Eurasian Studies in Business and Economics 13/2 *Series Editors:* Mehmet Huseyin Bilgin · Hakan Danis

Mehmet Huseyin Bilgin Hakan Danis Ender Demir Ahmet Faruk Aysan *Editors*

Eurasian Business Perspectives

Proceedings of the 23rd Eurasia Business and Economics Society Conference





Eurasian Studies in Business and Economics 13/2

Series Editors

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Eurasian Business Perspectives

Proceedings of the 23rd Eurasia Business and Economics Society Conference



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Preface

This is the Volume 2—*Eurasian Business Perspectives* of the 13th issue of the Springer's series *Eurasian Studies in Business and Economics*, which is the official book series of the Eurasia Business and Economics Society (EBES, www.ebesweb. org). This issue includes selected papers presented at the 23th EBES Conference—Madrid that was held on September 27–29, 2017, at the Faculty of Economics and Business, Universidad Complutense de Madrid in Madrid, Spain.

Distinguished colleague Giuseppe Ciccarone from Sapienza University of Rome, Italy, joined the conference as keynote speaker. During the conference, participants had many productive discussions and exchanges that contributed to the success of the conference where 301 papers by 519 colleagues from 53 countries were presented. In addition to publication opportunities in EBES journals (*Eurasian Business Review* and *Eurasian Economic Review*, which are also published by Springer), conference participants were given the opportunity to submit their full papers for this issue.

Theoretical and empirical papers in the series cover diverse areas of business, economics, and finance from many different countries, providing a valuable opportunity to researchers, professionals, and students to catch up with the most recent studies in a diverse set of fields across many countries and regions.

The aim of the EBES conferences is to bring together scientists from business, finance, and economics fields, attract original research papers, and provide them with publication opportunities. Each issue of *the Eurasian Studies in Business and Economics* covers a wide variety of topics from business and economics and provides empirical results from many different countries and regions that are less investigated in the existing literature. All accepted papers for the issue went through a peer review process and benefited from the comments made during the conference as well. The current issue covers fields such as entrepreneurship, human resources, management, and marketing.

Although the papers in this issue may provide empirical results for a specific county or regions, we believe that the readers would have an opportunity to catch up with the most recent studies in a diverse set of fields across many countries and

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regions and empirical support for the existing literature. In addition, the findings from these papers could be valid for similar economies or regions.

On behalf of the series editors, volume editors, and EBES officers, I would like to thank all presenters, participants, board members, and the keynote speaker, and we are looking forward to seeing you at the upcoming EBES conferences.

Istanbul, Turkey Ender Demir

Eurasia Business and Economics Society (EBES)

EBES is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. EBES was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics but also encouraging the intellectual development of scholars. In spite of the term "Eurasia," the scope should be understood in its broadest terms as having a global emphasis.

EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and increase economics, finance, and business knowledge through academic discussions. Any scholar or professional interested in economics, finance, and business is welcome to attend EBES conferences. Since our first conference in 2009, around 11,157 colleagues from 98 countries have joined our conferences and 6379 academic papers have been presented. EBES has reached 2050 members from 84 countries.

Since 2011, EBES has been publishing two journals. One of those journals, *Eurasian Business Review—EABR*, is in the fields of industrial organization, innovation, and management science, and the other one, *Eurasian Economic Review—EAER*, is in the fields of applied macroeconomics and finance. Both journals are published quarterly by *Springer* and indexed in *Scopus*. In addition, EAER is indexed in the *Emerging Sources Citation Index* (*Clarivate Analytics*) and EABR is indexed in the *Social Science Citation Index* (*SSCI*).

Furthermore, since 2014 Springer has started to publish a new conference proceedings series (*Eurasian Studies in Business and Economics*) which includes selected papers from the EBES conferences. The 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, and 20th (Vol. 2) EBES Conference Proceedings have already been accepted for inclusion in the *Conference Proceedings Citation Index - Social Science & Humanities (CPCI-SSH*). The 20th (Vol. 1), 21st, and subsequent conference proceedings are in progress.

We look forward to seeing you at our forthcoming conferences. We very much welcome your comments and suggestions in order to improve our future events. Our success is only possible with your valuable feedback and support!

With my very best wishes,

Klaus F. Zimmermann President

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Part I Human Resources

Employer Brand and Hospitality Services: Theoretical Overview



Indre Sciukauske

Abstract The hospitality industry is often characterized as a low-wage, low-skill, antisocial working time, and it contributes to the poor reputation of the employer. This leads to the global difficulties of recruitment in this industry and aim of this chapter is to expose how the use of the employer brand can help hospitality services providers to change this and to ensure a positive guest experience. Also focus on employees in the field of hospitality when making solutions that are useful to the organization is gaining increasing importance in the context that contact persons involved both during, after the provision of this service, and at the time of placing it, can affect the customer's decision to buy or not to buy a service, to become loyal, and exactly employer brand allows organization to attract and retain the right employees. Thus, this theoretical overview of the impact of the employer's brand on the provision of these services is relevant and important for hospitality service organizations as an opportunity to discover new ways to manage and address the specific challenges of this industry. The chapter reveals the concept of the employer brand, hospitality and hospitality services and the interconnections.

