

## A STUDY ON THE SKILLS GAP ANALYSIS IN THE JORDANIAN TOURISM SECTOR

**Ali S. HYASAT\*** 

Al-Balqa Applied University, Faculty of Business, Department of Planning  
and Project Management, Al-salt, Jordan, e-mail:ali.hyasat@bau.edu.jo

**Giuseppe AMORUSO** 

Design Department, Politecnico di Milano, Milano, Italy, e-mail: giuseppe.amoruso@polimi

**Alessandro IANNIELLO** 

Design Department, Politecnico di Milano, Milano, Italy, e-mail:alessandro.ianniello@polimi.it

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**Abstract:** According to the national development plans, the Jordanian tourism sector needs to be updated in order to meet international qualitative standards. To achieve this goal, one of the expected actions to be undertaken is the definition and the implementation of innovative professional profiles that should be integrated within the whole supply chain, and the updating of the related study plans. In order to address this demand, the research aimed to produce a skills gap analysis of the Jordanian tourism, hospitality, and heritage education system, which should highlight sets of innovative and underdeveloped skills for the tackled sectors, and the relative academic paths. The research also aimed to understand the actual offering of the Jordanian education system and to compare it with the requirements of the labor market. Although different plans have been developed, their implementation is still not fully exploited to achieve the desired transformation of the reference sector. By exploiting mixed research techniques, both quantitative and qualitative, it has been possible to understand the actual offering of the Jordanian education system and to compare it with the requirements of the labor market: these activities represent the needed basis to produce the demanded skills gap analysis, which is also part of this contribution.

**Key words:** skills gap, tourism, hospitality, cultural heritage, labor market, Jordan

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### INTRODUCTION

In accordance with the goals defined by the United Nations for the 2030 Agenda (UN, 2015), in 2015 The Hashemite Kingdom of Jordan developed a sustainable development plan which is being implemented during these last years (The Hashemite Kingdom of Jordan, 2017). Within the different sections, it includes a series of actions and goals for the country's tourism sector. The Tourism Sector Green Growth National Action Plan 2021-2025 is more detailed and punctual, which has been drafted by several public institutions. According to this plan, the actions to be undertaken must include transparent governance processes, mechanisms that incentivize sustainable growth, planning processes that value social impact, behavioral changes, and building skills and capacities to address female and youth unemployment (The Hashemite Kingdom of Jordan, 2020). At a broad level, the plan's goals consist of developing tourism products and enhancing their competitiveness; developing the infrastructure of tourist attractions and transport in the area; promoting internal and external tourism; increasing employment and strengthening human resources and implementing legislation that supports and facilitates governance of the sector. The above-mentioned strategic plan is divided into 12 actions, which meet one or more of the following sustainable objectives: enhancement of natural capital, sustainable economic growth, social development and poverty reduction, resource efficiency, climate change mitigation, and adaptation.

The research stemmed from an international project whose aim, in line with what previously mentioned, is to define at least ten innovative professional profiles for the Jordanian tourism sector. To fulfill it, a skills gap analysis has been conducted, involving, through different means, the post-secondary education institution, the private establishments and new graduates and employees. Therefore, this contribution aims to present the results obtained through this process: the first section of this paper defines the literature review, which has been fruitful in tracing the boundaries of the research and in understanding which general skill sets and related skills form the complexity of the market labor demand. The second section justifies the methodology and the methods used throughout the research. The third section presents the quantitative and qualitative stages of the research with the results obtained. The fourth section is devoted to the actual development of the skills gap analysis of four sectors considered to be those of greatest interest to the tourism labor market; finally, in the fifth section, the conclusions and next steps of the research are reported.

### LITERATURE REVIEW

The process of literature review consists of different phases: it starts with the identification of general keywords, such as

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\* Corresponding author

“sustainable tourism”, “experiential tourism”, “Jordanian education”, and “Education path in Jordan”, which help in producing a first technical review retrieved from institutional or private reports drafted by the Hashemite Kingdom of Jordan (2015, 2017, 2020), the Jordanian Ministry of Education (2018), the European Training Foundation (2019a, 2019b, 2020a, 2020b, 2020c, 2020d), OECD (2020), UNWTO (2019), World Economic Forum (2019), and the Economic Policy Council (2018). These reports support the comprehension of the general context, of the designed strategic plans, and the recognition of the values, the possible opportunities, and the existing threats related to the area of application of the project. Although different plans have been developed, their implementation is still not fully exploited to achieve the desired transformation of the reference sector. It also allows to identify and define the main problem, which can be summarized in four points: youth unemployment (The European Training Foundations, 2020a, 2020b, 2020c), low participation of women in the labor market (The Hashemite Kingdom of Jordan, 2017), low competitiveness of academic and professional qualifications (The Jordanian Minister of Education, 2018), sustainability of the tourism industry (UNWTO, 2019). It also contributes to the understanding of the digital innovation taking place within the tourism sector, both in Jordan and in other countries.

