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MS3

SKILLS SET NEEDED IN DIFFERENT DUTY AREAS +JOBS IN TOURISM BASED ON WP2 RESEARCH

Table of Content

INTRODUCTION

According to the RESKILL project description, Milestone 3 (MS3) is prepared on a research basis with the aim of defining the set of skills that will be required in the tourism sector over the next five years. The MS3 report comprises three sections:

- an analysis of the findings from the 2019 studies on tourism workforce skills needs conducted by the Next Tourism Generation (NTG) Skills Alliance;
- an analysis of the findings from the 2024 studies on tourism workforce skills needs conducted by PANTOUR;
- an analysis of the results of the skills-needs research carried out within the scope of the RESKILL project activities.

The consolidated insights in MS3 enable a comparison between the tourism workforce skill needs identified through the RESKILL project's research activities and the findings of prior studies, with the aim of delineating priority areas for targeted upskilling and reskilling. The summary of skills identified in the study, disaggregated by country, is provided in Annex 2.

1. ANALYSIS OF THE RESULTS OF THE 2019 STUDIES ON TOURISM WORKFORCE COMPETENCE NEEDS CONDUCTED BY THE NEXT TOURISM GENERATION (NTG) SKILLS ALLIANCE

The NTG (Next Tourism Generation) desk research summary presents a comprehensive review of trends, challenges, and skills needs within the tourism sector across Europe. The report synthesizes national-level studies and expert insights with the aim of identifying priority skill gaps and proposing directions for training and workforce development in tourism and related industries.

Key Trends and Drivers

The tourism sector is undergoing rapid transformation due to global megatrends such as digitalization, sustainability imperatives, and demographic shifts. Digital technologies (e.g., AI, mobile platforms, data analytics) are reshaping customer interactions and business models. At the same time, climate change and societal pressure are driving a shift toward more sustainable and responsible tourism practices.

Skills Gaps Identified:

1. Green Skills: Environmental awareness remains low in operational practices, and there is limited understanding of sustainability frameworks, energy efficiency, and waste management within the tourism workforce.
2. Digital Skills: Workers across all levels show varying degrees of digital literacy, with a marked lack of training in areas such as content creation, online marketing, and data management. SMEs and older employees are especially behind in adopting digital tools.
3. Social Skills: Soft skills such as communication, teamwork, intercultural competence, and adaptability are essential but frequently underdeveloped, particularly among younger and front-line staff.

The results of the country-specific skills studies are summarized in the table below:

Country	Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Bulgaria	Low levels of digital proficiency among older workers; lack of basic digital	Training in basic digital tools (e.g., MS Office, social media); improving	Limited awareness of environmental standards; lack of training in sustainable	Competences related to circular economy, energy efficiency, waste	Poor communication and customer service skills; low intercultural competence, especially	Training in interpersonal communication, teamwork, customer orientation, intercultural

	literacy in some segments; limited ICT use in tourism businesses	skills in digital marketing, online booking systems, and content creation	tourism practices	reduction, and sustainable mobility	among older employees	sensitivity, and foreign language use
Germany	Lack of confidence in using digital tools among older employees; limited use of digital applications for marketing and customer interaction; low data literacy	Need for upskilling in digital communication, social media, and CRM tools; practical training in digital tourism services and platforms	Limited integration of environmental awareness in tourism operations; lack of climate impact knowledge	Training on climate protection measures, energy efficiency, sustainable mobility, and green certifications	Challenges in intercultural communication, especially with international guests; weak team collaboration and adaptability	Training in communication, empathy, teamwork, and handling diverse customer needs; improving intercultural competence and stress management skills
Hungary	Low use of digital tools in small tourism enterprises; older employees lacking digital literacy; weak integration of digital platforms	Training in basic IT tools, online communication, reservation systems, and social media management	Lack of environmental responsibility and practical knowledge on sustainable tourism	Knowledge on climate-conscious tourism, energy-saving practices, sustainable travel, and resource efficiency	Inadequate communication and customer care skills; resistance to teamwork; poor conflict resolution	Training in customer service, empathy, teamwork, problem-solving, and intercultural communication
Ireland	Digital tools underused in smaller enterprises; lack of confidence in digital platforms among older workers; limited use of digital marketing	Training on digital content creation, online booking systems, CRM, and website management; building confidence with digital tools	Lack of knowledge on sustainability practices in tourism; poor integration of green initiatives in daily operations	Education on sustainability, climate action, waste reduction, and energy efficiency; practical skills for implementing green strategies	Difficulty in adapting to customer needs; insufficient communication, leadership, and team management skills	Training in leadership, conflict t resolution, team collaboration, emotional intelligence, and customer service excellence
Italy	Low digital literacy, especially in small and family-run tourism businesses;	Training in digital marketing, data management, CRM systems, and	Limited integration of sustainability practices in everyday operations;	Training on sustainable tourism, energy efficiency, waste management	Weak interpersonal communication and conflict management; difficulties	Training in soft skills such as communication, emotional intelligence, teamwork, adaptability, and

	poor use of data and technology in service delivery	basic IT tools; enhancing knowledge of digital customer service	low awareness of environmental standards	, and ecological footprint reduction	working in diverse teams	multicultural awareness
Netherlands	Digital transformation is uneven; small enterprises lag behind in digital adoption; some workers lack basic digital literacy	Need for training in digital marketing, data analytics, e-commerce, and customer-facing digital tools	Lack of clarity and knowledge on sustainable practices; few practical applications of green initiatives	Training on sustainability frameworks, circular economy, green certifications, and energy efficiency	Communication issues with diverse customers; limited social-emotional skills among younger employees	Need for soft skills development: customer orientation, teamwork, intercultural communication, and problem-solving abilities
Spain	Training in social media, e-commerce, data management, and booking platforms; digital upskilling for older workers and SMEs	Lack of sustainability integration in operations; insufficient awareness of eco-certification and climate measures	Training in eco-efficiency, green tourism practices, environmental management, and renewable energy use	Difficulty in client interaction, especially with international visitors; poor team collaboration in some cases	Training in communication, teamwork, cultural awareness, conflict management, and emotional intelligence	Support diversity, equality & inclusivity; Provide excellent customer service; Work effectively in a team; Communicate effectively with guests & colleagues.

Source of information: https://nexttourismgeneration.eu/research-and-insights/

Needs and Recommendations

The report calls for integrated training approaches that combine digital, green, and social competencies. Sector-specific education and lifelong learning strategies should focus on upskilling workers in both technical tools and transversal skills. Cooperation between educational institutions, businesses, and policymakers is crucial to address the evolving needs of the labor market. The NTG desk research highlights a critical need for innovation in tourism workforce development. Addressing current skills gaps will not only improve employability but also enhance service quality, sustainability, and competitiveness in the European tourism industry.

2. ANALYSIS OF THE FINDINGS FROM THE 2024 PANTOUR STUDIES ON TOURISM WORKFORCE COMPETENCE NEEDS

PANTOUR is a follow-up project to NTG (Next Tourism Generation Skills Alliance). The consortium focuses on designing innovative, collaborative solutions to address skills needs across the tourism ecosystem, developing outputs such as the Sectoral Skills Intelligence Monitor, the Skills Lab, a Resource Book for Trainers, the implementation of NSRGs, and a Skills Strategy Plan for 2026–2036, among others. The research results—targeted at labour-market needs in 2030 — are differentiated by country and presented in the tables below. The analysis of skills demand among Bulgaria's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Creating guest experiences with AR/VR (gap 1.97) Generative AI for text/visuals (1.85) Web & app development/programming (1.69) Robots (1.67) Data analytics/BI/data-driven decisions (1.65)	Office apps (4.80) Digital marketing & communications (4.79) Digital privacy & ethics (4.68) Cybersecurity/ secure information processing (4.68) Data analytics/BI (4.54)	Use of technology to speed the green transition (gap 1.94) Green procurement / greening the supply chain (1.86) CO_2 measurement & management (1.82) Green marketing & product development (1.71) Communicating organisation's green efforts (1.68)	Encourage sustainable guest practices (4.47) Resource efficiency (4.44) Environmental law/regulation (4.29) Communicating green actions (4.27) Waste management (4.24)	Communicating with guests in their native language (gap 1.21) Conflict resolution (1.05) Teamwork (1.03) Adaptability/ handling the unexpected (1.02)	Effective communication with guests/colleagues (4.85) Excellent customer service (4.83) Teamwork (4.82) Conflict resolution (4.82) Intercultural communication (4.81)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Finland's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills

Generative AI applications (+1.49), Digital technologies to create guest experiences (+1.39), Web & app development/programming (+1.39), Digital business analysis/BI/data-driven decision-making (+1.18), Use of robots (+0.98).	Secure information processing (4.49), use of office applications (4.35), Digital privacy & ethics (4.33), Digital marketing & communication platforms (4.31), Digital business analysis/BI/data-driven decision-making (4.02).	Communicating the organisation's green efforts (+1.36), CO_2 measurement & management (+1.30), Encouraging sustainable guest practices (+1.00), green marketing & product development (+1.00), Green procurement/greening the supply chain (+0.96	Efficient use of resources (energy/water/materials) (4.27), Encouraging sustainable guest practices (4.27), Communicating green actions (4.22), Measurement & management of waste (4.16), Understanding environmental law/regulation (4.10).	Communicate & interact across different cultural/social backgrounds (+0.65), Teamwork (+0.65), conflict resolution (+0.63), Communicate effectively with guests & colleagues (+0.59), Communicate with guests in their native language (+0.58).	Excellent customer service (4.76), Communicate effectively with guests & colleagues (4.59), Work effectively in a team (4.57), Adaptability/handling unexpected situations (4.53), Resolve conflicts (4.47).

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Germany's tourism workforce is presented in the table below:

Gaps in digital skills	**Needs for digital skills**	**Gaps in green skills**	**Needs for green skills**	**Gaps in social skills**	**Needs for social skills**
Use of generative AI applications (+1.27) Digital business analysis / BI / data-driven decision-making (+1.07) Use of digital technologies to create guest experiences (AR/VR) (+1.06)	Use of digital marketing systems & communication platforms (4.36) Secure information processing (4.33) Use of office applications (4.24) Digital privacy & ethics (3.88) Digital business analysis / BI /	Measurement & management of CO_2 emissions (+1.39) Communicate the organisation's green efforts (+1.33) Green procurement / greening the supply chain (+1.30)	Efficient use of resources (energy/water/materials) (4.27) Encourage sustainable guest practices (4.00) Use of technology to speed the green transition (3.94)	Adaptability to change & handling unexpected situations (+0.88) Resolve conflicts (+0.75) Work effectively in a team (+0.69)	Provide excellent customer service (4.48) Communicate effectively with guests & colleagues (4.45) Work effectively in a team (4.42)

