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**EUROPEAN
SKILLS
SURVEY
REPORT**



EUROPE



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INTRODUCTION

The Erasmus+ PANTOUR Project is a European partnership for improving a collaborative and productive relationship between education and industry. PANTOUR is the follow-up project of the NTG project (Next Tourism Generation Skills Alliance; 2018-2022). The PANTOUR project aims specifically at designing innovative solutions to address skills needs in tourism.

With the exploitation of its outputs, PANTOUR seeks to benefit job seekers, employed and unemployed workers from the tourism industry, employers, SMEs, sector associations and policy makers. Therefore, it has dedicated special attention to the reskilling and upskilling of the generic workforce on future skills needs. To be able to achieve this goal, research has been conducted in every country of the project consortium, to investigate the future of tourism, skills gaps between current levels of skills in the tourism industry and the future skills needed in the future.

As a start, up to date information is needed. This will be covered with this EUROPEAN Skills Profile Report: a comprehensive document, covering an in-depth analysis of the general tourism and skills landscape, gaps, needs and workforce capabilities within a particular country. It serves as a valuable resource for policymakers, government officials, employers/employees, and educational institutions to understand the current state of skills and make informed decisions regarding workforce development strategies.

The purpose of this European Skills Profile Report is to provide on the basis a comprehensive overview of the following:

General information of Europe regarding tourism and tourism employment, i.e., tourism facts & figures;

Summary of the current situation regarding the delivery of Digital, Green and Social Skills training provision for the main types of suppliers of education/training;

Analysis of online survey results within Europe, held among tourism professionals, HR managers and decision makers;

Overview of contemporary developments in tourism, trends in tourism employability, and the existing gaps between current levels of skills in the tourism industry and the projected future skills needed in 2030.

1. GENERAL TOURISM CHARACTERISTICS, FACTS & FIGURES OF EUROPE AND THE IMPLICATIONS FOR PANTOUR

The primary aim of this chapter of this European Skills Profile report is to elaborate on general information and give a summary of the tourism situation in the country. This is conducted by collecting and analysing data from sources and summarising these. The analysis is built upon existing online sources, course content, reports, existing research results, articles, books.

1.1 TOURISM FACTS & FIGURES

Tourism globally

The tourism industry is a vast and complex sector that encompasses many industries, including accommodation, transport, attractions, travel companies, and more. According to the international statistics portal Statista (2023 [1]), the total contribution of travel and tourism to the global economy was \$ 7.71 trillion in 2022 (Statista, 2022), a 7.6% share of the total global GDP, remaining 5% below pre-pandemic levels.

Prior to the pandemic, Travel & Tourism was one of the largest sectors in the world and accounted for 1 in 4 jobs. Growth is expected at 5.8% annually between 2022 and 2032, outpacing the general economy.

The same source (Statista, 2023 [2]) reports that the number of international tourist arrivals worldwide was 963 million in 2022. According to another study of Statista (2023), global employment in the travel and tourism sector rose slightly in 2022 over the previous year, following a sharp drop with the onset of the coronavirus pandemic. Despite the increase, the number of travel and tourism jobs worldwide remained below pre-pandemic levels, totaling 295 million in 2022. As forecast, this figure is expected to grow to 320 million in 2023 and to 430 million in 2033.

Analysing secondary data sources reveals the tourism industry has undergone a significant digital transformation in recent years. Key information includes:

Tourist SMEs often lack the necessary technical resources in their workforce to fully realise digital potentials. This can be due to several factors ranging from a lack of knowledge in identifying required digital skills to limited staffing issues, restricting the time and effort which can be applied to learning new digital. Beyond broad educational opportunities, advisory and consulting services are important to address specific needs of individual enterprises. There is some question as to whether public administrations, professional associations or the private sector is best suited to provide such services. *Advisory and consulting services could:*

- Assist individual tourism companies to develop their own digital strategies/plans that best suit their current stage of digitalisation and existing resources. These digital strategies should not be stand-alone but also focus on strategies for integration into existing digital supply chains.
- Assist individual tourism SMEs to develop appropriate training plans to acquire new digital Skills training

Training needs to be differentiated and targeted to different groups of Enterprises and employees including those that just start to digitalise and are moving into e-business; those that are in transition to e-commerce; and those that are highly digitalised and experimenting with new technologies. The effectiveness of filling workforce skills gaps will consequently need to accommodate fears and resistance and where it is practical and possible, persuading employees that the growth in the use of technology will not threaten their jobs but may enhance them.

Mentoring support

Mentoring initiatives can boost innovation, enhance creativity and ideation, assist with capacity building, and improve connectivity between tourism enterprises, tech companies, and other start-ups. Mentoring reduces the distance, and improves the timeliness, of advice between those that have the expertise and those that need to learn.

Finance

[Lack of finance is identified as the number one obstacle preventing the implementation of digital technologies in tourism SMEs.](#)¹ There is a significant concern amongst tourism enterprises that the cost of implementing new digital technologies will not be offset from the gains.

Infrastructure and Connectivity

The geographic location of tourism enterprises greatly affects their access to adequate digital infrastructures. Many tourist destinations, especially in emerging markets, lack robust digital infrastructure and high-speed internet, hindering the implementation of advanced technologies. SMEs in urban settings benefit from modern wireless and fiber broadband connections whereas the infrastructure in rural or more remote areas is often deficient. Technology - Operational issues captures a number of issues associated with suitable and appropriate technologies, including technical problems such as instability and virus protection, loss of data, outdated software, time and effort required to maintain online stores, and so on

Digitalization Impact

The digitalization of the tourist sector has reshaped how tourists plan, book, and experience their trips. Online platforms, mobile apps, and social media play a central role in this process.

¹ Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018) "Digitalisation in Tourism: In-depth analysis of challenges and opportunities". *Low Value procedure GRO-SME-17-C-091-A for Executive Agency for Small and Medium-sized Enterprises (EASME)*. Virtual Tourism Observatory. Aalborg University, Copenhagen.

Cybersecurity and data privacy regulations

With the increase in online transactions and data collection, the sector faces cybersecurity threats. Protecting customer information and maintaining trust is a crucial challenge. Also, compliance with data privacy regulations (e.g., GDPR) is a constant concern, as tourists' personal data is frequently handled.

Technological Adoption

The industry is adopting technologies such as augmented reality, virtual reality, and artificial intelligence to enhance customer experiences and streamline operations.

Data Utilization

Data analytics and big data are being harnessed for personalised marketing, demand forecasting, and optimizing resource allocation.

Online Reviews and Reputation Management

Online reviews and social media have a significant influence on tourists' choices and can shape the reputation of destinations and service providers.

1.1 ARISING KEY ISSUES AND CHALLENGES FROM PANTOUR RESULTS

The survey for desk research has also included European countries beyond the initial scope of the Pantour project, such as Austria, Sweden, Georgia, Ukraine, Czech Republic, Malta, United Kingdom, Slovenia, Poland, Moldova, Denmark, Norway, Belgium, Lithuania, Switzerland, Montenegro, Serbia and North Macedonia; also some countries in the rest of the world like Cyprus, China, USA and Singapore; to have a more clarifying and joint vision of the whole European and world panorama of digital skills.

Use of office applications (text processing, spreadsheets, presentation software) -3,9- , use of digital marketing systems and communication platforms (social media networks, e-mail and direct marketing systems, content management systems) are the most developed and common digital skills -3,62-²

All topics related to *digital privacy and ethics, secure information processing (backing-up, cybersecurity, data protection) -3,51- and digital business analysis, business intelligence, data-driven decision making -3,03-* have gained special relevance within the catalogue of digital skills in recent years.

Web & app development & programming is also considered as priority skills -2,93- , although less important than the previous ones, probably because it is usually dealt with by specialised technicians from outside the tourist sector.

Use of digital technologies to create guest experiences (e.g., for Virtual- and Augmented Reality); -1,96- *use of generative AI applications* (e.g., ChatGPT) for generating text and visuals have gained a lot of importance -1,74-, although they are not yet considered as important as those mentioned above.

Finally, the *use of robots* is not yet considered as a necessary skill in the tourism sector. -1,27-

The so called 'digital gap', arising from poor access to skills and technology, is quite high in the sector. Research has shown that the gap exists partly in existing jobs and activities, where there is a need to combine digital competence with complementary skills. However, there is also a need to provide for a range of specialist jobs, with commensurate skills, and to attract new people with digital aptitude into the tourism workforce. In many countries, evidence of specific skill requirements and of needs and opportunities is insufficient and more research and better planning is needed.

² Numbers refer to scores obtained in the survey conducted by Pantour Project

1.2 CONNECTION TO PANTOUR AND THE IMPLICATIONS FOR THE PROJECT

The PANTOUR project can benefit from addressing these digital challenges:

- **Workforce Training:** PANTOUR can initiate digital skill development programs to bridge the skills gap, ensuring that the workforce can harness digital tools effectively.
- **Data-Driven Insights:** By leveraging digital skills, the project can gather and analyse data to make informed decisions regarding tourism management, resource allocation, and sustainability.
- **Collaboration and Best Practices:** The project can facilitate knowledge sharing and collaboration among tourism stakeholders to collectively address digital challenges and share best practices
- **Develop a programme of digital skills education, training, and other support, tailored to meet the needs of the sector:**³ Partnerships with training bodies could be established to develop different training packages to meet varying levels of experience and need in the sector. Digital skills should also form a part of all mainstream tourism, travel and hospitality education and training, including in adult learning programmes.

Actions to pursue include:

- Setting targets for the uptake of digital skills programmes and an increase in the level of digital skills in the sector, with related monitoring.
- Providing research-based evidence on the results of digital upskilling
- Establishing and reporting on demonstration projects on digital applications in the sector.

³ OECD (2021), "Preparing the Tourism Workforce for the Digital Future", OECD Tourism Papers, No. 2021/02, OECD Publishing, Paris, <https://doi.org/10.1787/9258d999-en>.

1.3 KEY INFORMATION AND TRENDS/DEVELOPMENTS

The tourist sector is experiencing a significant transformation due to digital advancements. Key trends and developments include:

- **Increasing Online Booking:** The rise of online travel agencies (OTAs) and booking platforms, leading to a growing reliance on digital channels for reservations.
- **Personalisation and Data Analytics:** Data-driven decision-making and personalisation are becoming crucial for enhancing customer experiences and marketing efforts; including the use of big data and blockchain, to enable more efficient, accurate and profitable business operations and to assist in the management of destinations and visitor flows.
- **Virtual Reality and Augmented Reality:** These technologies are being used for virtual tours, providing immersive experiences to potential tourists.
- **Mobile Apps and social media:** Fast and cheap communication, marketing and sales via social media, digital platforms, and a range of on-line and mobile applications. These can be universal or highly targeted to identified users, capable of delivering customised products to travellers and giving them comparable and increasingly real-time information to inform decision-making.
- **Contactless Solutions:** In response to the COVID-19 pandemic, contactless technologies are becoming more prevalent, including mobile check-ins and digital room keys. biometrics, robotics, artificial intelligence, and the Internet of Things.

1.4 PANTOUR OTHER COUNTRY SURVEY ANALYSIS DIGITAL SKILLS

In general, there is a significant gap in digital skills (56 % in overall figures of all topics included in the survey), both among the workforce and management.

Use of robots, use of generative AI applications (e.g., ChatGPT) and use of digital technologies to create guest experiences (e.g., for Virtual- and Augmented Reality); are the skills that have the biggest gap between their current implementation status and their future development, according to the survey participants' replies of other countries

A bigger development and therefore an important gap is also expected in Web & app development & programming, secure information processing (backing-up, cybersecurity, data protection) and digital business analysis, business intelligence, data-driven

Reskilling and Upskilling in use of digital marketing systems and communication platforms (social media networks, e-mail and direct marketing systems, content management systems) will be still necessary in the future, although not so important as the above mentioned.

1.5 CONNECTION TO THE PANTOUR PROJECT AND IMPLICATIONS

The PANTOUR project, must adapt to these digital trends. It should consider incorporating technology to support sustainable practices, enhance visitor experiences, and leverage data analytics for informed decision-making. Digital marketing and online engagement strategies will also be essential for the project's success. PANTOUR should be prepared to embrace its partners and stakeholders on these digital changes to achieve its goals effectively.

Implications

- Training and Education Programs: Governments, industry associations, and businesses can collaborate to provide training and education programs that teach digital skills to employees in the tourism sector. These programs can range from basic digital literacy to advanced data analytics.