The academic literature review is developed using the *Google Scholar* platform for a first general draft, and Elsevier Scopus and Web of Science platforms to produce the contextual review, while referring to different keywords retrieved from the aforementioned reports, such as “Jordanian tourism”, “Jordanian tourism education”, “Youth unemployment in Jordan”, “Jordan Tourism Skills Gap”, “Digital strategy for tourism”, “Jordanian female participation in tourism”, “Sustainable tourism in Jordan”, and so on. It has been, therefore, possible to take a two-fold perspective and understand how the field of academia and public institutions interprets and tries to find solutions to the aforementioned problems (Figure 1).

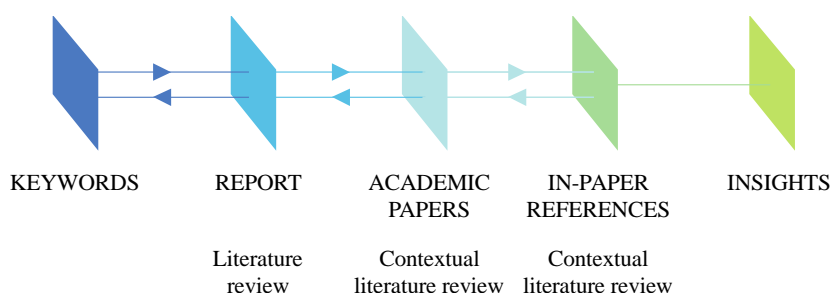


Figure 1. The different followed steps to produce the literature review, with the indication of the searched references.

In particular, what is noted through this process is the existing gaps between the needs of employers and the educational paths offered by higher education in tourism and hospitality (Mustafa, 2012). Another notable factor that emerged through this process is the fact that universities’ and colleges’ study plans are perceived to be too much theoretical and not able to facilitate the students’ skills development (Al-Zoubi, 2019; Mustafa et al., 2017); furthermore, the relationship between post-secondary education institutions and the labour market is underdeveloped resulting in a gap related to the transition study-work, again, in not useful skills transferring, and in not updated study plans for the sector needs.

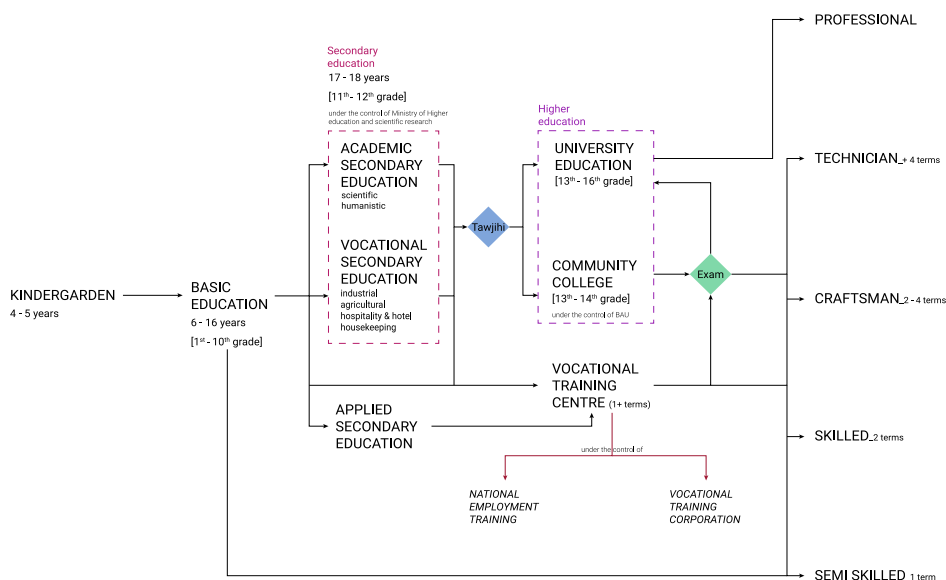


Figure 2. The different levels of education in Jordan, highlighting the years, the grades, the typology, and the outcome of each path

To overcome these gaps, it’s fundamental that educational institutions integrate new tools to and means to facilitate students’ transition to work dimension: to do that, it’s vital to foster the dialogue and the connections between the labor market and the education system in order to understand its requests and, consequently, to integrate the curricula with new teachings, that should be highly qualitative (Mustafa, 2019). As stated by Zagonari (2009), to design, implement, and upgrade study plans, four different actors are needed, which are industry and labor market, providing the current needs of

the establishments; educational institutions, that are responsible for connecting the students with the industry; students, who must be trained to meet the industry's demands; and, finally, governments. Following this statement, the research phases have been conducted involving the educational institutions, industries and private sector, and students.

