

Michal Mičík,

Faculty of Economics,

University of West Bohemia Pilsen, Czech Republic,

E-mail: micikm@kmo.zcu.cz

Kateřina Mičudová, Faculty of Economics,

Received: April, 2018 1st Revision: July, 2018

Accepted: August, 2018

DOI: 10.14254/2071-

789X.2018/11-3/11

University of West Bohemia Pilsen, Czech Republic,

E-mail: pitrovak@kem.zcu.cz

ORCID: 0000-0002-4112-4160

Mičík, M., & Mičudová, K. (2018). Employer Brand Building: Using Social Media and Career Websites to Attract Generation Y. Economics and Sociology, 11(3), 171-189. doi:10.14254/2071-789X.2018/11-3/11

# **EMPLOYER BRAND BUILDING: USING SOCIAL MEDIA AND CAREER** WEBSITES TO ATTRACT **GENERATION Y**

**ABSTRACT**. Having the image of an attractive employer allows organization hire the most talented employees. To win in this 'war for talents', it is necessary for organizations to build their employer brand. Ideally, branding should be perceived as a comprehensive recruiting strategy that positions a company in an attractive way and keeps it top of the mind for potential candidates. Potential candidates, in this case the Millennials, will make up a large share of the global workforce by the year 2020. Millennials are a specific social group due to several characteristics and expectations different from the previous generations, which means that companies cannot use the same strategies that have been in use so far. Considering the fact that the Generation Y has grown up with the firms should also develop Internet. their communications on the web. The goal of this research study was to find out whether organizations build an image of an attractive employer for potential employees of the Generation Y and to what extent companies can attract Millennials. To identify the most attractive companies for the generation in question, cluster analysis was used. The outcomes of this study can be used by companies to increase their attractiveness among talented young people looking for jobs.

JEL Classification: M31, Keywords: employer branding, social media, career websites, generation y, cluster analysis, Czech Republic.

# Introduction

M54, C38

Many organizations around the world focus increasingly on the concept of an attractive employer or the best place to work, or the Best Employer status, striving to differentiate themselves from competitors. This process of differentiation is becoming even more important today, as the unemployment rate is at its minimum in many developed countries. At the end of the first half of 2018, the unemployment rate in Czech Republic was around 2.3% (Eurostat, 2018), i.e., one of the lowest unemployment rates among all EU member states. The number of jobs available, which is well above the demand for jobs, continues to rise. In 2018, the number of registered unemployed people was 224,000, while the number of jobs available was 318,000 (Ministry of Labour and Social Affairs, 2018).

# ISSN 2071-789X **RECENT ISSUES IN SOCIOLOGICAL RESEARCH**

There is a number of ways of how to attract new employees. Lately, organizations have been trying to acquire the label of "attractive employer" and thus get engaged with more potentially interesting employees. Most of the attention has been paid to indepth theoretical discussion on the concept of an attractive employer/organization as well as on identifying the main attributes of an attractive employer/organization (Highhouse et al., 2003; Backhaus & Tikoo, 2004; Berthon et al., 2005; Joo & McLean, 2006). Attracting "the best and the brightest" is one of the most crucial activities companies worldwide put a great deal of effort into (Weiss & MacKay, 2009). Human capital is vital for a company's survival and development, since human capital is its most valuable resource (Xie, Bagozzi & Meland, 2015). It is well known that firms with better reputations attract more as well as higher quality applicants (Cable & Turban, 2003). Moreover, effectively branding an organization as a potential or current employer helps a company compete in the "war for talent" (Axelrod et al., 2001) by attracting and retaining talented personnel, which in turn is essential for delivering a quality service to customers. To address this issue, we need to understand what attracts new talents to companies today. Hieronimus et al. (2005) emphasize the need for companies to determine which attributes are the most important to specific types of potential employees. They mention that traditional job recruitment focuses on functional employment benefits rather than intangible and emotional benefits. Moroko & Uncles (2009) also point out that job seekers can be segmented into a range of groups based on demographic, geographic, psychographic and behavioral characteristics and, as with consumer branding, these should be acknowledged in the recruitment process. Generation Y, which is the focus of this study, at this time makes up 23.7% of the population in Czech Republic (Czech Statistical Office, 2017). In the coming years, the labor force will be joined by the Millennials who are currently studying. Having identified the need for effective recruitment practices and the factors that are important to potential recruits, it is also essential to recognize the role played by employer branding in this process.