Keywords Employer · Employer brand · Hospitality · Services · Relation

1 Introduction

Already in ancient times, the Greek "xenia" (guest, friendship) and the Roman "hospitium" (hospitality) as well as the beginning of merchant travel, were rudiments of hospitality, which in these days have become a major contribution to the service sector of individual countries and the world economy. It covers not only accommodation, catering, leisure, recreation, and other services, but also features a country and its people. The concept of hospitality itself is inseparable from the

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people, and the attitude of the people who are working and who create these workplaces in this sector can determine whether the guests (including locals) will return not only to the service organization but also to that country.

This hospitality sector is also faced with other challenges. The hospitality industry is often characterized as a low-wage, low-skill, antisocial working time, low learning opportunities and a limited career advancement industry, which contributes to tense stressful working conditions, frequent employee turnover, and poor employer reputation (Sobaih 2015). This determines the global recruitment difficulties in this industry, which is dominated by casual employees (i.e., temporary and part-time employees), and they may not be interested in long-term careers (Sobaih 2011). Therefore, these, as well as the shortage of employees due to emigration and globalization, can be solved by the employer brand concept adaptation as strategy in the hospitality sector. An employer brand for a company as an organization helps during recession and helps to stay in a competitive market, brings the image of the entire company, highlights the organization's commitment to the brand and is financially viable. It is also worth mentioning that the adaptation of the employer's brand concept is important not only for the organization as an employer in the context of human resource management by attracting and retaining employees, but also from the management perspective as a profit-making organization for the possibility of using this concept as a strategy to attract and retain loyal customers, and not just employees. A client, knowing about inappropriate working conditions in an organization, may not choose this organization as a provider of hospitality services, thus losing potential clients, forming an unfavorable service brand for a hospitality organization.

2 The Employer Brand: The Concept and the Strategy

Although nearly 30 years have elapsed since Ambler and Barrow, for the first time in 1996 mentioned the concept of an employer brand, this concept has not yet been purified, due to the existing similarities and differences between the traditional brand, the corporate brand, and the employer brand theories. They described the employer brand as a functional, economic, and psychological benefit package provided by the work and considered that the employer brand has personality and positioning as well as the traditional brand (Ambler and Barrow 1996). Davies (2008) also argued that traditional trademark features, such as the ability to differentiate, build loyalty, satisfaction, and develop emotional attachment, are also characteristic of the employer's brand. Tuzuner and Yuksel (2009) also endorsed this approach and added that employer branding is part of internal marketing and is still a concept that needs to be developed to determine which aspects make the company attractive to its current or future employees.

The most obvious aspect of these closely related theories is that the traditional brand management objectives and techniques used are translated into a higher level. The product brand/service brand is not the only brands of organization, but the entire organization also has to manage it's employer brand. The main objective of traditional marketing is to achieve a competitive similarity in the consumer market, when by employer brand's—in the labor market (Schlager et al. 2011; Mosley 2014).

It is also worth mentioning that employer brand benefits also include talent success (Singh and Sharma 2013), due to the loyalty of employees in companies with the employer brand, consumer satisfaction and financial indicators, such as growth margins, sales, shareholder profits and stocks value, are increasing (Barrow and Mosley 2006). As it is clear, the researchers focus on different aspects when examining the employer brand and this branding theory.

As can be seen in Table 1, interpretations of the employer brand are usually related to the positive image of the employer, but other researchers also point out that the development of identity and the whole process involves stakeholders in whose mind organization seeks to form a unique, excellent organization as an employer opinion. Martin et al. (2011) confirm this, describing it as a generalized recognition to be known among key stakeholders as offering high-quality recruitment experience and a distinctive organizational identity that employees value, engage with it and feel confident and happy to encourage others. Another scholar, Mosley (2014, p. 4), summarizes the employer's brand concept and states that it is defined "as a promise; as desirable image and reputation"; and as "the whole spectrum of thoughts and feelings that people associate with the employer, both positive and negative, both true and false, clear and impressionistic, whether they are based on direct experience, intentional or unintentional communication, hearing." In this context, each employer has an employer brand, regardless of whether he/she has defined the features and image that can be linked (Mosley 2014). All these definitions show the importance of managing it properly and that strategic steps should be taken by managers.

The strategic aspect of this concept was discussed by Aldousari et al. (2017) who have found that a well-developed employer brand strategy has an impact on organizational productivity: companies with well-developed strategies have better performance outcomes than companies without strategy or only partially developed. Among the organizational factors that have a significant effect on mediation are profitability, communication, and leadership, and the effect on productivity is seen through the following results:

- 1. Sufficient recruitment of new applicants.
- 2. Recruitment of applicants with the right skills and abilities.
- 3. Work-life satisfaction and organizational commitment.
- 4. Voluntary reduction of employee turnover.
- 5. Increased productivity of employees.
- 6. Enabling employees to provide quality products and services (Aldousari et al. 2017).

