The purpose of this study is to elaborate on the relationship between academia and industry. There is found a reciprocal relationship between academia and industry. Most of the studies have focused on the industry academia linkages from experiences of developed countries and those studies are not related to academia and tourism and hospitality relationships which are published in policy research. This study is based on exploratory research. Desktop research is carried out to collect secondary data to understand the collaboration and gap between academia and industry as there are many hidden problems in the process of producing the suitable manpower for the industry by academia and industry’s expectation from academia. Almost, the published literature is used in this research. This study is the outcome based on finding solutions to these research questions: how academia and industry collaboration in tourism and hospitality sectors is trending in the world? And what is the gap between these two arenas? This study aims to explore the interface between academia and industry (university and tourism and hospitality industry) which is very useful for providing knowledge,
employment, and nation’s development. This study includes introduction, university and industry interface, tourism academia and industry interface, literature review, personology and professionalism, career commitment, collaboration and bridging gap, methodology, discussions, conclusion, and recommendations.

Introduction

The tourism sector has been recognized in many developing countries as an opportunity for accelerating socioeconomic development, particularly as a supplier of foreign exchange and job opportunities (United Nations Conference on Trade and Development, 2008; World Tourism Organization, 2008; in Anderson & Sanga, 2018) and contributor to the formation of gross capital, the transfer of technology and managerial expertise, as well as improvements in quality of life (Anderson & Nicodemus, 2016; in Anderson & Sanga, 2018). Therefore, collaboration between stakeholders, including tourism educators, students, tourism service providers, and government authorities is one of the areas identified as critical to the provision of hospitality and tourism education (Cooper, 2002; Solnet, Robinson, & Cooper, 2007; in Anderson & Sanga, 2018). Though this study is going to be popular in the area of academia and industry, in many developing countries, this area remains unexplored in both applied and academic research. As a result, each side (i.e., industry and academia) continues working under presumptions that the other side knows what is required in the sector. The sector is currently facing a serious shortage of specialized managerial and operational skills in developing countries (Anderson & Sanga, 2018). One of the main sources of this shortage was identified by ATE (2011; in Anderson & Sanga, 2018) as a poor match between what is provided by hospitality and tourism education and what is expected by hospitality and tourism providers.

There is a reciprocal relationship between ‘academia’ and ‘industry’ (Dasgupta, 2017) as there will be no industry in the absence of academia and in the absence of industry there will be no academia. Academia refers to the educational community or society of students, faculty, and scholars engaged in higher education and research. In short academia is the world of colleges and universities and academia is the academic world (Gracia, 2022). The word academia comes from the Greek word referring to the greater body of knowledge, its development and transmission across generations (Sen, Ganguly, & Sen, 2015). Examples of academia include fields such as humanities, science, management, medicine, engineering, including master’s student, doctorate student, professor, or the university system. Therefore, academia produces graduates who are absorbed by industry and there is collaboration between university and the industry to tailor courses that would produce graduates whose skillset are aligned to industry requirements (Dasgupta, 2017).

Universities are key agents of economic and social progression for which their mission has gradually been extended to interactions with industry, and with society more generally, beyond the traditional goals of teaching and research which has attracted considerable attention from scholars and policymakers (Hsu et al., 2015; Trune & Goslin, 1998; Kochenkova et al., 2016; in
Scandura & Iammarino, 2022; Dasgupta, 2017). Therefore, academia-industry collaboration need not necessarily be a conflict of interest. Quality education/research comes at a cost, it requires a significant amount of money, and the government does not have enough money or lacks the will to provide it. All the universities are encouraged to generate funds to support their research activities, so they turn towards industry to provide funding (Patil, 2012).

The term ‘industry’ refers to any type of economic activity producing goods or services. It is part of chain—from raw materials to finished product, finished product to service sector, and service sector to research and development. Industries, the countries they exist in, and the economies of those countries are interconnected in a complex web of interdependence. There are four main industrial economic sectors: 1) the primary sector, which is largely involved in raw material extraction industries such as farming, mining, and logging; 2) the secondary sector, which is involved in processing products, refining, construction, and manufacturing; 3) the tertiary sector, which deals with provision of services (e.g., law and medicine) and distribution of manufactured goods; and 4) the quaternary sector, a relatively new type of knowledge industry which focus on technological research, design, and development such as computer programming, and biochemistry (Britannica, 2022). Industry usually refers to service, clearly identifiable economic activity with production methods, recognizable chains of supply and specific products or outputs (Sharpley, 2009, p.10). The tourism and hospitality industry is increasingly looking to elements of professionalism to provide education and training programs with the status and credibility that can sustain both industry development and public confidence (Cousquer & Beames, 2013, p.185).

The study is the outcome based on finding solutions to these research questions: how academia and industry collaboration in tourism and hospitality sectors is trending in the world? And what are the gaps between these two arenas? Therefore, this study aims to explore the collaboration between academia (university) and industry (tourism and hospitality) which is very useful for providing knowledge, employment, and nation’s development. Several researchers of different disciplines have realized that there must be a symbiotic relationship between the two sectors. As far as the tourism and hospitality industry is concerned, both sectors have become one of the largest and fast-growing industries in the world. According to the World Travel and Tourism Council (WTTC) one in ten jobs are provided by the global tourism industry (WTTC 2017; in Gebbels, Pentelidis, & Goss-Turner, 2019). For employees, the industry offers an array of career opportunities, both nationally and internationally. More importantly, as noted by Cheng and Wong (2015; in Gebbels et al., 2019), the hospitality industry, unlike other industries, relies heavily on human capital and the quality of its employees, and thus the performance of a business is strongly dependent on getting this human element of any hospitality business right.

Realizing the importance of this industry, many scholars have realized that both university as an academia and tourism and hospitality as an industry have very important roles for shaping the country with providing human capital, job opportunities, and services.
The ultimate aim of both institution and industry is to progress the economy of the country. Therefore, this study is very important for both academia and industry's sustainability. This study includes introduction, university and industry interface, tourism academia and industry interface, literature review, methodology, discussions, conclusion, and recommendations.

**University and industry interface**

Interface within a system, that is, they are of most intense interaction between what scholars usually refer to as cultural and environmental elements (Poffenberger, 1980, p.17; Kunwar, 1999, p.26). But this study applies interface as a close interaction between academia and tourism and hospitality industries.

In order to understand the academia and industry interface as a concept that has its own nature and scope, different scholars carried out their research by reviewing the articles related to non-tourism academia and other industries. Their studies show that this is going to be very popular in the field of academia and industry relationships. The following reviews reflect the relationships in terms of problems (gap) and the prospects (partnership) that were experienced and made suggestions to establish the collaboration between academia and industry for their sustainability.

In their studies, the scholars (Ahmed, Fattani, Ali, & Enam, 2022; Nsanzumuhire, Groot, Cabus, and Bizimana, 2021; Tiwari & Anjum, 2014; Bikard, Vakili, and Teodoridis, 2018; Dasgupta, 2017; Scandura & Iammarino, 2022), have developed their own model or approaches according to the nature of subjects. Though there are many different industries as mentioned above, the literature reveals that there are very few studies on the relationship between academia and industries such as construction industry, pharmaceutical industry, health care industry and so on. These studies contribute to disseminating the knowledge on academia and industry interface which inspired the scholars of tourism and hospitality to apply this model. Historically, the 1990s revolution of information system's research on the industrial community has initiated the discussion, but the problems related to collaboration remained unsolved as a gap between academia and industry (Steinbach & Knight, 2006; in Ahmed et al., 2022). Nsanzumuhire et al. (2021, p.1) mentioned that, over the past few decades, university-industry collaboration (UIC) has increasingly attracted the attention of researchers and policymakers around the globe. While focusing on developing countries, they write, UIC as a pathway towards technological upgrading which would enhance economic catch-up (Fischer et al., 2019; in Nsanzumuhire et al., 2021, p.1) but the knowledge on implementation mechanisms is still limited.

According to Tiwari and Anjum (2014, p.139), most of the studies have focused on the industry academia linkages from experiences of the developed world. The public research institutions (PRI’s) in India are focused on research whereas the universities are primarily focused on teaching. So, there is a need for industry to harness local R&D for sustaining their competitive capabilities. According to Bikard et al. (2018), academic scientists who
collaborate with firms may experience lower publication rates in their collaborative lines of work because of industry’s insistence on intellectual property protection through patenting or secrecy. This may be mutually beneficial for industry and academia.

The models developed on academia and industry relationships were also applied by other countries such as Australia (Walters & Ruhanen, 2018), Korea (Eom & Lee, 2010), Rwanda (Nsanzumuhire et al., 2021), Ghana (Sarkodie & KwameAdom, 2015), Tanzania (Anderson & Sanga, 2018), Saudi Arabia (Shehatta & Mahmood, 2016), Egypt (Sobaih & Jones, 2015), and Nepal (Pasa, 2021). These studies include both non-tourism and tourism academia and industry collaboration.

