# The most important hospitality competences in the times of digitalization

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In this thesis, the author tries to identify the most important competencies, which are needed to succeed in hospitality industry, but modernize them to better reflect the digital age of today.

In the first chapter, there's an overview of the thesis, it's background and justification for its importance for today's hospitality industry. The most important questions that are tried to answer are:

1. What are most relevant skills, knowledge, abilities and competencies, in hospitality industry, that are affected by digitalization?

2. How are most relevant skills, knowledge, abilities and competencies, in hospitality industry affected by digitalization?

The most relevant concepts are presented in the chapter 2, where competence, hospitality industry, digitalization and digital competence are explained for this thesis' purposes.

Then the seven studies from different authors in recent years are presented. The studies present most important competences in restaurant-, lodging-, travel- and events industries according to managers in different positions. The competences from those studies are analyzed based on how digitalization is affecting them.

Most important competencies in hospitality in the times of digitalization are presented and explained in chapter 3. The seven competencies are: Finding the relevant knowledge, digital interaction with colleagues, digital personal presentation, customer care, digital marketing, presentation & sales skills, ability to use technological software and hardware and accounting.

In the end the thesis presents conclusions and recommendations for the industry on how to prepare for the digital future of the hospitality industry, from competency perspective.

**Keywords**
Hospitality industry, Digitalization, Competences, Digital competence, Most important competences

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# 1   Introduction

For the past two years I have been working in a company that organizes professional events, mostly seminars, in different fields of business. The main target group for the events is executives from Finland's biggest companies and therefore I have been listening to endless presentations and discussions about challenges that today's companies are facing in different fields.

I have noticed that digitalization is a unifying theme across different fields of business and it seems to be the biggest challenge companies are facing now. Digitalization is changing the ways we work and companies are slowly but surely trying to adapt, and change their operational ways, and sometimes even complete business models. Whereas before a company would have to employ people to collect data, from where to draw business insight, today they need to employ people that can analyze, and find the relevant information from the massive amounts of data collected automatically. This is just one example of how the tasks are changing because of digitalization.

When tasks at work change, so should change the key competencies of employees. From a personal point of view as a soon-to-be graduate, this poses an interesting question about, how should one develop himself/herself in today's world to be valued among employers? In this thesis, academic literature about most relevant competencies in hospitality industry will be reviewed, and the competencies will be ranked based on how easily they are digitalized in the near future. The end product will be a list of most relevant competencies, pulled from the literature, but taking into account the digital aspect needed today. The thesis should provide useful insight that can be used by education institutes in curriculum planning, as well as businesses in their strategy, and employees in career planning.

The aim of this thesis is to find out what are the most relevant competencies today in hospitality industry, and how is digitalization affecting those competencies. Of course, there are multiple different professions and tasks in this industry, however this thesis aims to give general guidelines to someone entering the job market in this industry, about what competencies will result in a successful career in the industry. Previous research has also implicated that there is no significant difference between competences needed in different functional areas of hospitality industry, at least not between lodging, food and beverage, and meetings/conferences/events. (Sisson & Adams 2013)

Some of the more recent studies in skills, knowledge, abilities and competencies in hospitality industry will be reviewed with a digital mind set, and those competencies that are

found to be affected by digitalization will be listed in the end. This thesis aims to produce a list that can be used to see:

1. What are most relevant skills, knowledge, abilities and competencies affected by digitalization?

2. How are most relevant skills, knowledge, abilities and competencies affected by digitalization?

In the second chapter, there's a look at the most important concepts used in this thesis, focusing mostly on digitalization literature, as it will provide a basis for analyzing the competences later on. In the third chapter, seven different studies from previous years, focusing on most important competences in hospitality industry, are presented and analyzed to see how digitalization influences the competences found.

It is an exciting time to be graduating and entering the job market as the world is changing rapidly, but at the same time it is quite terrifying. Researchers from The Research Institute of Finnish Economy projected that one third of Finnish employment is threatened by computerization in the next decade or two. That's still 10 percent points less than in the USA. (Pajarinen & Rouvinen 2014) At the same time the competition for jobs is getting more global and is not anymore bound by borders of a nation or a region (Accenture 2015; Ali-Yrkkö 2014).

It will not be an easy task to find out what will happen in the future in terms of digitalization as the speed of change seems to be just growing. At the moment, there are two and a half billion people connected to the Internet and in 2020 there will be five billion people (at the time of writing there are already 3,4 billion internet users). It has even been said that only one percent has been done, out of everything that Internet allows us to do (Ronkainen 2015)

Some researchers believe that we're on the verge of the biggest societal change since the industrial revolution. This change is driven by (1.) increased capability to process and transfer data as well as increase in data items and connectivity, (2.) new pivotal, digital phenomena and (3.) the spreading of digitalization from screens to the real world. (Pajarinen & Rouvinen; Uudet teknologiat ja työ 2014)

Historically it has only been a matter of time as workers have adjusted their skills and employers have created new opportunities based on the new technology. Even though the number of workers in industries such as agriculture or manufacturing has dropped partly

because of technology, we haven't run out of jobs so far. (Rotman 2013) There seems to be a consensus, that even though one could make an argument that machines are taking over people's jobs, it doesn't necessarily mean that there are no jobs left, but instead new jobs created.

Digitalization has generated a lot of discussion in terms of working life and its future. There has been talk about the "new ways of working" referring to work that is done by utilizing the mobile digital technology, in more diverse, decentralized and individual ways, in different places, in different times and as a part of different communities and networks. (Alasoini 2015, 29-30.)

As we seem to be going through some huge changes in the ways we work and some tasks are being done completely by machines instead of humans, it raises a question, how should we prepare for working life? What are the competences that are needed in today's job market in hospitality? Jobs that require social or manual skills, such as service jobs, are less threatened by digitalization than for example routine office work. (Saijets 2009) Jeff Dachis, the founder of one of the biggest interactive agencies in the world: Razorfish, star-ted the company in the 1990's on the famous premise that "everything that can be digital, will be" (Dishman 2011) If that is the case, maybe we need to look at the things that people do better than machines, or how can people work well together with them, in order to determine how to stay employable.

A report by Confederation of Finnish Industries looks into year 2020 in services and concludes that in hospitality industry the service process itself will still be the most important factor in success. The industry, however is a pioneer in e-commerce, and most of the sales, marketing and reservations will be done online and customers seek information and make buying decisions directly online. The report suggests that service skills will be the most important competence for a worker in hospitality. Also, skills in sales and marketing, as well as business knowledge, and ability to determine customer needs are seen as key competencies for hospitality in 2020. (Elinkeinoelämän keskusliitto 2006) Sales & marketing, business knowledge and determining customer needs all are skills that require creativity, interactivity, analytic approach and people skills, which are very hard to digitalize or computerize. Other researchers have come up with similar suggestions, such as Benedict and Osborne (2013), who argued that substantial share of service occupations are highly susceptible to computerization, and therefore the low-skill workers will have to reallocate to tasks that require creative and social intelligence. (Benedikt & Osborne 2013)