# **1.** Employer branding

The employer brand is a sum of benefits associated with a job and an employer (Ambler and Barrow, 1996) or more precisely, a package of psychological, economic, and functional benefits provided by employment and identified with an employer (Ambler & Barrow, 1996; Thorne, 2004; Lievens & Highhouse, 2003). The role of employer branding is to utilize these benefits to position the firm in the minds of potential employees as an ideal place to work and making it a best employer. In other words, it is the sum of a company's efforts to communicate to prospective staff that it is a desirable place to work (Lloyd, 2002). Basically, it is the application of branding principles to human resources management and the employee-employer relationship that originates from the same principles as traditional branding (Verma & Ahmad, 2016). It should ideally present a picture of the instrumental and symbolic traits of an organization which permit job seekers to differentiate the organization from its competitors in the recruitment market. During the recruitment process, the employer brand messages indicate the nature of the employment, career opportunities, challenges and the unique features of the organization (Arachchige & Robertson, 2011). It is important to add that there is also an internal component of employer branding (which exists in the minds of current employees). However, this study is specifically concerned with the external component.

A closely related concept to employer branding is the concept of employer attractiveness, which can be defined as the envisioned benefits that a potential employee sees in working for a specific organization (Berthon et al, 2005). As the competition for the best employees becomes almost as fierce as the competition for customers, organizations have to

differentiate themselves from their competitors and be seen as attractive employers for potential applicants and current employees (Lievens & Highhouse, 2003). It is important for companies to understand what attracts job seekers.

Perception of a brand is closely aligned with a company's reputation. Employer branding plays a crucial role in the recruitment process as reputation is formed from the image, which in turn is a reflection of the brand. As studies have proved, there is a relationship between an organization's reputation and its success in attracting quality job applicants (Fombrun, 1996; Cable & Turban, 2001). Highhouse et al. (1999) even underline the fact that the overall perception of a company's reputation is the most important factor influencing the choice of potential employees. Research has shown that reputation is indeed a significant factor in the recruitment process (e.g., Berthon et al, 2005; Lievens et al, 2007, Xie et al, 2015). Millennials have become potential employees with different characteristics and expectations than previous generations (Ollivier & Tanguy, 2008). Generation Y is often presented as preferring a positive work environment and stimulating work offering opportunities for advancement and success, encouraging a collective management style, and attentive to the work-life balance (Eisner, 2005). The literature is more contradictory concerning the expectations of Generation Y in terms of salary. For some researchers, salary is considered less important than other attributes, such as a fulfilling private life (Eisner, 2005), while for others this generation remains attentive to salary (Qenani-Petrela, Schlosser & Pompa, 2007; Lowe, Levitt & Wilson, 2008). According to Manpower's Millennial Careers: 2020 vision, by the year 2020 Millennials will make up 35% of the global workforce. And for Millennials, purpose is a priority. The majority of Millennials say working for employers who are socially responsible and aligned to their values is important (Manpower, 2016). Millennials are attracted to employers who can offer more than merely good pay. That's not to say that pay isn't important. According to PwC's survey, the biggest draw for Millennials, though, is the opportunity to progress. Development programs, flexible working hours, work/life balance, good reputation in ethical practices, matching corporate values and job security are other important factors that matter to Millennials (PwC, 2013; Deloitte, 2016). As for Czech Millennials, their requirements of a future employer are not very different from Millennials in the rest of the world. They also seek job security, a friendly work environment, development and most of all, work/life balance (ČeSU & ASA, 2016). This means companies cannot use the same strategies and tactics that have been in use so far. Because this issue appears all the more crucial for corporate strategies since attracting and retaining human capital is a key factor in competitiveness, companies should adapt their marketing strategies (Soulez & Soulez, 2011) and especially their recruitment marketing to attract and retain talented employees. Organizations should be aware of certain challenges associated with employing Millennials. These challenges stem not only from the requirements that Generation Y has of its employers, but also from their weak points. The weaknesses of Czech Millennials include mainly their self-interest, laziness and the lack of loyalty to one's employer (Ipsos, 2017). For managers used to working with previous generations, managing Generation Y presents a real challenge. Their distinguishing features include their approach to work, communication style and the work-life balance. Meier& Crocker (2010) confirm that members of Generation Y expect of their superiors a stronger focus on their individuality, individual motivation and challenges in the form of quickly changing work tasks. Monotonous work makes employees from Generation Y bored, which leads to a decrease in their motivation. Baruch (2004) claims that they seem to be less interested in a lifelong job, but more interested in challenging and meaningful tasks that help to achieve high career goals. Gravett & Throckmorton (2007) mention three key ways to encouraging Generation Y to work in organizations, which are high salary, a friendly and casual work environment, and growth and development opportunities. Millennials also value freedom, home and family.