It is a basic process of producing skilled manpower by an academia which is then absorbed by the industry. Therefore, there has been gradual expansion in the mission of universities as they are interacting with both industry and society more generally rather than focusing on the traditional approach of teaching and research activities (Giuri et al., 2019; in Scandura & Iammarino, 2022, p.1000). In the 21st century, management colleges and industry are rapidly inching closer for creating synergies as there is found to have constant change in management paradigms that created growth of complexity in the business environment (Bisaria, 2011).

As per Shattock (2017), the information technology (IT) industry analyzed the advantage of investing in students and academia.

Gopal (2012; in Narayanan, Vinoth & Vakayil, 2021; Tiwari & Anjum, 2014, p.139) defines industry-academia interface as “a collaborative arrangement between academic institutions and business corporations towards the achievement of certain mutually inclusive goals.” The biggest commonality between researching in academia and industry is that science remains the same, so it helps immensely to arrive at industry with a strong scientific understanding. The productive interface between industry and academia in the present times of “knowledge economy” (Machlup, 1962; in Nyiri, 2002) is a critical requirement. Therefore, the knowledge economy can only be sustained if the higher education institutions are able to transform school leavers into critically thinking, innovative people with an entrepreneurial spirit to meet the needs of the industry (Tiwari & Anjum, 2014, p.139). A structured and regular interface between industry and academia is necessary while formulating curricula in technical schools, colleges, and universities. This will ensure that the education imparted in such institutions leads to the creation of expertise and skills that would meet the specific requirements of industry (Bisaria, 2011).

Carpenter (2004; in Patil, 2012, p.28) states that ‘relationships between academia and industry are increasingly intimate and commercial’. Industry collaborations are one of the parameters to measure the credibility of academic institutions. A spin off industry collaboration is that it creates opportunities for placements for their students.

Recently, Ahmed et al. (2022, p.1) applied the Triple Helix Model- the interaction between three institutional spheres i.e. academia, industry and government (Etzkowitz &
Leydesdorff, 2000; Kunwar & Ulak, 2023) to integrate two different aspects: universities and the industry through their study that shows universities serve the industry in two ways as it provides the workforce necessary to run the industry and it furnishes innovative ideas to start new business ventures. Therefore, academia and industry are analogous to two sides of a river that must flow independently. As far as science and engineering disciplines are concerned, creating linkages between the two sides of the river has the potential to contribute to the betterment of both - industry and universities (Ahmed et al., 2022). They proposed the Academia-Industry Collaboration Plan (AICP) design model. The model comprises processes, methods or approaches, and tools. Processes serve as a road map to third parties for establishing collaboration between academia and industry having all the essential process models and a series of steps that help minimize the organizational complexity of the collaboration process between academia and the industry. According to the organization for economic co-operation and development (OECD), the industry conducts around two-thirds of research and development (R&D) in science and technology studies. The remaining 20% of R&D work is carried out by universities, while 10% is carried out by the government (OECD, 2017; in Ahmed et al., 2022).

Source: Khan, 2019

Eom and Lee (2010, p.625) highlights how the Korea Innovation Survey data identified the determinants of industry–university and industry–government research institute (IUG) cooperation, and its impact on firm performance. According to Sen et al. (2015), “there has been a significant leap in a level of education that is offered at academies, universities, colleges, seminaries, institutes of technology, and certain other collegiate-level institutions, such as vocational schools, trade schools, and career colleges, that confer academic degrees or professional certifications”. Likewise, it is an industry that generates government revenue through tax and strengthens the economic viability of citizens, city, and country overall.
Large scale industry has the required resources to invest in the initiatives of new technology development, but it often tends to depend on bought out technologies, generally from foreign countries (Sen et al., 2015).

So far as gap between academia and industry is concerned, this has been studied by Bartunek and Rynes (2015, p.1182), Muller (2020, p.1), Tess, Vidyarthi, Yang, and Myers (2015), Partington (2016, p.207), Green and Erdem (2016), Khan (2019), and McCartney and Kwok (2022). Bartunek and Rynes (2015) attempted to study that specific gap between management academics and practitioners which has been of concern for decades, at least as long as early attempts to establish administration as a scientific discipline in the 1950s. Muller (2020, p.1) also explores the gap between the industrial and academic worlds and found that the needs and interests of industrial and academic people are often opposing and conflicting.

Many research proposal address tools. Industrial stakeholders ask for tools. Tools are perceived as ready-to-go solutions. Unfortunately tools do not provide any value, unless they are well embedded in a method. A method is a generalized description of a way of working. Methods have several attributes: a goal, a decomposition into smaller steps, a possible order of taking these steps, visualization(s) or representation(s) and recommendations (Muller, 2020, P.3).

Source: Muller, 2020, p. 3; Both academia and industry share an interest in methods. However, the industrial interest is focused on applying the method, while the scientific interest is towards founding the method scientifically.

Industrial employees select articles of which the subject is clearly industrially relevant. A good article is valuable and useful for the reader. In an industrial context that means that
the content is goal and solution oriented. In many cases goal and solution depend on a broad context and on an integral understanding of the problem in the context. To make it useful the content of the article must be practical, the “how to” style fits well. The industrial setting is a smooth operational environment, an economic must. Responsibilities and accountabilities are well defined. Articles with a single author are normal. When articles have multiple authors this is often an indication of diffuse responsibilities (Muller, 2020, p. 4).

In the academic community the subject of the article must have scientific relevance. The article must contain some new or original claim. The claim must be well positioned in relation to all existing scientific publications. References in the article serve only to relate statements in this article to existing articles (Muller, 2020, p. 5).

The viewpoints of the industrial people and the academic people are completely different. The table given below shows an overview of both publication viewpoints. The goal of industry is to design and sell products. Paper and knowledge are (necessary) means, not a primary goal.

<table>
<thead>
<tr>
<th>Industrial</th>
<th>Academical</th>
</tr>
</thead>
<tbody>
<tr>
<td>relevance</td>
<td>useful, valuable</td>
</tr>
<tr>
<td>orientation</td>
<td>goal, solution</td>
</tr>
<tr>
<td>content</td>
<td>practical, how to</td>
</tr>
<tr>
<td>style</td>
<td>clear, understandable juicy, low noise</td>
</tr>
<tr>
<td>references</td>
<td>service to the reader</td>
</tr>
<tr>
<td>author</td>
<td>single author</td>
</tr>
<tr>
<td>economic driver</td>
<td>writing and reading = cost public relation vs IPR and confidentiality</td>
</tr>
</tbody>
</table>

Source: Muller, 2020, p. 6

Tourism academia and industry interface

According to Baum (2007; in Partington, 2016, p. 207), the hospitality sector is one of the largest and most growing sectors of the global economy that is highly labor intensive and offers varied opportunities for people in diverse subsectors. Looking at this scenario, the identified gap should be bridged in the hospitality sector through the engagement of academia and industry. For bridging the gap between academia and industry in hospitality industry, Green and Erdem (2016; p.43) in their study highlights that in colleges and universities, teaching serves an important vehicle for achieving institutional goals of increased effectiveness, efficiency, and the enhancement of student learning (Hsu, 1999; in Green and Erdem, 2016). When it comes to academia and industry interface, tourism academia and tourism industry
are equally important. Therefore, they should be highlighted equally as there are also gaps which need to be bridged strategically for their sustainability.

Sobaih and Jones (2015) studied the gaps between academia and industry research that included (a) a lack of interest and commitment (b) confidentiality (c) patents, licenses, and intellectual property rights; (d) lack of mutual trust (e) acquisition of knowledge versus commercialization; (f) free accessibility of academic research; (g) full or part time research activity; and (h) fundamental versus applied research. Bridging these gaps was shown to result in mutual benefits with universities getting access to resources and solutions to real-life problems, thereby enhancing the research quality. In this regard, Kunwar and Khatri-Thapa (2016) argued that the scholars focused only on the internship of students studying hospitality education. There is a stakeholder theory scarcity in mainstream literature and almost nonexistent in the context of developing countries despite the critical role that partnership plays in the provision of education (Anderson, 2015a; in Anderson & Sanga, 2018). In addition, according to Fleming and Hickey (2013; in Anderson & Sanga, 2018), the lack of shared understanding of the meaning, purpose, expectations, and motivation for collaborations in the provision of education among stakeholders is a major drawback. Collaboration in this context requires communicative processes in which tourism stakeholders engage and work interdependently to address problems (Keyton, Ford, & Smith, 2008; in Anderson & Sanga, 2018). A low level of understanding among students explained by language barriers, inadequate training facilities, a shortage of qualified educators, poor enforcement of national curricula, and limited internship and placement opportunities are the major challenges to skills development (Anderson & Sanga, 2018). They are McCartney and Kwok (2021) who analyzed research needs, timelines, and priority gaps between the hospitality industry and academia that are well documented in the literature, with limited actions taken by either side to bridge this research disparity.