Also, Martin et al. (2011) point out that employer branding is a process in which branding, marketing, communication, and human resource techniques are tailored to create an employer's brand. A good employer brand requires good cooperation across all organizational functions (Gehrels and de Looij 2011). Hence, the design and implementation of an employer's brand embraces not only the concept of the

Table 1 The definitions and interpretations of employer brand

	D C 11
Authors	Definition
Ambler and Barrow (1996)	The package of functional, economical, and psy- chological benefits provided by employment, and identified with the employing company
Ewing et al. (2002)	Building an image in the minds of the potential labor market, that the company above all others, is a great place to work
Lloyd (2002)	The sum of a company's efforts to communicate in Berthon et al., to existing and prospective staff that it is a desirable place to work
Backaus and Tikoo (2004)	"Process of building an identifiable and unique employer identity concept of the firm that differ- entiates it from its competitors"
Knox and Freeman (2006)	Image associated with an organization, uniquely in its role as an employ
Grunewalder (2008)	Employer branding is the process, when employer image "great place to work" is put the minds of target groups
Rosethorn (2009)	Employer brand is both deal of organization and its people. Employer branding is the art to articulate this deal in a way that is distinctive, compelling and relevant to individual, and that would be ensuring through all employees' work cycle at the organization
Kimpakom and Tocquer (2009)	An organization's image as seen through the eyes of its actual and potential employees
Srivastava and Bhatnagar (2010)	Employer brand is about giving an identity, image, and distinctiveness to the organization as an employer in order to attract its prospective employees and to motivate, engage, and retain its current employees
McLeod and Waldman (2011)	Employer brand—it is perception of organization as a good place to work in the eyes of current, potential, and external people
Shiwaji and Shivashankar (2013)	Employer branding is a targeted long-term management strategy, awareness and perception of employees, potential employees and related stakeholders
Malati and Seghal (2013)	It helps to differentiate the company from its competitors as an employer
The UK's Chartered Institute of Personnel and Development (CIPD) (2008)	A set of attributes and qualities—often intangible—that makes the organization unique, promising a certain amount of work experience and appealing to those who are thriving and best performing in her culture
Minchington (2006)	Organizations image as a "great place to work"
	•

Source: Source for Rows 1 through 5: Srivastava and Bhatnagar (2010) and author's own study

brand, but also other organizational units, and in order to use successfully the employer brand benefits, organizations must integrate the activities of different departments. Shiwaji and Shivashankar (2013) described this as a targeted long-term managerial strategy, while Mosley (2014) specifically points out that the employer's brand strategy is in the middle of a human resource management strategy and marketing strategy, and right after a corporation/business strategy. This is because, according to this scientist, the employer's brand strategy must be consistent with all three, to support the talents needed to ensure the organization's competitive edge, as well as reflect the organization's and customer's brand promises and ambitions in the company.

An organization should not focus solely on the customer's brand, but should ensure that the organization's three brands (goods/services, corporations, and employers) are interlinked (Minchington 2006). An employer's brand is becoming increasingly important in research and practice in multinationals, as it directly relates to corporate reputation, talent management, and employee engagement (Martin et al. 2011). An integrated brand model presented by Gehrell and de Looij (2011) shows three branded proposals that the organization should manage: employer brand, customer brand and corporate brand. The employer brand consists of employer brand reputation, which leads to attractiveness for outsiders as well as internal identification with brand, which leads to talent commitment and retention. All these benefits, according to the authors, show the employer brand effectiveness, which leads to organizational performance and impacts organizational culture. All three brand proposals are created in the organizational culture and this means that indirectly employer brand impacts whole organizations performance.

According to Moroko and Uncles (2008), there are two main dimensions of a successful/unsuccessful employer's brand: accuracy and attractiveness. The latter is consistent with the user/corporate brand—to be known and noticeable, to be relevant and resonant, to stand out from direct competitors, and the interaction between employee engagement and the attractiveness of the company itself, according to these authors, is the work of human resources management and marketing departments. The attraction and retention of the "best" employees also means that these employees will pass on the promise of the brand and will meet the expectations of customers, increase their satisfaction and likely loyalty, which will encourage revenue growth and profitability (Moroko and Uncles 2016). The best employees' behavior is consistent, which ensures the fulfillment of customer expectations, which enhances corporate reputation and maintains customers.

These scientists also relied on McDonald et al. (2001) and de Chernatony et al. (2003) who argued that employees had the opportunity to create strong and long-lasting brands, especially in the service sector, and argued that employees were recognized as a successful player in brand management. Satisfied and loyal staff communicate with one another and between teams more positively, loyalty increases, which results in better employee retention, as well as the transfer of positive work experience to potential employees (Moroko and Uncles 2016). Hence, an employer brand strategy can be considered as a strategy that combines the activities of human resources and marketing departments and is tied to the

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strategy of the entire organization, the effect of its use is visible both at the external and internal levels of the organization and helps to solve problems related to employees who already as mentioned above is particularly relevant in the hospitality sector.

