental attitude with interesting assignments.

C-level, Argentina
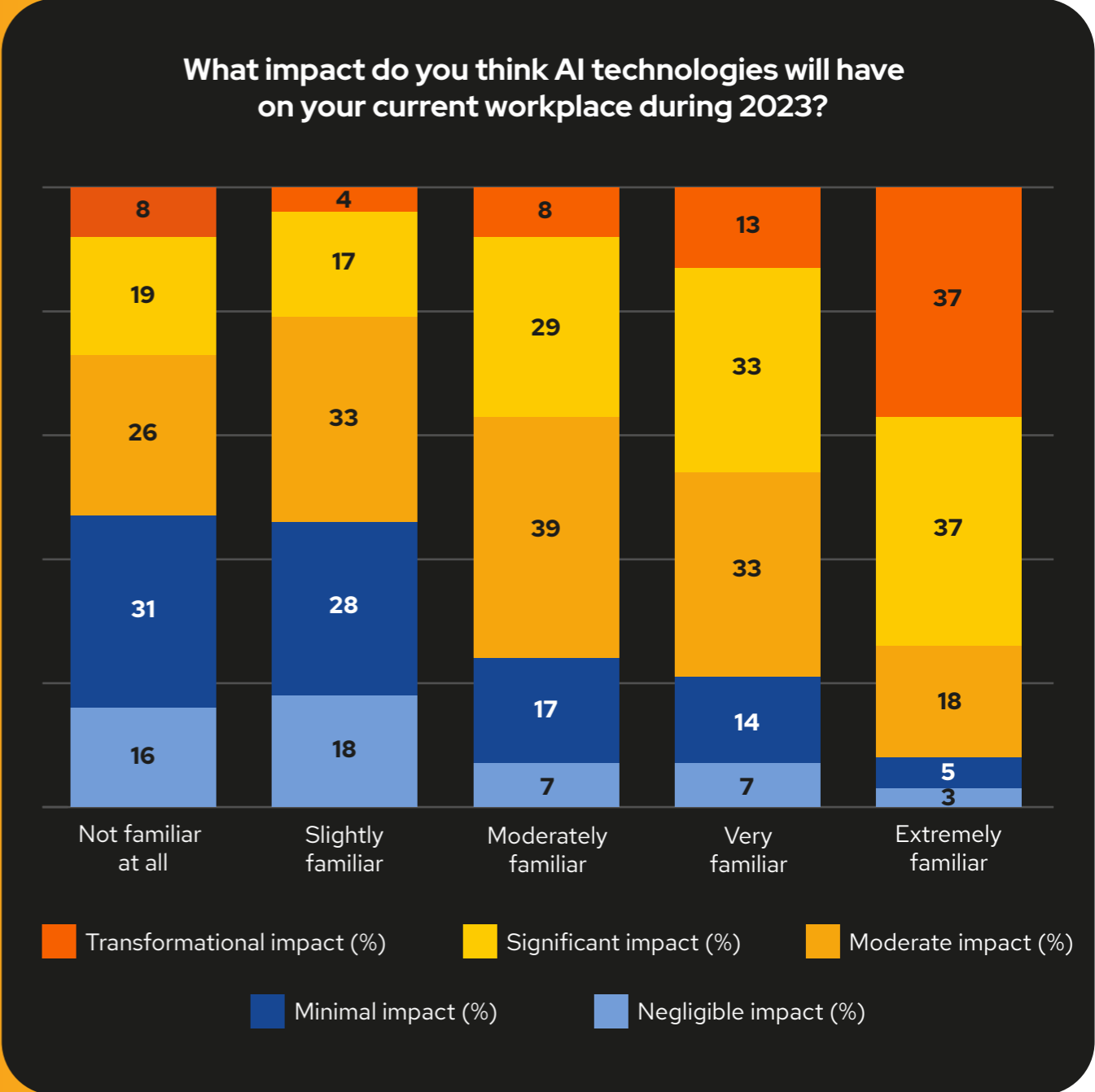
It's a real game changer, but has a lot of research and needs to be handled carefully.

C-level, Australia

The skills gap: What employers want from business school graduates

The skills gap: What employers want from business school graduates

Employers who are more familiar with the technology think AI will have more impact in the workplace

The perception of AI's impact on the workplace in 2023 appears to be significantly influenced by an employer's familiarity with the technology. A notable **37%** of employers who are extremely familiar with AI anticipate that it will bring about a substantial transformational change in their workplaces. This suggests that those who have a deeper understanding or firsthand experience with AI recognize its potential to revolutionise processes, enhance productivity, and possibly redefine roles within their organisations.

On the other hand, **31%** of employers who are not well-acquainted with AI believe its impact will be minimal. This disparity in views underscores the importance of awareness and education about AI's capabilities. Those unfamiliar with the technology might not yet grasp its potential benefits or may harbour apprehensions about its integration. As AI continues to evolve and permeate various sectors, it will be crucial for employers to stay informed to harness its benefits fully and address any challenges proactively.

What impact do you think AI technologies will have on your current workplace during 2023?

	Not familiar at all	Slightly familiar	Moderately familiar	Very familiar	Extremely familiar
Transformational impact (%)	8	4	8	13	37
Significant impact (%)	19	17	29	33	37
Moderate impact (%)	26	33	39	33	18
Minimal impact (%)	31	28	17	14	5
Negligible impact (%)	16	18	7	7	3

Skills gap: North America

The World Economic Forum's Future of Jobs Report 2023 highlights the growing importance of soft skills, including creativity, collaboration, communication, problem-solving, and empathy, with a 53% surge in demand. IBM's SkillsBuild is an example of an initiative which is addressing this by offering reskilling opportunities, targeting underrepresented communities to foster a more inclusive and skilled future workforce.

Soft skills

Team work

97% of North American employers found the ability to work as a team to be important in the business education context.