Anderson and Sanga (2018) examined different approaches to partnership between the tourism industry and educational institutions in the provision of tourism education in Tanzania along with how partnerships facilitate the development of skills and recommended a framework for effective collaboration. A framework proposed by Anderson and Sanga (2018, p.11) for effective partnership among key stakeholders (educational institutions, industry, and government authorities) are developing of skills to meet the needs of various stakeholders in tourism must be seen as a partnership between industry and education and training providers (vocational centers, colleges, and universities), government taking charge of developing national curricula for tourism education to be used by all training institutions; providing academia with necessary support, such as facilities, guidelines, and networks with international institutions; and providing academia with incentives to expand enrollment in tourism programs (e.g., providing employment opportunities, training of trainers, best student prizes, training facilities). The government is expected to carry out the monitoring and control of the adoption of national curricula through a central admission system,
inspection, seminar, and surveys; develop internship and apprenticeship regulations and
guidelines; enforce relevant labor laws to promote the employment of graduates; participate in
the management of academia through representation on governing boards and committees;
assist academia in developing and maintaining international links that encourage exchange
programs; and support academia in undertaking research on tourism development issues
(Anderson & Sanga, 2018).

**Literature review**

Over the years tourism research has grown rapidly in comparison to many other mature
industries, fewer attempts have been made to conduct a systematic evaluation of the
available literature to provide researchers and practitioners an insight on its evolution and
direction for the future (Chang & Katrichis, 2016; Arman, Ali, & Qadir, 2023). A literature
review is a comprehensive overview of prior research regarding a specific topic (Denney &
Tewksbury, 2013). Creswell (1994, pp. 20, 21; in Denney & Tewksbury, 2013) explains that the
literature in a research study accomplishes several purposes: (a) It shares with the reader the
results of other studies that are closely related to the study being reported (Fraenkel & Wallen,
1990; in Denney & Tewksbury, 2013), (b) It relates a study to the larger, ongoing dialog in the
literature about a topic, filling in gaps and extending prior studies (Marshall & Rossman, 1989;
in Denney & Tewksbury, 2013) (c) It provides a framework for establishing the importance
of the study (Denney & Tewksbury, 2013). Ridley (2008; in Denney & Tewksbury, 2013) also
explains that the literature review is where the researcher(s) identify the theories and previous
research which have influenced the choice of research topic and the methodology choosing
to adopt. The literature reviews force a writer to educate him/herself on as much information
as possible pertaining to the topic chosen. This will also assist in the learning process, and it
will also help make the writing as strong as possible. Second, literature reviews demonstrate
to readers that the author has a firm understanding of the topic (Denney & Tewksbury, 2013).

There are three steps of analyzing the literatures in the dataset: 1) bibliometric analysis,
2) thematic analysis and 3) critical analysis (in Chen, Weiler, Young, & Lee, 2016, p.6). The
analysis is based on a descriptive approach by means of bibliometric analysis. Bibliometric
analysis is considered as useful tool in tourism studies (Hall, 2011; in Chen et al., 2016).
Bibliometric analysis can be used to capture the growth of a stream of studies as an area
of knowledge (Cheng, Li, Petrick, & O’Leary, 2011; Coles, Hall, & Duval, 2006; in Chen et
al., 2016). Following bibliometric analysis, thematic analysis of conceptual papers are also
conducted to facilitate an understanding of key themes and contents. Hence this study is
based on partly bibliometric and partly thematic analysis for gaining the knowledge of
academia industry interface.

Seuring, Müller, Westhaus, and Morana (2005; in Chang & Katrichis, 2016) mentioned
that literature review as a content analysis which is a research technique for making replicable
and valid inferences from texts (or other meaningful matter) to the contexts of their use
Four steps in content analysis involve material collection, descriptive analysis, category selection and material evaluation (Mayring, 2003; in Chang & Katrichis, 2016). Literature review represents the most important step of the research process in qualitative, quantitative, and mixed research studies (Boote & Beile, 2005; Combs, Bustamante, & Onwuegbuzie, 2010; Onwuegbuzie, Collins, Leech, Dellinger, & Jiao, 2010; in Chang & Katrichis, 2016). The use of literature reviews is to provide direction for future studies that can address existing knowledge gaps (Chang & Katrichis, 2016). The knowledge gap is also known as the research gap. A research gap also termed as literature gap is a problem or unexplored/underexplored area of the existing research (https://thephdhub.com/what-is-a-research-gap-how-to-identify-it/).

In course of studying academia and tourism and hospitality industry, the scholars developed the concept of ‘collaboration’ (Anderson & Sanga, 2018; Sobaih & Jones, 2015); ‘partnership’ (Anderson & Sanga, 2018; Sobaih & Jones, 2015); ‘traditional association & balancing’ (Ruhanen, 2005); ‘bridging gap’ (Sarkodie & KwameAdom, 2015; Green & Erdem, 2016; Khan, 2019; McCartney & Kwok, 2022); ‘cooperation’ (Singh, 2015).

The industrial revolution and the development of a global economy led to increasing specialization and the emergence of an increasingly well-educated and trained middle (professional) class. Two forms of specialization have been identified: mechanical and discretionary (Freidson, 2001, pp. 22 – 24; Cousquer & Beames, 2013, p.193), which broadly correspond with the organizational and occupational professionalisms described by Evetts (2013, pp. 10–11; Cousquer & Beames, 2013). The former corresponds with Adam Smith's pin making, in which production is mechanized and tasks are reduced to a repetitive simplicity, and are readily supplied by semi-skilled manual laborers. By contrast, discretionary specialization requires the individual to exercise their judgment and remain sensitive to the variation found in individual cases.

For the first time, Sobaih and Jones (2015) applied the Triple Helix Model (Etzkowitz & Leydesdorff, 2000; Kunwar & Ulak, 2023) along with academia and industry interrelationship in the field of tourism and hospitality industry. Therefore, the researchers tried to understand what the Triple Helix Model is in the context of studying university and the industry interface. Before describing the Triple Helix Model, first and foremost, academia and industry relationships are shedding light on the importance of industry and academia relationships.

While some policy developers and scholars (Etzkowitz, 1999; Etzkowitz and Leydesdorff, 2000; in Sobaih & Jones, 2015) have argued that universities should form direct links with the industrial world, others (Dasgupta & David 1994; Business Higher Education Forum (BHEF), 2001; in Sobaih & Jones, 2015) have expressed concern about the integration between university and industry, reiterating: ‘let the university be the university; let the industry be the industry’ (Etzkowitz & Viale 2010, p.2; in Sobaih & Jones, 2015) and emphasizing distinctions between the two parties. Dasgupta and David (1994) argued that universities
and industries are distinctively organized and functionally differentiated spheres, and that a proper division of labor between the two should be maintained to maximize social benefits. Dasgupta and David (1994) emphasize education as an innate function of a university. This view is concerned with the relationship between university and industry too close arguing that it may be detrimental to the scientific potentials of a nation and that a proper division of labor between these actors is needed (Eom & Lee, 2010, p.526).

To understand the collaboration between university-industry-government with reference to the case study of Egypt, Sobaih and Jones (2015) came up with six key issues related to university-industry collaboration around hospitality and tourism. First, hospitality and tourism are not perceived as knowledge-based industries and thus there are few knowledge-related problems likely to drive hospitality and tourism organizations to seek university collaboration. Second, the relative infancy of tourism and, particularly, hospitality research globally compared to more generic social science research where the first PhD in tourism in the US appeared in 1951 (Jafari and Aaser, 1988; Sobaih & Jones, 2015, p.5). Third, the international, predominantly US, ownership of the hospitality and tourism industry through major international hotel, restaurant, and leisure chains, such as Hilton, Marriott, McDonald's, KFC and Pizza Hut, with their US-based head offices, means that universities in developing countries are very unlikely to be considered as potential partners for university–industry collaboration. Fourth, the dominance of small and medium-sized enterprises (SMEs) in the tourism and hospitality industry–most tourism and hospitality firms worldwide are small- or medium-sized enterprises (Thomas, 2000; in Sobaih & Jones, 2015) and their numbers are growing due to governmental emphasis globally on SMEs because of their potential contribution to economic growth and job creation which is critical to developing countries. Fifth, unlike other industries, there is no barrier to entry as hospitality and tourism business can happen anywhere and everywhere without the need for qualifications. Sixth, tourism and hospitality are a 24/7 industry which implies that industry has little/no time for research. When industry leaders seek collaboration with universities, they demand things instantly and they expect education to change and respond very quickly which often does not happen due to the procedures and routines in universities (Sobaih & Jones, 2015).