A report by the Institute for the Future analyses the future work skills without considering what will be the jobs in question. The report introduces six drivers of change, as can be seen from Figure 1: rise of smart machines and systems, extreme longevity, new media ecology, computational worlds, super structured organizations and globally connected world. The ten suggested job skills and how they connect to the six drivers of change can be seen in the picture below. (Davies, Fiddler & Gorbis.) Five out of six drivers for change mentioned, are connected to advancements in technology in a way or another.
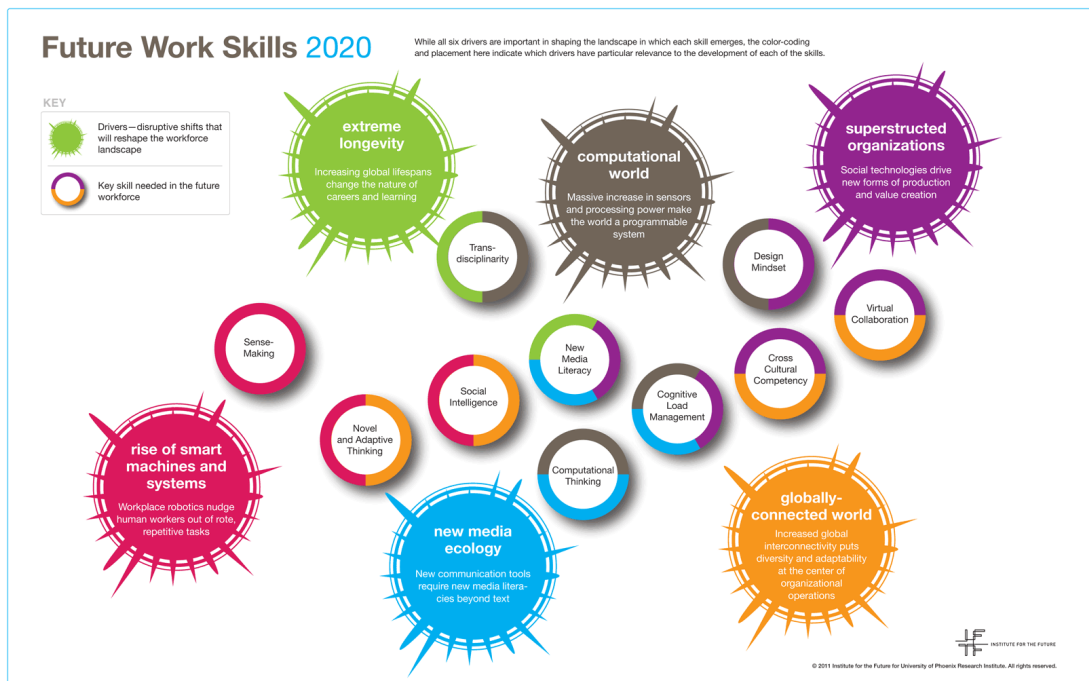


Figure 1. Future Work Skills in 2020 (Institute for the Future for University of Phoenix Research Institute 2011).

A research conducted by Finnish company Accenture asked 200 executives from Finland's largest companies about their views on digital disruption and found out that 56% of them thought that digital disruption is already affecting their business and 94% felt that it will take effect in the next 5 years. (Accenture 2015.)

This thesis aims to find out what kind of competences the employers of today appreciate in a candidate and whether phenomena arising from technological advancements such as digitalization, computerization and robotization are changing the skills needed in hospitality today. This thesis aims to provide useful insight for educational institutes, businesses and employees as well.

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## 2 Theoretical framework

### 2.1 Key concepts

In this chapter the most important concepts for this thesis are presented.

#### 2.1.1 Competence

The concept of competence is widely discussed in literature and many researchers have offered their own definitions. It is hard to draw a one coherent definition from multiple sources, however there are plenty of similarities. In 1973 an American psychologist David Mcclelland argued that students should be tested for competence rather than intelligence. He wrote that when testing for one's ability to drive a car they should be tested to do so instead of testing for general intelligence and such. (McClelland 1973.)

Lucia and Lepsinger offered their definition: "a cluster of related knowledge, skills, and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development." (Lucia & Lepsinger 1999)

In this thesis competence is defined as knowledge, skills and ability.

#### 2.1.2 Hospitality industry

The studies reviewed in this thesis included professionals from restaurant-, travel-, lodging- and events industries. Hospitality in this thesis refers to those industries.

#### 2.1.3 Digitalization

Digitalization has been much discussed in recent years and it seems to be reaching every-thing from one's personal life to work life. The term digitalization has been defined as "Integration of digital technologies into everyday life by the digitization of everything that can be digitized." Digitization on the other hand means converting analogic information to digital form so that the information can be processed, stored, and transmitted through digital circuits, equipment and networks. (Business Dictionary) Digitization essentially is converting analogic information to bits that are represented as ones and zeros, which allows the information to be accessed and processed through multiple different devices, and allows it to be stored more easily.

Digitization is also said to be the first wave, out of three, of digitalization. "The first wave of digitalization involves the technical digitization of converting analog contents and services

into digital ones without fundamental changes in the industry structure" (Youngjin, Kalle, Richard & Nicholas 2010) The second stage is separating devices, net-works, services and contents that historically used to be tightly coupled. This allows media such as music, books, e-mail and movie to be delivered over multiple different types of networks using multiple devices. "In the third wave of digitalization, we begin to see the emergence of novel products and services through the "mash up" of different media across different product architectural boundaries… For example, a simple insertion of an RFID chip into a pair of running shoes enable a runner to collect data (such as pace, location, and biomet-rics) that were not available in the past. Once captured, such information can be shared through one's social network services like Facebook or Twitter, or can be mashed-up with other media such as Google Earth or Flickr photo services. Or one's own running record can be simply juxtaposed with others' records." (Youngjin, Kalle, Richard & Nicholas 2010)

Digitalization can be disruptive to businesses, as it has been to selling CD's for instance, but it also has a tendency to create new opportunities, change business models and cre-ate completely new ones. Music- and video streaming services are simply changing the way these industries deliver their products to consumers more effortlessly. Amazon has created a Dash Replenishment Service (DRS), which can for example monitor how much a printer has toner and place an order automatically as soon as it's running low as the customer's paying and shipping information are already on the website. This helps the customer save time and effort, and from Amazon's point of view it makes the selling cheaper, creates possibilities to partner with manufacturers and assures the customer buys all of their toner from amazon.

Gartner provides a definition for digitalization that is solely from a business's point of view: "Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business." (Gartner) In this thesis the process of moving to a digital business is at core when talking about digitalization.

### 2.1.4 Digital competence

European commission discussed "digital competence" in their recommendations for life-long learning. That discussion provided some useful insights in order to understand the concepts in this thesis.

"Digital competence involves the confident and critical use of Information Society Technol-ogy (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the

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use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet." (European Commission 2006)

Skills needed include the ability to search, collect and process information and use it in a critical and systematic way, assessing relevance and distinguishing the real from the virtual while recognizing the links. Individuals should have skills to use tools to produce, present and understand complex information and the ability to access, search and use internet-based services. Individuals should also be able use ICT to support critical thinking, creativity, and innovation. (European Commission 2006)

## 2.2 Competence in hospitality

### 2.2.1 Analysis of competence studies

Buegermeister (1983, 38-55) produced one of the first studies, in which he tried to investigate the competencies needed for hospitality occupations. At the time, he felt that there were large variations in hospitality education but little efforts were made in order to identify competencies needed by hospitality managers upon graduation. In Buergermeister's study one of the competencies ranked as being least important in successful hospitality management was key computer (hardware and software), as well as, identifying and selecting the right marketing media. Over thirty years later, it feels that something has changed. However, the competencies identified by Buergermeister as being most important for success, such as customer satisfaction principles, motivation, communication, training abilities and profit realization have probably not lost their significance. However, it is an interesting question, whether those competencies are still necessary for human employees to possess, or will some of them be done digitally in the future. How about a mix? A customer support chat online still requires skills in communication, but because of the digital aspect, the skills needed are not the same than those of an in-person customer support worker.

Later research in the topic has come up with some of the same ideas as Buergermeister's study. Communication skills (oral and written) have come up in several studies since as well as focus on customer relations. (Hai-yan & Tom Baum, 2006, Chan & Marianne, 2008, Tesone & Ricci 2010, West, Suh, & Shin 2012, 509-512 & Sisson & Adams 2013.) However, computer-related skills have been overlooked in the research at least until 2010 according to (Johanson, Ghiselli, Shea & Roberts 2010) who reviewed academic papers concentrating on competencies in hospitality industry from the last 25 years:

"Computer-related skills - While some common management themes emerged from the analysis, some areas of the discipline were overlooked to a great extent. One of these is computer-related skills. Missing from the lists of knowledge and skills desired by hospitality industry professionals over the past 25 years are skills related to computers and technology. Given that this is probably the area with the most significant growth and advances affecting all industry, it is likely that its importance would be elevated and that hospitality managers within all sectors would expect higher levels of competency. In fact, 25 years ago, curricula addressing computer skills focused on how to use word processing programs such as Word and spread sheets such as Excel, and perhaps included opportunities to learn or fine-tune PowerPoint skills. The growth of social media venues and the corresponding opportunity for businesses representing all sectors of the economy points to the need for the development of skills in this area."