3 Hospitality Services and Contact Employees

According to the Oxford Dictionary, hospitality is "friendly and generous behavior with guests" and "food, beverages or services provided by organizations to their guests, clients, and so on" (Oxford Dictionary 2016). The friendly, welcoming, and generous treatment of guests is the essence of hospitality (Pezzotti 2011). This relates to the reception and leisure time of travelers, how they are treated with all the welfare and satisfaction of the traveler (Mok et al. 2001). Another distinctive feature of hospitality services is that the users or customers of these services, as already mentioned in the Oxford Hospitality Definition, are called guests. According to Pezzotti (2011), hospitality clients are named not as clients but as guests because the client is welcoming rather than a guest and is more oriented as a financial transaction when the word "visitor" brings all hospitality dimensions (Pezzotti 2011). This scientist states that the goal is to create a difference from the outside world, a stress-reducing, warm environment, and provide a timely, relevant, targeted, and professional service, as well as that hospitality and services are both different and related: hospitality is a strategy, and services are its tactics.

Hospitality and services must work together and synchronously, as this will only achieve the overall experience of the guest and, therefore, improvement of services and operations must be based on hospitality (Pezzotti 2011). This is confirmed by Barrow et al. (2012) who claim that "Zero Defects" is the goal that the company seeks to create by its own systems, but what should be included in the "zero defects" depends on the company's goals and customer's expectations. This is the reason hospitality services companies develops standards: they aim to create consistency, eliminate mistakes, and to manage customer expectations from inside.

The certain types of hospitality services are distinguished: electronic-mechanical, indirect personal, and transaction face-to-face. As the fact of the service itself happens only during its transaction, the guest's experience depends first on the contact person. There are two main aspects of personal service: the task that requires technical competence and the personal interaction between the guest and the service provider (employee), which can be described as a helpful and friendly approach (Barrow et al. 2012). The service is a technical procedure for doing a work (task), and a hospitality service is a transaction where the service emphasizes what is being done and hospitality personalizes as it is done (Pezzotti 2011). Hence, the interpersonal dimension in the services of hospitality is central to the competitive advantage of the service, since competitors can meet the aspect of the task, but only a person will provide some different experience.

An appropriate interpersonal aspect can only be provided by an employee with a helping skill, and the competences are required for a professional service deliver. Also, the service sector requires human resources be aligned with their specialized service behavior and with the values of their clients, and that employees should act consistently in serving their customers as they deliver brand promises to their customers (Chang and Ma 2015). Employees (because of unique hospitality environment) create a true relationship that is different from other services (Kandampully et al. 2014). This means that in the hospitality services a lot of attention must be paid to the contact staff because of their continuous involvement in the provision of services, the creation of the brand service through the transfer of promise, the creation of unique relationships and this can be done only by the helping and professional employees.

4 The Relations Between Employer Brand and Hospitality Services

Interpersonal factors are often more important than operational factors, and recruited and satisfied employees are more likely to provide a positive service experience (Mosley 2014). One of the biggest challenges in the hospitality industry is finding and retaining of good employees to be motivated (Walker and Miller 2009). According Gehrels and de Looij (2011) work in the hospitality industry has become a student job, although specialists are needed in this area. Consequently, the development of an appropriate strategy to ensure the coordination of the identification and maintenance of both suitable employee, the provision of their standardized services with zero defects, behavior and the provision of good guest emotions and experience is a major challenge.

Barrow et al. (2012) point out that in the hospitality industry, and in particular in the accommodation sector, employees both directly and indirectly affect the quality of the services provided, and therefore decide how to attract and retain the best of the best work power and become an employer of choice. The attitude toward the employee as an internal client is related to the continuous improvement of the highest quality of service for the client. The difference in quality of service depends on the individual - their power to provide hospitality and service (Pezzotti 2011). Lashley (2008) states that the emotional dimension of hospitality makes a host–guest relationship more than a normal collision of service. The guests appreciate the full experience, considering the feelings they encounter in their various meetings with frontline staff and executives, as well as other staff attending the entire visit. Understanding these emotional dimensions raises concerns about emotional work done by contact employees and the conditions required to eliminate negative effects and create emotional excitement. Frontline staff hosts guests and can create positive guest emotions and experiences that make customers loyal, because they have an emotional attachment to the company or destination (Lashley 2008). All it shows is 10 I. Sciukauske

that helping and professional employees are the main vehicle for achieving customer expectations, considering that the emotional environment in the hospitality services is more important and varies more frequently than physical environment.