Web & app development / programming (+1.00) Secure information processing (+1.00)	data-driven decision-making (3.52)	Measurement & management of waste (+1.24) Use of technology to speed the green transition (+1.24)	Green procurement / greening the supply chain (3.91) Understanding environmental law & regulation (3.88)	Communicate effectively with guests & colleagues (+0.69) Provide excellent customer service (+0.63)	Resolve conflicts (4.42) Adaptability to change & handling unexpected situations (4.36)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Hungary's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Use of generative AI applications (+1.59) Use of digital technologies to create guest experiences (AR/VR) (+1.59) Digital business analysis / BI / data-driven decision-making (+1.49) Web & app development / programming (+1.29) Use of robots (+1.23)	Secure information processing (4.68) Use of digital marketing systems & communication platforms (4.67) Use of office applications (4.55) Digital privacy & ethics (4.51) Digital business analysis / BI / data-driven decision-making (4.38)	Measurement & management of CO_2 emissions (+1.70) Green procurement / greening the supply chain (+1.61) Use of technology to speed the green transition (+1.59) Communicate the organisation's green efforts (+1.57) Efficient use of resources (energy/water/materials) (+1.50)	Efficient use of resources (energy/water/materials) (4.47) Understanding environmental law & regulation (4.37) Encourage sustainable guest practices (4.36) Communicate green actions (4.21) Green procurement / greening the supply chain (4.19)	Adaptability to change & handling unexpected situations (+1.03) Resolve conflicts (+0.98) Communicate & interact across different cultural/social backgrounds (+0.96) Communicate with guests in their native language (+0.95) Support diversity, equality & inclusivity (+0.93)	Adaptability to change & handling unexpected situations (4.74) Communicate effectively with guests & colleagues (4.71) Provide excellent customer service (4.70) Work effectively in a team (4.60) Resolve conflicts (4.45)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Netherlands' tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Use of generative AI applications (+1.79) Use of digital technologies to create guest experiences (+1.71) Digital business analysis / BI / data-driven decision-making (+1.46) Use of robots (+1.41) Web & app development / programming (+1.38)	Use of digital marketing systems & communication platforms (4.50) Secure information processing (4.50) Use of office applications (4.36) Digital business analysis / BI / data-driven decision-making (4.29) Digital privacy & ethics (4.21)	Use of technology to speed the green transition (+1.57) Efficient use of resources (energy/water/materials) (+1.29) Measurement & management of waste (+1.29) Green procurement / greening the supply chain (+1.28) Measurement & management of CO_2 emissions (+1.22)	Green procurement / greening the supply chain (4.71) Promotion of sustainable practices for guests/customers (4.50) Use of technology to speed the green transition (4.36) Efficient use of resources (energy/water/materials) (4.36) Green marketing & product development (4.21)	Communicate effectively with guests & colleagues (+1.07) Provide excellent customer service (+1.00) Understand the cultural setting of own destination (+0.86) Adaptability to change & handling unexpected situations (+0.78) Communicate with guests in their native language (+0.72)	Provide excellent customer service (4.93) Adaptability to change & handling unexpected situations (4.64) Communicate effectively with guests & colleagues (4.64) Work effectively in a team (4.57) Communicate & interact across different cultural/social backgrounds (4.50)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Ireland's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Use of digital technologies to create guest experiences (VR/AR) (+1.95) Web & app development & programming (+1.95) Digital business analysis / BI / data-driven decision-making (+1.80) Use of generative AI applications (+1.80)	Secure information processing (4.65) Use of digital marketing systems & communication platforms (4.55) Use of office applications (4.45) Digital privacy & ethics (4.30) Digital business analysis / BI / data-driven decision-making (4.20)	Measurement & management of CO_2 emissions (+2.25) Green marketing & product development (+2.20) Green procurement / greening the supply chain (+2.20) Measurement & management of waste (+2.20)	Measurement & management of waste (4.85) Efficient use of resources (energy/water/materials) (4.80) Communicate green actions (4.65) Understanding environmental law & regulation (4.60) Encourage sustainable	Communicate with guests in their native language (+1.50) Communicate effectively with guests & colleagues (+1.45) Work effectively in a team (+1.25) Support diversity, equality &	Provide excellent customer service (4.90) Communicate effectively with guests & colleagues (4.85) Work effectively in a team (4.75) Support diversity, equality &

Secure information processing (+1.45)		Communicate the organisation's green efforts (+2.10)	guest practices (4.60)	inclusivity (+1.15) Adaptability to change & handling unexpected situations (+1.15)	inclusivity (4.55) Communicate & interact across different cultural/social backgrounds (4.50)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Italy's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills
Use of digital technologies to create guest experiences (+1.72) Digital business analysis / BI / data-driven decision-making (+1.57) Web & app development / programming (+1.37) Use of robots (+1.35) Use of generative AI applications (+1.17)	Use of digital marketing systems & communication platforms (4.74) Secure information processing (4.69) Use of office applications (4.69) Digital privacy & ethics (≈4.3) Digital business analysis / BI / data-driven decision-making (≈4.1-4.3)	Use of technology to speed the green transition (+1.72) Green procurement / greening the supply chain (+1.68) Measurement & management of CO_2 emissions (+1.68) Adoption of environmental certifications & management systems (+1.46) Efficient use of resources (+1.40)	Encourage sustainable guest practices (4.51) Communicate green actions (4.37) Use of technology to speed the green transition (4.32) Efficient use of resources (4.29) Understanding environmental law & regulation (4.28)	Communicate with guests in their native language (+1.15) Provide excellent customer service (+1.05) Communicate effectively with guests & colleagues (+1.03) Understand the cultural setting of own destination & share with guests (+0.99) Work effectively in a team (+0.93)	Adaptability to change & handling unexpected situations (4.78) Provide excellent customer service (4.77) Understand the cultural setting of own destination & share with guests (4.74) Communicate effectively with guests & colleagues (4.71) Work effectively in a team (4.71)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Portugal's tourism workforce is presented in the table below:

Gaps in digital skills	Needs for digital skills	Gaps in green skills	Needs for green skills	Gaps in social skills	Needs for social skills

Use of digital technologies to create guest experiences (VR/AR) (+1.80) Use of generative AI applications (+1.76) Web & app development & programming (+1.59) Digital business analysis / BI / data-driven decision-making (+1.46) Use of robots (+1.43)	Digital privacy & ethics (4.82) Secure information processing (4.78) Use of digital marketing systems & communication platforms (4.71) Use of office applications (4.70) Digital business analysis / BI / data-driven decision-making (4.55)	Measurement & management of CO_2 emissions (+2.06) Green procurement / greening the supply chain (+1.77) Measurement & management of waste (+1.68) Green marketing & product development (+1.68) Use of technology to speed the green transition (+1.62)	Promotion & encouragement of sustainable practices among guests (4.65) Understanding of environmental laws & regulations (4.63) Efficient use of resources (energy/water/materials) (4.61) Communication about the organisation's green efforts (4.56) Use of technology to speed up the green transition (4.50)	Communicate effectively with guests in their native language (+1.23) Work effectively in a team (+1.21) Communicate effectively with guests & colleagues (+1.20) Resolve conflicts (+1.14) Adaptability to change & handling unexpected situations (+1.12)	Provide excellent customer service (4.88) Work effectively in a team (4.85) Communicate effectively with guests & colleagues (4.85) Support diversity, equality & inclusivity (4.83) Communicate & interact across different cultural/social backgrounds (4.80)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

The analysis of skills demand among Spain's tourism workforce is presented in the table below:

Gaps in digital skills	**Needs for digital skills**	**Gaps in green skills**	**Needs for green skills**	**Gaps in social skills**	**Needs for social skills**
Use of generative AI applications (+1.83) Use of digital technologies to create guest experiences (AR/VR) (+1.79) Use of robots (+1.64) Digital business analysis / BI / data-driven decision-making (+1.34) Web & app development / programming (+1.14)	Secure information processing (4.79) Use of office applications (4.72) Digital privacy & ethics (4.71) Use of digital marketing systems & communication platforms (4.68) Digital business analysis / BI / data-driven decision-making (4.43)	Measurement & management of CO_2 emissions (+1.74) Green procurement / greening the supply chain (+1.54) Green marketing & product development (+1.53) Communication about the organisation's green efforts (+1.49)	Efficient use of resources (energy/water/materials) (4.55) Communication about the organisation's green efforts (4.43) Promotion & encouragement of sustainable practices among guests (4.38) Use of technology to speed the green transition (4.32) Understanding of	Communicate effectively with guests & colleagues (+0.97) Communicate with guests in their native language (+0.94) Adaptability to change & handling unexpected situations (+0.94) Resolve conflicts (+0.91)	Support diversity, equality & inclusivity (4.79) Provide excellent customer service (4.78) Work effectively in a team (4.74) Communicate effectively with guests & colleagues (4.70)

		Use of technology to speed the green transition (+1.47)	environmental laws & regulations (4.28)	Work effectively in a team (+0.91)	Resolve conflicts (4.69)

Source of information: https://nexttourismgeneration.eu/research-and-insights/

Headline patterns

- Digital gaps cluster around new technologies: Generative AI, AR/VR for guest experiences, data/BI for decision-making, web/app development, and robots. Basics (office apps, marketing platforms) are stronger.
- Digital needs stay "foundational + data": secure information processing/cybersecurity, office apps, digital marketing & communications, privacy/ethics, and data/BI.
- Green skills: measurement and messaging lag. Biggest gaps are CO_2 measurement & management, green procurement, communicating an organisation's green efforts, tech for the transition, and waste management. Needs concentrate on resource efficiency/waste, guest-facing sustainable practices, communication of green actions, and understanding regulation.
- Social skills gaps are smaller but universal: communication (including languages), teamwork, conflict resolution, and adaptability. Needs emphasise service excellence, effective communication, teamwork, adaptability, and—often—DEI/intercultural competence.

Stand-out country signals

- Highest digital "frontier" gaps: Ireland (very high AR/VR & web/app development; strong AI gap), Spain (AI/AR; robots), Netherlands (AI/AR), Bulgaria (notably high AR/VR).
- Strongest stated digital needs: Portugal (very high privacy/ethics and cybersecurity); Spain high security and office apps; Italy and Germany also emphasise security and marketing platforms.
- Green gaps peaks: Ireland (highest CO_2 and multiple green items), Portugal (high CO_2 and procurement), Bulgaria and Netherlands emphasise 'tech for the transition'.
- Green needs highlights: Netherlands prioritises green procurement; Ireland leads on waste and resource efficiency; Portugal rates efficiency and environmental law highly.
- Social needs leaders: Netherlands (highest single value—excellent customer service), Spain prioritises DEI, Portugal mirrors strong DEI/intercultural needs; Germany shows comparatively smaller social gaps, suggesting a steadier baseline.

3. ANALYSIS OF THE RESULTS OF THE STUDIES ON TOURISM WORKFORCE COMPETENCE NEEDS CONDUCTED WITHIN THE SCOPE OF THE RESKILL PROJECT ACTIVITIES

3.1 Short overview of applied methodology

A central focus of the survey was to assess the significance of green, digital, and soft skills for the future development of the tourism sector, recognizing their essential role in fostering sustainable growth and enhancing customer experiences. Green skills empower businesses to adopt environmentally responsible practices and respond to the rising demand for sustainable travel. Digital skills, including expertise in social media and e-commerce, are crucial for effective marketing, expanding reach, and streamlining booking processes. Meanwhile, soft skills like communication and cultural awareness are key to delivering outstanding customer service and enriching interactions with a diverse visitor base. Together, these skill sets enable the industry to keep pace with changing consumer preferences, harness technological advancements, and promote sustainability.

This research is a quantitative exploratory study aimed at identifying and measuring the gap between the skills that tourism enterprises currently possess and those they need. The investigation specifically focuses on the demand for skills across digital, green, and soft skill categories vital for adaptation and innovation.

The data were gathered from a self-selected group of SMEs in the tourism and hospitality industry (HoReCa). Participants filled out an online questionnaire shared through consortium stakeholders, social media, mailing lists, and the project's official website.

Analytical efforts focused on descriptive statistics using basic Microsoft Excel functions (percentages, averages, filtering, pivot tables) to identify the most in-demand skills now and in the near future, differentiating among digital technical skills, environmental sustainability-related skills, and cross-cutting abilities. This methodological approach was designed to be accessible to research teams with varying statistical expertise. The study effectively measured the existing skills gap by comparing current skill levels with future skill requirements through simple ranking analysis and basic cross-tabulations**,** providing valuable insights into skills mismatches within the sector.

3.2 Skills assessment and future needs - Italy

This section identifies which skills businesses consider most important for the future. Based on the Italian survey data with 23 responses, the analysis uses average scores and simple rankings to show priorities.

3.2.1 Green skills for sustainable tourism

Green Skills Importance Ranking Table is presented bellow:

Rank	Green Skill	Weighted Average (1-5)
1	Resource efficiency and waste management	3.70
2	Renewable energy usage in hospitality	3.57
3	Environmental awareness	3.39
4	Sustainable transport coordination	3.39
5	Nature-based tourism planning	3.39
6	Sustainable event management	3.35
7	Circular economy practices in tourism	3.30
8	Ecological impact assessment	3.17
9	Knowledge of green certification standards	2.91
10	Carbon footprint monitoring	2.65

Top 5 Most Important Green Skills for Italy:

1. Resource efficiency and waste management (3.70/5)
2. Renewable energy usage in hospitality (3.57/5)
3. Environmental awareness (3.39/5)
4. Sustainable transport coordination (3.39/5)
5. Nature-based tourism planning (3.39/5)

Key Insights to Highlight:

Which green skills scored above 4.0 (very important)? None of the green skills reached the "very important" threshold of 4.0, indicating that Italian tourism businesses are still developing their green competency priorities.

Are there clear differences between high-priority and low-priority skills? Yes, there is a clear gap between practical operational skills (waste management, renewable energy) scoring above 3.5 and more technical/specialized skills (carbon monitoring, green certification) scoring below 3.0.

Simple statement about priorities: Italian businesses prioritize practical green skills like waste management (3.70) and renewable energy usage (3.57) over technical skills like carbon footprint monitoring (2.65) and green certification standards (2.91). This suggests companies are focusing on immediate, operationally applicable environmental improvements rather than complex measurement and certification processes.