- **Digital Inclusion Initiatives:** Efforts should be made to bridge the digital divide by ensuring that smaller and less resourceful businesses have access to affordable technology and digital infrastructure⁴.
- **Cybersecurity Training:** Cybersecurity awareness and training should be integrated into digital skill development programs to protect businesses and customer data.
- **Continuous Learning:** Encourage continuous learning and staying up to date with the latest digital trends through workshops, webinars, and online courses.
- **Technology Integration Support:** Provide guidance and support to tourism businesses looking to integrate new technologies. This can include consulting services and partnerships with tech providers.
- **Mentorship and Knowledge Sharing:** Establish mentorship programs where experienced professionals can guide newcomers in the industry, sharing their digital expertise and knowledge.

1.6 THE EMERGENCE OF NEW SKILLS

- New digital skills encompass a range of competencies. Some of these include:
- AR/VR development and content creation for immersive travel experiences.
- Data analytics and data science for customer profiling, market analysis, and personalized marketing.
- Proficiency in managing AI-driven chatbots and virtual assistants to enhance customer service.
- Expertise in online booking platforms, social media marketing, and mobile app development for digital marketing and sales.

⁴ Lazić, M. et al. (2023) "Digital skills in tourism and hospitality as a precondition for the sector resilient growth: The case of Serbia" – *Hotel and Tourism Management*, 2023, Vol. 11, No. 1: 25-40. <https://doi.org/10.5937/menhottur2301025L>

- Skills related to health and safety management using digital tools and contactless technologies.

The evolution of digital skills in the tourism sector since 2022 has been significant, but challenges remain, especially regarding digital inclusivity and keeping up with the rapidly changing technological landscape. [Collaborative efforts among governments, industry stakeholders, and educational institutions can help address these gaps and ensure the sector remains competitive and resilient in the digital age.](#)⁵

These new digital skills are relevant for a wide range of employees in the tourist sector. From marketing and customer service staff to IT professionals and managers, digital proficiency is increasingly essential. However, not all employees will require the same level of expertise in these skills. For example, IT specialists will need in-depth knowledge of data analytics and cybersecurity, while front-line employees may need basic digital marketing skills to communicate with tourists effectively.

In conclusion, the future of digital skills in the tourist sector is closely tied to the sector's evolving trends and the growing importance of technology. The PANTOUR project should adapt to these changes by embracing digital tools and educating stakeholders to meet the sector's evolving needs effectively. New digital skills will play a pivotal role in enhancing customer experiences, promoting sustainability, and ensuring the sector's continued growth.

⁵ OECD (2021), "G20 Rome guidelines for the future of tourism: OECD Report to G20 Tourism Working Group", *OECD Tourism Papers*, No. 2021/03, OECD Publishing, Paris, <https://doi.org/10.1787/d11080db-en>.

2. SURVEY RESULTS

This summary provides an overview of the survey results by sub sector across all survey respondents, conducted to assess current levels in digital, green and socio-cultural skills, and identify future gaps in these areas:

Total number of responses in EUROPE (including category 'Other' = 185)	
Number of responses:	873
Destination management organisations:	86
Accommodation providers:	321
Food & Beverage:	55
Visitor attractions:	77
Travel agents and tour operators:	149

We see broadly similar pictures across the sub sectors in most of the skills, indicating that many of the challenges faced in the future are likely to be shared throughout the tourism industry. Anomalies occur primarily in green skills in the travel agencies and tour operator sub sector, with them being the only one not showing the largest gap to be in CO2 measurement skills. Additionally, they are better skilled than the other sub sectors in the field of harnessing green technology.

Current skills

Sub Sector	Digital	Green	Social-Cultural
DMOs	2.80	2.83	3.72
Accommodation Providers	2.90	2.87	3.82
Food & Beverage	2.64	2.60	3.54
Visitor Attractions	2.82	2.83	3.78
Travel Agents & Tour Operators	2.79	2.56	3.82

Skills Gaps

Across the board, we see a much smaller % gap between current and future skills in the socio-cultural area than in the other two. This could possibly be attributed to this skillset being the traditional and established bedrock of the tourism industry, whereas digital and green skills are more recent developments. Digital and green skills show broadly similar % gaps, with digital gaps slightly lower than green skills gaps.

Sub Sector	Digital	Green	Social-Cultural
DMOs	59%	54%	23%
Accommodation Providers	54%	53%	22%
Food & Beverage	57%	62%	28%
Visitor Attractions	56%	52%	25%
Travel Agents & Tour Operators	56%	60%	22%

Looking at the features in the detail of each skill set, we can draw some overall conclusions:

Digital

Advanced skills such as robotics, mobile applications and AI are currently regarded as less relevant across all sub sectors. This is particularly true of robotics, which is also considered less relevant for the future.

Longer established skills such as information processing, office administration and email marketing show higher levels of proficiency. It is encouraging to see that digital privacy and ethics are also valued skills with good levels of competency.

Overall, the greatest challenges lie in the adoption of advanced technologies, highlighting the need to embrace a wider range of emerging innovations in the future across all sub sectors. These advancements create and enhance the guest experience, which is a key element for the tourism industry.

Green

In contrast to digital skills, we do not see such a prominent distinction between established skills and newer ones. This could be because much of this area is newer to organisations, so they are not starting from such an established base as we saw in some of the digital skills.

It is clear that all the sub sectors are facing difficulties around measurement, certification and green technology, with measurement and management of CO2 emissions consistently ranking at the bottom of the proficiency ratings, both now and in the future. This underscores an urgent need to invest in supporting all sub sectors with accessing metrics to understand their performance in this area. With regard to measuring and managing waste, some sub sectors fare better than others, notably accommodation providers. This could be attributed to greater ease of measuring this in a single, or chain, of properties versus the multiple facets involved for destination marketing organisations, travel agents and tour operators. Lastly, there is also evidence of the need to embrace technical tools and certifications to progress sustainability initiatives.

The smallest skills gaps are mostly in relation to sustainability compliance, indicating that all sub sectors have a good grasp of their legal requirements. Green procurement features higher up the list of currently proficient skills for food and beverage providers than any other sub sector. This could be due to more advanced transparency in the origins and production of food than in other sectors of the supply chain. Visitor attractions are currently the most proficient sub sector at encouraging sustainable practices amongst their guests.

Travel agencies and tour operators provide some interesting deviations from the trends seen in other sub sectors. Measuring CO2 emissions does not appear as the largest skills gap. This could in part be due to many agents and operators including an air travel element in their product. Air travel is more advanced and accountable for measuring its CO2 emissions than other elements in the supply chain, so this could contribute to the slightly greater measurement skills for this sub sector.

2.1 DESTINATION MANAGEMENT

ORGANISATIONS

2.1.1 DIGITAL SKILL SETS

Digital skills

Highest:

1. 4.05 Use of office applications
2. 3.7 Use of digital marketing systems and communications platforms
3. 3.47 Digital privacy and ethics
4. 3.41 Secure information processing
5. 2.85 Digital business analysis, business intelligence, data-driven decision making

Current existing level of proficiency**Lowest:**

1. 1.37 Use of robots
2. 1.62 Use of generative AI applications
3. 1.99 Use of digital technologies to create guest experiences
4. 2.71 Web & app development & programming
5. 2.85 Digital business analysis, business intelligence, data-driven decision making

Most necessary:

1. 4.70 Secure information processing
2. 4.63 Use of digital marketing systems and communications platforms
3. 4.63 Digital privacy and ethics
4. 4.58 Use of office applications
5. 4.45 Digital business analysis, business intelligence, data-driven decision making

**Future necessary level of proficiency
in 2030****Least necessary:**

1. 2.81 Use of robots
-

-
- 2. 3.65 Use of generative AI applications
 - 3. 3.71 Use of digital technologies to create guest experiences
 - 4. 4.02 Web & app development & programming
 - 5. 4.45 Digital business analysis, business intelligence, data-driven decision making
-

Skills gaps between existing and future level of skills sets

Largest gaps:

- 1. 2.03 Use of generative AI applications
- 2. 1.72 Use of digital technologies to create guest experiences
- 3. 1.60 Digital business analysis, business intelligence, data-driven decision making
- 4. 1.44 Use of robots
- 5. 1.31 Web & app development & programming

Smallest gaps:

- 1. 0.53 Use of office applications
 - 2. 0.93 Use of digital marketing systems and communications platforms
 - 3. 1.16 Digital and privacy ethics
 - 4. 1.29 Secure information processing
 - 5. 1.31 Web & app development & programming
-

Current skills levels

Advanced skills such as robotics, mobile apps and AI are currently regarded as substantially less proficient in destination management organisations than the more traditional skills of office administration and email marketing. It is encouraging to see that DMOs already view themselves as reasonably competent in the areas of digital privacy and ethics, as well as secure information processing.

Skills gaps

When looking at the gaps between current and future needs for digital skills, it is perhaps not surprising to see that the largest gaps lie in the areas that destination management organisations are currently not highly skilled in:

- Use of generative AI applications (2.03): The significant gap in using AI in the sub sector suggests that destination marketing organisations would benefit from increasing their proficiency in this area. AI-driven tools can assist marketers in reaching their audience more effectively, personalizing their message to individual consumers and creating personalised content for social media influencers.
- Use of digital technologies to create guest experiences (1.72): This gap highlights a need for DMOs to embrace a wider range of emerging technologies to connect and communicate with potential travellers to the destination. These could include AR/VR experiences and blockchain technology.
- Digital business analysis, business intelligence, data-driven decision making (1.60): This skill has a large gap but is also viewed as one of the most necessary skills for the future (4.45), implying that this should be an area of focus for the sub sector. The ability to make data-driven decisions will help maximise budgets and reach the travellers most likely to visit their destination.
- Use of robots (1.44): This gap could suggest a need for DMOs to integrate robotics into more tasks, but it should also be noted that this skill is viewed as by far the least necessary in the sub sector's future at 2.81.
- Web & app development & programming (1.31): These skills are important for raising the online profile of destination marketing organisations. Upskilling in this area will enable the creation of engaging digital platforms for potential and returning travellers.

The smallest gaps are in the areas this sub sector feels it is already doing well in:

- Use of office applications (0.53): Use of standard office software is already proficient and is not expected to require much attention in the future
- Use of digital marketing systems and communications platforms (0.93): As one might expect in this sub sector, the modest gap in digital marketing skills implies the destination marketing organisations already harness digital marketing tools well
- Digital and privacy ethics (1.16): It is encouraging to see that this gap is quite small.
- Secure information processing (1.29): Again, a reasonably small gap in secure processing skills suggests this sub sector already takes digital customer safeguarding seriously.

These results indicate that destination marketing organisations face the greatest challenges in the adoption of advanced technologies such as AI and robotics but is more advanced than other sub sectors in harnessing digital marketing systems.

2.2.2 GREEN SKILL SETS

Green skills

Highest:

1. 3.20 Understanding of environmental laws and regulations
2. 3.15 Promotion and encouragement of sustainable practices among guests
3. 3.08 Green marketing and product development
4. 3.05 Communication about the organisation's efforts towards a green economy
5. 3.02 Efficient use of resources (e.g. energy, water, materials)

Current existing level of proficiency

Lowest:

1. 2.06 Measurement and management of CO2 emissions
2. 2.56 Measurement and management of waste
3. 2.63 Green procurement and greening the supply chains
4. 2.67 Adoption of environmental certifications and management systems
5. 2.86 Use of technology to speed up the green transition

Most necessary:

1. 4.53 Efficient use of resources (e.g. energy, water, materials)
2. 4.49 Promotion and encouragement of sustainable practices among guests
3. 4.47 Use of technology to speed up the green transition
4. 4.44 Communication about the organisation's efforts towards a green economy
5. 4.37 Green procurement and greening the supply chains

Least necessary:

**Future necessary level of proficiency
in 2030**

1. 3.95 Measurement and management of CO2 emissions
 2. 4.10 Adoption of environmental certifications and management systems
 3. 4.14 Measurement and management of waste
 4. 4.31 Understanding of environmental laws and regulations
 5. 4.36 Green marketing and product development
-

Largest gaps:

1. 1.89 Measurement and management of CO2 emissions
2. 1.74 Green procurement and greening the supply chains
3. 1.61 Use of technology to speed up the green transition
4. 1.58 Measurement and management of waste
5. 1.51 Efficient use of resources (e.g. energy, water, materials)

Skills gaps between existing and future level of skills sets**Smallest gaps:**

1. 1.11 Understanding of environmental laws and regulations
 2. 1.28 Green marketing and product development
 3. 1.34 Promotion and encouragement of sustainable practices among guests
 4. 1.39 Communication about the organisation's efforts towards a green economy
 5. 1.43 Adoption of environmental certifications and management systems
-

Current skills levels

An interesting feature of current green skills, as compared with digital in this sub sector, is that there is not such a prominent distinction between established skills and newer ones. This could be because much of this area is newer to organisations, so they are not starting from such an established base as we saw in digital skills.

