

Abstract

Attracting and retaining the best talent is a concern, particularly for knowledge-based firms in high-turnover industries, which rely on a limited supply of highly qualified individuals (Ewing, Pitt, De Bussy, & Berthon, 2002). In 2014, 36% of global employers criticized talent shortages, and in a 2015 study, 73% of CEOs reported being concerned about the availability of workers with key skills (Mosley, 2015). Employer branding is a key human resource and marketing strategy that contributes to the company's brand, enhances the firm's reputation as a great place for employees to work, and attracts a new workforce (Ahmad & Daud, 2016). An employer brand's and its employer branding value propositions' (EBV) ability to attract new employees and increase retention will provide benefits for the entire organization.

EBV defines the employer's attractiveness (Berthon, Ewing, & Hah, 2005), is a key aspect of the employer branding process, and provides differentiation for the firm (Alnıaçık & Alnıaçık, 2012; Backhaus & Tikoo, 2004; Berthon et al., 2005; Leekha Chhabra & Sharma, 2014; Moroko & Uncles, 2008) to attract and retain employees. Existing research viewed employer branding and its EBV from one or two views—employee or employer—and lacked multiview approaches to employer branding and employer attractiveness. This research focused on a holistic approach and addressed the question: “How do different EBVs affect the perceptions of employer attractiveness? To answer this question holistically, the following research subquestions emerged:

RQ1: How do employees perceive the EBV of employer attractiveness?

RQ2: How do current and former employees perceive the EBV of employer attractiveness?

RQ3: How do potential employees perceive the EBV of employer attractiveness?

RQ4: How do employers manage how employees perceive EBV?

This research consisted of four empirical papers and focused on the information technology (IT) industry context. The first study focused on employee views from all industries, whereas the second study concentrated on the IT industry and compared current and former employees. Study 3 considered potential employees in the IT industry and

operationalized the employee attractiveness construct and EBVs. The final study explored EBVs from the employer's view in an IT firm and compared its employees' views regarding the psychological contract. The design of this research is a mixed approach with descriptive and exploratory methodologies. IBM Watson's artificial intelligence content analysis was used in Studies 1, 2, and 4.

Contributions to the body of knowledge includes operationalizing the employee attractiveness construct as a set of EBVs. This research viewed EBVs holistically and extended the set of EBVs from five to eight value propositions for the IT industry. It also defined employer brand intelligence as a tool for practitioners to develop insights for their employer brand.

The document is organized with an introductory chapter describing the overall research approach, followed by a literature review chapter, methodology chapter, and summary of findings and contributions. The four papers are included in the final chapter.

Keywords

Employer branding, employer branding value propositions, employer attractiveness, human resources management, recruitment, retention, psychological contract, IT industry, IBM Watson, artificial intelligence.

Sammanfattning

Att attrahera och behålla de bästa talangerna är ett bekymmer, särskilt för kunskapsbaserade företag inom sektorer med hög omsättning som förlitar sig på ett begränsat utbud av högkvalificerade individer (Ewing, Pitt, De Bussy, & Berthon, 2002). Under 2014 kritiserade 36% av de globala arbetsgivarna brist på talangfull arbetskraft och i en studie från 2015 rapporterade 73% av de verkställande direktörerna att de var oroliga för tillgången på arbetare med nyckelfärdigheter (Mosley, 2015). Employer branding är en viktig HR- och marknadsföringsstrategi som bidrar till företagets varumärke, förbättrar företagets rykte som en utmärkt plats för anställda att arbeta och attraherar ny arbetskraft (Ahmad & Daud, 2016). Ett arbetsgivarvarumärke och förmågan hos employer branding värdeerbjudandena (EBV), att attrahera nya anställda och öka bibehållandet av personal, kommer att ge fördelar för hela organisationen.

EBV definierar arbetsgivarens attraktivitet (Berthon et al., 2005), är en viktig aspekt av employer branding-processen och förser företaget med differentiering (Almaçık & Almaçık, 2012; Backhaus & Tikoo, 2004; Berthon et al., 2005; Leekha Chhabra & Sharma, 2014; Moroko & Uncle, 2008) för att attrahera och behålla anställda. Befintlig forskning såg employer branding och dess EBV från ett eller två perspektiv – som anställd eller arbetsgivare - och saknade strategier med flera synvinklar för employer branding och arbetsgivares attraktivitet. Denna studie fokuserade på en helhetssyn och adresserade frågan: ”Hur påverkar olika EBV:er uppfattningen av arbetsgivares attraktivitet? För att holistiskt besvara denna fråga etablerades följande forskningsunderfrågor:

FF1: Hur uppfattar anställda EBV:et för arbetsgivarattraktivitet?

FF2: Hur uppfattar nuvarande och tidigare anställda EBV:et för arbetsgivarattraktivitet?

FF3: Hur uppfattar potentiella arbetstagare EBV:et för arbetsgivarattraktivitet?

FF4: Hur hanterar arbetsgivare hur anställda uppfattar EBV?

Denna studie bestod av fyra empiriska artiklar och fokuserade på kontext inom branschen för informationsteknik (IT). Den första studien fokuserade på anställdas perspektiv från alla branscher, medan den andra

studien inriktades på IT-branschen och jämförde nuvarande och tidigare anställda. Studie 3 handlade om potentiella arbetstagare inom IT-branschen. Den slutliga studien undersökte EBV:er från arbetsgivarens synvinkel i ett IT-företag och jämförde de anställdas åsikter och det psykologiska kontraktet. Designen för denna studie baseras på en blandad forskningsansats med deskriptiva och explorativa undersökningsformer. Studierna 1, 2 och 4 använde en stor mängd data från Glassdoor.com:s webbplats för medarbetarrecensioner och använde IBM Watsons innehållsanalys framtagen via artificiell intelligens för att utveckla insikter. Studie 3 utvecklades och färdigställdes med hjälp av studenter som läste datorvetenskap och informationsteknik på ett stort universitet i västra USA. I Studie 4 genomfördes semistrukturerade intervjuer med en arbetsgivare i Silicon Valley i Kalifornien.

Studie 1 har bidragit till att utvidga de fem värdeerbjudandena: ekonomiskt, socialt, tillämpnings-, utvecklings- och intressevärde för arbete framtagna av Berthon et al. (2005) till sju genom att identifiera två nya värdeerbjudanden: balans mellan arbete och liv samt hantering för alla industrier. En 2x2-matris för sju värdeerbjudanden utvecklades för varje värdeerbjudande. De två eller tre främsta värdeerbjudandena stod för 65% till 83% av anställdas kommentarer. Studien definierade en arbetsgivares varumärkesintelligens som ett nytt verktyg för chefer för att utveckla insikt och studien identifierade även sju konsekvenser för ledarskap.

Studie 2 har bidragit till att utvidga de sju värdeerbjudandena i Studie 1 genom att identifiera ett nytt värdeerbjudande; varumärkesimage eller organisationsimage inom IT-branschen. De sociala och ekonomiska värdena är nyckelfaktorer för beröm från både nuvarande och tidigare anställda medan värdet för ledarskap är en stor klagomålsfaktor för tidigare IT-anställda. Varumärkesimage är en annan primär klagomålsfaktor för både nuvarande och tidigare anställda.

Studie 3 bekräftade att de åtta värdeerbjudandena som är viktiga för nuvarande och tidigare anställda också är viktiga för potentiella arbetstagare. Studien operationaliserade arbetsgivares attraktivitet, utvecklade ett instrument för att mäta EBV:er samt utvecklade och testade ett nytt, mer omfattande instrument för att utvärdera EBV:er.

Studie 4 bekräftade att de åtta värdeerbjudandena som var viktiga i studie 2 också är viktiga för arbetsgivaren. Däremot finns det stora skillnader mellan arbetsgivaren och nuvarande och tidigare anställda,

vilket kan bidra till att det psykologiska kontraktet bryts och problem med att behålla personal. Arbetsgivaren bryr sig mer om sociala värden än vad nuvarande anställda gör. Det finns ett betydande gap mellan arbetsgivares och anställdas uppfattning angående intressevärdet. Ett annat gap finns mellan arbetsgivares och anställdas uppfattningar för utvecklingsvärdet. Nuvarande anställda bryr sig mer om varumärkets imagevärde än vad arbetsgivaren gör.

Dokumentet är organiserat med ett inledande kapitel som beskriver den övergripande forskningsansatsen, följt av ett litteraturkapitel, metodkapitel och en sammanfattning av resultat och bidrag. De fyra artiklarna ingår i det sista kapitlet.

Preface

Doctorate study is a remarkable journey for any individual, and it challenges you on both personal and intellectual levels. The journey is not possible without the support of many people. It is hard to name everyone who helped me in this process, but I'd like to acknowledge a few individuals in this document.

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Thank you all,
Amir Dabirian

List of appended papers

Paper 1

Dabirian, A., Kietzmann, J., & Diba, H. (2017). A great place to work!? Understanding crowdsourced employer branding. *Business Horizons*, 60(2), 197–205.

Paper 2

Dabirian, A., Paschen, J., & Kietzmann, J. (2019). Employer branding: Understanding employer attractiveness of IT companies. *IT Professional*, 21(1), 82–89. doi:10.1109/MITP.2018.

Paper 3

Dabirian, A., Berthon, P., & Kietzmann, J. (2019). Enticing the IT crowd: Employer branding in the information economy. *Journal of Business & Industrial Marketing*, 34(7), 1403–1409. doi:10.1108/JBIM-11-2018-0333s

Paper 4

Dabirian, A. (Under Review), Employer branding: The employer view of value propositions. *Journal of Product & Brand Management*.

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Glossary of Keywords

Brand, as defined as by the American Association of Marketing, is “a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler, Saliba, & Wrenn, 1991, p. 442).

Employer Brand is the brand knowledge of an organization as a great place to work (Ambler & Barrow, 1996a; Botha, Bussin, & de Swardt, 2011) and set of value propositions offered by the employer (Backhaus & Tikoo, 2004).

Employer Brand Intelligence is insight from data-driven crowdsourced online review sites such as Glassdoor.com.

Employer Branding is defined as a three-step process (Backhaus & Tikoo, 2004; Eisenberg, Kilduff, Burleigh, & Wilson, 2001; Sullivan, 2002): (a) a firm develops a value proposition (EBV) for its brand; (b) the firm markets this value to potential employees, recruiting agencies, etc.; and (c) the firm markets to the internal workforce that already comprises the company to ensure continuity of the firm’s mission.

Employer Branding Value Proposition (EBV) is a set of values, attributes, offerings, and dimensions that an employer portrays to its potential and current employees (Ambler & Barrow, 1996a; Backhaus & Tikoo, 2004; Berthon et al., 2005; Hanin, Stinglhamber, & Delobbe, 2013; Tumasjan, Strobel, & Welppe, 2011) as a great place to work.

Psychological Contract is the terms of an exchange agreement between an individual and their organization (Rousseau, 1989). It is the unwritten promise or expectation between an employee and the organization (Argyris, 1960).

Resource-Based View (RBV) describes how a firm could have a sustained competitive advantage if it implemented value-creation strategies not yet used by its competitors. Specifically, RBV posits that a firm’s resources that are valuable, rare, nonimitable, and systematically managed can result in a sustained competitive advantage.

Chapter 1: Introduction

1.1 Introduction to the Research Area

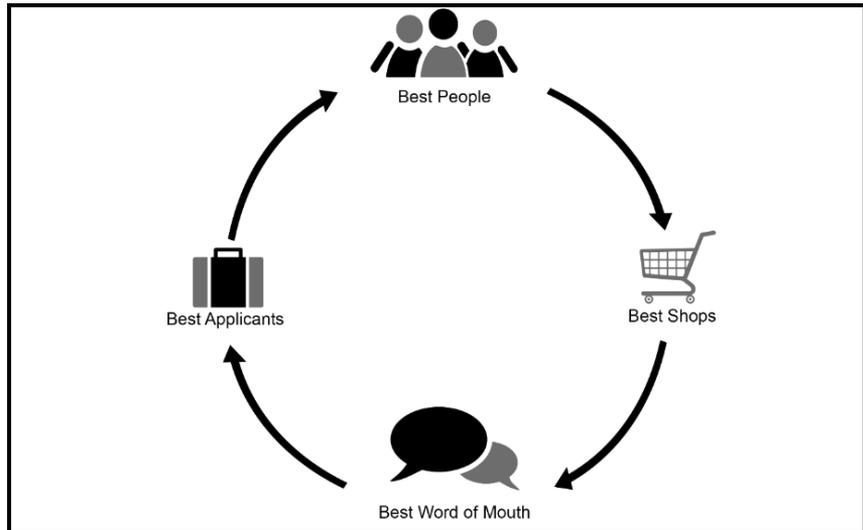
The word “brand” comes from the Old Norse “brandr” and is a derivation of “brinnan,” meaning “to burn” (Aaker, 1996; Blackett, 2004). In the 15th century, brands were used to stamp and identify ownership of livestock. The stamp or brand also reflected the farmer’s reputation for the quality of the animals on the farm. This early usage of brand is not far from its usage today. The American Association of Marketing defined brand as “a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler et al., 1991, p. 442). Brand identity refers to the visible components of a brand (Keller, 1993), such as a name, sign, symbol, or design. How customers perceive a brand is termed brand knowledge. Current literature demonstrates the importance of brand knowledge and links the brand to customer memory or knowledge (Alba, Hutchinson, & Lynch, 1991). Brand knowledge is divided into two categories: brand awareness and brand image. Brand awareness is how customers relate to the brand and how easily the brand comes to the customer’s mind. It is brand recognition from prior experience(s) that a customer had with the brand. Brand image is defined as “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993, p. 3). Customer-based brand equity is defined in relation to brand knowledge. Brand equity is defined as “the differential effect of brand knowledge on consumer response to the marketing of the brand” (Keller, 1993, p. 3).

1.1.1 Employer Brand and Employer Branding

Although the idea of a brand and branding originated in the Business to Consumer (B2C) marketing field, companies are increasingly utilizing brands and branding to identify themselves as a top employer and differentiate themselves from competing employers (Moroko & Uncles, 2009). The brand knowledge of an organization as a great place to work is known as an employer brand (Ambler & Barrow, 1996a; Botha et al., 2011) and encompasses a firm's efforts to communicate a set of value propositions (Barrow & Mosley, 2005; Knox & Freeman, 2006; Martin, 2010) to existing and prospective employees that it is a desirable place to work (Lloyd, 2002). Employer branding is the process of establishing or modifying brand equity (Berthon et al., 2005; Ewing et al., 2002; Moroko & Uncles, 2008), which is also known as employer brand equity or employer brand image (Knox & Freeman, 2006).

The concept of employer branding was first introduced by Ambler and Barrow (1996a). It suggests that employers benefit when their brand portrays the image of an organization as a great place to work (see Figure 1) in the minds of current employees and key stakeholders in the external market (active and passive candidates, clients, customers, and other key stakeholders; Lloyd, 2002). Figure 1 describes how “if we have best shops, with the best people, then we have the best word of mouth and receive the best applications and then we have the best shops” (Ambler & Barrow, 1996a, p. 186). Employer branding manages the perception and awareness of current and potential employees (Mandhanya & Shah, 2010).

Figure 1: Link between quality of employees and quality of product or service (Ambler & Barrow, 1996a)



Employer branding is concerned with initiatives seeking to enhance a company's employer brand (Ewing et al., 2002) with the goal to attract, engage, and retain current and prospective employees. It is a strategic lever that uniquely identifies one company from its competitors (Knox & Freeman, 2006) and is used to secure and retain employees to sustain a firm's competitive advantage (Moroko & Uncles, 2009).

In the past two decades, researchers have incorporated marketing into human resources management (HRM; Ambler & Barrow, 1996a; Moroko & Uncles, 2009). Companies seek to build and communicate an image for their employees as a great place to work (Ewing et al., 2002). Employer branding value propositions (EBV) or employer value propositions are a set of values, attributes, offerings, and dimensions that an employer portrays to its potential and current employees (Ambler & Barrow, 1996a; Backhaus & Tikoo, 2004; Berthon et al., 2005; Hanin et al., 2013; Tumasjan et al., 2011) as a great place to work. The key value propositions (EBV) of an employer brand, first described by Ambler and Barrow (1996a), is "the package of functional, economic, and physiological benefits provided by employment and identified within the employing company" (p. 196). A decade later,

these value propositions were extended to five areas: economic, social, application, development, and interest value of work (Berthon et al., 2005). The term has also been described as the “sum of a company’s effort to communicate to existing and prospective staff that it is a desirable place to work” (Lloyd, 2002, p. 1).

Companies use their strong brand to market to their employees by creating an employer brand (Moroko & Uncles, 2009). The concept of a strong employer brand will benefit both potential and current employees in the organization (Barrow & Mosley, 2005). Therefore, the firm will benefit from attracting and retaining employees (Minchington, 2010). Teetz (2013) mentioned in “Best Practice Technology in Talent Acquisition: From Branding to Global Job Boards” that employer branding is one of the best practices for leveraging talent acquisition. Employer branding is also known as a good tool for attracting talent, as previously highlighted, but it has also been seen as a catalyst to improve productivity through encouraging and motivating employees to improve the quality of their product or service (Shungu & Xivier, 2011).

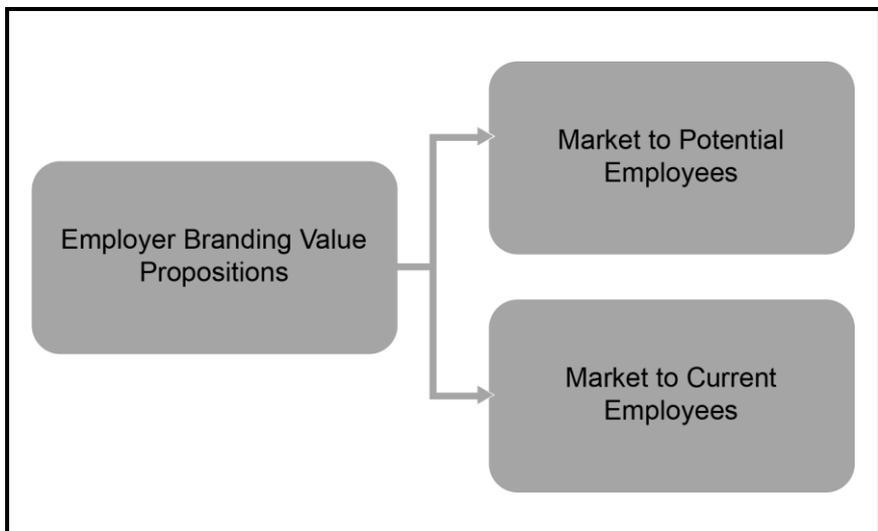
The (Shungu & Xivier) RBV or resource-based theory (RBT) provides an important theoretical framework to employer branding (Agrawal & Swaroop, 2009; Backhaus & Tikoo, 2004; Priyadarshi, 2011; Sivertzen, Nilsen, & Olafsen, 2013). RBV suggests that a firm could have a sustained competitive advantage if it implements value-creation strategies not yet used by its competitors. Specifically, RBV posits that a firm’s resources that are valuable, rare, nonimitable, and systematically managed can result in a sustained competitive advantage (Barney, 1991; Wernerfelt, 1984). Employer branding relies on the fact that human capital will enhance the firm’s performance and give a competitive advantage to the firm in the market (Backhaus & Tikoo, 2004; Barney, 1991). Human capital is a major resource that provides a sustainable competitive advantage for the firm (Barney, 1991; Barney, Wright, & Ketchen, 2001). This competitive advantage of human capital is something that organizations strive to maintain as they look “to secure and retain the most sought-after employees; those who will enable them to perpetuate their brand success and secure ongoing profitability” (Moroko & Uncles, 2008, p. 160). One suggestion to ensure that employer branding is targeted to current employees in the most effective way is to understand the trends of employee values (Biswas & Suar, 2013). The literature has also shown that a strong employer brand can help achieve positive market performance (Greening & Turban, 2000) and result in a

sustained competitive advantage (Holtbrügge, Friedmann, & Puck, 2010).

Employer branding is defined as a three-step process (Backhaus & Tikoo, 2004; Eisenberg et al., 2001; Sullivan, 2002), shown in Figure 2.

- 1) A firm develops a value proposition (EBV) for its brand.
- 2) The firm markets this value to potential employees, recruiting agencies, etc. (external branding).
- 3) The firm markets to the internal workforce that already comprises the company to ensure continuity of the firm's mission (internal branding).

Figure 2: Employer branding process



Step 1 is a key in the process and understanding of employer branding (see Figure 2; Backhaus & Tikoo, 2004).

EBV shapes the perception of employer attentiveness (Baum & Kabst, 2013; Berthon et al., 2005; Lievens, Van Hoye, & Schreurs, 2005; Schlager, Bodderas, Maas, & Luc Cachelin, 2011; Tumasjan et al., 2011).

This research took a holistic approach to employer branding, and EBV must be looked at from multiple perspectives: employer and current, former, and potential employees. This means what an employer offers also needs to be viewed based on current, former, and potential

employees' perspectives. EBV defines employer attractiveness (Berthon et al., 2005), is a key aspect of the employer branding process, and provides differentiation for the firm's employer brand (Alniaçık & Alniaçık, 2012; Kavitha & Srinivasan, 2012; Leekha Chhabra & Sharma, 2014; Lievens et al., 2005; Maxwell & Knox, 2009; Moroko & Uncles, 2008; Sivertzen et al., 2013). Firms develop EBV to attract and retain employees (Alniaçık & Alniaçık, 2012; Backhaus & Tikoo, 2004; Berthon et al., 2005; Ewing et al., 2002).

1.2 Motivation for Research

In 2014, 36% of global employers criticized talent shortages—the highest percentage since 2007—and in a 2015 study, 73% of CEOs reported being concerned about the availability of workers with key skills (Mosley, 2015). Attracting and retaining the best talent is a concern, particularly for knowledge-based firms in high-turnover industries, which rely on a limited supply of highly qualified individuals (Ewing et al., 2002).

Employer branding is a key human resources (HR) strategy to reduce turnover (Ahmad & Daud, 2016). The employer brand contributes to the company's brand, enhances the firm's reputation as a great place for employees to work, and attracts a new workforce (Ahmad & Daud, 2016). The company thus gains “many economic advantages due to lower rates of staff turnover” (Kucherov & Zavyalova, 2012b, p. 1). An employer brand's ability to lower turnover and increase retention will provide benefits for the entire organization, and it fundamentally affects employees' decision to stay or leave the company (Ahmad & Daud, 2016).

Figure 3: Gartner's top predictions for 2018 and beyond (Miller, 2017)

Top 10 Strategic Predictions for 2018 and Beyond				
Search	Disruption	Blockchain	Trust	AI
30% Visual and Voice Search Drive Commerce Revenue	5 of 7 Digital Giants Self-Disrupt	1 Billion Cryptocurrency Value Created in Banking	50% Consuming More False Information Than True	Real or Fake? "Counterfeit Reality"
2021	2020	2020	2022	2020
50% Bot Development Over Mobile App Development	40% IT Versatility With People-Centric Roles	2.3M Net New Jobs Versus 1.8M Eliminated	95% New Products Contain IoT	Half IoT Security Spend on Remediation
2021	2021	2020	2020	2022
AI	Talent	AI	IOT	Security

In 2017, Gartner (a technology research company founded in 1979) advised technology leaders of its top 10 strategic predictions for 2018 (see Figure 3) and told them to pace themselves given the upcoming impact of technology in the coming years (Miller, 2017). These predictions demonstrate the gravity of changes in technology and the impact on the IT workforce. Given the Gartner predictions, attracting and retaining the best talent is a concern, particularly for knowledge-based firms in IT, which rely on a limited supply of highly qualified individuals (Ewing et al., 2002). There is war on talent (Malati, Tiwari, & Sharma, 2013), and the IT industry is having problems coping with rapid changes (Benamati & Lederer, 2001; Sung & Choi, 2014) and the high skill requirement of IT employees (Aasheim, Li, & Williams, 2019), because this creates many challenges for management. Figure 4 identifies the employment challenges in the IT industry to recruit and retain highly qualified talent (Antonipillai & Lee, 2016; Lo, 2015; Malati et al., 2013; Miller, 2017; Wilden, Gudergan, & Lings, 2010).

Figure 4: IT industry recruitment and retention challenges

As the population ages, baby boomers retire, and the number of computer science students decreases, competition for talent will become an increasingly important issue for IT firms (Wilden et al., 2010). In addition, IT professionals tend to vote with their feet, changing jobs if they do not like the working conditions their employers offer. Thus, IT firms are constantly looking for effective strategies to attract and recruit new talent and retain their current employees. The turnover and growth in the tech workforce, specifically in the IT industry, has been extremely high in the last 5 decades (Lo, 2015). The U.S.-Dept-Labor (2015) reported a constant 10% growth from 2006 through 2016 in all professional IT jobs. Many studies have reported high turnover in the IT industry since the 1960s.

LinkedIn reported IT sector turnover last year at the top of all sectors, exceeding that of retail at 13.2% (Booz, 2018). Table 1 lists the top 10 industries and sectors with the highest turnover rates (Hollon, 2018). Professional IT job growth, predicted to be 4% by 2020, has the fastest growth of any industry (Henderson, 2012).

Table 1: LinkedIn top 10 industries and sectors with the highest turnover rates (Hollon, 2018)

	Industry/Sector	Turnover Rate
1	Technology (Software)	13.2%
2	Retail & Consumer Products	13.0%
3	Media and Entertainment	11.4%
4	Professional Services	11.4%
5	Government/Education/Non-Profit	11.2%
6	Financial Services and Insurance	10.8%
7	Telecommunication	10.8%
8	Oil and Energy	9.7%
9	Aerospace/Auto/Transport	9.6%
10	Healthcare and Pharmaceutical	9.4%

The IT industry has been facing a talent crunch that is expected to continue, and there will always be a high demand for specialized IT professionals (Bhattacharjee, Gaur, & Pandey, 2011). There is a war on talent (Malati et al., 2013) for top employees among companies in the IT sector. The phenomenon of high employee turnover is not new; in fact, it has always been a reality for those managing and working for an IT company, especially in IT clusters like Silicon Valley. Likewise, the notion of employer branding is not new. It first emerged during the dot-com boom, a time when turnover was unusually high. In 2016, the U.S. patent department reported (Antonipillai & Lee, 2016) that from 2009 to 2013, it received 555,488 patents, more than half of which were in the IT and related industries. The IT and related industries contributed 700,000 jobs during that time.

Today, more industries are moving from traditional matter-intensive, product-focused business models to more information-centric business models. In the past decade, we have seen traditional brick-and-mortar firms such as Sears, Marriott, Coldwell Banker, and taxis increasingly being replaced by information-intensive companies such as Amazon, Airbnb, Zillow, and Uber (Cohen & Kietzmann, 2014;

Täuscher & Kietzmann, 2017). Although these examples compete in the retail, hospitality, real estate, and transportation industries, they are inherently IT companies that use technology-based business models to provide enhanced offerings. As a result, the employees of these information-intensive firms vary dramatically from those of their traditional counterparts. Lengthy retail, hospitality, and transportation experience is being replaced by members from the IT industry—perhaps the purest embodiment of the information-intensive economy—with their own work expectations.