Today in business in general the importance of technology can be seen everywhere as more and more data is more easily collected, costs and budgets are analyzed using computers and most of the business related data is stored electronically, but can this trend be seen in competence studies? In a study by Sisson and Adams (2013), which ranked 33 soft, hard and mixed skills into three categories: less important, very important and essential for hospitality management, they found 16 essential skills out of which "using computers effectively" placed second in importance and was considered to be an essential skill in the industry.

Some conflicting findings were found in a study by Shariff, Kayat and Abidin (2014), where they asked HR-managers in Malaysian 4-star and 5-star hotels about their perceived and expected competencies in hospitality graduates. The ability to use technology was found to be insignificant competence in terms of what the industry perceived as important, however at the same time, it was the most expected competency by managers for graduates to have.

### 2.2.2 Kemal Birdir and Thomas E. Pearson (2000)

Birdir and Pearson (2000) studied most important competencies for research chefs, both those focused on research and those focused on management, by asking leaders to rank competencies on a scale of 1-5 (5 = extremely important, 4 = very important, 3 = important, 2 = slightly important, 1 = not important;). Nineteen competencies received a mean score of 4 or more making them very to extremely important according to the leaders. The nineteen competencies are listed below.

(full list appendix 1.)

- Knowledge of flavors
- <u>Knowledge of food sanitation</u>
- Ability to distinguish levels of quality in food products
- General communication skills (verbal, written, listening)
- Ability to make decisions
- Ability to conceptualize new products, processes, systems ± Creative
- Ability to keep ego in check
- Ability to see the ``Big Picture''
- Ability to work in multi-task environments
- Ability to prioritize projects
- <u>Knowledge of projected/future food trends</u>
- <u>Knowledge of culinary uses and applications of products</u>
- <u>Knowledge of current food trends</u>
- Ability to balance personal and professional lives
- Ability to take criticism
- <u>Ability to control emotion during communication with people</u>
- <u>Knowledge of weight and measurement conversions</u>
- Skilled at time management
- Skilled at motivating a team

Most of the most important competences listed in Birder and Pearson's study are related to an employees' personal attributes. For instance, an ability to make decisions, keep ego in check or see the "big picture" all are skills that require judgement, based on common sense, past experiences and intuition. Those types of competencies are very hard, if not impossible, to automatize, computerize or robotize.

All of the competencies that are based on memorizing are easily digitalized. From the list above all the knowledge-competencies are underlined except knowledge of flavors, which requires human interpretation. Knowledge of weight and measurement conversions, food trends and sanitation are all good4 to know for a hospitality worker, there's no question, but memorizing any such thing just is not necessary any more.

### 2.2.3   Kong Hai-yan, Tom Baum (2006)

Hai-yan and Baum (2006) studied the "skills profiles, work background, educational at-at-tainment, attitudes and plans" in Chinese 4-star and 5-star hotels in major tourist cities. In their study, the following competences were ranked on a scale from 1 = very low im-portance to 5 = very important. Communication was considered most important with a score of 4,56, while legal issues ranked at the bottom with 3,67. The list follows order of importance from most important downwards: (for all scores see appendix 2)

- Communication (oral)
- Professional and ethical standards
- Team work
- Leadership qualities
- Use of FO equipment

- Customer care
- Interpersonal
- Accounting
- Marketing
- Use of technology
- Health and safety
- Communication (written)
- Legal issues

Many of the competences in hospitality that were found important in Hai-yam's and Baum's study are going through changes because of digitalization. The most important competences are, as often in similar studies, mostly related to personal attributes of an employee.

The competences that are undergoing change because of digitalization are underlined from the list above.

Customer care and interpersonal relations are getting more and more digital, and may require the employee to engage with customers, and be active digitally, via email, chats, social media platforms, websites and such. Customer care can also mean being able to utilize new technologies, and assist customers with booking systems, self-service checkouts and apps, for instance. Interpersonal relations between co-workers are also transforming to more digital as services like WhatsApp, Yammer, Lync and Skype are more and more integrated in everyday communications.

Some examples of digitalized accounting practices are e-invoicing, integrated document management systems, electronic storage of accounting ledger and automatic recording and electronic storage of paper invoices. (EY, 2014)

So much of marketing and communication are done via digital channels today in hospitality business, that a completely new skillset is needed. A skilled marketer in today's business has to be familiar with social media platforms, blogging, vlogging, content creation, search engine optimization, web analytics and much, much more. Not necessarily every worker in every company has to know all those things, but as far as marketing and communication are considered, knowing at least some of it is essential.

Health and safety is highlighted as a digitalizing competence mostly because of the safety aspect of it. In the times of digitalization safety has to considered as security and privacy as well. Therefore, it is important that employees and managers understand the risks digitalization brings to.

### 2.2.4  Benny Chan and Marianne Coleman (2008)

In a study by Chan and Coleman (2008) eighteen skills and competencies were selected, based on previous research, and employers in the Hong Kong hotel industry were asked to evaluate (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree), which they considered to be the most important skills and competencies for an entry level worker in the industry. Seventeen out of eighteen were given a mean score of 3 or more, making them collectively considered important. (See. Appendix 3.) For this paper's purposes, those seventeen will be used. Below are listed all competencies in Chan & Coleman's study that had a mean score of 3 or more, in order from best score to worst score.

- Have a professional attitude
- Be honest
- Be able to communicate in foreign language
- Be able to work co-operatively as a team member
- Be able to accept responsibility
- Have genuine desire to help people
- Be adaptable and flexible to cope with a changing work environment
- Have a good personal presentation
- Possess effective writing skills
- Possess effective reading skills
- Be able to update my professional knowledge
- Be creative
- Be able to use relevant computer software
- Have a certain degree of practical knowledge in at least one area
- Manage guest problems with understanding and sensitivity
- Be able to work autonomously with minimal supervision
- Be able to define and solve problems

Most of the important competencies are related to an employee's personal attributes such as having a professional attitude and being honest, which were the top two skills and competencies in the study. However, there are skills and competencies in this list that could, at least in theory, be digitalized. The ones are underlined in the list. For example, the ability to communicate in a foreign language is definitely going to be an important skill in the Hong Kong hotel industry in the future as well, but as we're not just communicating in person but a lot of it happens virtually as well, where digital translators are possible to be used, it has to be considered as something that is digitalizing.

Personal presentation is an important skill which in today's world is also digitalizing as the gap between working life and personal life is decreasing, and a lot of one's persona is presented through digital channels such as social networking sites.

Skills in writing and reading are, without a question, still relevant in any industry. However, when considering writing as a skill in business, a lot of it is digitally assisted. Automated e-

mails and automated correction are used every day already, so it can be questioned how relevant is the actual skill of writing. Skill to produce intriguing content on the other hand is probably needed. Reading skills are also going to be needed in the future as well, for sure, but if we think of reading as going through large amount of information and making sense of it, it is going to be more and more digitalized in the future.

Using relevant computer software is in itself in the heart of digitalization. Ability to work with minimal supervision quite possibly refers to employees' personal attributes such as trust-worthiness and reliability, but it is considered to be a digitalizing competence, because a task that can be written in to code (i.e. digitalized), can be handled by a machine with absolutely no supervision. Same applies to defining and solving problems.

### 2.2.5   Dana V. Tesone, Peter Ricci (2009)

Tesone and Ricci studied competencies perceived by experienced lodging and restaurant managers and compared them to those perceived by new workers in the industry. They divided the competences in three different subgroups: knowledge, skills & ability and attitudes. Here we look at the perceptions of knowledge, skills and abilities perceived by man-agers. (Full list as an appendix 4.) They ranked the competencies on a Likert – type 5-point scale (5 = strongly agree, 1 = strongly disagree). Here are those that scored over 4:

Knowledge:
- Knowledge of grooming and professional image standards
- Knowledge of guest services standards
- Knowledge of realities involved in this type of work

Skills and ability:
- Ability to work as a part of a team
- Effective listening, verbal and written communication skills
- Ability to project a professional image
- Ability to empathize with the guest experience
- Ability to anticipate guest wants and needs to provide service
- Ability to deal with daily uncertainties and changes
- Ability to balance the needs of multiple guests at a same time
- Ability to generate an attitude of trust among co-workers
- Ability to make creative decisions to achieve service standards

(Tesone & Ricci 2010)

The important competences found in Tesoe's and Ricci's study somewhat different to other studies, however, most of the competences that can be considered going through changes, because of digitalization, have been covered already.