Destination marketing organisations are strongest in the areas of understanding laws and regulations (3.2), closely followed by encouraging sustainable practices amongst guests (3.15).

They are also relatively strong in green marketing and communicating their efforts in this area. This indicates an encouraging awareness of understanding and conveying their commitment to sustainability to their visitors. This sub sector is also aware of the importance of resource efficiency, with “efficient use of resources” ranking as the next highest skill (3.02)

The areas of lower proficiency centre around measurement, certification and technology. These are all complex areas, so it is perhaps unsurprising that they are less well understood. Measurement of both CO2 emissions (2.06) and waste (2.56) are at the bottom of the ranking, indicating a need for improvement in environmental monitoring, which in turn will contribute to more robust waste reduction strategies. Working with green suppliers is also a challenge for this sector (2.63), possibly because there are many links in the supply chain for destination management organisations. Lastly, there is also evidence of the need to embrace technical tools and certifications to progress sustainability initiatives.

Skills gaps

The largest Green skills gaps are in the areas of measurement, procurement and use of technology:

- Measurement and management of CO2 emissions (1.89) is the largest gap, indicating a need to improve the ability to accurately assess carbon footprints
- Green procurement (1.74) ranks high among the gaps, indicating that the ability to identify and harness environmentally friendly products and services needs developing in this sector
- Use of technology (1.61) underlines the importance of embracing technology to enhance sustainability efforts.
- Efficient use of resources (1.51) and "measurement of waste" (1.58) are also on the larger gaps list. These two aspects are closely linked and highlight the need for more accessible metrics for businesses to understand their performance in these areas.

Smaller gaps are seen in the skills relating to communication and compliance:

- Understanding of environmental laws (1.11) indicates that destination marketing organisations have a relatively firm understanding of environmental governance, which is the basis for compliance and responsible tourism.
- Green marketing (1.28) and "Promotion of sustainable practices" (1.34) also have smaller gaps, which is perhaps not surprising, given the strong general marketing competence required to do business in this sector.
- Communication (1.39) also has a relatively small gap, suggesting that this sector is already proficient in ensuring the relevant stakeholders understand the practices of destination marketing organisations in this area.
- Adoption of environmental certifications (1.43) implies that this sector is already reasonably proficient at endowing itself with relevant certifications that demonstrate their commitment to sustainability.

2.2.3 SOCIAL SKILL SETS

Social skills

	<p>Highest:</p> <ol style="list-style-type: none"> 1. 3.91 Support diversity, equality and inclusivity 2. 3.85 Provide excellent customer service 3. 3.78 Understand the cultural setting of the own destination and share this information with guests 4. 3.78 Communicate and interact with people from different cultural and social backgrounds 5. 3.76 Communicate effectively with guests and colleagues <p>Lowest:</p> <ol style="list-style-type: none"> 1. 3.35 Communicate effectively with guests in their native language 2. 3.65 Adaptability to change and handle unexpected situations
Current existing level of proficiency	

3. 3.71 Resolve conflicts
4. 3.72 Work effectively in a team
5. 3.76 Communicate effectively with guests and colleagues

Most necessary:

1. 4.74 Provide excellent customer service
2. 4.64 Communicate effectively with guests and colleagues
3. 4.64 Work effectively in a team
4. 4.59 Understand the cultural setting of the own destination and share this information with guests
5. 4.57 Adaptability to change and handle unexpected situations

Least necessary:

Future necessary level of proficiency in 2030

1. 4.28 Communicate effectively with guests in their native language
2. 4.50 Resolve conflicts
3. 4.56 Support diversity, equality and inclusivity
4. 4.57 Communicate and interact with people from different cultural and social backgrounds
5. 4.57 Adaptability to change and handle unexpected situations

Largest gaps:

Skills gaps between existing and future level of skills sets

1. 0.93 Communicate effectively with guests in their native language
 2. 0.92 Adaptability to change and handle unexpected situations
 3. 0.92 Work effectively in a team
 4. 0.89 Provide excellent customer service
 5. 0.88 Communicate effectively with guests and colleagues
-

Smallest gaps:

1. 0.65 Support diversity, equality and inclusivity
 2. 0.79 Resolve conflicts
 3. 0.79 Communicate and interact with people from different cultural and social backgrounds
 4. 0.81 Understand the cultural setting of the own destination and share this information with guests
 5. 0.88 Communicate effectively with guests and colleagues
-

Current skills levels

Overall, destination management organisations are more proficient in social skills than digital or green skills, particularly those centred around cultural awareness and communication. It is encouraging to learn that, in a sector that showcases different cultures, supporting diversity is the highest rated skill (3.91). This is closely followed by providing excellent customer service (3.85), again encouraging to see in a customer-focused industry. Also high on the list for destination management organisations, as might be expected, is understanding cultural settings (3.78). Equally rated at 3.78 is the ability to interact with people from different backgrounds. Communicating with guests and colleagues is also a proficient skill (3.76) but doing so in their native language (3.35) is much less so, appearing at the bottom of the current skills list.

Also lower in proficiency is the ability to handle unexpected situations (3.65). We also see that resolving conflicts (3.71) and working effectively as a team (3.72) are both currently areas that destination management organisations feel they are less proficient at than other social skills.

Skills gaps

It should be noted that the skills gaps in the social-cultural area are significantly smaller than the other two skillsets, indicating this is the area of least concern for

future skills gaps in general. It should, however, not be ignored when upskilling for the future as there are still some areas of improvement. Looking first at the largest skills gaps:

- Communicate with guests in native language (0.93): This implies that destination management organisations need to do more to acknowledge and support linguistic diversity.
- Handling unexpected situations (0.92): Unexpected situations can adversely affect the visitor experience and perception of a destination. Investing in bridging this gap will enhance the sector's ability to respond effectively to crises and ensure the safety and satisfaction of guests.
- Working effectively in a team (0.92): It is essential that this sub sector does more to recognise the importance of collaboration in the workplace.
- Provide excellent customer service (0.89): This gap implies that destination management organisations could aspire to higher levels of customer service excellence. Meeting and exceeding guest expectations is an important element of visitor satisfaction, recommendations and repeat visits.
- Communicate effectively with guests and colleagues (0.88): Effective communication is a high priority skill in the tourism industry. This gap highlights the need for improvement in ensuring clear, culturally appropriate communication with both visitors and colleagues.

Moving to the smallest gaps for destination management organisations:

- Support diversity (0.65): This small gap underscores the value that this sub sector places on inclusivity and welcoming tourists from diverse backgrounds.
- Resolve conflicts (0.79): It is encouraging to see that this sector is already relatively proficient at conflict resolution, an essential skill for ensuring positive experiences.

- Communicate with people from different backgrounds (0.79): An aptitude for cultural awareness and inclusivity is essential in tourism, and this sub sector is doing well in this area.
- Understand cultural setting of own destination (0.86): Gathering and imparting local knowledge is the cornerstone of the work done by destination management organisations. It is therefore fitting that this skill should show a small gap for the future.

Overall, one can conclude that destination management organisations are proficient in the areas of cultural awareness and communication but have more work do to upskilling in managing unforeseen circumstances and native language communication.

2.3 ACCOMMODATION PROVIDERS

2.3.1 DIGITAL SKILL SETS

Digital skills

Highest:

1. 4.00 Use of office applications
2. 3.76 Use of digital marketing systems and communications platforms
3. 3.66 Digital privacy and ethics
4. 3.62 Secure information processing
5. 3.11 Digital business analysis, business intelligence, data-driven decision making

Current existing level of proficiency

Lowest:

1. 1.45 Use of robots
2. 1.63 Use of generative AI applications
3. 1.68 Use of digital technologies to create guest experiences

4. 2.77 Web & app development & programming
5. 3.11 Digital business analysis, business intelligence, data-driven decision making

Most necessary:

1. 4.69 Secure information processing
2. 4.68 Use of digital marketing systems and communications platforms
3. 4.63 Use of office applications
4. 4.62 Digital privacy and ethics
5. 4.42 Digital business analysis, business intelligence, data-driven decision making

Future necessary level of proficiency in 2030

Least necessary:

1. 2.81 Use of robots
2. 3.31 Use of generative AI applications
3. 3.37 Use of digital technologies to create guest experiences
4. 4.07 Web & app development & programming
5. 4.42 Digital business analysis, business intelligence, data-driven decision making

Largest gaps:

1. 1.69 Use of digital technologies to create guest experiences
2. 1.68 Use of generative AI applications
3. 1.36 Use of robots
4. 1.31 Digital business analysis, business intelligence, data-driven decision making
5. 1.30 Web & app development & programming

Skills gaps between existing and future level of skills sets

Smallest gaps:

1. 0.63 Use of office applications
-

-
2. 0.92 Use of digital marketing systems and communications platforms
 3. 0.96 Digital privacy and ethics
 4. 1.07 Secure information processing
 5. 1.30 Web & app development & programming
-

Current skills levels

Accommodation providers, in common with most sub sectors of the tourism industry, regard advanced skills such as robotics, mobile apps and AI as substantially less proficient than the more traditional skills of office administration, email marketing and social media. Again, we see that accommodation providers already view themselves as reasonably competent in the areas of digital privacy and ethics, as well as secure information processing. They are also relatively advanced in using data to make business decisions.

Skills gaps

The gaps between current and future needs for digital skills in this sub sector highlight the need to address areas that are not currently strongly represented in accommodation providers:

- Use of digital technologies to create guest experiences (1.69): It is perhaps not surprising that accommodation providers view the ability to create engaging guest experiences as an important area to address for future skills in the sector. The gap highlights a need for them to embrace a wider range of emerging technologies to improve guest engagement, for example with virtual hotel tours or the prompting of access to exclusive discount codes.
- Use of generative AI applications (1.68): A similar-sized gap in using AI in the sub sector suggests that accommodation providers would benefit from increasing their proficiency in this area alongside embracing AR/VR in their businesses. AI-driven tools can assist this sub sector in real-time

price adjustments, contactless check-in and the automation of booking tasks.

- Use of robots (1.36): As with destination marketing organisations, using robotics is viewed as by far the least necessary in the sub sector's future at 2.81, but there is still a need to address the gap if they are to be able to understand the value of these technologies for their business.
- Digital business analysis, business intelligence, data-driven decision making (1.31): This sub sector is already reasonably skilled in the use of analytics to drive business. This gap implies that more work needs to be done, though, to enhance their ability to make data-driven decisions to maximise budgets and reach more potential guests.
- Web & app development & programming (1.30): These skills are important for enhancing the guest experience and increasing guest engagement and additional purchases. Upskilling in this area will increase revenues and encourage returning visitors.

The smallest gaps are in the areas this sub sector feels it is already doing well in:

- Use of office applications (0.63): Use of standard office software is already proficient and is not expected to require much attention in the future
- Use of digital marketing systems and communications platforms (0.92): This is already an important and well-developed skill for accommodation providers.
- Digital and privacy ethics (0.96): It is encouraging to see that this gap is quite small, indicating that upholding high privacy standards is already well-developed.
- Secure information processing (1.07): Again, a reasonably small gap in secure processing skills suggests this sub sector already takes digital customer safeguarding seriously.

These results indicate that accommodation providers would benefit focusing on the adoption of digital technologies that create and enhance guest experiences, whilst maintaining their ability to keep data secure and private.