However, what is new today is that many people turn to new technologies to discuss a firm's employer brand. With the advent of the information age and social media, companies have been forced to quickly create a strong employer brand (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011) and monitor how people talk about their expectations of and experiences with different employers through electronic word of mouth, or eWoM (Kietzmann & Canhoto, 2013). People used to talk behind closed doors about their jobs, but now those doors are clear, and others can access employment stories through social media sites, such as employee job review sites (e.g., Glassdoor.com). Positive and negative risks are associated with employer brands. When people talk favorably about a firm, it is a boon to its reputation as a great place to work, but when people share negative eWoM, a firm's chances of attracting great talent is quickly reduced. In other words, understanding exactly how employer branding and perceived dimensions of economic, application, and social values of a firm can combat today's ongoing labor mobility in the IT industry (Kaur, Sharma, Kaur, & Sharma, 2015). Furthermore, a positive social media presence has been found to directly improve corporate reputation, directly relating to increased applications (Sivadas & Brunz, 2013). This development toward more open formats in which people talk about great places to work points to an important change in employer branding—one that has so far been overlooked in the literature. Employer branding is a multifaceted phenomenon that is not only shaped by what employers believe or want to be true about their firms but also by what outsiders (e.g., potential employees) expect from firms and by actual employees' experience-based accounts of workplace conditions. Together, these different perspectives allow managers to develop a holistic understanding of their employer brand. Does the firm believe it is a great place to work? How does this perspective align with those of its current

and former employees? Moreover, what do people looking for employment expect from great places to work? Contradictions among these three perspectives might point to reasons why people behave the way they do (e.g., why they do or do not apply for openings, why employees stay or leave). These insights, in turn, suggest important areas of organizational development that might directly improve a firm's employer brand and indirectly affect its bottom line.

The concept of employer branding has been highlighted in the IT industry (Kucherov & Zavyalova, 2012; Malati et al., 2013; Mark & Toelken, 2009; Mohlala, Goldman, & Goosen, 2012) because it has faced many challenges (see Figure 4). To achieve a competitive advantage in the IT industry, employers now have to communicate their employer brand to prospective employees as a great place to work. Companies with a stronger employer brand have demonstrated better financial performance. Human capital is considered a major asset to the organization. Employer branding can increase the attractiveness of the firm to current and potential employees (Kavitha & Srinivasan, 2012). It also provides a better competitive advantage for companies that succeed as being perceived as the employer of choice (Vasavada-Oza & Bhattacharjee, 2016). Employer branding not only helps recruit highly qualified talent in the IT industry, but it can also help retain employees in the company (Thomas & Jenifer, 2016). If the employer brand promises are not met by current employers, the executive and company's success will be short lived and the employer will become a toxic brand in the IT industry (Mark & Toelken, 2009). In this new information age, the concept of branding has expanded to the internet, particularly in the IT industry. Change in the IT industry is more rapid, and as a result, recruitment and retention of highly qualified employees are challenges.

EBV is the main topic employees discuss regarding their employers (Kaur et al., 2015), and it is collections of EBV that attract employees to the firm (Berthon et al., 2005; Moroko & Uncles, 2008; Rampl, 2014). EBV differentiates one employer versus another employer and provides the firm with a competitive advantage (Backhaus & Tikoo, 2004). App, Merk, and Büttgen (2012) defined employer brand and employment as multiple phases from preemployment to postemployment. EBV provides attractiveness to an employer (Berthon et al., 2005) and must be viewed from a different perspective in different phases of employment. Holistic employer branding is when EBV is viewed from

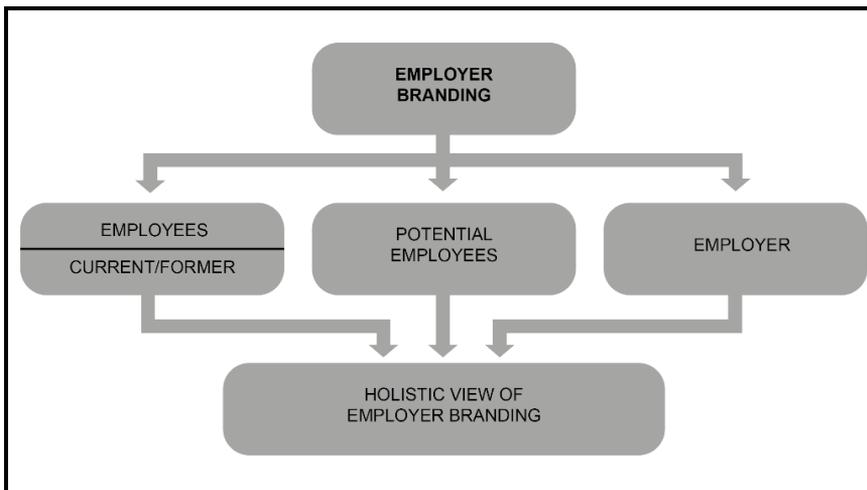
different perspectives to affect attractiveness of the employer in all phases of employment.

1.3 Problem Statement and Research Question

This research focused on employer attractiveness and EBV in the IT context. Although this research may apply to many industries as listed in Table 1, such as financial, retail, and professional services, its focus is on the IT industry due to multiple factors such as those listed in Figure 4, including a need for the strategic lever of HR as a key to provide a competitive advantage (Kryger Aggerholm, Esmann Andersen, & Thomsen, 2011) to the firm.

Figure 5 describes this research model to holistically view employer branding and provide a sustainable competitive advantage to the firm. The model looks at employer branding from the viewpoints of potential (preemployment), current, and former (postemployment) employees and the employer or firm. Employer attractiveness is key to employee factors in all phases of employment and the employer itself. Therefore, this research model focuses on the employer attractiveness construct and identification of EBV variables that affect employer attractiveness.

Figure 5: Holistic (multiview or different perspectives) of employer branding.



The overall research problem is to identify different EBVs that affect employer attractiveness of the employer and study them from different perspectives: employer, potential employees, and current and former employees.

To address the research problem, we need to answer the following overarching research question:

RQ: How do different EBVs affect perceptions of employer attractiveness?

1.4 Delimitations

This dissertation focused on employer branding in the IT industry context. The concept of employer branding attractiveness and EBV propositions was explored from different perspectives. It did not focus on firm performance or financial market performance and shareholder value as a result of EBV. In addition, it did not consider strategies to communicate EBV to current and potential employees.

1.5 Thesis Structure and Presentations

The structure of this thesis consists of five chapters (see Figure 6).

Chapter 1 provides background information on employer branding, defines the problem statement, and provides the motivation for this research. This chapter develops the overarching research problem and research question. In addition, Chapter 1 contains the delimitation of the research and thesis presentation.

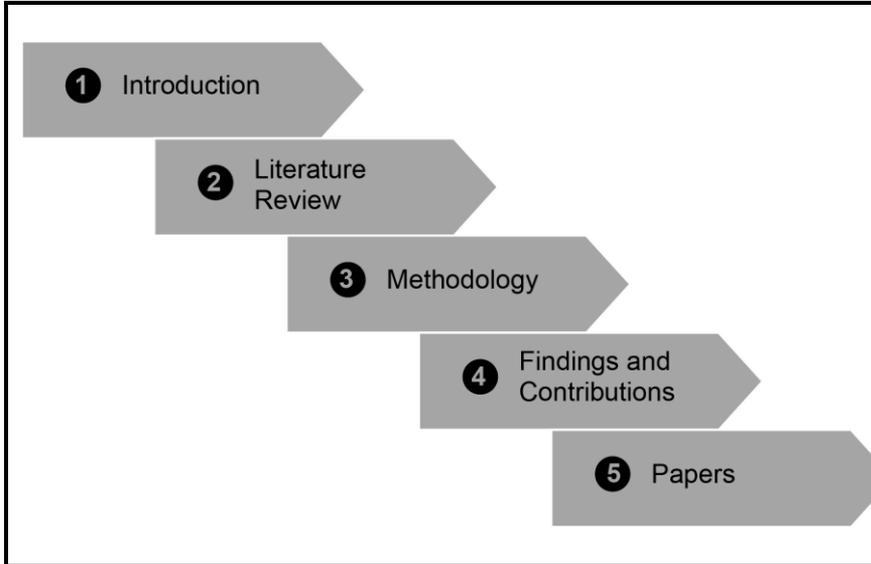
Chapter 2 focuses on the literature review. This chapter reviews the relevant literature, identify gaps in the literature, and develops the research question and four subresearch questions to address the overall research problem. It defines the theoretical framework for this thesis.

Chapter 3 describes the research design and methodology. In addition to the overall thesis design, this chapter describes each of the four papers' methodologies.

Chapter 4 describes each of the four papers' findings and overall contributions to theory and practice (managerial). In addition, it discusses future research and sets the stage for new studies based on this thesis.

Chapter 5 consists of a copy of the four papers described in this dissertation.

Figure 6: Dissertation chapter structure



Chapter 2: Literature Review

The following section provides a review of the key literature for this research. The section focuses on brand and branding, RBV, theoretical framework, employer branding, and EBV; identifies research gaps; and finally, develops the model for the current research question and four subquestions.

Table 2 identifies the major employer branding publications in the past 2 decades (1996–2018). The table lists several categories from each publication, such as author(s), area of study, perspective or lens (e.g., employer, employee, potential employee), methodology, data collection strategy, industry, and major finding(s).

Table 2 demonstrates the following areas of study regarding employer branding: employer attractiveness, corporate brand, internal branding, brand image, HR, talent management, brand equity and advertising, value propositions, and psychological contract. The studies also used many industries as their contexts, such as IT, financial, retail, hotel, service, education, government, banking, media and film, military, and others. Many of the studies used empirical research and surveyed college students, especially those focused on potential employees. A few studies covered conceptual research and literature reviews regarding employer branding.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (1)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Ahmad and Daud (2016)	Employer Branding and Turnover	Employees	Quantitative	Survey	Employees in Malaysia's SME-ICT Industry	There is a significant relationship between the development value in employer branding and turnover intention.
Agrawal and Swaroop (2009)	Employer Brand and Employer Brand Image	Potential Employees	Quantitative	Survey	College students in India	Among job attributes, the students' application intentions are influenced by their perceptions of the responsibility and empowerment inherent in the job, as well as compensation and locational considerations. Prior work experience moderates the relationship between the responsibility and the empowerment dimension of employer brand image and application intentions.
Alnıaçık and Alnıaçık (2012)	Employer Branding and HRM	Current and Potential Employees	Quantitative	Survey	College students; employee industry not defined	Significant differences between the perceived levels of importance of employer attractiveness dimensions concerning the gender of the respondents, but neither age nor current employment status.
Ambler and Barrow (1996a)	Corporate Brand and Employer Brand	Employer	Quantitative	Interviews	Mixed industry in United Kingdom	This exploratory research indicated that marketing can be applied to the employment situation. Bringing these functionally separate roles closer together would bring mutual benefit and lead to comparable performance measures, e.g., trust and commitment. Strong corporate equity with the brand's customers can improve the return on HR, while at the same time proved HR can improve the return on brand equity from external customers.
App et al. (2012)	Employer Branding, HRM, and Sustained Competitive Advantage (RBV)	Employer	Conceptual			Sustainable HRM (SHRM) can help establish an attractive employer brand that can address the different needs and expectations of potential and existing employees, without compromising a consistent employer image, which can result in a sustained competitive advantage.
Backhaus and Tikoo (2004)	Employer Brand, SHRM, and Competitive Advantage (RBV)	Employer	Conceptual			Presents a framework to initiate the scholarly study of employer branding. Combining RBV with brand equity theory, a framework is used to develop testable propositions.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (2)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Baum and Kabst (2013)	Employer Branding, Employer Attractiveness, and Intention to Apply	Potential Employees	Quantitative	Survey	College students across four countries	Impact of some facets of employer image (e.g., task attractiveness) varies across different countries, whereas other employer image facets, such as perceived career opportunities and working atmosphere, have a stable influence on students' intention to apply. Thus, the study proposed that there is an opportunity for a global employer positioning approach.
Berthon et al. (2005)	Value Propositions and Employer Attractiveness	Potential Employees	Quantitative	Survey	College students	Identify and operationalize the components of employer attractiveness from the perspective of potential employees. Specifically, it develops a scale for the measurement of employer attractiveness.
Biswas and Suar (2016)	Antecedent of Employer Branding and Psychological Contract	Employer	Quantitative	Survey	Top-level executives of 209 companies in India	The results revealed that realistic job previews, perceived organizational support, equity in reward administration, perceived organizational prestige, organizational trust, leadership of top management, psychological contract obligations, and corporate social responsibility influence employer branding, which in turn affects nonfinancial and financial performance of companies. Furthermore, leadership of top management is the most potent predictor of employer branding.
Bonaiuto et al. (2013)	Employer Branding and Employer Attractiveness	Potential Employees	Quantitative	Survey	College graduates from three Italian universities	The results indicate that the most idealized brand attributes are related to future employers' ability to innovate, commit to social responsibility, be open, value capabilities and knowledge, and finally, offer different career paths. The last three factors in particular have become more important in recent years. The results are discussed with reference to how they contribute to our understanding of employer branding, brand management, and the attraction of future leaders.
Botha et al. (2011)	Employer Branding and Value Propositions	Employer	Conceptual			Key findings suggest that employer brand is influenced by target group needs, a differentiated EVP, the people strategy, brand consistency, communication of the employer brand and measurement of HR employer branding efforts.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (3)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Cable and Turban (2001)	Employer Branding and Employer Knowledge	Potential Employees	Conceptual			Drawing on the marketing literature, this paper differentiates the dimensions of employer knowledge; describes the sources of employer knowledge and how these information sources are processed by job seekers; and describes how and why job seekers' employer knowledge represents a valuable asset to organizations. The discussion illustrates the implications of the model for recruitment researchers and managers.
Cascio (2014)	Employer Branding and HR Development	Employees	Conceptual			The biggest winners in this emerging economic environment, at least from a talent perspective, are organizations with positive employer brands, performance management strategies that help employees develop expertise that maximizes their potential, and innovative approaches to the design and delivery of HR initiatives, especially technology-delivered instruction and social learning tools.
Collins and Stevens (2002)	Employer Brand Image and Recruitment	Potential Employees	Quantitative	Survey	Engineering college students	Relationships between word-of-mouth endorsements and the two dimensions of brand image were particularly strong. In addition, early recruitment-related activities interacted with one another such that employer brand image was stronger when firms used publicity in conjunction with other early recruitment-related activities.
Devendorf and Highhouse (2008)	Employer Branding and Attractiveness	Potential and Current Employees	Quantitative	Survey	College students and retail companies	Extended this notion to workplace attraction by examining whether applicant similarity to prospective co-workers enhances attraction to the potential employer. Similarity between college-aged women and prototypical employees at well-known retail stores was assessed. Both perceived similarity and prototype similarity predicted perceptions of employer attractiveness.
Edwards (2009)	Employer Branding, HRM, RBV, and Psychological Contract	Employer	Conceptual and Literature Review			The review shows that research and theory from a range of fields can help add to knowledge of employer branding; these include areas of research that investigate organizational attractiveness to potential new recruits, research and writing linked to the psychological contract literature, and work that examines organizational identity, organizational identification, and organizational personality characteristics.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (4)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Elving et al. (2013)	Employer Branding and Advertising	Potential Employees	Qualitative and Quantitative	Content Analysis and Survey	Recruitment agencies and students	Results from the experiment reveal a preference for advertisements containing employer branding regarding several factors. Based on these results, corporate positioning, internal branding, employer branding, and related practices could be successful avenues for organizations. Employer branding should stem from the organization's position and corporate identity. A branded identity might offer major advantages in the war for talent.
Figurska and Matuska (2013)	Employer Branding Management Strategies	Employer	Conceptual			links between employer branding determinants and HR processes, touches the issue of dilemmas of employer branding metrics, and concentrates on recent global survey results indicating growing role of employer branding in management strategies of companies.
Foster et al. (2010)	Corporate Brand and Employer Brand	Employer	Conceptual			The review of the literature highlights the importance of employer branding and internal branding and their potential to support corporate brand-building initiatives while maintaining their distinctiveness in the literature. It also sheds light in terms of the interrelationships among the three concepts of branding.
Gomes and Neves (2010)	Employer Branding and Employer Attractiveness	Potential Employees	Quantitative	Survey	Potential applicant in marketing industry	This study found that employer branding moderates the proposed job-seeking process. Positive employer branding strengthened the process leading to the intention to apply to a vacancy, when compared with neutral or negative employer brandings. This explains applicants' desire to submit to a vacancy.
Hanin et al. (2013)	Employer Branding, EBV Propositions, and Psychological Contract	Employer	Quantitative	Survey	Retail industry in Belgium	Results indicated that employment offering and lived employment experience interact in the prediction of both perceived organizational support and psychological contract violation, and this interactive effect carries over to affective commitment.
Holtbrügge et al. (2010)	Employer Branding, HRM, and RBV	Employer	Quantitative	Survey	Mixed industry in India	Study adapted the RBV of the firm and tested whether recruitment and retention practices positively affect the number of qualified applicants and the attrition rate.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (5)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Ito et al. (2013)	Employer Branding and Employer Attributes at Exit and Entry	Current Employee	Quantitative	Survey	Day-care centers	Although the level of respondents' priorities for entry and exit differed, most priorities remained in the same order. However, their perspectives were more disaggregated for entry than for exit, where branding attributes were more strongly correlated. Consistent with the exploration stage of career development, younger people planned to stay a shorter time with a particular center.
Jain and Bhatt (2015)	Employer Brand and EBV Propositions	Potential Employees	Quantitative	Survey	College students in business school	The private sector emerged as the preferred sector of choice for many potential employees. However, some factors are handled well in the private sector as compared to the public sector and vice versa. Potential employees perceive some factors, like the stability of the company, work–life balance, and job security, as important and therefore, they need to be addressed by both public- and private-sector organizations.
Jiang and Iles (2011)	Employer Brand Equity and Organizational Attractiveness	Employer	Qualitative	Interviews	Retail and service sector in China	Framework extends theoretical and empirical knowledge of understanding organization attractiveness; intention to accept a job offer and intention to stay in the organization are consequences of organizational attractiveness and employer brand equity.
Joo and Mclean (2006)	Employer Branding, HRM, Competitive Advantage, and RBV	Employer	Conceptual and Literature Review			A conceptual model is suggested of the relationships among business strategy, HR practices, engaged employees, HR reputation, and financial performance, based on theoretical backgrounds, such as the RBV of the firm, SHRM, signalling theory, and social identity theory.
Kavitha and Srinivasan (2012)	Employer Branding and Employer Brand Attractiveness	Potential and Current Employees	Quantitative	Survey	IT industry and college students	Analyses reveal that application, development, and social value significantly predicted the organization's attractiveness among employees, whereas development and economic values emerged as significant predictors in the student sample.
Kimpakorn and Dimmitt (2007)	Employer Branding and HRM	Employer	Qualitative	Interviews	Hotel industry in Thailand	Management is concerned with employer branding as it relates to organizational practices such as internal communication, the process of recruitment, benefits, and career development.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (6)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Knox and Freeman (2006)	Employer Brand Image and Recruitment	Potential Employees	Quantitative	Survey	College students and service industry	Findings confirm that employer brand image is positively correlated with graduate recruitment intentions and that significant differences exist in the perception of this image internally and externally.
Kryger Aggerholm et al. (2011)	Employer Branding and Employee–Employer Relationship	Employer	Conceptual			Framework reconceptualizes employer branding as an integrated part of a corporate social responsibility strategy, thus offering a new way of approaching employer branding as supporting sustainable organizational development and long-term employer–employee relationships.
Kuchеров and Zamulin (2016)	Employer Branding, HR Development, and Value Propositions	Potential Employees	Quantitative	Survey	College students and IT industry	Identifies the core employment values and preferences of young IT professionals and considers efficient employer branding tools used by three IT companies to cooperate with them in the war for talent. IT employers pay special attention to HR development initiatives when promoting their employer brand to IT millennials. In sum, accurate value propositions are based on the functional benefits of the employer brand.
Kuchеров and Zavayalova (2012)	Employer Branding and Economic Advantages	Potential and Current Employees	Quantitative	Survey and Company Data	IT, telecom, professional services, oil and gas, automobile, trade, fast-moving consumer goods, banking and investment companies, and students	Strongly supported that the companies with employer brands gained economic advantages due to lower rates of staff turnover and higher rates of HR investments in training and development activities of employees and found out that in internal recruitment practices, internal training programs and highly efficient incentive activities were widespread.
Leekha Chhabra and Sharma (2014)	Employer Branding and Employer Brand Attractiveness	Potential Employees	Qualitative and Quantitative	Interviews and Survey	College students	Among students, most preferred organizational attributes were organizational culture, brand name, and compensation. Students rated the job portal to be the preferred channel for employer attractiveness. A significant and positive correlation exists between strong brand image and likelihood to apply.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (7)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Lievens et al. (2007)	Employer Branding and Employer Attractiveness	Potential and Current Employees	Quantitative	Survey	Military	Instrumental attributes explain greater variance in the U.S. Army's attractiveness as an employer among actual applicants compared to potential applicants or employees.
Malati et al. (2013)	Employer Branding, Employer Branding Strategies, and Organizational Performance	Potential and Current Employees	Quantitative	Survey	IT industry and college students	Employer branding strategies adopted by IT companies been successful in helping prospective employees see the company as a good employer. It is also evident through the financial performance and market capitalization of the companies that being a good employer translates into positive organizational performance.
Mandhanya and Shah (2010)	Employer Branding and Talent Management	Employer	Conceptual			Employer branding is a distinguishing and relevant opportunity to increase employee satisfaction and happiness, resulting in retention, productivity, and efficiency, and this is nothing but managing the talent of the organization.
Mark and Toelken (2009)	Employer Branding and Psychological Contract	Employer	Case Study	Company Data	IT industry	Illustrated the toxic effect employer branding can have in the hands of senior executives who fail to live up to the promise of their employer brand when they do not follow the company's organizational narrative and dishonor their psychological contract with their employees.
Maxwell and Knox (2009)	Employer Branding and Employer Attractiveness	Employee	Quantitative	Survey	TV, film, sport, and school	A comparative study found specific attributes considered most attractive by employees were different in each organization. However, the categories of attributes were almost identical; these were employment, organizational successes, and product or service characteristics.
Mohlala et al. (2012)	Employer Branding and Retention Strategy	Employer	Qualitative	Interviews	IT industry division in banking	Findings indicate that employee turnover is the main contributor to skills shortages in the IT division. The lack of a retention strategy is making it difficult for leadership to identify crucial skills that must be retained.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (8)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Moroko and Uncles (2008)	Employer Branding, Attractiveness, and Accuracy	Employer	Qualitative	Interviews and Focus Groups	Mixed industries	There are two key dimensions of success for an employer brand: attractiveness and accuracy. As with customer-centric brands, attractiveness is underpinned by awareness, differentiation, and relevance. For employer brands, however, the accuracy with which the employer brand is portrayed is also critical to success. This emphasis on accuracy highlights the importance of consistency between the employer brand and employment experience.
Moroko and Uncles (2009)	Employer Branding and Market Segmentation	Employer	Qualitative	Interviews	Pharmaceutical, financial services, semigovernment utility, transportation	Using a range of segmentation approaches in concert can strengthen explicit links between employer branding and the broader strategic goals of an organization. A combination of generic types of market segmentation should help the firm be more efficient and effective in attracting, retaining, and motivating both current and potential employees.
Mosley (2007)	Employer Brand, Customer Management, and Organizational Culture	Employer	Conceptual			Presents a reappraisal of the concept in terms of its potential contribution to brand-led culture change and customer experience management.
Myrden and Kelloway (2015)	Employer Brand and Employer Brand Image	Potential Employees	Quantitative	Survey	College students	Functional and symbolic attributes of the brand image were related to job seekers' attraction to the firm. In contrast to previous research, work experience moderated the effect of symbolic but not functional attributes such that these effects became stronger with more experience. Symbolic and functional attributes also interacted to predict job seekers' attraction to the firm.
Näppä et al. (2014)	Corporate, Employer, and Internal Branding	Employer	Qualitative	Interviews	Financial industry	Reveals that the areas of employer, internal, and corporate branding are not mutually exclusive, but instead an intertwined collection of branding issues that together form the corporation's core values.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (9)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Priyadarshi (2011)	Employer Branding, Brand Image, and RBV	Current Employees	Quantitative	Survey	Engineering in telecommunication	Shows the importance of managing employer brand image for existing employees through highlighting the difference between the existing and preferred levels of employer attributes.
Rampl (2014)	Employer Brand and Employer Brand Attractiveness	Potential Employees	Quantitative	Survey	College students and management and consulting industry	Results indicate that work content and work culture of employer brand associations are drivers of being a first-choice brand (FCB), with no support found for effects of salary, advancement opportunities, location, or organizational reputation. Importantly, employer brand emotions emerged as a full mediator in the model, indicating that for an FCB, work content and work culture need to be linked to emotions. These results suggest that only if employer brand associations lead to positive employer brand emotions can an FCB be established.
Roy (2008)	Employer Brand and Employer Attractiveness	Potential Employees	Quantitative	Survey	College students in India	The study found eight dimensions of attractiveness of the employer brand in the Indian context: application value, interest value, ethical value, economic value, social value, psychological value, career opportunities, and development value.
Saini et al. (2013)	Employer Branding, Employer Attractiveness, and Intention to Apply	Potential Employees	Quantitative	Survey	Mixed firms; applicant intends to apply to 12 firms in three years in India	Findings suggest that firms with a consistent or recent listing in a best employer survey receive a significantly higher intention to apply than firms present only in one or an older survey. Furthermore, organization familiarity is a major predictor of intention to apply.
Schlager et al. (2011)	Employer Brand, Employer Attractiveness, and Employee Attitudes	Current Employee	Quantitative	Survey	Insurance industry	Relationship exists between the perceived employer brand and service branding. Second, the influence of drivers of employee attitudes is determined.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (10)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Sehgal and Malati (2013)	Employer Branding and Brand Management	Current Employee	Quantitative	Survey	Hotel industry	Comparative analysis of the employee perspective toward branding practices adopted by hotels, revealing a significant difference exists in branding practices.
Sengupta et al. (2015)	Employer Branding and Value Propositions	Current Employee	Quantitative	Survey	Mixed industries in India	Findings suggested a six-factor model for internal employer branding and a five-factor model for external employer branding. Further analyses of demographic variables and their interactional effects on work value preferences also revealed significant findings. A value proposition framework and policy implications in the Indian context are discussed in detail.
Sivertzen et al. (2013)	Employer Brand, Employer Brand Attractiveness, and RBV	Potential Employees	Quantitative	Survey	College students and engineering industry	Results indicate that several employer attributes are positive for corporate reputation, which is related to attraction of potential employees. Specifically, the results suggest that innovation value, psychological value, application value, and the use of social media positively relate to corporate reputation, which in turn is positively linked to intention to apply for a job. Psychological value, which is the strongest predictor, is also directly related to intention to apply for a job.
Sokro (2012)	Employer Brand, Employer Brand Attractiveness, Retention, and RBV	Current Employees	Quantitative	Survey	Banking sector	Organizations use employer branding processes to attract employees and customers. Brand names of organizations may significantly influence the decision of employees to join and stay in the organization. It was therefore suggested that employers need to create conducive work environment with conditions to enable employees feel comfortable and remain in the organization.
Sutherland et al. (2002)	Employer Branding and Knowledge Workers	Potential Employees	Qualitative and Quantitative	Open-Ended Questions (Content Analysis) and Survey	College students and business	Findings show 11 underlying factors, with career growth and challenging work opportunities being the most desired attributes. Word of mouth and current employees are the most used communication channels. Differences in the target market were noted by gender, age and cultural groupings. Recommendations are offered for organizations seeking to become employers of choice.

Table 2: Description of major employer branding research publications in last two decades (1996–2018) (11)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Theurer et al. (2018)	Employer Branding	Employer	Conceptual and Literature Review			Identified 187 articles and integrated them along employer brand dimensions and branding strategies: conceptual, employer knowledge, and employer branding activities and strategies. Based on this review, the authors develop an employer branding value chain model and derive future research avenues and practical implications.
Thomas and Jenifer (2016)	Employer Brand Personality	Current Employees	Qualitative	Interviews	IT industry	Brand personality is a complex construct comprising dimensions like radical, exhilaration, modish, lenient, conscientious, satisfying, enterprise, frank, and influential for IT sector.
Tumasjan et al. (2011)	Employer Branding and Job Attributes	Employer	Qualitative and Conjoint Analysis	Interviews and Literature Review	Start-up ventures	Identify unique job attributes distinguishing entrepreneurial firms from large firms and calibrate the relative value of these job attributes from potential employees' perspective and demonstrate that a communal team climate and the early assignment of responsibilities are a startup's most attractive job attributes for prospective applicants.
Van Hoyer (2012)	Employer Branding and Recruitment Attraction	Potential Employees	Quantitative	Survey	Nursing jobseekers and nursing industry	Results of this field study suggest that to enhance their attractiveness as an employer for job seekers, especially those in high demand on the labor market, recruiting organizations should provide credible employment information and stimulate word-of-mouth as a recruitment source.
Vasavada-Oza and Bhattacharjee (2016)	Employer Branding and Brand Identity	Employer	Qualitative and Content Analysis	Content Analysis by Website Scraping	IT industry	Findings show that organizations have different approaches to building their brand identity using their websites.