In 2007, the International Society of Hospitality Consultants (ISHC) as quoted by King, Funk and Wilkins (2011), polled 150 hospitality consultants to identify the 10 issues currently having the greatest impact on the hospitality industry namely labor and skill shortages, construction costs, technology, changing demographics impacting travel trends, future of hotel profits, branding, distribution, travel permit restrictions, emerging markets and capital availability. These insights are informative for both industry and academia, in terms of research and curriculum development, however, empirical evidence in support of these 10 issues in the hotel sector is lacking. While academic research has explored some of these contemporary issues in a hotel context (HRM – Collins, 2007); (brand management – Daun and Klinger, 2006); (corporate social responsibility (CSR) – Henderson, 2007); (internationalization – Velo and Mittaz, 2006);
(renovation – Hassanien, 2006; in King et al., 2011), the research is narrow in focus. According to King et al. (2011), “no attempt has been made to consider such issues on a collective basis. There is a void of understanding about the hotel sector’s priorities, needs and wants as a result of market forces. Evidence is needed to understand the extent to which these anecdotal issues are reflective of hotel managers’ perceptions working at the property level. Furthermore, comprehension as to the focus of hospitality academic research would be beneficial in informing academia’s readiness to address the hotel sector’s identified issues” (p.158).

Walo (2001) acknowledged few prerequisites for hospitality management graduates i.e. interrelation skills, customer relationship and human management skills. Conferring to Kluge (1996, in Bathla, Rana, & Singh, 2020), hotel management curriculum should contain a core course on information technology a for developing computational skills of hospitality management students to ensure their career in the real hospitality world. Some scholars argue that hospitality management learning should be additional practical based instead of theory practice. Sarkodie et al. (2015) pointed out that multi language, communication skills, operating skills, computing skills, and research skills as the most evident skills needed for employability in the hospitality industry. Schofield (2012; in Bathla et al., 2020) pointed out that commercial universities has become the centers of significance for commercial and societal expansion and knowledge formation. Dasgupta and David (1994) mentioned that institutes and industries are exclusively structured and efficient distinguished spheres, and that a proper dissection of labor among the two should be kept to maximize societal welfares.

According to Lefever and Withiam (1998, p.70), a periodic process of curriculum review has become continuous in the hospitality education programs; similarly, it is equally important to review curriculum in tourism and event education according to time and situation. For instance, there was a gap between tourism academia and industry due to outbreak of Covid-19 pandemic and to bridge that gap, tourism academia continues online education to avoid risk of virus transmission, maintain safety, and health management (Wassler & Fan, 2021). According to survey conducted by Lefever and Withiam (1998), they came out with a flabbergasting result in their study that there is still a gap between curriculum and learning process. The greatest issue facing by an industry is recruiting, training, and retaining employees. Hiltrop (1999, p.422) also agreed that there is a serious issue of attracting and retaining talent for organizations worldwide.

Sarkodie and KwameAdom (2015, p.114) stressed that education is a vehicle for social and economic transformation which helps in bringing progress and economic development. Indeed, the development of any country in this contemporary time depends largely on the quality of education of such a nation. At present, nine out of ten polytechnics in Ghana offer hospitality/tourism programs at Higher National Diploma level. However, in recent times hospitality/tourism higher education has experienced rapid growth globally in terms of the number of students who were enrolled into the program but still faces uncertainties in terms of the needs and expectations of the hospitality/industry. Therefore, based on their study,
they recommended following for bridging gap between academia and industry in hospitality/tourism sector:

- There should be a close collaboration between the educators and the industry so that students leave school knowing industry expectations. This will go a long way towards improving the quality of service delivered to guests.

- There should be regular conferences, seminars and workshops aimed at exchanging ideas. During such a gathering, students and teachers would be well-equipped. They would gain a lot of theoretical and practical knowledge. In this way, the graduates from the institutions would not be square pegs in round holes when they enter the world of work in the industry.

- Students should be exposed to field trips to industry. Tertiary institutions should organize regular field trips for students and teachers to industry as a form of exposing them to current industry trends and best practices.

Green and Erdem (2016, p.43) suggested to lessen the perceptual gap between educators and industry by immersing the hospitality students in real life case studies that have the underpinnings of experiential learning, instructional technology, meta-cognition, and communication skills required in the industry. However, the fact that tourism and hospitality degree programs are relatively new to the university system, the growing numbers of both student enrolments and specialized programs, is also testament to the fact that university graduates are required for careers in this sector (Craig-Smith & Ruhanen, 2005; The Higher Education Academy, 2005; Tribe, 2002; in Ruhanen, 2005, p.34).

Cobanoglu and Moreo (2001; in McCartney & Kwok, 2022, p.3) also highlight the gap between academia and industry; its consequence that most hospitality industry practitioners did not use academic research that resulted in this mismatch which will have further consequences. And the possible consequences as per Anderson and Sanga (2019; in McCartney & Kwok, 2022, p.3) is that it can lead to hospitality and tourism curricula with limited input from industry, including a shortage of qualified graduates for the hospitality industry. In this regard, Barron (2008; in McCartney & Kwok, 2022, p.3) suggested focusing on practical aspects in hospitality programs so that it could encourage students to join hospitality studies at university. If not, there will be a scenario where students may simply join industry to shape their career and bypass formal university education. Therefore, students being ‘industry ready’ must be established between the universities offering hospitality degree programs and industry to keep curricula useful and relevant (McCartney and Kwok, 2022, p.3).

They were Khan and Olsen (1998; in Khan, 2019, p. 82) who shed light on the queries that were asked with hospitality educational program administrations over thirty years ago as to how their institutions will gain from a research program supported by the industry. However, vocationally based degree programs such as tourism and hospitality face the pressure of balancing the theory base that necessitates a university degree with the practical skills required
by the industry that will ultimately employ the students upon graduation. Experiential learning approaches such as role-play have been advocated as one possible educational tool that can be utilized to bridge the divide between academic knowledge and practical skills (Hamer, 2000; Maddrell, 1994; in Ruhanen, 2005). Tourism and hospitality degree programs are now offered at several universities around the world, and both undergraduates and postgraduates in ever increasing numbers are studying in these areas (Busby & Fiedel, 2001; Tribe, 2002; in Ruhanen, 2005).

Othman, Eid, and Anter (2021) argue that the issue of developing managerial competencies is one of the essential tools of human resources management and a significant strategic tool in the business environment. They believe that tourism and hospitality organizations are meeting sundry changes and improvements, including (e.g., the changeable work environment, rising competition globally, the fast progress technological, and ever-changing request types of tourism) and Hobson (2010, in Othman et al., 2021, p. 2) confirms that employers in tourism and hospitality industry seek well-trained and qualified graduates besides their competencies limited in theoretical skills and knowledge in a specific area. Furthermore, as highlighted by Baum (2015, p. 205; in Gebbels et al., 2019) ‘the quality of the people in the workplace can make a real and positive difference to business outcomes’. Therefore, the recognition of employees’ skills and professionalism is key to ensuring a stable workforce and increased career longevity among existing employees (Mooney et al., 2016; in Gebbels et al., 2019). Therefore, it is becoming necessary to identify and develop the essential competencies required in tourism and hospitality industry from graduates and incorporate them in the university courses (Hodges & Burchell, 2003; in Othman et al., 2021, p.2).

Within specialist groups in the UK, for example, Strebler et al. (1997; in Hoffmann, 1999) suggested that two different meanings of the term competency have developed. Competencies may be “expressed as behaviors that an individual needs to demonstrate”, or they may be “expressed as minimum standards of performance” (Strebler et al., 1997; in Hoffmann, 1999). A review of the literature showed three main positions taken toward a definition of the term. Competencies were defined as either: 1) observable performance (Boam and Sparrow, 1992; Bowden and Masters, 1993; in Hoffmann, 1999); 2) the standard or quality of the outcome of the person’s performance (Rutherford, 1995; Hager et al., 1994; in Hoffmann, 1999); or 2) the underlying attributes of a person (Boyatzis, 1982; Sternberg and Kolligian, 1990; in Hoffmann, 1999).

Personology and professionalism

Gebbels et al (2019) while studying about the personality traits of hospitality industry, they came up with a concept called ‘personology.’ Personology, a concept established in personality psychology, which claims that only through a systematic and an in-depth study of each individual, it is possible to claim any knowledge in human personality becomes an overarching framework for understanding the key characteristics of a hospitality professional
The proposed personology of hospitality professional, which consists of three dimensions, hospitality career commitment, hospitality career inheritance and hospitality self-efficacy, was founded on the key principles of career commitment, career inheritance and self-efficacy (Gebbels et al., 2019).

Wang (2013; in Gebbels et al., 2019) identified career development, career adjustment and control, workplace attitude, and communication and networking as the four key dimensions of career competency that can assist people in enhancing and satisfying their career developmental needs. However, according to Bharwani and Jauhari (2013; in Gebbels et al., 2019), compared with other sectors, hotels choose their workforce on the basis of their competencies and task proficiency or specific technical expertise and job aptitude as opposed to their individual characteristics.