2.3.2 GREEN SKILL SETS

Green skills

Highest:

1. 3.35 Understanding of environmental laws and regulations
2. 3.16 Promotion and encouragement of sustainable practices among guests
3. 3.12 Efficient use of resources (e.g. energy, water, materials)
4. 3.04 Measurement and management of waste
5. 2.95 Communication about the organisation's efforts towards a green economy

Current existing level of proficiency

Lowest:

1. 2.19 Measurement and management of CO2 emissions
2. 2.63 Green procurement and greening the supply chains
3. 2.64 Green marketing and product development
4. 2.64 Use of technology to speed up the green transition
5. 2.90 Adoption of environmental certifications and management systems

Most necessary:

Future necessary level of proficiency in 2030

1. 4.57 Efficient use of resources (e.g. energy, water, materials)
 2. 4.50 Promotion and encouragement of sustainable practices among guests
 3. 4.45 Measurement and management of waste
 4. 4.44 Understanding of environmental laws and regulations
-

5. 4.44 Communication about the organisation's efforts towards a green economy

Least necessary:

1. 4.05 Measurement and management of CO2 emissions
2. 4.21 Green procurement and greening the supply chains
3. 4.23 Adoption of environmental certifications and management systems
4. 4.24 Green marketing and product development
5. 4.24 Use of technology to speed up the green transition

Largest gaps:

1. 1.86 Measurement and management of CO2 emissions
2. 1.60 Use of technology to speed up the green transition
3. 1.60 Green marketing and product development
4. 1.58 Green procurement and greening the supply chains
5. 1.49 Communication about the organisation's efforts towards a green economy

Skills gaps between existing and future level of skills sets

Smallest gaps:

1. 1.09 Understanding of environmental laws and regulations
 2. 1.33 Adoption of environmental certifications and management systems
 3. 1.34 Promotion and encouragement of sustainable practices among guests
-

4. 1.41 Measurement and management of waste

5. 1.45 Efficient use of resources (e.g. energy, water, materials)

Current skills levels

Here we see that accommodation providers are more confident in their ability to measure and manage waste than their counterparts in destination marketing organisations (number 4 on the list of current skills for accommodation providers, versus number 9 for destination marketing organisations). This could be attributed to greater ease of measuring this in a single, or chain, of properties versus the multiple facets involved for destination marketing organisations.

Accommodation providers are strongest in the area of understanding laws and regulations (3.35), closely followed by encouraging sustainable practices amongst guests (3.15). It is encouraging to see that they are also proficient at the efficient use of resources (3.21), as well as measuring and managing waste (3.04). This indicates that this sub sector already has a commitment to saving resources and being accountable for that. They are also relatively skilled in communicating their efforts (2.95)

The areas of lower proficiency centre around CO2 measurement, certification and technology. Measurement of both CO2 emissions (2.19) is once again at the bottom of the ranking, indicating a need for improvement in emissions monitoring, which in turn will contribute to more efficient management of this. Working with green suppliers is also a challenge for this sector (2.63), along with green marketing (2.64). Lastly, there is also evidence of the need to embrace technical tools and certifications to progress sustainability initiatives.

Skills gaps

The largest Green skills gaps are in the areas of CO2 emissions, use of technology, and green marketing/communication:

- Measurement and management of CO2 emissions (1.86) is the largest gap, indicating a need to improve the ability to accurately assess carbon footprints
- Use of technology (1.60) is also high on the skills gap list, highlighting the need to further understanding of the available options to harness technology in this area.
- Green procurement (1.58) and green marketing (1.60) both rank in the larger gaps, highlighting a need for accommodation providers to improve in both working with green suppliers, as well as marketing this fact. This is underscored by next largest skills gap, in Communication (1.49).

Smaller gaps are seen in the skills relating to certification and compliance:

- Understanding of environmental laws (1.09) indicates that accommodation providers have a relatively firm understanding of environmental governance, which is the basis for compliance and responsible tourism.
- Adoption of environmental certifications (1.33) implies that this sector is already reasonably proficient at endowing itself with relevant certifications that demonstrate their commitment to sustainability.
- Promotion of sustainable practices (1.34): It is encouraging to see that accommodation providers rate this a relatively small gap, indicating that they are already doing well at prompting their guests to adopt best practise during their stay.
- Efficient use of resources (1.45) and measurement of waste (1.41) are once again on the larger gaps list. These two aspects are closely linked and highlight the need for more accessible metrics for businesses to understand their performance in these areas.

2.3.3 SOCIAL SKILL SETS

Green skills

	Highest: <ol style="list-style-type: none">1. 4.07 Provide excellent customer service2. 3.93 Communicate and interact with people from different cultural and social backgrounds3. 3.89 Support diversity, equality and inclusivity4. 3.86 Understand the cultural setting of the own destination and share this information with guests5. 3.85 Work effectively in a team
Current existing level of proficiency	Lowest: <ol style="list-style-type: none">1. 3.36 Communicate effectively with guests in their native language2. 3.77 Resolve conflicts3. 3.81 Adaptability to change and handle unexpected situations4. 3.83 Communicate effectively with guests and colleagues5. 3.85 Work effectively in a team
	<hr/> Most necessary: <ol style="list-style-type: none">1. 4.81 Provide excellent customer service2. 4.78 Communicate effectively with guests and colleagues3. 4.77 Work effectively in a team4. 4.74 Adaptability to change and handle unexpected situations5. 4.67 Resolve conflicts
Future necessary level of proficiency in 2030	

Least necessary:

1. 4.33 Communicate effectively with guests and colleagues
2. 4.63 Understand the cultural setting of the own destination and share this information with guests
3. 4.64 Support diversity, equality and inclusivity
4. 4.66 Communicate and interact with people from different cultural and social backgrounds
5. 4.67 Resolve conflicts

Largest gaps:

1. 0.97 Communicate effectively with guests in their native language
2. 0.95 Communicate effectively with guests and colleagues
3. 0.93 Adaptability to change and handle unexpected situations
4. 0.92 Work effectively in a team
5. 0.90 Resolve conflicts

Skills gaps between existing and future level of skills sets**Smallest gaps:**

1. 0.73 Communicate and interact with people from different cultural and social backgrounds
 2. 0.74 Provide excellent customer service
 3. 0.75 Support diversity, equality and inclusivity
 4. 0.77 Understand the cultural setting of the own destination and share this information with guests
 5. 0.90 Resolve conflicts
-

Current skills levels

In common with the other sub sectors, we see that accommodation providers have a higher overall proficiency in social and cultural skills than in digital and green skills. Here we see a sub sector that is highly competent in excellent service provision (4.07), as well as in communicating with those from different backgrounds (3.93) and in supporting diversity (3.89). Cultural sensitivity is important in this sector because it entails overnight accommodation, which can be an area of particular concern for visitors to have their needs met. Also encouraging to see is the competency in understanding the setting of their destination (3.86) and effective teamwork (3.85).

At the lower end of current skills, though still quite highly rated in the context of all the skills in the survey, we once again see that native language communication skills are lacking (3.36). Conflict resolution is also an area for improvement (3.77), along with handling unexpected situations (3.81). It is important that accommodation providers improve in these areas because both elements, if poorly handled, can lead to an unsatisfactory guest experience. Finally, communicating with guests and colleagues (3.83) has room for improvement, which this sub sector should address to help with conveying information to relevant stakeholders.

Skills gaps

In line with other sub sectors, the gaps are relatively small compared with digital and green skills, but there are still some areas to focus on. Regarding the largest gaps:

- Communicate with guests in native language (0.97): This highlights that, along with the rest of the industry, accommodation providers should focus on developing their skills to support a wider range of native languages.
- Communicate effectively with guests and colleagues (0.95): This gap underscores the need to develop clearer, more impactful communication strategies for guests and work colleagues.
- Handling unexpected situations (0.93): Unexpected situations, particularly around a visitor's overnight accommodation, can cause upset to

itineraries and a negative guest experience. Accommodation providers have work to do in improving their ability to handle these, to mitigate their effects on guests.

- Working effectively in a team (0.92): It is essential that this sub sector does more to recognise the importance of collaboration in the workplace.
- Resolve conflicts (0.90): Conflict resolution is an important skill to master to maintain a calm visitor environment. The gap implies that this sector should focus more energy on upskilling in this area.

Moving to the smallest gaps for accommodation providers:

- Communicate with people from different backgrounds (0.73): This sub sector is already proficient in this key skill for the tourism industry.
- Provide excellent customer service (0.74): Meeting and exceeding guest expectations is crucial for a positive visitor experience, and accommodation providers are set to continue doing well in this area into the future.
- Support diversity (0.75): This small gap underscores the value that this sub sector places on inclusivity and welcoming tourists from diverse backgrounds.
- Understand cultural setting of own destination (0.77): Placing accommodation in an appropriate cultural setting helps provide an authentic visitor experience in destination. Accommodation providers are likely to remain proficient at this over the next five years.

To conclude, accommodation providers are strong in excellent service provision, communication and cultural sensitivity, but could invest more in native language capabilities and management of unexpected situations.

2.4 FOOD AND BEVERAGE

2.4.1 DIGITAL SKILL SETS

Digital skills

Highest:

1. 3.76 Use of office applications
2. 3.40 Use of digital marketing systems and communications platforms
3. 3.24 Digital privacy and ethics
4. 3.22 Secure information processing
5. 2.85 Digital business analysis, business intelligence, data-driven decision making

Current existing level of proficiency

Lowest:

1. 1.35 Use of robots
2. 1.69 Use of generative AI applications
3. 1.75 Use of digital technologies to create guest experiences
4. 2.53 Web & app development & programming
5. 2.85 Digital business analysis, business intelligence, data-driven decision making

Most necessary:

Future necessary level of proficiency in 2030

1. 4.51 Secure information processing
 2. 4.45 Use of digital marketing systems and communications platforms
 3. 4.42 Use of office applications
 4. 4.42 Digital business analysis, business intelligence, data-driven decision making
 5. 4.40 Digital privacy and ethics
-

Least necessary:

1. 2.69 Use of robots
2. 3.20 Use of digital technologies to create guest experiences
3. 3.33 Use of generative AI applications
4. 3.89 Web & app development & programming
5. 4.40 Digital privacy and ethics

Largest gaps:

1. 1.64 Use of generative AI applications
2. 1.57 Digital business analysis, business intelligence, data-driven decision making
3. 1.45 Use of digital technologies to create guest experiences
4. 1.36 Web & app development & programming
5. 1.34 Use of robots

Skills gaps between existing and future level of skills sets**Smallest gaps:**

1. 0.66 Use of office applications
 2. 1.05 Use of digital marketing systems and communications platforms
 3. 1.16 Digital privacy and ethics
 4. 1.29 Secure information processing
 5. 1.34 Use of robots
-

Current skills levels

The food and beverage sector, like its counterparts in other sectors, is currently least skilled in the newer and emerging technologies of robotics, AR, mobile apps and AI. The more established areas of office administration, email marketing and social media are already strong in the sub sector.

Again, we see that food and beverage providers view themselves as reasonably competent in the areas of digital privacy and ethics, as well as secure information processing.

Skills gaps

The gaps between current and future needs for digital skills in food and beverage providers are very similar to their colleagues in accommodation provision. Given the close synergies between these two sectors, this is to be expected:

- Use of generative AI applications (1.64): AI tools can be used in the provision of food and beverage services to reduce wait times, for example with live tracking of every order. Harnessing such tools is the area in most need of development in this sector.
- Digital business analysis, business intelligence, data-driven decision making (1.57): This sub sector is less skilled than their counterparts in accommodation provision in the use of analytics to drive business. This gap implies that work needs to be done to enhance their ability to make data-driven decisions to understand their customers, maximise budgets and reach more potential guests, with the acknowledgement that capturing guest data in this subsector is more difficult due to the short duration of customer interaction with these services.
- Use of digital technologies to create guest experiences (1.45): This gap highlights the need to embrace a wider range of emerging technologies to improve guest engagement, such as interactive touch screens at table.
- Web & app development & programming (1.36): These skills are important for increasing guest engagement and the facilitation of upselling and making additional purchases. Upskilling in this area will increase revenues and encourage returning visitors.
- Use of robots (1.34): As with other sub sectors, using robotics is viewed as by far the least necessary in the future at 2.69, but there is still a need to address the gap if they are to be able to understand the value of these technologies for their business.

The smallest gaps are in the more traditional digital areas:

- Use of office applications (0.66): Use of standard office software is already proficient and is not expected to require much attention in the future.
- Use of digital marketing systems and communications platforms (1.05): This is already an important and well-developed skill for food and beverage providers, especially given the suitability of their product for photography on social media platforms.
- Digital and privacy ethics (1.16): It is encouraging to see that this gap is quite small, indicating that upholding high privacy standards is already well-developed.
- Secure information processing (1.29): Again, a reasonably small gap in secure processing skills suggests this sub sector already takes digital customer safeguarding seriously.