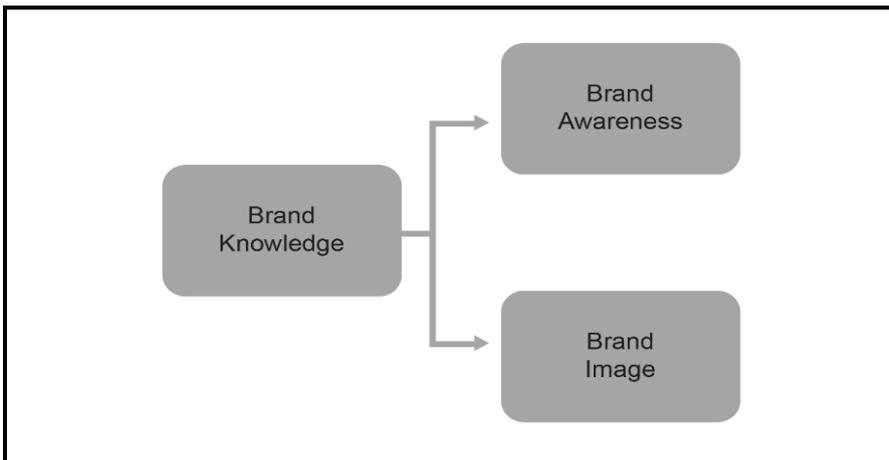
Table 2: Description of major employer branding research publications in last two decades (1996–2018) (12)

Author(s)	Topic of Study	Perspective	Methodology	Data Collection	Industry	Finding(s)
Verma and Verma (2015)	Employer Brand and Employer Attractiveness	Current Employee	Quantitative	Survey	Technical educational institutions	Attempted to examine the contribution of various attractiveness dimensions of employer branding in technical educational institutions. Six factors were found to be related with the personal benefits of faculty members, job security aspects, additional benefits, career development opportunity, teaching aid, and facilities in institutions and work freedom in routine work schedule.
Wayne and Casper (2012)	Employer Branding and HRM	Potential Employees	Quantitative	Survey	College students	Results indicate that a firm's reputation in compensation, work-family balance, and diversity efforts increase college students' intentions to pursue employment with the firm. College students perceive that the organization is prestigious, will be supportive, and will foster their job performance. Results suggest that a strong employer brand derived from employee-centered HR practices is important for recruiting college students.
Wilden et al. (2010)	Employer Brand and Employer Brand Attractiveness	Potential Employees	Qualitative	Interviews	Job seekers	In-depth interviews reveal that job seekers evaluate the attractiveness of employers based on any previous direct work experiences with the employer or in the sector; evaluations of the clarity, credibility, and consistency of the potential employers' brand signals; perceptions of the employers' brand investments; and perceptions of the employers' product or service brand portfolio.
Zhu et al. (2014)	Employer Branding and Employer Brand Attractiveness	Potential Employees	Qualitative and Quantitative	Focus Groups and Survey	Senior college students in the Chinese context	Results reveal a five-dimensional structure of employer brand in the Chinese context, which implies that explicit functional factors predominate the Chinese employer brand rather than the functional-symbolic structure that prevails in the Western context. Among the five dimensions, work-life effectiveness and organizational mark seemed unique to the Chinese context, whereas the other three dimensions were similar to those found in the Western context.

2.1 Brand and Branding

The American Association of Marketing defined brand as “a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler et al., 1991, p. 442). The focus of brand has been on products and consumers, but the brand definition has since been expanded and is broader than the one defined by the marketing association (Ambler, 1992; Maurya & Mishra, 2012; Murphy, 1992; Wood, 2000). Brand is also identified as an intangible asset of a company (Seetharaman, Azlan Bin Mohd Nadzir, & Gunalan, 2001). In addition, brand is defined as a value system (Sheth, Newman, & Gross, 1991) or a set of consumption values that defines a brand. Brand identity refers to the visible components of a brand (Keller, 1993), such as a name, sign, symbol, or design. How customers perceive a brand is termed *brand knowledge*. Current literature demonstrates the importance of brand knowledge and links the brand to customer memory or knowledge (Alba et al., 1991). Brand knowledge is divided into two categories: brand awareness and brand image (see Figure 7). Brand awareness is how customers relate to the brand and how easily the brand comes to the customer’s mind.

Figure 7: Dimensions of brand knowledge (Keller, 1993)



It is brand recognition from prior experience(s) that a customer had with the brand. Brand image is defined as “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993; p. 3). Customer-based brand equity is defined in relation to brand knowledge. Brand equity is defined as “the differential effect of brand knowledge on consumer response to the marketing of the brand” (Keller, 1993, p. 3). In the consumers’ minds, a brand could have a positive or negative effect, which is why brand knowledge plays a vital role in brand equity and brand image (Keller, 1993).

Brand image is derived from brand associations (Keller, 1993). A key component of brand association is brand attributes or value propositions identified by the brand. Building brand equity requires building on brand identity and brand awareness. Brand identity helps in establishing a relationship between the brand and the customer by generating a value proposition (Aaker, 1996). Aaker (1996) defined brand value as a set of value propositions that involves the functional benefit of the brand. If there are no clearly defined value propositions, the brand will be vulnerable to its competitors (Webster & Keller, 2004). The value and value propositions are reasons you buy a certain brand rather than a competitor’s product. It identifies the brand over its competitors. Brand equity has different dimensions that are key to employer branding conceptualizations (Theurer et al., 2018).

2.2 Resource-Based View (RBV)

RBV describes how a firm could have a sustained competitive advantage if it implements value-creation strategies not yet used by its competitors. Specifically, RBV posits that a firm’s resources that are valuable, rare, nonimitable, and systematically managed can result in a sustained competitive advantage (Barney, 1991; Wernerfelt, 1984). Resources can be divided into two types: tangible and intangible resources (Galbreath, 2005). Tangible resources consist of resources that have physical and financial value. Intangible resources include intellectual assets, reputational assets, brand, organizational assets, and skills.

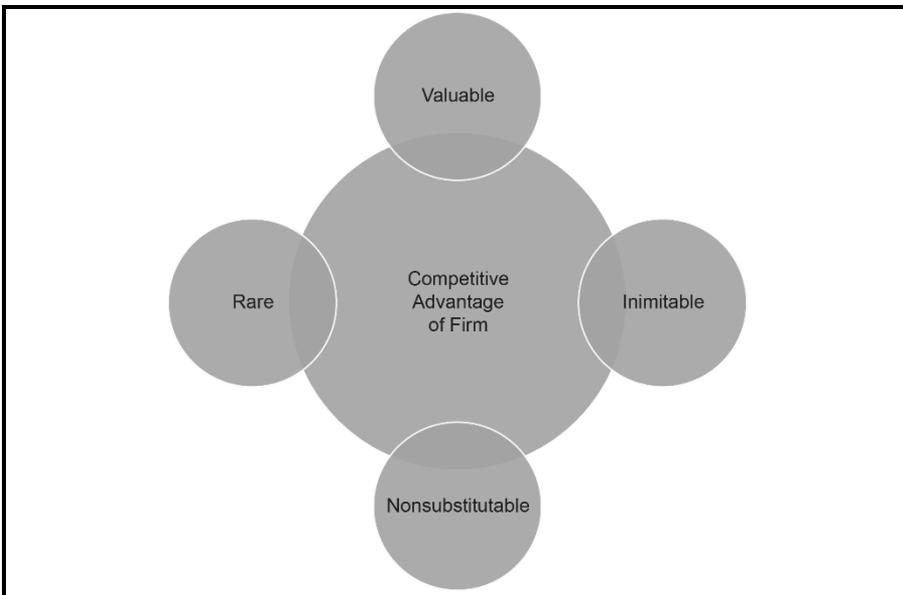
RBV defines three categories of resources:

- 1) Physical capital resources (Williamson, 1975), including the firm's location, equipment, and ability to get raw materials.
- 2) Human capital resources, training, and insight of individual managers and workers (Tomer, 1987).
- 3) Organizational capital resources, including many aspects of the organization, such as reporting structure, controls, policies, group interactions, and planning.

All resources that provide a competitive advantage for a firm must have four attributes (Barney, 1991; Barney et al., 2001; see Figure 8):

- a) They all must be valuable, remove current threats, and exploit new opportunities.
- b) They must be "unique" or rare with respect to their competitors.
- c) They should not be able to be easily created by competitors and inimitable.
- d) There cannot be an equivalent substitute for the resource, making it nonsubstitutable.

Figure 8: Attributes of RBV to provide sustainable competitive advantage (Barney, 1991; Barney et al., 2001)



Wernerfelt (1984) and Wright, Dunford, and Snell (2001) noted that HR and strategic HR management (SHRM) provide a sustainable competitive advantage to the firm. Human capital produces product and services that can provide a competitive advantage to the firm and can sustain these advantages. SHRM can create policies that demand particular values and behavior from employees (Cappelli & Singh, 1992). SHRM can provide firm competencies that cannot be imitated by firm's competitors. These SHRM policies and practices are key to a sustainable competitive advantage. Boxall (1996) argued that management can create a workforce that has all the attributes of RBV: valuable, inimitable, rare, and nonsubstitutable. HR is unique and its capabilities can fit into the RBV model. Greening and Turban (2000) described how workforce quality provides a competitive advantage to the firm. A quality workforce is more critical than any other source for competitive advantage, and a firm's human capital can grow with training and development to create a stable and positive image of the employer. Also, firms can be successful in creating and passing along knowledge in the workforce, which enhances the quality of the workforce. Thurow (1992) identified HR as a key to creating a sustainable competitive advantage in the global economy.

2.3 Theoretical Framework (RBV) and Employer Branding

Employer branding has been described as “the sum of a company's effort to communicate to existing and prospective staff that it is a desirable place to work” (Lloyd, 2002, p. 1). In 1996, an employer brand (Figure 9) was originally defined as a set of EBVs, or a “package of functional, economic, and psychological benefits provided by employment, and identified with the employing company” (Ambler & Barrow, 1996a, p.196). RBV provides an important theoretical framework for employer branding to explain the value of an employer brand (Agrawal & Swaroop, 2009; Backhaus & Tikoo, 2004; Priyadarshi, 2011; Sivertzen et al., 2013) and has been used in the employer branding literature (Agarwal, Ferratt, & De, 2007; Backhaus & Tikoo, 2004; also see Table 2 for employer branding studies associated with the RBV theoretical framework). RBV suggests that a firm could have a sustained competitive advantage if it implements value-creation strategies not yet used by its competitors.

Figure 9: Employer brand as a package of economic, functional, and psychological benefits (set of EBVs; Ambler & Barrow, 1996a)

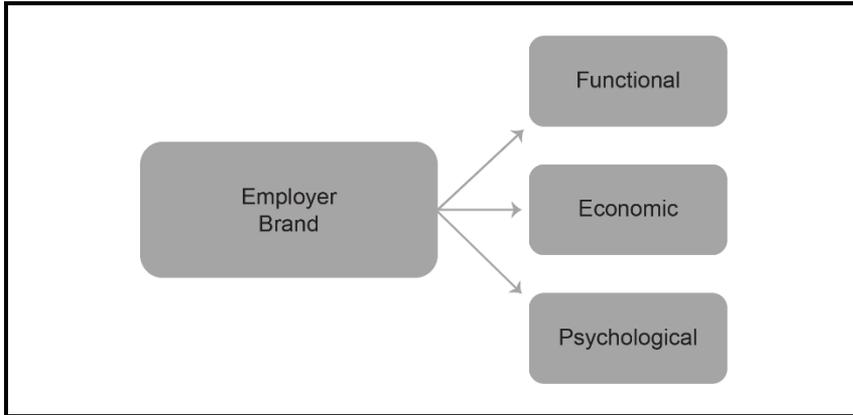
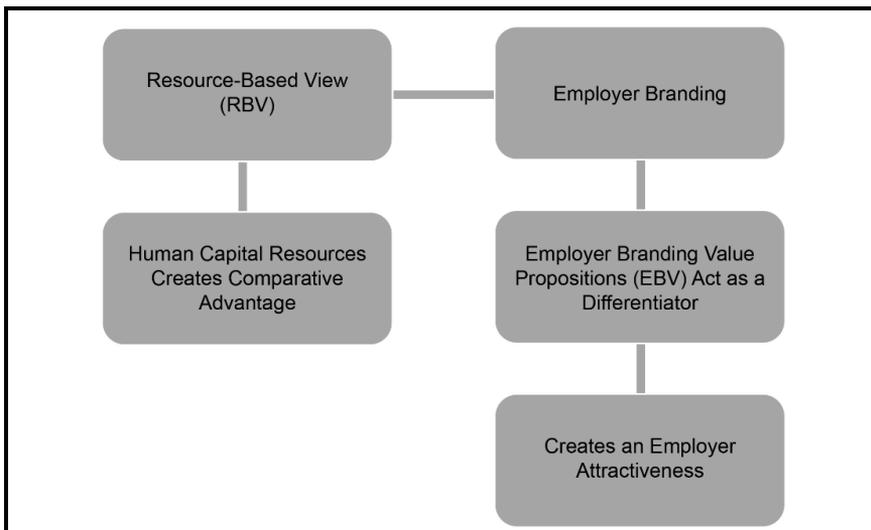


Figure 10 is a theoretical framework (Backhaus & Tikoo, 2004; Barney, 1991; Berthon et al., 2005; Edwards, 2009) for employer branding and RBV.

Figure 10: Theoretical framework for RBV and employer branding (App et al., 2012; Backhaus & Tikoo, 2004; Barney, 1991; Berthon et al., 2005; Edwards, 2009; Wright et al., 2001)



Backhaus and Tikoo (2004) and Berthon et al. (2005) identified a set of EBVs as a differentiator in employer branding to attract employees to the firm and retain them once they become employees. Employer attractiveness attracts and retains both potential and current employees. Employer branding and EBV refer to aspects that differentiate the firm from its competitors (Botha et al., 2011) and position the firm as the best place to work. This is very similar to product branding, in which branding seeks to make the product appear to be the best in its classification. Brand equity is also defined as “a set of brand assets and liabilities linked to the brand that add to or subtract from the value provided by product or services to a firm and that firm’s customers” (Aaker, 1996, p. 103). Employer branding and its activities are the firm’s assets. That means current employees recognize the value propositions that differentiate their company from competitors and retain them in the firm because of the employer brand equity associated with their firm. Also, employer brand equity provides a brand image to external or potential employees to differentiate the firm as the best place to work and provides a differentiating value proposition (Botha et al., 2011). Employer brand works the best with companies that have strong brand equity (Moroko & Uncles, 2009). These firms, such as Google, have differentiated themselves as the best place to work (Moroko & Uncles, 2009).

Employer brand is a key HR strategic lever to providing a competitive advantage (Priem & Butler, 2001). Without competent human capital, arguably all other resources would not provide a competitive advantage. Employer branding creates external and internal marketing for the firm (Foster, Punjaisri, & Cheng, 2010). Therefore, it enables the firm to recruit highly qualified talent and retain existing talent. External employer brand marketing focuses the firm on external audiences or recruitment, whereas internal employer brand marketing focuses the firm on internal audiences or retention of its best employees (Figurska & Matuska, 2013). The firm does not want to let its competitors recruit its best employees, and similarly, it would like to recruit highly qualified employees from its competitors to get the best competitive advantage over them (Biswas & Suar, 2016). Internal employer brand marketing allows the firm to create the best organizational workforce, which is hard for other firms to imitate. This includes management and key workers. Southwest Airlines is a great example of fantastic employer branding. The company has created a very special workforce and organizational culture that is very hard for its competitors to duplicate or imitate (Stamler,

2001). This allows it to have a sustainable competitive advantage (Barney, 1991).

2.4 Employer Branding and EBV

Employer branding has been described as “the sum of a company’s effort to communicate to existing and prospective staff that it is a desirable place to work” (Lloyd, 2002, p. 1). The employer brand (Figure 9) is the EBV “package of functional, economic, and psychological provided by employment” (Ambler & Barrow, 1996a, p. 196). The first defined EBV is the economic dimension, which focuses on financial benefits including salaries, medical benefits, vacations, free meals, and other benefits through which employees obtain direct financial gains. The functional EBV relates to actual work, such as work interest and applications. Finally, the psychological EBV represents a sense of belonging among employees as to how they interact with other employees and their managers.

The resulting employer brand is the perception, or commonly shared image, of an organization as a place to work and its value propositions (EBV) to current, past, and future employees (Backhaus & Tikoo, 2004). This collective image influences the loyalty and retention of current employees, in addition to shaping how firms attract new talent. According to a Conference Board of Canada report, effective employer branding can support the development of a firm’s competitive advantage (Dell, Ainspan, Bodenberg, Troy, & Hickey, 2001). However, the competitive advantage of an employer brand helps “to secure and retain the most sought-after employees” (Moroko & Uncles, 2009, p. 160) only if managers understand the trends in what employees value (Biswas & Suar, 2013). A stronger employer brand will result in stronger attraction and a higher level of employee engagement and contribute to stronger financials (Mosley, 2007).

Table 3: EBV variables (Ambler & Barrow, 1996a; Berthon et al., 2005)

(Ambler & Barrow, 1996a)	(Berthon et al., 2005)	Definitions
Functional	Development	Provides employees with development opportunities, recognition, and confidence and ability to move into future employment.
	Application	Provides employees with ways to apply and teach their skills to others in the environment, creating a meaningful application atmosphere that is customer oriented and humanitarian.
Economic	Economic	Portrays to employees that an employer provides job security, a top salary, and great compensation and opportunities to be promoted in the firm.
Psychological	Interest	Provides employees with exciting and great work practices including innovations and fosters employee creativity to support and create high-quality products and services.
	Social	Provides an image to employees that the firm provides a great working environment that is exciting, fun, and features great relationships among employees and with management. It also promotes teamwork and collaboration.

To understand how these priorities might have changed, Berthon et al. (2005) studied desirable employer attributes and extended the three EBVs introduced by Ambler and Barrow (1996a) of perceived benefits as value propositions (variable) that attract employees to a firm; they identified the employer attractiveness construct as result of the value propositions. The five variables (values) they identified are defined in Table 3.

Through these EBV propositions, companies market themselves to their employees (Moroko & Uncles, 2008), both current and potential (Barrow et al., 2005). In other words, a strong employer brand helps retain current employees (also known as internal employer branding) and attract new employees (also known as external employer branding; Minchington, 2010). Not only is employer branding one of the best practices for leveraging talent acquisition (Teetz, 2013), but it is also a catalyst to improve productivity through encouraging and motivating

employees (Chunping & Xi, 2011). The HR literature (Backhaus & Tikoo, 2004; Eisenberg et al., 2001; Sullivan, 2002) describes employer branding as a three-step process (see Figure 2) of developing a firm's value proposition; marketing this value to potential employees, recruiting agencies, etc.; and motivating the internal workforce. The first step in the process is to create or identify the firm's value propositions that are identified by brand, which creates the employer attractiveness construct (set of EBVs). Employer attractiveness is the key differentiator between the firm and its competitors. The second step is to market the value propositions to potential employees and associate the brand with those value propositions. External marketing of employer branding is focused on attracting potential employees and strengthening the product and service brand (Backhaus & Tikoo, 2004). Step 3 of employer branding is internally marketing the employer brand to the firm's current employees. In this important step, firms have to conform to the brand promise from the recruitment process. The psychological contract agreed on during recruitment now must be confirmed by the employer (Ambler & Barrow, 1996a; Froom, 2001). The psychological contract's unwritten promise or expectation between an employee and the organization (Argyris, 1960) is a key to employee retention. This means the value propositions (App et al., 2012) promised to attract employees must be fulfilled by the employer and executive team (Moroko & Uncles, 2008) throughout employment.

Employer branding builds on its EBV, which outlines what employees want and what they get in return. It provides the firm's commitment to policies and procedures that increase retention and improves recruitment strategies (Mandhanya & Shah, 2010). EBV propositions guide the company's strategic direction (Botha et al., 2011). Firms are at risk of higher turnover if their value propositions are less attractive than those of their competitors (Munsamy & Venter, 2009). Value propositions are the elements that improve employee attitudes toward the firm (Gowan, 2004; Lemmink, Schuijff, & Streukens, 2003). Although there are many similar value propositions, it is very important for a firm to clearly identify its value propositions as distinct (Wilden et al., 2010). Well-differentiated value propositions will clearly set the firm apart from its competitors and provide a great motivation for both current and prospective employees to apply to and stay with the firm; it also provides great marketing, both internally and externally, for the employer brand (Botha et al., 2011; Minchington, 2010; Munsamy & Venter, 2009; Schumann & Sartain, 2009). The brand association accompanying these value propositions sets

a firm apart from its competitors and helps it rise in the employer market (Keller, Parameswaran, & Jacob, 2011). These value propositions have been defined and studied from different views and lenses or perspectives during the last two decades (see Table 2). These perspectives consist of the employer (Hanin et al., 2013; Moroko & Uncles, 2008), current and former employees (Sengupta et al., 2015; Sivertzen et al., 2013; Sutherland et al., 2002), and potential employees (Agrawal & Swaroop, 2009; Berthon et al., 2005). Many articles have focused on EBV propositions and employer attractiveness and developed instruments to measure them in different segments and industries. A favorable EBV provides employees with positive attitudes toward the firm (Highhouse, Lievens, & Sinar, 2003). Table 2 lists research articles and their different perspectives or views. The employer branding literature also features studies that explored the views of both current and potential employees (Almaçık & Almaçık, 2012; Biswas & Suar, 2016).

The main difference between corporate branding and employer branding is the third step. In corporate branding (see Table 2), the focus is external marketing, whereas employer branding is focused on both internal and external marketing. Firms sometimes do both employer branding and corporate branding campaigns at the same time (Backhaus & Tikoo, 2004). Biswas and Suar (2013) argued that it is important to understand trends in what employees value. However, what is valued varies by industry. For instance, seasonal, low-paid hospitality workers have different employment priorities than highly paid knowledge workers. Thus, managers need to pay attention to industry-specific trends in what employees value. This is particularly true in industries with high turnover. This is certainly the case in the IT industry, where firms rely on a limited supply of skilled professionals (Ewing et al., 2002).

To circumvent the spread of unreliable and unrepresentative data, specific social networks have been created. In line with the revised definition of crowdsourcing (Kietzmann, 2017), these social networks specifically invite former and current employees to volunteer their employment-related stories. The advantage of these crowdsourced employer branding platforms is that they can rely on strength in numbers (Lievens & Slaughter, 2016). If they succeed at attracting many employees who share positive stories, the voices of a few disgruntled employees will be silenced by the accounts of others who praise the company. If successful, these crowdsourced employer branding platforms (Backhaus, 2016; Cascio, 2014) enable job seekers to separate good employers from

bad. The public nature of the information on these platforms also presses firms to listen to the stories of their employees, both former and current, because they might otherwise lose their best recruits to better firms without being able to attract new high-value individuals (Lievens & Slaughter, 2016).

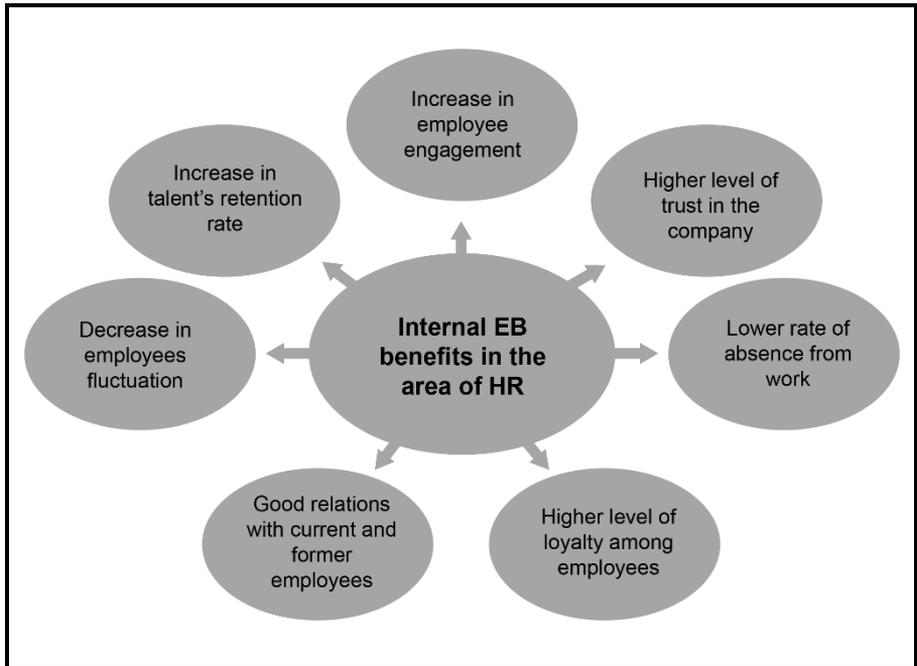
Employer branding relates to an organization's reputation as an employer and its value proposition to its employees (Barrow & Mosley, 2011). The term suggests that a firm benefits from employer branding when it is perceived as a great place to work in the minds of current employees and key stakeholders in the external market (Minchington, 2010). Great work environments don't emerge by happenstance but instead result from deliberate and strategic initiatives aimed at attracting, engaging, and retaining employees. Indeed, employer branding is the product of the "sum of a company's efforts to communicate to existing and prospective staff that it is a desirable place to work" (Lloyd, 2002, p. 1). Of course, an employer brand cannot be controlled by the firm—its beauty lies in the eye of the beholder. In this regard, the degree to which a firm's intended employer brand matches its employees' experiences with the company culture and values determines the employer brand's impact on the market.

An employer brand can be internal for current employees and external for future or potential employees and have many benefits (Figurska & Matuska, 2013) for HRM. Figures 11 and 12 describe both internal and external benefits for HRM in an organization (Figurska & Matuska, 2013).