The process of literature review has also been helpful in understanding the structure of the Jordanian education system (Figure 2) and in highlighting the general skills cluster, with their related skills, that underpin the various professions in the tourism sector, which indeed are digital skills, marketing skills, customer relationship skills, business administration skills, analytical skills, teamwork skills, heritage management skills, and technical skills. The aforementioned clusters and related skills were used to design parts of the questionnaire delivered to academic institutions, the focus group activities carried out with the private sector and the survey provided to new graduates and employees.

## **METHODOLOGY AND SURVEY**

The research here presented requires both quantitative and qualitative research, thus it has been assumed a pragmatic perspective, an epistemology that emphasizes process and experimentation (Rylander, 2012). Furthermore, pragmatists believe that the process of acquiring knowledge is a continuum rather than two opposing and mutually exclusive poles of either objectivity and subjectivity (Goles and Hirschheim, 2000); it embraces these two extremes and offers a flexible and more reflexive approach to research (Feilzer, 2010), due to the possibility of selecting the methodologies that are the most suitable to achieve the goals, and to the use of abductive reasoning (Zingale, 2013) that moves back and forth between deduction and induction. Pragmatism sidesteps the contentious issues of truth and reality, accepts the existence of multiple realities open to empirical inquiry, and orients itself toward solving practical problems in the real world. Pragmatism allows the researchers to be free of mental and practical constraints imposed by the dichotomy between quantitative or objectivist, and qualitative or constructivist approaches (Creswell and Plano Clark, 2007), and, so, it allows them to apply both methodologies (Robson, 1993). Therefore, a pragmatist stance is an approach to knowledge that tries to take into consideration multiple viewpoints, perspectives, positions, and standpoints (Johnson and Rorher, 2007); it is based on the collection or analysis of mixed data in a single study, which involves their integration at one or more stages in the process (Creswell et al., 2003).

This kind of framework has different and many purposes, which can be summed up in the convergence between the results of various methods to foster the validity of the results by decreasing the risks of using irrelevant sources; in increasing the validity of the results, through the elaboration and clarification of one method activity by applying the second one, and vice versa, also capitalizing their strength and their meaningfulness; in the creation of new perspectives and in the identification of paradoxes and contradictions; in the extension of the range of inquiry to evolve its scope by selecting the most appropriate methods (Gray, 2014). Clearly, there are issues in the application of this epistemology, mainly related to the integration of opposite but complementary methodologies, which can result in difficulties when integrating and validating the results obtained, and also, when analyzing hybrid data sets (Bryman, 2006). Within the research framework, the main quantitative method exploited is the questionnaire, while the main qualitative method applied is the focus group.

### **Quantitative and qualitative research**

Quantitative research usually refers to objectivist epistemology, and it is based on empirical inquiry (Gray, 2014). In the case here tackled and described the methodology applied has been surveyed research which was a deductive activity; to fulfil this kind of method, it is necessary to identify the right researched population and a representative sample of it; it is also needed to control all the variables that may influence the analysis; finally, in survey research, the data gained should be generalized (Gray, 2014). While qualitative research is often based on inductive reasoning (Rylander, 2012). Thus, it is preferable to apply qualitative methods when trying to achieve complex, less objective, and more variable data gathering and analysis. Therefore, the focus group is a more suited tool to understand the requirements of the labor market, which is fundamental in producing the skill gap analysis.

### **Academic survey**

A questionnaire has been designed and provided to various academic institutions to generate an adequate data set to be further analyzed. In this section, the quantitative research phase, the exploited method, and the tool are presented, focusing on the aim and goals of these actions, the sample analyzed through the questionnaire and the results of this first step (Appendix A: survey structure and datasets).

### **Aims and goals**

On one side, the survey research has been useful to understand the state-of-the-art of the post-secondary academic institutions that provide education in the field of tourism, hospitality, and cultural heritage regarding their study plans and transferred skills, among other sets of information. The goal of the questionnaire was to provide a quantitative description of the academic perspective regarding the current gaps that they can identify in relation to the request of the labor market. This first step has also been fundamental for organizing the next activities, such as focus groups.

### **Survey's structure**

The questionnaire was divided into two main parts: the first one has been fruitful to map and positioning the sample of people answering it, while the second one was focused on four clusters of information: general information regarding the academic degrees and courses, such as the field of academic paths, their duration, the admission requirements, and the kind of final certificate obtained by students. The second cluster revolved around information regarding the contents of the courses, the languages used, and the period of training or internship, while the third, instead, was focused on

getting information about the students, such as the number of attendants, the percentage of female enrollment, the percentage of students who get the final certificate and enroll in higher education. Finally, the last required information dealt with the main transferred skills and the job placement.

**Survey sample**

Due to a scarcely reached sample, the questionnaire has been provided two times through emails and other media: the first time, only 47 answers (40, 17%; valid 32: 27, 35%) have been received, while the sample was constituted of 117 people, among which professors, deans, and other institutional academic positions. During the second round, the received answers have been 85 (73%) among which 55 (47%) were considered valid.