Overall, the food and beverage sector could increase its efficiency and develop the guest experience by upskilling in areas that embrace more advanced digital capabilities. This could lead to greater understanding of their customers, and enhanced experiences at their venues.

2.4.2 GREEN SKILL SETS

Green skills

Highest:

1. 3.02 Understanding of environmental laws and regulations
2. 2.96 Efficient use of resources (e.g. energy, water, materials)

Current existing level of proficiency

3. 2.93 Promotion and encouragement of sustainable practices among guests
4. 2.84 Measurement and management of waste
5. 2.67 Green procurement and greening the supply chains

Lowest:

1. 1.82 Measurement and management of CO2 emissions
2. 2.29 Green marketing and product development
3. 2.42 Use of technology to speed up the green transition
4. 2.45 Communication about the organisation's efforts towards a green economy
5. 2.60 Adoption of environmental certifications and management systems

Most necessary:

1. 4.44 Understanding of environmental laws and regulations
2. 4.38 Measurement and management of waste
3. 4.35 Efficient use of resources (e.g. energy, water, materials)
4. 4.29 Promotion and encouragement of sustainable practices among guests
5. 4.20 Green procurement and greening the supply chains

Least necessary:

**Future necessary level of proficiency
in 2030**

1. 3.67 Measurement and management of CO2 emissions
 2. 3.95 Green marketing and product development
 3. 4.05 Use of technology to speed up the green transition
 4. 4.05 Adoption of environmental certifications and management systems
-

5. 4.09 Communication about the organisation's efforts towards a green economy

Largest gaps:

1. 1.85 Measurement and management of CO2 emissions

2. 1.66 Green marketing and product development

3. 1.64 Communication about the organisation's efforts towards a green

4. 1.63 Use of technology to speed up the green transition

5. 1,54 Measurement and management of waste

Skills gaps between existing and future level of skills sets

Smallest gaps:

1. 1.36 Promotion and encouragement of sustainable practices among guests

2. 1.39 Efficient use of resources (e.g. energy, water, materials)

3. 1.42 Understanding of environmental laws and regulations

4. 1.45 Adoption of environmental certifications and management systems

5. 1.53 Green procurement and greening the supply chains

Current skills levels

In the food and beverage sub sector, we see a similar picture to that of accommodation providers, with the exception that green procurement features higher up the list of currently proficient skills for food and beverage providers. This could be due to more advanced transparency in the origins and production of food than in other sectors of the supply chain.

This sector is once again strongest in the area of understanding laws and regulations (3.02). That is followed by efficient use of resources (2.96) and encouraging sustainable practises among guests (2.93). Working with green suppliers (2.67) and measuring waste (2.84) also feature higher up on the list of current skills, indicating that this sector is already committed to monitoring their supply chain, as well as the waste produced.

Moving down the rankings, we see that, as in other sub sectors, measuring CO2 emissions is a challenge for food and beverage providers (1.82). There is also a need to focus on improving green marketing (2.29), to enable this sector to develop greener products, closely linked with communication of these efforts, which is also near the bottom of the list (2.45). Again, facilitating the green transition with technology requires improvement (2.42). Lastly, adoption of certifications (2.60) is also in the lower half of the skills list at the moment.

Skills gaps

As with the accommodation provision sector, the largest Green skills gaps for food and beverage lie in the areas of CO2 emissions, use of technology, and green marketing/communication:

- Measurement and management of CO2 emissions (1.85): consistently at the top of the skills gap list, highlighting that much work needs to be done across the tourism industry to address the difficulty in measuring CO2 emissions, and how that should be managed.
- Green marketing” (1.66) and Communication (1.64) are next on the gap list and very closely ranked. This implies that the food and beverage sector would benefit from investment in developing green product, as well as the ability to convey this to the relevant stakeholders.
- Use of technology (1.63) is also high on the skills gap list again, highlighting the need to further understanding of the available options to harness technology in this area.
- Measurement and management of waste (1.54): Perhaps discouraging for this sector that measuring waster is more of challenge than in other

sectors, indicating a need to upskill, potentially learning from examples in other sub sectors.

Looking at the smaller gaps, we see that they are again clustered around certification and compliance:

- Promotion of sustainable practices (1.36): It is encouraging to see that the food and beverage sector is already proficient at encouraging guests to adopt sustainable practises.
- Efficient use of resources" (1.39) This relatively small skills gap implies that this sector is well on the way to being able to manage resources in the future.
- Understanding of environmental laws (1.42) indicates that food and beverage providers have a relatively firm understanding of environmental governance, which is the basis for compliance and responsible tourism.
- Adoption of environmental certifications (1.45) implies that this sector is already reasonably proficient at endowing itself with relevant certifications that demonstrate their commitment to sustainability.
- Green procurement (1.53): Whilst this appears in the smaller gaps list, it is very close to the bottom of the larger gaps list (1.54), suggesting that wring with green suppliers is still an area for improvement in this sector.

2.4.3 SOCIAL SKILL SETS

Social skills

Highest:

1. 3.71 Communicate effectively with guests and colleagues
2. 3.67 Provide excellent customer service
3. 3.65 Work effectively in a team
4. 3.60 Adaptability to change and handle unexpected situations
5. 3.53 Resolve conflicts

Current existing level of proficiency

Lowest:

1. 3.27 Communicate effectively with guests in their native language
2. 3.40 Understand the cultural setting of the own destination and share this information with guests
3. 3.51 Communicate and interact with people from different cultural and social backgrounds
4. 3.51 Support diversity, equality and inclusivity
5. 3.53 Resolve conflicts

Most necessary:

1. 4.69 Provide excellent customer service
2. 4.67 Communicate effectively with guests and colleagues
3. 4.67 Adaptability to change and handle unexpected situations
4. 4.64 Work effectively in a team
5. 4.58 Communicate and interact with people from different cultural and social backgrounds

Least necessary:

1. 4.27 Communicate effectively with guests in their native language
2. 4.33 Support diversity, equality and inclusivity
3. 4.45 Understand the cultural setting of the own destination and share this information with guests
4. 4.56 Resolve conflicts
5. 4.58 Communicate and interact with people from different cultural and social backgrounds

**Future necessary level of proficiency
in 2030**

Skills gaps between existing and future level of skills sets	<p>Largest gaps:</p> <ol style="list-style-type: none"> 1. 1.07 Communicate and interact with people from different cultural and social backgrounds 2. 1.07 Adaptability to change and handle unexpected situations 3. 1.05 Understand the cultural setting of the own destination and share this information with guests 4. 1.03 Resolve conflicts 5. 1.02 Provide excellent customer service
	<p>Smallest gaps:</p> <ol style="list-style-type: none"> 1. 0.82 Support diversity, equality and inclusivity 2. 0.96 Communicate effectively with guests and colleagues 3. 0.99 Work effectively in a team 4. 1.00 Communicate effectively with guests in their native language 5. 1.02 Provide excellent customer service

Current skills levels

In the food & beverage sub sector, we see a different set of proficiencies and shortfalls compared with the other sectors. This sector is most skilled in communication with guests (3.71) and providing excellent service to them (3.67). Teamwork is crucial when preparing and serving food and drink to guests, and it is encouraging to this this skill high up the list (3.65). This sector is also relatively competent when it comes to their adaptability to change and uncertainty (3.60). We also see relatively advanced skills in conflict resolution (3.53), which is important in the event of guest disputes, since these are likely to take place at the venue itself in front of other guests, so disruption needs to be kept to a minimum.

Moving further down the rankings, once again communication in native languages is the least developed skill (3.27). Perhaps of concern is that indeed all the lower ranked skills are clustered around culturally sensitive and inclusive communication, indicating that this a significant weakness in the food and beverage sub sector. Also near the bottom of the list, we see that understanding of the cultural setting of their own destination is underdeveloped compared with other skills (3.40). More work needs to be done in supporting diversity (3.51), along with the similar skill of interacting with those from different backgrounds (3.51).

Skills gaps

As in other sub sectors, the gaps are relatively small compared with digital and green skills, but there are areas for improvement in the future. Looking at the largest gaps:

- Communicate with people from different backgrounds (1.07): the relatively large gap when compared with the general size of gaps in the skillset highlights the priority that should be given to making improvements in culturally appropriate communication.
- Handling unexpected situations (1.07): Unexpected situations can adversely affect the visitor experience. Investing in bridging this gap will enhance the sector's ability to respond effectively to crises and ensure the safety and satisfaction of guests.
- Understand cultural setting of own destination (1.05): This is an important gap to address because many guests wish to enjoy the local food and drink of their destination and expect it to be in an appropriate setting.
- Resolve conflicts (1.03): Conflict resolution is an important skill to master to maintain a calm visitor environment. The gap implies that this sector should focus more energy on upskilling in this area.
- Provide excellent customer service (1.02): This gap implies that food and beverage organisations could aspire to higher levels of customer service excellence. Meeting and exceeding guest expectations is an important element of visitor satisfaction, recommendations and repeat visits.

Moving to the smaller gaps in the food and beverage sub sector we see:

- Support diversity (0.82): This small gap indicates that this sub sector already close to where it needs to be in welcoming tourists from diverse backgrounds.
- Communicate effectively with guests and colleagues (0.96): Effective communication is a high priority skill in the tourism industry, and it is encouraging to see the food and beverage sub sector is doing well in ensuring clear, culturally appropriate communication with both visitors and colleagues.
- Working effectively in a team (0.99): Whilst this is quite a small gap, there is still room for improvement in to recognising the importance of collaboration in the workplace.
- Communicate with guests in native language (1.00): This appears much lower down the gaps list than for other sub sectors, but there is also less importance as a future skill placed on it by this sector. This implies that perhaps food and beverage organisations should invest more energy in recognising the need to develop their skills to support a wider range of native languages.

In conclusion, the food and beverage sector is skilled in excellent service provision but needs to improve in culturally sensitive communication with guests.

2.5 VISITOR ATTRACTIONS

2.5.1 DIGITAL SKILL SETS

Digital skills

Highest:

1. 4.00 Use of office applications
2. 3.69 Use of digital marketing systems and communications platforms
3. 3.57 Digital privacy and ethics
4. 3.43 Secure information processing
5. 2.82 Digital business analysis, business intelligence, data-driven decision making

Current existing level of proficiency

Lowest:

1. 1.55 Use of robots
2. 1.70 Use of generative AI applications
3. 2.12 Use of digital technologies to create guest experiences
4. 2.53 Web & app development & programming
5. 2.82 Digital business analysis, business intelligence, data-driven decision making

Most necessary:

Future necessary level of proficiency in 2030

1. 4.77 Use of digital marketing systems and communications platforms
 2. 4.74 Secure information processing
 3. 4.66 Digital privacy and ethics
 4. 4.65 Use of office applications
 5. 4.38 Digital business analysis, business intelligence, data-driven decision making
-

	<p>Least necessary:</p> <ol style="list-style-type: none"> 1. 3.01 Use of robots 2. 3.42 Use of generative AI applications 3. 3.91 Use of digital technologies to create guest experiences 4. 4.01 Web & app development & programming 5. 4.38 Digital business analysis, business intelligence, data-driven decision making
<p>Skills gaps between existing and future level of skills sets</p>	<p>Largest gaps:</p> <ol style="list-style-type: none"> 1. 1.79 Use of digital technologies to create guest experiences 2. 1.72 Use of generative AI applications 3. 1.56 Digital business analysis, business intelligence, data-driven decision making 4. 1.48 Web & app development & programming 5. 1.46 Use of robots
	<p>Smallest gaps:</p> <ol style="list-style-type: none"> 1. 0.65 Use of office applications 2. 1.08 Use of digital marketing systems and communications platforms 3. 1.09 Digital privacy and ethics 4. 1.31 Secure information processing 5. 1.46 Use of robots

Current skills levels

In the visitor attractions sector, we see that once again, professionals working here are already competent in the more fundamental digital skills, as well as digital privacy and secure processing of information.

The same, newer skills such as robotics, AR, mobile apps and AI are again lower down the list of current competencies.