The internal benefits of employer branding for current employees are as follows (Figurska & Matuska, 2013, pp. 40):

- Increase in employee engagement
- Increase in talent retention rate
- Decrease in employee fluctuation
- Good relations with current and former employees
- Higher level of loyalty among employees
- Lower rate of absence from work
- Higher level of trust in the company

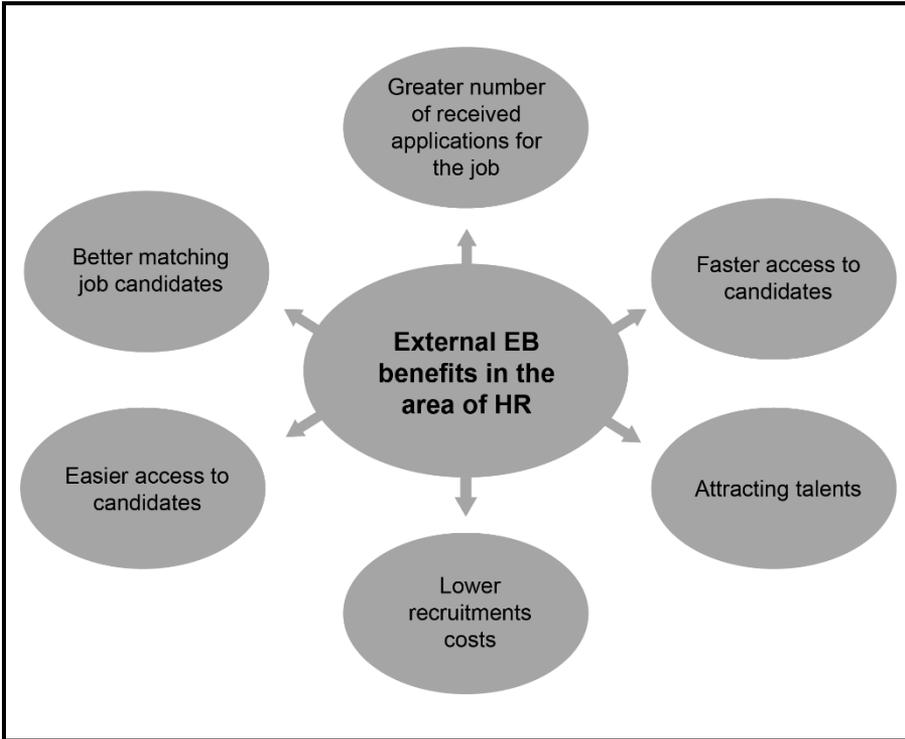
Figure 11: Internal employer brand benefits for organizations (Figurska & Matuska, 2013, p. 40)



The external benefits of employer branding for future employees are as follows (Figurska & Matuska, 2013, pp. 41):

- Greater number of applications received for open jobs
- Better match between job candidates
- Easier access to candidates
- Lower recruitment costs
- Faster access to candidates
- Attracting talents

Figure 12: External employer brand benefits for organizations (Figurska & Matuska, 2013, p. 41)



These benefits make employer branding a great strategy to attract and retain high-quality talent for organizations and provide continuity for organizations' financial profitability (Moroko & Uncles, 2008).

2.4.1 Employer Branding: Employer Perspective

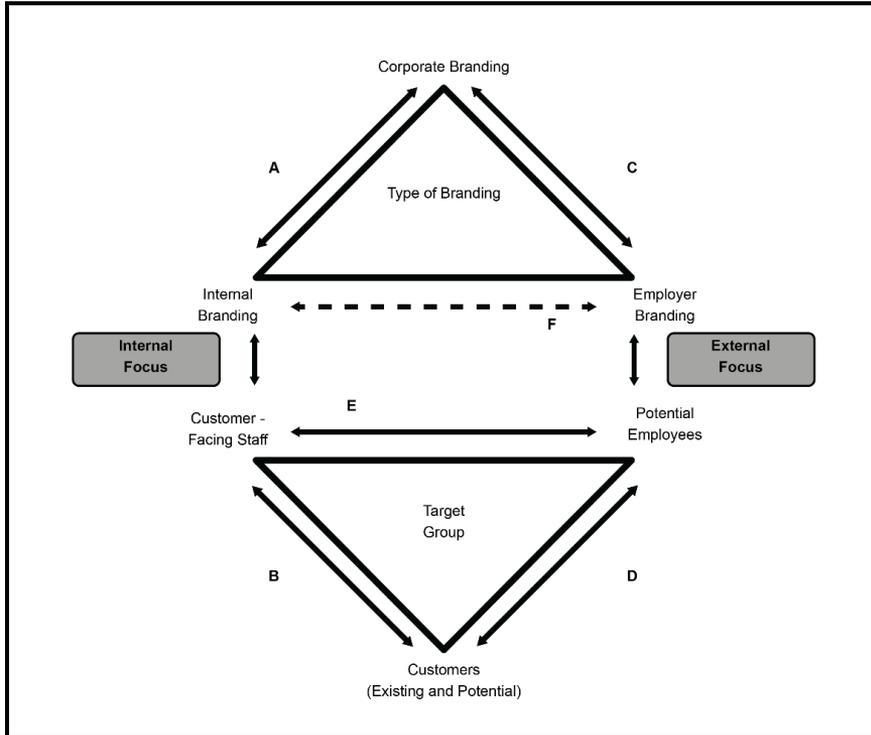
The employer brand was first introduced in this area by focusing on how companies use branding to attract and retain highly qualified employees via a package of functional, economic, and psychological values (Ambler & Barrow, 1996a). To convey their employer brands to current and potential employees, firms use marketing strategies such as advertising (Ewing et al., 2002). Firms use internal advertising to share their employer brand with internal employees for retention and externally with potential employees for recruitment. For the past two decades, Fortune magazine has published a list of the “top 100 best companies to work for in America” (Levering & Moskowitz, 1998), and becoming an employer of choice is one of the key strategies for HR in major companies (Pfeffer, 1998), especially for expensive and rare knowledge workers (Cairncross, 2002) and high-demand industries (Agarwal et al., 2007). Companies now have to work on their internal brand identity to improve the external image of their company (Martin, Beaumont, Doig, & Pate, 2005). Moroko and Uncles (2008) focused on the characteristics of a successful employer brand and developed a metric for a successful employer brand.

The characteristics defined by Moroko and Uncles (2008, pp. 164-165) are:

- 1) Being known and noticeable
- 2) Being seen as relevant and resonant
- 3) Being differentiated from direct competitors
- 4) Fulfilling a psychological contract between employee and employer
- 5) Unintentionally appropriating brand value

The literature has connected the employer brand and corporate brand (Ambler & Barrow, 1996b; Foster et al., 2010; see Table 2). Figure 13 describes the internal and external focus of this relationship. The internal focus is on customer-facing staff members, whereas the external focus is for potential employees.

Figure 13: The relationship among internal and external employer and corporate branding (Foster et al., 2010)



There is also research on the market segmentation of employer branding (Moroko & Uncles, 2009), focusing on employer branding in different markets. Another body of knowledge has explored employer brand association, in which a job is viewed as a product (Cable & Turban, 2001; Celani & Singh, 2011; Martin & Hetrick, 2009), and focused on the recruitment aspect of employer branding.

Much literature has focused on factors of employer branding, but this research has considered the social responsibility of employer branding (Dokania & Pathak, 2013; Nyborg & Zhang, 2013) as an antecedent for a successful employer brand.

Talent management is another strategy firms now use to retain and recruit employees through employee engagement and to develop a strong employer brand and EBVs (Christensen Hughes & Rog, 2008). Many gaps have been identified (Theurer et al., 2018) in this area, including

EVB identity and positioning. Ewing et al. (2002) suggested studying employers and their efforts to shape employment brand value.

Research on the employer's view also includes efforts to understand the value propositions offered and understood by management and executives of firms to their employees (Heilmann, 2010; Moroko & Uncles, 2008; Priem & Butler, 2001). The employer's view represents the executives and their perception of the employer brand image in various dimensions or value propositions (Priyadarshi, 2011). Priyadarshi (2011) identified four factors: organizational environments, organizational frame and flexibility, variety in job and work settings, and compensation and career. The employment offering provided by employer during recruitment must be fulfilled for current employees (Hanin et al., 2013). This offering creates a commitment that binds an individual to the organization. These four factors are predictors of employee satisfaction and employer brand image. Moroko and Uncles (2008) described employer brand as consistent with corporate brand. One of the key elements that is important in an employer brand is fulfilling the psychological contract (Ambler & Barrow, 1996a; Rousseau, 1989). An employer brand is considered good if the value propositions (App et al., 2012) match "what you were sold" (Moroko & Uncles, 2008, p. 165) as an applicant. If the employer fulfills the psychological contract, it will yield better loyalty and better engagement from the employee; if broken, it will likely cause turnover and loss of productivity (Morrison & Robinson, 1997). Here is an example of a broken psychological contract:

"We need to get graduates and we need to offer work life balance." So the HR department recruited graduates based on "We will give you work life balance." No one told the managers or the senior managers that this was the new way of working. ... The graduates started there and realised that "My manager is still around at 7pm or 8pm. This isn't what was promised to me." Within 12 months, they had all gone. [Company] were selling a promise they could never deliver." (Moroko & Uncles, 2008, p. 166)

It is important to fulfill the psychological contract and not breach the employees' trust. Psychological contract violations are a key factor in employee turnover, trust, and loss of job satisfaction in the organization (Robinson & Rousseau, 1994).

Table 4 lists types of violations of the psychological contract (Robinson, Kraatz, & Rousseau, 1994) and not meeting the organization's promises.

Table 4: Types of violation of the psychological contract (Robinson & Rousseau, 1994)

Violation Type	Definition	Examples
Training/development	Absence of training, or training experience not as promised	'Sales training was promised as an integral part of marketing training. It never materialized.'
Compensation	Discrepancies between promised and realized pay, benefits, bonuses	'Specific compensation benefits were promised and were either not given to me, or I had to fight for them.'
Promotion	Promotion or advancement schedule not as promised	'I perceived a promise that I had a good chance of promotion to manager in one year. While I received excellent performance ratings, I was not promoted in my first year.'
Nature of job	Employer perceived as having misrepresented the nature of the department or the job	'(My) employer promised I would be working on venture capital projects. I was mainly writing speeches for the CEO'
Job security	Promises regarding degree of job security one could expect were not met	'The company promised that no one would be fired out of the training program – that all of us were "safe" until placement (in return for this security we accepted lower pay). The company subsequently fired four people from the training program'
Feedback	Feedback and reviews inadequate compared to what was promised	'...(I did) not receive performance reviews as promised'
Management of change	Employees not asked for input or given notice of changes as they were promised	'I was promised more knowledge and control over my future'
Responsibility	Employees given less responsibility and/or challenge than promised	'(I was) promised greater responsibility. More strategic thinking/decision making'
People	Employer perceived as having misrepresented the type of people at the firm, in terms of things such as their expertise, work style or reputation	'I was promised as dynamic and as having challenging environment... rubbing elbows with some of the brightest people in the business... a big lie. The true picture started to come out... after the initial hype... of working at one of the best 100 companies in the US had worn off'
Other	Perceived promises not fulfilled by the employer not fit into above categories	'Original representations of the company's financial and market that do strength became clearly fraudulent'

Psychological violation and contract breach are based on the interpretation of employees' expectations (Morrison & Robinson, 1997) and start from mistrust between the employee and organization (Robinson & Rousseau, 1994).

An employer brand promise is a strategy that management needs to meet (Backhaus & Tikoo, 2004; Mosley, 2007) to develop a successful employer brand. EVBs must be met for employees' entire employment (App et al., 2012). Otherwise, it will result in a violation of the psychological contract and employer brand promise. This will likely cause employees to leave the organization and potentially weaken the firm's competitive advantage (Rousseau, 2001).

Hanin et al. (2013, pp. 62–63) found:

- A) "The relationship between lived employment experience and psychological contract violation is moderated by employment offering."
- B) "The interaction of lived employment experience by employment offering on affective commitment will be mediated by psychological contract violation."

EVBs are key to the success of the employer brand, and employers must keep their brand promise to support the psychological contract (App et al., 2012; Moroko & Uncles, 2008).

2.4.2 Employer Branding: Employee Perspective

The research in this area has mainly focused on employer branding propositions for current employees (see Table 2). Employees are the most valuable asset of a company, and their view of the employer brand promise is critical to the firm's financial stability (Moroko & Uncles, 2008). Measuring EBV and making sure the organization adheres to the employer brand promise is very important (Sehgal & Malati, 2013). Prior studies were conducted in different segments and industries, especially those with talent shortages (Ito et al., 2013). Much empirical research (see Table 2) in this area used surveys to understand the perspective of current employees regarding EBV and to see if their employer's brand promise was met with their current employees (Sivertzen et al., 2013; Sokro, 2012; Sutherland et al., 2002). If the brand promise is not met, it can result in violation of the

psychological contract and yield turnover and lost productivity (Hanin et al., 2013; Rousseau, 1989). It is also important to market the EBV to current employees to enhance their job satisfaction (Ito et al., 2013). The internal employer brand plays a vital role in retention of current employees (Figurska & Matuska, 2013). Whereas many studies in this area only considered current employees, Ito et al. (2013) studied employees both at the entry and exit of their employment. They explored six value proposition or indicators: pay, flexibility, security, development, promotion, and values. They examined differences in priorities and whether the priorities changed from entry to exit.

There were four factors for entry priorities and two factors for exit priorities:

Entry Priorities or Factors

- 1) Development
- 2) Values
- 3) Flexibility and security
- 4) Promotion and pay

Exit Priorities and Factors

- 1) Development and values
- 2) Pay, flexibility, and promotion

These results are critical for the firm to find out which EBVs cause employees to leave and choose their competitors (Ito et al., 2013). Sehgal and Malati's (2013) study demonstrated significant differences among employees' perspectives of employer branding. This means the firm must develop management training and carry out the value propositions promised at recruitment (Sehgal & Malati, 2013).

2.4.3 Employer Branding: Potential Employee Perspective

Much research in this area has focused on potential employees (see Table 2). Employers are very interested in recruiting top candidates to their firms (Rampal, 2014; Sivertzen et al., 2013). Employer branding is a key strategy to market to potential or prospective employees (Backhaus & Tikoo, 2004). In the past two decades, many research articles explored this area and developed many instruments to identify the value

propositions important to prospective employees (Agrawal & Swaroop, 2009; Berthon et al., 2005; Bonaiuto et al., 2013; Jain & Bhatt, 2015; Lievens, 2007). The value proposition associates the employer brand with the firm. Berthon et al. (2005) developed an instrument that has been used or modified in many studies to measure employer attractiveness via a set of value propositions important to potential employees (Berthon et al., 2005; Rampl, 2014; Roy, 2008; Saini et al., 2013; Schlager et al., 2011; Sivertzen et al., 2013). Berthon et al. (2005) extended the original value propositions of psychological, functional, and economic domains identified by Ambler and Barrow (1996a) to five values: economic, social, development, application, and interest. These value propositions have a positive impact on potential employees and increase the attractiveness of the firm.

Most studies have been empirical and used these survey instruments to identify important value propositions. These studies mainly focused on university students as prospective employees (Berthon et al., 2005; Jiang & Iles, 2011; Rampl, 2014). Sivertzen et al. (2013) validated the five values discovered by Berthon et al. (2005). Other studies measured the use of social media in relation to corporate reputation (Turban, Forret, & Hendrickson, 1998) and intention to apply for a job. Results demonstrated positive effects for both corporate reputation and intention to apply and indicated the use of social media is an effective tool in employer branding campaigns and has great effects on a firm's reputation. Baum and Kabst (2013) identified five values related to an employer's image: working atmosphere, career opportunities, work–life comfort, task attractiveness, and payment attractiveness—which are very similar to Berthon et al.'s (2005) values. The study included the national context as a moderator, indicating that firms must adjust their employer brand to each country. The study surveyed students in China, India, Germany, and Hungary to test this national context variable. The results demonstrated that the national context moderates work–life comfort, task attractiveness, and payment attractiveness but does not affect career opportunities and working atmosphere.

Saini et al. (2013) studied the relationship between employer attractiveness attributes (value propositions or offerings from the employer) and intention to apply to different technology firms. Berthon et al.'s (2005) instrument and scale were used. This study demonstrated that sustained efforts are needed in developing employer attractiveness attributes to have a competitive advantage in employer

branding. These attributes do not carry the same weight, and firms need to adjust their employer branding effort to focus on the one with the greatest weight. Roy (2008) extended Berthon et al.'s (2005) values with two new values, strong and clear culture and ethical organization, using a survey of final-semester students. The results indicated eight factors: the five values identified by Berthon et al. (2005) of application, interest, economic, social, and development, and three new values: ethical, career opportunities, and psychological.

Value propositions are key to potential employees' image of the firm and improve attitudes toward the firm and intention to apply to the firm. They also provide differentiation between the firm and its competitors. Potential employees value each of these value propositions differently depending on national context and industries. Rampl (2014) studied which of these value propositions also make the firm a "first-choice brand." Work content (interest value) and work culture (social value) were drivers for becoming a first-choice brand.

Value propositions or organizational attributes are the most important factors for potential employees when evaluating job vacancies (Gomes & Neves, 2010), and they provide firms with high-quality candidates and speed up the recruitment process.

2.4.4 Employer Branding Now

Recruiting and retention of employees are described as a war for talent (Kalyankar, Mathur, & Bakshi, 2014), because talent is a strategic lever to gain a competitive advantage (Backhaus & Tikoo, 2004). Much has happened since the term employer branding was first coined by Ambler and Barrow in 1996. The then-new IT choices, far superior to the analog alternatives they replaced, allowed interaction among people in altogether new ways. Reminiscing about the Web 1.0 era and the arrival of dial-up service at home (e.g., through AOL), email (e.g., Hotmail), early browsers (e.g., Mosaic), and early cellular phones (e.g., Nokia 1600) reminds us of just how big a difference IT made. However, on the much-lauded "Information Superhighway" of the 1990s, websites were static and mainly allowed firms to advertise and ~~with the development of the~~ markup language XML, a new, more interactive web emerged. Known as Web 2.0 (O'Reilly, 2007), this platform ensured people could easily post their own content, and the web went social. Social media platforms and mobile devices took over the

internet (Kietzmann et al., 2011; Kietzmann, Silvestre, McCarthy, & Pitt, 2012). Very quickly, people started to value the opinions of strangers and rely on peer-review sites for all sorts of decisions, including books (e.g., Amazon), restaurants (Yelp!), hotels (TripAdvisor), and movies (IMDb). Review sites became the norm for savvy consumers everywhere, and unsurprisingly, people started to talk about organizations online, too. On LinkedIn (2003), Facebook (2004), YouTube (2005), and Twitter (2006), people started sharing their experiences and created eWoM related to firms and their brands, offerings, and role as employers (Ventura, 2013). All of this often-public chatter had a tremendous impact on employer brands and the ability of firms to attract and retain good employees.

In short, employer branding is changing. The resulting crowdsourced employer branding presents new opportunities for former and current employees to share their employment experience, and it allows job seekers to learn more about potential employers. For firms, this means that they need to understand this brave new world of crowdsourced employer branding (Cascio, 2014) so they can provide the benefits that a current or prospective employee desires in working for a specific organization (Berthon et al., 2005).

Glassdoor.com (Tambe, Ye, & Cappelli, 2017), a website where current and former employees anonymously review companies and their management and that also ranks the best and worst employers based on crowdsourced employee-generated data, is one of the sites current and former employees use to rate their employers (Backhaus, 2016). The significant impact of eWoM on potential employees has been measured in several studies of employer branding (Van Hoyer, 2012; Van Hoyer & Lievens, 2005). Potential employees often go to social media and employer review websites to study firms, which can have positive effects on a firm's recruitment efforts (Madia, 2011).

Today, all sorts of people turn to new technologies to discuss a firm's employer brand. With the advent of social media, companies have been forced to quickly create a strong employer brand (Kietzmann et al., 2011) and monitor how people talk about their expectations of and experiences with different employers through eWoM (Kietzmann & Canhoto, 2013). People used to talk behind closed doors about their jobs, but now those doors are clear, and others can access employment stories through social media sites, such as employee job review sites (e.g., Glassdoor.com). There are positive and negative risks associated

with employer brands. When people talk favorably about a firm, it is a boon to its reputation as a great place to work, but when people share negative eWoM, a firm's chances of attracting great talent is quickly reduced. In other words, understanding exactly how employer branding and perceived dimensions of economic, application, and social values of a firm can combat today's ongoing labor mobility (Kaur et al., 2015). Furthermore, a positive social media presence has been found to directly increase corporate reputation, directly relating to increased applications (Sivertzen et al., 2013).

Cable and Turban (2001) defined employer knowledge as employer familiarity, reputation, and image. Employer familiarity consists of employee awareness, social and mass media, and employer job impact. Employer awareness comes from corporate and employer image (Gatewood, Gowan, & Lautenschlager, 1993). Companies like Google portray a great employer image (Gaddam, 2008). Social media and mass media play another important role in employer knowledge and branding (Roper et al., 2013). Yu and Cable (2012) focused on leaders and how they view recruitment and employer brand equity in providing a firm with a future sustainable competitive advantage. In addition, different stakeholders hold different images of the firm (Gatewood et al., 1993; Highhouse et al., 2003; Lemmink et al., 2003). The literature on employer branding (see Table 2) has focused on either potential employees (Berthon et al., 2005; Burmann, Schaefer, & Maloney, 2008; Kavitha & Srinivasan, 2012; Leekha Chhabra & Sharma, 2014; Lievens, 2007; Maxwell & Knox, 2009; Tüzüner & Yüksel, 2009) to attract new employees or current employees for retention (Almıçık & Almıçık, 2012; Foster et al., 2010). Employer branding is considered a key marketing and HRM strategy to overcome employee turnover and shortages (Dokania & Pathak, 2013; Ewing et al., 2002; Kavitha & Srinivasan, 2012; Malati et al., 2013; Thomas & Jenifer, 2016; Vasavada-Oza & Bhattacharjee, 2016).

Attracting and retaining employees is multifaceted and very complicated. It is extremely paramount to all firms how others view the firm, including potential employees (for attracting talent; Berthon et al., 2005) and current and former employees (for retaining talent; Ewing et al., 2002; Malati et al., 2013). Developing a set of value propositions for firms (Backhaus & Tikoo, 2004) is essential for their employer brand. These value propositions have to be considered from all three perspectives and provide a great roadmap and understanding for firms to

stay on top and attract and retain the best employees. The value propositions are a lever for success and the competitive advantage of the firm (Backhaus & Tikoo, 2004; Sivertzen et al., 2013). These value propositions also have positive effects on employer brand equity (Ambler & Barrow, 1996a; Backhaus & Tikoo, 2004; Berthon et al., 2005).

This accounts for the four research subproblems (see Figure 3), which seek a holistic view of employer branding:

- i. To understand perceptions of employer branding value propositions from current employees' view
- ii. To understand perceptions of employer branding value propositions from former employees' view
- iii. To understand perceptions of employer branding value propositions from potential employees' view
- iv. To understand perceptions of employer branding value propositions from employer's view

The following research question and subquestions emerged from the broader research problems. See Figure 14.

RQ: How do different EBVs affect the perceptions of employer attractiveness?

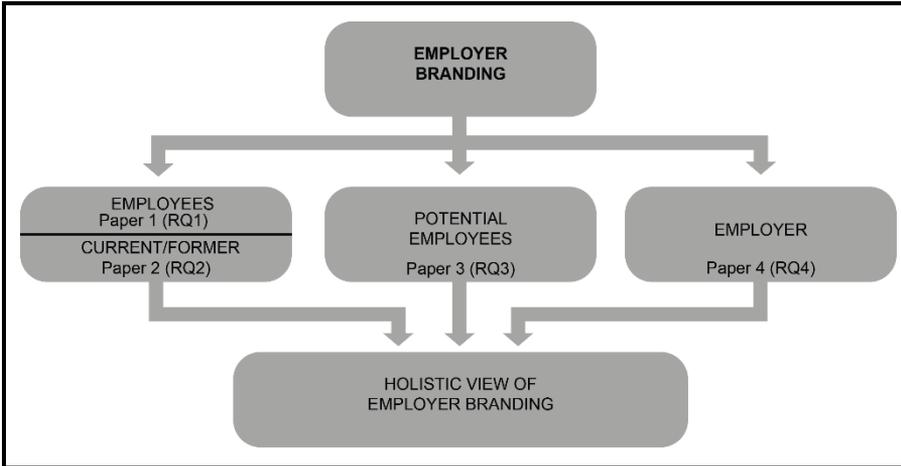
RQ1: How do employees perceive the EBV of employer attractiveness?

RQ2: How do current and former employees perceive the EBV of employer attractiveness?

RQ3: How do potential employees perceive the EBV of employer attractiveness?

RQ4: How do employers manage how employees perceive EBV?

Figure 14: Research paper series and holistic (multiview) of employer branding



The first study (Paper 1) focused on EBV from the employee perspective and answers the question, “How do employees perceive the EBV of employer attractiveness?” This study concentrated on what employees say about their firms by looking at both positive and negative comments. It identified a set of value propositions from the employees’ view. In addition, it clarified that these value propositions do not reflect all issues to the same extent and demonstrated how their relative valences and weights differ across organizations, especially if institutions are considered particularly good or bad places to work. Based on these findings, the study showed how employers can use crowdsourced employer branding intelligence to become great places to work that attract highly qualified employees. This study provided a good understanding of employer branding, including a literature review.

The second study (Paper 2) focused on current and former employees’ perspectives, addressing the second question: “How do current and former employees perceive the EBV of employer attractiveness? and “What are the differences between current and former employees?” Employment agreements are formed through psychological contracts between employers and employees, which focus on the real and expected benefits that every individual considers to be important (Bello, 2015). This study focused on both current and former employees and their different views. When employment commences, employees’ expectations

are often disconfirmed—in other words, they expected more or less from their employer than they experienced. Fear of negative consequences and sheer inertia could block a widespread diffusion of employees' perceptions of the actual employer brand.

Today, however, social media (Kaplan & Haenlein, 2010) and anonymity allow current and former employees to report their experiences. Kaur et al.'s (2015) study reported that social media is a key driver in employer branding, influencing both employer attractiveness and employee engagement. The study clarified that these value propositions are different between current and former employees, as is their view of EBV during their tenure and after they leave the firm. It identified the key EBV weights once employees leave the firm.

In third study (Paper 3), the focus was on understanding EBV in the context of advances in information and communication technologies and social media (Kaplan & Haenlein, 2010). Potential employees draw on information from many different sources to evaluate employer brands and examine multiple attributes for their top choice of places to work (Rampl, 2014). This study investigated the question, “How do potential employees perceive the EBV of employer attractiveness?” This study also developed a new instrument based on Berthon et al. (2005) and operationalized a set of EBVs and employer attractiveness.

This final study explored the value propositions of successful employer branding from the employer perspective. Because strong consumer brand images contribute to successful employer brands (Knox & Freeman, 2006), this study explored what firms do to retain and attract their highly skilled workforce. The study further examined EBVs that are important for employers to recruit and retain the workforce. It focused on a top company that has a dominant consumer brand as much as an employer brand. It also concentrated on a company with great brand equity. This study answered the question of, “How do employers manage how employees perceive EBV?”

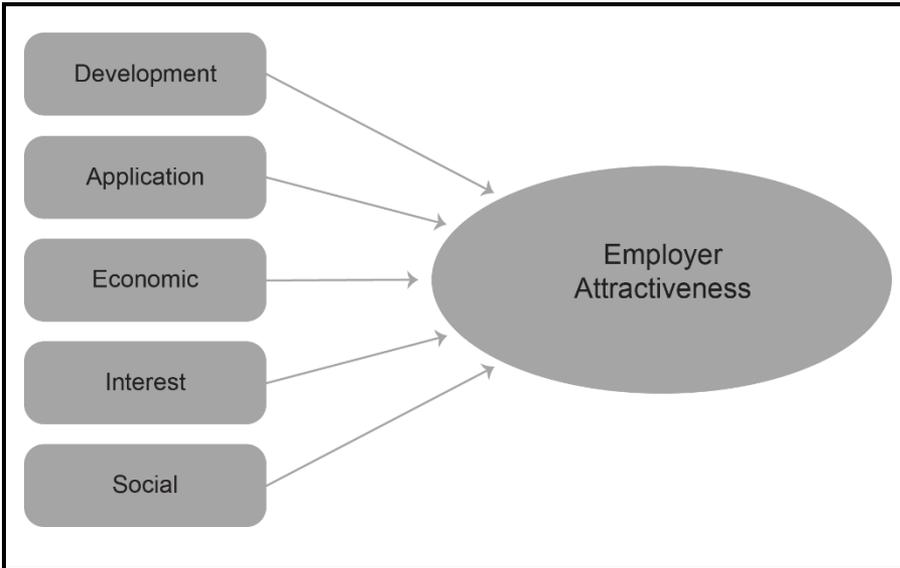
Chapter 3: Methodology

This chapter provides an overview of the research design and approach and how the research was designed and conducted. Also, it describes the context and rationale for how the research was conducted. It provides details on methods used to collect and analyze the data and how the data were verified for research quality. In addition, it covers in detail the research method and data collection, analysis, and rationale for each study. This research used three types of research methods: quantitative, qualitative, and mixed methods (combination of both quantitative and qualitative).