In addition to above concept of personology, person as an individual who enters into the industry for job and pursue their profession, one should be very careful about their own career and success as academia will not always take responsibility of their output. In various sort of industries, professional works must have different professional competencies required in order to fulfill their own jobs. It is the requirement to successfully accomplish the goals of job. McClelland (1973; in Lin, Lin, & Chen, 2017) proposed the term “competency” and indicated that intelligence (i.e. knowledge and skills) is not the only factor to determine job performance. Attitude, cognition and personality traits are also the underlying factors to achieve excellent job performance. Jarvis (1983; in Lin, et al., 2017) suggested that professional competencies are mainly associated with individuals' jobs. It is the professional knowledge, skills and attitude required for a person when playing a specific role in his or her professional job to fulfill the responsibility in an organization.

According to job characteristics theory (JCT), people with sufficient knowledge and skills to perform well will feel positive about their job performance, while people with insufficient knowledge and skills will have negative feelings. People with a need for personal growth are expected to develop higher internal motivation, especially when they work on a challenging job (Lin et al., 2017). Hackman and Oldham (1980; in Lin et al., 2017) argued that skill variety is one of the critical characteristics that contribute to a person's feelings about their works and whether it seems to be meaningful. The understanding of professionalism lies in the basic concept of profession. Cogan (1953, p. 48; in Mak, Wong, & Chang, 2011; Hwang & Lee, 2018) defined profession as “a vocation whose practice is founded upon an understanding of the theoretical structure of some department of learning or science, and upon the abilities accompanying such understanding”. That is, the term profession means expertise in a specific field. In the tourism and hospitality industry, various attributes affect the evaluation of tourism employees' professional competencies. Many previous studies have suggested the following three attributes either individually or collectively: (1) professional knowledge, (2) professional skills, and (3) professional attitude (Ap & Wong, 2001; Geva & Goldman, 1991; Huang, Hsu, & Chan, 2010; Lin, Lin, & Chen, 2017; Ryan & Dewar, 1995; Wang, Hsieh, &
Chen, 2002; in Hwang & Lee, 2018). Barber (1963, p. 672; in Mak et al., 2011) suggests that professional behavior may be defined in terms of four essential attributes: (1) a high degree of generalized and systematic knowledge, (2) a primary orientation to community interest rather than to individual self-interest, (3) a high degree of self-control of behavior through codes of ethics, and (4) a system of rewards (monetary and honorary) that is primarily a set of symbols of work achievement.

The term professional can be used to describe individuals who are members of the professions and who share certain characteristics that set them apart from non-professionals. A common focus of agreement, between consumers and academics alike, would be an emphasis on the quality of the work undertaken and the social mechanisms in place for ensuring this: Professionalism refers to the occupational behaviors and practices of workers who not only have full-time jobs but also possess a clear sense of what their work is about and when it is effective. Some sort of collective – traditionally called a ‘profession’ – guards and maintains this self-awareness. (Schinkel & Noordegraaf, 2011, p. 68; in Cousquer & Beames, 2013). In the process of developing a distinct and coherent professional identity, a profession must consider what it does. Dunne (2011) claims that the concept of a profession is defined in that of a practice, which he defines as:

... a more or less coherent and complex set of activities that has evolved co-operatively and cumulatively over time and that exists most significantly in the community of those who are its practitioners – so long as they are committed to sustaining its internal goals and its proper standards of excellence. (p. 14; in Cousquer & Beames, 2013, p.196).

The development of practical wisdom (phronesis), or ‘good judgement’, is as essential a preparation for professional practice as the development of technical competency (Cousquer & Beames, 2013, p. 196).

The acquisition, mastery and employment of a body of specialist expert knowledge, gained from following a program of training is thus a foundation stone of professional practice. Freidson (2001, pp. 33–34; Cousquer & Beames, 2013) distinguishes between everyday knowledge, practical knowledge, formal knowledge and tacit knowledge and highlights the importance of formal knowledge, and to a lesser extent practical knowledge, to those specialists who are required to exercise mental discretion in their work. Formal knowledge cannot generally speaking be acquired through every day or work-related activities, but must be acquired through study, as it ‘is composed of bodies of information and ideas that are organized by theories and abstract concepts’ (Freidson, 2001, p. 33; in Cousquer & Beames, 2013). This ‘body of knowledge that includes scientific bases, values and applied skills’ (Martin, Cashel, Wagstaff, & Breunig, 2006; in Cousquer & Beames, 2013).

It is seen to have a negative image of the hospitality industry despite the tremendous growth. The sector is a part of the secondary labor market that faces low wages and high
labor-intensive jobs. The Wealth of Nations (1776; in Partington, 2016, p.207) also advocated the inequality of the labor market by explaining that 'labor belongs to the laborer.' Partington (2016, p.210; Walmsley 2004) also argues that hospitality employment is repeatedly characterized as low paid, low skilled, part-time, and seasonal, with poor management and lacking a clear path. This may be a result of not having a strategic collaboration between two sectors i.e., academia (hospitality studies) and industry (hotels, restaurants, and travel industry). The bad image of the hospitality industry is associated with the duty hours of the labors as Wong and Ko (2009; in Partington, 2016, p. 210) stressed on the long and unsociable hours faced by hospitality employees as non-conductive for a healthy work-life balance. Hence, it results in a high turnover of the employees in this sector. Similarly, given the diverse size and characteristics of the sector, the types of employment are varied, ranging from unskilled porter to highly skilled manager, and depend on the types of consumers served and types of workers required (Partington, 2016, p.211). Lockyer and Scholarios (2004; in Partington, 2016, p.211) in their study highlighted the general lack of systematic selection procedures for the hotel sector, particularly in smaller hotels.

In the western context hospitality employment is considered as temporary, poorly paid and of low status (Baum 2015; Mooney et al., 2016; in Gebbels et al., 2019). Hospitality organizations often rely on a contingent workforce employed under flexible conditions, on a part-time or seasonal basis, which are factors contributing to high staff turnover (Hjalager & Andersen, 2001; in Gebbels et al., 2019). Talent shortage within the global tourism industry continues to be the most critical issue for human resource management (WTTC 2015; in Gebbels et al., 2019). Similarly, Lashley and Chapman (1999; in Partington, 2016, p.211) also argued poor quality recruitment practices as the main cause of the high staff turnover in this sector. Therefore, the knowledge of personology as mentioned by Gebbels et al. (2019) will equip hospitality managers with more reliable selection outcomes during the recruitment and selection process, and enable them to employ the most suitable candidate who will take ownership of their roles and responsibilities, thus benefiting, not only her or his career but also the employing organization.

Career commitment

Career commitment is considered as quintessential attitudinal profession in the field of tourism and hospitality. This concept has been first operationalized and measured by Blau (1985, 1988; in Gebbels et al., 2019), who defined career commitment as ‘one’s attitude towards one’s profession or vocation’ (Blau, 1985, p.278; in Gebbels et al., 2019). This term is often used as an umbrella towards a personology of a hospitality professional concept to describe commitment to one’s career, one’s profession and one’s occupation (Cooper-Hakim & Viswesvaran, 2005; in Gebbel et al., 2019). Despite increased attention paid to the subject of commitment (Meyer et al., 1993; in Gebbels et al., 2019), historically the work on career commitment has received the least attention, with the focus being directed towards the concepts of job and employee commitment (Aryee & Tan, 1992; Meyer et al., 1993; Goulet & Singh, 2002; in Gebbels et al., 2019). Historically, the notion of commitment has
been conceptualized in relation to organizations, in a form of a three-component model of commitment (Meyer & Allen, 1984; Meyer et al., 1993; in Gebbels et al., 2019). Affective commitment reflects an emotional attachment to, identification with and involvement in the organization; continuance commitment is the perceived cost linked to leaving the organization; and normative commitment denotes a perceived obligation to remain in the organization (Meyer et al., 2002; in Gebbels et al., 2019).

All three forms of commitment are of an affective nature (Meyer et al., 2002; in Gebbels et al., 2019). The emotional attachment to one's career is very significant in helping to decide whether one desires to stay or leave the chosen career field, and remains the strongest among the other two dimensions of commitment (Meyer et al., 1993; Meyer et al., 2002; in Gebbels et al., 2019). Although originally the three-component model of commitment referred to organizational commitment, they are considered relevant to the concept of career commitment. Career commitment can be affected, enhanced and changed by many factors. The more educated employees are, and the higher their job status, the higher the level of career commitment (Goulet & Singh, 2002; in Gebbels et al., 2019). Employees are also more inclined to remain in their job and continue in their chosen careers. This corresponds with conclusions made by Colarelli and Bishop (1990; in Gebbels et al., 2019), Ladkin (2002; in Gebbels et al., 2019) and Vance (2006; in Gebbels et al., 2019), who proposed that better educated employees are more interested in their career development, which results in higher career commitment. Career experiences of individuals will also differ depending on age, gender, individual differences, country of birth, attitude towards life, and job satisfaction (Chernish, 1991; Sullivan et al., 1998; Niu, 2010; in Gebbels et al., 2019).