Skills gaps

In this sub sector, we see gaps that reflect the relative impact of acquiring these newer skills on visitor attractions:

- Use of digital technologies to create guest experiences (1.79): This is the largest gap and is indicative of its importance to visitor attractions. Harnessing AR and VR is regarded as more important in this sector than some of the others, possibly because these developments have the potential to transform the visitor experience at attractions. For example, AR/VR technology can recreate historic scenes as they were at the time without the need for physical artefacts, draw visitors inside the experiences, and enable them to customise them to their interests.
- Use of generative AI applications (1.72): Upskilling in the use of these tools is also regarded as important for visitor attractions. AI-powered customer service and personalisation technology can be used to enhance the visitor experience on site.
- Digital business analysis, business intelligence, data-driven decision making (1.56): As with the food and beverage sector, visitor attractions have a larger skills gap in the use of analytics to understand their clients and drive business than some of the other sectors.
- Web & app development & programming (1.48): There are some important applications of mobile app technology that visitor attractions could increase their skill level in. For example, a mobile app that alerts their guests to the less busy areas of the attraction can make their experience more fulfilling, as well as manage visitor flows to enable more people to visit at any given time.
- Use of robots (1.46): Again, using robotics is viewed as the least necessary skill in the future at 3.01, but there is still a need to address the gap so that more professionals working in attractions can take advantage of the technology.

The smallest gaps are in the more traditional digital areas:

- Use of office applications (0.65): Use of standard office software is already proficient and is not expected to require much attention in the future.
- Use of digital marketing systems and communications platforms (1.08): This is already an important and well-developed skill for visitor attractions.
- Digital and privacy ethics (1.09): It is encouraging to see that this gap is quite small, indicating that upholding high privacy standards is already well-developed.
- Secure information processing (1.31): Again, a reasonably small gap in secure processing skills suggests this sub sector already takes digital customer safeguarding seriously.

Overall, the most pressing need for upskilling in visitor attractions is around VR and AR technologies that create engaging guest experiences, both prior to arrival and once at the venue.

2.5.2 GREEN SKILL SETS

Green skills

Highest:

1. 3.35 Promotion and encouragement of sustainable practices among guests
2. 3.19 Efficient use of resources (e.g. energy, water, materials)
3. 3.18 Understanding of environmental laws and regulations
4. 2.92 Communication about the organisation's efforts towards a green economy
5. 2.83 Green marketing and product development

Current existing level of proficiency

Lowest:

1. 2.13 Measurement and management of CO2 emissions
2. 2.57 Measurement and management of waste
3. 2.62 Use of technology to speed up the green transition
4. 2.71 Adoption of environmental certifications and management systems
5. 2.82 Green procurement and greening the supply chains

Most necessary:

1. 4.60 Promotion and encouragement of sustainable practices among guests
2. 4.53 Efficient use of resources (e.g. energy, water, materials)
3. 4.43 Communication about the organisation's efforts towards a green economy
4. 4.36 Green marketing and product development
5. 4.35 Understanding of environmental laws and regulations

Least necessary:

**Future necessary level of proficiency
in 2030**

1. 3.74 Measurement and management of CO2 emissions
 2. 4.01 Measurement and management of waste
 3. 4.10 Adoption of environmental certifications and management systems
 4. 4.25 Green procurement and greening the supply chains
 5. 4.26 Use of technology to speed up the green transition
-

Skills gaps between existing and future level of skills sets

Largest gaps:

1. 1.64 Understanding of environmental laws and regulations
2. 1.61 Measurement and management of CO2 emissions
3. 1.53 Green marketing and product development
4. 1.51 Communication about the organisation's efforts towards a green economy
5. 1.44 Measurement and management of waste

Smallest gaps:

1. 1.17 Understanding of environmental laws and regulations
 2. 1.25 Promotion and encouragement of sustainable practices among guests
 3. 1.43 Efficient use of resources (e.g. energy, water, materials)
 4. 1.39 Adoption of environmental certifications and management systems
 5. 1.43 Green procurement and greening the supply chains
-

Current skills levels

It is encouraging to see that visitor attractions are currently most proficient at encouraging sustainable practices amongst their guests (3.35), as well as being strong in the efficient use of their resources (3.19). This bodes well for the future, as it provides a solid foundation from which to develop their weaker skills, in the areas of measurement of waste and CO2 emissions. In common with the other sub sectors, they are also relatively skilled in their understanding of environmental laws (3.18). Communication (2.92) and green marketing (2.83) are also reasonably well-developed already.

With regard to the less proficient skills, as mentioned above, and once again in line with other sub sectors, measuring and managing both CO2 emissions (2.13) and waste (2.57) are challenging for visitor attractions. Using technology to assist in the green transition (2.62) and adopting certifications (2.71) are also relatively less well-developed skills. Working with green suppliers (2.82) is the final area we see at the lower end of the current skillset.

Skills gaps

For visitor attractions, the largest green skills gaps are to be found in the areas of common difficulty across the sub sectors, namely technology, measurement and green marketing:

- Use of technology (1.64) is highest on the list of skills gaps, perhaps due in part to the perceived high costs in both time and resources entailed in embracing new technology. This indicates that more work needs to be done to highlight the benefits of making such technological commitments to increase the speed of green transition.
- Measurement and management of CO2 emissions (1.61): consistently at the top of the skills gap list, once again underscoring the general difficulties faced across the industry in understanding CO2 emissions metrics.
- Green marketing (1.53) and Communication (1.51) are next on the gap list and very closely ranked. This implies that the visitor attractions sector would benefit from investment in developing green product, as well as in increasing skills in ensuring the wider community is aware of their efforts.
- Measurement and management of waste (1.44): The appearance of this skill in the large gaps list highlights the need for this sub sector to invest more in understanding where and how waste occurs within their business, so that they can build appropriate mitigating strategies.

The smaller gaps centre around compliance, certification and sustainable practices:

- Understanding of environmental laws (1.17): The visitor attractions sector is in line with other sectors in having less work to do in the future in this area than any other.
- Promotion of sustainable practices (1.25): It is encouraging to see that we can anticipate a continuation of this already-proficient skill in the future for visitor attractions.
- Efficient use of resources (1.34) This relatively small skills gap implies that this sector is well on the way to being able to manage resources in the future.
- Adoption of environmental certifications (1.39): The appearance of this on the smaller gaps list implies that visitor attractions do not anticipate too much difficulty continuing with this into the future. This is good news for their potential clients, as it enables them to easily see which attractions have the relevant certifications, to help them with their greener choice of attraction.
- Green procurement (1.43): ranks towards to middle of the gaps, indicating that the ability to identify and harness environmentally friendly products and services needs developing in this sector, but not the extent required in the larger gaps above.

2.5.3 SOCIAL SKILL SETS

Social skills

Highest:

1. 4.04 Provide excellent customer service
2. 3.95 Understand the cultural setting of the own destination and share this information with guests

Current existing level of proficiency

3. 3.90 Support diversity, equality and inclusivity
4. 3.84 Adaptability to change and handle unexpected situations
5. 3.83 Communicate effectively with guests and colleagues

Lowest:

1. 3.18 Communicate effectively with guests in their native language
2. 3.71 Resolve conflicts
3. 3.78 Work effectively in a team
4. 3.83 Communicate and interact with people from different cultural and social backgrounds
5. 3.83 Communicate effectively with guests and colleagues

Most necessary:

1. 4.86 Provide excellent customer service
2. 4.82 Communicate effectively with guests and colleagues
3. 4.82 Work effectively in a team
4. 4.75 Adaptability to change and handle unexpected situations
5. 4.75 Communicate and interact with people from different cultural and social backgrounds

Future necessary level of proficiency in 2030

Least necessary:

1. 4.47 Communicate effectively with guests in their native language
 2. 4.66 Understand the cultural setting of the own destination and share this information with guests
 3. 4.73 Support diversity, equality, and inclusivity
 4. 4.75 Communicate and interact with people from different cultural and social backgrounds
 5. 4.75 Resolve conflicts
-

Largest gaps:

1. 1.29 Communicate effectively with guests in their native language
2. 1.04 Work effectively in a team
3. 1.04 Resolve conflicts
4. 0.99 Communicate effectively with guests and colleagues
5. 0.92 Communicate and interact with people from different cultural and social backgrounds

Skills gaps between existing and future level of skills sets**Smallest gaps:**

1. 0.71 Understand the cultural setting of the own destination and share this information with guests
 2. 0.82 Provide excellent customer service
 3. 0.83 Support diversity, equality, and inclusivity
 4. 0.91 Adaptability to change and handle unexpected situations
 5. 0.92 Communicate and interact with people from different cultural and social backgrounds
-

Current skills levels

Visitor attractions are most proficient in the provision of excellent customer service (4.04), which is encouraging to see in a sector with a strong customer focus requirement. Also high on the list for visitor attractions, as might be expected and certainly hoped for, is understanding the cultural setting of their destination (3.95). Supporting diversity is next (3.90), which again paints a reassuring picture for current priorities in this sector. Visitor attractions are also relatively skilled at handling unexpected scenarios (3.84), which is important with regard to safety and comfort at their venues.

Clustered around the middle of the rankings we see skills relating to communication, both with guests and colleagues (3.83) as well as with those from different backgrounds (also 3.83). Team working (3.78) and conflict resolution (3.71) are rated slightly below this, and, in common with other sub sectors, native language communication is once again the least proficient skill (3.18).

Skills gaps

Despite the comparatively small gaps compared with digital and green skills, they should not be ignored when upskilling for the future as there are still some areas of improvement. Looking first at the largest skills gaps:

- Communicate with guests in native language (1.29): This implies that visitor attractions, like their colleagues in other sectors, need to do more to acknowledge and support linguistic diversity.
- Working effectively in a team (1.04): It is essential that this sub sector does more to recognise the importance of collaboration in the workplace.
- Resolve conflicts (1.04): This is also an area for development, as calm and measured conflict resolution has a positive impact on visitor experiences.
- Communicate effectively with guests and colleagues (0.99): Effective communication is a high priority skill in the tourism industry. This gap highlights the need for improvement in ensuring clear, culturally appropriate communication with both visitors and colleagues.
- Communicate with people from different backgrounds (0.92): An aptitude for cultural awareness and inclusivity is essential in tourism. Despite doing well in supporting diversity, visitor attractions should invest in also communicating this.

Areas of lesser concern for visitor attractions are seen in:

- Understand cultural setting of own destination (0.71): Displaying local context is a key element in the value of visitor attractions. It is therefore fitting that this skill should show a small gap for the future.
- Provide excellent customer service (0.82): Meeting and exceeding guest expectations is an important element of visitor satisfaction,

recommendations and repeat visits, and it is reassuring to see that visitor attractions have less work to do in this area in the future.

- Support diversity (0.83): This small gap underscores the value that this sub sector places on inclusivity and welcoming tourists from diverse backgrounds.
- Handling unexpected situations (0.91): Investing in bridging this gap will enhance the sector's ability to respond effectively to crises and ensure the safety and satisfaction of guests.

Overall, one can conclude that visitor attractions are proficient in the areas of cultural awareness and customer service but could invest in upskilling in teamworking, conflict resolution and native language communication.

2.6 TRAVEL AGENTS AND TOUROPERATORS

2.6.1 DIGITAL SKILL SETS

Digital skills

Highest:

1. 3.82 Use of office applications
2. 3.69 Digital privacy and ethics
3. 3.58 Secure information processing
4. 3.52 Use of digital marketing systems and communications platforms

Current existing level of proficiency

5. 2.94 Digital business analysis, business intelligence, data-driven decision making

Lowest:

1. 1.39 Use of robots
2. 1.67 Use of digital technologies to create guest experiences

3. 1.73 Use of generative AI applications
4. 2.81 Web & app development & programming
5. 2.94 Digital business analysis, business intelligence, data-driven decision making

Most necessary:

1. 4.71 Secure information processing
2. 4.67 Use of office applications
3. 4.67 Use of digital marketing systems and communications platforms
4. 4.62 Digital privacy and ethics
5. 4.33 Digital business analysis, business intelligence, data-driven decision making

Future necessary level of proficiency in 2030

Least necessary:

1. 2.72 Use of robots
2. 3.23 Use of digital technologies to create guest experiences
3. 3.50 Use of generative AI applications
4. 4.22 Web & app development & programming
5. 4.33 Digital business analysis, business intelligence, data-driven decision making

Largest gaps:

1. 1.77 Use of generative AI applications
2. 1.56 Use of digital technologies to create guest experiences
3. 1.41 Web & app development & programming
4. 1.39 Digital business analysis, business intelligence, data-driven decision making
5. 1.33 Use of robots

Skills gaps between existing and future level of skills sets

Smallest gaps:

1. 0.85 Use of office applications
 2. 0.93 Digital privacy and ethics
 3. 1.13 Secure information processing
 4. 1.15 Use of digital marketing systems and communications platforms
 5. 1.33 Use of robots
-

Current skills levels

Travel agents and tour operators are typical of the tourism industry in general, as evidenced in the other sub sectors, in that they currently feel proficient in established technologies but are less skilled in emerging ones.