3.1 Research Approach

This research featured four studies, and each study's approach specifically supported the overall research question: How do different EBVs affect the perceptions of employer attractiveness? See Figure 14. This research focused on EBV variables that collectively create employer attractiveness constructs. In addition, using different methods, this research explored different views or perspectives to understand employer attractiveness holistically. Each study focused on a different perspective. All studies built on Berthon et al.'s (2005) employer attractiveness and EBV formative variables, which create the employer attractiveness construct (see Figure 15). The definition of each EBV variable is listed in Table 3 in the previous section.

Figure 15: EBV variables and employer attractiveness construct (Berthon et al., 2005)



All four studies used empirical research methods. Study 1 focused on employee reviews from top and bottom companies in all industries using qualitative content analysis of data from a crowdsourced employer branding website (Glassdoor.com). The second study also used qualitative content analysis and considered both current and former employees; however, it validated its findings via quantitative correlation analysis. The third study focused on quantitative methods. This research used a survey instrument to explore the perspective of potential employees. It built on the previous research and extended the instrument in Berthon et al. (2005) and EBVs in the IT industry identified in Study 2. The fourth study featured a two-step qualitative analysis of the employer's view of employer branding. Step 1 involved semistructured interviews with an employer in California's Silicon Valley. Step 2 employed Study 1's method of reviewing comments from the company's current and former employees on the crowdsourced review site (Glassdoor.com).

3.2 Research Design

This research was designed for the IT context as described in previous sections. Although the first study explored all industries, Studies 2–4 focused on the IT industry. The design of each study centered on EBV to answer the overall research questions and looked at employer branding holistically. This research explored different views of employer branding. Studies 1 and 2 examined all employee views. The first study focused on employee views from all industries, whereas the second study concentrated on the IT industry and compared current and former employees. Study 3 considered potential employees' views of the EBVs operationalized in the employer attractiveness construct. The final study explored EBV from the employer's view and compared it to employees' views regarding the psychological contract. Table 5 outlines each of the four studies and their methods of inquiry and methodological approaches. The design of this research was a mixed approach of descriptive and exploratory methodology as described in the following sections.

Table 5: Research design and approach

	Object of Study	Research Questions	Research Type	Method	Methodological Approach and Analysis
1	Employees	How do employees perceive the EBV of employer attractiveness?	Exploratory	Web scraping: 38,000 reviews from Glassdoor.com	Qualitative: Content Analysis
2	Current and Former Employees	How do current and former employees perceive the EBV of employer attractiveness?	Descriptive and Exploratory	Web scraping: 15,000 reviews from Glassdoor.com	Qualitative: Content Analysis Quantitative: Correlation Analysis
3	Potential Employees	How do potential employees perceive the EBV of employer attractiveness?	Descriptive	Survey of college students: two samples of 450 and 200	Quantitative: Exploratory Factor Analysis and Confirmatory Factor Analysis
4	Employer and Employees	How do employers manage how employees perceive EBV?	Exploratory	Interviews and web scraping data: 1,450 reviews from Glassdoor.com	Qualitative: Interviews and Content Analysis

3.3 Methodologies for the Studies

This section discusses in detail the method and design used in data collection, analysis, and approaches for each study. Because content analysis using artificial intelligence (AI) via IBM Watson featured in three of the four studies, the following section is dedicated to this methodology. All content analyses in these studies used the same methodological approach.

3.3.1 Content Analysis Using AI (IBM Watson)

AI-enabled content analysis is much more powerful than traditional text analysis because it can perform deep natural language processing (NLP) coupled with machine learning. For example, with shallow NLP,

“My nose is running” can be interpreted as a nose that is going for a jog, which is nonsensical. On the other hand, deep NLP AI-enabled content analysis approach involves machine learning every time it processes a text. The AI system receives its information not only from the sentence structure and context of the text but also from a knowledge base (for IBM Watson, the Corpus). The accuracy of AI-enabled system improves over time because it also can contextualize its recognition. For example, the system can be applied to medical documents (Diomaiuta, Mercorella, Ciampi, & De Pietro, 2017), using a medical dictionary to analyze the language in the text similar to a human with medical training. By processing both context and sentence structure from the text and its previously gathered knowledge, the system achieves a significantly higher level of accuracy than its alternatives. AI is a promising technology for enhancing text analysis by retaining more contextual information, handling content that is continuously changing such as online reviews by consumers, and analyzing nontext content such as images, audio, and video.

Figure 16: IBM Watson natural language processing of text (High, 2012)

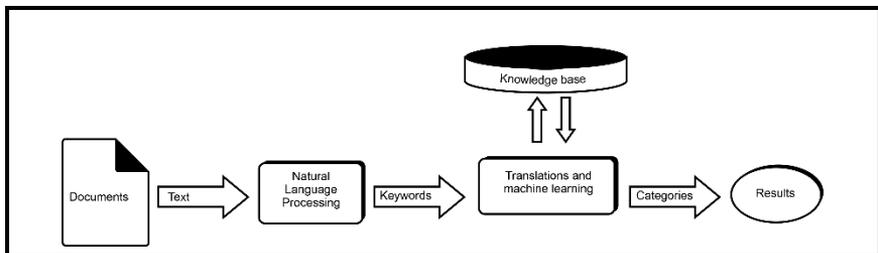


Figure 16 illustrates how the IBM Watson AI system processes text. In the first step, it takes documents (text files) and performs deep NLP to generate keywords, which contain one word or a phrase such as nouns, pronouns, noun sequences, and verb–noun phrases. IBM Watson also calculates the frequency of each keyword in the document. The knowledge base then converts the keywords into subject-matter translations (i.e., categorization). For example, if a marketing knowledge base is chosen, expressions like “consumer protest,” “don’t buy,” or “unethical brand” could all translate to “brand boycott.” It is important to

note that at this stage, manual coding is still required. Although significant improvements have been achieved in AI-enabled text analysis, it is not completely autonomous. It requires connecting keywords to particular constructs by programmers. In 2018, for example, medical experts in Japan trained an AI system on hundreds of datasets to see if it could accurately spot instances of stomach cancer. Once trained to differentiate malignant from benign endoscopic images, AI only took 0.004 seconds to judge whether a patient showed early stage cancer or normal stomach tissue (The Japan Times, 2018). AI correctly detected cancer in 80% of cancer images, whereas the accuracy rate was 95% for normal tissue (The Japan Times, 2018). Without training, the high detection rate in cancer images would not have been possible. Training can also improve the recognition rate of text analysis as well.

IBM Watson uses NLP to process data and provide in-depth high-quality analysis at human scale accuracy (High, 2012). IBM Watson NLP provides the following methods:

1. Parts of speech including nouns, verbs, and adjectives that employees used
2. Sequences of words in sentences and phrase constituents
3. Sentiments, separating positive and negative expressions

Running the text through IBM Watson based on one or more of these methods generates a set of keywords. The next step is to develop the knowledge base (see Figure 16). To develop a knowledge base or dictionary, manual coding is performed based on previous research and experts in the field. For example, in this study, “great pay” can be translated as an economic value proposition and “good working environment” can be translated as a social value proposition. Creating the knowledge base is an iterative process. This means that running a new set of data will discover more keywords than contained in the knowledge base or dictionary and that need to be added. It is also equally important to have multiple coders involved in knowledge base development to have high coding reliability. In this process, random reviews were selected and manually checked for IBM Watson validity, and validity was confirmed in each study.

3.3.2 Study 1 Research Design and Measures

This study addressed the research question: How do employees perceive the EBV of employer attractiveness? This study reviewed employer branding based on employees' opinions and looked at the top and bottom 10 companies according to Glassdoor.com (Ventura, 2013). Glassdoor.com is an employer branding website that collects anonymous opinions from firms' employees. Glassdoor.com ranks the companies based on their overall rating. The top companies are the highest ranked and bottom companies are the lowest ranked companies on Glassdoor.com (see Table 6).

Table 6: Glassdoor's 10 best and 10 worst places to work in 2016

Best Places to Work	Worst Places to Work
Airbnb	Forever 21
Bain & Company	Express Scripts
Guidewire	Family Dollar Stores
Hubspot	Sears
Facebook	Xerox
LinkedIn	Kmart
Boston Consulting Group	DISH
Google	RadioShack
Nestle Purina PetCare	Dillard's
Zillow	Kraft Heinz Company

More than 38,000 reviews for these 20 companies were scraped (downloaded) from the website. Berthon et al. (2005), as described in previous sections (see Table 3), identified five EBV variables—social, application, economic, development, and interest—for the employer attractiveness construct. This study explored these five variables (propositions) to determine if any other variables (EBVs) merged from

the data. The fields extracted from the downloaded data were pros and cons from each review.

The data were divided into four datasets divided by each record:

1. All pros from the top companies
2. All cons from the top companies
3. All pros from the bottom companies
4. All cons from the bottom companies

Then, each set was analyzed by IBM Watson Explorer (IBM Knowledge Center, 2018). IBM Watson performs content analysis, which uses NLP to analyze the content of the data. NLP uses natural human language to process data and provides in-depth high-quality analysis to provide human-like accuracy (High, 2012). The previous section describes this method in detail.

To reduce bias in large firm data, this study examined several companies with a large dataset to make sure their values were similar to and did not have an adverse impact on the overall dataset. This ensured that the data were not biased toward a single large company.

The output of IBM Watson Explorer is a set of keywords (described in the prior section), such as “great pay,” “great benefits,” “development opportunities,” “interesting work,” “great software,” “innovative company,” and “great environment.” The keywords were used to develop a dictionary or knowledge base of EBVs. Two coders were used in this study. The coders derived the coding based on the five value propositions identified by Berthon et al. (2005) and shown in Table 3. Three new value propositions emerged during the coding process. The keywords “work–life balance” and “management” were identified as major new propositions by both coders in this process. The definitions of these variables (value propositions) are listed in Table 7.

Table 7: Seven EBV variables (value propositions) extended from five prior EBVs (Berthon et al., 2005)

EBV	Definitions
Development	Provides employees with development opportunities, recognition, and confidence and ability to move into future employment.
Application	Provides employees with ways to apply and teach their skills to others in the environment, creating a meaningful application atmosphere that is customer oriented and humanitarian.
Economic	Portrays to employees that an employer provides job security, a top salary, great compensation, and opportunities to be promoted in the firm.
Interest	Provides employees with exciting and great work practices including innovations and fosters employee creativity to support and create high-quality products and services.
Work–life balance	Allows people to manage their work and personal life without conflict.
Management	Ensures employees have good relationship with their managers and management practices.
Social	Provides an image to employees that the firm provides a great working environment that is exciting, fun, and features great relationships among employees and coworkers. It also promotes teamwork, collaboration, and a people-focused organizational culture.

The frequency and percentage of each value proposition were built into a table based on the definitions in Table 7. Results from the four datasets were used to derive a 2-by-2 matrix. The matrix included the percentage of each variable for pros and cons of both top companies and bottom companies. The matrix is included in the Study 1 findings section.

3.3.3 Study 2 Research Design and Measures

This study addressed the research question: How do current and former employees perceive the EBV of employer attractiveness? This study focused on the IT industry, building on the methodology of Study 1. Similar to Study 1, this study used Glassdoor.com (Ventura, 2013) to extract data from the top and bottom companies. The focus was on the IT industry, technology talent, and tech-related jobs. First, all

anonymous job positions in the reviews were eliminated. Then each record was eliminated that did not relate to technology jobs and functions, such as such as administrative assistant, sales, marketing, etc. These records were eliminated from the original data before the subdivision of datasets. This study also looked at the top 10 and bottom three IT companies (see Table 8). Similar to Study 1, it used Glassdoor.com rankings to identify the top and bottom companies.

Table 8: Glassdoor.com top 10 and bottom three IT firms in 2017

TOP COMPANIES			
Rank IT Firms	Rank All Firms	Company	Number of Reviews
1	2	 Facebook	833
2	4	 Google	2,165
3	5	 World Wide Technology	162
4	6	 Fast Enterprises	290
5	8	 LinkedIn	638
6	9	 Adobe	1,224
7	15	 SAP	2,204
8	16	 Mathworks	279
9	17	 Salesforce	858
10	20	 Intuit	1,374
BOTTOM COMPANIES			
Rank IT Firms	Rank All Firms	Company	Number of Reviews
1	3	 Xerox	2,176
2	6	 Dish	1,958
3	10	 CompuCom	766
			TOTAL 14,927

To reduce bias in large firm data, this study examined several companies with a large dataset to make sure their values were similar to and did not have an adverse impact on the overall dataset. This ensured that the data were not biased toward a single large company.

The Glassdoor.com data has a flag indicator on employment status. This flag was used to create datasets for former and current employments.

The following eight datasets were created:

1. All pros from the top companies' current employees
2. All cons from the top companies' current employees
3. All pros from the bottom companies' current employees
4. All cons from the bottom companies' current employees
5. All pros from the top companies' former employees
6. All cons from the top companies' former employees
7. All pros from the bottom companies' former employees
8. All cons from the bottom companies' former employees

Two coders were used in this study. The study used IBM Watson Explorer (IBM Knowledge Center, 2018) and developed a dictionary and knowledge base for the five original value propositions (Berthon et al., 2005) and two that emerged from Study 1 (see Table 7). In addition, a new value proposition also emerged, explicitly related to IT industry and IT professionals: “brand image” or “organizational image.” Brand image refers to when employees perceive the company brand as “exciting,” “cool,” or “hip” and in a great location (see Table 9).

Table 9: Eight EBV variables (value propositions) extended from the five original EBVs (Berthon et al., 2005) and Study 1 EBVS for the IT industry

EBV	Definitions
Development	Provides employees with development opportunities, recognition, and confidence and ability to move into future employment.
Application	Provides employees with ways to apply and teach their skills to others in the environment, creating a meaningful application atmosphere that is customer oriented and humanitarian.
Economic	Portrays to employees that an employer provides job security, a top salary, great compensation, and opportunities to be promoted in the firm.
Interest	Provides employees with exciting and great work practices including innovations and fosters employee creativity to support and create high-quality products and services.
Work–life balance	Allows people to manage their work and personal life without conflict.
Management	Ensures employees have good relationships with their managers and management practices.
Brand image	Ensures employees perceive the company brand as exciting, cool, or hip and in a great location.
Social	Provides a great working environment that is exciting, fun, and features great relationships among employees and coworkers. It also promotes teamwork and collaboration and a people-focused organizational culture.

Using Table 9 definitions for coding, a knowledge base for these datasets was created. The frequency and percentage of each value proposition were calculated for all eight datasets. The eight datasets were divided between current and former employees to provide a clear distinction between the two populations. The results table is included in the findings section.

To ensure the eight value propositions were distinct and there was no significant overlap, a bivariate correlation analysis was performed between each of the value propositions for each of the reviews. The entire dataset was combined into one set featuring 29,854 reviews (combined pros and cons). Then each review was checked to see if any of the eight EBVs were present. This was identified by one or zero flag for each review. For example, for a particular review, if economic and social EBVs

were present, those columns would be flagged with one and the other six would be flagged with zero. Then a bivariate correlation was performed for the eight factors. Although the correlation coefficients between the values were statistically significant (likely due to large sample size), the coefficients were quite small (0.3 or less), leading to high confidence that the value propositions are formative variables representing distinctive factors for employer branding.

3.3.4 Study 3 Research Design and Measures

This study answered the research question: How do potential employees perceive the EBV of employer attractiveness? The study focused on identifying employer-based factors valued by potential employees seeking technology positions in the IT industry. Quantitative methods were used for this study through a survey instrument. The survey instrument was created based on prior work (Berthon et al., 2005) and Study 2 results to focus on the IT industry. The original five value propositions were used along with three new value propositions—role of management, work–life balance, and brand image of the employer (i.e., desire to work at a cool, exciting, and innovative company)—from Study 2 (see Table 9 for definitions of the eight EBV variables).

Similar to previous employer branding literature (see Table 2), college students in the IT field were used in this study. Two pretests validated the final 37 questions in the instrument. The instrument addressed the same question asked by Berthon et al. (2005): *“How important are the following to you when considering a potential employer?”*

The first survey instrument had 48 questions (32 from Berthon et al., 2005, and 16 new items). After the first pilot study, eight questions were eliminated due to factor loading. After the second pilot study, three more questions were eliminated and some questions were slightly modified for clarity. Table 10 demonstrates the final survey instrument.

Table 10: Employer attractiveness survey instrument – 1) Strongly disagree, 2) Disagree, 3) Somewhat disagree, 4) Neither agree nor disagree, 5) Somewhat agree, 6) Agree, 7) Strongly Agree. (1)

#	Question	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Recognition and appreciation (from management)	0	0	0	0	0	0	0
2	A springboard for future employment (i.e., looks good on your CV)	0	0	0	0	0	0	0
3	Feel more prepared as a result of working for a particular organization	0	0	0	0	0	0	0
4	Feel more self-confident to pursue future employment opportunities	0	0	0	0	0	0	0
5	Feel more prepared as a result of working for a particular organization	0	0	0	0	0	0	0
6	Gain career-enhancing experience	0	0	0	0	0	0	0
7	Have a good relationship with your superiors	0	0	0	0	0	0	0
8	Have a good relationship with your colleagues (work mates)	0	0	0	0	0	0	0
9	Working in an exciting environment	0	0	0	0	0	0	0
10	Innovative employer (uses novel work practices or is forward thinking)	0	0	0	0	0	0	0
11	The Organization both values and makes use of your creativity	0	0	0	0	0	0	0
12	Organization produces high quality products and services	0	0	0	0	0	0	0

Table 10: Employer attractiveness survey instrument – 1) Strongly disagree, 2) Disagree, 3) Somewhat disagree, 4) Neither agree nor disagree, 5) Somewhat agree, 6) Agree, 7) Strongly Agree. (2)

#	Question	(1)	(2)	(3)	(4)	(5)	(6)	(7)
13	Organization produces innovative products and services	0	0	0	0	0	0	0
14	Good promotion opportunities within the organization	0	0	0	0	0	0	0
15	Opportunity to apply your talent to give back to society	0	0	0	0	0	0	0
16	Opportunity to apply what you learned at a higher education institution	0	0	0	0	0	0	0
17	Opportunity to teach others what you have learned	0	0	0	0	0	0	0
18	Acceptance and belonging (you feel part of the company)	0	0	0	0	0	0	0
19	Opportunity to apply your talent to best serve customers	0	0	0	0	0	0	0
20	Job security within the organization (i.e. not having to worry about being retrenched)	0	0	0	0	0	0	0
21	Rewarding work environment	0	0	0	0	0	0	0
22	Above average basic salary	0	0	0	0	0	0	0
23	Attractive overall compensation package (other benefits, contribution to retirement fund, tax-effective salary packaging)	0	0	0	0	0	0	0

Table 10: Employer attractiveness survey instrument – 1) Strongly disagree, 2) Disagree, 3) Somewhat disagree, 4) Neither agree nor disagree, 5) Somewhat agree, 6) Agree, 7) Strongly Agree. (3)

#	Question	(1)	(2)	(3)	(4)	(5)	(6)	(7)
24	An organization that is considered innovative or “cool”	0	0	0	0	0	0	0
25	An organization that is viewed as the “leader” in its industry/field	0	0	0	0	0	0	0
26	An organization that is well known	0	0	0	0	0	0	0
27	An organization that is viewed as trustworthy	0	0	0	0	0	0	0
28	An organization that has a positive reputation	0	0	0	0	0	0	0
29	A supervisor with a clear vision	0	0	0	0	0	0	0
30	A supervisor who is committed to high quality work	0	0	0	0	0	0	0
31	A supervisor who understands my job needs	0	0	0	0	0	0	0
32	A supervisor who is willing to help me solve problems in my job	0	0	0	0	0	0	0
33	A supervisor who encourages and supports me	0	0	0	0	0	0	0
34	An organization whose work schedule allows me to spend time with family and friends	0	0	0	0	0	0	0

Table 10: Employer attractiveness survey instrument – 1) Strongly disagree, 2) Disagree, 3) Somewhat disagree, 4) Neither agree nor disagree, 5) Somewhat agree, 6) Agree, 7) Strongly Agree. (4)

#	Question	(1)	(2)	(3)	(4)	(5)	(6)	(7)
35	Flexible work hours	o	o	o	o	o	o	o
36	An organization that allows me to telecommute when appropriate	o	o	o	o	o	o	o
37	An organization that allows for work-hour adjustment to meet personal needs	o	o	o	o	o	o	o

The final 37-question survey was completed by 449 junior and senior students in the fields of computer science and information systems at a large comprehensive university in the Western United States. Exploratory factor analysis (EFA) yielded eight factors. In addition, a new dataset was collected during different semesters from 204 students for confirmatory factor analysis (CFA). The CFA converged and validated the structure of the eight-factor model. The result of EFA and CFA are listed in a subsequent section.

3.3.5 Study 4 Research Design and Measures

This study addressed the research question: How do employers manage how employees perceive EBV? The study focused on qualitative analysis of a top company with a dominant consumer brand and employer brand (Moroko & Uncles, 2008), in addition to great brand equity and image. The company selected was ABC, Inc. In 2017, ABC, Inc. was ranked ninth in all industries and sixth in IT firms. The study used interviews and crowdsourced employee reviews similar to Study 1. The first part focused on the employer, and an open-ended semistructured questionnaire was based on eight value propositions derived in Study 2 (see Table 9).

The following are two major questions asked regarding the eight value propositions:

- How do you portray and communicate ABC, Inc. as a great place to work for IT professionals?
 - For potential IT employees, i.e., the IT professionals you wish to recruit
 - For current IT employees
- What value propositions or activities do ABC, Inc. use to attract and retain highly skilled IT employees? (Why choose ABC, Inc.?)

The questionnaire was tested with the vice president of HR of a large comprehensive university. Then the semistructured interviews were conducted at ABC, Inc. headquarters in San Jose, California, and via conference calls. The individuals and interview durations are listed in Table 11.

Table 11: Interviewees at ABC, Inc.

Position	Interview Time
Vice president of human resources	35 Minutes
Two managers of human resources recruitment	30 Minutes
Manager of human resources professional development	35 Minutes
Manager of human resources communication	30 Minutes
Recruitment staff member	30 Minutes
Hiring manager #1	45 Minutes
Hiring manager #2	45 Minutes
Manager of employer branding	30 Minutes

Two transcribers transcribed the interviews. Two coders performed manual coding of the eight value propositions and developed a frequency scale, and results are included in the findings section.

The second part of this study focused on employees. Similar to Study 1, this study used the Glassdoor.com site (Ventura, 2013) to extract ABC, Inc. reviews. The focus also was on technology talent and tech-related jobs. At first, all anonymous job positions in the reviews were eliminated.

Then each record was eliminated that did not relate to technology jobs and functions such as administrative assistant, sales, marketing, etc. These records were eliminated from the original data before subdivision into datasets. Using two coders, IBM Watson analysis (see previous section on this approach) was conducted and a knowledge base and dictionary were developed similar to previous studies. The Glassdoor.com data have a flag indicator for employment status. This flag was used to create datasets for former and current employments.

The following two datasets were created:

1. All pros and cons from ABC, Inc. current employees
2. All pros and cons from ABC, Inc. former employees

The frequency and percentage of each value proposition were calculated for the two datasets. A results table is included in the findings section.

3.4 Research Quality

Both qualitative and quantitative research methods were used in these studies. Research quality needs to be validated during the data collection and analysis process, and it is different for each type of research method. This section discusses the steps and measurements of qualitative and quantitative methods.

3.4.1 Quality of Research in Qualitative Methods

The quality of research in qualitative methods is measured using two-factor reliability and validity (Golafshani, 2003; Miles & Huberman, 1994; Wolcott, 1994). It is important to ensure the integrity of the process from data collection to coding. It is critical to developing an instrument that is semistructured and provides open-ended questions (McCracken, 1988), as is ensuring a feedback process in the creation of the instrument or questionnaire. The interviewer must use multiple transcribers (at least two) to ensure the reliability of the transcription. The next steps are using the literature to identify the coding scheme, using multiple coders, and measuring intercoder reliability.

3.4.2 Quality of Research in Quantitative Methods

The quality of research in quantitative methods is measured using several different validities (Messick, 1995). Table 12 demonstrates approaches to ensuring the integrity of the process from data collection to analysis. It is critical to developing a survey instrument and validating the process of data collection and analysis (DeVellis, 2016).

Table 12: Validity measures for quantitative research (Messick, 1995)

Type of Validity	Definition
Content Validity	A survey has content validity when it adequately covers the range of meanings included in the construct it is intended to measure (i.e., it is representative of the construct).
Substantive Validity	The strength of the theoretical rationale for interpreting the survey scores.
Structural Validity	This is assessed by investigating the degree to which the survey adequately reflects the dimensionality of the construct to be measured.
Generalizability	The extent to which scores generalize across different population groups, different situations or settings, different time periods, etc.
External Validity	Similar to convergent, divergent, and predictive validity.

3.4.3 Research Quality in Study 1

This study used a qualitative research method—namely, content analysis. This section demonstrates both the validity and reliability (Golafshani, 2003; Miles & Huberman, 1994) of this study. The data were collected from the Glassdoor.com review site. The dataset included pros and cons (open-ended questions) data for the top 10 and bottom 10 companies according to Glassdoor.com. More than 38,000 data were collected. IBM Watson Explorer was used to analyze the collected data as the tool for content analysis. IBM Watson creates an array of keywords. These keywords are then evaluated by two expert coders and developed into a value proposition knowledge base and dictionary. In this process, random reviews were selected and manually checked, and IBM Watson's

validity was confirmed. First, two coders used an inductive iterative process based on the current literature regarding five value propositions (Berthon et al., 2005). The value proposition definitions are listed in the previous literature review section and Table 3.

After the coders went through the output and first pass of the process, they discovered two new value propositions emerging from the data at significant levels:

1. **Work–life balance** refers to when people emphasize not only their desire to identify with the organization but also their identity as more than just an employee. A proper work–life balance allows people to manage their work in harmony with their other identities (e.g., parent, friend, traveler, club member) without conflict or stress.
2. **Management value** relates to the value proposition that employees do not leave or remain at a workplace because of the company; rather, they leave or stay because of their bosses. The influence of good or bad superiors at work is tremendous. Positive and negative experiences spill into employees' leisure time and affect their relationships with friends and family.

Table 7 in the previous section demonstrates all seven value propositions extended from the original five value propositions.

In the next step, the two coders used the seven value propositions and their definitions to code each keyword from the output in subsequent passes. The intercoder reliability was calculated for each of the seven value propositions and found to be less than 1%. The overall intercoder reliability was less than 1%.

To minimize bias in these large firm-based data, this study explored several companies with a large dataset to make sure their values were similar to and did not have an adverse impact on the overall dataset. This ensures that the data are not biased toward a single large company.

Finally, the data were categorized into four subsets and run through IBM Watson using a common dictionary created by the two coders.

The following sets of data were created:

1. Top companies' pros
2. Top companies' cons
3. Bottom companies' pros
4. Bottom companies' cons

Frequencies of each set for all seven value propositions were calculated and can be found in the findings section.

3.4.4 Research Quality in Study 2

This study also used qualitative research and quantitative methods. The qualitative research method was similar to the previous study using content analysis.

3.4.4.1 Part 1: Qualitative Research Method

This section demonstrates both the validity and reliability of this part of study. The data were collected from the Glassdoor.com review site, similar to the previous study. This study focused on IT professionals in the top IT companies. The data included pros and cons (open-ended questions) data for the top 10 IT firms and bottom two IT firms as established by Glassdoor.com (see Table 8). More than 24,000 data were initially collected but had to be further refined based on job title. All jobs not classified as IT professionals were manually eliminated (i.e., accountant, administrative support, sales, etc.) from the original dataset. This resulted in 15,000 reviews. The remaining data were pooled into a single set and run through IBM Watson Explorer as the tool for content analysis. IBM Watson creates an array of keywords. These keywords are then evaluated by two expert coders into a value proposition knowledge base and dictionary. First, the two coders used an inductive iterative process based on the current literature regarding five value propositions (Berthon et al., 2005) and two value propositions from Study 1 (see Table 7 for definitions). In this process, random reviews were selected and manually checked, and IBM Watson's validity was confirmed.

