

A systematic assessment of gaps between academic research and industry participation in hospitality management discipline

Mahmood A. Khan

MSBA Program, Department of Hospitality & Tourism Management, Virginia Tech, Pamplin College of Business, 7054 Haycock Rd. Falls Church, VA, 22043, United States

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ABSTRACT

This paper is an outcome of a pursuit to assess the collaboration or a lack of, between academia and hospitality industry during the past 30 years. The primary objective was to investigate if there are any gaps between the academic research and hospitality industry collaboration, using a qualitative assessment of selected data for the past several years. Sources of information include: (a) all published papers in peer-reviewed hospitality journals from 1988 to 2017 and (b) a secondary systematic review of all papers (161) published in the Journal of Hospitality & Tourism Research from the year 2013–2017 for analyses of practical/managerial implications mentioned by authors. As a result of systematic assessment, six different gaps were identified which are described in detail. Finally, possible ideal collaboration between academe and hospitality industry is discussed considering the existing gaps. Possible recommendations for bridging the gaps are listed.

1. Introduction

Over thirty years ago, hospitality educational program administrators were asked as to how their institutions will gain from a research program supported by the industry (Khan and Olsen, 1988). Their responses included (a) the industry is more likely to provide monetary support to a good research program, which was badly lagging at that time; and (b) the industry is more likely to make information and research resources available to institutions that have established a sound research program. This paper is a result of a pursuit to systematically and comparatively assess the collaboration or a lack of, between academia and hospitality industry, primarily in relation to research during the past 30 years. The main objective of this study is to investigate any gaps between the academic research and hospitality industry collaboration, using a qualitative assessment of selected data for the past several years. An earlier review of research emphasized that many topics and subject areas in hospitality and tourism management need further exploration (Demetriadi, 1995). According to Ingram (1996), issues of current interest offer the academic researchers the opportunity to explore areas, which need greater exposure, as well as to provide an interpretation on their future importance to the industry. Despite more than four decades of research in hospitality and tourism areas, limited attention was focused on the characteristics and applicability of research to practice. A review in the area of human resource management and organizational behavior found that the hospitality authors are primarily taking ideas and concepts, which have been developed in the

mainstream business literature, and applying them to the hospitality context (Guerrier and Deery, 1998). These ideas and concepts may not be applicable to service oriented hospitality industry. Although, hospitality researchers are increasingly publishing in mainstream journals their work is rarely cited by mainstream researchers. Although there is considerable body of research literature related to hospitality managers, gaps do exist. A noted difference is that the primary focus of academic research work is on unit managers rather than at the corporate level. Consequently, little information becomes available about the real nature of management (Guerrier and Deery, 1998).

Jones and Philips (2003) outlined some of the differences between how industry uses research compared to academia. Industry uses research for decision making, whereas academe uses it to extend the body of knowledge. Research by industry is superficial with short time line, whereas academic research is lengthy and based on formal methodology and critical analyses. In addition, the research conducted by industry is mainly for internal use whereas the academic research is intended for researchers' use, valuable only if published in professional journals. Above-mentioned differences clearly expose potential gaps, which led to further exploration of relations between academic and industry research. The fact that research can have an impact on teaching cannot be ignored. The best classroom experiences are those in which professors with broad research perspectives analyze cases that challenges and peel away layers of hidden messages required for effective business decisions (Bennis and Toole, 2005).

It is imperative to understand the needs of the industry by academia

E-mail address: mahmood@vt.edu.

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in order to plan mutually beneficial research studies. Haemoon et al. (2004) identified several gaps after a review of marketing research published in selected hospitality and tourism journals from 2002–2003. These gaps between hospitality and tourism marketing research and industry's needs were addressed primarily to encourage research on neglected topics. Covered topics included demographic changes among guests, travelers and patrons in light of their needs. Authors concluded that while hospitality and tourism research was growing in its scope and rigor, it still did not seem to fully meet the industry's research demands with regard to topical diversity. King et al. (2011) found that no attempt has been made to consider the needs of hotel industry on a collective basis by academic research. They recommended that academic research within an applied industry context needs alignment with business issues, in order to gain support from the industry.

An opposite point of view based on growing body of research showed that financial relationships with industry increase the likelihood of pro-industry findings, biased interpretations of data and under-representation of alternative interpretations (Babor and Miller, 2014). This fact was co-echoed in an article by Cassidy (2014) in reference to the funding provided by the gambling industry for research. According to the author, researchers are able to construct silos from which they defend their approaches and disparage alternatives.

In any case, the current need for identifying gaps is more important now since academic hospitality research has grown considerably during the past decade. Based on a review during the past two decades, Rivera and Pizam (2015) concluded that hospitality management research has progressed and advanced to a level of sophistication and scientific rigor. The findings demonstrate that over the years, there has been a shift away from descriptive research. Research has little value for practitioners if it did not provide solutions to problems faced daily by practitioners. Thus rather being recorders of industry practices, hospitality researchers have become problem solvers (Rivera and Pizam, 2015).

In a study (Elnasr Sobaih and Jones, 2015) the gaps between academia and industry research were found to be related to several factors which 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.

Considering the gaps, Baker and Magnini (2016) developed a more representative constituency model for hospitality marketing, which hopes to provide academics and practitioners with a more comprehensive framework that will facilitate research, specifically related to hospitality marketing and theory development.

Even among similar disciplines, there is a difference between hospitality and tourism research compared to general business areas. For example, Kalargyrou and Costen (2017) found that despite twenty years of research on the subject of diversity management, hospitality and tourism field has not progressed as much as general business. The hospitality and tourism scholarship has focused on evaluating organizational diversity programs and related training to identify best practices for managing diversity. By contrast, the general management research investigated the degree to which the widely held business case for diversity is valid and how specific demographic groups navigate their work environments. Hospitality and tourism scholars will need to be more intentional and focused on critical areas (Kalargyrou and Costen, 2017). Similarly, Perea and Brady (2017) found disconnect between the business school research and the world of business practice. It was suggested that this gap might be difficult to bridge without first tackling the academic reward system.