Skills gaps

Travel agents and tour operators have identified the most important gaps as being in the adoption of emerging technologies that are used primarily in customer service and understanding their clients:

- Use of generative AI applications (1.77): This gap is rated as the largest, which is not surprising given the wide range of its application to customer service. AI-powered virtual assistants form the core of automated customer interactions, streamlining communications between tour operators and their clients, and freeing up staff for other tasks. ChatGPT can help in social media content creation and sentiment analysis, both of which are key components of an effective client understanding.
- Use of digital technologies to create guest experiences (1.56): Immersive content generation is the next largest gap, indicating that this sector would benefit from embracing these technologies to deliver information to clients in a more engaging way in the future.
- Web & app development & programming (1.41): Developing apps and web content for tools such as self-guided walking tours and other product add-ons is an area that would benefit from additional skills in this sector.
- Digital business analysis, business intelligence, data-driven decision making (1.39): Greater skill in data-driven analytics would enable travel agents and tour operators to save money and focus marketing strategies. It will be important for professionals to increase their skills in this area.

- Use of robots (1.33): This sector in particular, when compared with the others, rates the use of robotics as firmly the least required future skill (2.72), whilst also currently being comparatively unskilled in this area. This could be due to this type of technology having more applications in- destination and at venue as opposed to prior to departure.

As expected, given the trends in all other sub sectors, the smallest gaps are once again in the well-established areas of digital skill:

- Use of office applications (0.85): Use of standard office software is already proficient and is not expected to require much attention in the future.
- Digital and privacy ethics (0.93): It is encouraging to see that this gap is quite small, indicating that upholding high privacy standards is already close to the level required for the future.
- Secure information processing (1.13): Again, a reasonably small gap in secure processing skills suggests this sub sector already takes digital customer safeguarding seriously.
- Use of digital marketing systems and communications platforms (1.15): This is already an important and well-developed skill for tour operators, where it can be used alongside customer segmentations to reach the right audiences.

In summary, travel agents and tour operators will need to upskill in the area if generative AI applications to have the greatest impact on their business. Other forms of technology such as AR/VR and business analytics are also important development areas for this sub sector, whilst privacy, ethics and security are already well-established.

2.6.2 GREEN SKILL SETS

Green skills

Highest:

1. 3.04 Efficient use of resources (e.g. energy, water, materials)

Current existing level of proficiency

2. 2.74 Promotion and encouragement of sustainable practices among guests

3. 2.69 Understanding of environmental laws and regulations

4. 2.68 Communication about the organisation's efforts towards a green economy

5. 2.67 Measurement and management of waste

Lowest:

1. 2.15 Measurement and management of CO2 emissions

2. 2.26 Adoption of environmental certifications and management systems

3. 2.32 Green procurement and greening the supply chains

4. 2.39 Green marketing and product development

5. 2.62 Use of technology to speed up the green transition

Most necessary:

1. 4.32 Efficient use of resources (e.g. energy, water, materials)

2. 4.32 Promotion and encouragement of sustainable practices among guests

3. 4.23 Communication about the organisation's efforts towards a green economy

4. 4.10 Use of technology to speed up the green transition

5. 4.07 Measurement and management of waste

**Future necessary level of proficiency
in 2030**

Least necessary:

1. 3.78 Measurement and management of CO2 emissions

2. 3.81 Adoption of environmental certifications and management systems

	<p>3. 3.99 Green marketing and product development</p> <p>4. 4.02 Green procurement and greening the supply chains</p> <p>5. 4.06 Understanding of environmental laws and regulations</p>
Skills gaps between existing and future level of skills sets	<p>Largest gaps:</p> <p>1. 1.70 Green procurement and greening the supply chains</p> <p>2. 1.63 Measurement and management of CO2 emissions</p> <p>3. 1.60 Green marketing and product development</p> <p>4. 1.58 Promotion and encouragement of sustainable practices among guests</p> <p>5. 1.55 Communication about the organisation's efforts towards a green economy</p>
	<p>Smallest gaps:</p> <p>1. 1.28 Efficient use of resources (e.g. energy, water, materials)</p> <p>2. 1.37 Understanding of environmental laws and regulations</p> <p>3. 1.40 Measurement and management of waste</p> <p>4. 1.48 Use of technology to speed up the green transition</p> <p>5. 1.55 Adoption of environmental certifications and management systems</p>

Current skills levels

In the travel agencies and tour operators sub sector, the most proficient green skill by quite a large margin is the efficient use of resources (3.04). This is most

encouraging both now and for the future, as efficiently managing resources forms the bedrock from which to build other efficiencies. This sector is also relatively skilled at encouraging sustainable practices (2.74). Travel agencies and tour operators have a fairly good understanding of environmental laws and regulations (2.69), along with measurement and management of waste (2.67)

At the lower end of the current skills list, we once again see measurement of CO2 emissions at the bottom (2.15). This sector is also less proficient at adopting certifications (2.26). Green procurement (2.32) and marketing (2.39) are also less well-developed skills. Finally, the use of technology (2.62), whilst in the lower half of the current skills list, is ranked relatively further up the list than in most other sub sectors, indicating that this sector could be viewed as a leader in this area for the tourism industry as a whole.

Skills gaps

Travel agencies and tour operators provide some interesting deviations from the trends seen in other sub sectors. For the first time, measuring CO2 emissions does not appear as the largest skills gap:

- Green procurement (1.70): The largest gap, potentially because this sector typically has a great many elements within its product, making it challenging to ensure the entire chain is green.
- Measurement and management of CO2 emissions (1.63): Whilst still high on the list of skills gaps, for the first time we find that this is not the largest gap. This could in part be due to many agents and operators including an air travel element in their product. Air travel is more advanced and accountable for measuring its CO2 emissions than other elements in the supply chain, so this could contribute to the slightly greater measurement skills for this sub sector.
- Green marketing (1.60) and Communication (1.55) both look challenging for the future, possibly linked to the difficulties this sector expects to face around green procurement in general.

- Promotion of sustainable practices (1.58): This is higher up the list of skills gaps than in most other sub sectors, again possibly linked to the air travel forming a fundamental part of the product in much of this sector
- Communication of green efforts (1.55): This gap suggests that this this sector could do more ensure the relevant stakeholders understand the practices of tour operators in this area.

The smaller gaps, though still relatively large, also differ for travel agencies and tour operators when compared with the other sectors, especially when it comes to harnessing technology:

- Efficient use of resources (1.28) This sector anticipates that managing resources will be their smallest skills gap in the future.
- Understanding of environmental laws (1.37): Travel agencies and tour operators, in line with their counterparts in other sectors, are reasonably strong in this area, but this gap size indicates that more work needs to be done.
- Measurement and management of waste (1.40): this gap highlights the need for more accessible metrics for businesses to understand the strengths and weaknesses in their waste management strategies.
- Use of technology (1.48): Embracing technology to help speed the green transition is better developed in this sector than any other. This could be attributable to a longer-established relationship with technology platforms for reservations, customer booking and review in this sector compared with the others, and hence a greater inclination to look to technological solutions to green issues.
- Adoption of environmental certifications (1.55): The appearance of this on the smaller gaps list implies that visitor attractions do not anticipate too much difficulty continuing with this into the future, although this gap is still larger than might be desired.

2.6.3 SOCIAL SKILL SETS

Social skills

Highest:

1. 4.03 Provide excellent customer service
2. 4.01 Communicate and interact with people from different cultural and social backgrounds
3. 3.91 Support diversity, equality and inclusivity
4. 3.90 Communicate effectively with guests and colleagues
5. 3.89 Adaptability to change and handle unexpected situations

Current existing level of proficiency

Lowest:

1. 3.31 Communicate effectively with guests in their native language
2. 3.73 Resolve conflicts
3. 3.75 Understand the cultural setting of the own destination and share this information with guests
4. 3.87 Work effectively in a team
5. 3.89 Adaptability to change and handle unexpected situations

Most necessary:

1. 4.83 Provide excellent customer service
 2. 4.77 Communicate effectively with guests and colleagues
 3. 4.77 Adaptability to change and handle unexpected situations
 4. 4.74 3.87 Work effectively in a team
 5. 4.68 Resolve conflicts
-

Future necessary level of proficiency in 2030

Least necessary:

1. 4.26 Communicate effectively with guests in their native language
2. 4.60 Support diversity, equality and inclusivity
3. 4.61 Understand the cultural setting of the own destination and share this information with guests
4. 4.64 Communicate and interact with people from different cultural and social backgrounds
5. 4.68 Resolve conflicts

Largest gaps:

1. 0.95 Resolve conflicts
2. 0.95 Communicate effectively with guests in their native language
3. 0.88 Adaptability to change and handle unexpected situations
4. 0.87 Work effectively in a team
5. 0.87 Communicate effectively with guests and colleagues

Skills gaps between existing and future level of skills sets

Smallest gaps:

1. 0.63 Communicate and interact with people from different cultural and social backgrounds
 2. 0.69 Support diversity, equality and inclusivity
 3. 0.80 Provide excellent customer service
 4. 0.86 Understand the cultural setting of the own destination and share this information with guests
 5. 0.87 Communicate effectively with guests and colleagues
-

Current skills levels

Following the trend seen in the other four sub sectors, travel agents and tour operators are significantly more competent in social and cultural skills than in digital and green skills. As may be hoped for, they are highly skilled in excellent service provision (4.03), which is fundamental to the sales and delivery processes. They communicate well with those from different backgrounds (4.01); this cultural sensitivity is further reflected in the high rating for supporting diversity (3.91). Communicating effectively with guests and colleagues (3.90), which is essential for conveying information to relevant stakeholders, is also a relatively well-developed skill in this sub sector, as is the ability to manage unexpected situations (3.89).

Further down the list, native language communication is once again highlighted as being least proficient (3.31), which is perhaps more surprising in travel agencies and tour operators than in the other sub sectors, since many visitors prefer to purchase in their native language, especially when purchasing in their home country. Resolving conflicts is also an area where this sub sector could improve (3.73), ailing with understanding the cultural setting of destinations (3.75). Lastly, teamworking skills, whilst fairly highly rated, still sit towards the middle of the rankings and could be developed.

Skills gaps

We again see relatively small gaps in this skillset compared with the other two, but some areas would benefit from a focus on upskilling:

- Communicate with guests in native language (0.95): This highlights that, along with the rest of the industry, travel agents and tour operators should develop their skills to support a wider range of native languages.
- Resolve conflicts (0.95): Conflict resolution is an important skill to become proficient in to increase client satisfaction. The gap underscores that this sector should invest more energy in upskilling in this area.
- Handling unexpected situations (0.88): This gap could in part be due to a barrage of recent events that have upset many travel plans: the pandemic, the outbreak of wars and extreme weather. Travel agents and tour

operators could perhaps feel less well-equipped to handle these in the future, given the rapidity of their occurrence in recent years.

- Working effectively in a team (0.87): It is essential that this sub sector does more to recognise the importance of collaboration in the workplace.
- Communicate effectively with guests and colleagues (0.87): This gap underscores the need to develop clearer, more impactful communication strategies for guests and work colleagues.

Regarding the smallest gaps for this sub sector:

- Communicate with people from different backgrounds (0.63): It is reassuring that this sub sector is already proficient in this key skill for the tourism industry.
- Support diversity (0.69): This small gap highlights the value that this sub sector places on inclusivity and welcoming tourists from diverse backgrounds
- Provide excellent customer service (0.80): This narrow gap suggests that travel agents and tour operators are set to continue meeting and exceeding guest expectations into the future.
- Understand cultural setting of own destination (0.86): This sub sector is likely to remain proficient at this over the next five years.

Overall, travel agents and tour operators are skilled in excellent service provision and cultural sensitivity but would benefit from greater investment in native language capabilities and strategies for the management of unexpected situations.