Interpersonal skills

91% of employers in North America were satisfied with the interpersonal skills of business graduates. Interpersonal skills are highly valued in business graduates, enabling effective communication and collaboration.
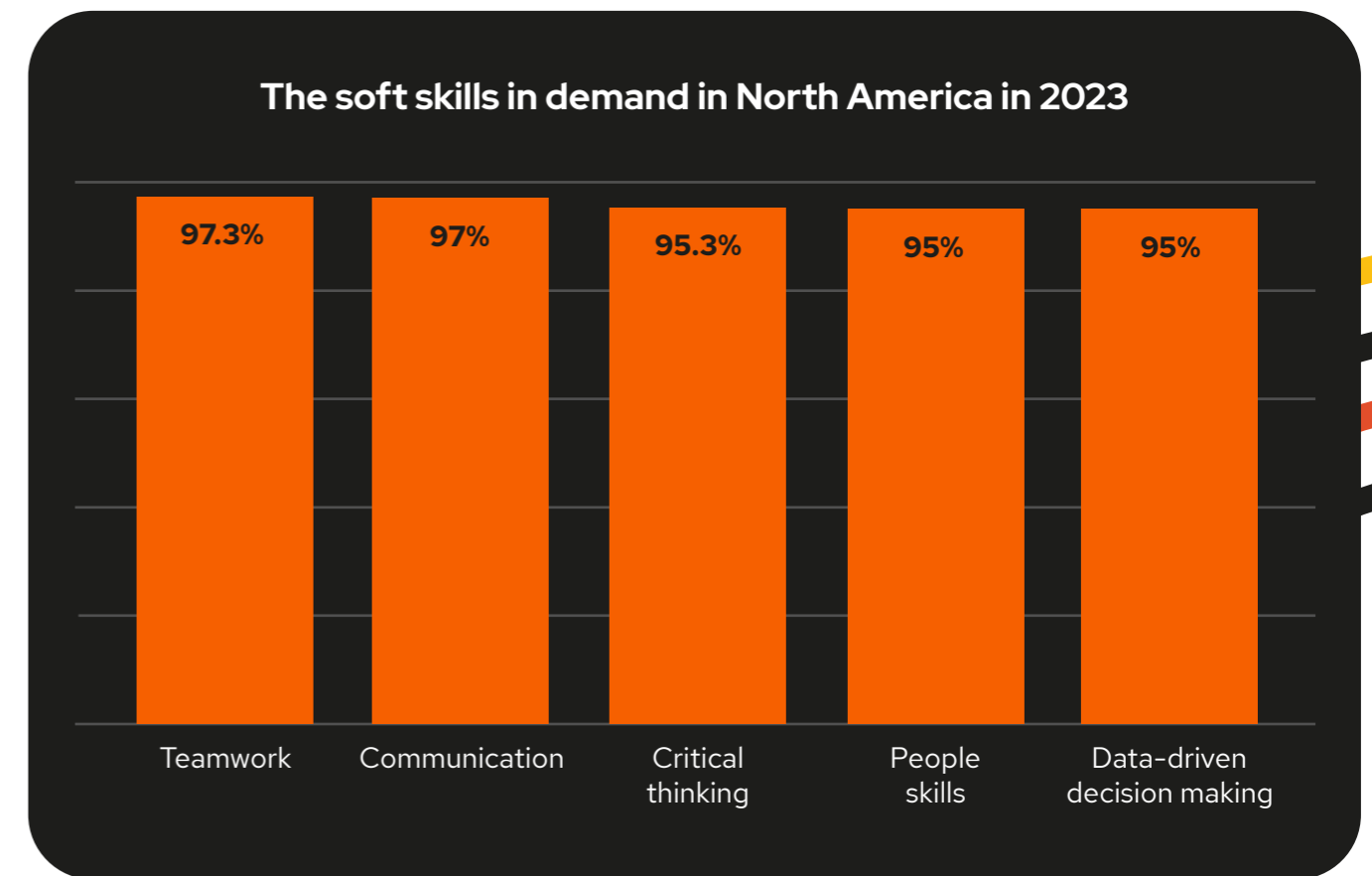
Adaptability

Adaptability is the pronounced skill gap between North American business schools and employers. Essential for navigating fast-changing markets and unforeseen challenges, this skill is often overlooked in traditional business education.
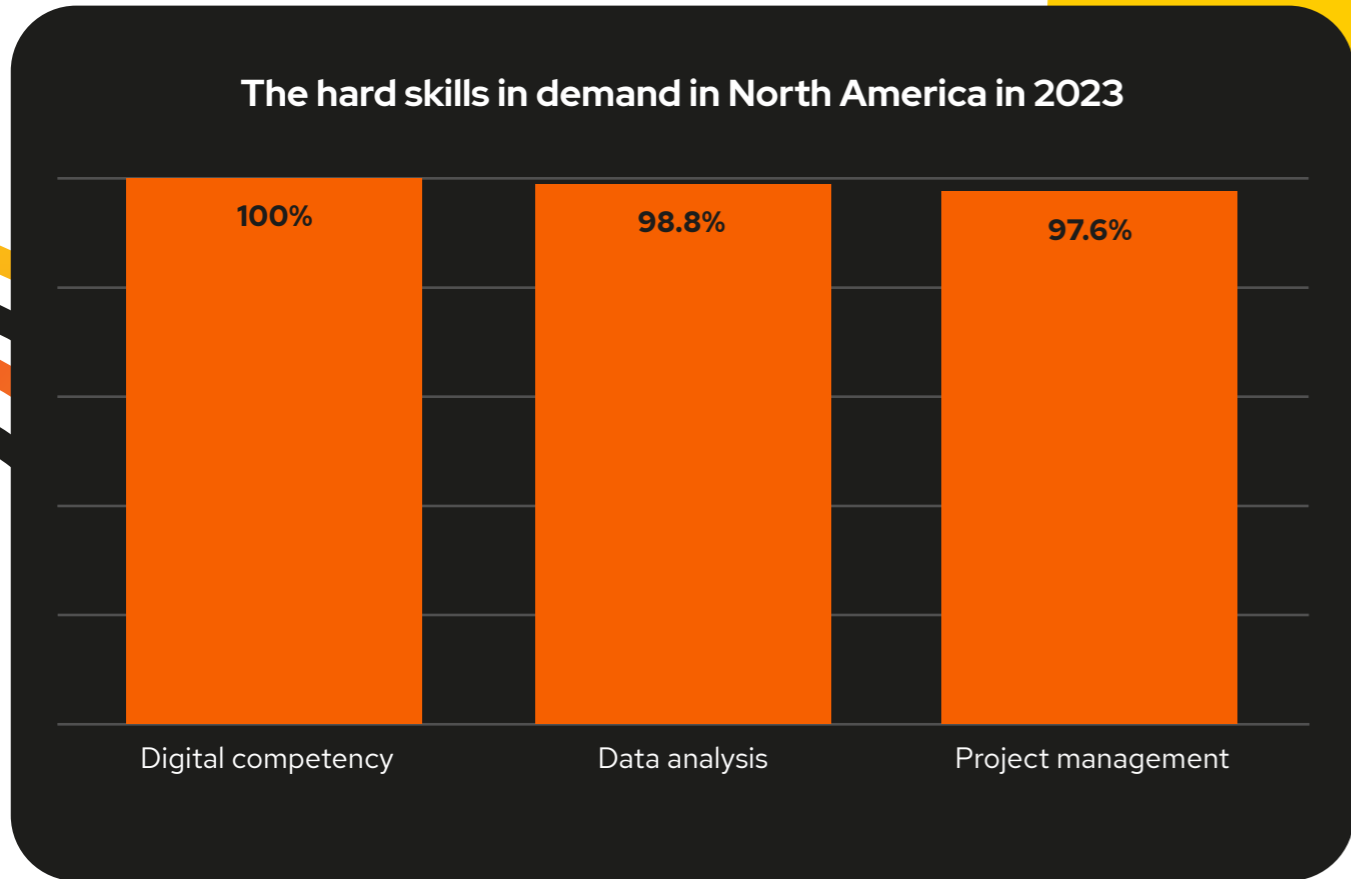
Entrepreneurship