To limit bias in these large firm data, this study explored several companies with a large set of data to make sure their values were similar and did not have an adverse impact on the overall dataset. This ensured that the data were not biased toward a single large company.

After the coders completed the first pass, they discovered a new value proposition had emerged from the output data for IT professionals:

Brand image (or organizational image) is how the brand is perceived through the eyes of its target audience. Brand image is defined as how employees perceive the company brand as an employer. In their reviews, IT professionals expressed their desire to work for an exciting, cool, or hip company in a great location.

Table 9 in the previous section features the definitions of all eight value propositions. In the next step, the two coders used the eight value propositions and their definitions to code each keyword from IBM Watson's output and create the knowledge base and dictionary. The intercoder reliability for each of the eight value propositions was measured and found to be less than 1%. The overall intercoder reliability also was less than 1%.

Finally, the data were combined into eight subsets and run through IBM Watson using a common dictionary created by the two coders.

Eight datasets were created:

1. Pros from the top companies' current employees
2. Cons from the top companies; current employees
3. Pros from the bottom companies' current employees
4. Cons from the bottom companies' current employees
5. Pros from the top companies' former employees
6. Cons from the top companies' former employees
7. Pros from the bottom companies' former employees
8. Cons from the bottom companies' former employees

Frequencies in each set for all eight value propositions were calculated.

3.4.4.2 Part 2: Quantitative Research Method

This section demonstrates the validity of this part of the study. The same data—15,000 records—were collected and filtered from Glassdoor.com. This part of the study demonstrated if the eight propositions used were distinct and are formative variables for the employer attractiveness construct. The 30,000 records for each pro and con were assessed individually for each review. Then each review was run through the dictionary developed in Part 1 to identify which of the eight value propositions were present. The new output contained 30,000 rows and eight columns. Each column had a binary value of 1 or 0, indicating whether each value proposition was present or absent. Then bivariate Pearson correlations were performed on the eight value propositions.

Although the correlation coefficients between the values were statistically significant (likely due to large sample size), the coefficients were quite small (0.3 or less), indicating the eight value propositions were distinct.

3.4.5 Research Quality in Study 3

This study used quantitative research methods. This section demonstrates validity and reliability for this study (DeVellis, 2016; Messick, 1995). Validity and reliability assessments ensure the integrity of the process from data collection to analysis. This study relied on EBV variables from Berthon et al. (2005), Study 1, and Study 2 (see Table 9) to develop a survey instrument and operationalize the employer attractiveness construct.

The intention was to measure the importance of the eight EBVs defined in Table 9. For the first five (i.e., social, interest, application, development, and economic values), this study used the instrument developed by Berthon et al. (2005). The three additional factors identified by Studies 1 and 2 were management, work–life balance, and brand image (organization image) of the employer (i.e., the desire to work at a cool, exciting, and innovative company). To measure these new value propositions, this study used 16 new questions.

The resulting survey with 48 questions for all eight dimensions using 7-point Likert scale was completed by 120 students in a pilot study. Data were analyzed using EFA with the principal component analysis extraction method and varimax rotation. The majority of variables loaded on a single factor; therefore, the instrument was updated and tested through another pilot. The seven questions eliminated in the original study (Berthon et al., 2005) also did not have good loading on those variables. Therefore, eight questions (including seven from the original study) were eliminated that did not yield good factor loading. During the second pilot study, 100 students (from a different pool of students) responded, followed by another EFA. The results revealed eight factors, comprising four overall themes (see Table 13).

Table 13: Preliminary themes and factors

Theme	Factors
1. Company Image	Brand Image, Interest, Application
2. People and Warm Feeling	Management, Social
3. Work–Life Balance	Work–Life Balance
4. Financial and Personal Gain	Economic, Development

Based on the second pilot study, further questions were eliminated or rephrased to improve clarity. Table 10 lists the final 37 questions used in the main study. The study included 37 questions and was completed by 449 college students.

With respect to scale reliability and EFA, this study involved an initial check for scale reliability and purification of the scale. Cronbach's alpha (Cronbach, 1951) was 0.975 for overall and for each factor were between 0.855 and 0.931, suggesting that the scale demonstrated good internal consistency. A scale is regarded as reliable if the coefficient exceeds .70 (Carman, 1990). The EFA (Varimax rotation) yielded eight factors. Questions 9, 21, 27, and 28 were eliminated because their factor loadings were less than .54 (Williams, Onsmann, & Brown, 2010). The questions and EFA factor loadings and results are listed in Table 14.

Table 14: EFA results and factor loadings

Total Variance Explained									
Component	INITIAL EIGENVALUES			EXTRACTION SUMS OF SQUARED LOADINGS			ROTATION SUMS OF SQUARED LOADINGS		
	Total	Percent of Variance	Cumulative Percentage	Total	Percent of Variance	Cumulative Percentage	Total	Percent of Variance	Cumulative Percentage
1	19.805	53.526	53.526	19.805	53.526	53.526	4.078	11.022	11.022
2	2.089	5.646	59.172	2.089	5.646	59.172	4.076	11.015	22.037
3	1.494	4.037	63.209	1.494	4.037	63.209	3.782	10.222	32.259
4	1.367	3.694	66.903	1.367	3.694	66.903	3.774	10.199	42.459
5	1.008	2.742	69.627	1.008	2.742	69.627	3.549	9.591	52.050
6	0.891	2.408	72.034	0.891	2.408	72.034	3.351	9.058	61.107
7	0.826	2.233	74.267	0.826	2.233	74.267	3.126	8.448	69.556
8	0.717	1.937	76.204	0.717	1.937	76.204	2.460	6.648	76.204

	FACTORS							
	1	2	3	4	5	6	7	8
Q1: Recognition and appreciation (from management)								0.554
Q2: A springboard for future employment (i.e. looks good on your CV)	0.670							
Q3: Feel more prepared as a result of working for a particular organization	0.782							
Q4: Feel more self confident to pursue future employment opportunities	0.667							
Q5: Feel more prepared as a result of working for a particular organization	0.761							
Q6: Gain career-enhancing experience	0.596							
Q7: Have a good relationship with your superiors								0.684
Q8: Have a good relationship with your colleagues (work mates)								0.627
Q10: Innovative employer (uses novel work practices or is forward thinking)				0.601				
Q11: The Organization both values and makes use of your creativity				0.647				
Q12: Organization produces high quality products and services.				0.693				
Q13: Organization produces Innovative products and services.				0.677				
Q14: Good promotion opportunities within the organization					0.556			
Q15: Opportunity to apply your talent to give back to society						0.538		
Q16: Opportunity to apply what you learned at a higher education institution						0.707		
Q17: Opportunity to teach others what you have learned						0.686		
Q18: Acceptance and belonging (you feel part of the company)						0.528		
Q19: Opportunity to apply your talent to best serve customers						0.666		
Q20: Job security within the organization (i.e. not having to worry about being retrenched)						0.655		
Q22: Above average basic salary						0.727		
Q23: Attractive overall compensation package (other benefits, contribution to retirement fund, tax-effective salary packaging)						0.686		
Q24: An organization that is considered innovative or "cool"								0.717
Q25: An organization that is viewed as the "leader" in its industry/field								0.816
Q26: An organization that is well known								0.810
Q29: A supervisor with a clear vision		0.628						
Q30: A supervisor who is committed to high quality work		0.730						
Q31: A supervisor who understands my job needs		0.660						
Q32: A supervisor who is willing to help me solve problems in my job		0.578						
Q33: A supervisor who encourages and supports me		0.583						
Q34: An organization whose work schedule allows me to spend time with family and friends				0.584				
Q35: Flexible work hours				0.759				
Q36: An organization that allows me to telecommute when appropriate.				0.707				
Q37: An organization that allows for work-hour adjustment to meet personal needs group				0.745				

The factors accounted for 76% of the variation. The rotated matrix loaded Items 2–6 for Factor 1 (development); Items 29–33 for Factor 2 (management); Items 34–37 for Factor 3 (work–life balance); Items 10–13 for Factor 4 (application); Items 14, 20, 22, and 23 for Factor 5 (economic); Items 15–19 for Factor 6 (interest); Items 26–28 for Factor 7 (brand image); and Items 1, 7, and 8 for Factor 8 (social).

For the CFA, structural equation modeling was used to confirm the factor structure. Using AMOS statistical software, a first-factor CFA was performed on eight factors and 33 variables with a new sample of 204 students. The new sample from a new semester featured different students than the original students in the EFA study. Table 15 shows a chi-square value of 1,236.21 with 467 degrees of freedom and a p-value < .001. The other indexes also demonstrated overall goodness of fit, such as root mean residual < .08 and CFI comparative fit index > .90 (Bentler, 1990; Hair, Black, Babin, Anderson, & Tatham, 2006). The average variance explained for all eight latent variables was > .50 and composite reliability was > .70 (Hair et al., 2006). The structural equation model confirmed the eight factors. Table 15 also shows the result of standardized regression weights for all items.

Table 15: CFA results

FACTOR	AVE	CR
Application	0.73	1.84
Development	0.81	2.02
Management	0.78	1.96
Interest	0.77	1.55
Economic	0.78	1.58
Work/Life Balance	0.76	1.53
Social	0.74	1.12
Brand Image	0.75	1.13

Psychometric Results	
ChiSquare	1236.205
Degree of Freedom	467
Probability Level	0.000
RMR	0.075
CFI	0.0905

Standardize Regression Weights						
ITEMS		LATENT VARIABLES	ESTIMATE	λ	λ^2	ϵ
A19	←	Application	0.901	0.901	0.812	0.188
A18	←	Application	0.863	0.863	0.745	0.255
A17	←	Application	0.836	0.836	0.699	0.301
A16	←	Application	0.802	0.802	0.643	0.357
A15	←	Application	0.858	0.858	0.736	0.264
A6	←	Development	0.917	0.917	0.841	0.159
A5	←	Development	0.929	0.929	0.863	0.137
A4	←	Development	0.925	0.925	0.856	0.144
A3	←	Development	0.911	0.911	0.830	0.170
A2	←	Development	0.798	0.798	0.637	0.363
A33	←	Management	0.891	0.891	0.794	0.206
A32	←	Management	0.876	0.876	0.767	0.233
A31	←	Management	0.891	0.891	0.794	0.206
A30	←	Management	0.890	0.890	0.792	0.208
A29	←	Management	0.866	0.866	0.750	0.250
A13	←	Interest	0.898	0.898	0.806	0.194
A12	←	Interest	0.855	0.855	0.731	0.269
A11	←	Interest	0.861	0.861	0.741	0.259
A10	←	Interest	0.888	0.888	0.789	0.211
A23	←	Economic	0.907	0.907	0.823	0.177
A22	←	Economic	0.864	0.864	0.746	0.254
A20	←	Economic	0.878	0.878	0.771	0.229
A14	←	Economic	0.894	0.894	0.799	0.201
A37	←	Work/Life Balance	0.890	0.890	0.792	0.208
A36	←	Work/Life Balance	0.863	0.863	0.745	0.255
A35	←	Work/Life Balance	0.880	0.880	0.774	0.226
A34	←	Work/Life Balance	0.848	0.848	0.719	0.281
A8	←	Social	0.893	0.893	0.797	0.203
A7	←	Social	0.889	0.889	0.790	0.210
A1	←	Social	0.790	0.790	0.624	0.376
A26	←	Brand Image	0.816	0.816	0.666	0.334
A25	←	Brand Image	0.920	0.920	0.846	0.154
A24	←	Brand Image	0.853	0.853	0.728	0.272

3.4.6 Research Quality in Study 4

This study used qualitative research methods—namely, both content analysis and a traditional interview process. The following section demonstrates both validity and reliability (Golafshani, 2003; Miles & Huberman, 1994) of this study. The company chosen for this study was ABC, Inc. In 2017, ABC, Inc. ranked ninth in all industries and sixth in IT firms.

The first part of this research focused on the employer, and interviews were conducted. A semistructured interview guide was created with open-ended questions (McCracken, 1988), and a feedback process was used in the development of the instrument. Berthon et al. (2005), Moroko and Uncles (2008), and Study2 were used to develop the interview questions. Individuals were selected for interviews based on their work position, with guidance from Moroko and Uncles (2008). The open-ended semistructured questionnaire was based on the eight value propositions identified in the previous studies (see Table 9). The questionnaire was tested with the vice president of HR of a large comprehensive university. The semistructured interviews were conducted at the ABC, Inc. headquarters in San Jose, California, and via conference calls. The interviews were transcribed by two transcribers. The coding process was iterative. Two coders performed manual coding based on the eight value propositions (see Table 9). The coders went through the iterative process two times to enhance intercoder reliability. The final intercoder reliability between the coders for each value proposition was less than 3%, with overall intercoder reliability of 1.47%. The frequencies each of the eight value propositions were calculated.

For second part of the research, employee data were collected from Glassdoor.com for ABC, Inc., similar to the previous study. This part of the study focused on IT professionals in top IT companies. More than 2,200 data were collected but needed to be further refined based on job titles. All jobs not classified as IT professionals were eliminated (i.e., accountant, administrative support, sales, etc.). This resulted in 1,450 reviews. Data were combined into a single set and run through IBM Watson Explorer as the tool for content analysis. IBM Watson creates an array of keywords. These keywords were then evaluated by two expert coders and developed into a value proposition dictionary. In this process, random reviews were selected and manually checked, and IBM Watson's validity was confirmed. First, the two coders used an inductive iterative

process based on the current literature regarding the eight value propositions developed in Study 2 (see Table 9). In the next step, the coders used the eight value propositions and their definitions to code each review based on the value proposition dictionary. The intercoder reliability for each of the eight value propositions between the coders was less than 1%. The overall intercoder reliability also was less than 1%.

Finally, the data were combined into sets and run through IBM Watson using the common dictionary created by the two coders.

Two sets were created for each of the following categories:

1. All pros and cons for current employees
2. All pros and cons for former employees

Frequencies in each set for all eight value propositions were calculated. The results are listed in the findings section.

Chapter 4: Summary, Findings, and Contributions

This research aimed to identify EBVs that enhance employer attractiveness from a holistic perspective, including perspectives of all main stakeholders. It expanded on the current literature regarding employer branding, EBV propositions (Ambler & Barrow, 1996a; Backhaus & Tikoo, 2004; Berthon et al., 2005), and the employer branding attractiveness construct. It is critical for employers to understand which EBV propositions or employer offerings are important to potential and current employees. In addition, this research employed more open formats in which people talked about desiring great places to work, indicating an important change in employer branding—one that so far has been overlooked in the literature. Employer branding is a multifaceted phenomenon that is shaped not only by what employers believe or want to be true about their firms but also by what outsiders (e.g., potential employees) expect from firms and by current employees' experience-based accounts of workplace conditions. EBV propositions provide a strategic lever for the employer brand of a firm to attract and retain employees. These EBVs can build employer brand equity and help current and potential employees associate the employer brand with the firm. The psychological contract is the employer's commitment to EBVs and ensures those EBVs are met and provided to current employees. This research provided a holistic view of employer branding. Firms develop EBVs to attract and retain employees (Almıaçık & Almıaçık, 2012; Backhaus & Tikoo, 2004; Berthon et al., 2005; Ewing et al., 2002) and provide a competitive advantage to the firm (Backhaus & Tikoo, 2004). This research focused on the IT industry as its context and operationalized the employer attractiveness construct and set of EBV variables in IT industry.

This research holistically answered the overall research question:

RQ: How do different EBVs affect the perceptions of employer attractiveness?

This research also developed four subquestions to address the overarching research question:

RQ1: How do employees perceive the EBV of employer attractiveness?

RQ2: How do current and former employees perceive the EBV of employer attractiveness?

RQ3: How do potential employees perceive the EBV of employer attractiveness?

RQ4: How do employers manage how employees perceive EBV?

The purpose of this chapter is to address the overall research question and describe how the four studies addressed each of the subquestions. This chapter is organized by summaries and findings for each study, managerial implications, theoretical contributions, and suggestions for future research. Table 16 provides a summary of the findings for this research.

Table 16: Summary of research findings

Study	Research Question	Major Findings
1	How do employees perceive the EBV of employer attractiveness?	<p>Extended Berthon et al.'s (2005) five value propositions by identifying two new value propositions: work–life balance and management</p> <p>Developed a 2-by-2 matrix for seven value propositions</p> <p>The top two or three value propositions accounted for 65% to 83% of comments</p> <p>Defined employer brand intelligence and seven managerial implications</p>
2	How do current and former employees perceive the EBV of employer attractiveness?	<p>Extended the seven EBVs in Study 1 by identifying one new value proposition in the IT industry: brand image</p> <p>Social and economic values are key praise factors for both current and former employees</p> <p>Management value is a major complaint factor for former IT employees</p> <p>Brand image is another main complaint factor for both current and former employees</p>
3	How do potential employees perceive the EBV of employer attractiveness?	<p>Confirmed that the eight value propositions that are important to current and former employees are also important to potential employees</p> <p>Operationalized employer attractiveness, developed an instrument to measure EBVs, and developed and tested a new, more comprehensive instrument to assess EBVs</p>
4	How do employers manage how employees perceive EBV?	<p>Major differences exist between the employer and current and former employees, which can contribute to violation of the psychological contract and retention problems</p> <p>The employer cares more about the social value than current employees</p> <p>A significant gap exists between employer and employee perceptions of the interest value</p> <p>A gap exists between employer and employee perceptions of the development value</p> <p>Current employees care more about the brand image value than the employer</p>

The findings reflect the employer attractiveness construct and a set of EBVs applied to the IT industry. Although this may apply to many industries, it cannot be generalized from only one industry. Employer attractiveness and EBVs need to be studied in many other industries before findings can be generalized. Table 2 outlines industries studied in the last two decades of research on employer branding and employer attractiveness. Table 1 lists industries that can be studied for generalization.

4.1 Summary and Findings of Study 1 (Paper 1)

RQ1: How do Employees Perceive the EBV of Employer Attractiveness?

This study extended the previous EBV literature and employer attractiveness construct. The original EBVs were proposed as a package of psychological, functional, and economic propositions (Ambler & Barrow, 1996a; Hanin et al., 2013) before being extended and operationalized by Berthon et al. (2005) as five propositions (see Table 3). Berthon et al. (2005) used these five formative EBV variables to create an employer attractiveness construct (see Figure 15). The study focused on the employees of top and bottom companies. The study collected 38,000 reviews of the highest- and lowest-ranked employers on Glassdoor.com. Using IBM Watson to analyze the data, it identified and extended the five EBVs to seven EBVs that employees care about, thus expanding the employer attractiveness construct (see Figure 17). It identified two new EBV variables: management and work–life balance.

Figure 17: Seven EBV variables and the employer attractiveness construct

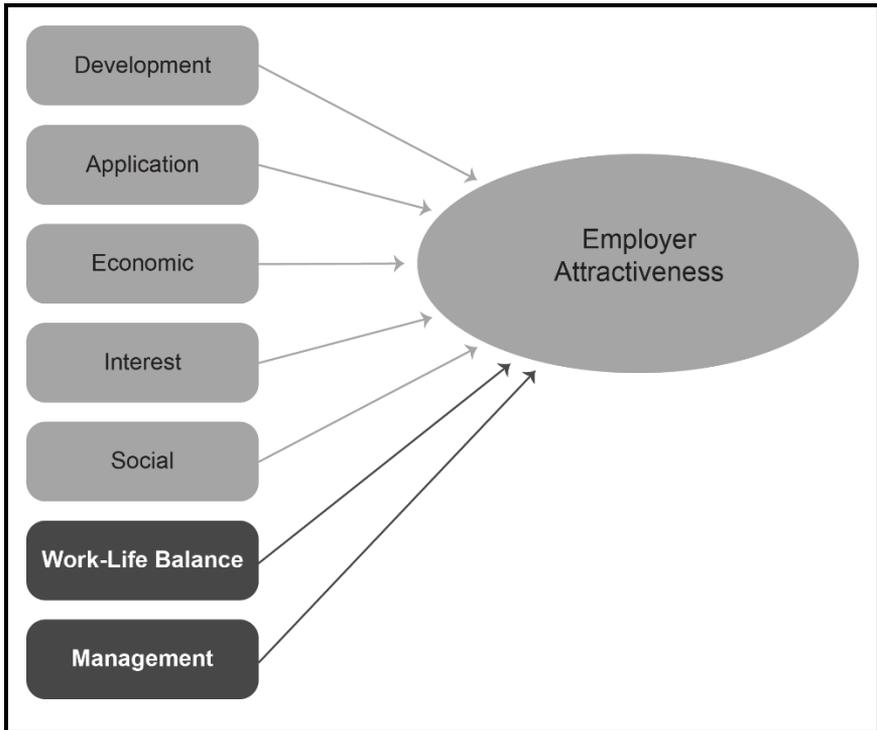


Figure 18 lists and demonstrates the seven EBVs in this study: (a) social elements of work(Social), (b) interesting and challenging work tasks(Interest), (c) the extent to which skills can be applied in meaningful ways(Application), (d) opportunities for professional development(Development), (e) economic issues tied to compensation(Economic), (f) the role of management(Management), and (g) work–life balance. The definition of the seven EBVs is listed in Table 7.

Figure 18: Seven employer branding value propositions (EBV)

SEVEN EMPLOYER BRANDING VALUE PROPOSITIONS						
SOCIAL VALUE	INTEREST VALUE	APPLICATION VALUE	DEVELOPMENT VALUE	ECONOMIC VALUE	MANAGEMENT VALUE	WORK/LIFE BALANCE
Is this a fun place to work with talented people and a great organizational culture?	Is this an interesting place to work, with challenging but achievable goals?	Is the work meaningful and does it invite the application of knowledge and skills?	Are there opportunities for employees to grow and advance professionally?	Is work rewarded appropriately through salaries, benefits and perks?	Are managers good, honest leaders who inspire, trust, protect, enable and respect employees?	Are work arrangements flexible enough to achieve success on and off the job?

These EBVs do not emphasize all issues to the same extent, and this study demonstrated how their relative valences and weights differed across organizations, especially if institutions were considered particularly good or bad places to work. Figure 19 is a 2-by-2 matrix of the results from a frequency analysis of the qualitative content analysis.

Figure 19: Valences and weights of employer branding value propositions

		Praises	Complaints
Best places to work		Social (35%) Interest (23%) Economic (16%) Application (14%) Work/Life Balance (9%) Development (3%)	Interest (31%) Economic (31%) Work/Life Balance (21%) Social (9%) Application (5%) Management (3%)
		Work/Life Balance (29%) Application (24%) Social (20%) Economic (13%) Interest (10%) Development (4%)	Economic (38%) Management (30%) Application (8%) Interest (7%) Social (7%) Work/Life Balance (6%) Development (4%)
		↑ This is why people come and stay!	↑ This is why people leave!

The following findings reflect the results of the 2-by-2 matrix (Figure 19):

- *Each quadrant is unique.* Employees cared about different values when they commented on the highest- and lowest-ranked places to work, and they emphasized different value propositions when they praised or complained about these employers.
- *The top two or three value propositions accounted for 65% to 83% of people’s comments in each quadrant, suggesting that these values alone make up the lion’s share of what employees care about in places of work. Together, these two observations reveal “praise factors” (e.g., the social value proposition) that attract people and turn them into loyal employees. They also point to “complaint factors” (e.g., the management value proposition) that are the main reasons people leave companies. This ranking process revealed that some value propositions are simply not regarded highly.*
- These are some observations for each EBV:
 - *Development*, for instance, was hardly mentioned.
 - *Social* is a praise item; people are happy to work with other people, but they complain less when others are not great.
 - *Economic* always matters, but more so when it is seen as inadequate.
 - *Application* is not a complaint item, but a praise item.
 - *Interest* matters for top companies, but less so for bottom companies.
 - *Work–life balance* matters to everyone, but it matters least as praise among from top companies and complaints among bottom companies.
 - *Management* is a complaint item, particularly among bottom companies.

This study investigated crowdsourced employer branding platforms in light of new technological capabilities. There is an important difference between true motivators and hygiene factors. This demonstrates to practitioners that mining data from employer branding sites allows managers to understand how attractive their firms are to employees, especially relative to other firms in the same industry.

This study indicated seven managerial implications regarding development of employer brand intelligence for employers. Employer brand intelligence refers to insight garnered from data-driven crowdsourced sites.

Here are the seven managerial implications of employer brand intelligence:

1. *Understand industry idiosyncrasies.* Each industry has its own priorities and characteristics that are unique to that industry.
2. *Understand the value of employer brand intelligence.* Create firm and industry employer brand intelligence from the crowdsourced sites.
3. *Create an employer brand attraction spectrum.* Look at your competitor's employer brand intelligence and create a spectrum of attraction for your potential and current employees.
4. *Use employer brand intelligence to build a competitive advantage.* Understanding value propositions allows managers to better compete for employees.
5. *Automate, automate, automate—or outsource.* Managers and firms need a process to collect and monitor their own brand intelligence by either automation or outsourcing these services.
6. *Trust but verify the data.* After creating employer brand intelligence for your firm, build a verification process before any resource allocation or change in the company's direction to engage these value propositions.
7. *Make employer branding part of corporate strategies.* The existence of a crowdsourced employer branding platform offers a tremendous advantage to a firm to become the best place to work. This needs to be included in the corporate strategy to gain a competitive advantage for the firm.

4.2 Summary and Findings of Study 2 (Paper 2)

RQ2: How do Current and Former Employees Perceive the EBV of Employer Attractiveness?

This study expanded on Study 1 and the EBV literature and employer attractiveness construct (Ambler & Barrow, 1996a; Berthon et al., 2005; Hanin et al., 2013; see Table 7). The study explored the seven EBV variables defined in Study 1 in creating the employer attractiveness construct (see Figure 17). It also examined the emphasis on EBV in the IT industry context—more specifically, among both current and former IT professionals. To manage their brands effectively, IT firms need to gain an understanding of what values matter to both current and former employees. Similar to Study 1, the content of nearly 15,000 employee reviews for top and bottom companies in the IT industry was downloaded and analyzed (see Table 8). Qualitative analysis of the data identified and extended the seven EBVs from Study 1 and the previous literature to eight EBVs that employees care about in the IT industry, expanding the employer attractiveness construct (see Figure 20). The new EBV variable was brand image or organizational image. Brand image (or organizational image) is how the brand is perceived through the eyes of its target audience. Brand image is defined as how employees perceive the company brand as an employer. In their reviews, IT professionals expressed their desire to work for an exciting, cool, or hip company in a great location. Table 9 features the definitions of all EBV variables important to the IT industry.