A point that need consideration is the accessibility of information by industry researchers. A quantitative study (Vong, 2017) showed that the most common sources of information for practitioners were

company and personal networks, and the least common sources were academic journals and conferences. The readership of academic journals and interest in research collaboration remained low, in spite of the prevalent hospitality and tourism research topics being relevant.

Differences were also found in the methodology and interpretation of research data. Mariani et al. (2018) analyzing large data found that the academic research was fragmented in scope with limited methodologies and several gaps. A conceptual framework related to business domain and identification of critical business intelligence using big data was found to be missing in hospitality management research. Despite calls for more integration of management and data science, cross-disciplinary collaborations with computer and data scientists are rather episodic and related to specific types of research work.

It is evident based on a review of literature that studies focusing on gaps between academic and industry research is sporadic which makes it necessary to reassess and seriously consider bridging the gaps. The desired outcome of this study is to spur further discussion about bridging these gaps.

2. Methodology

This study is primarily based on qualitative analyses of literature with limited quantitative assessment in support of derived arguments, where necessary. A variety of information was collected from different sources, spanning back several years, to identify possible gaps in research collaboration by hospitality academe and industry. Specifically, the information reviewed include: (a) All published papers in peer-reviewed journals from 1988 to 2017, scanned under the search keys related to the gaps in academic and industry research using the ABI/INFORM Global from ProQuest database. This database provides all peer reviewed research work within several disciplines and journals. (b) Hospitality & Tourism Complete from EBSCOhost database to further refine the findings using similar search keys during the same period. This database focuses mainly on hospitality and tourism research. Published papers were reviewed for each year using both databases and the research work was classified based on functional hospitality areas and pertinent important issues during the past 30 years. (c) A separate systematic review of all papers (161) published in the Journal of Hospitality & Tourism Research from the year 2013–2017 mainly for analyzing practical/managerial implications mentioned by authors of each of the peer-reviewed published studies. Content analyses of the implication sections were conducted for each paper comparing the number of words within the most affective portion of the write-up to the total number of words in the section. Only one hospitality journal was used for comparative assessment and as an example in support of the utility of inferences described by the authors. A typology of the implications was developed based on the applicability of the inferences. In addition to the mentioned databases, observations and discussions with both academic scholars and industry practitioners during the past several years were valuable in support of the arguments.

3. Discussion

As a result of the extensive review of publications during the past 30 years, several gaps were identified, mostly based on qualitative data and some based on limited quantitative analysis as well as informal feedback from experts. The gaps identified are only prepositions at this point and therefore subject to further verification and challenge. The focus is on most probable gaps between research conducted by academia as compared to what was/is done by the hospitality industry, in general. The intent is to critically analyze the gaps and elaborate on the affiliated reasons with a desire to incite a dialogue for bridging the gaps, finally resulting in a mutually beneficial collaboration between the academia and the hospitality industry. In an ideal situation, both parties should have strategies, which will help each other in achieving a common goal. A framework of positive relationship is visualized and

shown as an example at the end of this paper.

3.1. GAP 1. Application: academe is not providing information that the industry needs in a timely fashion or providing information that they already know

This gap concerns with the practical application of academic research findings by hospitality industry. Most probable reasons for this gap are described under the following headings:

3.1.1. Utility

According to [McKercher \(2018\)](#) hospitality and tourism research has become a competitive sport where the goal is to churn out as many papers as possible in as short a time as possible, while ideas matter little. Researchers are forced to meet performance metrics based on the number of published papers in elite or well-recognized journals. This objective creates a wedge between academic interest and hospitality needs. One of the reasons why industries may hesitate to rely on academic research is that it is answering questions, which were never asked. Apparently, much of the academic research is for the consumption and usage by colleagues. Whereas, industry wants research on topics of current interest which will help in their day-to-day business operations.

In order to verify above assumptions a survey of all papers published under the title of hospitality for the past thirty years (1988–2017) was undertaken. It is interesting to note that much of the rigorous research publications in hospitality appeared after 1997, which is rather late compared to other business disciplines. As shown in [Fig. 1](#) peer reviewed research in hospitality for the past two decades was primarily focused on the functional areas of marketing and strategy. Of course, these two areas are important for the hospitality industry, however, the industry have ample help in marketing area from both academic and non-academic sources. There are also several publications in the area of strategy, which are more theoretical than practical. The lower numbers of research publications were in the area of finance, human resources and operations. These areas are of utmost important to the hospitality industry in their day-to-day operations. Finance is one of the areas where hospitality academia lacks expertise, with very few scholars who can help industry on finer points of financial performance and eventually the bottom line or profitability. Similarly, although there are considerable published studies related to human resources and operations, more applied research is needed since these areas are dynamic with rapid changes over time.

Apart from the functional areas, data were collected based on topics of current interest for the past two decades. A review of the needs of the professional organizations both in restaurant and hotel businesses,

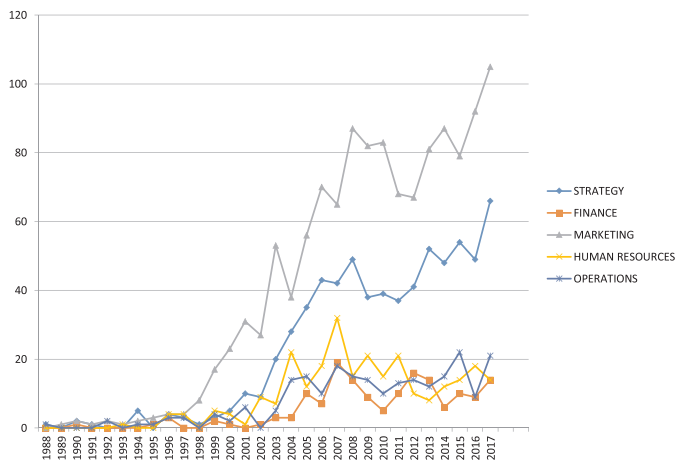


Fig. 1. Number of peer reviewed papers published in the Journal focusing on functional areas.