3.2.2 Digital skills for tourism innovation

Digital Skills Priority Ranking Table:

Rank	Digital Skill	Weighted Average (1-5)
1	Online reputation and review management	4.17
2	Social media management and analytics	3.78
3	Digital marketing and SEO for destinations	3.74
4	E-commerce and online booking systems	3.74
5	Cybersecurity awareness in tourism businesses	3.70
6	Data analysis and interpretation	3.61
7	Customer Relationship Management (CRM) systems	3.26
8	Digital storytelling for tourism promotion	3.26
9	GIS and geolocation technologies in tourism	3.26
10	Mobile app use and development	3.13
11	Chatbot and AI applications for customer service	2.87
12	Use of augmented and virtual reality (AR/VR)	2.43

Top 5 Digital Priorities for Italy:

1. Online reputation and review management (4.17/5)
2. Social media management and analytics (3.78/5)
3. Digital marketing and SEO for destinations (3.74/5)
4. E-commerce and online booking systems (3.74/5)
5. Cybersecurity awareness in tourism businesses (3.70/5)

Skills Scoring Below 3.0 (Less Important):

- Chatbot and AI applications for customer service (2.87/5)
- Use of augmented and virtual reality (AR/VR) (2.43/5)

Skills Priority Analysis:

The Italian tourism sector demonstrates a clear focus on marketing-oriented and online reputation digital skills. Online reputation and review management is the only skill considered "essential" (4.17/5), reflecting the critical importance of reviews and online presence for Italian tourism businesses.

Five digital skills are considered high priority (above 3.7), all concentrated on:

- Digital marketing and online presence management
- Booking systems and e-commerce platforms
- Cybersecurity and data analysis capabilities

Advanced technologies like AR/VR (2.43/5) and AI/chatbots (2.87/5) are not yet perceived as priorities, indicating that Italian businesses take a pragmatic approach to digital competencies, focusing on proven technologies that directly impact customer acquisition and satisfaction rather than experimental or emerging technologies.

3.2.3 Soft skills for service excellence

Complete Soft Skills Ranking Table

Rank	Soft Skill	Weighted Average (1-5)
1	Adaptability to change	4.48
2	Multilingual proficiency	4.30
3	Empathy and emotional intelligence	4.30
4	Creativity and innovation	4.17
5	Cross-cultural communication	4.13
6	Conflict resolution and complaint handling	4.13
7	Service design thinking	4.00
8	Inclusive service delivery	3.83
9	Ethical decision-making in tourism	3.78
10	Leadership in multicultural teams	3.74
11	Storytelling and narrative development	3.57
12	Networking and stakeholder collaboration	3.52
13	Co-creation and participatory planning	3.48

Essential Soft Skills Identification:

Skills Grouped by Importance Level:

Essential Skills (>4.0) - 7 skills:

- Adaptability to change (4.48)
- Multilingual proficiency (4.30)
- Empathy and emotional intelligence (4.30)
- Creativity and innovation (4.17)
- Cross-cultural communication (4.13)
- Conflict resolution and complaint handling (4.13)
- Service design thinking (4.00)

Important Skills (3.0-4.0) - 6 skills:

- Inclusive service delivery (3.83)
- Ethical decision-making in tourism (3.78)
- Leadership in multicultural teams (3.74)
- Storytelling and narrative development (3.57)
- Networking and stakeholder collaboration (3.52)
- Co-creation and participatory planning (3.48)

Secondary Skills (<3.0) - 0 skills: None of the soft skills scored below 3.0, indicating that all are considered at least moderately important.

Key Finding: Seven skills are considered essential, with adaptability to change leading at 4.48/5. This likely reflects the post-pandemic experience where businesses had to rapidly adjust operations, customer service approaches, and business models.

The emphasis on multilingual proficiency (4.30) and cross-cultural communication (4.13) reflects the international nature of Italian tourism, where staff regularly interact with visitors from diverse cultural backgrounds.

3.2.4 Simple comparative analysis

Skills Category Comparison

Skill Category	Average Score (1-5)	Essential Skills (>4.0)	Low Priority Skills (<3.0)
Soft Skills	3.95	7 skills	0 skills
Digital Skills	3.41	1 skill	2 skills
Green Skills	3.27	0 skills	2 skills

Cross-Category Analysis:

The analysis reveals a clear hierarchy of priorities for Italian tourism businesses:

1. Soft Skills: Absolute priority with the highest average score (3.95/5)
2. Digital Skills: Medium-high priority (3.41/5)
3. Green Skills: Moderate priority (3.27/5)

This pattern indicates that Italian tourism businesses view human competencies as fundamental to their success, consider digital skills as necessary for remaining competitive in the modern market, while green skills are still perceived as complementary rather than strategically essential.

The significant gap between soft skills and the other categories (0.54 points above digital skills, 0.68 points above green skills) demonstrates that service excellence through human interaction remains the core competitive advantage for Italian tourism businesses.

Sector-Specific Insights:

Italian tourism companies show a service-centric approach that prioritizes:

- Human interaction quality over technological innovation
- Practical digital tools over advanced technologies
- Operational environmental improvements over complex sustainability frameworks

This suggests that training programs should focus first on enhancing interpersonal and service skills, then on building practical digital competencies, and finally on introducing green practices that can be easily integrated into existing operations.

3.2.5 Conclusions and Insights from the comparison with the PANTOUR study results

The ranking list of for tourism industry in Italy significant skills is presented in the table bellow:

Rank	Skill	Weighted Average (1-5)
1	Adaptability to change	4.48
2	Multilingual proficiency	4.30
3	Empathy and emotional intelligence	4.30
4	Creativity and innovation	4.17
5	Online reputation and review management	4.17
6	Cross-cultural communication	4.13
7	Conflict resolution and complaint handling	4.13
8	Service design thinking	4.00
9	Inclusive service delivery	3.83
10	Ethical decision-making in tourism	3.78
11	Social media management and analytics	3.78
12	Leadership in multicultural teams	3.74
13	Digital marketing and SEO for destinations	3.74
14	E-commerce and online booking systems	3.74
15	Cybersecurity awareness in tourism businesses	3.70
16	Resource efficiency and waste management	3.70
17	Data analysis and interpretation	3.61
18	Renewable energy usage in hospitality	3.57
19	Storytelling and narrative development	3.57
20	Networking and stakeholder collaboration	3.52
21	Co-creation and participatory planning	3.48
22	Environmental awareness	3.39
23	Sustainable transport coordination	3.39
24	Nature-based tourism planning	3.39
25	Sustainable event management	3.35
26	Circular economy practices in tourism	3.30

27	Customer Relationship Management (CRM) systems	3.26
28	Digital storytelling for tourism promotion	3.26
29	GIS and geolocation technologies in tourism	3.26
30	Ecological impact assessment	3.17
31	Mobile app use and development	3.13
32	Knowledge of green certification standards	2.91
33	Chatbot and AI applications for customer service	2.87
34	Carbon footprint monitoring	2.65
35	Use of augmented and virtual reality (AR/VR)	2.43

The comparison between the RESKILL project findings and the PANTOUR study results reveals significant consistency in identifying Italy's digital competency challenges within the tourism sector, while highlighting an evolution in skills prioritization approaches. Both studies confirm Italy's position as having relatively low digital maturity in the European tourism landscape, with the PANTOUR study documenting Italy's 25th ranking out of 27 EU Member States in the Digital Economy and Society Index (DESI) for human capital digital skills, where only 45.6% of the population possesses basic digital competencies. The RESKILL survey data corroborates these findings, showing that digital skills rank second in the three-category hierarchy with an average score of 3.41/5, significantly below soft skills (3.95/5) but above green skills (3.27/5). Notably, both studies identify substantial gaps between current competency levels and future requirements, particularly in advanced digital applications. The PANTOUR study highlighted the largest skills gaps in digital technologies for guest experiences, generative AI applications, and business intelligence, while the RESKILL data shows that only online reputation management achieved "essential" status (4.17/5) among digital competencies, with advanced technologies like AR/VR (2.43/5) and AI chatbots (2.87/5) remaining low priorities. However, the RESKILL findings reveal a strategic shift toward human-centered service excellence, with seven soft skills considered essential and adaptability to change leading at 4.48/5. This emphasis on interpersonal competencies complements the PANTOUR study's identification of social and cultural skills as critical for Italy's international tourism market. Both studies converge on the conclusion that Italian tourism businesses adopt a pragmatic approach, prioritizing proven technologies that directly impact customer acquisition and satisfaction over experimental innovations. The green skills analysis shows similar patterns, with both studies indicating that environmental competencies remain complementary rather than strategically essential, though the RESKILL data suggests growing attention to practical sustainability measures like resource efficiency and renewable energy usage. This comparative analysis confirms that Italy requires targeted interventions focusing first on enhancing service quality through soft skills development, followed by building practical digital competencies, and gradually integrating sustainability practices into existing operational frameworks.

3.3 Skills assessment and future needs - Poland

As of October 27, 2025, twelve companies from Poland responded to the online questionnaire. The sample structure by sub-sector was as follows:

- Accommodation (hotels, B&Bs, hostels): 27,78%
- Food and Beverage (restaurants, cafés, catering): 22,22%
- Tour operators and travel agencies: 16,67%
- Attractions and entertainment: 16,67%
- Other: 11,11%
- Transportation services (tourism-specific): 5,56%

In terms of business size, 50.00% of respondents identified as micro enterprises (1–9 employees), 33.33% as small enterprises (10-49 employees), and 16.67% as medium-sized enterprises (50-249 employees).

3.3.1 Green Skills for Sustainable Tourism

The respondents were asked to grade listed green skills using the scale from 1 to 5 (1 – least important, 5 – most important). The table below presents the average score attributed to each skill:

Skill	Average score (1-5; descending)
1. Sustainable event management	3,67
2. Resource efficiency and waste management	3,50
3. Environmental awareness	3,33
4. Ecological impact assessment	3,17
5. Circular economy practices in tourism	3,17
6. Nature-based tourism planning	3,17
7. Renewable energy usage in hospitality	3,08
8. Sustainable transport coordination	2,75
9. Knowledge of green certification standards	2,25
10. Carbon footprint monitoring	2,08

Note: no respondent specified „Other" skills

Based on the results from the table above, Polish respondents find the following green skills as the key ones ("top 5"):

1. Sustainable event management
2. Resource efficiency and waste management
3. Environmental awareness
4. Ecological impact assessment / Circular economy practices in tourism / Nature-based tourism planning (ex aequo)

5. Renewable energy usage in hospitality

The characteristics of the highest-graded "Green" skills suggests that Polish companies seem to prioritize practical methods and techniques that can be implemented in the work of a single hotel, restaurant or other venue (e.g. sustainable events, waste management). Yet, it is important to notice that none of the skills from the group has been graded as very important (4,0 or higher). Three lowest-graded skills from the group were rated lower than 3,0. The difference between the highest and lowest grade for that group of skills is 1,59.

3.3.2 Digital Skills for Tourism Innovation

In this part of the survey, the respondents were asked to grade listed digital skills using the scale from 1 to 5 (1 – least important, 5 – most important). The table below presents the average score attributed to each skill:

Skill	Average score (1-5; descending)
1. Social media management and analytics	4,33
2. E-commerce and online booking systems	4,33
3. Data analysis and interpretation	4,25
4. Online reputation and review management	4,25
5. Digital marketing and SEO for destinations	4,17
6. Customer Relationship Management (CRM) systems	3,83
7. Cybersecurity awareness in tourism businesses	3,67
8. Mobile app use and development	3,50
9. GIS and geolocation technologies in tourism	3,50
10. Digital storytelling for tourism promotion	3,17
11. Chatbot and AI applications for customer service	3,08
12. Use of augmented and virtual reality (AR/VR)	2,75

Note: no respondent specified „Other" skills

Based on the results from the table above, Polish respondents find the following digital skills as the key ones ("top 5"):

1. Social media management and analytics / E-commerce and online booking systems (ex aequo)
2. Data analysis and interpretation / Online reputation and review management (ex aequo)
3. Digital marketing and SEO for destinations
4. Customer Relationship Management (CRM) systems

5. Cybersecurity awareness in tourism businesses

It is worth noticing that five of the listed skills from the "Digital" group were rated very important (4,0 or above). These skills relate either to direct sale increase or improvement of the reputation and digital visibility of the company. Only one skill from the group was given less attention and graded as the least relevant (2,75 for AR/VR). The difference between the highest and lowest grade for that group of skills is almost identical as in case of green skills (1,58).