Collaboration and bridging gap

Collaboration and partnership between the tourism and hospitality industry and universities has been found to be a crucial part of building a knowledge-based economy (Sobaih & Jones, 2015). Yet, there is an ongoing tension to balance theory with practice, to have the skills and knowledge required by students upon graduation to work in the tourism and hospitality field (Ruhanen, 2005). One principal aim of bridging or closing this gap is to create actions where curriculum design connects educators and industry, thereby helping prepare students adequately with the skills and knowledge sets needed for a career in the hospitality industry (Alhelalat, 2015; in McCartney & Kwok, 2022). Most staff employed in the sector are generally regarded as semi-or unskilled (Lucas, 2004 and Riley, 2011; in Partington, 2016, p.211). Therefore, this sector is notorious for its reputation as a poor trainer (Pratten, 2003; in Partington, 2016, p.211).

Khan (2019) published a paper entitled “A systematic assessment of gaps between academic research and industry participation in hospitality management discipline” that studied the collaboration and gap between academia and hospitality industry during the past 30 years where six different gaps (see table 2) were identified and are described in detail. Similarly, the
paper discussed possible ideal collaboration between academe and the hospitality industry considering the existing gaps.

**Table 2: Recommended steps for bridging the gaps between research conducted by academia and the hospitality industry**

<table>
<thead>
<tr>
<th>S.no.</th>
<th>Gaps</th>
<th>By Academia</th>
<th>By Industry</th>
</tr>
</thead>
</table>
| 1.    | Academe is not providing information that the industry needs in a timely fashion or providing information they already know. | a. Keep in touch with research needs of the industry and find mutually beneficial research areas.  
b. Find value-added components in research.  
c. Select methodology which is applicable and understood by the industry.  
d. Make the outcome easily comprehensible and appreciable.  
e. Be sensitive to the deadlines.  
f. Consider the profitability of research.  
g. Provide journals or abstracts of research findings to industry personnel. | a. Explore institutions where mutually beneficial research is being conducted.  
b. Seek researchers who can complement or provide needed advice.  
c. Understand the role of academics and their obligations. |
| 2.    | There is a considerable communication lag between hospitality academia and industry. | a. Develop sound mutually understandable relationships.  
b. Build confidence.  
c. Develop a bridge between industry for continuous communication.  
d. Use case studies and short research papers.  
e. See how parts of research done for industry might contribute to tenured decisions.  
f. Clearly outline the interpretation and application of research findings.  
g. Understand the terminology used by the industry. | a. Develop mutually understandable relationships.  
b. Explain the needs of the industry.  
c. Provide opportunities for research by institutions.  
d. Allow the use of facilities and resources for conducting research.  
d. Involve faculty before starting any research projects. |
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<th>S.no.</th>
<th>Gaps</th>
<th>By Academia</th>
<th>By Industry</th>
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<td></td>
<td></td>
<td>h. Develop links by networking and industry contacts through meetings and professional organizations.</td>
<td>e. Understand the terminology used by academia.</td>
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<td></td>
<td></td>
<td>i. Present research findings in seminars and meetings where industry is represented.</td>
<td>f. Join seminars and meetings organized by institutions.</td>
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<tr>
<td>3.</td>
<td>There is a considerable lag between educational and practical experience between hospitality academia and industry.</td>
<td>a. Utilize opportunities to get practical experience during summers or sabbaticals.</td>
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<td></td>
<td></td>
<td>b. Develop motivation by exploring new and interesting areas of research.</td>
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<tr>
<td></td>
<td></td>
<td>c. Negotiate time for research and consulting in your job descriptions.</td>
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<td></td>
<td></td>
<td>d. Work on research in collaboration, even as co-investigators.</td>
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<tr>
<td></td>
<td></td>
<td>a. Provide opportunities for faculty and graduate students to get experience on a part time basis.</td>
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<td></td>
<td></td>
<td>b. Gain academic experience by taking courses and attending seminars organized by institutions.</td>
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<tr>
<td></td>
<td></td>
<td>c. Join in collaborative research.</td>
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<tr>
<td>4.</td>
<td>There is a discrepancy between the understanding of the research quality between academia and industry.</td>
<td>a. Develop a focus of research aligned with industry needs.</td>
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<td></td>
<td></td>
<td>b. Include a value-added component to research.</td>
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<td></td>
<td></td>
<td>c. Be aware of contemporary issues and future developments.</td>
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<td></td>
<td></td>
<td>d. Be conscious of the deadlines and time constraints.</td>
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<tr>
<td></td>
<td></td>
<td>e. Develop a compatible research agenda.</td>
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<tr>
<td></td>
<td></td>
<td>a. See similarities between research agendas.</td>
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<tr>
<td></td>
<td></td>
<td>b. Discover any value-added component of research which can be conducted in collaboration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Understand the time constraints of academicians.</td>
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Singh (2013, p.69) highlights industry-academia differences and identifies cooperation between industries, academic establishments, and government for the future of the hospitality and tourism industry. However, there is a discrepancy between the manpower produced by academia and the expectation of industry as management degrees tend to lack the quality which is required in the real world. Besides, there is also conflict in perception between hospitality management graduates and employees as students seem to rate the value of their degrees higher than do employees in the industry. Therefore, the major gaps between the expectations and assumptions of students and those of hospitality experts have led to difficulties in the tourism and hospitality business. Similarly, many studies show that students are having unconstructive perceptions comprising lesser salaries, deprived operational circumstances, extended functioning times and high staff turnover. Hence, Singh (2013, p.69) focused on how career prospects, expectations and necessities vary among tourism management students and employees in the tourism industry, the working circumstances of employees and their perceptions of the industry’s needs etc. The tourism and hospitality
industry are developing rapidly with changes and causing issues for educators to produce professionals that meet the needs of the industry. The travel and tourism institutes and hotel management institutes (both private and government owned) have grown considerably in the last two decades. This is a clear signal of tourism importance and tourism growth (Singh, 2013, p. 70).

In the context of academia-industry collaboration for bridging the gap, Robinson and Cooper (2007; in Anderson & Sanga, 2018, p.2) highlighted one of the areas identified as critical to the provision of hospitality and tourism education is collaboration between stakeholders, including tourism educators, students, tourism service providers, and government authorities. Likewise, Baum and Kokkranikal (2005; in Anderson & Sanga, 2018, p.2) suggested a partnership between industry and training providers for developing skills to meet the needs of the tourism industry. According to McCartney and Kwok (2022, p.2), there have been attempts to bridge the hospitality industry and academia in terms of curriculum development, there is limited discussion on academic research being aligned to the needs of industry – particularly on how to convince industry that academic research, often conceptual, can provide timely and relevant research insight into hospitality in practice. As such, commercial research enterprises are oftentimes approached for tourism research, as these organizations are perceived as able to relate and engage with the industry in understandable language, action-oriented solutions, and relevant research (Walters & Ruhanen, 2019; in McCartney & Kwok, 2022).

There is an existing challenge between the priorities of hospitality and tourism academia, and the real-world needs of industry (McCartney & Kwok, 2022, p.2). As per the assumption of Jenkins, academic and scholarly work could have limited impact on the practicalities of tourism. There might be instances where the industry may perceive that tourism and hospitality academic research does not address practical business needs (Jenkins, 1999; in McCartney & Kwok, 2022, p.2). Sobaih & Jones (2015; in McCartney & Kwok, 2022, p.2) argues that practitioners may be unaware that the research exists as these are published in journals and not disseminated to industry as there are different level of confusions that are seen on the roles and perspectives of that academia and practitioners of each other. Leiper et al. (2007; in McCartney & Kwok, 2022, p.2) underlines the fact that academics and industry professionals’ collaboration are not always required; ‘fundamentally, they work in different industries, for very different types of organizations, and their work has different purposes and objectives. The appropriate context for cooperation is when their interests overlap, which may occur on a range of issues.’ Likewise, there might be an instance where universities have been researching hospitality study actively, but the industry is unaware of those studies. Cobanoglu and Moreo (2001; in McCartney & Kwok, 2022, p.2) also focused on the scenario where academia prioritizes research journal publication, but the study may not be communicated to the industry. Therefore, research for industry needs to be timely and business relevant.