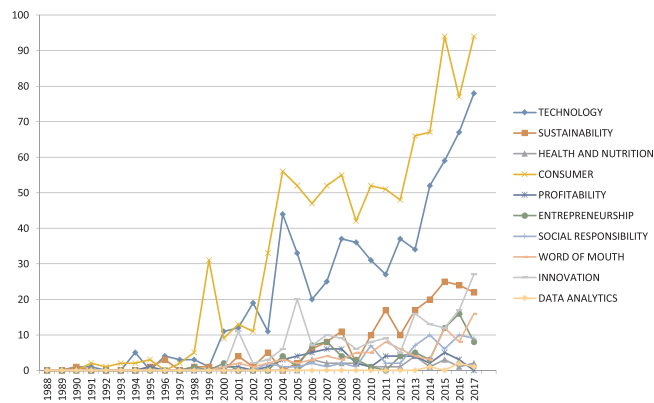


Fig. 2. Number of peer reviewed papers published in the Journal focusing on contemporary issues.

revealed that health, nutrition, sustainability, innovation and data analytics are important considering the industry and consumer needs during the past several years. Based on some of the contemporary topics, peer reviewed papers were searched to see the numbers of publication during the past 30 years. This information is graphically presented in [Fig. 2](#). There were numerous publications related to consumers from different points of view, followed by publications in the area of technology. Ironically, the number of publications in the area of health and nutrition, profitability, entrepreneurship, social responsibility, and data analytics were few. These are the areas where industry needed more research work in hospitality during the past decades. There seems to be an upsurge in research in these areas since 2010, which is a healthy sign. Of course, there are other non-hospitality areas, which cover some of these topics, however, they may or may not be of use in a service-oriented industry. Technology received almost equal emphasis, with articles focused on operational efficiency enhancements and application solutions. As seen in the graph, technology will continue to be of importance to the hospitality industry. Data analytics and big data handling are other topics on which research is needed to fill the needs as well as bridge the gap.

3.1.2. Value

A serious point that need consideration is the value that the research work adds to the current practices and operations of the hospitality businesses. In a study conducted by [Haemoonh et al. \(2004\)](#), the majority of the studies were found to be exploratory or application-minded, simply “trying out” some research questions or testing some borrowed theories. The studies were typically absent of testable formal hypotheses and tended to be driven by data or methods. Applications were fine but a stronger conceptual rigor and meaningful contribution seems to be lacking. This is an example as to how even some good intentioned research does not reach the point of adding real value to the end users, particularly in the hospitality industry. In agreement with the authors, it is fair to conclude that if the research is based on whatever data are already available to industry, then a refined exploration or modification of the existing information may be of little value, since the industry can get access to the information they need from other reliable sources, such as databases or private consultants.

Researchers should focus on value-added benefit embedded in their research with very clear explanations as to how the findings can be applied in decision-making or day-to day operation. It is common understanding that unless the value is apparent there will be limited support, both financial and collaborative from businesses. All indications are that the academic research as it stands now has not reached a level that will provide on-going value to the industry. Comparison can be drawn between the amount of funding that is provided by the auto industry to engineering faculty or pharmaceuticals to medical research, to what is provided to scholars in hospitality management. Industry will

be eager to help once they know that the findings will be of value to them in the long run.

3.1.3. Methodology

Data and methods are just selected ways or means to achieve the (conceptual) goals of a study. They should be based on competent analyses that merits generation of meaningful knowledge and substantive contributions to the literature (Haemmoon et al., 2004). Academia is handcuffed by the publication requirements to have sound methodology in research undertakings. This demand for methodology is getting more sophisticated with improved statistical applications and models.

Using a methodology that does not mimic what is applicable to industry add a little value even to a rigorous research findings. Real laboratory replications have proven valuable to scientific research, which garner considerable funding and support from the industry. Instead of entering the world of business, professors set up simulations to see how people might behave in what amounts to a laboratory experiment. Although useful, they often fail to reflect the way businesses are conducted in real life (Bennis and O'Toole, 2005). In addition, it becomes very hard for someone in the industry to understand and keep pace with newer methods of analysis. Even the vocabulary used in the write-up sounds alien to those in the industry who would seriously consider using research findings. In addition, the use of surveys, students, and other convenient way of sampling, does not go very well with the needs of the business world. Most of the studies conducted by academic researchers use surveys for research, the validity of such results becomes difficult for the industry to apply in real life situations. As an example, a research (Dolnicar, 2018) found substantial variation is both in terms of who responds to survey questions (raters) and in the constructs under study. According to the author, a small number of constructs are investigated frequently and most often does not portray the actual behavior. On the other hand, the industry is reluctant to let their facilities be used for research or survey for different reasons. At times, the pressure to have empirical research makes things further complicated diluting the impact of qualitative research. Research methodologies, particularly the qualitative ones, are recognized as valid techniques to map the inherent richness of hospitality & tourism. More experimentation and interchange with the hospitality industry are needed to develop methodologies which are mutually understandable and through which research may be made more accessible and credible (Ingram, 1996).