3.3.3 Soft Skills for Service Excellence

The third group of skills the respondents were asked to grade were soft skills (scale from 1 to 5; 1 – least important, 5 – most important). The table below presents the average score attributed to each skill:

Essential Soft Skills Identification

Skill	Average score (1-5; descending)
1. Empathy and emotional intelligence	4,58
2. Adaptability to change	4,58
3. Conflict resolution and complaint handling	4,33
4. Creativity and innovation	4,33
5. Cross-cultural communication	4,25
6. Service design thinking	4,25
7. Multilingual proficiency	4,17
8. Ethical decision-making in tourism	4,08
9. Co-creation and participatory planning	3,83
10. Inclusive service delivery	3,75
11. Networking and stakeholder collaboration	3,50
12. Storytelling and narrative development	3,50
13. Leadership in multicultural teams	3,25

Note: no respondent specified „Other" skills

Based on the results from the table above, it is possible to categorize the preferences of the Polish respondents into three groups by importance:

Essential skills (>4,0):

- Empathy and emotional intelligence
- Adaptability to change
- Conflict resolution and complaint handling
- Creativity and innovation
- Cross-cultural communication
- Service design thinking
- Multilingual proficiency

- Ethical decision-making in tourism

Important skills (3,0-4,0):

- Co-creation and participatory planning
- Inclusive service delivery
- Networking and stakeholder collaboration
- Storytelling and narrative development

- Leadership in multicultural teams

Secondary skills (<3,0): none

Compared to green and digital skills, soft ones received more attention from the Polish respondents, with 8 out of 13 listed skills graded higher than 4,0. No skill was graded as secondary. The difference between the highest and the lowest-graded skills was the smallest out of three studied categories of skills (1,33).

3.3.4 Simple Comparative Analysis:

Skills category	Average score (1-5; descending)	No. of essential Skills (>4.0)	No. of low priority Skills (<3.0)
Soft	4,03	8	0
Digital	3,74	5	1
Green	3,02	0	3

In Polish respondents, soft skills received generally the highest rating (4,03), while digital ones were graded slightly lower (3,74). The third place of the green skills in the ranking also shows a distance of one grade of importance (1,01) to the leading category. The same pattern can also be seen through a number of skills rated as "essential" (8 for "soft"; 0 for "green") and "low priority" (0 for "soft"; 3 for "green"). Generally, it suggests that the field of soft skills might be particularly challenging for the industry and Poland and possibly generate more training needs than in other areas, while green skills are subject to less awareness in the industry, or the companies might have already implemented several practices as part of other projects or national legislation.

No significant differences in skill rating by size and type of businesses were observed, possibly due to a low number of complete answers (N=12).

3.3.5 Conclusions

The comparative analysis of the three skill categories indicates that soft skills are viewed as the most critical for the tourism sector in Poland, achieving the highest overall average score (4.03/5) and the largest number of "essential" skills (eight). These results highlight the growing recognition of interpersonal abilities such as empathy, adaptability, and

cross-cultural communication as key drivers of service quality and customer satisfaction. Digital skills follow closely (3.74/5), with a clear focus on tools that enhance online visibility, sales, and reputation management - showing that technological competence is increasingly linked to individual competitiveness of the businesses. In contrast, green skills received noticeably lower importance (3.02/5), suggesting that sustainability-related competencies remain less prioritized in daily business operations, even though they are fundamental for long-term sector resilience. It is likely that green skills are subject to less awareness in the industry, or the companies might have already implemented several practices as part of other projects or national legislation. The results also reveal a practical, short-term orientation among Polish tourism enterprises, emphasizing immediate operational and customer service needs over environmental strategies.

Skill	Average score (1-5; descending)
1. Empathy and emotional intelligence	4,58
2. Adaptability to change	4,58
3. Conflict resolution and complaint handling	4,33
4. Creativity and innovation	4,33
5. Social media management and analytics	4,33
6. E-commerce and online booking systems	4,33
7. Cross-cultural communication	4,25
8. Service design thinking	4,25
9. Data analysis and interpretation	4,25
10. Online reputation and review management	4,25
11. Multilingual proficiency	4,17
12. Digital marketing and SEO for destinations	4,17
13. Ethical decision-making in tourism	4,08
14. Co-creation and participatory planning	3,83
15. Customer Relationship Management (CRM) systems	3,83
16. Inclusive service delivery	3,75
17. Cybersecurity awareness in tourism businesses	3,67
18. Sustainable event management	3,67
19. Networking and stakeholder collaboration	3,50
20. Storytelling and narrative development	3,50
21. Mobile app use and development	3,50
22. Resource efficiency and waste management	3,50
23. GIS and geolocation technologies in tourism	3,50
24. Environmental awareness	3,33
25. Leadership in multicultural teams	3,25
26. Digital storytelling for tourism promotion	3,17
27. Ecological impact assessment	3,17

28. Circular economy practices in tourism	3,17
29. Nature-based tourism planning	3,17
30. Chatbot and AI applications for customer service	3,08
31. Renewable energy usage in hospitality	3,08
32. Use of augmented and virtual reality (AR/VR)	2,75
33. Sustainable transport coordination	2,75
34. Knowledge of green certification standards	2,25
35. Carbon footprint monitoring	2,08

3.4 Skills assessment and future needs – Lithuania

Among the 50 respondents from Lithuania, 58.82% belonged to the accommodation subsector; 17.65% to food and beverage; 17.65% to tour operators and travel agencies; 11.76% to tourist guiding and tour leading; 11.76% to attractions and entertainment; and 13.73% to other activities (The percentages sum to more than 100% because at least one respondent selected more than one activity.).

With respect to firm size, 43.14% of the sample were micro-enterprises, 21.57% were small enterprises, and 35.29% were medium-sized enterprises. *(Note: the source text also reports "30.0% micro enterprises," which appears to be a duplication/typographical error.)* The principal recruitment challenges identified were a shortage of qualified candidates (52.94%), a mismatch between salary expectations and offers (47.06%), and difficulties related to geographic location (21.57%).

3.4.1 Green skills for sustainable tourism

The following tables present the results of the Lithuanian national survey:

Green skill	Weighted Average (1-5)
1. Resource efficiency and waste management	4.22
2. Sustainable event management	4.18
3. Renewable energy usage in hospitality	4.04
4. Nature-based tour planning	4.02
5. Environmental awareness	3.94
6. Circular economy practices in tourism	3.61
7. Sustainable transport coordination	3.59
8. Knowledge of green certificate standards	3.47
9. Ecological impact assessment	3.37
10. Carbon footprint monitoring	3.18

The green-skills profile points to an operational, practice-first orientation. Highest priorities lie in resource efficiency and waste management (4.22) and sustainable event management (4.18), with renewable energy in hospitality (4.04) and nature-based tour planning (4.02) close behind—skills that translate directly into day-to-day cost savings, compliance, and visible guest-facing improvements. By contrast, capabilities tied to standards and measurement—environmental awareness (3.94), circular economy practices (3.61), sustainable transport coordination (3.59), knowledge of green certificates (3.47), ecological impact assessment (3.37), and carbon footprint monitoring (3.18)—rank lower, suggesting limited in-house auditing capacity and a preference for immediately actionable practices over formal accounting. Training should therefore prioritize operational efficiency and event sustainability while deliberately building a second wave of competency in metrics, certification literacy, and carbon accounting,

ideally using simple toolkits, supplier partnerships, and phased targets that connect measurement to tangible operational gains.

3.4.2 Digital Skills for Tourism Innovation

The assessment by Lithuanian respondents of the importance of digital skills for tourism innovation is presented in the table below:

Digital skill	Weighted Average (1-5)
1. Online reputation and review management	4.53
2. Social media management and analytics	4.41
3. Digital marketing and SEO for destinations	4.35
4. E-commerce and online booking systems	4.27
5. Data analysis and interpretation	4.25
6. Customer Relationship Management (CRS) systems	4.22
7. Mobile app use and development	4.04
8. Cybersecurity awareness in tourism business	4.02
9. Digital storytelling for tourism promotion	3.94
10. GIS and geolocation technologies in tourism	3.65
11. Chatbots and AI applications for customer service	3.51
12. Use of augmented and virtual reality (AR/VR)	3.22

The digital skills profile is marketing- and commerce-led, with the highest priorities in online reputation and review management (4.53), social media management and analytics (4.41), and digital marketing/SEO for destinations (4.35)—all core to visibility and demand generation. Operational enablers—e-commerce/online booking (4.27), data analysis and interpretation (4.25), and CRM/"CRS" systems (4.22)—sit just behind, indicating a need to convert traffic into bookings and to use data for targeting and service recovery. Mobile app use (4.04) and cybersecurity awareness (4.02) mark a baseline of technical fluency and risk management expected across roles. By contrast, digital storytelling (3.94), GIS/geolocation (3.65), chatbots/AI for customer service (3.51), and AR/VR (3.22) score lower, suggesting these are emerging or role-specific rather than universal requirements. Overall, the distribution argues for training that first consolidates reputation/social presence, e-commerce, and data/CRM capability, while phasing in AI/chatbots, GIS, and AR/VR through targeted pilots where they demonstrably lift conversion, service quality, or visitor experience.

3.4.3 SOFT SKILLS for service excellence

The assessment by Lithuanian respondents of the importance of soft skills for service excellence is presented in the table below:

Soft skill	Weighted Average (1-5)
1. Creativity and innovation	4.67

2. Empathy and emotional intelligence	4.63
3. Adaptability to change	4.63
4. Conflict resolution and complaint handling	4.59
5. Cross-cultural communication	4.41
6. Inclusive service delivery	4.37
7. Multilingual proficiency	4.35
8. Networking and stakeholder cooperation	4.33
9. Storytelling and narrative development	4.29
10. Service design thinking	4.29
11. Co-creation and participatory planning	4.29
12. Ethical decision-making in tourism	4.20
13. Leadership in multicultural teams	4.12

The ratings indicate a distinctly human-centred skills profile for tourism, with creativity and innovation (4.67), empathy and emotional intelligence (4.63), and adaptability to change (4.63) forming a clear top tier. These are closely followed by conflict management (4.59) and a cluster of intercultural and inclusive communication capabilities**—cross-cultural communication (4.41), inclusive service delivery (4.37), multilingual proficiency (4.35)—that underpin high-quality, equitable guest experiences in diverse markets. Mid-tier priorities emphasize collaboration and value co-creation, including networking/stakeholder cooperation (4.33), storytelling and narrative development (4.29), service design thinking (4.29), and co-creation/participatory planning (4.29). Ethical decision-making (4.20) and leadership in multicultural teams (4.12) round out the profile, signaling expectations that frontline and supervisory staff alike can act responsibly and lead across cultures. Overall, the distribution points to training strategies that first consolidate empathetic, adaptive, and communicative excellence, then develop design-led and collaborative practices that turn local narratives into differentiated experiences—anchored by ethical conduct and inclusive leadership.

3.4.4 Simple Comparative Analysis:

A simple comparative analysis indicates that Lithuanian respondents did not identify any skill as a low priority.

Skills category	Average score (1-5; descending)	No. of essential Skills (>4.0)	No. of low priority Skills (<3.0)
Soft	4,39	14	0
Digital	4,03	8	0
Green	3,76	4	0

Lithuanian respondents assigned the highest level of importance to soft skills. Digital skills, based on their average score, were also classified as essential, whereas green skills were rated as of moderate significance. This distribution suggests that the contribution

generated by staff–guest interaction continues to be regarded as a core element of the sector's development vision.

3.4.5 Conclusions

A comparison of the three skill categories shows that 26 skills of 35 received scores above 4.0, which is considered very important. Soft skills received the highest scores, compared to digital and green skills.

Skill	Weighted Average (1-5)
1. Creativity and innovation	4.67
2. Empathy and emotional intelligence	4.63
3. Adaptability to change	4.63
4. Conflict resolution and complaint handling	4.59
5. Online reputation and review management	4.53
6. Social media management and analytics	4.41
7. Cross-cultural communication	4.41
8. Inclusive service delivery	4.37
9. Multilingual proficiency	4.35
10. Digital marketing and SEO for destinations	4.35
11. Networking and stakeholder cooperation	4.33
12. Storytelling and narrative development	4.29
13. Service design thinking	4.29
14. Co-creation and participatory planning	4.29
15. E-commerce and online booking systems	4.27
16. Data analysis and interpretation	4.25
17. Customer Relationship Management (CRS) systems	4.22
18. Resource efficiency and waste management	4.22
19. Sustainable event management	4.18
20. Ethical decision-making in tourism	4.20
21. Leadership in multicultural teams	4.12
22. Mobile app use and development	4.04
23. Renewable energy usage in hospitality	4.04
24. Nature-based tour planning	4.02
25. Cybersecurity awareness in tourism business	4.02
26. Digital storytelling for tourism promotion	3.94
27. Environmental awareness	3.94
28. GIS and geolocation technologies in tourism	3.65
29. Circular economy practices in tourism	3.61
30. Sustainable transport coordination	3.59
31. Chatbots and AI applications for customer service	3.51
32. Knowledge of green certificate standards	3.47
33. Ecological impact assessment	3.37
34. Use of augmented and virtual reality (AR/VR)	3.22
35. Carbon footprint monitoring	3.18

Among the skills not included in the top thirty, four belong to the green-skills category and two to the digital-skills category.