The one here that has not come up in other studies, at least exactly, is the ability to antici-pate guest wants and need to provide service. Because of digitalization there's not even that much need for anticipation anymore, but rather all the necessary information is out there if we know how to make sense of it. A lot of data is collected about customers, which is used to make the services match their needs exactly. Tailoring services to each cus-tomer's needs based on data is at the heart of digitalization.

### 2.2.6 Eunju Suh, Joseph J. West and Jaeuk Shin (2012)

Suh, West and Shin (2012) analyzed 296 questionnaire answers from hospitality students and managers considering the most important competencies for success in the industry. They found differences between students' and managers' perceptions, but for this paper's purposes the managers' perceptions will be used as they have actually succeeded in the industry, and are in position to make hiring decisions.

The questionnaire was answered by hotel, restaurant, event, catering, consulting, travel and other managers. The top ten competencies required for success in the industry ac-cording to managers were in order of importance: (full list appendix 5.)

- Listening skills
- Tolerance for change
- Guest interaction
- Openness to new ideas
- Personal integrity
- Interaction with superiors
- Peer interaction
- Leadership
- Interaction with subordinates
- Staff training
- Knowledge in cultural differences

Four of the important competences; guest-, peer, superior- and subordinate interaction were named as interpersonal skills in this study which we have explained already in Hai-yan's and Baum's study.

Interestingly top competencies included tolerance for change and openness to new ideas which are absolutely integral for digitalization in the industry, however as competences they are not necessarily changing because of it. (West, Suh, & Shin 2012)

### 2.2.7 Lisa G. Sisson & Allison R. Adams (2013)

In a more recent study by Sisson and Adams (2013) a thorough review of the literature was made from which, after removing overlapping, 33 competencies were pulled. The competencies were categorized as soft-skills, hard-skills and a mix of both, and industry

leaders and educators were asked to rank them on a 1 to 6 Likert-type scale. Thirty of the following competencies were considered as very important or essential in the order from most important downwards: (for full list see appendix 6.)

- Developing positive customer relations
- Using computers effectively
- Working effectively with peers
- Professional demeanor and appearance
- Leadership abilities
- Written communication skills
- Critically using information for decision making
- Customer service problem resolution
- Managing personal stress
- Using ethics in decision making
- Delegation of tasks
- Facilitating teams and teamwork
- Knowledge of and compliance with legal and regulatory requirements
- Presentation skills
- Controlling costs
- Supervising subordinates
- Negotiating techniques
- Training employees
- Coaching/developing staff
- Forecasting staffing needs
- Developing and managing budgets
- Sales techniques
- Managing crisis situations, such as fire, employee or guest injuries, tornados etc.
- Analyzing financial statements
- Identifying target markets
- Forecasting revenues
- Managing staff meetings
- Developing staffing schedules
- Cultivating diverse environment
- Conducting hiring interviews

Interestingly in this study "using computers effectively" placed second in importance, while competences in IT in general have been almost non-existent in other similar studies. It is probably safe to assume that digital competences are gaining importance among the industry, as Johanson, Ghiselli, Shea & Roberts (2010) also suggested in their conclusions of 25 – year review of hospitality competences.

Developing customer relations in today's hospitality business is digitalizing, although it requires human input as well. Responding to enquiries in social media and web sites, being active in same digital platforms as customers, developing and sending out newsletters, "thank you" e-mails and such. In some businesses in the industry it is possible to create a good relationship with your customers without ever seeing or talking to them in person. And some of this is automated as well, which is why it is considered to be digitalizing.

### 2.2.8 Nurhazani Mohd Shariff, Kalsom Kayat and Azlan Zainol Abidin (2014)

Shariff, Kayat and Abidin (2014) studied the most important competencies in Malaysian hospitality industry (although 70% of those who answered were foreign). They asked the managers about which competencies they perceived as important in the industry, and which competences they expected the new graduates to have. Here the perceptions are reviewed.

The questionnaire included 40 competences, based on literature, that the 60 human resource managers rated on a 1-5 scale (1 = least important, 2 = less important, 3 = neither both, 4 = important and 5 = very important) Most of the competences were generally considered important, however many technology-related competencies placed on the bottom such as: ability to use technology (40/40), technology awareness (37/40), computer application skill (33/40). For full list see Appendix 7.

The top ten competences according to HR managers' perceptions were:

- Ability to work in teamwork
- Learning skill
- Ability to inform information
- Customer service skill
- Ability to support staff
- Professionalism skill
- Reliability
- Integrity skill
- Interpersonal skill
- Marketing skill

The most important competencies in the study are quite similar to findings in other studies presented here as well. Learning skill has not come up yet in other studies and it is quite important in the times of digitalization. A report by European parliament stated that in the information society people rely more and more on technology for support. The report emphasizes that technologies can be helpful in expanding people's cognitive abilities, however, we need to be careful to not force more information on ourselves than our cognitions are able to process. (European parliament 2015)
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It is possibly easier than ever to go and obtain information and learn new skills, however, it is more difficult than ever to pick out the most relevant information. A skill to learn is arguably an important competence across industries and educational institutions as well in to-day's world.

## 3   Process

### 3.1   Background

The process of creating the digitalized competences presented in this thesis started by the author's own interest towards the phenomena, as digitalization is discussed a lot in all areas of business at the moment, but there seems to be a lack of acknowledgement of its influence on competence studies in general, and in hospitality especially. Digitalization is changing the ways work is being done everywhere, and hospitality industry, as one of the pioneers of e-commerce is not the least affected by it. When the ways people work change, the competences needed to succeed in said work have to change as well.

Most of the existing literature on competences in hospitality, was done before digitalization had really had a lot of influence on the industry. Plenty of research has been done to determine competences needed for success in hospitality industry, and there seems to be some continuity with the results, but most of the studies list general sounding competences such as "customer care" or" interpersonal skills" without really addressing what that means in 2016? The purpose of this thesis is to first determine the key competences in the industry, based on previous studies, then analyse them from the perspective of digitalizing world. What do the most important competences mean today in hospitality industry?

The process started with understanding digitalization and its effects on working life in general. The base knowledge is formed by authors own encounters with Finnish business leaders across multiple industries, while working in a company that that organizes some of Finland's largest professional events. The topic of digitalization, and its influence on businesses, keeps coming up in managers' speeches, and it has been coming up for the past two years at least.

### 3.2   Material

The process of consisting a digitalized list of most important competences in the industry started by familiarization with digitalization by studying the literature around it. Other sources such as newspapers, videos, blog posts, interviews and the aforementioned events were used in order to grasp an idea of how digitalization is affecting businesses, and what kind of new competences are needed because of it.

Literature on most important hospitality competences was reviewed, consisting of studies focusing on different professions in the industry. Seven studies were included focusing on research chef's, hotel employees, lodging and restaurant managers, event professionals

and other industry professionals. The competences presented in each study were ana-
lyzed on the basis of whether digitalization is changing them or not. All digitalizing compe-
tences were gathered from the studies, and the findings were compared to other studies,
to see if they had similar results. What was left out from the original studies, were mostly
competences related to one's persona such as honesty, creativity or ability to motivate.
Even though it could be argued that, for instance, creativity could be enhanced by digital
tools, or at least that process of creating is digitalizing, but here these competences were
considered merely as personality traits.

## 3.3   Grouping

In figure 2. the digitalizing competences from each study analyzed can be seen along
each other. By using color-coding the reader can see which competences are grouped to-
gether, with explanations of each group formed. All competences that appeared in at least
three studies were included, in order to use only those competences that are generally
considered most important.

Similar competences such as "interpersonal" and "interaction with…" were grouped to-
gether. After comparing the results from the studies to each other, seven categories of
competences were formed: Finding the relevant knowledge, digital interaction with col-
leagues, digital personal presentation, customer care, digital marketing, presentation &
sales skills, ability to use technological software and hardware and accounting.

## 3.4 Digitalized competences



Figure 2. Grouping of competences.

### 3.4.1 Finding the relevant knowledge

Ability to use technology in today's businesses in order to obtain information, while separating the relevant information from irrelevant. World is definitely smaller today and, for instance, trends can be predicted better by using social media and internet for insight. Also more data is collected from customers than ever before and by asking the right questions a lot can be learned. An employee in hospitality business could benefit from a weight conversion app for a quick check, digital translator for communication or maybe a Pinterest board for interior design inspiration.