According to Erkmen and Hancer (2015), hospitality staff are required to present the service brand through brand supportive behavior during customer interaction. People who interact with customers are the main difference for guest experiences. Because all hospitality organizations offer almost similar tangible offers such as hotel rooms, restaurant meals or airline seats, this makes the experience of the guests unique and offers a competitive edge (Erkmen and Hancer 2015). Also, they state that hospitality employees contribute to brand success through their behavior and employer brand helps organizations improve the brand-related behavior of their employees in order to ensure long-term relationships not only with clients but also with their employees working in intensive work and high-level customer contact with the industry. As the employer branding allows to attract right employees, retain and develop a psychological contract with them, it can be argued that the employer's brand affects the brand of hospitality services through employee and it can be used as strategy. According to Schlager et al. (2011), the employer brand has not yet been proven to be important to service brands, and argue that a strong employer brand is an effective tool that promotes and increases employee performance in such a way that they in turn have a positive impact on customer experience and thus indirectly affect service brand: employee satisfaction and identity with the organization positively affects the experience of clients and helps to create the service brand, while the long-term creation of a consistent service brand is ensured also taking into account potential employees.

A strategic aspect of marketing management is also highlighted by Baker and Magnini (2016), which combined the services marketing triangle and strategic marketing planning, implementation, and control systems into the composite model of hospitality marketing, where frontline service provider is the most important employee and can be managed through internal marketing. According to the authors, who rely on Akroush et al.'s (2013) statement that internal marketing is vital to the hospitality industry, state that dual communication between the frontline staff and management is essential to their ability and motivation to ensure customer satisfaction through internal marketing activities. Interactive marketing for hospitality involves preparing the service environment and frontline service provider for the highest level of interaction, and therefore, latter marketing activities must be incorporated into hospitality marketing (Baker and Magnini 2016). According to these researchers, hospitality management is different from other services due to the high proportion of frontline staff interaction, which still requires a lot of hospitality. Hence, the management of hospitality services requires new tools to ensure that interactions between employees and clients are conducted smoothly and create a positive experience. This can be done by using the employer brand strategy, and Fig. 1 is theoretical model of the employer brand impact on hospitality services, which illustrates its effects.

Since the employer brand is understood as a management strategy, it can be used in both external and internal ways. In conjunction with internal marketing activities,

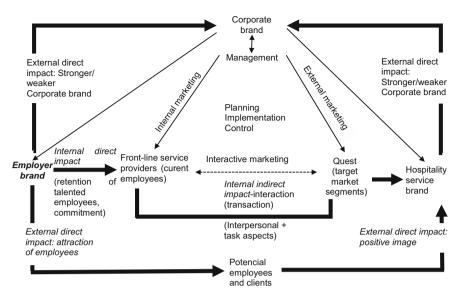


Fig. 1 The theoretical model of the employer brand impact on hospitality services. Source: Based on Baker and Magnini (2016) and author's own study

it can impact the frontline service provider in his interaction with target market segment's customer (quest) and indirect way impacts hospitality service brand. As internal direct impact is the retention of suitable employees (Cascio 2014), the attractiveness of the employer (Maxwell and Knox 2009), satisfaction and commitment of the employee. Also, due to consistent employee behavior that can be guaranteed by a strong employer brand (Moroko and Uncles 2016), the service transaction or otherwise the frontline service provider's professional interaction with the quest through appropriate interpersonal and task aspects in the hospitality services (Barrow et al. 2012) can have an indirect effect on the image and reputation of the hospitality service brand and its loyalty.

Most often, the employer brand is discussed as the tool to impact potential employees (Rampl 2014), explaining what values they value most (Berthon et al. 2005; Schlager et al. 2011; Sengupta et al. 2015) and the attributes that determine their candidacy to the proposed vacancy (Knox and Freeman 2006). Only from many potential candidates the hospitality organization can choose most suitable employees with helping and professional skills. As a potential employee can be a potential client and vice versa, the resulting external image will determine both the number of candidates for the job and the number of clients who decide to use the services of exactly that hospitality organization, because of its image as good employer.

Since the employer brand, as well as the product/service brand, is part of the organization's corporate brand, negative or positive associations associated with mentioned brands will have a corresponding external impact on the corporate brand: according to Moroko and Uncles (2016), it can strengthen or weaken it. It means that through management of all three brands, organization can achieve its goals.

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Hence, further investigation and research of the employer brand is particularly relevant in the hospitality business since the frontline employee can determine the competitive advantage of the organization's services: it is easier to "manage" the employee precisely because of the use of an integrated employer's brand strategy; also external impacts for corporate brand through employer brand perspectives should be discussed and researched as well as connections with employer brand and internal marketing activities.

5 Conclusions

Although employer's brand strategy is not a new strategy, potential using of it is not fully explored. The hospitality sector is precisely the niche that faces a persistent shortage of employees as well as their turnover, and this can be solved by a new way combining both human resources and marketing strategies.