Unfortunately, compared to the expected number of responses, those received and considered valid did not, in any case, exceed the 50% threshold, which, undoubtedly, means that the sample cannot be considered exhaustive. The primary identified cause could be that the questionnaire was not correctly designed in all its parts; nevertheless, given the wide range of responses received per institution (considering that the vocational institutions were represented by TVC), it was decided not to proceed with a third questionnaire delivery, to avoid compromising the schedule of the entire research. A general analysis of the sample results is illustrated in the Figure 3, 4 and 5.

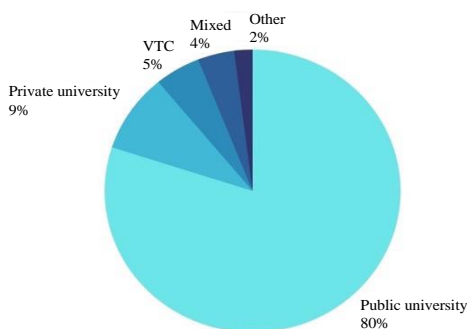


Figure 3. Survey outcome. Percentage of answers according to public or private universities, vocational training centers (VTC) and other bodies or institutions

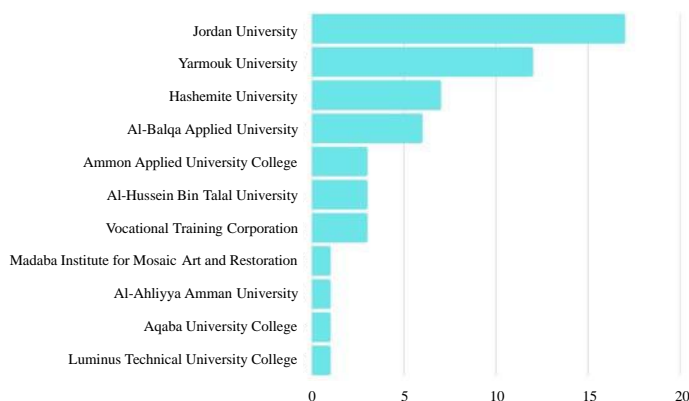


Figure 4. The number of answers for the horizontal axis divided for the individual institutions

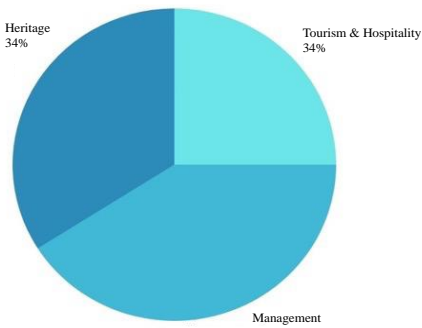


Figure 5. The overview of the analyzed sample by area of teaching

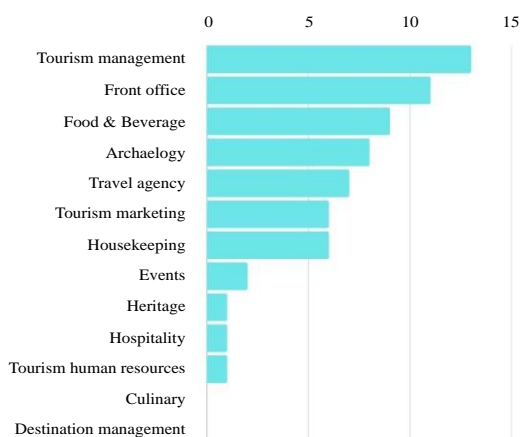


Figure 6. The main job opportunities that new graduates can undertake on the horizontal axis, and the number of given answers on the vertical axis.

**RESULTS**

Focusing on the transferred skills and linking them to the professional fields (Figure 6 and 7) and the demands of the labor market highlighted by the sample, it can already be understood that there are evident gaps and mismatching: from the obtained results, analytical and heritage management skills are strongly developed, but required for few professional positions, while digital and marketing skills, for different reasons, appear to be underdeveloped in post-secondary education, but strongly required for many market establishments. The analysis highlights that even with a high percentage of students getting the final certificate, there is a low/medium percentage of job placement, which reflects what was discovered through the literature review process. The result is that unemployment is high in the country in the tourism sector (Figure 8). By comparing the educational offering with the skills required by the labor market, different discrepancies can be highlighted: not all the transferred skills are needed to find a job position, while others appear to be undertaught compared to the market requests. A significant number of academic institutions does not have information about students' careers after their educational path. The lack of data does not allow to have feedback on their performances. It would be essential to discover the reasons why only a few students continue their studies after college or a bachelor's degree. Since every academic institution offers a training period, it is mandatory to investigate the reason why the labor market perceives a lack of needed skills in the new employees. Due to this gap, it can be understood the present communication issues between academic institutions and private establishments.