Khan (2019; in McCartney & Kwok, p.3) highlights six significant industry-to-academia
research gaps that persist: that academia did not provide timely nor value adding research; there was a communication lag and between academia and industry and a lack of understanding of terminology used by academia; there was a substantial gap between educational and practical experience; there was lack of understanding by academia to provide timely and value adding research, as well as a lack of trust on issues of copyrights, confidentiality and transparency between academia and industry; and lastly, that there was limited understanding by academia on how to add value to their research compared to independent research consultants.

Roberts (2007) examined traditional industry-academic partnerships including corporate internships, work-study programs, curriculum advisory boards, guest lectureships and capstone courses, identifying gaps and opportunities for growth in his study on the future of academic-industry collaboration. The study clarifies that by considering the benefits and gaps of existing academia-industry partnerships and through examination of seven trends that will inevitably shape the future of design, new models for collaboration can be developed. The following discussion by Roberts (2007) outlines several opportunities for strengthening the academia-industry interface.

### Table 3: Several opportunities for strengthening academia and industry interface

<table>
<thead>
<tr>
<th>For the academic community</th>
<th>For the industry</th>
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<tbody>
<tr>
<td>• Bring the real world into the classroom or take the classroom into the real world.</td>
<td>• Offer more of the work opportunities that students and professors seek.</td>
</tr>
<tr>
<td>• Incorporate real projects with real clients into the curriculum.</td>
<td>• Build deeper relationships with students.</td>
</tr>
<tr>
<td>• Academic institutions could mitigate this challenge and offer their students a great service if they required participation in international internships, international research, study-abroad programs, or immersive cultural exchanges before graduation.</td>
<td>• Build a presence on campus through activities such as information sessions, portfolio reviews, interviewing and mentorship.</td>
</tr>
<tr>
<td>• Explore new research opportunities.</td>
<td>• Redistribute the funding.</td>
</tr>
<tr>
<td>• Stay connected to Industry.</td>
<td>• Examine where the philanthropic funding is going.</td>
</tr>
<tr>
<td>• Influence other academic communities.</td>
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<table>
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<tr>
<th>For academia and industry together</th>
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<tbody>
<tr>
<td>• Expand the collaboration.</td>
</tr>
<tr>
<td>• Halt the impending identity crisis.</td>
</tr>
<tr>
<td>• Expand the diversity of the design community. Design is very much a multidisciplinary and multicultural field.</td>
</tr>
<tr>
<td>• In preparation for the upcoming population shift, design firms, academic institutions, governments, and NGOs should work together to diversify the pipeline that feeds the design industry.</td>
</tr>
</tbody>
</table>
Exposure of students from the target communities to design thinking and viable career opportunities early on will positively affect their engagement in the industry in years to come.

- Modify academic rewards structures to encourage collaboration.
- Seek creative synergies.
- Integrate corporate-sponsored interdisciplinary research projects.

Source: Roberts, 2007

King et al. (2011) focused on effective organizational decision making in a highly competitive and fragmented market that demands current and relevant insights. They focused on the global perspective in which the hotel sector operates; the need for such insight is intensified. As per King et al. (2011, p.157), given the competitive national and international environment in which these hotel sectors operate, the need for market awareness is intensified. With competitors and consumers operating in a global market, the challenge for the hotel sector is to ensure its focus at the property level reflects knowledge of the contemporary challenges presented in such an environment.

Barron (2008, p.732) highlights that several studies have addressed the nature of the relationship between hospitality educators, the hospitality industry, and the student. The study focuses on the debate regarding what graduates and the industry requires and what educators provide. Gilbert and Guerrier (1997; in Barron, 2008) found significant differences between the perceptions of industry and academics on the skills, knowledge and attitudes required by graduates for successful careers in the industry. It is found that industry often criticized educators for over emphasizing theoretical concepts and identified deficiencies in certain practical skills. Hospitality practitioners consider it essential that hospitality management educators provide students with a more realistic view of the industry in addition to the technical skills and knowledge essential for careers in the industry (Barron, 2008).

Walters and Ruhanen (2018, p.1) emphasized that “the role of universities is clearly evolving beyond their traditional mission of centers for student learning, and generators and hubs of knowledge”. For example, neo-liberal shifts in the university sector in many countries have increased competition for both student and research income. As a result, there has been an increased emphasis on what has been described as a ‘third mission’ whereby universities foster direct links with knowledge users or ‘industry’ (De Fuentes & Dutrénit, 2012; Etzkowitz, Webster, Gebhardt, & Terra, 2000; Göransson, Maharajh, & Schmoch, 2009; Perkmann et al., 2013; in Walters & Ruhanen, 2018). They further emphasize that in a tourism context, a country like Australia; it is difficult to convince prospective tourism industry partners of the value and knowledge that academic researchers produce (Walters & Ruhanen, 2018). Therefore, from a practical perspective, if academics want to better engage with industry for research collaboration purposes and impact, it is crucial that they position their research agendas in accordance with the needs, usage and benefits sought by industry. This requires a two-way
communication stream that can be implemented at both an individual and an institutional level. Industry engagement functions present ideal opportunities for academics to converse with industry stakeholders. These opportunities should be used as a platform for learning of the latest industry concerns that may then in turn either advise the academic’s future research agenda or allow them to share existing knowledge or future research plans that are likely to be of relevance. Academic institutions can also provide opportunities for industry to share their research needs and inform industry-focused research agendas via the facilitation of seminars, round table discussions and think tank style symposia. Such dissemination and extension platforms provide a formal environment for both parties to engage on issues that matter and most importantly identify shared areas of interest that allow academics to demonstrate the value and benefits they can add to policy making and managerial decision making (Peacock & Ladkin, 2002; Tribe, 2008; in Walters & Ruhanen, 2018, p.11).

Kim and Jeong (2018, p.119) in their study depict that “traditionally, much research on hospitality and tourism education has focused on enhancing students’ learning capabilities and developing instructors’ teaching effectiveness”. However, the research paradigm has shifted to meet the needs of all key stakeholders - students, instructors, and industry employers (Barber, Deale, & Goodman, 2011; in Kim & Jeong). They further categorized the education-related topics into six groups: leadership and human capital development, teaching methods with the emphasis on active and experiential learning, online education, diversity education, internationalization, and industry experience. Meanwhile, Kim and Jeong (2022) also argued that the landscape of hospitality and tourism higher education is altering dramatically. Internationalization and advanced technology are the main forces behind most changes occurring, along with demographic shifts such as aging population and growing minorities. The hospitality and tourism industry are also experiencing all these changes, thereby looking for competent employees who are agile to these changes and lead others. Thus, hospitality and tourism programs have no choice but to restructure their curricula to creatively meet and serve industry demands on HR. Despite chaotic changes, it is an exciting era for higher education. It is possible to imagine that hospitality and tourism higher education will be disseminated into every corner of the globe due to highly advanced technologies (Kim & Jeong, 2022).

Executive Chef David Harbourne (1995) outlines those, and presents alternative views based on a recent research project. The outcome of the study on employees’ attitudes and career expectations shows that within the industry, job satisfaction is high, most companies have a loyal and happy workforce and there are few causes for complaint. He discussed key issues from the report: staff turnover, loyalty, job satisfaction, pay and perks, staff development, and presentation of the industry to the outside world (Harbourne, 1995).

Thomas (2000, p.352) argued that there are good reasons for treating small tourism firms as a distinct analytical category. It is clear also that even though the relative importance of small tourism firms in terms of employment may be declining, they remain a significant and
buoyant component of the tourism industry. Although there is limited evidence on which to draw, that which does exist suggests that official utilization of academic research in this context is currently suboptimal. The challenge for the future is to use the insights provided by the emerging literature on small tourism firms to create initiatives that meet their varied needs.

Wassler and Fan (2021, p.5) discussed bridging gap between tourism academia and industry brought by Covid-19 pandemic where they first identified and analyzed the key factors; and then they generate four scenarios based on factors and effects. According to Wassler and Fan (2021, p.7), the third scenario is adaptancy: tourism academia bridging the gap. The term “adaptancy” was originally used by Jafari (1990/2001/2007; in Wassler & Fan, 2021) to delineate the emergence of alternative forms of tourism in order to maintain benefits without (or limiting) the negative impacts. This term is adapted to tourism academia which needs to adapt in order to limit the impacts of the pandemic on the academic field. The third scenario assumes a slow recovery, meaning that the pandemic extends beyond 2021 and has long-term impacts on global tourism. Tourism academia will have to bridge the gap between academic work and the rapidly changing needs of the new tourism industry, strengthening a closer collaboration to overcome the crisis. This scenario is based on tourism academia going forward by bridging the gap between the academic field and the new industry. Tourism academia continues with online education, a focus on local students, and strengthens industry support significantly, mainly in terms of risk, safety, and health management. A new, multidisciplinary paradigm emerges to shift tourism academia towards a new reality of tourism, potentially attracting scholars from other disciplines towards the field.