Employers are least satisfied with entrepreneurship skills of business school graduates.

Teamwork is the most in demand soft skill in North America

The soft skills in demand in North America in 2023

Teamwork	Communication	Critical thinking	People skills	Data-driven decision making
97.3%	97%	95.3%	95%	95%

Digital competency is the most valued hard skill in North America

The hard skills in demand in North America in 2023

100%	**98.8%**	**97.6%**
Digital competency	Data analysis	Project management

Hard skills

Digital competency

The majority of North American employers consider digital competency to be crucial and project management skills hold significant importance in the job market.
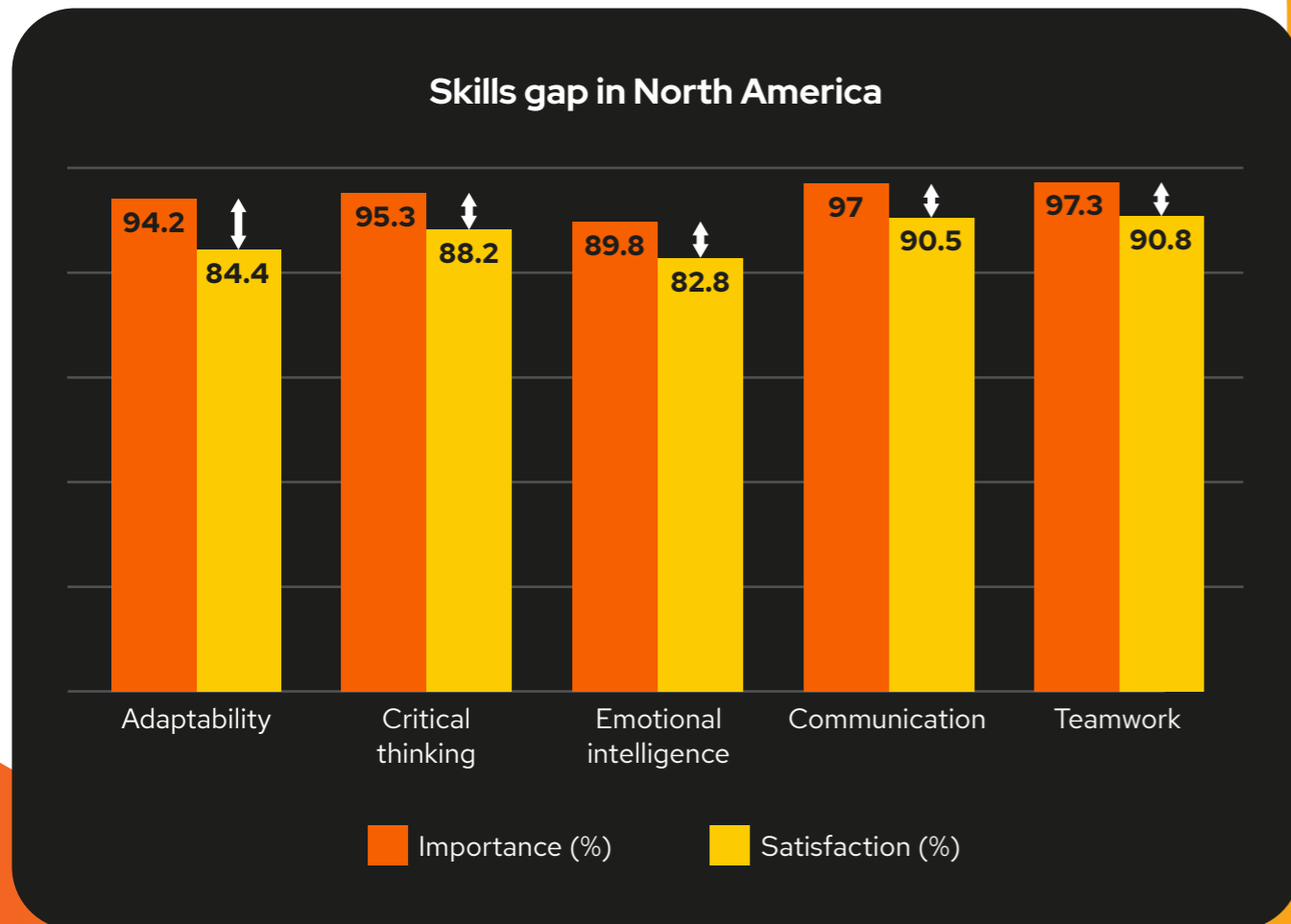
Data analysis

The majority of North American employers expressed satisfaction with data analysis skills.

AI

Satisfaction was lowest with AI skills in business school graduates. This is unsurprising given the transformational change in AI platforms and interest which occurred in the first six months of 2023.