3.1.4. Comprehension

The common question that often props up after reading a research article is “so what?” – the answers to which may not be apparent. Business professors too often forget that executive decision makers are not fact collectors but are fact users and integrators (Bennis & James, 2005). Particularly the use of mathematical models, equations, and formulae gets very confusing for most of the managerial or supervisory level workers since they are not at a level to understand many of the academic lingo and techniques. The most useful research finding is one that can be easily understood and applied. In reality, the level at which most of the hospitality research has been conducted and presented does not align with the comprehension capability of the day-to-day managers. For example, authors Xu and Martinez (2018) indicate that researchers can benefit using LGCM (Latent Growth Curve Modeling) for further research in hospitality and that their use can answer pressing and complex questions in the hospitality industry. This very well written paper primarily addresses academic researchers, rather than to those working in the hospitality industry. The level of research and direction of majority of hospitality research are mainly geared towards academic researchers rather than those facing problems in the hospitality industry. Moreover, it is not possible for a hospitality manager to understand how different analytical research techniques work. Predictably, industry personnel will shy away from complicated

terminology or wait for its applications from trade journals, or rely on a simplified version, if at all available.

3.1.5. Delay

The time lag between what is needed by the industry and the time it takes for a publication to reach industry personnel either as hard copy or online makes a difference. The hot topics need immediate assistance. For example, legal issues like minimum wage for employees or food safety issues, require immediate assistance supported by solid data. This is not possible due to other commitments by academic faculty, thereby making industry to seek help from non-academic consultants or seeking other possible alternatives. By the time the issue is formulated by a study, resources are secured, data are analyzed, peer reviewed, and published, it may be of little or no use to the industry. Industry needs immediate answers that they can use as a support in operations or decision making. In addition, academia does not have a depository of information since the research areas are individualized and fragmented. The requirements for getting tenured and emphases on a focus area, limits, sometimes handicaps, the expertise of a scholar. Most industry research demands are urgent, short-termed, and instant. On the other hand, researchers do not foresee any benefits in publishing incidental solutions even if permitted, since those are not considered as having the required academic rigor for promotion and recognition.

3.1.6. Bottom line

Obviously, businesses always consider their profitability and any impact that it can have by supporting a research endeavor. The financial support is directly related to the benefits that an industry derives by helping academic world. Apparently, much good research is stymied by the lack of resources. Much of the support by the industry is earmarked towards student recruitment or scholarships rather than for research. Often it is based on public relations or brand recognition. If a major benefit from the research findings is shown, then industry will jump on such an opportunity. Ideally, it will be desirable to initiate long-term research after consulting with the industry on issues that are mutually beneficial. The research should have sound proposition, methodology, application and easily understood outcome. Businesses are anxious to find ways, which will benefit their bottom line or result in solving problems they are facing.

3.2. GAP 2. Communication: there is a considerable communication lag between hospitality academia and industry.

The following points explores the reasons for this gap.

3.2.1. Outreach

Reaching out to specific segments of industry on a continuous basis is not a goal of many institutions, except in the cases of land grant institutions, which have designated “extension” positions. Many schools do not have an intermediary faculty of practice or extension positions, solely dedicated to translating and transferring research conducted by faculty to hospitality industry. Even the section, which is earmarked as “practical implications” and required by almost all of the professional journals, is of little use to the practitioners. This may be due to one or more of the following reasons: (a) it is not accessible or does not reach professionals in the industry; (b) it is hard to comprehend by those who can benefit from the findings; (c) is of little use due to the methodology, such as sample surveyed; (d) is too late to be of any use; and/or (e) the research findings does not clearly explain its application. Timely, concise, and useful information provided on a continuous bases by institutions will solve many of the above-mentioned issues.

3.2.2. Publish or perish syndrome

A major gap between the academia and industry can be traced to the excruciating pressure to publish in elite journals particularly for securing tenure. This severely limits faculty from taking up issues facing

industry and focusing on contemporary issues. According to, [Bennis & O'Toole, 2005](#) at many business schools, the road to tenure does not run through fieldwork in businesses. It is possible to find tenured professors of management who have never set foot inside a real business, except as consumers. Paradoxically, a faculty member who publishes in a quantitative journal is likely to get tenure while another member risks being denied tenure for publishing in a trade journal, which is more likely to influence business practice. Sometimes faculty are swayed by the glamor of popular issues, which at times are short lived. For example, the use of social media in research attracts attention and it is easy to get the work published since a considerable volume of data can be secured in a short period of time. However, the extent to which the results of such studies are applicable to the industry is debatable. Another problem is the emphasis in tenure decisions for a research focus and area of specialization, which restricts many from venturing into other areas. In short, it is hard for researchers to focus on issues that will not lead to scholastic publications or acceptance by professional journals in a very competitive environment.

3.2.3. *Research interest alignment*

This is in support of earlier points that the interest of the academia does not align with those in the industry. Findings from a study related with bridging the gap between industry and academic research, [King et al. \(2011\)](#) suggest that industry priorities are not consistent with the emphasis in the academic literature. For example, generational changes and competitive markets may demand an entirely new approach for decision-making. Attention towards dynamic contemporary issues are of particular value to the academia as well as industry. A sincere effort is needed by research scholars to carefully align their research agenda with the needs of the hospitality industry.

3.2.4. *Practical implications*

Almost every peer-reviewed journals ask for practical implications of research findings under one heading or another. Presumably, this section is intended to help the hospitality industry in benefiting from the research findings. However, there are many reasons the industry does not receive desired benefits from these sections. In order to assess the applicability of inferences drawn in research publications, content analysis of 116 research papers published in the Journal of Hospitality & Tourism Research from 2013–2017 was conducted. The results are presented in [Tables 1 and 2](#). The total number of words in each section was recorded as shown in [Table 1](#). Within the discussion of the practical applications, words referring to the most comprehensible and useful component were isolated and computed as a percentage of the total words in the section. Also in order to clearly visualize the effectiveness of this section, a typology was developed after a careful reading of each research paper. Scores were assigned based on the effectiveness of the statements using the following criteria: 1: Vague or no clear implications; 2: Some implications but no clear applications; 3: Average write-up with some clear implications; 4: Significantly clear implications with

Table 1
Average number of words and Effectiveness Scores for Practical Implications.