Methodology

This study followed qualitative research to seek an in-depth understanding of collaboration between academia and industry in the tourism and hospitality sector for which exploratory research is applied. The data and information used in this study are based on secondary sources for which the authors used desktop research methods for the data collection. Desktop research involves research on existing literature to create new knowledge and insight on the relevant study (Toracco, 2016; in Moodley & Naidoo, 2022, p.1044). Desktop research is the review of previous research findings to gain a broad understanding and gain more in-depth insight (Travis, 2022; Moodly & Naidoo, 2022; Kunwar & Ulak, 2023). This is not project funding work. The authors decided to work on their own.

Discussions

This study concentrated on university (academia) and industry (tourism and hospitality) interface. There is a mutual relationship between academia and industry; however, there are gaps as well as prospects. Several scholars have studied the relationship between academia and industries such as construction industry, pharmaceutical industry, healthcare industry and so on. Later, these studies also inspired the scholars of tourism and hospitality to apply
this model which aids in spreading the knowledge on academia and industry interface. Research shows the problems and unsolved gap between academia and industry; therefore, University-Industry Collaboration has increasingly attracted the attention of researchers and policymakers which focuses on R&D and intellectual property protection through patenting or secrecy. The productive interface between industry and academia in the present times of knowledge economy can only be sustained if the institutions are able to transform their graduates with an entrepreneurial spirit to meet industry’s needs. For which the Academia-Industry Collaboration Plan (AICP) that comprises process, methods or approaches, and tools should be implemented. Bridging gap between academia and industry results in mutual benefit but due to lack of shared understanding of the meaning, purpose, expectations, and motivation for collaborations in the provision of education among stakeholders are still major problems and drawbacks which could be solved through communicative processes, stakeholder’s engagement, extensive research, and working interdependently.

While studying tourism academia and industry interface, the scholars of tourism academia have developed the concept of ‘collaboration’, ‘partnership’, ‘traditional association & balancing’, ‘bridging gap’, and ‘cooperation’. Anderson (2015a; in Anderson & Sanga, 2018) points out that there is a stakeholder theory scarcity in mainstream literature and almost nonexistent in the context of developing countries despite the critical role that partnership plays in the provision of education. The major gap is the lack of shared understanding of the meaning, purpose, expectations, and motivation for collaborations in the provision of education among stakeholders. For effective partnership among key stakeholders (educational institutions, industry, and government authorities), a framework proposed by Anderson and Sanga (2018) that includes skills development, government taking charge of developing national curricula for tourism education to be used by all training institutions; providing academia with necessary support, such as facilities, guidelines, and networks with international institutions; and providing academia with incentives to expand enrollment in tourism programs.

The main aim of bridging or closing the gap in tourism academia and industry is to create actions where curriculum design connects educators and industry for preparing skilled manpower for the hospitality industry. In terms of curriculum development, there have been attempts to bridge the hospitality industry and academia; however, there was limited discussion based on academic research. Khan (2019) discussed possible ideal collaboration between academe and the hospitality industry considering the existing gaps. One of the areas identified as critical to the provision of hospitality and tourism education is collaboration between stakeholders, including tourism educators, students, tourism service providers, and government authorities. They were Sobiah and Jones (2015) who used the Triple Helix Model along with academia and industry interrelationship in the field of tourism and hospitality industry. Leiper et al. (2007; in McCartney & Kwok) think that academics and industry professionals’ collaboration are not always required.
The major gap between the expectations and assumptions of students and those of hospitality experts has led to difficulties in the tourism and hospitality business (Singh, 2013). In this regard, Barron (2008) found significant differences between the perceptions of industry and academics on the skills, knowledge and attitudes required by graduates for successful careers in the industry. Internationalization and advanced technology are the main forces behind most changes occurring (Kim & Jeong, 2018) and the hospitality and tourism industry are also experiencing all these changes. Some changes have come due to the crises which are required to be adopted temporarily or permanently for the better. Wassler and Fan (2021) discussed how tourism academia and industry bridged the gap amid Covid-19 pandemic crisis. Tourism academia continues with an online education system and strengthens industry support significantly to avoid risk, ensure safety, and health management.

Conclusion

This study identified that there are different disciplines in the world of academia. Similarly, there are different industries and they have been collaborating with academia for developing the curriculum (this will help to bridge the gap in terms of what industry wants from academia in terms of curricula and practical), experience sharing and information sharing on new trends through series of visiting lecture, and arranging internship that can produce capable and competent manpower for the industries and industries are supporting academia in varied ways to conduct research. Academia focuses on highlevel research based on philosophy and theories; however, industry wants academia to conduct industry-based research. As quoted by Henry Ford “Coming together is a beginning, keeping together is a progress, and working together is a success” (Purnama, 2018). The synchronization needs have been accepted for better outcomes by both sectors (academia and industry). Academia (universities) focuses on quality education, quality teaching, quality research, quality manpower, quality product that increases competencies of the students. Tourism and hospitality academia focus more on experiential learning than focusing on just theories as the tourism and hospitality industry seek technically sound, competent, skilled, innovative, and hospitable manpower.

This study depicts that the economic and social progression in any country has a higher degree of contribution by academia. The interaction with industry, and with society besides teaching and research are other roles played by universities which attracted scholars and policymakers (Kochenkova et al., 2016; in Scandura & Immarino, 2022). Academia also carries out a wide range of collaborative initiatives that are often labelled as academic engagement. There are interorganizational collaborations linking academia and industries for both formal (research and consulting) and informal activities (networking with practitioners). This study also shows that the success of academia and industry collaboration highly depends upon the alignment of research motivations and meeting expectations of the partners.

Likewise, many key issues are discussed in the tourism and hospitality sector in accordance with the academia and industry collaboration and its need. It is also found that there is a shift
of paradigm from the traditional approach of just enhancing teaching and learning process to understanding the needs of all key stakeholders (students, instructors, and industry employers. The study focuses on the debate regarding what graduates and the industry requires and what educators provide. Many issues and significant differences are seen between insights of industry and academics on the skills, knowledge and attitudes required by graduates for successful careers in the industry (Kim & Jeong, 2018). Similarly, the gap between the need of the industry and educators’ production is found very alarming. The industry people often complained about the academia that educators should focus more on practical approaches than on the theoretical concepts. Therefore, it is essential to provide students with a more realistic view of the industry through field visits, induction programs, internships, in addition to enhancement of their technical skills and knowledge through practical approach learnings for pursuing career (Barron, 2008, p.732).

The latest trend in the tourism and hospitality industry is more inclined towards innovation, technology including artificial intelligence (AI). And it is also important to be aware and prepared for any type of crisis that could affect the impetus of tourism academia and industry. Wassler and Fan (2021) discussed the challenges faced by academia and industry amid Covid-19 pandemic. The tourism academia during Covid-19 crisis had adopted the alternate education with online system to assure safety and health management; however, the tourism academia was seen as irrelevant as there were scarce of jobs, declined industry relationships, and decreased research on tourism and hospitality as tourism scholars were focusing their attention on other fields and disciplines. Developed countries have started following post covid-19 tourism and hospitality marketing which does not seem to have been adopted by developing countries. In this regard, by following the statement of Nepali entrepreneur- one of the industrialists of Bardiya National Park, Nepal, Prof. Ramesh Raj Kunwar addressed the trichotomies such as ‘tikne’ (consistency at work), ‘sikne’ (learning and becoming competent) and ‘bikne’ (self-marketing) as Nepali connotations in his several deliberations. It is noteworthy to understand that recognition of employees’ skills and professionalism is key to ensuring a stable workforce and increased career longevity among existing employees (Mooney et al., 2016; in Gebbels et al., 2019)

This kind of study is very important in the context of Nepal too. As Nepal has been adopting international courses in Nepal, it is very important to adopt international practices in teaching and learning process which should not be limited to classroom learning only. Therefore, the curriculum of tourism and hospitality studies demands a practical learning approach for technical skill enhancement of the students and the institutions should construct state-of-art practical labs for learning skills. There are more than 50 colleges offering tourism and hospitality courses for bachelor’s level students; however, most of their curriculum, facilities and collaboration with industries are seen as inadequate. Hence, there is a huge gap in academia and industry interface when it comes to the tourism and hospitality sector in Nepal. For the first time in the year 2016, Prof. Ramesh Raj Kunwar studied academia and
industry collaboration in the hospitality sector in Nepal and published an article titled “A study of hospitality internship in Gokarna Forest Resort, Nepal”. The study has focused on the importance of the internship in hospitality sector for both academia and hotel industry which presented an internship from various perspectives including the concept of internship, knowledge before, during and after internship, learning experience, difference between theoretical and real-life world (Kunwar & Khatri-Thapa, 2016).

Based on this study, it is highly recommended to carry out research on academia and industry interface with special reference to Nepal’s tourism & hospitality colleges, and travel & hotel industries as Nepal is a fertile ground for this kind of study. Therefore, this study could be a reference for future study.

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