Adaptability presents the greatest skills gap for North American employers

Skills gap in North America

Skill	Importance (%)	Satisfaction (%)
Adaptability	94.2	84.4
Critical thinking	95.3	88.2
Emotional intelligence	89.8	82.8
Communication	97	90.5
Teamwork	97.3	90.8

■ Importance (%)   ■ Satisfaction (%)

	Biggest skills gaps in North America	Gap
1	Adaptability	9.9%
2	Critical thinking	7.1%
3	Emotional intelligence	7.0%
4	Communication	6.6%
5	Teamwork	6.5%

The QS finding on the skills gap of adaptability showcases how important it is for students to take advantage of any type of experiential learning opportunity their school or programme offers. Many schools, Carlson included, have several ways to learn hands-on entrepreneurial skills through partnerships with start-ups, collaboration with university led innovators and researchers, and projects with corporations and nonprofits. Utilizing these experiences to augment your classroom learning is a great way to get comfortable with problem solving, dealing with ambiguity, and adapting to the constantly changing world of business.
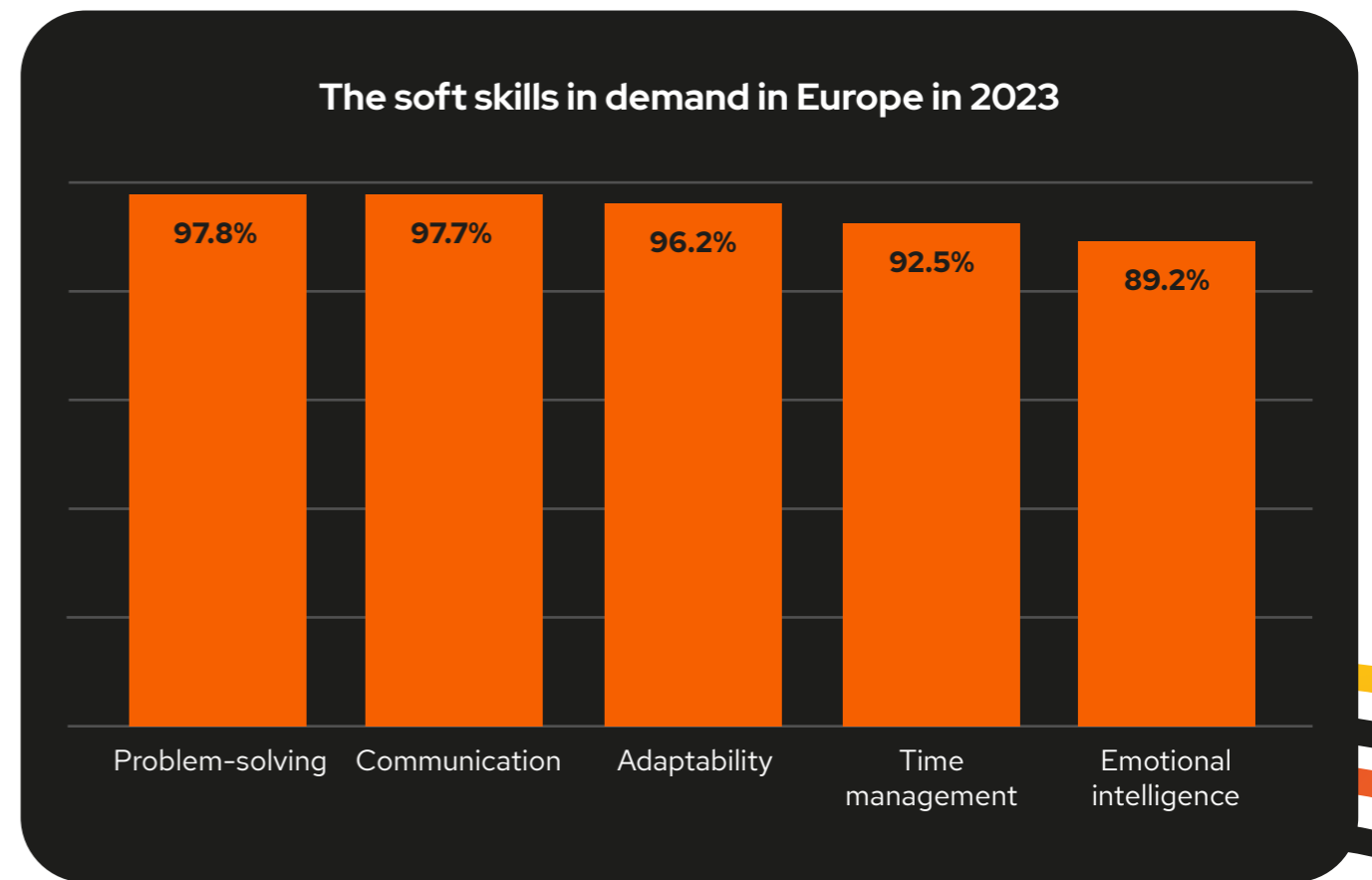
Maggie Tomas, Executive Director, Carlson Business Career Center–Carlson School of Management/Univ of Minnesota and Vice President, MBA CSEA

Skills gap: Europe

According to a McKinsey The Future of Work in Europe report, 67% of employers identify soft skills such as leadership, teamwork, communication, and problem-solving as crucial for employees, particularly in the era of automation and digital transformation.