		SKILLS SET							
		Technical	Analytical	Heritage management	Customer relationship	Teamwork	Digital	Business administration	Marketing
MARKET ESTABLISHMENT	Archaeology								
	Culinary								
	Destination management								
	Events								
	Food & Beverage								
	Front office								
	Heritage								
	Hospitality								
	Housekeeping								
	Tourism human resources								
	Tourism management								
	Tourism marketing								
	Travel agencies								

Figure 7. The perspective of the sample regarding the transferred sets of skills compared to the labor market need.

**Focus group with private establishments**

The focus group is a more suited tool to understand the requirements of the labor market, which is fundamental in producing the skill gap analysis. In this section, the qualitative research phase, the exploited method, and the tool are presented, focusing on the aim and objectives of these actions, the participants of the focus group, and the results of this second step.

**Aims and goals**

The main aim of this research phase was to evidence the comparisons between what was stated in the questionnaire by academic institutions and the actual demands of actors in the labor market. In this way, it is possible to understand what actual skills are required by private establishments and which are perceived to be lacking.

**Participants**

The participants of the focus group were 10, employees or representatives of four working associations, which are the Jordan Society of Tourism & Travel Agents, the Jordan Hotel Association, the Jordan Restaurant Association, and the Specialist Tourism Transport Association. The members of each association worked together to fill in the documents, with answers that represent their field of application.

**Focus group’s structure**

The focus group was divided into four sessions: the first one, lasting 10 minutes, asked the participants to rank different skills (digital skills, analytical skills, customer relationship skills, marketing skills, technical skills, heritage management skills, teamwork skills, and business administration skills) in order of importance for the establishment they are part of.

The second part of the focus group, lasting 45 min, asked the participants to indicate the most required skills for their establishment, picking them from the general clusters of the previous activity (digital skills, business administration skills, customer relationship skills, marketing skills, analytical skills, teamwork skills, heritage management skills, and technical skills). The third step of the focus group, lasting 45 minutes, asked the participants to select the missed skills in their establishment, picking them from the previous lists for each cluster.

In the last activity of the focus group, which lasted 20 minutes, the participants were asked to answer the following question: which skills and expertise are you looking for in your junior and intern positions?

**Results**

The first result obtained through this phase are related to the perception and skills requirements of the different private establishments regarding the competencies needed by their new employees or interns (Figure 9 and 10).

Though the other activities, it has been possible to outline and compare the most required and the lacking skills for each establishment, starting to define a more detailed picture for each of the sectors taken into consideration, despite matching lacking and required skills, it comes out that answers are not homogeneous between involved stakeholders. The skills that appear to be both the most required and the lacking ones are communication within the cluster of teamwork skills (JSTTA, JRA, STTA), statistics within the analytical skills (JSTTA, JHA, STTA), accounting within business administration set (STTA, JRA), promotion of tourism products and services (JSTTA, STTA) and online marketing (JHA, JRA) within marketing skills, and, finally, creative thinking within analytical skills set (JHA, JRA).

Due to the inexhaustive results obtained during this step, it has been necessary to compare the outcomes with other similar research, such as “Labor market analysis in the tourism sector” by Al Kahled (2021), to fulfill its scope and overlap what has been highlighted through this activity with what instead has been understood during the first phase. To conclude, despite the absence of some responses, it is possible to identify several skills that the labor market, in the tourism sector, highlights as necessary but lacking in their junior and intern positions. Thus, the actual gap between educational programs and the real demand of the sector is inferred, which has been also highlighted by the answers given by the representatives of the post-secondary education, who recognize the need for the study programmes and planes to be updated.

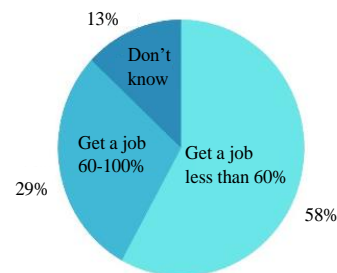


Figure 8. The percentage of job placement divided into three categories related to the percentage of given answers.

### New graduated student’s survey

The last step of this phase of research has been the delivery of another questionnaire (Appendix B: survey’ structure and dataset) to new graduates (that have graduated since 2018 due to the Covid-19 pandemic).