Employment flexibility is a way of achieving work-life balance, and this means that a company's management and organizational culture should support such flexibility (Maxwell, 2005).

Considering the fact that Generation Y is a group that has grown up with the Internet, firms are also developing their communications on the web. Members of Generation Y have grown up in a world dominated by the media and they spend approx. 25 % of their time consuming online content (MediaGuru, 2017). Concerning recruitment, it appears that the Internet has become one of the most popular sources of information for job seekers (Backhaus, 2004; Soulez & Soulez, 2011; Eger et al, 2015). It is also evident that especially Millennials often evaluate companies through the Internet before they apply for a job; they want to be sure before they link their professional lives with them (Jobvite, 2016; Deloitte, 2016).

# 2. The Internet and its place in recruitment

The Internet has revolutionized the way people learn about companies and apply for jobs. In many ways, acquiring and accessing talent is among a company's most critical goals. Without critical talent and skills, companies cannot grow their businesses. Yet in today's new environment, the old ways of recruiting, acquiring and accessing talent are no longer effective. Companies that fail to adapt will likely be on the losing end when it comes to attracting the people they need. Internet tools such as social media and recruitment websites have the ability to build a strong employer brand (Baum & Kabst, 2014). A strong employer brand can help to attract qualified applicants and, therefore, succeed in the war for talent (Wayne & Casper, 2012; Egerová et al, 2015).

Companies use various recruitment activities to inform potential employees about career opportunities and company characteristics (Perkins, Thomas & Taylor, 2000). In this paper, we focus on Internet tools such as the previously mentioned social media and recruitment websites, whose importance has been increasing constantly (Dineen, Ling, Ash & DelVecchio, 2007) and which give potential applicants the opportunity to obtain a lot of information about the organization itself (job offers, organizational culture) (Allen et al., 2007). This is exactly what Millennials want to know when they are screening potential employers. Not only do they want to search for open job positions, they also want to access potential employers according to their values, looking for the best fit. All of this information can be found on social media or on the career websites of the respective organization (Chandy et al, 2001). As Williamson et al. (2010) add, recruitment websites have a significant effect on prospective applicants' attraction to firms.

Social media is increasingly used in employer branding campaigns and in the recruiting process. The exponential growth of social media sites (Strauss & Frost, 2012; Janouch, 2011) provides access to huge numbers of people who are looking for a new job and a new career, who offer their abilities and experience, and who want to develop personally and grow professionally. Many companies are leveraging Facebook, LinkedIn, Twitter, YouTube or Google+ to build a compelling employment brand, find talent, and market their companies to job candidates. Social media have gained such importance and popularity due to their interactivity and ability to facilitate two-way communication with companies (Kietzmann et al, 2011). Further research brought results regarding promotion of the employer brand. In a survey conducted by Minchington (2014), social media and career websites were the top two tools to enhance a company brand, with 76% of companies using social media and 64% of companies using career websites. Looking from a potential employee's perspective, 79% of job seekers are likely to use social media in their job search and 76% of job seekers prefer to apply through career sites (Glassdoor, 2016).