Year	Average Number of words	Average Number of directly related words	Percentage of directly related words	Effectiveness Score ^a
2013	232	43	18.3	2.50
2014	184	60	32.5	2.71
2015	330	40	12.1	2.66
2016	316	37	11.8	2.50
2017	392	52	13.2	2.20

* 1: Vague or no clear implications; 2: Some implications but no clear applications; 3: Average write-up with some clear implications; 4: Significantly clear implications with little or no applications; 5: Highly significant implications with practical applications.

Table 2
Distribution of reviewed applications within industry segments.

Industry Segments	(N = 116)	
	n	%
General tourism/destination marketing	25	21.6
General	16	13.8
Restaurant/foodservice	14	12.1
Consumer studies	14	12.1
Government/Organizations	12	10.3
Hotel/lodging	8	6.9
Services Management/Quality	8	6.9
Online/Social Media	8	6.9
Human resources general	8	6.9
Casino/gaming	2	1.7
Convention/conference	1	0.9

little or no applications; 5: Highly significant implications with practical applications. It was interesting to note that invariably all authors mentioned that their research findings have numerous applications. However, some of these applications were not clearly defined. The number of words counted for the entire section ranged from 184 to 392. Evidently, the practical implication section was very wordy and was often overstated by citations of work by other authors. This practice is fine for academic purposes but it is hard for someone in the industry to extract the essence of the applicability. As shown in [Table 1](#) the average affective words ranged from 37 to 60 corresponding to 11.8–32.5% of the entire section. This shows that a comprehensive description of the practical implications in few simple words will be of immense help in understanding of the findings by the practitioners. The average effectiveness scores ranged from 2.20–2.71, which falls between “some to average” usefulness. Many sections included unnecessary information or a repeat of the findings, which is of limited use as well encroach on the limited available space in academic publications. Few papers, which scored four or higher had very clear steps by which the findings can be used by industry practitioners. It will be desirable if authors or publishers can extract in simple terms (such as bold or highlighted points) as to how the findings can be applied in practice. Medical and nutrition oriented journals often highlight points within each research paper, which helps in understanding the major outcome of the study by practitioners, media or lay persons.

Another observation which is worth mentioning is the variety of industry segments affiliated with research work for which implications were analyzed. As shown in [Table 2](#) out of the 116 implications prescribed by reviewed research papers, a majority were in the area of tourism followed by general area, restaurant/foodservice, consumer studies and government/organizations. Thus in every volume of the journal, papers comprised from a variety of different industry segments. Although desirable, this large spread of areas limits the amount of applicable research in a specific discipline. For example, someone in the foodservice business will be looking for research that relates to his or her area of interest. Apparently, one will find few papers in any issue of a journal that covers wide range of disciplines that would be of specific interest. This is an issue, which is difficult to overcome and underscores the need for more independent publications on specific topics in hospitality management. Another possibility is for journals to publish special issues based on selected area of research.

3.2.5. *Terminology*

It is often observed that the terminology used by industry is different than what is used by academia. Particularly the scientific lingo is very hard to comprehend. For example, many do not understand what is meant by organoleptic evaluations or even convenience sampling. Similarly, many academics may not relate to “RevPAR”, or “Same Store sales.” These words have different meanings for different professionals. It becomes difficult when such terminologies are used even with the

same meanings. Researchers are getting more and more accustomed to sophisticated statistical analyses, which results in developing models, or constructs, which use terminology that is hard to relate. Financial decision making and controls have different technical terms in use, which have very specific meanings. In addition, the use of calculus based formulae and equations add to the complexity and lack of understanding by practitioners, particularly if they are not exposed to such knowledge base.

3.2.6. Professional links

There is a lack of links between researchers working in the industry with academia. Ideally, it will be an excellent example of collaboration if coauthors come from academia and industry on a research project, as seen in many of the medical and engineering research. Professional organizations can help in building such links by acting as go-between the two parties or facilitating networking among members.

3.3. GAP 3. Experience: there is a considerable lag between educational and practical experience between hospitality academia and industry

3.3.1. Industry experience

Many research scholars lack sufficient hands-on operational industry experience at a level where research work will be of benefit. This is normally at a higher management level, someone who can understand research and its implications. Most faculty connection to industry is through case studies, anecdotes, published comments, or just interviews. The lack of in-depth insight into the working knowledge or strategies limit the capability to solve problems. Sometimes this is evident from the conclusions and practical applications drawn by authors even when studies were empirical. Encouraging academicians to work for industry on sabbaticals and work experience at a management level may alleviate this deficiency.

3.3.2. Academic experience

On the other hand, most industry personnel lack academic and research experience. They are good in operations and not in research techniques. They have limited research knowledge since most do not have terminal degrees or their job requirements do not allow time to acquire those skills. Simultaneous exchange for those working in industry to work on university research will be helpful. Here the problem relate to the qualifications and understanding of the basics of research. If institutions can design short-term courses or workshops, which will enhance the research experience of those who do not have terminal degrees, might be one of the possible solutions.

3.3.3. Motivation

There is an apparent lack of motivation from either side to engage in collaborative and productive research. There seems to be a sense of comfort with the status quo by both sides. No strong efforts are made by either side to initiate research, which will result in groundbreaking theories or innovative products and services. Industry is satisfied with whatever trial and error tactics that they are used to and academia is convinced to follow the historical patterns of conducting research. Thus, there is a parallel approach in ways of conducting research with both sides proceeding with no signs of a merger in the near future.