### 3.4.2 Digital interaction with colleagues

Ability and readiness to communicate and be present on current digital spaces, and social networks. Competent in using the organizations preferred digital services such as WhatsApp, Yammer, Lync and Skype for communication. Plenty of internal communication among colleagues in companies, as well as, between B2B associates is being done through social networks such as Twitter, Facebook and LinkedIn. In order to maintain a good relationship, it is important to be competent in using them.

### 3.4.3   Digital personal presentation

An employee's competent projection of a professional image online. Employees personal lives are more visible today than ever before. People often associate themselves online with the organizations they work for and therefore it is important to present a professional image online as well. For entrepreneurs, freelancers and consultants in hospitality business the way they present them online is especially important for being successful.

### 3.4.4   Customer care

An employee is competent in solving customer's problems, providing quality service, informing customers and maintaining relationship through digital channels. Ability to provide customer support concerning digital tools such as booking systems, self-service checkouts, new digital payment methods and apps are some digital competences that a hospitality worker might need. When a company is using social media, it is important to stay active in them. For instance, when private messaging a company's Facebook page a customer can see a "typically replies within an…"- projection of how quick they are responding. In the digital age it is also important to remember that giving notably good or bad service to one customer in real life can be seen or heard by countless people very quickly.

### 3.4.5   Digital marketing, presentation and sales skills

Marketing and selling through networking digitally, and doing market research based on customer data, to be used in identifying customer needs. Ability to maintain a professional social media presence, write professional e-mails when representing the company, knowledge in web design, image processing, content creation and choosing the right social media channels, are some examples of digital marketing skills. Digital tools such as web analytics, social media platforms like LinkedIn, or outbound emails are efficient tools for prospecting, lead generation and selling in modern hospitality businesses.

### 3.4.6   Ability to use technological soft and hardware

Computers, pads and mobile phones are being used at work a lot, while customer relation-ship management- (CRM) and enterprise resource planning (ERP) programs are some examples of software that hospitality employees are likely to use today. Ability to type efficiently is important as well. While digital technologies provide tremendous opportunities, along with them comes risks as well. Understanding basic cyber security issues, and handling of confidential information is crucial for any professional in the digital age.

### 3.4.7   Accounting

Some examples of digitalized accounting practices are e-invoicing, integrated document management systems, electronic storage of accounting ledger and automatic recording and electronic storage of paper invoices. (EY, 2014) Most invoicing is done electronically in today's companies, usage of paper money is on the decline and most calculations are automated, which is why there is a need for digital competence in accounting practices. Employees should also be aware of common scams when dealing with accounting such as fake-billing via e-mail, phishing or advance-fee scams.

### 3.4.8   Product

The final product as an appendix 8.

# 4 Discussion

## 4.1 Conclusions

The digitalized competences list presented in this thesis has some implications on educational institutes, as well as, employers and employees in the industry. Plenty of research has been done from decades back, on what kind of competences will help employees and managers succeed in the industry. Some changes have been seen in these competence lists for the industry, but mostly they have stayed quite the same, which could be at least to some level due to quite generic terms used such as "marketing" or "interpersonal skills". There is a need to take a new look at these competences in the digital age because digitalization is changing so much of how work is being done.

The digitalized competences presented in this thesis should give recent graduates entering the industry, a general idea of, not only what competences will help them succeed, but also how they should be interpreted in the digital age. The data collection in this thesis from multiple competence studies is helpful for employees, managers, students and teachers alike, because data from different studies, from different years, are collected on one paper.

It has been predicted that digitalization is threatening jobs in Finland and all over the world, so it is extremely important to be prepared, and to be aware of what kind of changes can be expected. Rather than jobs disappearing as a whole, it is more likely that tasks will change as people work together with digital tools. The awareness of these changes and knowledge about digitalization will help motivate employees to update their skillset.

When there is change, there is usually resistance, unwillingness to change and tendency to stick to old habits. By understanding the change ahead, schools can better prepare students with proper competences to enter the industry. Especially in these times as Finland has not been doing so good economically, there is need for new innovation, and digitalization is a major enabler for said innovation.

It is important for students, educational institutes and those interested in hospitality industry, to understand that digital tools are creating completely new professions in the field. Also, the market has changed. It has been estimated that in the year 2015, there were over one trillion photos taken worldwide. (InfoTrends, 2016) World is more visual and there is more demand for pictures and videos than ever before. A local consumer review

by Bright Local revealed that 88% of consumers trust online reviews as much as a personal recommendation, at the same time, restaurants / cafes and hotels / B&B's were the ones people searched the most online reviews for. (Bright Local, 2014)

Anyone interested in hospitality industry in 2016, could easily go on their own and start a travel blog or a YouTube cooking channel, work as a food photographer, work as an Airbnb host or as a local tour guide in their own city by just using internet for marketing and customer acquisition. There are jobs in just answering online reviews and customer feedback. There are jobs in providing immersive virtual reality experiences, and while on topic, it is possible to "travel" by just using virtual reality glasses, so we can only imagine how the industry is going to change, say 5-10 years from now.

## 4.2   Recommendations for the industry

Still the most important keys to success in hospitality appears to be the ability to take care of customers and interact with people. However, digitalization brings some news aspects into doing so. Hospitality schools should take notice that the focus in today's hospitality education should be in learning to learn, rather than memorizing, as so much information is out there to be easily, digitally (and mostly for free) accessed. It is more important for a student to be able to separate the relevant information from all the irrelevant. School tasks should include plenty of tasks that allow students to seek information through their preferred channels, as it will better their competence in finding information, assessing it critically and using different tools.

Employees in today's hospitality industry should be familiar with current digital communication tools that are being used. Regardless of an employee's own view towards, for example social media, it is important to understand how it works, because that's how customers interact, seek information and make buying decisions today. Schools could integrate these tools more in projects and encourage students to use them more. However, digitalization does not mean just using social media, which should be clear in order to not alienate more introverted people from digitalization.

Projects in school could be more driven by digital data to begin with; using Google Trends or similar to identify trends and create business plans based on findings, doing more targeted marketing in social media or analyzing the data from projects and reflecting on it. Projects could include aspects that encourage students to train their content creation skills, such as blogs or vlogs. Why not a blog or an infographic instead of a report? One challenge in working with massive amounts of data in today's world is being able to pre-

sent the most relevant information in brief. School tasks should reflect this reality by challenging students to illustrate their proceedings in a given assignment, as briefly as possible.

Work today is more mobile than it has ever been. One with a laptop and internet connection could employ themselves in multiple ways in hospitality industry. Entrepreneurship and freelancing should be encouraged along with employment, as those are getting more common. The gap between working life and personal life is diminishing and self-marketing is more important, not only for entrepreneurs, but for employees as well. Students should pay attention to their digital representation of themselves, and companies should realize they are represented by their employees indirectly online. School curriculums could include courses in self marketing, online networking and professionally representing oneself online.

Curriculums should recognize the changing nature of customer service, as customers are not only dealt with directly in real life, but also via e-mail, support chats, social media and such. It is important for employees to be able to handle customer feedback, and offer support, efficiently digitally, but also pay extra attention to the fact that bad customer service can reach huge amounts of people very quickly.

Students today should be competent in multiple digital tools, which is why, school work could include software programs like CRM and ERP, most common image and video processing software, and also different hardware such as computers, pads and mobile phones.

Risks that arise from digitalization should be paid more attention to in schools and companies as well. Employees should be more recognizing of risks that storing sometimes sensitive data digitally, handling invoicing electronically, or simply operating online poses. Employees should be aware of secure handling of information and most common cyber security issues facing companies, such as scams.

All competences presented in this thesis are demanded by the industry today, which means educational institutes should focus their curriculum planning accordingly.

## 4.3   Limitations & ideas for future studies

This study does not separate between different professions in hospitality industry but rather looks at the industry as a whole. The industry includes multiple types of businesses in restaurant-, travel-, lodging- and events industries. etc., and in these businesses there are

multiple different positions and titles so it is difficult to generalize the needed compe-
tences.