### 3. Methodological approach

The goal of this study was to investigate the extent to which Czech employers can attract potential employees from Generation Y, also known as Millennials. As a source of information based on the literature review in this paper, career websites and social media were selected. For our study, the top 60 Czech employers of the year 2016 announced in an annually conducted survey, TOP Czech employers (ČeSU & ASA, 2016), were chosen. This prestigious survey has been conducted since 2012 under the guidance of GfK in cooperation with Czech universities, student organizations and company partners. 8.530 respondents took part in the survey and voted for the top employers.

Our primary focus was to find out whether a job seeker belonging to Generation Y can find relevant information about employers on their career websites and social media sites which would help them decide on the best fit according to their preferences. We also wanted to identify companies that could be described as best employers for Millennials among the chosen sample. To reach the set goals, we analyzed career websites and social media sites searching for things that matter to Millennials. Our partial goals were formulated to research questions and hypotheses, which are listed in this chapter. The data were obtained by browsing relevant recruitment websites and social media sites of select employers by three independent experts, who also happen to be academics dealing with the issues of digital marketing and HR, have published on the subject, and have a minimum of 5 years of practical experience. The data acquired were evaluated according to the key principles of online marketing (Todaro, 2007; Strauss & Frost, 2012; Janouch, 2011) in the period March -August 2016. The use of online tools was evaluated by way of heuristic analysis, which is one of the most frequently used methods for website testing. Heuristic analysis is an unobtrusive research method that involves the use of non-reactive resources so that information is obtained without the subject's prior knowledge (Miller & Brewer, 2003). According to Gray (2009), unobtrusive measures can offer a flexible, creative and imaginative way of collecting data.

On career websites, we focused on the quality of the website, the communication of organizational culture and the employer's image (possibilities for employee growth, wellbeing, and information on recruitment process). We also wanted to find whether there was a relationship between those three variables.

Quality of career websites	Organizational culture information availability	Positive image creation, especially towards Generation Y
Existence of a career website	Explicitly expressed information about company culture	Information about opportunities for employee growth and development
Link to career websites	Clearly states company's values	Well-being
Job feeds	Information on CSR	Information for graduates
Profile registration	Long-term organizational aspirations	Information about personnel practices and principles of management
Personnel department contact	Presented positive work environment	Work/life balance
Personalized		
contacts		

Table 1. Career websites evaluating matrix

**RQ1**: Do the majority of the best Czech employers follow current (personal, recruitment) trends and use them in their communication on their career websites to attract Millennials?

On social media sites, we focused on social media strategy. For our purposes, we chose Facebook, YouTube, Twitter and LinkedIn. Facebook and YouTube are the most popular social networks in the Czech Republic. Twitter is on the rise and has huge potential, and LinkedIn is a representative of a professional network, also the largest professional social media network in the world and in the Czech Republic (Amidigital.cz, 2016; Socialbakers.com, 2016; Moreau, 2016). The evaluating matrix is shown in Table 2. Common criteria for all four social media which are not listed in the table below were company website link, career websites link and post frequency.

Facebook	LinkedIn	Twitter	YouTube
Strategy/presence	Strategy/presence	Strategy/presence	Strategy/presence
Primary focus on casual topics	Primary focus on employee acquisition	Primary focus on company news	Acquisition videos
Created/shared posts	Open positions postings	Open position postings	Casual videos
Organizational	Organizational		Organizational
culture information	culture information		culture information
availability	availability		availability
Positive image	Positive image		Positive image
creation, especially	creation, especially		creation, especially
towards Generation Y	towards Generation Y		towards Generation Y
	Contact for HR		
	employees		

 Table 2. Social Media evaluating matrix

Source: own compilation

**RQ2**: Do the majority of the best Czech employers follow current (personal, recruitment) trends and use them in their communication on their social media sites to attract Millennials?