3.3.4. Job requirements

The respective job requirements of both academia and industry personnel does not allow time for research. Other than larger corporations, businesses do not have positions specifically earmarked for conducting research. The nature of the tasks and job descriptions for professionals on both sides are starkly different. For academicians teaching demands a significant amount of time, thus limiting the time to explore industry issues. On the other hand, in industry, operations consume a big chunk of time, with limited opportunities for meaningful research. Also in industry, supervisors outlook and business strategies

dictate the amount and type of research that can be undertaken, if any.

3.4. GAP 4. Research Quality: there is a discrepancy between the understanding of the research quality between academia and industry

3.4.1. Focus

The foundation and interpretation of research varies considerably between academia and industry. The focus in the industry is on research designed for development or problem solving purposes and revolves around the existing operational needs. In academia, there is a broad perspective and the research is not restricted to a specific area or time. Sometimes the research work is initiated without concentrating on a specific problem. This type of broader perspective is required in order to develop foundational research and support academic standing. In addition, most faculty with terminal degrees stick to their areas of interest, which may be based on fundamental research. In other words, academic research is conducted first and then its practical application is sought for the hospitality industry. This does not help the industry's focus on problems, which need immediate solutions. Academic research is not necessarily designed considering the profitability whereas industry research is very sensitive to the bottom line.

The focus of academic research is unfortunately dictated by topics that are broad, interdisciplinary and which result in publications. Added to this, the lack of communication with industry results in the absence of innovative approaches based on current needs. Some corporations have their own R & D (Research & Development) departments, with good research facilities but there is seldom interactions or collaborations between academic scholars. Most often, it is the confidentiality of the information, which restricts those working on research in industry to align with academia in their area of expertise. Only when there is an acute or chronic problem that they seek help from academic researchers. Alternatively, the apparent lack of industry experience by academics may create hesitation among scholars to contact peers in the industry. Academic researchers also focus on fundamentals and theory building, which are of limited interest to the hospitality industry.

3.4.2. Value-added features

Hospitality industry is mainly looking for a value-added research, which holds potential for business success. Trade publications therefore focus on areas, which are more pertinent to their business success such as entrepreneurship, social responsibility, innovation, use of social media, data analytics and sustainability. However, as seen in Fig. 2 published peer-reviewed publications are lacking in these areas. Particularly data analytics and handling big data are important topics, which will add value and innovativeness to the industry.

3.4.3. Contemporary issues

Hospitality issues are always dynamic and change frequently. The problems are mostly short-term with immediate need for solutions. Being engaged in such short-lived projects draw research scholars away from their on-going research as well as interrupting their teaching responsibilities. It is also possible that most research scholars are not aware of the real current issues, which they often read from either trade journals or news items. Most are also not privy to strategic decisions. Therefore, any suggestions for research on a topic by academic faculty may be of little interest to the industry since they already have sufficient information and may not be worth pursuing. In addition, most of the academic research cover customers' point of view rather than the industry's.

3.4.4. Time constraints and deadlines

Industry demands quick solutions with short deadlines. With all work responsibilities related to teaching and research, academicians are not prepared to respond on a short notice or do work that is satisfactory to the industry. Unfortunately, sometimes industry assumes that faculty

have more bookish theoretical knowledge. They also do not have an understanding of the time commitment. Thus when they give deadlines, they expect work to be completed as they would expect from any of their employees. Few in the industry realize that faculty work on a different timetable with heavy teaching load during regular semesters.

3.4.5. *Compatible research quality*

Apparently, it seems that the industry has doubts about the capability or the quality of research they can expect from hospitality faculty. The lack of experience, particularly in the way in which the industry operates, makes them feel that the faculty are unaware of the operational parameters and so relying on them to solve problems is fruitless. Moreover, they do not have time to teach or reveal their operational systems. Since academics learn from theories, their application, methods or way of thinking sometimes does not align with industry. Academics are not aware of short cuts which industry may take in order to facilitate operational management. Thus, there is a sort of pseudo-suspicion, which result in hesitation between both parties. Individual faculty members are solicited by the industry only when they are well established in their field of study and of assured beneficial output.

3.5. *GAP 5. Trust: there is a considerable lack of trust about overall performance between academia and industry*

3.5.1. *Confidentiality*

It was reported that the reasons for gaps stem from a lack of mutual trust between academic institutions that believe that industry does not value academic research whereas the industry considers university researchers does not have an understanding of the needs of the industry (Elnasr Sobaih and Jones, 2015). One of the major problems associated with the hesitation by the industry to assign research work to academia is the confidentiality. On one hand, the industry is reluctant and hesitant to provide their data to faculty whereas on the other hand academic regulations require transparency.

Different barriers for getting approvals from the university departments can potentially expose the nature of work, which the industry would rather keep it confidential. In addition, institutional sponsored research agreements are at times complicated which the industry may not understand or would like to get involved with. The need for transparency may expose information to competitors and other regulatory bodies, which may be the primary reason for not assigning research work to academic institutions.

3.5.2. *Copyrights*

Related with the earlier mentioned confidentiality issue, a major hurdle is the copyright transfer for sponsored research work by the industry. The authorship of the research output whenever a work is published becomes a negotiation nightmare. This becomes more complicated when patents are involved. Institutions have their own policies about patents, which may or may not entertain industry partners for any patents originating from the assigned research work. Most often industry does not understand the rules and limitation of copyrights. There are ways by which industry can secure copyrights of research work. It comes down to the mutual understanding between both partners. Other companies like automobiles and medicine rely on research work done by academia. Some corporations establish permanent offices on institutional campuses to be near research experts.