As a result of the employer's brand strategy, such as attracting and retaining suitable employees, the use of this strategy can also have an impact on the service brand because of the frontline personnel's right and consistent behavior and attitude to both the hospitality and the guest. Due to the specificity of hospitality services (where professionalism and hospitable attitude are relevant), the contact person is the main person who generates and transmits a brand message of the hospitality service, and thereby strengthens the service brand. This means that the organization must ensure a proper message from the employer's brand, so that by attracting, retaining, and motivating the employee, they are able and willing to convey a certain message of the hospitality service brand and thus create a competitive advantage in such way.

As the employer brand affects not only the service brand, but also the corporate brand, management of all three brands should be strategic and cover all organization's departments in order for the organization to achieve its goals. The organization is more attractive as service provider, employment place or partner when all type brand messages create positive image.

References

- Akroush, M. N., Abu-ElSamen, A. A., Samawi, G. A., & Odetallah, A. L. (2013). Internal marketing and service quality in restaurants. *Marketing Intelligence & Planning*, 31(4), 304–336.
- Aldousari, A. A., Robertson, A., Yajid, M. S. A., & Ahmed, Z. U. (2017). Impact of employer branding on organization's performance. *Journal of Transnational Management*, 22(3), 153–170
- Ambler, T., & Barrow, S. (1996). The employer brand. *Journal of Brand Management*, 4(3), 185–206.
- Backaus, K., & Tikoo, S. (2004). Conceptualizing and researching employer branding. Career Development International, 9(5), 501–517.

- Baker, M. A., & Magnini, V. P. (2016). The evolution of services marketing, hospitality marketing and building the constituency model for hospitality marketing. *International Journal of Con*temporary Hospitality Management, 28(8), 1510–1515.
- Barrow, S., & Mosley, R. (2006). The employer brand: Bringing the best of brand management to people at work. Chichester: Wiley.
- Barrow, C. W., Powers, T., & Reynolds, D. R. (2012). *Introduction to management in the hospitality industry* (10th ed.). New Jersey: Wiley.
- Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: Dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2), 151–172.
- Cascio, W. F. (2014). Leveraging employer branding, performance management and human resource development to enhance employee retention. *Human Resource Development Interna*tional, 17(2), 121–128.
- Chang, H., & Ma, C. (2015). Managing the service brand value of the hotel industry in an emerging market. *International Journal of Hospitality Management*, 47, 1–13.
- Davies, G. (2008). Employer branding and its influence on managers. *European Journal of Marketing*, 42(5–6), 667–681.
- De Chernatony, L., Drury, S., & Segal-Horn, S. (2003). Building the services brand: Stages, people and orientations. *The Service Industries Journal*, 23(3), 1–21.
- Erkmen, E., & Hancer, M. (2015). Do your internal branding efforts measure up? Consumers' response to brand supporting behaviors of hospitality employees. *International Journal of Contemporary Hospitality Management*, 27(5), 878–895.
- Ewing, M. T., Pitt, L. F., de Bussy, N. M., & Berthon, P. (2002). Employment branding in the knowledge economy. *International Journal of Advertising*, 21(1), 3–22.
- Gehrels, S. A., & de Looij, J. (2011). Employer branding: A new approach for the hospitality industry. *Research in Hospitality Management*, 1(1), 43–52.
- Grunewalder, A. (2008). *Employer branding. Marketing the company as an attractive employer*. Seminar paper. Norderstedt: Druck und Bindung: Books on demand Gmbh.
- Kandampully, J., Keating, B. W., Kim, B. P., Mattila, A. S., & Solnet, D. (2014). Service research in the hospitality literature insights from a systematic review. *Cornell Hospitality Quarterly*, 55 (3), 287–299.
- Kimpakom, N., & Tocquer, G. (2009). Employees' commitment to brands in the service sector: Luxury Hotel Chains in Thailand. *Journal of Brand Management*, 16(89), 532–544.
- Knox, S., & Freeman, C. (2006). Measuring and managing employer brand image in the service industry. *Journal of Marketing Management*, 22(7–8), 695–716.
- Lashley, C. (2008). Marketing hospitality and tourism experiences. In H. Oh & A. Pizam (Eds.), *Handbook of hospitality marketing management* (pp. 3–31). Oxford: Butterworth-Heinemann. Lloyd, S. (2002). Branding from the inside out. *BRW*, 24(10), 64–66.
- Malati, N., & Seghal, K. (2013). Employer branding: A potent organizational tool for enhancing competitive advantage. *The IUP Journal of Brand Management*, 10(1), 51–66.
- Martin, G., Gollan, P. J., & Grigg, K. (2011). Is there a bigger and better future for employer branding? Facing up to innovation, corporate reputations and wicked problems in SHRM. *The International Journal of Human Resource Management*, 22(17), 3618–3637.
- Maxwell, R., & Knox, S. (2009). Motivating employees to "live the brand": A comparative case study of employer brand attractiveness within the firm. *Journal of Marketing Management*, 25 (9–10), 893–907.
- McDonald, M. H. B., de Chernatony, L., & Harris, F. (2001). Corporate marketing and service brands – Moving beyond the fast-moving consumer goods model. *European Journal of Marketing*, 35(3–4), 335–352.
- McLeod, Ch., & Waldman, J. (2011). The HR Trailblazer: Unlock the potential of your employer brand. Kindle ed. eBookIt.com
- Minchington, B. (2006). *Your employer brand Attract, engage, retain*. Torrensville: Collective Learning Australia.