The distribution shows a service-led skill profile where human, creative, and adaptive capabilities top the list: creativity and innovation, empathy, adaptability, and conflict resolution all outscore 4.5, signaling that standout guest experiences still hinge on people skills. Immediately behind are reputation and communication levers—online reviews, social media analytics, cross-cultural communication, inclusive delivery, multilingual ability, and destination SEO—pointing to a market where narrative control and audience reach are daily differentiators. A strong middle tier blends collaboration and design (networking, storytelling, service design, co-creation) with commercial and data fluency (e-commerce, data analysis, CRM), indicating that teams must turn insights into bookable value. Sustainability competencies (resource efficiency, sustainable events, environmental awareness, circular practices) sit in the upper-middle range, suggesting growing operational expectations rather than niche specialism. By contrast, advanced/dedicated tech skills—AR/VR, GIS, chatbots/AI for service, carbon monitoring—rank lower, implying these are important but not yet mainstream requirements for most roles. Overall, the mix argues for programs that first solidify customer-centric excellence and inclusive communication, then layer in data-driven marketing and commercial execution, while steadily mainstreaming practical sustainability and selectively piloting emerging tech where it creates clear guest value.

3.5 Skills assessment and future needs - Germany

Of the 40 German survey respondents, the majority belonged to the accommodation and/or food and beverage subsector. 47.5 per cent were small enterprises, 30.0 per cent micro enterprises, and only 9.0 per cent medium enterprises. The main recruitment challenges identified were a shortage of qualified candidates (70%), deficiencies in language skills (32,5%), and seasonal issues (25%).

One of the key concerns of the survey was to evaluate the importance of green, digital and soft skills for the future of tourism, as these skills are vital for promoting sustainable growth and improving customer experiences. Green skills allow businesses to implement environmentally friendly practices and meet the growing demand for sustainable travel. Digital skills, such as proficiency in social media and e-commerce, are vital for successful marketing campaigns, reaching a wider audience and streamlining the booking process. Soft skills, such as communication and cultural awareness, are vital for providing excellent customer service and enriching interactions with a diverse range of visitors.

Together, these skills enable the industry to adapt to evolving consumer preferences, leverage technological progress and promote sustainable tourism.

The following tables present the results of the German national survey.

3.5.1 Green skills for sustainable tourism

Assessment of German respondents of the importance of GREEN SKILLS for sustainable tourism

Green skill	Weighted Average (1-5)
1. Resource efficiency and waste management	4.10
2. Environmental awareness	4.03
3. Renewable energy usage in hospitality	3.77
4. Nature-based tour planning	3.67
5. Sustainable event management	3.67
6. Ecological impact assessment	3.63
7. Circular economy practices in tourism	3.58
8. Sustainable transport coordination	3.40
9. Carbon footprint monitoring	3.23
10. Knowledge of green certificate standards	3.20

The top five important green skills in the German sample are: 1. Resource efficiency and waste management (4.10/5), 2. Environmental awareness (4.03/5), 3. Renewable energy usage in hospitality (3.77/5), 4. Nature-based tour planning (3.67/5) and 5. Sustainable event management (3.67/5).
While „Resource efficiency and waste management“ ranks highest (4.10/5), „Knowledge of green certificate standards“ ranks lowest (3.20/5). „Resource efficiency and waste management“ and „Environmental awareness“ are the only skills that score above 4.0. However, as all the other green skills scored above 3.0, there are no significant differences in how important they are perceived by German respondents. Most ratings are in the middle range.

3.5.2 Digital Skills for Tourism Innovation

Assessment of German respondents of the importance of DIGITAL SKILLS for tourism innovation

Digital skill	Weighted Average (1-5)
1. E-Commerce and online booking systems	4.40
2. Digital marketing and SEO for destinations	4.08
3. Social media management and analytics	4.08

4.	Online reputation and review management	4.05
5.	Cybersecurity awareness in tourism business	3.98
6.	Mobile app use and development	3.83
7.	Data analysis and interpretation	3.83
8.	Customer Relationship Management (CRS) systems	3.77
9.	Digital storytelling for tourism promotion	3.58
10.	Chatbots and AI applications for customer service	3.45
11.	GIS and geolocation technologies in tourism	3.33
12.	Use of augmented and virtual reality (AR/VR)	2.85

The top five important digital skills in the German sample are:1. E-commerce and online booking systems (4.40/5), 2. Digital marketing and SEO for destinations (4.08/5), 3. Social media management and analytics (4.08/5), 4. Online reputation and review management (4.05/5) and 5. Cybersecurity awareness in tourism business (3.98/5).

Only one of the digital skill scores below 3.0. While „E-commerce and online booking systems“ scored highest with 4.40/5, “Use of augmented and virtual reality (AR/VR)” scored lowest with 2.85/5. Once again, the majority of ratings fall within the middle range.

3.5.3 Soft skills for service excellence

Assessment of German respondents of the importance of SOFT SKILLS for service excellence

Soft skill		**Weighted Average (1-5)**
1.	Adaptability to change	4.40
2.	Conflict resolution and complaint handling	4.40
3.	Creativity and innovation	4.35
4.	Empathy and emotional intelligence	4.30
5.	Cross-cultural communication	4.13
6.	Storytelling and narrative development	3.90
7.	Networking and stakeholder cooperation	3.88
8.	Multilingual proficiency	3.85
9.	Leadership in multicultural teams	3.83
10.	Service design thinking	3.83
11.	Inclusive service delivery	3.80
12.	Co-creation and participatory planning	3.52
13.	Ethical decision-making in tourism	3.50

The top five important soft skills in the German sample are: 1. Adaptability to change (4.40/5), 2. Conflict resolution and complaint handling (4.40/5), 3. Creativity and innovation (4.35/5), 4. Cross-cultural communication (4.13/5), and 5. Storytelling and narrative development (3.90/5).

The first five skills, all of which score above 4.0, are particularly considered essential. The skill with the highest score is „Adaptability to change“ with 65 per cent of respondents rating it as 5/5, compared to the second most important skill, „Conflict resolution and complaint handling"“ which also scores 4.40/5, but with only 52.5 per cent of respondents rating it as 5/5. As before, most ratings fall within the middle range. With a score of 3.50/5 „ Ethical decision-making in tourism“ ranks lowest.

3.5.4 Simple Comparative Analysis

A comparison of the three skill categories shows that eleven skills received scores above 4.0, which is considered very important. Soft skills received the highest scores, compared to digital and green skills. Five of the soft and four of the digital skills scored above 4.0, whereas only two of the green skills did so. Therefore, green skills are considered less important than soft and digital skills.

Skill		Weighted Average (1-5)
1.	Adaptability to change (s)	4.40
2.	E-commerce and online booking systems (d)	4.40
3.	Conflict resolution and complaint handling (s)	4.40
4.	Creativity and innovation (s)	4.35
5.	Empathy and emotional intelligence (s)	4.30
6.	Cross-cultural communication (s)	4.13
7.	Resource efficiency and waste management (g)	4.10
8.	Digital marketing and SEO for destinations (d)	4.08
9.	Social media management and analytics (d)	4.08
10.	Online reputation and review management (d)	4.05
11.	Environmental awareness (g)	4.03

Skills category	Average score (1-5; descending)	No. of essential skills (>4.0)	No. of low priority skills (<3.0)
Soft	3,98	5	0
Digital	3,77	4	1

Green	3,62	2	0

A skills assessment of German hotel and restaurant enterprises highlights the relative importance of green, digital and soft skills. Although resource efficiency and environmental awareness are the top green skills, they have lower overall scores compared to digital and soft skills, suggesting that they are perceived as less important. E-commerce and online booking systems are prioritised among digital skills, reflecting the need for technological integration in tourism. Soft skills, particularly adaptability to change and conflict resolution, are highly valued, emphasising the importance of human interaction and flexibility. Across all categories, most skills are rated in the middle range, but soft skills consistently receive the highest ratings, highlighting their importance in the industry.

3.5.5 Conclusions and Insights from the comparison with the PANTOUR study results

Skill		Weighted Average (1-5)
1.	Adaptability to change	4.40
2.	Conflict resolution and complaint handling	4.40
3.	E-commerce and online booking systems	4.40
4.	Creativity and innovation	4.35
5.	Empathy and emotional intelligence	4.30
6.	Cross-cultural communication	4.13
7.	Resource efficiency and waste management	4.10
8.	Digital marketing and SEO for destinations	4.08
9.	Social media management and analytics	4.08
10.	Online reputation and review management	4.05
11.	Environmental awareness	4.03
12.	Cybersecurity awareness in tourism business	3.98
13.	Storytelling and narrative development	3.90
14.	Networking and stakeholder cooperation	3.88
15.	Multilingual proficiency	3.85
16.	Leadership in multicultural teams	3.83
17.	Service design thinking	3.83
18.	Mobile app use and development	3.83
19.	Data analysis and interpretation	3.83
20.	Inclusive service delivery	3.83
21.	Renewable energy usage in hospitality	3.77

22.	Customer Relationship Management (CRS) systems	3.77
23.	Nature-based tour planning	3.67
24.	Sustainable event management	3.67
25.	Ecological impact assessment	3.63
26.	Circular economy practices in tourism	3.58
27.	Digital storytelling for tourism promotion	3.58
28.	Co-creation and participatory planning	3.52
29.	Ethical decision-making in tourism	3.50
30.	Chatbots and AI applications for customer service	3.45
31.	Sustainable transport coordination	3.40
32.	GIS and geolocation technologies in tourism	3.33
33.	Carbon footprint monitoring	3.23
34.	Knowledge of green certificate standards	3.20
35.	Use of augmented and virtual reality (AR/VR)	2.85

The 2024 PANTOUR Country Skills Profile Report for Germany includes responses from 33 companies in the tourism sub-sector, who rated the future skills (green, social, and digital) that will be needed in the tourism industry by 2030. These skills only partly overlap with those identified in the RESKILL survey. However, both surveys emphasise the future necessity of green, digital and soft skills within the tourism sector, albeit with differing priorities in certain areas. In terms of *green skills*, both surveys emphasise resource efficiency. PANTOUR prioritises the efficient use of resources such as energy and water (4.27), which aligns closely with RESKILL's focus on resource efficiency and waste management (4.10). Both surveys emphasise the importance of promoting sustainable practices, but PANTOUR places greater emphasis on sustainable practice advocacy (4.0), whereas RESKILL focuses more on environmental awareness (4.03). The surveys diverge in their third preferences: PANTOUR stresses the role of technology in accelerating the green transition (3.94), while RESKILL emphasises the use of renewable energy in the hospitality industry (3.77). Additionally, RESKILL uniquely considers nature-based tour planning and sustainable event management (3.67), which are not mentioned by PANTOUR. In terms of *digital skills*, PANTOUR prioritises digital marketing systems and communication platforms (4.36), a focus that is also evident in RESKILL, albeit with a slightly lower rating of 4.08 for digital marketing and SEO. Both surveys emphasise secure information processing, with PANTOUR scoring 4.33 and RESKILL focusing on cybersecurity awareness (3.98), highlighting a shared concern over data protection. RESKILL uniquely emphasises e-commerce and online booking systems (4.40), distinguishing it from PANTOUR, which focuses more on office applications (4.24) and digital privacy (3.88). RESKILL also emphasises social media management and analytics, as well as online reputation management (4.05), indicating a

greater focus on customer relations than PANTOUR exhibits. In terms of *soft skills*, PANTOUR places paramount importance on excellent customer service (4.48), emphasising its importance in guest experiences. Communication with guests and colleagues follows closely behind at 4.45, alongside teamwork and conflict resolution, which are both valued at 4.42. Adaptability to change is also prioritised (4.36), highlighting the importance of flexibility in uncertain settings. Conversely, RESKILL places a high value on adaptability to change (4.40), with significant consensus, while conflict resolution (4.40) receives slightly less unanimous support. RESKILL also emphasises creativity and innovation (4.35), empathy and emotional intelligence (4.30) as well as cross-cultural communication (4.13), reflecting the need for diverse problem-solving skills. Storytelling (3.90) completes RESKILL's top five, demonstrating the importance of engagement in communication. While both surveys emphasise adaptability and conflict resolution, PANTOUR places greater importance on traditional service skills such as customer service and teamwork. RESKILL's emphasis on creativity and cross-cultural communication highlights a preference for adaptability and innovation. Skills considered less critical by PANTOUR include language-specific communication (3.61) and cultural insights (3.97). This contrasts with RESKILL's lower importance placed on co-creation and participatory planning (3.45).

3.6 Skills assessment and future needs - Finland

This section identifies which skills businesses consider most important for the future. Based on the Finnish survey data with 10 responses, the analysis uses average scores and simple rankings to show priorities.