3.5.3. *Competitiveness*

Although there is no threat of competition between academia and industry, it is the possible exposure of the data and area of research that can end up in the hands of the competitors' indirectly through published research or through university public relation messages. Universities normally have sponsored program units, which handles external resources for research. Thus, there is another layer of exposure

and completion of legal requirements. Other requirements such as legal documents, tax implications, use of human subjects, and other ethical standards may serve more of an obstacle discouraging participation by the industry. There are also conflict of interest documentations, which may add to the complications.

3.5.4. *Student involvement*

Academia, particularly at the graduate level have a tendency to involve students. This may be in the form of graduate research, project papers, thesis or dissertations. This may give a false impression to the industry that the research is being handled by students who are learning while researching. This again creates some hesitation to seek help from the academia. On the other hand, sometimes, the industry may assume that the work is of lower quality since students are involved. In addition, students helping faculty have their own goals and they have to fulfill their requirements to graduate. There exists possibilities that the student may leave in the midst of a research project. Other than some unforeseen circumstances, this is only a perception since student involvement and hard work increases the strength of the research outcome. Industry need to understand that quality research work can be conducted by academia at a fraction of the costs compared to being done by commercial agencies.

3.5.5. *Seasonality*

Demands for research work by the industry fluctuates and may not coincide with the academic timetable, which varies considerably. In addition, breaks during summers and holidays interrupt the opportunities to provide consistent and continuous communication related to research. Academia often cannot meet the deadline set by the industry during academic semesters due to teaching load. Most faculty are available during summer time, which may be a busy period for many hospitality operations and not a desirable time for research engagement. Thus finding an ideal period of time for research, which is convenient for both parties, may be difficult.

3.6. *GAP 6. ROI: there is a gap between ROI (Return on Investment) expectation between academia and industry research partners*

3.6.1. *Return value*

Industry's focus is on their return on investment, which is their main reasonable concern. The investment may be in the form of financial support, time commitment, or profit expectations. Often faculty are willing to work on voluntary basis for experience or charge a nominal fee for research expenses. Even when research is undertaken on complementary bases, the perception of the quality of research may get tarnished. For complementary work, faculty or their students might not be motivated as desired. There is no guarantee that the work assigned will be completed or completed on time since there are very limited obligations to comply. The other value relate to the significance or applicability of the research. The industry will always compare the work done by a paid consultant/company to the benefit derived by using academia for solving their problems. Academia need to learn as to how small independent consultants deal with any assigned projects they are working on. The professional presentation of the reports carry a lot of weight, which is sometimes ignored by the academics.

3.6.2. *Time commitment*

As mentioned in all of the earlier points, the industry will evaluate the time commitment from their side. Often the industry need credibility in any of the research findings. Work conducted by academia may not carry as much weight as a similar work conducted by a commercial firm. Industry evaluate the value of their time commitment and the reliability of the information provided by the academia. For example, an academic researcher may take an entire semester to complete a project due to time constraints.

Table 3

Recommended steps for bridging the gaps between research conducted by academia and hospitality industry.

No	Gaps	By Academia	By Industry
1	<i>Academe is not providing information that the industry needs in a timely fashion or providing information that they already know.</i>	<ul style="list-style-type: none"> a <i>Keep in touch with research needs of the industry and find mutually beneficial research areas.</i> b <i>Find value-added component in research.</i> c <i>Select methodology which is applicable and understood by the industry.</i> d <i>Make the outcome easily comprehensible and appreciable.</i> e <i>Be sensitive to the deadlines.</i> f <i>Consider the profitability of research.</i> g <i>Provide journals or abstracts of research findings to industry personnel.</i> 	<ul style="list-style-type: none"> a <i>Explore institutions where mutually beneficial research is being conducted.</i> b <i>Seek researchers who can complement or provide needed advice.</i> c <i>Understand the role of academics and their obligations.</i>
2	<i>There is a considerable communication lag between hospitality academia and industry.</i>	<ul style="list-style-type: none"> a <i>Develop sound mutually understandable relationship.</i> b <i>Build confidence.</i> c <i>Develop a bridge between industry for continuous communication.</i> d <i>Use case studies and short research papers.</i> e <i>See how parts of research done for industry might contribute to tenure decisions.</i> f <i>Clearly outline the interpretation and application of research findings.</i> g <i>Understand the terminology used by the industry.</i> h <i>Develop links by networking and industry contacts through meetings and professional organizations.</i> i <i>Present research findings in seminars and meeting where industry is represented.</i> 	<ul style="list-style-type: none"> a <i>Develop mutually understandable relationship.</i> b <i>Explain the needs of the industry.</i> c <i>Provide opportunities for research by institutions.</i> d <i>Allow the use of facilities and resources for conducting research.</i> e <i>Involve faculty before starting any research projects.</i> f <i>Understand the terminology used by the academe.</i> g <i>Join seminars and meetings organized by institutions.</i>
3	<i>There is a considerable lag between educational and practical experience between hospitality academia and industry.</i>	<ul style="list-style-type: none"> a <i>Utilize opportunities to get practical experience during summers or sabbaticals.</i> b <i>Develop motivation by exploring new and interesting areas of research.</i> c <i>Negotiate time for research and consulting in your job descriptions.</i> d <i>Work on research in collaboration, even as co-investigators.</i> 	<ul style="list-style-type: none"> a <i>Provide opportunities for faculty and graduate students to get experience on a part time basis.</i> b <i>Gain academic experience by taking courses and attending seminars organized by institutions.</i> c <i>Join in collaborative research.</i>
4	<i>There is a discrepancy between the understanding of the research quality between academia and industry.</i>	<ul style="list-style-type: none"> a <i>Develop a focus of research aligned with industry needs.</i> b <i>Include a value added component to research.</i> c <i>Be aware of the contemporary issues and future developments.</i> d <i>Be conscious of the deadlines and time constraints.</i> e <i>Develop a compatible research agenda.</i> 	<ul style="list-style-type: none"> a <i>See similarities between research agenda.</i> b <i>Discover any value added component of research which can be conducted in collaboration.</i> c <i>Understand the time constraints of academicians.</i>
5	<i>There is a considerable lack of trust about overall performance between academia and industry.</i>	<ul style="list-style-type: none"> a <i>Develop confidence and explain the intricacies of regulations related to transparency of information.</i> b <i>Inform the copyright applications and work on a reasonable agreement.</i> c <i>Assure the confidentiality of work and rules regarding conflict of interest.</i> d <i>Select and train students who can perform quality research.</i> 	<ul style="list-style-type: none"> a <i>Understand the regulations regarding copyrights and patents before entering into research collaboration.</i> b <i>Work around schedules that do not compete with academic obligations.</i>
6	<i>There is a gap between ROI (Return on Investment) expectation between academia and industry research partners.</i>	<ul style="list-style-type: none"> a <i>Understand the ROI significance to industry.</i> b <i>Show the importance of research in terms of derived values.</i> 	<ul style="list-style-type: none"> a <i>Evaluate the value received by work done by academia compared independent consultants.</i> b <i>Consider the support industry can provide to academic research.</i>