Problem-solving and communication are the two most sought-after soft skills in Europe

The soft skills in demand in Europe in 2023

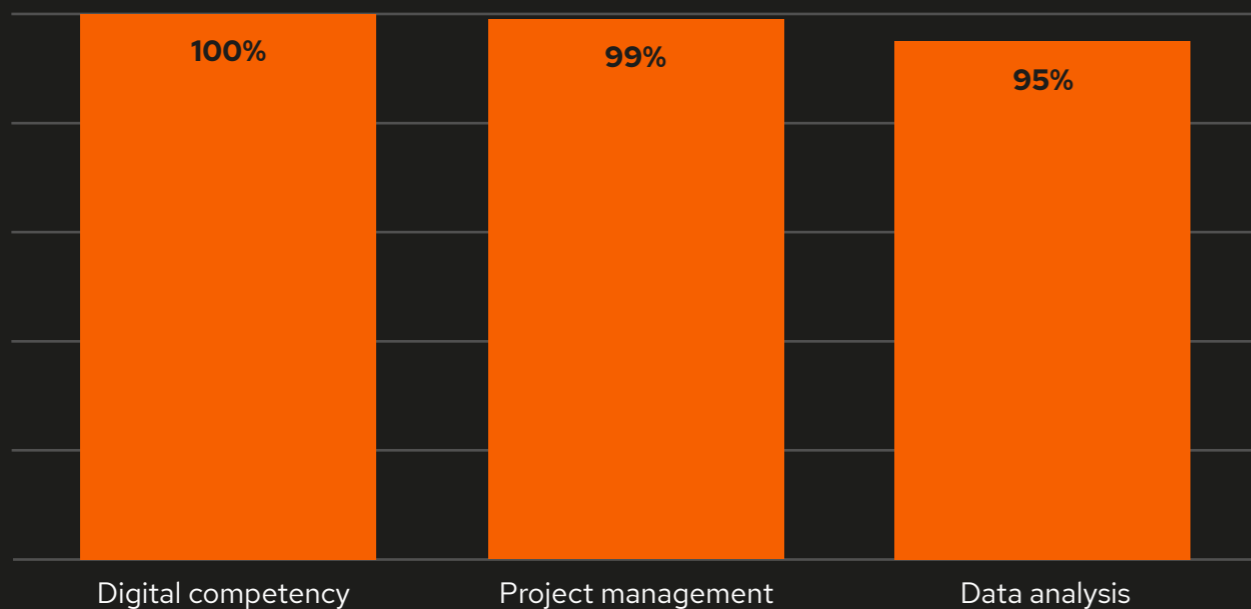| Problem-solving	Communication	Adaptability	Time management	Emotional intelligence
97.8%	97.7%	96.2%	92.5%	89.2%

Hard skills

Digital competency

Digital competency is the most important skill amongst employers in European business education.

Blockchain management

Blockchain management is becoming an essential skill for business school graduates in Europe as the EU actively invests in blockchain technology.
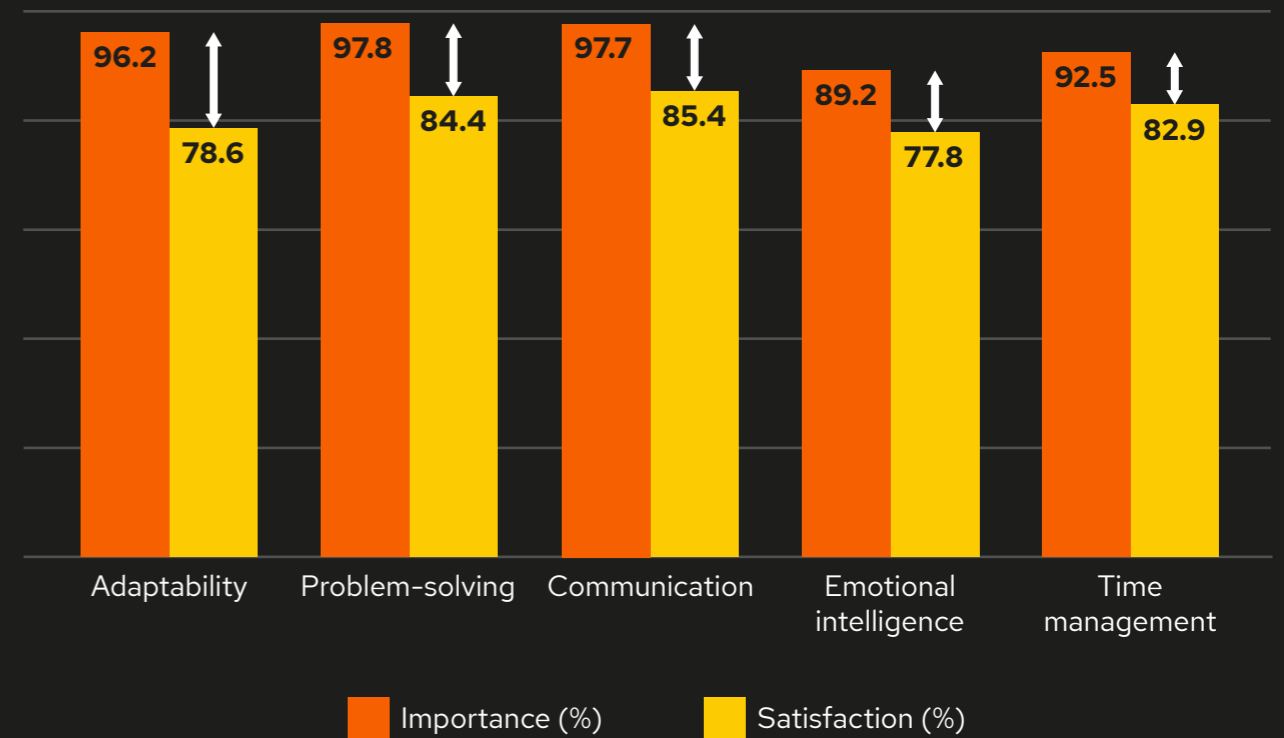
Digital competency is the number one hard skill in demand from European employers.

The hard skills in demand in Europe in 2023

Digital competency	Project management	Data analysis
100%	99%	95%

Adaptability presents the biggest skills gap challenge to European employers

Skills gap in Europe

	Importance (%)	Satisfaction (%)
Adaptability	96.2	78.6
Problem-solving	97.8	84.4
Communication	97.7	85.4
Emotional intelligence	89.2	77.8
Time management	92.5	82.9

- Importance (%)
- Satisfaction (%)

	Biggest skills gaps in Europe	Gap
1	Adaptability	17.6%
2	Problem solving	13.4%
3	Communication	12.3%
4	Emotional intelligence	11.4%
5	Time management	9.6%

Skills gap: Asia

The Coursera Global Skills Report acknowledges the importance of business, data science, and technology skills in building a robust workforce for economic growth in the Asia Pacific region. Soft skills are considered vital for long-term success and innovation, shaping the way organisations in Asia approach talent acquisition, workforce development, and business education.