Next, we analyzed companies based on different criteria in order to search for those that are the most attractive for Millennials. We used a cluster analysis to identify and separate the best companies from the sample in terms of the observed variables. The aim of the cluster analysis is to divide objects (in this case companies) into clusters so that the objects assigned to one cluster are close (similar) to each other, and objects assigned to different clusters are distant, i.e., dissimilar, from each other. The application of cluster analysis methods leads to positive results especially if the group of objects can in fact be broken down into categories, i.e., the objects have a tendency to form natural clusters (Hebák et al., 2007; Rencher & Christensen, 2012). Using a cluster analysis, we can identify a group of companies that stand out in terms of the observed variables; companies displaying low values in all the variables; and companies that excel only in some of the observed areas.

For the purpose of our analysis, it is suitable to use the hierarchical clustering procedure, which is based on the gradual clustering of objects from the most similar to most dissimilar. At the lowest level, each object forms an independent cluster, while at the highest level all objects make up one cluster. This procedure allows a comprehensive and detailed analysis of the structure of the dataset. The graphic output comes in the form of a so-called dendrogram (hierarchical structure), an accurate illustration of the clustering sequence at various levels. The dendrogram allows for the identification of individual clusters.

Determining the required number of clusters and the subsequent optimum division of objects into these clusters falls under non-hierarchical cluster analysis methods, which in practice are often supplemented by hierarchical procedures offering an initial (survey) clustering solution.

The distance matrix (of objects or clusters) clearly indicates the similarity or dissimilarity of individual objects or clusters. The Euclidean distance expresses the measure of similarity (distance) between objects. High values of distance indicate dissimilarity between objects. We have a group of n objects, each of which is characterized by p attributes (variables). The Euclidean distance  $d_{ij}$  between objects i and j can be determined as follows

$$d_{ij} = \sqrt{\sum_{k=1}^{p} (x_{ik} - x_{jk})^2},$$
 (1)

where  $x_{ik}$  is the value of variable k for object i and  $x_{jk}$  is the value of variable k for object j. As a method of clustering metrics, we chose Ward's method, one of the most effective and widely used methods in practice. Its principle lies in the minimization of heterogeneity of clusters based on the criterion of minimum increments in within-cluster error sums of squares.

$$ESS = \sum_{i=1}^{n_h} \sum_{h=1}^{q} (x_{hi} - \bar{x}_{C_h})^2, \qquad (2)$$

where  $n_h$  is the number of objects in cluster  $C_h$ ,  $\bar{x}_{C_h}$  is the vector of mean values of attributes in cluster  $C_h$  and  $x_{hi}$  is the vector of the values of attributes of object *i* in cluster  $C_h$ . This algorithm ensures that at each step of the clustering procedure there is a minimum increment in within-cluster error sums of squares (Stankovičová & Vojtková, 2007).

**RQ3**: Which employers are the most attractive for Millennials?

In our analysis, we focused on evaluating the relationship between the observed variables. Our aim was to determine whether there was a relationship between the three variables – the quality of career websites, communication of organizational culture, and the image of the organization.

H1: There is a dependence between the quality of career websites and communication of organizational culture.

H2: There is a dependence between the quality of career websites and the organization's image.

**H3**: There is a dependence between the communication of organizational culture and the organization's image.

The basic test used to determine the dependence between two categorical variables is the chi-square test of independence, which is based on the notion that if two attributes are independent, the distribution in a contingency table is proportionate to the row and column marginal frequencies.

Our next goal was to ascertain whether there is a dependence between the use of career websites and utilizing social media, i.e., if the organizations included in the study have a high-quality career website, do they also utilize social media at a high level?