Figure 20: Eight EBV variables and the employer attractiveness construct for the IT industry

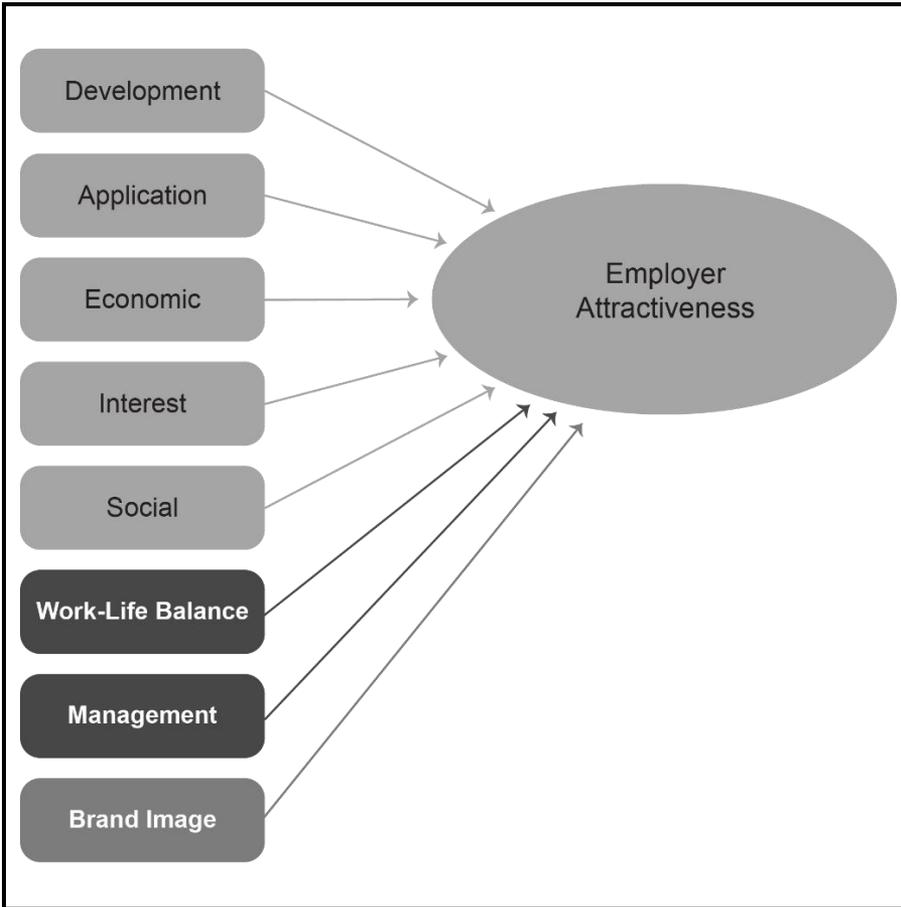


Figure 21 demonstrates the eight EBVs and provides examples of what they mean to IT industry employees. The figure is an extension of Figure 18 in Study 1, adding brand image as the eighth EBV. The correlation analysis determined that the eight EBV variables are distinct and collectively create employer attractiveness.

Table 17 highlights which values are most important for IT firms. It is important that managers use employer brand intelligence (see Study 1) to attract and retain IT talent to remain competitive. The study contributes

to RBV by improving our understanding of employer branding as an HRM strategy to generate a sustainable competitive advantage.

Figure 21: Eight value propositions for employer branding (EBV) in IT Industry

EIGHT VALUE PROPOSITIONS FOR EMPLOYER BRANDING							
SOCIAL VALUE	INTEREST VALUE	APPLICATION VALUE	DEVELOPMENT VALUE	ECONOMIC VALUE	MANAGEMENT VALUE	WORK/LIFE BALANCE	BRAND IMAGE
Is this a fun place to work with talented people and a great organizational culture?	Is the work interesting, challenging and achievable?	Is the work meaningful and does it invite the application of knowledge and skills?	Are there opportunities for employees to grow and advance professionally?	Is work rewarded appropriately through salaries, benefits and perks?	Are managers good, honest leaders who inspire, trust, protect, enable and respect employees?	Are work arrangements flexible enough to achieve success on and off the job?	Through the eyes of employees, how is the firm's brand perceived? Is it seen as cool and innovative?

Table 17: Current and former employees' EBV weights for the IT industry

		TOP COMPANIES		BOTTOM COMPANIES	
		Praises	Complaints	Praises	Complaints
CURRENT EMPLOYEES	Social	25%	16%	19%	9%
	Interest	19%	19%	18%	16%
	Application	2%	2%	2%	6%
	Development	6%	8%	12%	6%
	Economic	19%	3%	13%	15%
	Management	2%	14%	4%	19%
	Work/Life Balance	9%	8%	12%	9%
	Brand Image	17%	29%	20%	20%
FORMER EMPLOYEES	Social	26%	19%	23%	9%
	Interest	20%	17%	17%	14%
	Application	2%	3%	2%	7%
	Development	5%	6%	10%	5%
	Economic	20%	2%	15%	12%
	Management	1%	21%	4%	21%
	Work/Life Balance	8%	6%	10%	11%
	Brand Image	17%	26%	18%	20%

The results indicate the following findings:

- *Social and economic* values are key praise factors and the *management* value is a major complaint factor for former IT employees.
- *Social, interest, economic, and brand image* are high praise factors for both current and former employees.
- *Management* is a major complaint factor for bottom companies, including current and former employees, but for top companies, management is 7% lower for the former employees. Employees leave top companies because of their management.
- *Brand image* is another main complaint factor. Among the top IT firms, both current and former IT professionals shared more negative opinions about the brand of their employers than praise, and the complaints revealed employees' disappointment in the company. This suggests that their expectations of how innovative, hip, or cool their employer was were not met. Interestingly, current employees' complaints about brand image decreased with increasing tenure. This points to a significant gap between brand identity, i.e., how IT firms convey their employer brand externally to attract talent, and how in the eyes of new recruits, companies deliver on the promises made internally. IT firms are advised to spend considerable attention aligning their external and internal branding strategies to avoid this gap and succeed in retaining new talent. At the same time, former employees increasingly complained about brand image the longer they worked at an IT firm, suggesting that the gap in brand image and brand identity is a key contributing factor to employees leaving the company. In the top companies, complaints were 3% less for former employees than current employees.
- *Work–life balance and development* are consistently low among both top and bottom companies and current and former employees, and it seems to be more important to bottom companies.
- *Application* is extremely low for both top and bottom companies and current and former employees.

This study has implications for managers. First, managers can use the employer attractiveness spectrum to determine what top employers in the IT industry do well and compare how their own firms stack up against

their competition. In other words, understanding EBVs allows IT firms to better compete for highly qualified and scarce IT talent. Second, the analysis highlighted that four of the eight value propositions (see Figure 20) are most important for developing and communicating impactful EBV propositions. Paying attention to what matters most to IT professionals can help IT firms focus their resources and become and remain great places to work that attract and retain highly skilled talent, which can be a source of sustained competitive advantage. Third, this study demonstrated how data mining from employer review sites allows managers to understand the perceived attractiveness of their firms as employers, and it introduced two essential tools to help managers make sense of these data. Although this paper analyzed reviews across various types of IT professionals, managers can use the tools introduced herein for more granular analysis of the employer branding preferences of specific types of IT professionals.

4.3 Summary and Findings of Study 3 (Paper 3)

RQ3: How do Potential Employees Perceive the EBV of Employer Attractiveness?

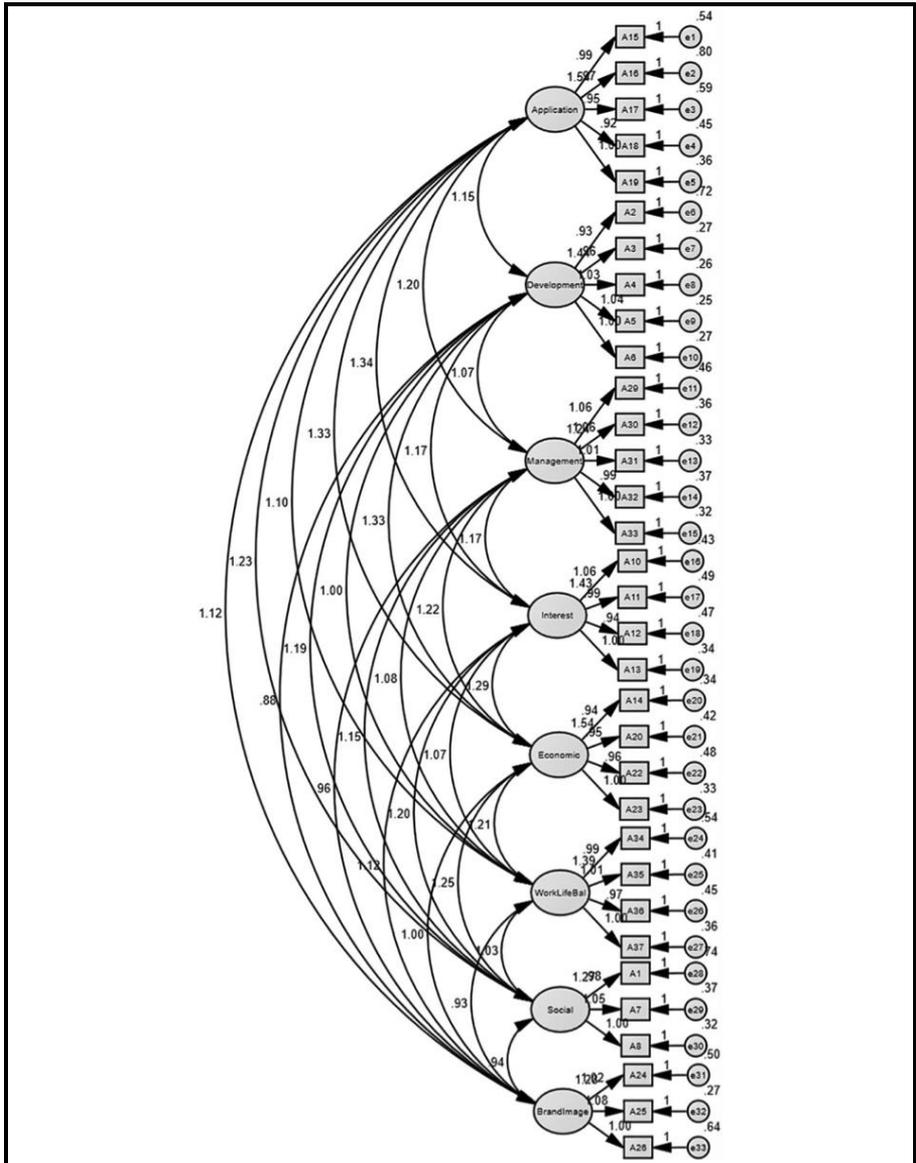
This paper focused on potential employees in the IT industry. In this new age, industries have moved away from product- and service-intensive approaches to information-intensive industries. The study identified and operationalized the EBV variables (components) of employer attractiveness from potential employees based on the previous literature (Berthon et al., 2005) and Study 2 to measure employer attractiveness.

This study explored the types of benefits potential employees seek in the IT industry and yielded several important contributions:

- First, it confirmed that the eight value propositions that are important to current and former employees are also important to potential employees in the IT industry. This suggests that people care about the same benefits, whether they are potential, current, or former employees. In a sense, from a theoretical perspective, this finding brings the areas of internal and external employer branding closer together.

- Second, the study operationalized employer attractiveness and developed an instrument to measure EBV.
- Third, managers can use this instrument as a tool to measure not only what IT jobseekers find attractive but also once they are hired, what employees care about. Previous studies have shown that employees seek changes over time, and this instrument allows managers to track these changes.

Figure 22: CFA item loading for a first-order eight-factor EBV model of employer attractiveness



The final instrument featured 37 questions (see Table 10) and was validated based on the eight value propositions described in Study 2 (see Figure 20). Both EFA and CFA (see Figure 22) were employed to analyze the survey results, and they identified and validated the eight factors and structure of the model. Four questions were eliminated as a result of the EFA (Table 14). The EFA and CFA results and eight factor loadings, along with the 33-question survey, are presented in Figure 22, Table 14 and Table 15. The study operationalized the employer attractiveness construct and EBV variables (see Table 18).

Table 18: Operationalization of employer attractiveness in IT industry

Employer Attractiveness	EBV	Definitions	Sources	Questions
	Development	Provides employees with development opportunities, recognition, and confidence and ability to move into future employment.	Berthon et al. (2005); Jain and Bhatt (2015); Rampl (2014); Roy (2008); Saini et al. (2013)	2-6
	Application	Provides employees with ways to apply and teach their skills to others in the environment, creating a meaningful application atmosphere that is customer oriented and humanitarian.	Berthon et al. (2005); Rampl (2014); Roy (2008); Saini et al. (2013)	15-19
	Economic	Portrays to employees that an employer provides job security, a top salary, great compensation, and opportunities to be promoted in the firm.	Ambler and Barrow (1996a); Berthon et al. (2005); Rampl (2014); Roy (2008)	14, 20, 22, 23
	Interest	Provides employees with exciting and great work practices including innovations and fosters employee creativity to support and create high-quality products and services.	Berthon et al. (2005); Rampl (2014); Roy (2008); Saini et al. (2013)	10-13
	Work-Life Balance	Allows people to manage their work and personal life without conflict.	Jain and Bhatt (2015); Zhu et al. (2014); Study 1	34-37
	Management	Ensures employees have good relationships with their managers and management practices.	Moroko and Uncles (2008); Study 1	29-33
	Brand Image	Ensures employees perceive the company brand as exciting, cool, or hip and in a great location.	Leekha Chhabra and Sharma (2014); Study 2	24-26
	Social	Provides a great working environment that is exciting and fun and features great relationships among employees and coworkers. It also promotes teamwork and collaboration and people-focused organizational culture.	Berthon et al. (2005); Rampl (2014); Roy (2008); Saini et al. (2013)	1, 7, 8

4.4 Summary and Findings of Study 4 (Paper 4)

RQ4: How do Employers Manage How Employees Perceive EBV?

This study answered this research question by studying a top company with a dominant consumer brand and employer brand (Moroko & Uncles, 2008), in addition to great brand equity. The company selected was ABC, Inc. In 2017, ABC, Inc. was ranked ninth in all industries and sixth in IT firms. The study used interviews and crowdsourced employee reviews. The open-ended semistructured questionnaire was based on eight value propositions outlined in previous studies (see chapter 3 for more detail). This study reviewed the psychological contract between employees and employer. The employer meeting the psychological contract is key for the employer to retain (Hanin et al., 2013) current employees. An employer must meet the employees' expectations regarding the value propositions promised during the recruitment process. Therefore, this study explored ABC, Inc. from both employer's and employees' (current and former) perspective to compare the eight value propositions previous studies. The research involved interviews to get insight from the employer, whereas employee reviews from the crowdsourced site Glassdoor.com revealed employees' comments regarding the eight value propositions. The focus of this study was IT professionals in an IT firm. It considered both current and former employees and the employer, ABC, Inc. Results of coding and data analysis are shown in Table 19, reflecting the frequency of EBVs mentioned in the employer interviews and Glassdoor.com employee reviews.

Table 19: Employer branding value propositions frequency analysis of current and former employees versus employer views

	Current Employees	Former Employees	Employer	Employer Difference with Current Employees	Employer Difference with Former Employees
Social	18.33%	22.24%	21.79%	3.46%	-0.45%
Interest	18.83%	18.22%	10.16%	-8.67%	-8.06%
Application	5.61%	3.65%	5.21%	-0.40%	1.56%
Development	6.48%	5.23%	11.75%	5.27%	6.52%
Economic	11.27%	10.69%	12.33%	1.06%	1.64%
Management	9.37%	11.46%	9.96%	0.59%	-1.50%
Work–Life Balance	6.80%	6.15%	8.07%	1.27%	1.92%
Brand Image	23.32%	22.35%	20.74%	-2.58%	-1.61%

The following outlines this study’s findings:

- The employer cares more about social value than current employees. This brings up a great question: Does the employer spend its resources on the wrong value proposition to retain employees? Or has ABC, Inc. listened to its employees who have left and is catching up with that feedback?
- A big gap exists between employer and employee perceptions of the interest value (both current and former employees). Employees put much more importance on interest value than the employer. This led to employees leaving ABC, Inc. in the past and may become a retention problem for the firm in the future.
- Another big gap exists between employer and employee perceptions of the development value (both current and former employees). The firm may be wasting resources; work–life balance seems to matter more to the employer than to former employees.
- Current employees care more about brand image than the employer. This gap could result in retention problems for the employer.

- Although it's not a big delta, employees care most about brand image, whereas the employer cares most about the social value.

These findings validate the notion of employer brand intelligence described in Study 1. Firms need to use employer branding as a strategic lever and monitor and align their value proposition strategies both for current and potential employees. They need to spend resources on the right value propositions. It is critical to communicate EBV to current employees and ensure there is alignment between what is promised by the firm to potential employees and delivered to current employees, known as the psychological contract. Table 19 demonstrated some of the key differences between employer and employee views. The psychological contract is a key success indicator for employee retention, and the firm needs to know perspectives on EBV among employees. The psychological contract (Hanin et al., 2013) is critical in employee retention, and employers need to pay close attention to fulfilling what they promised during the recruitment process, retaining and renewing those promises on a continual basis.

4.5 Managerial Implications

This dissertation provides practitioners with a variety of tools and techniques to improve their employer brand to gain a competitive advantage over their competitors. The following are highlights of the managerial implications for this research:

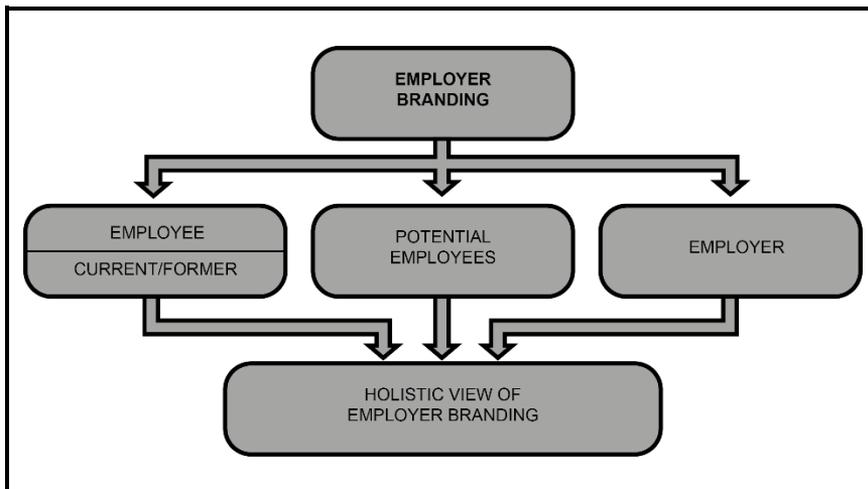
- These studies extended the current set of EBVs to eight value propositions for the IT industry (see Figure 21) that are key for firms to develop a competitive advantage over competitors. The definitions of the eight EBVs are described in Table 9. Managers can use the eight value propositions to attract and recruit high-quality employees and differentiate themselves from their competitors. Managers with recruitment or retention problems can identify which of their eight value propositions are causing the issue for their firm.
- Managers need to view EBV and employer branding holistically and throughout the employment life cycle.

- This research developed a new comprehensive instrument survey (see Table 10) to assess employer branding. Managers can use this survey tool to measure not only what jobseekers find attractive but also once they are hired, what employees care about. This instrument can be used to identify on which of the eight value propositions firms need to focus and spend valuable resources.
- This research also defined employer brand intelligence to develop insight for firms' employer brand.
- Managers need to monitor EBVs and ensure the psychological contract proposed at recruitment is maintained until an employee leaves the firm. Monitoring employer brand intelligence will enable managers to maintain the psychological contract. It is paramount that management constantly monitors each of each value propositions in Figure 21 and ensures alignment from recruitment promises to support for employees during their tenure. All eight value propositions need to be aligned and looked at holistically from all perspectives during the employment cycle. Managers should look at their competitor's employer brand intelligence and create a spectrum of attractions for their potential and current employees. This will provide them with a sustainable competitive advantage over their direct competitors.
- This research provided a new method for content analysis of employer brand intelligence. This new method used IBM Watson as described in Section 3.3.1. Employers can automate the process and develop insights from the large volume of data in social media crowdsourced sites such as Glassdoor.com.
- The existence of crowdsourced employer branding platforms offers a tremendous advantage to firms to become the best place to work. This needs to be included in corporate strategy to gain a competitive advantage for the firm. Firms can use these tools to automate and develop live insight into employer brand intelligence and EBVs at all times.
- This research will provide managers with a new methodological approach to harnesses a large volume of data using AI and develop insights from their data.

4.6 Theoretical Contributions

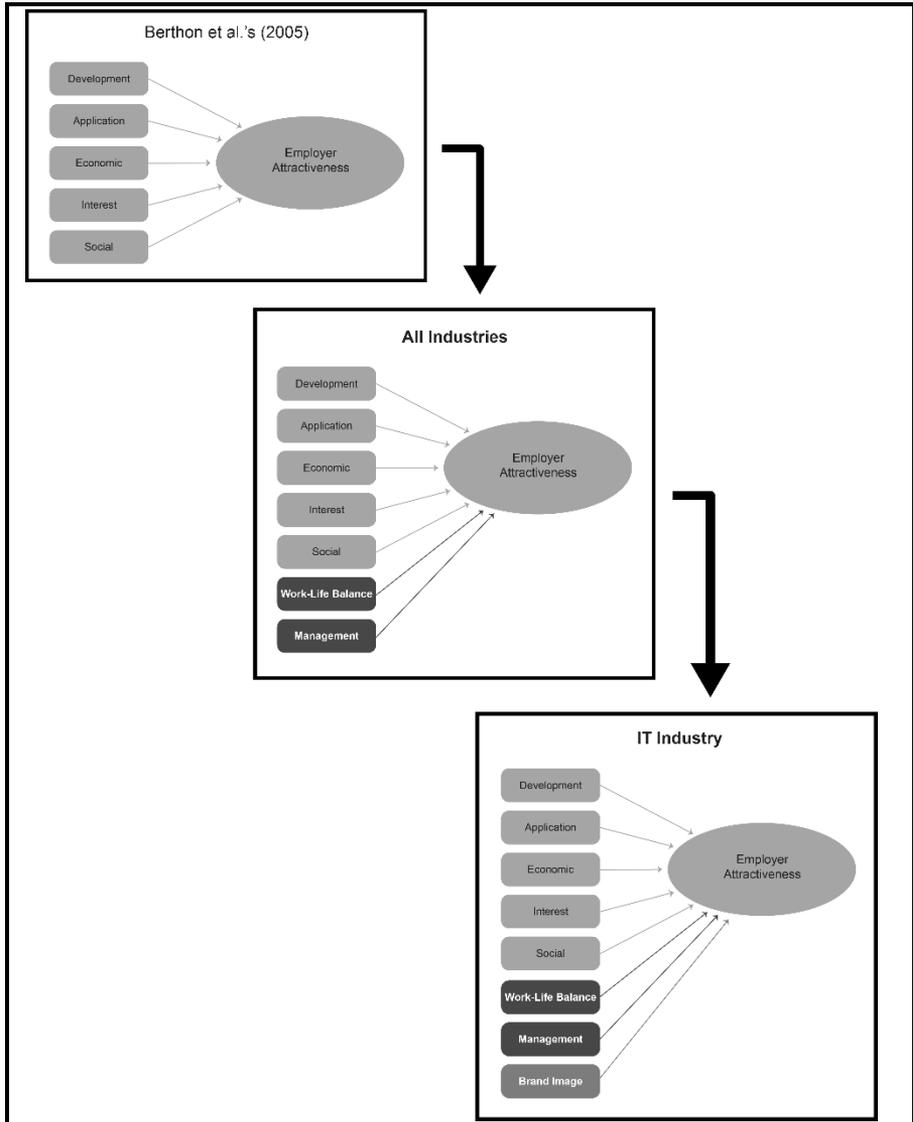
This research contributes to the RBV theory by holistically unpacking employer branding. The theoretical framework for this research is the RBV, as demonstrated in Figure 10. The research identified a set of EBVs as a differentiator in employer branding to attract employees to the firm and retain in the IT industry. Employer attractiveness attracts and retains both potential and current employees. Employer branding and EBV refer to aspects that differentiate the firm from its competitors (Botha et al., 2011) and position the firm as the best place to work. In the IT industries, current employees recognize the value propositions that differentiate their company from competitors and retain them in the firm because of the employer brand equity associated with their firm. Also, employer brand equity provides a brand image to external or potential employees to differentiate the firm as the best place to work and provides a differentiating value proposition (Botha et al., 2011). In this research, we have established employer branding provides a competitive advantage by creating employer attractiveness for the firm and its EBVs, which are viewed holistically as a sustainable differentiator. Figure 23 demonstrates the holistic model of employer branding. The holistic model provides a comprehensive view of these EBVs for the firm.

Figure 23: Holistic view of employer branding



This research extended the set of EBV variables for employer attractiveness construct from five (Berthon et al., 2005) to seven (for all industries) and then to eight in the IT industry (see Figure 24). The definition of the eight EBV variables is described in Table 9.

Figure 24: Employer attractiveness construct

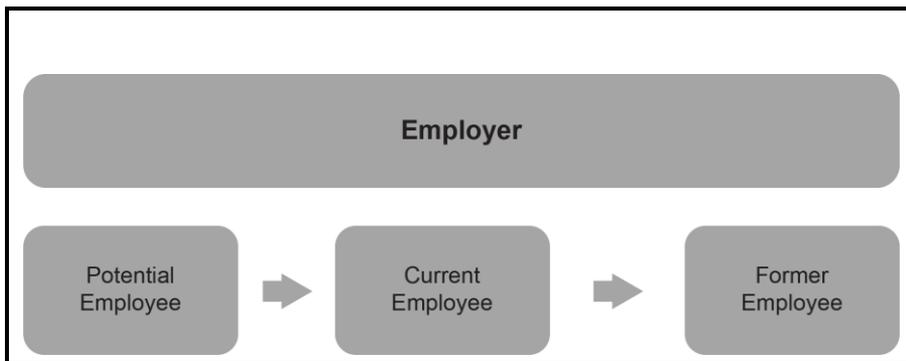


This study also contributed to employer branding and employer attractiveness construct, by empirically looking at the employer and current, former, and potential employee views (holistic view or multiview). Previous research has primarily investigated employer branding from the perspective of one or two stakeholder, either current, former or potential employees. It is a widely recognized perspective in marketing that firms need to consider multiple stakeholders in their marketing; and this is for example embodied in the current definition of ‘marketing’ by the American Marketing Association (2019). This thesis addresses a gap in the literature by adopting a multi-stakeholder perspective in understanding the antecedents (i.e., EBVs) to employer attractiveness. It confirmed the eight EBV variables combine to represent the employer attractiveness construct holistically in the IT industry context.

It demonstrated that it is critical to communicate EBVs to current employees and ensure there is alignment between what is promised by the firm to potential employees and delivered to current employees, known as the psychological contract. The psychological contract is a key success indicator for employee retention, and the firm needs to know perspectives on EBVs among employees.

The psychological contract (Hanin et al., 2013) is critical to employee retention, and employers need to pay close attention to fulfilling what they promised during the recruitment process, retaining and renewing those promises on a continual basis. The psychological contract needs to be maintained throughout the employment lifecycle (see Figure 25).

Figure 25: Employment lifecycle



Employer branding can serve as a strategic lever for the employer to retain and recruit highly sought human capital, especially in high-demand industries such as IT.

This research operationalized the employer attractiveness construct for the eight EBV variables and developed a survey instrument. Table 18 outlines the operationalization of employer attractiveness in the IT industry and Table 10 describes the survey instrument developed and validated in this study. This instrument tool can be used by both researchers and practitioners to examine EBVs for the firm.

The research also explored the frequency of each EBV from different views and differences between top and bottom companies. It demonstrated EBVs are viewed differently from different views and in differently ranked companies. It also measured and demonstrated how employees talk positively and negatively about these valuable EBVs differently. These values are extremely important to firms in their HR and employer branding strategies. For example, the social and economic values are key praise factors for both current and former employees where the management value was a major complaint factor for former IT employees.

The research explores new ways employees talk about their employers via eWoM. The new information age allows employees to talk freely and anonymously about their employers via social media and employer branding sites. This provides a wealth of information to expand and extend employer branding research. It also provides researcher with a new methodological approach to harness and develop insight from this data using artificial intelligence.

This research is at the intersection of marketing and human resources, and contributes to both literatures. In terms of human resources, employer branding is the process of managing a firm's reputation as a great place to work. The goal is to attract and retain top employees. These activities are impacted by and may affect what a firm does in terms of its corporate brand marketing. The research has shown that brand image is an important EBV, therefore the way company brand is designed and communicated, may impact the effectiveness of employer branding.

4.7 Future Research

The field of employer branding is wide open and relatively new in both research and practice. Future studies could look at employer branding in other high-turnover industries and determine whether the value propositions are the same as the IT industry. Also, researchers should study the economic impact of good versus bad employer branding in highly volatile industries. Many studies (Dineen & Allen, 2016; Love & Singh, 2011) have examined great places to work and linked them to financial benefits for the company.

EBV propositions studied in the context of the IT industry and need to be generalized in other industries. Each EBV needs to be studied to demonstrate how and when they can generate a financial advantage for firms. How do stakeholders benefit from successful employer branding?