Soft skills

Team work

The ability to work in a team is regarded as the most important soft skill in Asia and digital competency the most important hard skill.
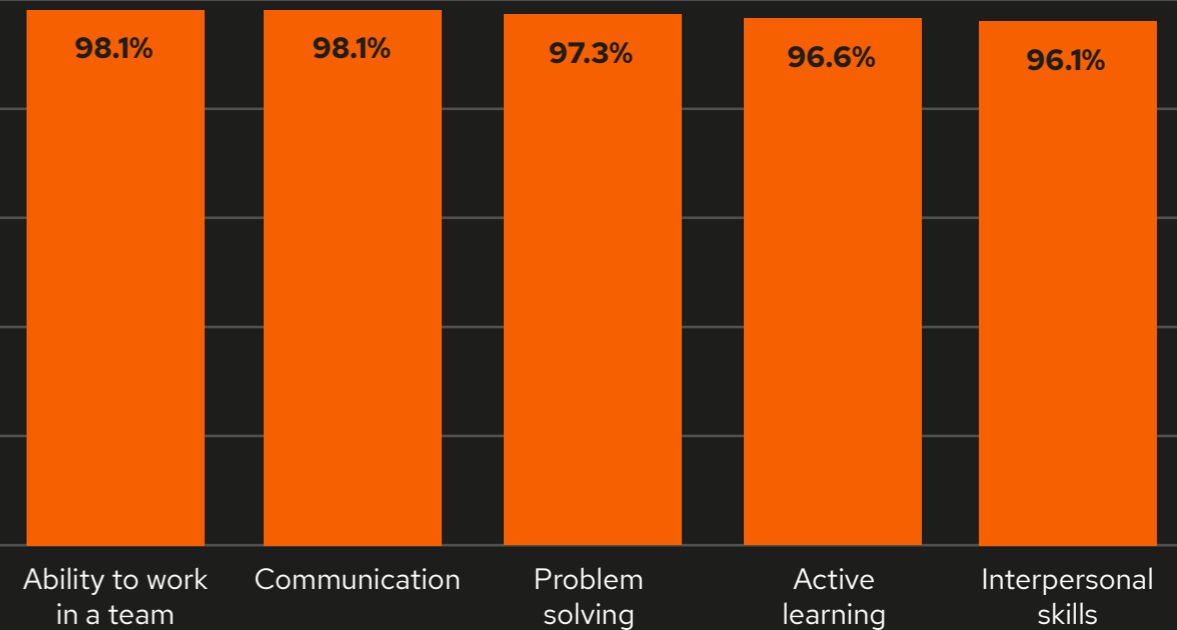
Ethics and social responsibility

88% of employers in Asia are satisfied with the ethics and social responsibility skills which they see in business school graduates.
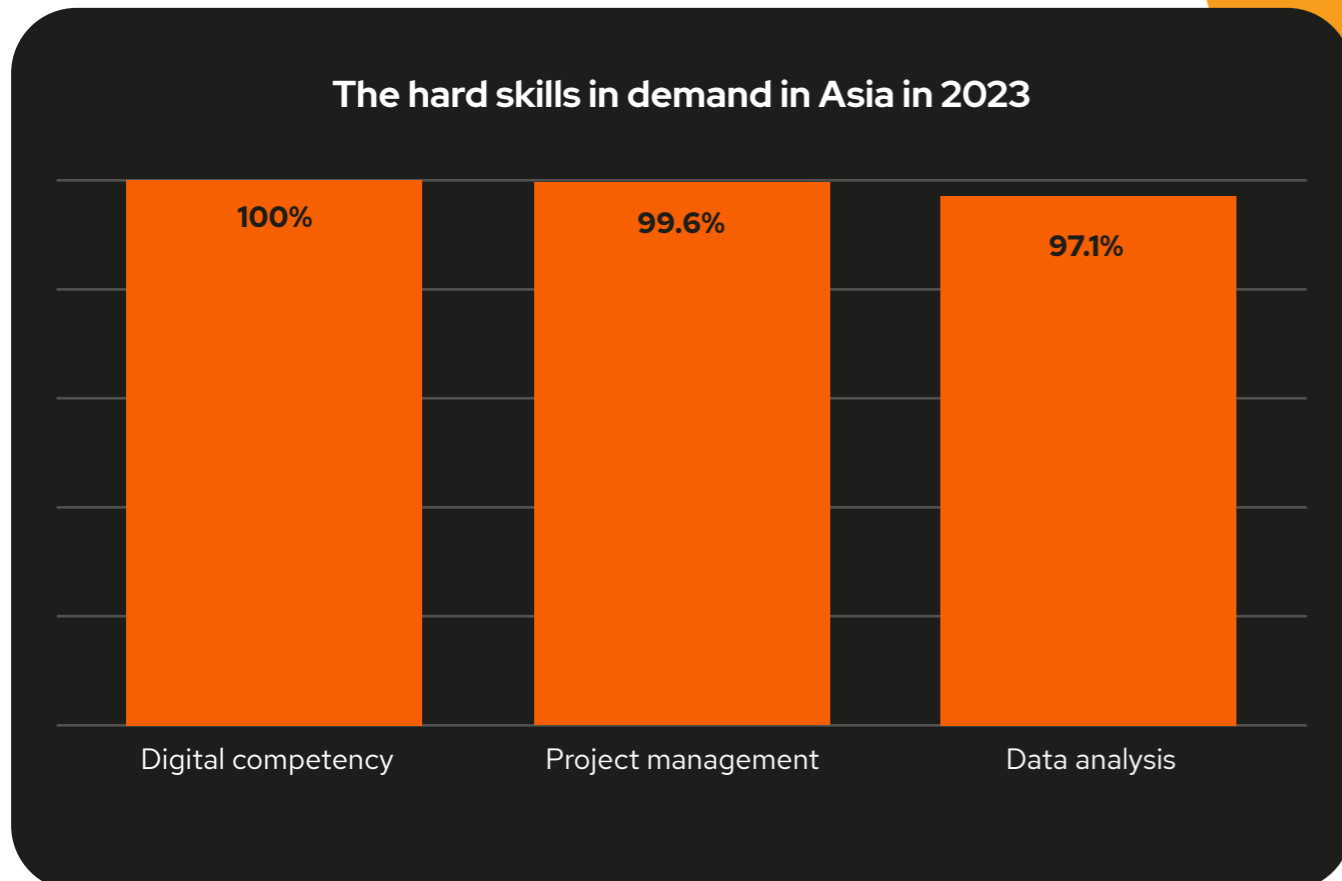
Creativity

Skills in creativity represent the biggest skill gap in Asia and employers are least satisfied with leadership skills.