**H4**: There is a dependence between the use of career websites and social media in recruiting Millennials.

Various coefficients are used to measure the dependence and its intensity (strength). Due to the nature of our data, Spearman's correlation coefficient  $r_s$  was chosen for the purpose of our analysis

$$r_{s} = \frac{\sum_{i=1}^{n} x_{ri} y_{ri} - n\bar{x}_{r} \bar{y}_{r}}{(n-1)s_{xr} s_{yr}},$$
(3)

where  $x_{ri}$  is the rank of value  $x_i$  (value *i* for variable *X*) in an ascending order of values  $x_1, ..., x_n, y_{ri}$  is the rank of value  $y_i$  (value *i* for variable *Y*) in an ascending order of values  $y_1, ..., y_n, \bar{x}_r$  is the average of values  $x_{ri}$  (average rank),  $\bar{y}_r$  is the average of values  $y_{ri}$  and  $s_{x_r}$  and  $s_{y_r}$  are the corresponding standard deviations.

The values of Spearman's correlation coefficient range in the interval  $\langle -1; 1 \rangle$ . The value 1 indicates a positive, direct correlation. If we arrange the values of variable X in ascending order and at the same time determine the descending order for variable Y, the coefficient equals -1 (negative, indirect correlation). It is possible to conduct a test of whether Spearman's correlation coefficient equals zero, i.e., it is possible to test whether the value of Spearman's coefficient is statistically significantly different from zero (Řezánková, 2011; Agresti, 2013).

All computations and analyses were conducted using SW Statistica.

#### **3.** Conducting research and results

To get an answer to the first research question, we analyzed the career websites of our top employers. For this purpose, we used the evaluation matrix as shown in Table 1. The results of the analysis are summarized in Table 3. Based on these results, employers were divided into four groups depending on the level of their career websites according to the examined criteria.

Career websites	Number of points	Number of employers
Poor	0 - 4	3
Fair	5 - 9	10
Good	10 - 14	43
Excellent	15 - 18	4
Average - 10.64, min 0, max	x 17	

Source: *own compilation* 

As can be seen in Table 3, the career websites of 78% (47/60) of employers contain information that is relevant for Millennials. Based on this figure, it can be stated that the answer to the first research question (RQ1) is yes – the majority of employers use current recruiting trends in their communication through their career websites to attract Millennials. These employers thus have a real potential to capture the interest of potential employees from Generation Y.

Table 4 contains the results of the analysis of the use of social media by top employers. The total number of points gained includes the evaluation of the use of all four social media networks – Facebook, YouTube, Twitter and LinkedIn.

Social media	Number of points	Number of employers
Poor	0 - 10	16
Fair	11 – 21	41
Good	22 - 32	3
Excellent	33 - 42	0
	Average 12.85, min 0, max 24	

 Table 4. Social Media results

As can be clearly seen in Table 4, the best employers did not achieve very good results, as was the case when evaluating their career websites. The average number of points gained per company is 12.85 out of a maximum number of 42, and the company with the highest rating reached only 57% of the maximum number of points. The answer to the second research question (Q2) is thus "no – the majority of employers do not use current recruiting trends on social media networks to attract Millennials." Companies lost the most points for their use of Twitter and YouTube. The reason for this is either employers do not have a company profile on Twitter or a YouTube channel, or they do, but fail to use it for business purposes. The company may boast about their use of social media, referring to them from their homepage or career page of their website, but these are not updated or contain absolutely irrelevant information.

For the purpose of a more detailed understanding of the use of social media to attract and recruit Millennials and for the reasons stated above, we excluded Twitter and YouTube from the research study. We believe that these two social media platforms are not as wellknown and popular among companies in the Czech Republic as Facebook and LinkedIn and therefore are not so commonly used that they would distort the social media evaluation results. The results of the analysis are shown in Table 5.