3. EXPERT INTERVIEW

RESULTS

The outlook for tourism and tourism employment has been disrupted, partly due to the crises of the past few years. Examples of these are the current mega-trends, the COVID-19 pandemic, the emergent conflicts across the globe, and the current cost of living crisis. There are several challenges in domestic tourism due to economic conditions and the changing travel habits of populations. However, what is also causing most of these disruptions is the changing workforce and the emergence of new skills. There is a need for lifelong learning and continuous skills development. The results of expert interviews conducted by the individual partners of the Pantour consortium revealed that digital, green, and socio-cultural skills are seen as important for tourism and tourism employment now and in the future. Digital skills are indispensable, but their implementation varies across subsectors. These skills are seen as increasingly essential, including those related to working with new technologies, software, online marketing, data analytics, and AI, among others. Customers are becoming more digitally savvy but still value personal interaction. Green skills adoption is likewise on the increase, with priorities including communication, training, and waste management. Socio-cultural skills remain critical, especially communication, languages, cultural understanding, and empathy. Such skills are vital in tourism in matters related to customer service, experience creation, and cultural interpretation. Accommodation providers, tour operators, destination management companies, visitor attractions, and food and beverage companies comprised the five subsectors of the population that were investigated.

In this chapter, semi-structured interviews were used as the primary data collection method. These were thought to be appropriate tools for this purpose because they allow for the emergence of new understandings and thoughts and

provide additional details about the responses and elaborations of the participants. The interviews indicate a notable degree of digitization in the tourism subsectors across the consortium, despite the fact that this trend may seem unpredictable. While adopting green and particularly socio-cultural skills is still important, digital skills should also be prioritised for jobs in the tourism industry. These skills include cybersecurity, digital marketing, data analysis, and emerging technologies like AI and AR/VR. Adoption of green skills is increasing, with a focus on sustainability communication, staff training, and waste management. However, social skills like communication, cultural awareness, empathy, and teamwork are vital in the tourism sector, which relies heavily on positive human interactions. The tourism industry is a dynamic one, and while implementation may differ, digital transformation is happening quickly, sustainability is gaining ground, and social skills like multilingualism, resilience, and a customer service orientation are desperately needed.

3.1 THE FUTURE OF TOURISM AND TOURISM DEVELOPMENT

The future of tourism and tourism development is very difficult to predict due to global trends and developments. Even though there is cause for optimism regarding tourism expansion, there is uncertainty due to the anticipated turbulent times that will occur as a result of recent crises. Although the majority of respondents believe that the industry will eventually return to the level prior to the pandemic, they also believe that it will undergo a significant transformation in the next ten years. There will be a sustainability focus, and tourists will be both diverse and demanding. There is an ever-growing need for specialised skills and flexible work arrangements. Close collaboration with various stakeholders and an emphasis on staff training will be key to thriving in the future, according to Finland. Changes will be visible in almost every tourism organisation due to current trends. For example, the industry is expected to continue growing, with the potential for domestic tourism to remain strong as locals explore more of their own region. There is optimism about growth, but also uncertainty due to the current turbulent times. Technology, automation, and digitalization will

impact tourism significantly. The use of new technologies like VR, AR, and AI is expected to increase. As a result, digital skills will be critical across most roles.

Furthermore, sustainability and environmental awareness will become even more important. The adoption of eco-certifications and labels is growing as businesses put more emphasis on environmentally friendly practices.

Additionally, specialised skills will be needed to meet changing tourist expectations. Consequentially, roles may become more specialised, which makes it necessary for businesses to work closely together. The sharing of resources and cooperation are essential in this regard. Furthermore, work practices will evolve, with more remote working and flexibility expected. Part-time and freelance work may increase as well. Likewise, staff shortages, hiring difficulties, and retention challenges will persist, especially for seasonal roles. There is a possibility that the need for immigrant labour will increase. Therefore, training, reskilling, and upskilling of staff will be essential in order to keep up with these changes. Hence, continuous learning will become even more imperative.

Digitalization is an established trend in accommodation, transforming processes and roles. Some see technology as enhancing the customer experience, while others view personalised service as most important. According to the Netherlands, digital literacy is increasingly mandatory in accommodation as technology transforms operations and customer service. To stay digitally proficient and use technology to enhance human services, regular training and skill development are crucial. This opinion was shared by many other respondents. Retirements and digitization are expected to alter workforce composition and roles. Some tour operators believe that automating processes can help prioritise and augment the customer experience. Therefore, many view automation through digitalization as an opportunity to concentrate more on enhancing the customer experience.

At the same time, visitor attractions foresee exponential growth but are concerned about overtourism impacts. Their objective is to maximise the use of technology while preventing it from taking over customers' experiences. Some tourist destinations disclosed that while they anticipate exponential growth in

tourism, they are worried about the possible drawbacks of overtourism. Their goal is to leverage technology to its full potential without letting it distract from the visitor experience. Destination management is evolving digitally but sees customer service as the cornerstone. New technical and sustainability-focused roles may emerge. Ireland highlighted some perspectives from Irish destination management organisations, including the need to adapt to new realities and develop more digital, data-, and innovation-focused skills. According to Greek and Italian DMOs, more specialised digital skills like big data management and analysis are needed in tourism businesses. They contend that ongoing data gathering is required to inform tourism strategies. The Dutch DMOs concur that it is critical to understand the local way of life. Their aim is to inform travellers about the importance of sustainability. Furthermore, Finland and Portugal's DMOs are focused on using sustainability certifications and communications to showcase their commitment to sustainable practices. By informing tourists of their efforts through marketing and promotion, they aim to appeal to visitors looking for eco-friendly and responsible travel options. The certifications and messaging help educate tourists about sustainability initiatives at the destination. When it comes to the future of the food and beverage industry, people and transversal skills are expected to be the primary focus. However, Greece contends that smaller establishments seem to place less importance on sustainability and digitalized production.

3.2 DIGITAL SKILLS

Digital skills are crucial across all sectors, but implementation varies considerably. The degree of digitization exhibited by accommodations varies, as outlined by Spain. Cybersecurity, web and app design, and digital marketing are key skills that tour operators highlight as being important. Travel agencies demonstrate contrasting scenarios of digitization. There is a growing demand for skills in areas like digital marketing, data analytics, and sustainability. The increasing adaptation of technologies like AI, robotics, and AR/VR will transform most roles in the industry. According to respondents from visitor attractions' organisations, digital skills focus is divided: some emphasise marketing and business

development, others focus on basic ICT for operations. Meanwhile, DMOs prioritise digital marketing, social media, and creative and administrative skills. The future emphasis is on emerging technologies like AI and the metaverse. Generic technology adoption is seen as crucial, especially in digital marketing and automation, according to Bulgaria. Digital technology integration through digital skills development is seen as vital, though differences in digital needs between subsectors are distinguished, as posited by Greece. The digital skills required by food and beverage companies range from the adoption of fundamental technologies to the production of digitised goods and the analysis of data for the purpose of personalisation. Therefore, although digital transformation is ongoing across all subsectors, implementation varies per subsector. By participating in management system training, one can acquire the digital skills necessary for their professional development.

Although the evolution of digital skills in the tourism sector has been significant, challenges remain, especially regarding digital inclusivity and keeping up with the rapidly changing technological landscape. Collaborative efforts among governments, industry stakeholders, and educational institutions can help address these gaps and ensure the sector remains competitive and resilient in the digital age. However, not all employees will require the same level of expertise in these skills. Therefore, the future of digital skills in this sector is closely tied to the sector's evolving trends and the growing importance of technology.

3.3 GREEN SKILLS DEVELOPMENT

Environmental sustainability practices are becoming more widely adopted. In the accommodation sector, green skills focus on sustainability communication, training employees in waste management, and innovation. There is an increasing focus on environmental awareness and sustainability certifications. Most respondents agree that, due to ongoing crises, training and preparation are needed to leverage technology effectively. Finland emphasises the need for continuous staff training and development to maintain and retain talent. According to most respondents, sustainability can be achieved through the

reduction of waste, the efficiency of energy use, and the provision of training. In addition to growing concerns about inadequate government support and infrastructure, sustainable practices are being driven by EU regulations, according to some respondents. Tour operators reduce environmental impact through flexible working, but some agencies lack training. Visitor attractions aim for sustainability across their operations. Conversely, there is a demand for more specialised skills to meet changing tourist expectations. Furthermore, concerns have been raised regarding staff shortages and retention that are prevalent in the tourism and hospitality industries. In order to improve the quality of service that is provided, the tourism industry must prioritise education and training in cultural awareness, communication, and inclusivity. Destination management companies also value training in sustainability and communication, while food and beverage operations focus on waste management and other sustainability issues.

3.4 SOCIAL-CULTURAL SKILLS DEVELOPMENT

In the tourism and hospitality industries, the development of socio-cultural skills is of paramount importance. The nature of the industry makes this abundantly clear: it is a people industry. When it comes to social skills, the most important priorities in the context of accommodations are communication, language, tolerance for stress, diversity, and inclusion. Tour operators value multilingualism and cultural understanding. This is due to the emerging multicultural nature of the current workforce. Additionally, visitor attractions focus on respect and teamwork. This also applies to destination management firms, which emphasise the importance of language, cooperation, and communication. Food and beverage operators also emphasise the significance of interpersonal and empathy skills. In Ireland, for instance, there is a strong emphasis placed on "soft skills" such as communication, resilience, and the ability to solve problems. Corporate social responsibility and community engagement were also noticeable skills mentioned by respondents. This is particularly true for small and medium enterprises, according to Germany and Italy. Several countries, including Finland, Ireland, and Bulgaria, have argued that other skills, such as customer relations

(marketing and sales), the creation of experiences, and the interpretation of data, are examples of essential social skills in the tourism industry. Greece, on the other hand, maintains that the management of diversity and inclusion are initiatives that have not yet reached their full potential.

3.5 TRAINING PROVISION AND EMERGING JOB PROFILES

As a result of the development of new skills, there is a demand for new employment opportunities across the tourism and hospitality spectrum. Furthermore, there is a requirement for the upskilling and reskilling of roles within these sectors. Consequently, the transformation and evolution of tourism job profiles necessitate a diverse set of skills. The recent pandemic has caused a labour shortage, which has been exacerbated by the digital revolution. It is becoming increasingly difficult for businesses to not only find suitable personnel but also to retain their current workforce. In order to fill positions, many of the respondents hire migrant workers, which makes the situation even more challenging. Language barriers and cross-cultural communication are two consequential outcomes. Subsequently, appropriate education and training must be in place to leverage technology effectively and create new job profiles. Potential new roles related to the management of technology, sustainability, resilience, and guest experience are emerging. At the same time, leadership and management training are desired for career advancement. Moreover, education is required in areas such as diversity, equality, and inclusion. The growing adoption of technology such as AI, robotics, AR/VR, and data management will transform roles, as mentioned by Portugal and Hungary. Furthermore, in light of the ongoing difficulties associated with locating qualified personnel and satisfying training requirements, businesses are placing an emphasis on the ongoing training and development of their employees. It is possible that the labour shortage could be alleviated through the implementation of new work formats, such as increased flexibility and remote working, as well as continuing efforts to recruit and retain staff. Potential new roles related to technology,

sustainability, and socio-cultural understanding could be established in the tourism and hospitality industries.

In conclusion, the expert interviews reveal that the tourism industry across Europe faces considerable changes and uncertainties in the coming years due to ongoing crises, digitalisation, sustainability demands, and evolving tourist expectations. Developing specialised skills in areas like technology, data analytics, sustainability practices, cultural awareness, and guest experience creation will be essential for tourism organisations and workers to remain competitive. While digital capabilities are indispensable, human social skills like communication, empathy, and resilience remain core competencies. Regular training and reskilling are crucial to navigate digital transformation and meet sustainability goals while cultivating and retaining talent. Though specific needs vary between subsectors, closer cooperation and an emphasis on continuous lifelong learning for employees will help tourism businesses adapt to new realities. The industry must, therefore, proactively address hiring and retention challenges and seek innovative solutions to develop the diverse workforce required to deliver excellent service. Overall, a customer-focused approach balancing cutting-edge technology with human interaction will define tourism in the future.

SKILLS SYNTHESIS

a skilled workforce is essential for the sustainable growth competitiveness of the tourism sector



The findings presented in this report serve as a roadmap for policymakers, educators, and industry stakeholders to collaborate effectively in shaping the future of tourism workforce development.

In essence, the PANTOUR Country Skills Profile Reports serve as a call to action, urging stakeholders to prioritize skill enhancement initiatives and embrace innovative practices to ensure the continued success and resilience of the tourism industry in the years to come.

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