Teamwork and communication are the two most important soft skills for employers in Asia

The soft skills in demand in Asia in 2023

Ability to work in a team	Communication	Problem solving	Active learning	Interpersonal skills
98.1%	98.1%	97.3%	96.6%	96.1%

Digital competency is the most important hard skill for employers in Asia

The hard skills in demand in Asia in 2023

Digital competency	100%
Project management	99.6%
Data analysis	97.1%

The biggest skills gap is in creativity with problem solving a close second.

Skills gap in Asia

Skill	Importance (%)	Satisfaction (%)
Creativity	91.8	80
Problem solving	97.3	86.2
Adaptability	95.6	84.6
Critical thinking	96.6	85.7
Sustainability	90.9	80.9

■ Importance (%)   ■ Satisfaction (%)

	Biggest skills gaps in Asia	Gap
1	Creativity	11.8%
2	Problem Solving	11.2%
3	Adaptability	11%
4	Critical thinking	10.9%
5	Sustainability	10.0%

The skills gap: What employers want from business school graduates

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Taking action:
how business schools can address the skills gap

Daniel Kahn,
QS Senior Insights Specialist (Graduate Management Education)

The findings from the QS Global Employer Survey 2023 serve as a call to action for educational institutions, businesses, and policymakers to foster collaboration and innovation in bridging the skills gap. These are my recommendations on the actions which business schools can take:

- **Analyse specific gaps:** Assess the specific areas where gaps exist between employer needs and current offerings. Evaluate how existing curricula align with the identified critical skills, and determine where enhancements or additions are necessary.

- **Engage with industry:** Build direct relationships with employers to understand their real-time demands. Collaborate with them to develop courses, workshops, or guest lectures that bring industry insights into the classroom and into their boardrooms.

- **Update curricula:** Reflect on the skills highlighted as important but lacking. Modify the existing curricula to include these skills, ensuring that graduates are equipped with the competencies that are most valued in the workplace.

- **Monitor satisfaction continuously:** Establish a system for ongoing communication with employers to regularly gauge their satisfaction with graduates' skills. Continuous feedback will allow for timely adjustments, ensuring that the education provided remains aligned with industry needs.

- **Promote soft skills development:** While technical skills are essential, interpersonal skills, communication, and adaptability are also in demand. Implement programmes that foster these attributes, recognising that they are often as crucial to career success as hard skills.

- **Personalise skills development:** Consider where in the world – or with what kind of organisaiton - a student may be looking for work and encourage them to understand the skills gaps in those regions and how they might gain experience and knowledge in those skills areas.

- **Project management:** Focus on embedding project management skills into all business curriculums. Schools still have a tendency to favour project management theory over real-world practice. There's no harm in learning the theory too but the emphasis needs to be on practical experience and skills.

Appendix

The QS Global Employer Survey, conducted annually, receives over 60,000 responses from a diverse array of businesses, ranging from globally recognised corporations to emerging small businesses.

Minor variations in the report's calculations due to rounding are noticeable but permissible.

Data analysis and interpretation

The collected data were analysed to discern patterns and disparities between the importance and satisfaction levels concerning various hard and soft skills. The skills gap, in this context, is defined as the difference between the importance assigned to a skill by the employers and their satisfaction with that skill among their current employees or recruits. For example, if a particular hard skill was deemed highly important but the satisfaction level was low, it would indicate a significant gap for that skill.

The insights were further refined by considering the specific regions where the employers were based, allowing for a geographically nuanced understanding of the skill gap. This regional analysis helped in identifying unique trends and challenges in different parts of the world, thereby aligning the findings with the broader context of global skills gap statistics and trends. By segmenting the analysis regionally, the study was able to provide targeted recommendations for addressing the skill

gap in different markets and industries, reflecting the varied nature of business practices, educational systems, and workforce development initiatives across different regions.

In the process of adapting the survey results data to the context of business education, it must be noted that some of the names of the skills originally included in the employer survey have undergone modifications. This alteration was necessary to ensure that the terminology resonated more accurately with the specific discourse of business education. The original meanings and implications of the skills have not been altered; only the wording has been refined to better align with the context under examination.

This methodological decision was made to enhance the clarity and relevance of the findings, facilitating a more nuanced understanding of the hard skills essential for business education. It reflects a commitment to presenting the information in a manner that is both accurate and contextually appropriate, without compromising the integrity of the original data.

Methodology to calculate skills gap

To accurately identify the skills gap among various competencies, a methodical evaluation was employed. This process consisted of assessing employers' perspectives on the importance and satisfaction of distinct skills. The calculation was executed in three essential steps:

Importance Index Calculation: Employers' feedback was quantified by assigning a score of +1 for each mention of "Very Important" or "Important," and -1 for each mention of "Not Important." The sum of these scores was then divided by the number of respondents and multiplied by 100. The formula is: Importance Index=(Σ Importance Points/Number of Respondents) ×100

Satisfaction Index Calculation: A similar method was used for the Satisfaction Index. A score of +1 was assigned for "Very Satisfied" or "Satisfied" and -1 for "Not Satisfied." The sum was then divided by the number of respondents and multiplied by 100. The formula is: Satisfaction Index=(Σ Satisfaction Points/Number of Respondents)×100

Skill Gap Calculation: Finally, the Satisfaction Index was subtracted from the Importance Index to calculate the Skill Gap: Skill Gap=Importance Index−Satisfaction Index.

Example

Consider a skill for which 10 employers responded. Among them, 7 said it was "Very Important" or "Important" (+7 points), and 3 said it was "Not Important" (-3 points). Therefore, the Importance Points are 7−3=4. If 6 employers were "Very Satisfied" or "Satisfied" (+6 points), and 4 were "Not Satisfied" (-4 points), the Satisfaction Points are 6−4=2.