This research represents only the first step of the three-step processes of employer branding. The communication and marketing strategies of EBV both for internal branding and external branding is a key success factor to employer branding and must be studied.

Employer branding is successful if there is a successful corporate brand (Moroko & Uncles, 2008). The eight value propositions can be measured with respect to corporate branding, including the effect of a successful employer brand on the corporate brand.

There needs to be a greater focus on EBVs, the employment lifecycle, and how the frequency of EBVs evolves during the employment lifecycle.

References

- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38, 102–120.
- Aasheim, C. L., Li, L., & Williams, S. (2019). Knowledge and skill requirements for entry-level information technology workers: A comparison of industry and academia. *Journal of Information Systems Education*, 20(3), 10.
- Agarwal, R., Ferratt, T. W., & De, P. (2007). An experimental investigation of turnover intentions among new entrants in IT. *ACM SIGMIS Database*, 38, 8–28.
- Agrawal, R. K., & Swaroop, P. (2009). Effect of employer brand image on application intentions of B-school undergraduates. *Vision: The Journal of Business Perspective*, 13(3), 41–49.
- Ahmad, N. A., & Daud, S. (2016). Engaging people with employer branding. *Procedia Economics and Finance*, 35, 690–698.
- Alba, J. W., Hutchinson, J. W., & Lynch, J. G., Jr. (1991). Memory and decision making. In T. S. Robertson & H. Kassirjian (Eds.), *Handbook of consumer behavior* (pp. 1–49). Englewood Cliffs, NJ: Prentice Hall.
- Alınışık, E., & Alınışık, Ü. (2012). Identifying dimensions of attractiveness in employer branding: effects of age, gender, and current employment status. *Procedia - Social and Behavioral Sciences*, 58, 1336–1343.
- Ambler, T. (1992). *Need-to-know marketing: An accessible AZ guide*. London, England: Century Business.
- Ambler, T., & Barrow, S. (1996a). The employer brand. *Business Review Weekly*, 4, 185–206.
- Ambler, T., & Barrow, S. (1996b). The employer brand. *Journal of Brand Management*, 4, 185–206.
- American Marketing Association. (2019). *Definitions of marketing*. Retrieved from <https://www.ama.org/the-definition-of-marketing/>
- Antonipillai, J., & Lee, M. K. (2016). *Intellectual property and the US economy: 2016 update*. Washington, DC: Economics & Statistics Administration and U.S. Patent and Trademark Office.
- App, S., Merk, J., & Büttgen, M. (2012). Employer branding: Sustainable HRM as a competitive advantage in the market for high-quality employees. *Management Revue*, 23, 262–278.
- Argyris, C. (1960). *Understanding organizational behavior*. Homewood, IL: Dorsey Press.
- Backhaus, K. (2016). Employer branding revisited. *Organization Management Journal*, 13, 193–201.
- Backhaus, K., & Tikoo, S. (2004). Conceptualizing and researching employer branding. *Career Development International*, 9, 501–517.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
- Barney, J., Wright, M., & Ketchen Jr, D. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management*, 27, 625–641.

- Barrow, S., & Mosley, R. (2005). *The employer brand*. London, England: John Wiley & Sons.
- Barrow, S., & Mosley, R. (2011). *The employer brand: Bringing the best of brand management to people at work*. London, England: John Wiley & Sons.
- Baum, M., & Kabst, R. (2013). How to attract applicants in the Atlantic versus the Asia-Pacific region? A cross-national analysis on China, India, Germany, and Hungary. *Journal of World Business*, 48, 175–185.
- Bello, D. P. (2015). *A critic review of talent management through a contextual approach*. Venice, Italy: Università Ca'Foscari Venezia.
- Benamati, J., & Lederer, A. L. (2001). Rapid information technology change, coping mechanisms, and the emerging technologies group. *Journal of Management Information Systems*, 17, 183–202.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–246.
- Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: Dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24, 151–172.
- Bhattacharjee, A., Gaur, S. P., & Pandey, R. (2011). Perceptions of practicing and prospective women executives from India about Indian business newspapers. *Asian Journal of Communication*, 21, 632–647.
- Biswas, M., & Suar, D. (2013). Which employees' values matter most in the creation of employer branding? *Journal of Marketing Development and Competitiveness*, 7, 93–102.
- Biswas, M. K., & Suar, D. (2016). Antecedents and consequences of employer branding. *Journal of Business Ethics*, 136, 57–72.
- Blackett, T. (2004). What is a brand? In R. Clifton & J. Simmons (Eds.), *Brands and branding*. Princeton, NJ: Bloomberg Press.
- Bonaiuto, M., De Dominicis, S., Illia, L., Rodríguez-Cánovas, B., & Lizzani, G. (2013). Managing employer brand attributes to attract potential future leaders. *Journal of Brand Management*, 20, 779–792.
- Booz, M. (2018). These 3 industries have the highest talent turnover rates. Retrieved from <https://business.linkedin.com/talent-solutions/blog/trends-and-research/2018/the-3-industries-with-the-highest-turnover-rates>
- Botha, A., Bussin, M., & de Swardt, L. (2011). An employer brand predictive model for talent attraction and retention. *SA Journal of Human Resource Management*, 9, 1–12.
- Boxall, P. (1996). The strategic HRM debate and the resource-based view of the firm. *Human Resource Management Journal*, 6(3), 59–75.
- Burmann, C., Schaefer, K., & Maloney, P. (2008). Industry image: Its impact on the brand image of potential employees. *Journal of Brand Management*, 15, 157–176.
- Cable, D. M., & Turban, D. B. (2001). Establishing the dimensions, sources and value of job seekers' employer knowledge during recruitment. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 20, pp. 115–163). Bingley, England: Emerald Group.
- Cairncross, F. (2002). *The company of the future: Meeting the management challenges of the communications revolution*. London, England: Profile Books.
- Cappelli, P., & Singh, H. (1992). Integrating strategic human resources and strategic management. In D. Lewin, O. S. Mitchell, & P. Sherer (Eds.), *Research frontiers in industrial relations and human resources* (pp. 165–192). Madison, WI: Industrial Relations Research Association.
- Carman, J. M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66, 33–56.

- Cascio, W. F. (2014). Leveraging employer branding, performance management and human resource development to enhance employee retention. *Human Resource Development International*, 17, 121–128.
- Celani, A., & Singh, P. (2011). Signaling theory and applicant attraction outcomes. *Personnel Review*, 40, 222–238.
- Christensen Hughes, J., & Rog, E. (2008). Talent management: A strategy for improving employee recruitment, retention and engagement within hospitality organizations. *International Journal of Contemporary Hospitality Management*, 20, 743–757.
- Chunping, Y., & Xi, L. (2011). The study on employer brand strategy in private enterprises from the perspective of human resource management. *Energy Procedia*, 5, 2087–2091.
- Cohen, B., & Kietzmann, J. (2014). Ride on! Mobility business models for the sharing economy. *Organization Environment*, 27, 279–296.
- Collins, C. J., & Stevens, C. K. (2002). The relationship between early recruitment-related activities and the application decisions of new labor-market entrants: A brand equity approach to recruitment. *Journal of Applied Psychology*, 87, 1121–1133.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Dell, D., Ainspan, N., Bodenber, T., Troy, K., & Hickey, J. (2001). *Engaging employees through your brand*. New York, NY: Conference Board.
- Demirkan, H., & Delen, D. (2013). Leveraging the capabilities of service-oriented decision support systems: Putting analytics and big data in cloud. *Decision Support Systems*, 55, 412–421.
- DeVellis, R. F. (2016). *Scale development: Theory and applications*. Thousand Oaks, CA: Sage.
- Devendorf, S. A., & Highhouse, S. (2008). Applicant–employee similarity and attraction to an employer. *Journal of Occupational and Organizational Psychology*, 81, 607–617.
- Dineen, B. R., & Allen, D. G. (2016). Third party employment branding: Human capital inflows and outflows following “best places to work” certifications. *Academy of Management Journal*, 59, 90–112.
- Diomaiuta, C., Mercorella, M., Ciampi, M., & De Pietro, G. (2017). A novel system for the automatic extraction of a patient problem summary. Paper presented at the 2017 IEEE Symposium on Computers and Communications, Heraklion, Greece.
- Dokania, A. K., & Pathak, G. S. (2013). Corporate social responsibility and employer branding: A case study of Indian information technology industry. *Review of HRM*, 2, 149.
- Edwards, M. R. (2009). An integrative review of employer branding and OB theory. *Personnel Review*, 39, 5–23.
- Eisenberg, B., Kilduff, C., Burleigh, S., & Wilson, K. (2001). *The role of the value proposition and employment branding in retaining top talent*. Alexandria, VA: Society for Human Resource Management.
- Elving, W. J., Westhoff, J. J., Meeusen, K., & Schoonderbeek, J.-W. (2013). The war for talent? The relevance of employer branding in job advertisements for becoming an employer of choice. *Journal of Brand Management*, 20, 355–373.
- Ewing, M. T., Pitt, L. F., De Bussy, N. M., & Berthon, P. (2002). Employment branding in the knowledge economy. *International Journal of Advertising*, 21, 3–22.
- Figurska, I., & Matuska, E. (2013). Employer branding as a human resources management strategy. *Human Resources Management & Ergonomics*, 7, 35–51.

- Foster, C., Punjaisri, K., & Cheng, R. (2010). Exploring the relationship between corporate, internal and employer branding. *Journal of Product Brand Management*, 19, 401–409.
- Frook, J. (2001). Burnish your brand from the inside. *B to B*, 86(8), 1–2.
- Gaddam, S. (2008). Modeling employer branding communication: The softer aspect of HR marketing management. *ICFAI Journal of Soft Skills*, 2, 45–55.
- Galbreath, J. (2005). Which resources matter the most to firm success? An exploratory study of resource-based theory. *Technovation*, 25, 979–987.
- Gatewood, R. D., Gowan, M. A., & Lautenschlager, G. J. (1993). Corporate image, recruitment image and initial job choice decisions. *Academy of Management Journal*, 36, 414–427.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *Qualitative Report*, 8, 597–606.
- Gomes, R., & Neves, J. D. (2010). Employer branding constrains applicants' job seeking behaviour? *Journal of Work and Organizational Psychology*, 26, 223–234.
- Gowan, M. A. (2004). Development of the recruitment value proposition for geocentric staffing. *Thunderbird International Business Review*, 46, 687–708.
- Greening, D. W., & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society*, 39, 254–280.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hanin, D., Stinglhamber, F., & Delobbe, N. (2013). The impact of employer branding on employees: The role of employment offering in the prediction of their affective commitment. *Psychologia Belgica*, 53(4), 57–83.
- Hannigan, T., Haans, R. F. J., Vakili, K., Tchaljian, H., Glaser, V., Wang, M., ... Jennings, P. D. (2019). Topic modeling in management research: Rendering new theory from textual data. *Academy of Management Annals*, 13, 586–632.
- Heilmann, P. (2010). Employer brand image in a health care organization. *Management Research Review*, 33, 134–144.
- Henderson, R. (2012). Industry employment and output projections to 2020. Retrieved from U.S. Bureau of Labor Statistics website: <https://www.bls.gov/opub/mlr/2012/01/art4full.pdf>
- High, R. (2012). *The era of cognitive systems: An inside look at IBM Watson and how it works*. Armonk, NY: IBM Corporation.
- Highhouse, S., Lievens, F., & Sinar, E. F. (2003). Measuring attraction to organizations. *Educational and Psychological Measurement*, 63, 986–1001.
- Hollon, J. (2018). What industries had the highest turnover last year? This is what LinkedIn says. *Recruiting Daily*. Retrieved from <https://recruitingdaily.com/turnover/>
- Holtbrügge, D., Friedmann, C. B., & Puck, J. F. (2010). Recruitment and retention in foreign firms in India: A resource-based view. *Human Resource Management*, 49, 439–455.
- IBM Knowledge Center. (2018). Overview—What's new in IBM Watson Explorer content analytics. Retrieved from <https://www.ibm.com/support/knowledgecenter/>
- Ito, J.K., M. Brotheridge, C., & McFarland, K. (2013). Examining how preferences for employer branding attributes differ from entry to exit and how they relate to commitment, satisfaction, and retention. *Career Development International*, 18, 732–752.
- Jain, N., & Bhatt, P. (2015). Employment preferences of job applicants: Unfolding employer branding determinants. *Journal of Management Development*, 34, 634–652.
- Jiang, T., & Iles, P. (2011). Employer-brand equity, organizational attractiveness and talent management in the Zhejiang private sector, China. *Journal of Technology Management in China*, 6, 97–110.

- Joo, B.-K., & Mclean, G. N. (2006). Best employer studies: A conceptual model from a literature review and a case study. *Human Resource Development Review*, 5, 228–257.
- Kalyankar, D., Mathur, N., Bakshi, S. (2014). Employer branding and its importance in attracting job applicants. *Abhinav National Monthly Refereed Journal of Research in Commerce & Management*, 3(5), 83–87.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53, 59–68.
- Kaur, P., Sharma, S., Kaur, J., & Sharma, S. K. (2015). Using social media for employer branding and talent management: An experiential study. *IUP Journal of Brand Management*, 12(2), 7–20.
- Kavitha, M., & Srinivasan, P. (2012). The relationship between employer image and organizational attractiveness in the information technology industry. *Journal of Contemporary Research in Management*, 7(2), 11–19.
- Keller, K. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing Development*, 57, 1–22.
- Keller, K. L., Parameswaran, M., & Jacob, I. (2011). *Strategic brand management: Building, measuring, and managing brand equity*. Delhi, India: Pearson Education.
- Kietzmann, J. H. (2017). Crowdsourcing: A revised definition and introduction to new research. *Business horizons*, 60(2), 151-153.
- Kietzmann, J., & Canhoto, A. (2013). Bittersweet! Understanding and managing electronic word of mouth. *Journal of Public Affairs*, 13, 146–159.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54, 241–251.
- Kietzmann, J. H., Silvestre, B. S., McCarthy, I. P., & Pitt, L. F. (2012). Unpacking the social media phenomenon: Towards a research agenda. *Journal of Public Affairs*, 12, 109–119.
- Kimpakorn, N., & Dimmitt, N. (2007). Employer branding: The perspective of hotel management in the Thai luxury hotel industry. *Australasian Marketing Journal*, 15(3), 49.
- Knox, S., & Freeman, C. (2006). Measuring and managing employer brand image in the service industry. *Journal of Marketing Management*, 22, 695–716.
- Kotler, P., Saliba, S., & Wrenn, B. (1991). *Marketing management: Analysis, planning, and control: Instructor's manual*. Upper Saddle River, NJ: Prentice-Hall.
- Kryger Aggerholm, H., Esmann Andersen, S., & Thomsen, C. (2011). Conceptualising employer branding in sustainable organisations. *Corporate Communications*, 16, 105–123.
- Kucherov, D., & Zamulin, A. (2016). Employer branding practices for young talents in IT companies (Russian experience). *Human Resource Development International*, 19, 178–188.
- Kucherov, D., & Zavyalova, E. (2012). HRD practices and talent management in the companies with the employer brand. *European Journal of Training and Development*, 36, 86–104.
- Leekha Chhabra, N., & Sharma, S. (2014). Employer branding: Strategy for improving employer attractiveness. *International Journal of Organizational Analysis*, 22, 48–60.
- Lemmink, J., Schuijf, A., & Streukens, S. (2003). The role of corporate image and company employment image in explaining application intentions. *Journal of Economic Psychology*, 24, 1–15.
- Levering, R., & Moskowitz, M. (1998). The 100 best companies to work for in America. *Fortune*, 137, 84–95.

Lievens, F. (2007). Employer branding in the Belgian Army: The importance of instrumental and symbolic beliefs for potential applicants, actual applicants, and military employees. *Human Resource Management*, 46, 51–69.

Lievens, F., Slaughter, J. E. (2016). Employer image and employer branding: What we know and what we need to know. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 407–440.

Lievens, F., Van Hoye, G., & Anseel, F. (2007). Organizational identity and employer image: Towards a unifying framework. *British Journal of Management*, 18, S45–S59.

Lievens, F., Van Hoye, G., & Schreurs, B. (2005). Examining the relationship between employer knowledge dimensions and organizational attractiveness: An application in a military context. *Journal of Occupational and Organizational Psychology*, 78, 569–582 (2002). Branding from the inside out. *Business Review Weekly*, 24(10), 64–66.

Lo, J. (2015). The information technology workforce: A review and assessment of voluntary turnover research. *Information Systems Frontiers*, 17, 387–411.

Love, L. F., & Singh, P. (2011). Workplace branding: Leveraging human resources management practices for competitive advantage through “best employer” surveys. *Journal of Business and Psychology*, 26, 175.

Madia, S. A. (2011). Best practices for using social media as a recruitment strategy. *Strategic HR Review*, 10(6), 19–24.

Malati, N., Tiwari, P., & Sharma, R. (2013). An empirical study of employer branding in information technology companies. *DIAS Technology Review*, 8, 2246328.

Mandhanya, Y., & Shah, M. (2010). Employer branding: A tool for talent management. *Global Management Review*, 4, 74–80.

Manning, C. D., & Schütze, H. (1999). *Foundations of statistical natural language processing*. Cambridge, MA: MIT Press.

Mark, P., & Toelken, K. (2009). Poisoned by a toxic brand: A worst case scenario of employer branding—A case study of a Fortune 100 technology firm. *Organization Development Journal*, 27(4), 21–29.

Martin, G. (2010). Employer branding and corporate reputation management: A model and some evidence. In R. J. Burke & C. L. Cooper (Eds.), *The peak performing organization*. London, England: Routledge.

Martin, G., Beaumont, P., Doig, R., & Pate, J. (2005). Branding: A new performance discourse for HR? *European Management Journal*, 23, 76–88.

Martin, G., & Hetrick, S. (2009). Employer branding and corporate reputation management in an international context. In P. Sparrow (Ed.), *Handbook of international human resource management: Integrating people, process, and context* (pp. 293–320). Chichester, England: Wiley.

Maurya, U. K., & Mishra, P. (2012). What is a brand? A perspective on brand meaning. *European Journal of Business and Management*, 4, 122–133.

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, 893–907.

McCarthy, I. P., & Ruckman, K. (2017). Licensing speed: Its determinants and payoffs. *Journal of Engineering and Technology Management*, 46, 52–66.

McCracken, G. (1988). *The long interview*. Newbury Park, CA: Sage.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50, 741–749.

Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Miller, M. J. (2017). Gartner's top predictions for 2018 and beyond: Pace yourself. *PC Magazine*. Retrieved from <https://www.pcmag.com/article/356664/gartners-top-predictions-for-2018-and-beyond-pace-yourself>

Minchington, B. (2010). Employer brand leadership: A global perspective. Adelaide, Australia: Collective Learning Australia.

Mohlala, J., Goldman, G. A., & Goosen, X. (2012). Employee retention within the information technology division of a South African bank. *SA Journal of Human Resource Management*, 10(2), 1–11.

Moroko, L., & Uncles, M. D. (2008). Characteristics of successful employer brands. *Journal of Brand Management*, 16, 160–175.

Moroko, L., & Uncles, M. D. (2009). Employer branding and market segmentation. *Journal of Brand Management*, 17, 181–196.

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22, 226–256.

Mosley, R. W. (2007). Customer experience, organisational culture and the employer brand. *Journal of Brand Management*, 15, 123–134.

Mosley, R. (2015). CEOs need to pay attention to employer branding. *Harvard Business Review*. Retrieved from <https://hbr.org/2015/05/ceos-need-to-pay-attention-to-employer-branding>

Munsamy, M., & Venter, A. B. (2009). Retention factors of management staff in the maintenance phase of their careers in local government. *SA Journal of Human Resource Management*, 7, 1–9.

Murphy, J. M. (1992). What is branding? In *Branding: A key marketing tool* (pp. 1–12). New York, NY: Springer.

Myrden, S. E., & Kelloway, K. (2015). Young workers' perception of brand image: Main and moderating effects. *Journal of Organizational Effectiveness: People and Performance*, 2, 267–281.

Näppä, A., Farshid, M., & Foster, T. (2014). Employer branding: Attracting and retaining talent in financial services. *Journal of Financial Services Marketing*, 19, 132–145.

Nyborg, K., & Zhang, T. (2013). Is corporate social responsibility associated with lower wages? *Environmental and Resource Economics*, 55, 107–117.

O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *International Journal of Digital Economics*, 65, 17–37.

Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Cambridge, MA: Harvard Business Press.

Priem, R. L., & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review*, 26, 22–40.

Priyadarshi, P. (2011). Employer brand image as predictor of employee satisfaction, affective commitment & turnover. *Indian Journal of Industrial Relations*, 46, 510–522.

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, 1486–1504.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *Academy of Management Journal*, 37, 137–152.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 15, 245–259.

- Roper, S., de Carvalho, L. V., Guzman, F., Sivertzen, A.-M., Nilsen, E. R., & Olafsen, A. H. (2013). Employer branding: Employer attractiveness and the use of social media. *Journal of Product & Brand Management*, 22, 473–483.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2, 121–139.
- Rousseau, D. M. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*, 74, 511–541.
- Roy, S. K. (2008). Identifying the dimensions of attractiveness of an employer brand in the Indian context. *South Asian Journal of Management*, 15(4), 110–130.
- Saini, G. K., Rai, P., & Chaudhary, M. K. (2013). What do best employer surveys reveal about employer branding and intention to apply? *Journal of Brand Management*, 21, 95–111.
- Schlager, T., Bodderas, M., Maas, P., & Luc Cachelin, J. (2011). The influence of the employer brand on employee attitudes relevant for service branding: An empirical investigation. *Journal of Services Marketing*, 25, 497–508.
- Schumann, M., & Sartain, L. (2009). *Brand for talent: Eight essentials to make your talent as famous as your brand*. New York, NY: John Wiley & Sons.
- Seetharaman, A., Azlan Bin Mohd Nadzir, Z., & Gunalan, S. (2001). A conceptual study on brand valuation. *Journal of Product & Brand Management*, 10, 243–256.
- Sehgal, K., & Malati, N. (2013). Employer branding: A potent organizational tool for enhancing competitive advantage. *IUP Journal of Brand Management*, 10, 51–65.
- Sengupta, A., Bamel, U., & Singh, P. (2015). Value proposition framework: Implications for employer branding. *Decision*, 42, 307–323.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22, 159–170.
- Sivertzen, A.-M., Nilsen, E. R., & Olafsen, A. H. (2013). Employer branding: Employer attractiveness and the use of social media. *Journal of Product & Brand Management*, 22, 473–483.
- Sokro, E. (2012). Impact of employer branding on employee attraction and retention. *European Journal of Business and Management*, 4(18), 164–173.
- Stamler, B. (2001). Companies are developing brand messages as a way to inspire loyalty among employees. *The New York Times*. Retrieved from <https://www.nytimes.com/2001/07/05/business/media-business-advertising-companies-are-developing-brand-messages-way-inspire.html>
- Sullivan, J. (2002). Crafting a lofty employment brand: A costly proposition. Retrieved from <https://www.ere.net/crafting-a-lofty-employment-brand-a-costly-proposition/>
- Sung, S. Y., & Choi, J. N. (2014). Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations. *Journal of Organizational Behavior*, 35, 393–412.
- Sutherland, M., Torricelli, D. G., & Karg, R. (2002). Employer-of-choice branding for knowledge workers. *South African Journal of Business Management*, 33(4), 13–20.
- Tambe, P., Ye, X., & Cappelli, P. (2017). Poaching and retention in high-tech labor markets. Retrieved from <https://www.scheller.gatech.edu/Facademcs/Fconferences/Fpoaching-high-tech-tyc.pdf>
- Täuscher, K., & Kietzmann, J. (2017). Learning from failures in the sharing economy. *Science Technology*, 67, 2047–2059.
- Teetz, I. (2013). Best practice technology in talent acquisition: From branding to global job boards. *Workforce Solutions Review*, 4, 34–35.

- The Japan Times. (2018, July 22). In breakthrough, Japanese researchers use AI to identify early stage stomach cancer with high accuracy. Retrieved from <https://www.japantimes.co.jp/news/2018/07/22/national/science-health/japanese-researchers-use-ai-identify-early-stage-stomach-cancer-high-accuracy/#.XUG8aehKg2w>
- Theurer, C. P., Tumasjan, A., Welpe, I. M., & Lievens, F. (2018). Employer branding: A brand equity-based literature review and research agenda. *International Journal of Management Reviews*, 20, 155–179.
- Thomas, B. J., & Jenifer, S. C. (2016). Measurement model of employer brand personality: A scale construction. *Journal of Contemporary Management Research*, 10, 58.
- Thurow, L. C. (1992). Who owns the twenty-first century? *MIT Sloan Management Review*, 33(3), 5–17.
- Tomer, J. F. (1987). *Organizational capital: The path to higher productivity and well-being*. New York, NY: Praeger.
- Tumasjan, A., Strobel, M., & Welpe, I. M. (2011). Employer brand building for start-ups: Which job attributes do employees value most? *Zeitschrift für Betriebswirtschaft*, 81, 111–136.
- Turban, D. B., Forret, M. L., & Hendrickson, C. L. (1998). Applicant attraction to firms: Influences of organization reputation, job and organizational attributes, and recruiter behaviors. *Journal of Vocational Behavior*, 52, 24–44.
- Tüzüner, V. L., & Yüksel, C. A. (2009). Segmenting potential employees according to firm's employer attractiveness dimensions in the employer branding concept. *Journal of Academic Research in Economics*, 1, 46–61.
- U.S.-Dept-Labor. (2015). Industry employments and output projections to 2024. Retrieved from <https://www.bls.gov/opub/mlr/2015/article/industry-employment-and-output-projections-to-2024.htm>.
- Van Hoye, G. (2012). Recruitment sources and organizational attraction: A field study of Belgian nurses. *European Journal of Work and Organizational Psychology*, 21, 376–391.
- Van Hoye, G., & Lievens, F. (2005). Recruitment-related information sources and organizational attractiveness: Can something be done about negative publicity? *International Journal of Selection and Assessment*, 13, 179–187.
- Vasavada-Oza, F., & Bhattacharjee, D. (2016). Promoting organizational brands as desirable employers through company websites: A study of three Indian IT companies. *IUP Journal of Brand Management*, 13(2), 7–23.
- Ventura, M. (2013). Which is the best employer review site? [Glassdoor vs the contenders]. Retrieved from <http://theundercoverrecruiter.com/employer-reviews/>
- Verma, D., & Verma, C. (2015). A study on attractiveness dimensions of employer branding in technical educational institutions. *International Journal of Marketing and Human Resource Management*, 6, 36–43.
- Wayne, J. H., & Casper, W. (2012). Why does firm reputation in human resource policies influence college students? The mechanisms underlying job pursuit intentions. *Human Resource Management*, 51, 121–142.
- Webster, F. E., & Keller, K. L. (2004). A roadmap for branding in industrial markets. *Journal of Brand Management*, 11, 388–402.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171–180.
- Wilden, R., Gudergan, S., & Lings, I. (2010). Employer branding: Strategic implications for staff recruitment. *Journal of Marketing Management*, 26, 56–73.

Williams, B., Onsmann, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3), 1–13.

Williamson, O. E. (1975). *Markets and hierarchies*. New York, 2630.

Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Newbury Park, CA: Sage.

Wood, L. (2000). Brands and brand equity: Definition and management. *Management Decision*, 38, 662–669.

Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27, 701–721.

Yu, K. Y. T., & Cable, D. M. (2012). Recruitment and competitive advantage: A brand equity perspective. In S. W. J. Kozlowski (Ed.), *Oxford handbook of industrial–organizational psychology* (pp. 197–220). New York, NY: Oxford University Press.

Zhu, F., Wang, Z., Yu, Q., Hu, T., Wen, Y., & Liu, Y. (2014). Reconsidering the dimensionality and measurement of employer brand in the Chinese context. *Social Behavior and Personality*, 42, 933–948.

Chapter 5: Papers