3.6.1 Green skills for sustainable tourism

Green Skills Importance Ranking Table

Rank	Green Skill	Weighted Average (1-5)
1	Environmental awareness	4.60
2	Resource efficiency and waste management	4.50
3	Ecological impact assessment	4.00
3	Knowledge of green certification standards	4.00
3	Renewable energy usage in hospitality	4.00
3	Sustainable event management	4.00
7	Circular economy practices in tourism	3.90
8	Carbon footprint monitoring	3.70
9	Nature-based tourism planning	3.50
10	Sustainable transport coordination	3.40

Top 6 Most Important Green Skills for Finland:

1. Environmental awareness (4.60/5)
2. Resource efficiency and waste management (4.50/5)
3. Ecological impact assessment (4.00/5)
4. Knowledge of green certification standards (4.00/5)

5. Renewable energy usage in hospitality (4.00/5)
6. Sustainable event management (4.00/5)

Key Insights to Highlight:

Which green skills scored above 4.0 (very important)? In Finland the tourism businesses value green skills. Six out of ten skills are ranked as very important.

Are there clear differences between high-priority and low-priority skills? Yes - there are noticeable differences between the high- and low-priority green skills based on their weighted averages.

High-Priority Skills (Weighted Average ≥ 4.0)

These represent areas where stakeholders place the greatest emphasis — likely seen as core competencies for sustainability in hospitality and tourism.

Skill	Weighted Average	Interpretation
Environmental awareness	**4.60**	Strongly prioritized; seen as foundational.
Resource efficiency & waste management	**4.50**	Very high importance — practical, measurable impact.
Ecological impact assessment	**4.00**	Essential for planning and compliance.
Knowledge of green certification standards	**4.00**	Important for credibility and market competitiveness.
Renewable energy usage in hospitality	**4.00**	Reflects growing focus on energy sustainability.
Sustainable event management	**4.00**	Important among event businesses and MICE sectors.

These six skills cluster tightly between 4.0 and 4.6, showing a strong consensus on their importance.

Moderate to Lower-Priority Skills (Weighted Average < 4.0)

These are still relevant but may be considered emerging or specialized areas requiring further development or investment.

Skill	Weighted Average	Interpretation
Circular economy practices in tourism	**3.90**	Moderately prioritized; still gaining traction.
Carbon footprint monitoring	**3.70**	Recognized importance but may lack tools/training.
Nature-based tourism planning	**3.50**	Niche application; less universal.
Sustainable transport coordination	**3.40**	Lowest ranking — logistical or structural challenges. Maybe also not valued as a solution to business development.

These four skills range from 3.4 to 3.9, marking a clear step down from the top tier.

Summary of Differences

Gap magnitude: Top skill (4.6) vs. lowest skill (3.4) → 1.2-point difference on a 5-point scale.

Priority threshold: A clear cutoff seems to appear around 4.0, separating "core" from "developing" competencies.

Interpretation:

Skills above 4.0 → Currently essential and actionable.

Skills below 4.0 → Emerging priorities that may become more important as sustainability practices mature.

3.6.2 Digital skills for tourism innovation

Rank	Digital Skill	Weighted Average (1–5)
1.	E-commerce and online booking systems	4.90
2.	Customer Relationship Management (CRM) systems	4.60

3.	Social media management and analytics	4.50
4.	Digital marketing and SEO for destinations	4.40
4.	Data analysis and interpretation	4.40
4.	Cybersecurity awareness in tourism businesses	4.40
7.	Mobile app use and development	4.30
7.	Digital storytelling for tourism promotion	4.30
7.	Online reputation and review management	4.30
10.	Chatbot and AI applications for customer service	3.80
11.	Use of augmented and virtual reality (AR/VR)	3.70
12.	GIS and geolocation technologies in tourism	3.60

High-Priority Digital Skills (Weighted Average ≥ 4.4)

These are seen as core competencies — widely valued and likely already integrated into daily operations.

Skill	Weighted Average	Interpretation
E-commerce and online booking systems	4.90	Top priority — vital for online competitiveness.
Customer Relationship Management (CRM) systems	4.60	Key for personalized guest experience and loyalty.
Social media management and analytics	4.50	Essential for marketing and engagement.

Digital marketing and SEO for destinations	4.40	Important for visibility and branding.
Data analysis and interpretation	4.40	Necessary for data-driven decision-making.
Cybersecurity awareness in tourism businesses	4.40	Crucial for protecting customer data and trust.

Clustered between 4.4 and 4.9 — strong agreement on importance and integration.

Moderate-Priority Skills (4.0–4.3)

These are recognized as important but secondary — supportive rather than core.

Skill	Weighted Average	Interpretation
Mobile app use and development	4.30	Useful for customer engagement but resource-intensive.
Digital storytelling for tourism promotion	4.30	Valuable for branding; creative rather than technical.
Online reputation and review management	4.30	Important for maintaining digital presence.

Slightly lower but still high, suggesting growing emphasis.

Lower-Priority or Emerging Skills (≤ 4.0)

These are emerging or specialized skills — may gain importance as technology evolves.

Skill	Weighted Average	Interpretation

Chatbot and AI applications for customer service	3.80	Seen as promising but not yet mainstream.
Use of augmented and virtual reality (AR/VR)	3.70	Innovative but niche.
GIS and geolocation technologies in tourism	3.60	Specialized; relevant for certain sectors only.

These range from 3.6 to 3.8, showing a noticeable drop from the top tier.

Overall Differences

Range: 3.6 (lowest) → 4.9 (highest) → 1.3-point gap on a 5-point scale.

Threshold: Strong cutoff around 4.3–4.4, separating "core digital skills" from emerging ones.

Trends:

- High scores emphasize marketing, data, and customer relations.
- Lower scores reflect innovative but less implemented technologies (AI, AR/VR, GIS).

3.6.3 Soft skills for service excellence

Complete Soft Skills Ranking Table

Rank	Soft Skill	Weighted Average (1–5)
1.	Adaptability to change	4.80
2.	Networking and stakeholder collaboration	4.70
3.	Leadership in multicultural teams	4.60

3.	Creativity and innovation	4.60
3.	Service design thinking	4.60
6.	Cross-cultural communication	4.40
6.	Multilingual proficiency	4.40
6.	Empathy and emotional intelligence	4.40
6.	Conflict resolution and complaint handling	4.40
10.	Co-creation and participatory planning	4.30
11.	Inclusive service delivery	4.20
11.	Ethical decision-making in tourism	4.20
11.	Storytelling and narrative development	4.20

The Finnish tourism sector places exceptionally high value on soft skills, with all rated above 4.0, confirming their central role in ensuring service quality and innovation. The highest-ranked skill, adaptability to change (4.80), reflects the industry's need to respond quickly to technological, environmental, and market shifts. Networking and stakeholder collaboration (4.70) and leadership in multicultural teams (4.60) highlight the importance of cooperation and inclusive management in diverse work environments. Creativity, innovation, and service design thinking (all 4.60) emphasize the drive toward guest-centered and sustainable service models. A strong cluster of skills—cross-cultural communication, multilingual proficiency, empathy, and conflict resolution (all 4.40)—further illustrates the sector's people-centered focus. Even the lower-ranked skills, such as inclusive service delivery, ethical decision-making, and storytelling (4.20), remain highly valued. Overall, the consistency of these scores (4.2–4.8) suggests a mature appreciation of interpersonal and adaptive capabilities as key assets for Finland's tourism workforce.

3.6.4 Simple comparative analysis

Skills Category Comparison

Skills category	Average score (1-5; descending)	No. of essential Skills (>4.0)	No. of low priority Skills (<3.0)
Soft	4,47	13/13	0
Digital	4,29	9/12	0
Green	4,01	6/10	0

3.6.5 Conclusions and Insights from the comparison with the PANTOUR study results

The comparison between the PANTOUR and ReSkill (Finland) results shows that Finnish tourism businesses strongly prioritize soft skills, while continuing to advance in digital and green skills. Soft skills such as adaptability, collaboration, and creativity received the highest ratings, confirming their central role in maintaining service quality and innovation. Digital skills were also highly valued, especially e-commerce, CRM, and digital marketing, although more advanced technologies like AI and AR/VR are still developing. Green skills demonstrated strong awareness of sustainability and resource efficiency but lower engagement with technical areas like carbon monitoring and sustainable transport. The PANTOUR findings highlight remaining gaps, particularly in digital and green competencies, suggesting that while Finland is progressing toward a digitally mature and people-centered tourism sector, practical skills implementation still lags. Future efforts should integrate digital innovation, sustainability, and human adaptability to strengthen the sector's long-term competitiveness and resilience in tourism.

3.6.6 Conclusion of skills

Overall Rank	Category	Skill	Weighted Average (1–5)
1	Digital Skills	E-commerce and online booking systems	4.90
2	Soft Skills	Adaptability to change	4.80
3	Soft Skills	Networking and stakeholder collaboration	4.70
4	Digital Skills	Customer Relationship Management (CRM) systems	4.60
5	Soft Skills	Leadership in multicultural teams	4.60
6	Soft Skills	Creativity and innovation	4.60
7	Soft Skills	Service design thinking	4.60
8	Green Skills	Environmental awareness	4.60
9	Digital Skills	Social media management and analytics	4.50
10	Green Skills	Resource efficiency and waste management	4.50
11	Digital Skills	Digital marketing and SEO for destinations	4.40
12	Digital Skills	Data analysis and interpretation	4.40
13	Digital Skills	Cybersecurity awareness in tourism businesses	4.40

14	Soft Skills	Cross-cultural communication	4.40
15	Soft Skills	Multilingual proficiency	4.40
16	Soft Skills	Empathy and emotional intelligence	4.40
17	Soft Skills	Conflict resolution and complaint handling	4.40
18	Digital Skills	Mobile app use and development	4.30
19	Digital Skills	Digital storytelling for tourism promotion	4.30
20	Digital Skills	Online reputation and review management	4.30
21	Soft Skills	Co-creation and participatory planning	4.30
22	Soft Skills	Inclusive service delivery	4.20
23	Soft Skills	Ethical decision-making in tourism	4.20
24	Soft Skills	Storytelling and narrative development	4.20
25	Green Skills	Ecological impact assessment	4.00
26	Green Skills	Knowledge of green certification standards	4.00
27	Green Skills	Renewable energy usage in hospitality	4.00
28	Green Skills	Sustainable event management	4.00

29	Green Skills	Circular economy practices in tourism	3.90
30	Digital Skills	Chatbot and AI applications for customer service	3.80
31	Green Skills	Carbon footprint monitoring	3.70
32	Digital Skills	Use of augmented and virtual reality (AR/VR)	3.70
33	Digital Skills	GIS and geolocation technologies in tourism	3.60
34	Green Skills	Nature-based tourism planning	3.50
35	Green Skills	Sustainable transport coordination	3.40

3.7 Skills assessment and future needs - Spain

Among the 34 Spanish respondents who participated in the survey, the majority (50%) belonged to the accommodation sector, followed by the food and beverage sector (35.29%). The remaining 14.71% represented tour operators and travel agencies, indicating a relatively balanced distribution across the main branches of the tourism industry.

Regarding company size, most respondents represented small enterprises (10–49 employees), followed by micro enterprises (1–9 employees). Medium-sized companies accounted for 20.41% of the total sample. This composition reflects the structural characteristics of the Spanish tourism sector, which is largely dominated by small and medium-sized enterprises (SMEs).

When asked about their main recruitment challenges, respondents most frequently identified a shortage of qualified candidates (61.76%) as the primary difficulty. This was followed by issues related to irregular work schedules and seasonality (35.29%), which continue to affect the stability and attractiveness of employment in the sector. Additionally, 20.59% of respondents pointed to a lack of interest among potential employees in tourism-related occupations, suggesting a growing gap between workforce expectations and the realities of the industry.

These findings highlight the persistent human resource challenges that the tourism sector faces in the post-pandemic context, particularly in attracting and retaining skilled professionals.

A central focus of the survey was to assess the relevance of green, digital, and soft skills for the future of the tourism sector, recognizing their essential role in fostering sustainable growth and enhancing the overall customer experience. Green skills equip businesses to adopt environmentally responsible practices and respond to the increasing demand for sustainable forms of travel. Digital skills, including expertise in social media management and e-commerce, are crucial for designing effective marketing strategies, expanding audience reach, and optimizing booking processes. Meanwhile, soft skills—such as communication, empathy, and cultural awareness—are fundamental for delivering high-quality customer service and enriching interactions with visitors from diverse backgrounds.

Together, these skill sets enable the tourism industry to adapt to changing consumer expectations, harness technological innovation, and advance toward a more sustainable and competitive future.