However, the basis for this study is that all hospitality businesses focus heavily on cus-
tomer satisfaction. While that can be said about most businesses, in hospitality industry it
is more important to provide a service in which the customer is happy with, since they are
paying for something "luxury" rather than a basic need such as food or clothing. (Best hos-
pitality degrees)

At the moment, there is not enough job-specific research focusing on competences in
hospitality industry to make conclusions out of, which is why in this study the industry is
being looked at as a whole. However, future research should try to narrow down the focus
to a job-specific level to get even more useful insight for teaching training and manage-
ment purposes.

The end product here; the list of digitalized competences is formed based on author's own
view of how digitalization affects hospitality industry. The grouping of competences could
be formed differently as well, depending on interpretation. Besides literature, the under-
standing of digitalization in this paper, comes from author's own experiences, and be-
cause of the lack of industry-specific digitalization literature the theories are adapted to fit
hospitality industry.

The question of what can be considered to be digitalizing is not an easy one to answer.
Digital tools are expanding to all areas of work, and life in general so in a way or another
anything can be considered digitalizing. However, this thesis reflects the working life at the
moment; what is being done already today, and what is known to be likely done in the
near future.

Future research could study digitalization more specifically in the hospitality industry, for
instance, assessing the general level of digitalization in Finnish hospitality companies, to
better understand the need for competence. Level of digitalization could be also assessed
in hospitality schools, because presumably there are differences depending on schools,
cities and individual teachers. Digitalization in the industry could also be studied from the
employees' perspective; How positive is their view towards digitalization? Is it experienced
as increasing of work well being or not? How willing are employees to shift towards digital
work?

Competence studies in the industry should recognize the impact of digitalization as a force that is changing the type of competence needed to be successful in the industry. More specific assessment of competences could be insightful inside hospitality industry, to better understand the different skills, abilities and knowledge needed for chefs, event professionals and hotel workers, for instance.

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# Appendices

## Appendix 1

| Importance of skills | Mean response on five-point scale | Number ($n = 276$) |
| --- | --- | --- |
| Communication (oral) | 4.56 | 276 |
| Professional and ethical standards | 4.43 | 276 |
| Team work | 4.33 | 276 |
| Leadership qualities | 4.31 | 276 |
| Use of FO equipment | 4.29 | 276 |
| Customer care | 4.25 | 276 |
| Interpersonal | 4.25 | 276 |
| Accounting | 4.18 | 276 |
| Marketing | 4.17 | 276 |
| Use of technology | 4.12 | 276 |
| Health and safety | 4.02 | 276 |
| Communication (written) | 3.92 | 276 |
| Legal issues | 3.67 | 276 |

**Table VII.**
Importance of skills in
front office work

**Appendix 2**

TABLE 1. Skill and competency needed by new graduate employees according to employer expectations.

| Skill & competency | Mean* (n = 44) | Standard. deviation |
|---|---|---|
| Have a professional attitude | 3.68 | 0.47 |
| Be honest | 3.68 | 0.47 |
| Be able to communicate in foreign language | 3.64 | 0.49 |
| Be able to work co-operatively as a team member | 3.61 | 0.58 |
| Be able to accept responsibility | 3.55 | 0.55 |
| Have genuine desire to help people | 3.55 | 0.50 |
| Be adaptable and flexible to cope with a changing work environment | 3.48 | 0.55 |
| Have a good personal presentation | 3.39 | 0.54 |
| Possess effective writing skills | 3.39 | 0.49 |
| Possess effective reading skills | 3.32 | 0.52 |
| Be able to update my professional knowledge | 3.30 | 0.46 |
| Be creative | 3.25 | 0.53 |
| Be able to use relevant computer software | 3.25 | 0.49 |
| Have a certain degree of practical knowledge in at least one area | 3.19 | 0.50 |
| Manage guest problems with understanding and sensitivity | 3.18 | 0.58 |
| Be able to work autonomously with minimal supervision | 3.12 | 0.50 |
| Be able to define and solve problems | 3.09 | 0.52 |
| Be able to lead others effectively | 2.91 | 0.56 |

*Means based on a four-point interval scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree.

(Chan & Marianne 2008, 3-18).

**Appendix 3**

_____

**Table III**
Competencies for both research and management focsed research chefs

| Competencies[a] | M[b] |
|---|---|
| **Knowledge of flavors** | 4.59 |
| **Knowledge of food sanitation** | 4.55 |
| **Ability to distinguish levels of quality in food products** | 4.55 |
| **General communication skills (verbal, written, listening)** | 4.50 |
| **Ability to make decisions** | 4.45 |
| **Ability to conceptualize new products, processes, systems – Creative** | 4.36 |
| **Ability to keep ego in check** | 4.36 |
| **Ability to see the "Big Picture"** | 4.36 |
| **Ability to work in multi-task environments** | 4.32 |
| **Ability to prioritize projects** | 4.27 |
| **Knowledge of projected/future food trends** | 4.27 |
| **Knowledge of culinary uses and applications of products** | 4.23 |
| **Knowledge of current food trends** | 4.23 |
| **Ability to balance personal and professional lives** | 4.18 |
| **Ability to take criticism** | 4.14 |
| **Ability to control emotion during communication with people** | 4.14 |
| **Knowledge of weight and measurement conversions** | 4.05 |
| **Skilled at time management** | 4.00 |
| **Skilled at motivating a team** | 4.00 |
| **Knowledge of formulas for conversion computations** | 3.95 |
| **Ability to perform public relations functions with new customers/clients** | 3.91 |
| **Ability to balance between competing pressures – Perspective** | 3.82 |
| **Knowledge of menu engineering** | 3.82 |
| **Knowledge of competitive products** | 3.82 |
| **Knowledge of cultural preferences as they affect food products** | 3.64 |
| **Skilled in helping others – Mentor** | 3.59 |
| **Knowledge of technologies affecting projects** | 3.55 |
| **Skilled at general mathematics and statistics** | 3.55 |
| **Knowledge of human nutrition** | 3.45 |
| **Skilled at computer wordprocessing (Word, WordPerfect)** | 3.27 |
| **Ability to use internet as a research tool** | 3.23 |
| **Knowledge of large production equipment and limitations** | 3.18 |
| **Skilled at computer spreadsheets (Excel, Lotus)** | 3.05 |
| **Skilled at/with computer presentation programs (PowerPoint, CorelDraw)** | 2.55 |
| **Ability to develop "packaging" for finished products** | 2.05 |

**Notes:** $N$ = 22; [a] Rating scale: 5 = extremely important, 4 = very important, 3 = important, 2 = slightly important, 1 = not important; [b] M = mean

(Birdir & Pearson, 2000, 205-209).

# Appendix 4

Table 1: Industry's Perceptions on the Importance of Tourism and Hospitality Graduates' Competencies