Using the formulas:
- Importance Index = (4/10)×100=40
- Satisfaction Index = (2/10)×100=20
- Skill Gap = 40−20=20

This example illustrates the method used to determine the skills gap for a specific competency, revealing the variance between the perceived importance of a skill and the satisfaction with current competence levels.

Data note: In the evaluation of hard skills required for business education, the scores were rescaled out of 100. This rescaling was essential to normalise the data and provide a consistent framework for analysis. The original data included a broad range of skills, some of which were not directly relevant to the context of business education. As such, the analysis was concentrated on the top three hard skills to provide a more contextual perspective.

Survey design and participants

Between January 2023 and April 2023, a comprehensive survey was conducted among more than 98,000 employers worldwide. The respondents had to answer a survey that lasted around 10 minutes. This survey was designed to gauge various aspects of the workforce but specifically included questions related to the skills that employers found important and the skills with which they were satisfied. The skills were meticulously categorized into hard skills (e.g., technological proficiency) and soft skills (e.g., interpersonal communication).

From the total respondents, 16,278 were identified as relevant for recruiting business school graduates. The segmentation of these respondents was as follows:

Industry	Percentage
Finance / Banking	14%
Consulting	12%
Technology	12%
Education	10%
Manufacturing	6%
HR / Recruitment/ Training	5%
Engineering	4%
Health / Medical	4%
Construction / Real Estate	4%
Consumer Goods	3%

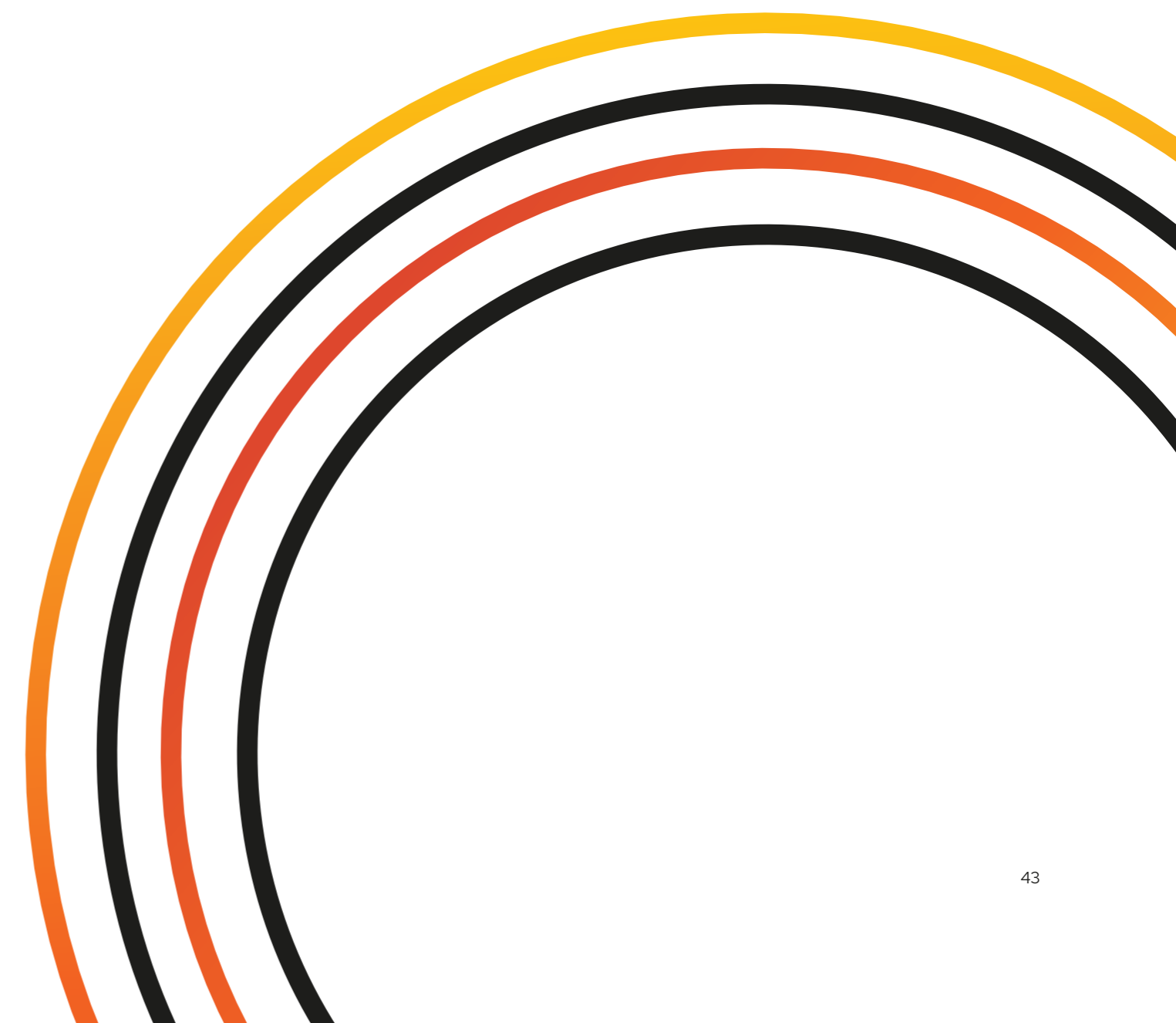| Company size	Percentage
Large Enterprise (more than 2500 employees)	27%
Medium sized business (100 – 499 employees)	24%
Small business (10 – 99 employees)	20%
Enterprise business (1000 - 2499 employees)	12%
Mid-Large sized business (500 - 999 employees)	9%
Micro business (1-9 employees)	9%

Contextual understanding

The survey was framed against the backdrop of a growing skills gap observed globally. This growing concern has been recognised by **87% of companies worldwide** (Gitnux, 2023) and could lead to significant economic impacts such as an $8.5 trillion loss in the US by 2030 The UK context highlighted that 88% of businesses (Oxford College of Learning, 2023) lack at least one area of digital skills, pointing to a wider issue that transcends geographic boundaries.

Limitations and future research
While the survey provided rich insights, it also acknowledged the limitations and areas that could be explored in future research. The rapidly evolving technological landscape and socio-economic factors that contribute to the skills gap were identified as areas that require ongoing examination and longitudinal studies.

QS

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