Mok, C., Sparks, B., & Kadampully, J. (2001). Service quality management in hospitality, tourism, and leisure (1st ed.). London: Haworth Hospitality Press.

- Moroko, L., & Uncles, M. D. (2008). Characteristics of successful employer brands. *Journal of Brand Management*, 16(3), 160–175.
- Moroko, L., & Uncles, M. D. (2016). Strategic employer brands: Current domain, future directions. In F. D. Riley, J. Singh, & C. Blankson (Eds.), *The Routledge companion to contemporary brand management* (1st ed., pp. 309–323). Roxon: Routledge.
- Mosley, R. (2014). Employer brand management (1st ed.). West Sussex: Wiley.
- Oxford Dictionary. (2016). Oxford University Press [online]. Accessed September 22, 2017, from http://www.oxfordlearnersdictionaries.com/definition/english/hospitality
- Pezzotti, G. (2011). The essence of hospitality and service. In M. C. Sturman & J. B. Corgel (Eds.), The Cornell school of hotel administration on hospitality: Cutting edge thinking and practice (1st ed., pp. 5–20). New Jersey: Wiley.
- Rampl, L. V. (2014). How to become an employer of choice: Transforming employer brand associations into employer first-choice brands. *Journal of Marketing Management*, 30(13–14), 1486–1504.
- Rosethorn, H. (2009). *The employer brand: Keeping faith with the deal* (1st ed.). Surrey: Gower Publishing.
- Schlager, T., Bodder, M., Maas, P., & Cachelin, J. L. (2011). The influence of the employer brand on employee attitudes relevant for service branding: An empirical investigation. *Journal of Services Marketing*, 25(7), 497–508.
- Sengupta, A., Bamel, U., & Singh, P. (2015). Value proposition framework: Implications for employer branding. *Decision*, 42(3), 307–323.
- Shiwaji, W., & Shivashankar, S. (2013). Employer branding: A strategic tool to attract and retain talents in a competitive environment. *Indian Streams Research Journal*, 2(12), 1–4.
- Singh, M. K., & Sharma, S. (2013). Employer branding in India: Emerging dimension. *International Journal of Research in Commerce and Management*, 4(2), 70–75.
- Sobaih, A. E. E. (2011). The management of part-time employees in the Restaurant Industry: A case study of the UK restaurant sector. Saarbrucken: Lap Lambert Academic Publishing GmbH & KG.
- Sobaih, A. E. E. (2015). Hospitality employment issues in developing countries: The case of Egypt. *Journal of Human Resources in Hospitality & Tourism, 14*(3), 221–243.
- Srivastava, P., & Bhatnagar, J. (2010). Employer brand for talent acquisition: An exploration towards its measurement. *Vision: The Journal of Business Perspective*, 14(1–2), 25–34.
- The UK's Chartered Institute of Personnel and Development (CIPD). (2008). Employer branding. A no-nonsense approach [online]. Accessed October 22, 2017, from http://www2.cipd.co.uk/NR/rdonlyres/D0AC3CB0-BC5F-44F5-886D-4C00276F2208/0/empbrandguid.pdf
- Tuzuner, V. L., & Yuksel, C. A. (2009). Segmenting potential employees according to firm's employer branding concept. *Journal of Academic Research in Economics*, *I*(1), 46–61.
- Walker, J. R., & Miller, J. E. (2009). Supervision in the hospitality industry. Leading human resources (6th ed.). New Jersey: Wiley.

Motivating Employees in Times of Industry 4.0: The Suitability of Classical Motivation Theories Within the Framework of Industry 4.0



Sabrina Romina Sorko and Claudia Brandstätter

Abstract The comprehensive networking and digitization associated with the fourth industrial revolution leads to changes along the entire value chain and requires a holistic change process within the company. This change process affects not only the company itself, but also addresses a wide range of stakeholders. As a particularly important stakeholder group, employees are faced with entirely new challenges. Lifelong learning and continuous professional development will be a prerequisite to survive in the labor market modified by Industry 4.0. Particularly with those employees, who see their job threatened by Industry 4.0, these fears lead to uncertainty and motivation losses. This leads to the question how employees can be motivated in the age of Industry 4.0 and whether classical motivation theories are still valid. In order to answer this question, different motivation theories are analyzed, and the main motivation criteria are worked out and summarized in an overview matrix. Subsequently, the applicability of the classical motivation theories and their measures in the Industry 4.0 process is examined in an empirical survey.