Facebook, LinkedIn	Number of points	Number of employers
Poor	0 - 5	9
Fair	6 – 11	31
Good	12 - 17	20
Excellent	18-22	0
Average 8.94, min 0, max 15		

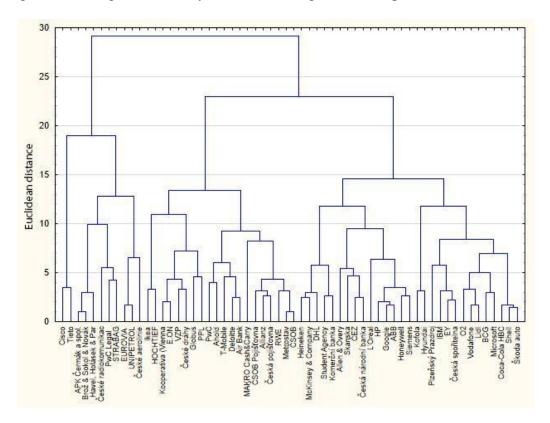
Table 5. Modified Social Media results

# Source: own compilation

Looking at the table above, it is clear that having excluded Twitter and YouTube, the number of companies that achieved a higher score in the use of social media sites to attract and recruit Millennials has significantly increased. It seems that our assumption about the insufficient use of YouTube and Twitter by companies in the Czech Republic was correct. For this reason, further evaluation of companies regarding social media questions will not take into account the use of Twitter or YouTube and the group of social media networks will only be made up of Facebook and LinkedIn. However, even if we based our research question (RQ2) only on Facebook and LinkedIn, we could not answer it in the affirmative (20/60 - 33%). The biggest drawback identified in the strategy/presence category is disrespecting the nature of the particular social medium.

Graph 1 shows the procedure of clustering employers based on the evaluation of their career websites and social media sites. The result of this analysis is the division of employers into subgroups based on the measure of similarity and thus also identification of employers that are most attractive for potential employees from Generation Y based on their career websites and social media results. This analysis resulted in the identification of employers that are most attractive for potential employees from Generation Y. The most attractive employers can be found on the right, where they formed two smaller clusters and subsequently merged to form a single cluster. The graph also indicates that employers situated on the left (Cisco and Czech Airlines) were assigned to the other groups in the last stage of clustering, and therefore are the most dissimilar from the above-mentioned group of attractive employers.

Based on clustering allocation, 6 basic clusters were identified. The number of clusters is not very important for the given analysis; what is crucial is identification of the most and least attractive employers for Generation Y. If we were to define seven or eight clusters, the allocation of companies to the best-rated and worst-rated groups would remain virtually unchanged, and changes would only affect the average-rated companies.



Graph 1.Dendrogram (linkage between clusters) based on career websites and social media results

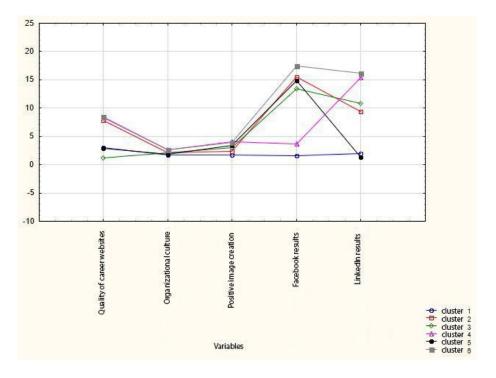
Source: own compilation

Table 6 shows the average values of observed indicators of individual employer clusters. Based on the information contained in the table, it is possible to define the groups (clusters) of employers that scored higher in the evaluation of their use of career websites and social media sites, and on the other hand, there are some clear "weak" spots of individual clusters, i.e., indicators with a low rating. At first sight, cluster 6 dominates, in which employers achieved above-average values in all selected indicators and are therefore attractive for Millennials. This cluster is made up of the companies shown in Table 8. Employers in cluster 1 received a below-average rating. Graph 2 graphically illustrates the data in Table 6, providing a more clearly arranged view of the comparison of the average values of all clusters. For a more detailed comparison of clusters and unequivocal identification of the similarity or dissimilarity between the various clusters, it is necessary to look at the Euclidean distances between the clusters as shown in Table 7.