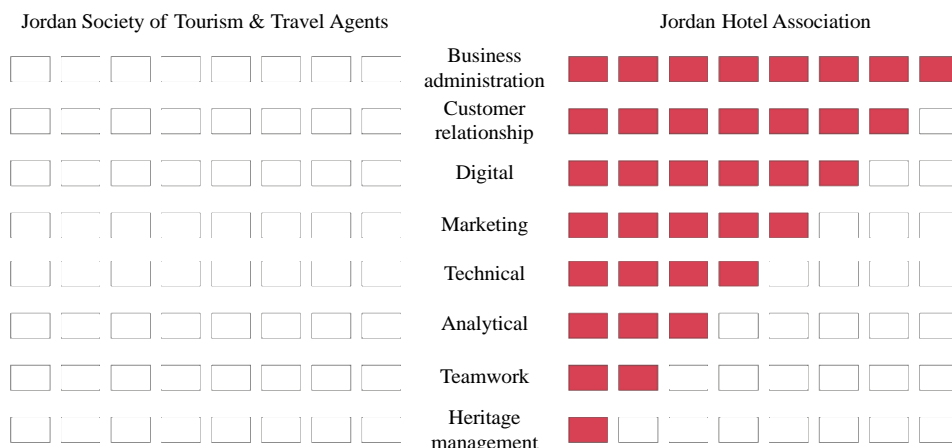


Figure 9. The level of importance (8: the most required; 1: the least required) of each skill set for the Jordan Society of Tourism & Travel Agents and for the Jordan Hotel Association. Unfortunately, the Jordan Society of Tourism & Travel Agents did not provide a satisfactory answer to this activity.

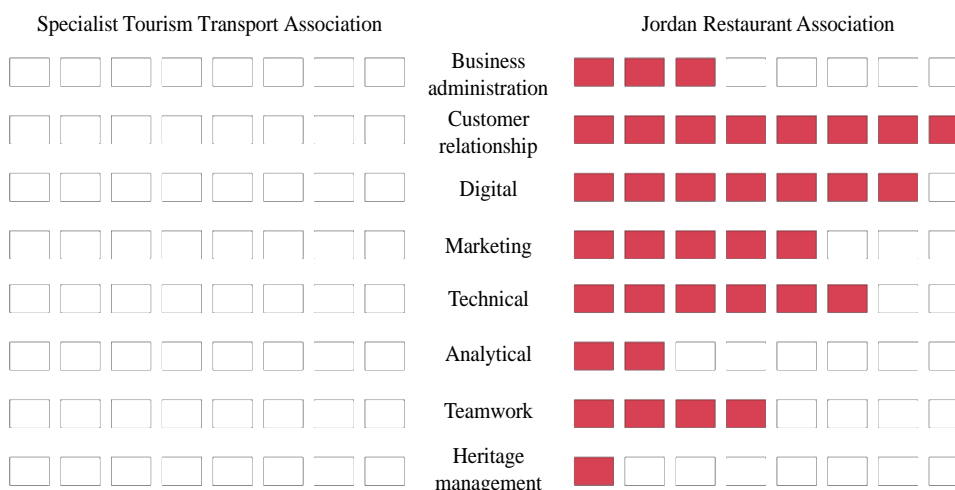


Figure 10. The level of importance (8: the most required; 1: the least required) of each skill set for the Specialist Tourism Transport Association and for the Jordan Restaurant Association. Unfortunately, the Specialist Tourism Transport Association did not provide a satisfactory answer to this activity.

### Aims and goals

This survey aimed to highlight current gaps from the perspective of new graduates and employees to match their answers with the results obtained during the previous steps and to produce an exhaustive skills gap analysis.

### Survey’s structure

The survey was divided into three main parts: a first set of questions to sample the respondents, a second one to investigate the job positioning, and a third to understand the perspective of the sample about the useful developed and the lacking skills, they had obtained during their study paths, chosen among the same clusters and lists provided during the previous steps.

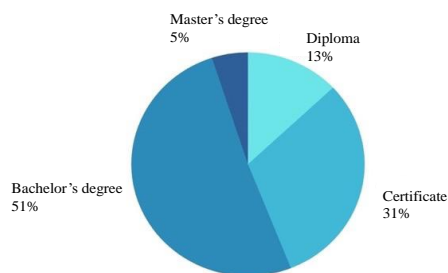


Figure 11. Education level granted by the different institutions

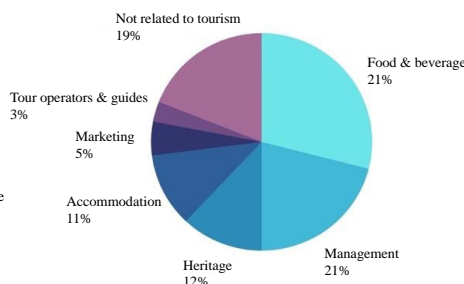


Figure 12. Field of studies addressed by each institution

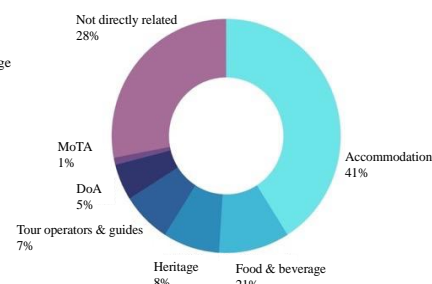


Figure 13. Fields of occupation indicated by each institution involved in the activities

### Analyzed Sample

The questionnaire was filled out by 121 people representing 60% of the expected sample. 63% of the respondents were male, while 36% were female, with 1% of responses not provided.