Keywords Motivation theories · Industry 4.0 · Leadership · Digitization

1 Introduction

The fourth industrial revolution (Industry 4.0) will lead to changes for manufacturing companies and their employees in the future. Increasing digitization enables the development and implementation of intelligent systems, which causes more flexible processes within the whole company. Thus, monitoring the production could be done independently of location and time (Kagermann et al. 2013; Bauernhansl et al. 2014). If real productivity increases within the framework of Industry 4.0, it should be realized that the working environment also needs to be redesigned (Frey and

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Osborne 2013; World Economic Forum 2016). Although in discussions around this topic mainly technological possibilities are in the foreground, it is of great relevance to consider the human factor. So the cooperation between employee and machine is becoming ever more intense and their degree of networking will be a decisive factor in the success of a company (World Economic Forum 2016). One important result of this development, especially for existing employees, is the restructuring of the competence areas (Sorko and Kreil 2016). By digitizing, work content, processes and tasks will change. However, the employees should remain the chief of planning, controlling, and dispositive activities (Becker 2015). In future, it will be necessary for the employees not only to network tasks and information. They will have to be able to think organizational and to keep the overview on all processes (Kraft 2016). These changes create on the one hand insecurity among employees and lead to the fear of losing one's job. Nevertheless on the other hand numerous positive changes such as the development of new occupational fields are expected.

Summing up, the following applies: The lower the qualification of the employee, the higher the probability of being replaced by intelligent systems. After implementation of the production potentials of Industry 4.0, fewer employees are needed directly in production with the same equipment. In particular, simple routine tasks can be replaced by automation, and also routine decisions can be performed by intelligent control systems (Hirsch-Kreinsen 2015). Now it has to be considered what impact these findings have especially for employees working on the shop floor. The knowledge of those employees that their jobs are more likely to be digitalized by Industry 4.0 can lead to considerable motivation losses. However, motivated employees are an important resource for companies, because with intrinsic motivation average performance can be achieved, which can have a significant positive impact on the company's success (Mitchell 1984; Thomas 2010). This raises the question of how employees can be motivated in a completely changing environment and whether the prevailing classical motivation theories are still suitable under Industry 4.0. With the help of a qualitative examination, the chapter tries to identify which motivation measures are currently being applied in companies and whether they can usually be assigned to the traditional motivation theories. In the context of the empirical survey, it is examined which motivational measures are planned in relation to Industry 4.0 and which are considered important. Another goal is to find out whether classical motivation theories still play a role within the framework of Industry 4.0.

The chapter is structured as follows: First, the theoretical framework and the literature review analyses the main contributions to the topic of Industry 4.0, as well as an overview of the most classical motivation theories is given. Then we describe the methodology and present main empirical results. In the final section the findings are interpreted and a conclusion is provided.

2 Theoretical Background

The first time the Fourth Industrial Revolution was discussed was in 2011 in Hannover, Germany (Gleich et al. 2016). Accordingly the term Industry 4.0 was created by the German federal government which has developed a buzzword, which is very often used in connection with future developments of companies by now (Gleich et al. 2016). A generally valid definition for Industry 4.0 is not yet available. Nevertheless, this term often refers to the networking of machines through communication tools, which will change the organization and management of the value chain over the entire product life cycle. Apart from improvements in flexibility and added value, the aim is also to individualize products and services through the networking of customers and companies (Yin et al. 2018; Roth 2016). In order to achieve the highest possible degree of individualization, large amounts of customer data are necessary. Through an analysis of this data the request of the customers can be specified precisely and can be used for the production of customer-specific individual products. Thus, an individualization degree to a production size of only one piece is possible (Kraft 2016). Furthermore digitizing the entire lifecycle could be used to minimize the distance between supply and demand. The optimum is the so-called "zero distance," in which innovations are developed close to the customer (Roth 2016).

By merging the virtual with the physical world of manufacturing systems, a self-organizing factory with optimized production flow could be created, in which cyber-physical systems (CPS) are working autonomously and fully automatic: a Smart Factory. A Smart Factory is characterized by being a cloud-based and decentralized manufacturing company. Thus all information is available in real time—by networking all entities involved in value creation process. The ongoing analysis of the process data in real-time results in shorter reaction times as well as optimum resource utilization. Such networks are not only a major technical challenge, but also lead to changes in production and quality management. Ultimately, they affect the entire corporate culture and sales organization (Adamson et al. 2017; Roels 2012; Yin et al. 2018).

An important factor for the success of Industry 4.0 within the company is to adapt the work processes to the new technologies (Kraft 2016). Employees will have to expand or adapt their (digital) competencies due to the increasing level of digitization. For example, at least basic IT skills are required or process responsibility is to be taken over by the employees. Therefore, the willingness to further development and lifelong learning will get more important under Industry 4.0. Employees will have to learn how to think and act in networked and overlapping processes as well as deal with large amounts of data. For the employees, Industry 4.0 is a change in their usual way of working. It leads to many uncertainties and completely new—sometimes temporarily over-demanding—tasks. These factors can easily lead to demotivation. For this reason, HR managers and leaders are facing new challenges of how they can best motivate employees in the framework of Industry 4.0 (Thomas 2010; Sorko et al. 2017).