3.7.1 Green Skills for Sustainable Tourism

In recent years, the European Union has recognized that the transition towards a sustainable and climate-neutral economy requires not only technological innovation but also the development of new competencies across all sectors. Within this context, the concept of green skills has gained strategic importance as a set of knowledge, abilities, and attitudes that enable individuals and organizations to contribute actively to environmental sustainability and the green transition.

The EntreComp framework (European Entrepreneurship Competence Framework) provides a foundational structure for understanding how entrepreneurial competencies can support this transition. Although EntreComp does not explicitly focus on green skills, it promotes a mindset oriented toward opportunity recognition, value creation, and resource mobilization, all of which are essential for driving innovation and sustainable practices within the tourism sector and beyond. Through its emphasis on creativity, ethical thinking, and initiative, EntreComp encourages individuals and organizations to generate solutions that balance economic, social, and environmental dimensions.

Building on this foundation, the GreenComp framework (European Sustainability Competence Framework), developed by the European Commission's Joint Research Centre, directly addresses the competencies required for sustainability. GreenComp identifies four interrelated competence areas: (1) *Embodying sustainability values*—developing respect for nature, equity, and justice; (2) *Embracing complexity in sustainability*—understanding systems thinking, critical reflection, and collaboration; (3) *Envisioning sustainable futures*—cultivating adaptability, future literacy, and exploratory thinking; and (4) *Acting for sustainability*—mobilizing individual and collective agency for change.

Together, these frameworks position green skills as transversal and transformative competencies that empower professionals to act responsibly within their fields. In the tourism industry, such skills are essential for adopting sustainable practices, minimizing environmental impact, and aligning business models with the principles of the European Green Deal. Moreover, by integrating entrepreneurial thinking from EntreComp and sustainability competencies from GreenComp, the tourism workforce can better respond to the growing demand for responsible travel experiences while fostering innovation, resilience, and long-term competitiveness.

In terms of the survey, respondents were asked to Competencies needed for environmentally sustainable practices, resource efficiency and climate-friendly operations, including: Transversal skills linked to sustainable thinking and acting, relevant to all economic sectors Specific skills required to implement standards and processes that protect ecosystems and reduce resource consumption Highly specialized skills required to develop green technologies such as renewable energies and recycling systems. The assessment of Spanish respondents of the importance of GREEN SKILLS for sustainable tourism are as follows:

Green skill	**Weighted Average (1-5)**
1. Resource efficiency and waste management	4.12
2. Environmental awareness	4.03
3. Renewable energy usage in hospitality	3.94
4. Knowledge of green certificate standards	3.88
5. Nature-based tour planning	3.85
6. Sustainable event management	3.85
7. Ecological impact assessment	3.71
8. Sustainable transport coordination	3.71
9. Circular economy practices in tourism	3.53
10. Carbon footprint monitoring	3.35

Based on table, the top five important green skills in the sample are: 1. Resource efficiency and waste management (4.10/5), 2. Environmental awareness (4.03/5), 3. Renewable energy usage in hospitality (3.77/5), 4. Nature-based tour planning (3.67/5),

and 5. Sustainable event management (3.67/5). While *Resource efficiency and waste management* ranks highest (4.10/5), *Knowledge of green certificate standards* is perceived as the least important skill (3.20/5). Only *Resource efficiency and waste management* and *Environmental awareness* score above 4.0, indicating that these are considered the most critical competencies for fostering sustainability in tourism and hospitality. However, since all green skills score above 3.0, respondents generally view all of them as relevant. The remaining skills — including *Renewable energy usage in hospitality*, *Nature-based tour planning*, *Sustainable event management*, and *Ecological impact assessment* — fall within the mid-importance range (3.6–3.8). This suggests a relatively consistent perception of importance across the set of green skills, with no extreme polarization in responses. Overall, the results indicate that German respondents recognize the broad relevance of sustainability-related competencies, even if some, such as *carbon footprint monitoring* (3.23/5) and *knowledge of green certificate standards* (3.20/5), are perceived as somewhat less central in current practice.

3.7.2 Digital Skills for Tourism innovation

Regarding digital competences, the DigComp framework (European Digital Competence Framework for Citizens) is the most direct reference point: it defines digital competence as the *"confident, critical and responsible use of digital technologies for learning, work and participation in society."*

What is particularly interesting is that the development of EntreComp "builds upon the previous work carried out by the JRC on digital competence (DigComp)."
In this sense, when we speak about digital skills from an entrepreneurial perspective, that is, when we understand digital competences not merely as the technical use of technologies but as part of a mindset that identifies opportunities, creates value, and mobilizes resources— the EntreComp framework provides a valuable interpretive lens:

- Digital competences become tools for creativity, innovation, and transformation.
- The ability to use digital technologies is linked to initiative, problem-solving, and value creation, which are typical of the entrepreneurial sphere.
- The ethical and responsible perspective of EntreComp reinforces the idea that digital use should not be merely technical but also critical, collaborative, and sustainability-oriented.

In the field of tourism—or in any other sector experiencing rapid change through digitalization—this combination of entrepreneurship and digitalization has strong practical implications: professionals and organizations need not only to *know how to use digital tools* but to *use them strategically*, in an adaptive and creative way that identifies new opportunities, mobilizes resources (technological, human, and financial), and acts with a sense of responsibility and shared value.

Digital skill	Weighted Average (1-5)
1. Data analysis and interpretation	4.65
2. Online reputation and review management	4.56
3. Customer Relationship Management (CRM) systems	4.47
4. Digital marketing and SEO for destinations	4.38
5. E-commerce and online booking systems	4.35
6. Cybersecurity awareness in tourism business	4.32
7. Social media management and analytics	4.32
8. Mobile app use and development	4.26
9. Digital storytelling for tourism promotion	4.00
10. Chatbots and AI applications for customer service	3.85

Based on Table, the top five important digital skills in the sample are: 1. Data analysis and interpretation (4.65/5), 2. Online reputation and review management (4.56/5), 3. Customer Relationship Management (CRM) systems (4.47/5), 4. Digital marketing and SEO for destinations (4.38/5), and 5. E-commerce and online booking systems (4.35/5). While *Data analysis and interpretation* ranks highest (4.65/5), *Chatbots and AI applications for customer service* is perceived as the least important skill (3.85/5).

Overall, all digital skills score above 3.8, indicating that respondents perceive them as highly relevant for the tourism and hospitality industry. The consistently high mean values (ranging from 3.85 to 4.65) suggest that digital competencies are widely recognized as essential for business competitiveness, customer engagement, and operational efficiency. Notably, *Data analysis and interpretation* and *Online reputation and review management* stand out as the only skills scoring above 4.5, reflecting the growing importance of data-driven decision-making and online image management in tourism enterprises.

Skills such as *CRM systems*, *digital marketing and SEO*, and *e-commerce and online booking systems* also receive strong ratings (4.3–4.5), highlighting the sector's emphasis on customer-centered digital strategies and online visibility. In contrast, more specialized or emerging digital skills—such as *digital storytelling for tourism promotion* (4.00/5) and *chatbots and AI applications for customer service* (3.85/5)—are valued slightly lower, suggesting that while innovation is appreciated, practical and data-oriented digital skills are currently prioritized.

Overall, the results indicate that respondents attribute high importance to a broad range of digital skills, with particular emphasis on analytical, customer relationship, and marketing competencies that directly contribute to enhancing competitiveness and digital transformation in the tourism sector.

3.7.3 Soft Skills for service excellence

Regarding soft skills, the EntreComp framework (European Entrepreneurship Competence Framework) is the main reference established by the European Commission to understand and foster entrepreneurial competences across all sectors. EntreComp defines entrepreneurship as the *"capacity to act upon opportunities and ideas to create value for others"*, where value can be financial, cultural, or social. In this sense, soft skills are not isolated personal attributes but dynamic competences that enable individuals to transform ideas into action through collaboration, creativity, and responsibility.

What is particularly relevant is that the EntreComp framework conceptualizes soft skills as transversal and developmental competences—they can be learned, transferred, and adapted across different professional and social contexts. It organizes them into three interrelated areas:

1. Ideas and opportunities, which include creativity, vision, ethical and sustainable thinking, and the ability to identify opportunities.
2. Resources, which cover self-awareness, motivation, perseverance, teamwork, and mobilization of resources—both tangible and intangible.
3. Into action, which focuses on taking initiative, coping with uncertainty, and turning ideas into concrete, value-creating outcomes.

From this perspective, soft skills are not "secondary" to technical or digital skills, but the foundation that gives direction and meaning to them. They provide the human dimension that enables digital and green transformations to be inclusive, ethical, and innovative. In particular, competences such as creativity, collaboration, adaptability, and ethical awareness are central to building resilience in fast-changing sectors.

In the field of tourism, where interpersonal interaction, cultural sensitivity, and innovation are essential, this approach has clear implications. Professionals are increasingly required not only to master operational or technical tasks but to communicate effectively, think critically, and act collaboratively in multicultural and uncertain environments. Through the EntreComp lens, soft skills become strategic enablers of sustainable and creative tourism development—allowing individuals and organizations to identify opportunities, mobilize collective capacities, and create shared value responsibly.

Soft skill	**Weighted Average (1-5)**
1. Adaptability to change	4.68
2. Empathy & Emotional Intelligence	4.62
3. Conflict resolution and complaint handling	4.38
4. Cross-cultural communication	4.38
5. Multilingual proficiency	4.32

6. Leadership in multicultural teams	4.26
7. Creativity and innovation	4.26
8. Service design thinking	4.15
9. Inclusive service delivery	4.12
10. Storytelling and narrative development	4.03

Based on Table 3, the top five important soft skills identified in the sample are: 1. Adaptability to change (4.68/5), 2. Empathy and Emotional Intelligence (4.62/5), 3. Conflict resolution and complaint handling (4.38/5), 4. Cross-cultural communication (4.38/5), and 5. Multilingual proficiency (4.32/5). While *Adaptability to change* ranks highest (4.68/5), *Storytelling and narrative development* is perceived as the least important skill (4.03/5).

Overall, all soft skills score above 4.0, indicating that respondents perceive them as highly relevant for professional performance in the tourism and hospitality industry. The consistently high mean values (ranging from 4.03 to 4.68) suggest that interpersonal and adaptive competencies are widely recognized as key enablers of service quality, teamwork, and resilience in dynamic business environments.

Notably, *Adaptability to change* and *Empathy and Emotional Intelligence* stand out as the only skills scoring above 4.6, highlighting the growing importance of emotional adaptability and interpersonal understanding in managing uncertainty and ensuring guest satisfaction. Skills such as *Conflict resolution and complaint handling*, *Cross-cultural communication,* and *Multilingual proficiency* also receive strong ratings (4.3–4.4), reflecting the central role of communication and cultural awareness in customer-centered service contexts.

In contrast, more creative or design-oriented competencies—such as *Service design thinking* (4.15/5), *Inclusive service delivery* (4.12/5), and *Storytelling and narrative development* (4.03/5)—are valued slightly lower. This suggests that while innovation and inclusivity are appreciated, practical interpersonal and emotional management skills are currently prioritized by respondents as more critical to everyday operations.

Overall, the results indicate that respondents attribute high importance to a broad set of soft skills, with particular emphasis on adaptability, empathy, and communication as core drivers of sustainable human interaction, leadership, and service excellence in the tourism and hospitality sectors.

3.7.4 Simple comparative analysis

A comparative analysis of the three skill categories—green, digital, and soft skills—reveals distinct patterns in their perceived importance within the tourism and hospitality

sector. Overall, ten skills across all categories received scores above 4.0, indicating that respondents generally view these competencies as highly relevant for professional performance and organizational competitiveness.

Among the three categories, soft skills received the highest overall ratings, with mean values ranging from 4.03 to 4.68. This demonstrates a strong recognition of interpersonal, emotional, and adaptive competencies as fundamental to service excellence and leadership in dynamic, people-oriented environments. In particular, *Adaptability to change* (4.68/5) and *Empathy and Emotional Intelligence* (4.62/5) emerged as the top-rated skills across all categories, highlighting the critical role of emotional intelligence and flexibility in responding to uncertainty and enhancing customer experiences.

Digital skills ranked second, with consistently high scores ranging from 3.85 to 4.65, confirming the sector's growing dependence on data-driven decision-making, online visibility, and customer relationship management. The most valued digital competencies—*Data analysis and interpretation* (4.65/5) and *Online reputation and review management* (4.56/5)—reflect the increasing need for analytical and strategic digital capabilities in competitive tourism markets.

In contrast, green skills recorded slightly lower ratings, with mean values between 3.20 and 4.10, suggesting that sustainability-related competencies are recognized as important but not yet fully integrated into operational priorities. Only *Resource efficiency and waste management* (4.10/5) and *Environmental awareness* (4.03/5) exceeded the 4.0 threshold, indicating moderate but growing attention to environmental sustainability.