8% of the sample were aged between 15 and 20, 43% between 21 and 25, 29% between 26 and 30 and 20% over 30. A more detailed analysis related to their study paths and fields of study is shown in Figure 11-12.

**Job positioning**

Interesting and relevant answers have been received within the section related to job positioning. It was possible to confirm what was found through the literature review process and during the post-secondary survey phase: the level of youth unemployment in the tourism sector is fairly high. Furthermore, almost a third of the respondents declare that they are not working in establishments directly related to their field of study which highlights the incompleteness and inadequacy of study programs in relation to the demands of the labor market. The figure 13 instead describe the job positioning relating it to the establishments in which new employees work.

**Results**

This final step of the research made it possible to obtain a complete picture of the needed skills by the tourism sector, of the currently existing gap between what is required by the labor market and what is transmitted instead during the study paths, and of the perception of each stakeholder involved. Besides this wide gap, the main challenges highlighted by the respondents of this survey were related to teamwork, customer relationship, technical, business administration, marketing, and analytical skills, and to job condition.

**Skills gap analysis**

This section presents the results of the entire skills gap analysis, highlighting the threats and opportunities for the four establishments that have been considered: food and beverage, accommodation, tour operators and guides, and heritage management. To produce those final results, the data obtained through all the phases have been merged to define the correct skill sets for each establishment and rank them to understand the gaps within each field involved in the research.

**A general overview**

By highlighting the results obtained on the average of the sector taken into consideration and the main challenges faced in the transition from study to work, the skill sets to be strengthened the most are: marketing skills, teamwork skills and customer relationship skills (Figure 14). Within the cluster of digital skills, the ones that need to be strengthened or implemented are operating system use, communication, use of software, social media management, data analytics, and AI and robotics; the marketing underdeveloped skills are promotion of tourism, identification of target areas, social media marketing, sales, SEO and SEM, brand management, and storytelling; for customer relationship skills, the ones that are shared the most are communication, empathy, patience, foreign languages, and customer services, while, within the business administration cluster, computer skills, product development and innovation, destination management, and marketing and sales have been highlighted. The analytical shared set is composed of problem-solving, creativity, decision-making, and time management, while the teamwork one of communication, emotional intelligence, organization, delegation, problem-solving, leadership, and team management. Finally, community engagement, ethics, and legal skills are the reported and underdeveloped heritage management skills.

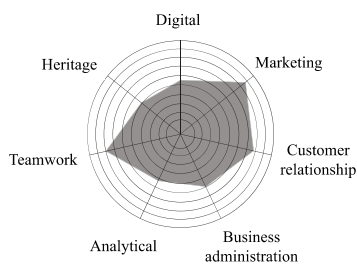


Figure 14. The overall situation of the tourism sector regarding the development of the skills highlighted through the research

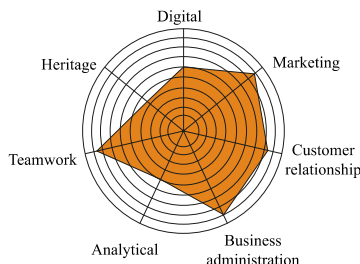


Figure 15. The overall situation of the food and beverage sector regarding the development of skills highlighted through the research

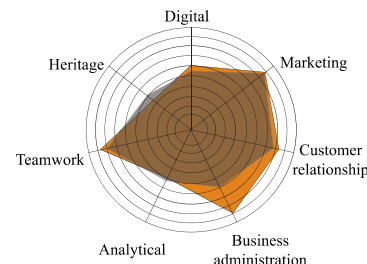


Figure 16. The average results for the tourism sector compared with the ones from the food and beverage sector highlighted through the research

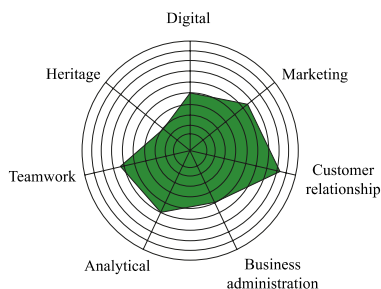


Figure 17. The overall situation of the accommodation sector regarding the development of skills highlighted through the research

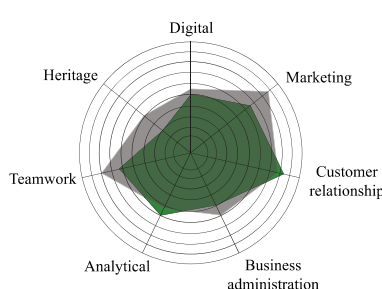


Figure 18. The radar compares the average results for the tourism sector with the ones obtained by the accommodation sector highlighted through the research