| No. | Competencies Items | Less important (%) | Neither both (%) | Important (%) | Very important (%) |
|---|---|---|---|---|---|
| 1 | Ability to work in teamwork | | | 30 | 70 |
| 2 | Learning skill | | 1.6 | 41.7 | 56.7 |
| 3 | Ability to inform information | | 1.6 | 56.7 | 41.7 |
| 4 | Customer service skill | | 1.7 | 35.0 | 63.3 |
| 5 | Ability to support staff | | 1.7 | 53.3 | 45.0 |
| 6 | Professionalism skill | | 1.7 | 50.0 | 48.3 |
| 7 | Reliability | | 3.3 | 40.0 | 56.7 |
| 8 | Integrity skill | | 3.3 | 45.0 | 51.7 |
| 9 | Interpersonal skill | | 3.3 | 36.7 | 60.0 |
| 10 | Marketing skill | | 3.3 | 40.0 | 56.7 |
| 11 | Communication skill | | 3.3 | 31.7 | 65.0 |
| 12 | Staffing | | 5.0 | 50.0 | 45.0 |
| 13 | Ability to delegate | | 5.0 | 68.3 | 26.7 |
| 14 | Planning and organizing skill | | 5.0 | 56.7 | 38.3 |
| 15 | Initiative | | 5.0 | 45.0 | 50.0 |
| 16 | Networking | 1.6 | 5.0 | 61.7 | 31.7 |
| 17 | Reading skill | | 6.7 | 61.6 | 31.7 |
| 18 | Conflict resolution skill | | 6.7 | 45.0 | 48.3 |
| 19 | Flexibility | | 6.7 | 40.0 | 53.3 |
| 20 | Writing skill | | 8.3 | 66.7 | 25.0 |
| 21 | Problem solving skill | | 8.3 | 45.0 | 46.7 |
| 22 | Mentoring skill | | 8.3 | 56.7 | 35.0 |
| 23 | Motivation | | 8.3 | 51.7 | 40.0 |
| 24 | Vision | | 8.3 | 58.4 | 33.3 |
| 25 | Monitoring staff | | 8.3 | 53.3 | 38.4 |
| 26 | Ability to control resources | | 8.3 | 58.4 | 33.3 |
| 27 | Strategic planning | | 10.0 | 45.0 | 45.0 |
| 28 | Creative skill | | 10.0 | 48.3 | 41.7 |
| 29 | Recording skill | | 11.7 | 55.0 | 33.3 |
| 30 | Coordinating skill | 1.7 | 13.3 | 46.7 | 38.3 |
| 31 | Critical thinking skill | | 15.0 | 46.7 | 38.3 |
| 32 | Preparing budget | 1.7 | 13.3 | 48.3 | 36.7 |
| 33 | Computer application skill | 1.7 | 15.0 | 61.6 | 21.7 |
| 34 | Ability to clarify company's objectives | | 16.7 | 48.3 | 35.0 |
| 35 | Entrepreneurship skill | 1.7 | 18.3 | 55.0 | 25.0 |
| 36 | Ability to use tools | 3.3 | 16.7 | 66.7 | 13.3 |
| 37 | Technology awareness | 3.3 | 25.0 | 56.7 | 15.0 |
| 38 | Business fundamental skill | 3.3 | 25.0 | 41.7 | 30.0 |
| 39 | Mathematical skill | 3.3 | 28.3 | 56.7. | 11.7 |
| 40 | Ability to use technology | 20.0 | 35.0 | 38.3 | 6.7 |

# Appendix 5

**Table 3**
Top ten competencies required for future success in the industry.

| Rank | Managers | Rank | Students |
|------|----------|------|----------|
| 1 | Listening skills | 1 | Leadership |
| 2 | Tolerance for change | 2 | Listening skills |
| 3 | Guest interaction | 3 | Guest interaction |
| 4 | Openness to new ideas | 3 | Tolerance for change |
| 5 | Personal integrity | 5 | Interaction with subordinates |
| 6 | Interaction with superiors | 6 | Peer interaction |
| 7 | Peer interaction | 7 | Interaction with superiors |
| 8 | Leadership | 8 | Decision making |
| 8 | Interaction with subordinates | 9 | Openness to new ideas |
| 10 | Staff training | 10 | Oral Eng. communication |
| 10 | Knowledge in cultural differences | | |

# Appendix 6

<div align="center">

TABLE 4

Competency Importance Ranking and Differences by Functional Work Area

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| Ranked Level of Importance | Type | Competency | Overall Mean | | Lodging | | | Food and Beverage | | | Meetings/ Conferences/Events | | | Other | | | p* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | M | SD | n** | M | SD | n | M | SD | n | M | SD | n | M | SD | |
| **Essential (M < 2.0)** | | | | | | | | | | | | | | | | | |
| 1 | S | Developing positive customer relations | 1.23 | 0.601 | 30 | 1.20 | 0.551 | 18 | 1.17 | 0.383 | 35 | 1.14 | 0.355 | 17 | 1.53 | 1.068 | .458 |
| 2 | H | Using computers effectively | 1.25 | 0.604 | 30 | 1.07 | 0.254 | 18 | 1.67 | 0.907 | 35 | 1.20 | 0.473 | 19 | 1.21 | 0.713 | .006 |
| 3 | S | Working effectively with peers | 1.26 | 0.544 | 30 | 1.40 | 0.621 | 18 | 1.22 | 0.548 | 35 | 1.26 | 0.561 | 19 | 1.11 | 0.315 | .257 |
| 4 | S | Professional demeanor and appearance | 1.33 | 0.708 | 30 | 1.17 | 0.461 | 18 | 1.17 | 0.514 | 35 | 1.37 | 0.646 | 19 | 1.68 | 1.108 | .106 |
| 5 | S | Leadership abilities | 1.37 | 0.758 | 30 | 1.20 | 0.484 | 18 | 1.11 | 0.471 | 35 | 1.57 | 0.917 | 18 | 1.50 | 0.924 | .057 |
| 6 | S | Written communication skills | 1.52 | 0.805 | 30 | 1.37 | 0.615 | 18 | 2.11 | 1.132 | 35 | 1.46 | 0.741 | 19 | 1.32 | 0.582 | .005 |
| 7 | S/H | Critically using information for decision making | 1.56 | 0.907 | 30 | 1.60 | 1.102 | 18 | 1.39 | 0.778 | 35 | 1.71 | 0.893 | 19 | 1.37 | 0.684 | .471 |
| 8 | S | Customer service problem resolution | 1.57 | 1.035 | 30 | 1.27 | 0.583 | 18 | 1.11 | 0.323 | 35 | 2.06 | 1.392 | 15 | 1.60 | 0.910 | .004 |
| 9 | S | Managing personal stress | 1.61 | 1.036 | 30 | 1.33 | 0.661 | 18 | 1.78 | 1.166 | 35 | 1.83 | 1.248 | 19 | 1.47 | 0.905 | .327 |
| 10 | S | Using ethics in decision making | 1.71 | 0.981 | 30 | 1.73 | 1.112 | 18 | 1.44 | 0.705 | 35 | 1.91 | 1.040 | 19 | 1.53 | 0.841 | .322 |
| 11 | S | Delegation of tasks | 1.74 | 1.036 | 30 | 1.47 | 0.681 | 18 | 1.50 | 0.985 | 35 | 1.83 | 1.014 | 18 | 2.28 | 1.406 | .079 |
| 12 | S | Facilitating teams and teamwork | 1.80 | 1.126 | 30 | 1.77 | 1.194 | 18 | 1.28 | 0.461 | 35 | 2.06 | 1.211 | 19 | 1.89 | 1.197 | .129 |
| 13 | H | Knowledge of and compliance with legal and regulatory requirements | 1.94 | 1.241 | 30 | 1.77 | 0.935 | 18 | 1.56 | 1.097 | 35 | 2.17 | 1.294 | 19 | 2.16 | 1.608 | .251 |
| 14 | S | Presentation skills | 1.97 | 1.150 | 30 | 1.87 | 1.252 | 17 | 2.47 | 1.375 | 35 | 2.00 | 1.000 | 18 | 1.61 | 0.916 | .154 |
| **Very important (M < 3.00)** | | | | | | | | | | | | | | | | | |
| 15 | H | Controlling costs | 2.10 | 1.296 | 30 | 2.33 | 1.493 | 18 | 1.44 | 0.705 | 33 | 2.15 | 1.372 | 17 | 2.29 | 1.105 | .093 |
| 16 | S | Supervising subordinates | 2.16 | 1.651 | 30 | 1.77 | 1.357 | 18 | 1.22 | 0.732 | 27 | 2.74 | 1.933 | 14 | 3.07 | 1.730 | .000 a,b,e |
| 17 | S | Negotiating techniques | 2.22 | 1.369 | 30 | 1.97 | 1.217 | 18 | 2.39 | 1.195 | 35 | 2.17 | 1.485 | 19 | 2.53 | 1.541 | .519 |
| 18 | S/H | Training employees | 2.24 | 1.543 | 30 | 1.67 | 1.155 | 18 | 1.28 | 0.461 | 30 | 3.07 | 1.760 | 16 | 2.88 | 1.544 | .000 b,e,f |
| 19 | S | Coaching/developing staff | 2.32 | 1.673 | 30 | 1.83 | 1.315 | 18 | 1.22 | 0.428 | 28 | 3.29 | 1.863 | 15 | 2.80 | 1.821 | .000 b,e,f |
| 20 | H | Forecasting staffing needs | 2.43 | 1.571 | 29 | 2.00 | 1.414 | 18 | 1.33 | 0.686 | 30 | 3.07 | 1.530 | 15 | 3.33 | 1.718 | .000 b,e,f |
| 21 | H | Developing and managing budgets | 2.47 | 1.575 | 30 | 2.73 | 1.741 | 17 | 1.76 | 0.752 | 32 | 2.56 | 1.684 | 18 | 2.56 | 1.580 | .385 |
| 22 | H | Sales techniques | 2.48 | 1.501 | 30 | 2.47 | 1.383 | 18 | 2.22 | 1.114 | 33 | 2.55 | 1.660 | 19 | 2.63 | 1.770 | .856 |
| 23 | H | Managing crisis situations, such as fires, employee or guest injuries, tornados, etc. | 2.53 | 1.571 | 30 | 2.27 | 1.596 | 18 | 1.94 | 0.998 | 33 | 2.85 | 1.661 | 13 | 3.15 | 1.676 | .078 |
| 24 | H | Analyzing financial statements | 2.57 | 1.624 | 30 | 2.67 | 1.768 | 18 | 1.72 | 0.826 | 32 | 3.13 | 1.737 | 19 | 2.26 | 1.447 | .032 |
| 25 | H | Identifying target markets | 2.64 | 1.625 | 20 | 2.83 | 1.560 | 17 | 2.35 | 1.320 | 34 | 2.85 | 1.861 | 19 | 2.21 | 1.512 | .424 |
| 26 | H | Forecasting revenues | 2.69 | 1.605 | 30 | 2.77 | 1.736 | 18 | 1.94 | 0.998 | 31 | 3.19 | 1.621 | 16 | 2.44 | 1.632 | .058 |
| 27 | S | Managing staff meetings | 2.71 | 1.563 | 30 | 2.63 | 1.732 | 18 | 1.89 | 0.832 | 31 | 3.19 | 1.662 | 16 | 2.81 | 1.337 | .046 |
| 28 | H | Developing staffing schedules | 2.77 | 1.766 | 29 | 2.31 | 1.628 | 18 | 1.39 | 1.037 | 27 | 3.34 | 1.668 | 14 | 4.36 | 1.277 | .000 a,e,b |
| 29 | S | Cultivating a diverse environment | 2.85 | 1.635 | 30 | 2.40 | 1.404 | 18 | 2.33 | 1.372 | 31 | 3.39 | 1.585 | 17 | 3.24 | 2.047 | .036 |
| 30 | S/H | Conducting hiring interviews | 2.86 | 1.864 | 30 | 2.53 | 1.776 | 18 | 1.72 | 1.364 | 25 | 3.80 | 1.708 | 15 | 3.33 | 2.024 | .001 b,c,f |
| **Less important (M ≥ 3.00)** | | | | | | | | | | | | | | | | | |
| 31 | H | Conducting performance evaluations | 3.00 | 1.712 | 29 | 2.38 | 1.568 | 18 | 2.28 | 1.227 | 26 | 3.77 | 1.704 | 16 | 3.69 | 1.778 | .001 e,f |
| 32 | S/H | Managing staff grievances | 3.10 | 1.851 | 30 | 2.57 | 1.633 | 18 | 2.06 | 1.349 | 26 | 3.92 | 1.831 | 14 | 4.07 | 1.900 | .000 b,e,f |
| 33 | H | Developing a marketing plan | 3.13 | 1.665 | 30 | 3.50 | 1.717 | 17 | 3.00 | 1.275 | 30 | 3.10 | 1.882 | 18 | 2.67 | 1.495 | .398 |