Taken together, these results suggest a hierarchy of perceived relevance: soft skills are considered the most essential, followed by digital skills, while green skills—though increasingly relevant—remain comparatively less prioritized. This pattern reflects the current stage of transformation in the tourism industry, where human-centered and technology-driven competencies are already embedded in daily operations, whereas sustainability-oriented skills are still emerging as strategic imperatives for the future.

Skills category	Average score (1-5; descending)	No. of essential Skills (>4.0)	No. of low priority Skills (<3.0)
Soft	4.33	10/10	0
Digital	4.32	9/10	0
Green	3.80	2/10	0

3.7.5 Conclusions and Insights from the comparison with the PANTOUR study results

Both PANTOUR and our survey on tourism skills in Spain highlight the growing importance of digital, green, and social competences, though they differ in focus and

depth. In the digital domain, PANTOUR points to major gaps in advanced technologies—AI, AR/VR, and robotics—while professionals in our survey emphasize more immediate, applied skills such as data analysis (4.65/5), online reputation management (4.56/5), and CRM systems (4.47/5). This reflects a focus on practical competitiveness rather than frontier innovation.

For green skills, PANTOUR stresses technological and systemic sustainability (e.g., CO_2 monitoring, green procurement), whereas our results reveal a stronger emphasis on resource efficiency (4.10/5) and environmental awareness (4.03/5), indicating an operational rather than transformative approach to sustainability.

In soft skills, both studies agree on their critical relevance. PANTOUR prioritizes DEI and customer service excellence, while our survey highlights adaptability (4.68/5) and empathy (4.62/5) as essential for managing uncertainty and guest relations.

Overall, both perspectives are complementary: PANTOUR anticipates future-oriented skills for 2030, while Spanish professionals focus on competencies that sustain current performance and competitiveness.

On the other hand and based on the survey results, the analysis of green, digital, and soft skills among Spanish respondents highlights a clear prioritization that reflects the current needs and challenges of Spain's tourism, hospitality, and gastronomy sectors. Soft skills are perceived as the most critical, with *adaptability to change* (4.68/5) and *empathy and emotional intelligence* (4.62/5) emerging as top-rated competencies. This underscores the sector's emphasis on high-quality interpersonal service, intercultural communication, and emotional responsiveness—essential in Spain's highly diverse and service-oriented tourism environment.

Digital skills are also highly valued, particularly *data analysis and interpretation* (4.65/5) and *online reputation and review management* (4.56/5), reflecting the sector's increasing reliance on data-driven decision-making, digital marketing, and customer engagement strategies to remain competitive in a global market.

Green skills, while recognized as important—*resource efficiency and waste management* (4.10/5) and *environmental awareness* (4.03/5)—receive lower overall ratings compared to soft and digital skills. This suggests that sustainability practices are acknowledged but have not yet fully permeated operational priorities, mirroring the broader EU trend where environmental competencies are still emerging as strategic necessities.

These findings align closely with the EntreComp framework, which emphasizes entrepreneurial competences such as initiative, creativity, value creation, and ethical responsibility. In Spain, the combination of strong soft skills, advanced digital skills, and a growing awareness of green skills creates a workforce capable of driving innovation,

enhancing customer experiences, and gradually embedding sustainability in tourism operations.

For the Spanish tourism ecosystem, this means that training and professional development programs should focus on: (1) strengthening interpersonal and adaptive skills for service excellence, (2) fostering digital literacy and data-driven strategic thinking, and (3) integrating sustainability-oriented competencies to meet EU targets, such as those outlined in the European Green Deal and the GreenComp framework.

In conclusion, Spain's tourism, hospitality, and gastronomy sectors require a holistic skill set where soft and digital competences enable immediate operational excellence, while green competences are progressively embedded to ensure long-term sustainability, resilience, and international competitiveness. In the following table, the overall list of skills is presented.

Skill	**Weighted Average (1-5)**
1. Adaptability to change	4.68
2. Data analysis and interpretation	4.65
3. Empathy & Emotional Intelligence	4.62
4. Online reputation and review management	4.56
5. Customer Relationship Management (CRM) systems	4.47
6. Digital marketing and SEO for destinations	4.38
7. Conflict resolution and complaint handling	4.38
8. Cross-cultural communication	4.38
9. E-commerce and online booking systems	4.35
10. Cybersecurity awareness in tourism business	4.32
11. Social media management and analytics	4.32
12. Multilingual proficiency	4.32
13. Leadership in multicultural teams	4.26
14. Creativity and innovation	4.26
15. Mobile app use and development	4.26
16. Service design thinking	4.15
17. Inclusive service delivery	4.12
18. Resource efficiency and waste management	4.12
19. Storytelling and narrative development	4.03
20. Environmental awareness	4.03
21. Digital storytelling for tourism promotion	4.00
22. Renewable energy usage in hospitality	3.94
23. Knowledge of green certificate standards	3.88
24. Nature-based tour planning	3.85
25. Sustainable event management	3.85
26. Chatbots and AI applications for customer service	3.85
27. Ecological impact assessment	3.71

28. Sustainable transport coordination	3.71
29. Circular economy practices in tourism	3.53
30. Carbon footprint monitoring	3.35

Annex 1. Summary of skills

RESKILL

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No.	Skills_30_ES	Mean	Skills_30_FIN	Mean	Skills_30_DE	Mean	Skills_30_IT	Mean	Skills_30_LT	Mean	Skills_30_PL	Mean
1	Adaptability to change	4,68	E-commerce and online booking systems	4,90	E-commerce and online booking systems	4,40	Adaptability to change	4,48	Creativity and innovation	4,67	Empathy and emotional intelligence	4,58
2	Data analysis and interpretation	4,65	Adaptability to change	4,80	Adaptability to change	4,40	Service design thinking	4,00	Empathy and emotional intelligence	4,63	Adaptability to change	4,58
3	Empathy & Emotional Intelligence	4,62	Networking and stakeholder collaboration	4,70	Conflict resolution and complaint handling	4,40	Multilingual proficiency	4,30	Adaptability to change	4,63	Social media management and analytics	4,33
4	Online reputation and review management	4,56	Customer Relationship Management (CRM) systems	4,60	Creativity and innovation	4,35	Empathy and emotional intelligence	4,30	Conflict resolution and complaint handling	4,59	E-commerce and online booking systems	4,33
5	Customer Relationship Management (CRM) systems	4,47	Leadership in multicultural teams	4,60	Cross-cultural communication	4,13	Online reputation and review management	4,17	Online reputation and review management	4,53	Conflict resolution and complaint handling	4,33
6	Digital marketing and SEO for destinations	4,38	Creativity and innovation	4,60	Resource efficiency and waste management	4,10	Creativity and innovation	4,17	Social media management and analytics	4,41	Creativity and innovation	4,33
7	Conflict resolution and complaint handling	4,38	Service design thinking	4,60	Digital marketing and SEO for destinations	04,08	Cross-cultural communication	4,13	Cross-cultural communication	4,41	Data analysis and interpretation	4,25
8	Cross-cultural communication	4,38	Environmental awareness	4,60	Social media management and analytics	04,08	Conflict resolution and complaint handling	4,13	Inclusive service delivery	4,37	Online reputation and review management	4,25
9	E-commerce and online booking systems	4,35	Social media management and analytics	4,50	Online reputation and review management	04,05	Inclusive service delivery	3,83	Multilingual proficiency	4,35	Cross-cultural communication	4,25
10	Cybersecurity awareness in tourism business	4,32	Resource efficiency and waste management	4,50	Environmental awareness	04,03	Social media management and analytics	3,78	Digital marketing and SEO for destinations	4,35	Service design thinking	4,25
11	Social media management and analytics	4,32	Digital marketing and SEO for destinations	4,40	Cybersecurity awareness in tourism business	3,98	Ethical decision-making in tourism	3,78	Networking and stakeholder cooperation	4,33	Digital marketing and SEO for destinations	4,17
12	Multilingual proficiency	4,32	Data analysis and interpretation	4,40	Storytelling and narrative development	3,90	Digital marketing and SEO for destinations	3,74	Storytelling and narrative development	4,29	Multilingual proficiency	4,17
13	Mobile app use and development	4,26	Cybersecurity awareness in tourism businesses	4,40	Networking and stakeholder cooperation	3,88	E-commerce and online booking systems	3,74	Service design thinking	4,29	Ethical decision-making in tourism	4,08
14	Leadership in multicultural teams	4,26	Cross-cultural communication	4,40	Multilingual proficiency	3,85	Leadership in multicultural teams	3,74	Co-creation and participatory planning	4,29	Customer Relationship Management (CRM) systems	3,83
15	Creativity and innovation	4,26	Multilingual proficiency	4,40	Mobile app use and development	3,83	Resource efficiency and waste management	3,70	E-commerce and online booking systems	4,27	Co-creation and participatory planning	3,83
16	Service design thinking	4,15	Empathy and emotional intelligence	4,40	Data analysis and interpretation	3,83	Cybersecurity awareness in tourism businesses	3,70	Data analysis and interpretation	4,25	Inclusive service delivery	3,75
17	Resource efficiency and waste management	4,12	Conflict resolution and complaint handling	4,40	Leadership in multicultural teams	3,83	Data analysis and interpretation	3,61	Customer Relationship Management (CRS) systems	4,22	Sustainable event management	3,67
18	Inclusive service delivery	4,12	Mobile app use and development	4,30	Service design thinking	3,83	Renewable energy usage in hospitality	3,57	Resource efficiency and waste management	4,22	Cybersecurity awareness in tourism businesses	3,67
19	Environmental awareness	04,03	Digital storytelling for tourism promotion	4,30	Renewable energy usage in hospitality	3,77	Storytelling and narrative development	3,57	Sustainable event management	4,18	Resource efficiency and waste management	3,5
20	Storytelling and narrative development	04,03	Online reputation and review management	4,30	Customer Relationship Management (CRS) systems	3,77	Networking and stakeholder collaboration	3,52	Ethical decision-making in tourism	4,20	Mobile app use and development	3,5
21	Digital storytelling for tourism promotion	4,00	Co-creation and participatory planning	4,30	Nature-based tour planning	3,67	Co-creation and participatory planning	3,48	Leadership in multicultural teams	4,12	GIS and geolocation technologies in tourism	3,5
22	Renewable energy usage in hospitality	3,94	Inclusive service delivery	4,20	Sustainable event management	3,67	Environmental awareness	3,39	Mobile app use and development	04,04	Networking and stakeholder collaboration	3,5
23	Knowledge of green certificate standards	3,88	Ethical decision-making in tourism	4,20	Ecological impact assessment	3,63	Sustainable transport coordination	3,39	Renewable energy usage in hospitality	04,04	Storytelling and narrative development	3,5
24	Nature-based tour planning	3,85	Storytelling and narrative development	4,20	Circular economy practices in tourism	3,58	Nature-based tourism planning	3,39	Nature-based tour planning	04,02	Environmental awareness	3,33
25	Sustainable event management	3,85	Ecological impact assessment	4,00	Digital storytelling for tourism promotion	3,58	Sustainable event management	3,35	Cybersecurity awareness in tourism business	04,02	Leadership in multicultural teams	3,25
26	Chatbots and AI applications for customer service	3,85	Knowledge of green certification standards	4,00	Co-creation and participatory planning	3,52	Circular economy practices in tourism	3,30	Digital storytelling for tourism promotion	3,94	Ecological impact assessment	3,17
27	Ecological impact assessment	3,71	Renewable energy usage in hospitality	4,00	Chatbots and AI applications for customer service	3,45	Customer Relationship Management (CRM) systems	3,26	Environmental awareness	3,94	Circular economy practices in tourism	3,17
28	Sustainable transport coordination	3,71	Sustainable event management	4,00	Sustainable transport coordination	3,40	Digital storytelling for tourism promotion	3,26	GIS and geolocation technologies in tourism	3,65	Nature-based tourism planning	3,17
29	Circular economy practices in tourism	3,53	Circular economy practices in tourism	3,90	Carbon footprint monitoring	3,23	GIS and geolocation technologies in tourism	3,26	Circular economy practices in tourism	3,61	Digital storytelling for tourism promotion	3,17
30	Carbon footprint monitoring	3,35	Chatbot and AI applications for customer service	3,80	Knowledge of green certificate standards	3,20	Ecological impact assessment	3,17	Sustainable transport coordination	3,59	Renewable energy usage in hospitality	3,08
			Carbon footprint monitoring	3,70			Mobile app use and development	3,13	Chatbots and AI applications for customer service	3,51	Chatbot and AI applications for customer service	3,08
			Use of augmented and virtual reality (AR/VR)	3,70			Knowledge of green certification standards	2,91	Knowledge of green certificate standards	3,47	Sustainable transport coordination	2,75