3.6.3. Shelf life

In conjunction with several points mentioned earlier, the shelf-life of the research findings become an important consideration. Academia with continuous movements of the graduate students may not be able to provide consistent or similar research output depending on the availability of resources. This may impact the quality and quantity of work that the industry can assign to academia. It is the continuity of the research and dependability, which is of importance. The industry should also consider that they could get more mileage by working and associating with a reputed faculty researchers.

4. Conclusion

Gaps identified earlier are based on a systematic and extensive review of research conducted during the past three decades. However, the research is not completely exclusive and other gaps may exist. In short, there should be a comprehensive mutual understanding on the issues, which are paramount, or of urgent importance to the industry. Possible recommendations in order to bridge the abovementioned gaps are presented in Table 3.

Research objectives and goals vary based on several factors for both academia and hospitality industry. Obviously, the type of collaborative research should be more applied than fundamental. It is expected that there will be divergence in the agendas of hospitality academics and the

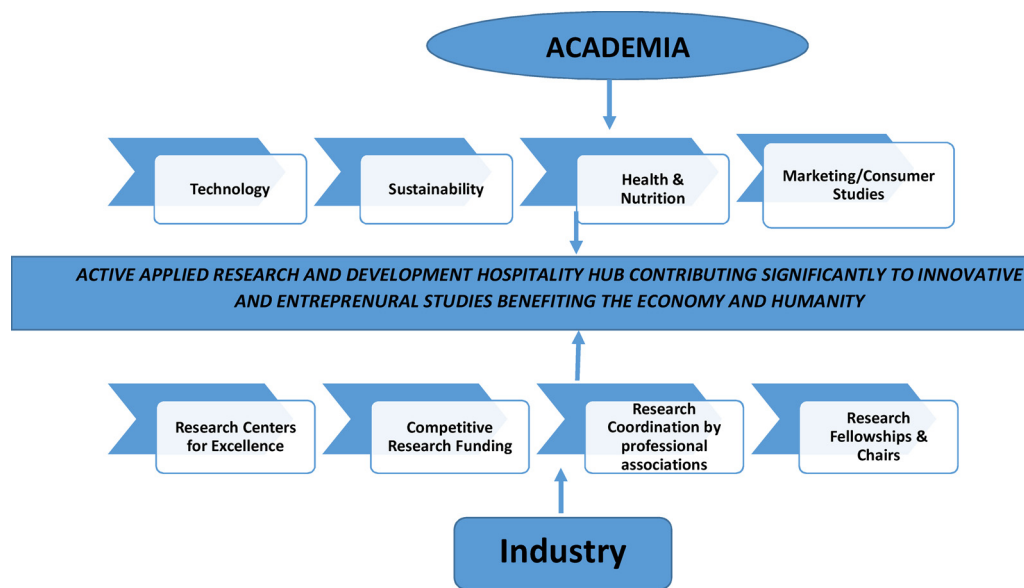


Fig. 3. Ideal or Desired relationship between academia and industry.

associated industry. On the other hand, there can also be an argument for stronger alignment between academic research and industry needs. Academics need industry support to contextualize their research and facilitate data collection.

In order for developing long-term relationship, sound strategy and plans are necessary. Considering all the challenges in bridging the gap, an ideal blueprint of collaboration between academe and industry is visualized as shown in Fig. 3. The mutual goal can be to form an active research and development hub contributing significantly to innovative studies benefiting the economy and human well-being. These hubs can be centers of research excellence housed at selected research institutions and supported by the hospitality industry. This way qualified and selected experts will be able to participate without interfering with those who would like to continue with fundamental research or research which does not necessarily involve industry such as regulatory agencies, governments, etc. These centers should be open and available to the industry researchers who can collaboratively work with faculty. The centers will serve two simultaneous functions, one with broader research being conducted by experts in academia and industry. The other having a continuous supply of financial resources from the industry matched by other sponsored agencies within and without the institutions. Research output thus will be of use by broader hospitality industry and will be available for use by operations as well as by regulatory bodies. Of course, the very confidential research cannot be published due to proprietary reasons. Such centers can be ideal testing ground for newer equipment, technology use, newer methods, etc. Similarly suppliers, governmental agencies, hi-tech corporations, and others can be affiliated with such centers. For institutions, this will be a great source for incubator research, pilot testing, large-scale consumer tests, survey institutes, etc. The greater use by industry of academic expertise, and the funding of relevant research, would contribute to a solution for both academics and management. This paper is designed to initiate discussion among scholars in academia and hospitality industry to jointly develop a solid research program that is long lasting and provide benefits to a broader audience.

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