*Note:* S = soft; H = hard; S/H = mixed. Superscript letters indicate paired test differences. ªLodging vs. all. ᵇFood and beverage vs. all. ᶜMeeting and event management vs. all. ᵈLodging vs. food and beverage. ᵉFood and Beverage vs. meeting and event management. ᶠLodging vs. meeting and event management.

*Significant at $p \leq .003$ on analysis of variance when the assumptions for normality and equal variances were met or on Kruskal–Wallis when the assumptions were not met. **ns differ because of N/A (not applicable) responses.

Sisson & Adams 2013, 131-145).

# Appendix 7

Table 1: Industry's Perceptions on the Importance of Tourism and Hospitality Graduates' Competencies

| No. | Competencies Items | Less important (%) | Neither both (%) | Important (%) | Very important (%) |
|---|---|---|---|---|---|
| 1 | Ability to work in teamwork | | | 30 | 70 |
| 2 | Learning skill | | 1.6 | 41.7 | 56.7 |
| 3 | Ability to inform information | | 1.6 | 56.7 | 41.7 |
| 4 | Customer service skill | | 1.7 | 35.0 | 63.3 |
| 5 | Ability to support staff | | 1.7 | 53.3 | 45.0 |
| 6 | Professionalism skill | | 1.7 | 50.0 | 48.3 |
| 7 | Reliability | | 3.3 | 40.0 | 56.7 |
| 8 | Integrity skill | | 3.3 | 45.0 | 51.7 |
| 9 | Interpersonal skill | | 3.3 | 36.7 | 60.0 |
| 10 | Marketing skill | | 3.3 | 40.0 | 56.7 |
| 11 | Communication skill | | 3.3 | 31.7 | 65.0 |
| 12 | Staffing | | 5.0 | 50.0 | 45.0 |
| 13 | Ability to delegate | | 5.0 | 68.3 | 26.7 |
| 14 | Planning and organizing skill | | 5.0 | 56.7 | 38.3 |
| 15 | Initiative | | 5.0 | 45.0 | 50.0 |
| 16 | Networking | 1.6 | 5.0 | 61.7 | 31.7 |
| 17 | Reading skill | | 6.7 | 61.6 | 31.7 |
| 18 | Conflict resolution skill | | 6.7 | 45.0 | 48.3 |
| 19 | Flexibility | | 6.7 | 40.0 | 53.3 |
| 20 | Writing skill | | 8.3 | 66.7 | 25.0 |
| 21 | Problem solving skill | | 8.3 | 45.0 | 46.7 |
| 22 | Mentoring skill | | 8.3 | 56.7 | 35.0 |
| 23 | Motivation | | 8.3 | 51.7 | 40.0 |
| 24 | Vision | | 8.3 | 58.4 | 33.3 |
| 25 | Monitoring staff | | 8.3 | 53.3 | 38.4 |
| 26 | Ability to control resources | | 8.3 | 58.4 | 33.3 |
| 27 | Strategic planning | | 10.0 | 45.0 | 45.0 |
| 28 | Creative skill | | 10.0 | 48.3 | 41.7 |
| 29 | Recording skill | | 11.7 | 55.0 | 33.3 |
| 30 | Coordinating skill | 1.7 | 13.3 | 46.7 | 38.3 |
| 31 | Critical thinking skill | | 15.0 | 46.7 | 38.3 |
| 32 | Preparing budget | 1.7 | 13.3 | 48.3 | 36.7 |
| 33 | Computer application skill | 1.7 | 15.0 | 61.6 | 21.7 |
| 34 | Ability to clarify company's objectives | | 16.7 | 48.3 | 35.0 |
| 35 | Entrepreneurship skill | 1.7 | 18.3 | 55.0 | 25.0 |
| 36 | Ability to use tools | 3.3 | 16.7 | 66.7 | 13.3 |
| 37 | Technology awareness | 3.3 | 25.0 | 56.7 | 15.0 |
| 38 | Business fundamental skill | 3.3 | 25.0 | 41.7 | 30.0 |
| 39 | Mathematical skill | 3.3 | 28.3 | 56.7. | 11.7 |
| 40 | Ability to use technology | 20.0 | 35.0 | 38.3 | 6.7 |

**Appendix 8**

| Finding the relevant information | Digital interaction with colleagues | Digital personal presentation | Customer care |
|---|---|---|---|
| • Using technology to find information and draw business insight<br>• Finding and utilizing useful gadgets, apps and websites<br>• A sense of source criticism | • Usage of digital communication services<br>• Online presence | • Professional image online<br>• Awareness of association between a company and an employee online | • Digitally maintaining a customer relationship<br>• Ability to provide digital assistance to customers<br>• Sense of cautiousness in the digital age |

| Digital marketing, presentation and sales skills | Ability to use technological soft- and hardware | Accounting |
|---|---|---|
| • Data-based market research<br>• Digital marketing tools<br>• Brand management digitally<br>• Networking and selling digitally | • Computers, pads and mobile phones<br>• Programs such as CRM and ERP<br>• Cyber security | • Digital invoicing<br>• Digitally storing financial documents<br>• Securing financial data online |