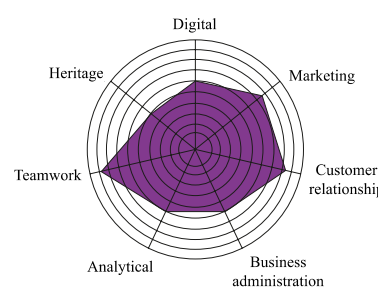


Figure 19. The overall situation of the tour operators and guides sector regarding the development of skills highlighted through the research

### A focus on the sectors

As shown in figure 15, the food and beverage sector shows wide gaps in different skills sets, making it one of the sectors that requires strong intervention. By comparing the overall scores of the food and beverage field with the average of the tourism sector, the main skills sets to strengthen are business administration skills, teamwork skills and customer relationship skills (Figure 16). The accommodation field is perceived to be one of the best-performing sectors (Figure 17) by comparing the overall scores of the accommodation field with the average of the tourism sector, the only skills set to strengthen are analytical skills and customer relationship skills (Figure 18). As food and beverage, also the field of tourism operators and guides appears to be one of the worst-performing sectors (Figure 19): by comparing the overall scores of the tour operators and guides field with the average of the tourism sector, the main skills set to strengthen are analytical skills, teamwork skills, digital skills, and customer relationship skills (Figure 20). Finally, the heritage management field shows the best performance among the ones analyzed (Figure 21): it's interesting to note that the skills set perceived to need improvements are heritage management skills and teamwork skills (Figure 22).

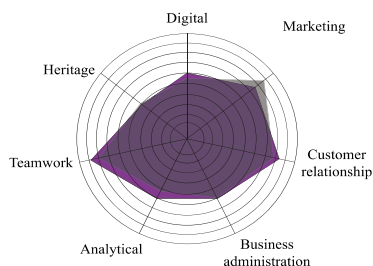


Figure 20. The radar compares the average results for the tourism sector with the ones obtained by the tour operators and guides sector

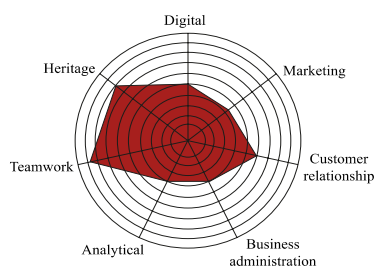


Figure 21. The overall situation of the heritage management sector regarding the development of skills highlighted through the research

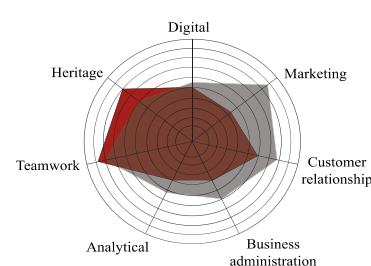


Figure 22. The average results for the tourism sector compared with the ones from the heritage management sector

### CONCLUSION

The study presented in this contribution focuses on the state of the art of the Jordanian education sector in the area of tourism, hospitality, and heritage management. Starting from three research phases, it was possible to outline an analysis regarding the skills gap between what is taught in post-secondary education and what is required by the labor market. From the research carried out, it is clear that the most prominent gap is to be found in the following skill sets: marketing skills, teamwork skills, and customer relationship skills. The sectors that perceive the greatest difficulties are food and beverage (especially in business administration skills, teamwork skills, and customer relationship skills) and tour operators and guides (especially in analytical skills, teamwork skills, digital skills, and customer relationship skills).

Other notable elements produced by the research concern the lack of a strong link between the academic and professional worlds, which translates into the lack of available data regarding the study-work transition; and the need to integrate further educational tools to facilitate learning by doing processes and to enable students to mature the skills required by the labor market. Furthermore, one other noticeable piece of evidence that has been highlighted by comparing the final results with part of the one obtained during the academic survey is the mismatch between the perceived importance (and the level of teaching) of digital skills and the real requests of an evolving labor market. Those results were also supported by other research conducted over the past year on the areas and topics of interest (Hyasat, 2022, Hyasat et al., 2022). As mentioned throughout the paper, the research has some limitations: in the first phase of the quantitative analysis, the number of valid answers was less than a half of the respondents; and the focus group activity did not produce the expected results in all its steps.

For these reasons, it was necessary to integrate what was discovered with a further phase of literature review, focused on similar research carried out in previous years. Through this utter process, it was possible to obtain an exhaustive set of data to proceed with the next phase of skills gap analysis. After the identification of the skills sets and the skills gap for each subfield, it will be possible to define different professions that should be updated with new skills or that should be completely invented and designed from new. Then, by highlighting integrated or new needed professions it is necessary to define the academic paths through which students should obtain the needed skills. Finally, in order to validate the highlighted skills, the defined job profiles, and the related training paths, they need to be assessed and included in the National Qualification Framework.

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