Variable	Cluster average values					
v allable	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Quality of career websites	3.0000	7.8333	1.1539	8.3333	2.8750	8.5333
Organizational culture	1.7778	2.1667	2.0769	2.6667	1.8750	2.6667
Positive image creation	1.6667	2.4167	3.0769	4.0000	3.3750	3.9333
Facebook results	1.5556	15.5000	13.3846	3.6667	14.8750	17.4667
LinkedIn results	2.0000	9.4167	10.8462	15.3333	1.3750	16.1333

# Table 6. Cluster average values (career websites and social media)

Source: own compilation



Graph 2. Cluster average values Source: *own compilation* 

The following table 7 shows the distances between individual clusters. All of the entries on the diagonal are 0, since a cluster does not differ from itself (the distance from each cluster to itself is, of course, 0). Values below the diagonal are Euclidean distances, values above the diagonal are the respective squared Euclidean values. The most attractive cluster of employers is, as mentioned above, cluster 6. The most similar cluster to cluster 6, and therefore the second most attractive cluster of employers, is that which is at the shortest distance from cluster 6. Table 7 clearly indicates that this closest cluster is cluster 2. The Euclidean distance between clusters 2 and 6 is 3.22. Clusters 6 and 2 are followed by clusters 3, 4, 5 and the most distant, cluster 1. Companies assigned to the two most attractive clusters for Millennials are displayed in tables 8 and 9. These tables also provide an answer to the research question RQ3.

Cluster	Euclidean distance between each pair of clusters					
Cluster	1	2	3	4	5	6
1	0	54.7059	44.7335	43.3827	36.1483	97.8920
2	7.3963	0	10.3156	35.6083	18.1295	10.4043
3	6.6883	3.2118	0	33.4636	19.0032	20.0311
4	6.5866	5.9673	5.7848	0	70.2545	38.2249
5	6.0123	4.2579	4.3593	8.3818	0	51.4961
6	9.8940	3.2256	4.4756	6.1826	7.1760	0

Source: own compilation

Table 8. Employers from cluster 6

Škoda auto
Siemens
ABB
Honeywell
Google
Microsoft
HP
Hyundai
Česká spořitelna
Air Bank
EY
IBM
ČEZ

Table 9. Employers from cluster 2

Shell
Lidl
BCG
Vodafone
Plzeňský Prazdroj
Coca-Cola HBC
O2
Skanska
L'Oreal
Deloitte
PwC
Kofola
T-Mobile
Kofola

Source: *own compilation* 

By taking a closer look at the two clusters, we can identify their key characteristics. The cluster of the most attractive companies is mostly made up of large corporations that are very profitable and successful in the market. They are mostly companies with foreign participation that are among the largest market players either in the Czech Republic or worldwide. Thanks to their global reach, they constantly follow the latest trends, which ensures their competitiveness and leadership role in their industries. They are mostly companies operating in the automotive, mechanical engineering and ICT industries, plus a large share of companies in the consumer industry. Companies in clusters 6 and 2 have both high-quality career websites and social media presence. Both forms of communication are rich in information that is important for Millennials. In this paper, we labeled these companies the most attractive employers from the point of view of Generation Y.

The least attractive cluster of employers for Millennials consists of a variety of companies; however, certain dominant industries can be identified. Cluster 1 is mostly made up of Czech companies in the following industries: law firms and insurance, transport and logistics companies. Companies assigned to cluster 1 received a very low rating for their career websites and also a very low rating for their use of social media. For these reasons, they have a very small chance of capturing the attention of Millennials, who cannot find the relevant information on the key factors in deciding on their future employer when browsing the information sources of these employers. It is possible that these companies do not primarily look to hiring Millennials, and for this reason the attractiveness of these employers

is determined by other factors such as reputation and prestige (Strauss, 2016). The reasons why these companies do not focus on attracting Millennials as their employees and why in their communication channels they do not include factors that are relevant for Millennials in choosing a potential employer are a possible topic for future research.

For verification of the acquired results (i.e., to verify the clustering procedure and the division of employers into individual clusters) using Ward's method, the complete linkage method (furthest neighbor) was also used. As the clustering procedure and the assignment of employers to clusters was similar using both methods, we can consider the results to be consistent.

In order to verify or disprove the validity of our hypotheses H1, H2 and H3, we tested the independence of the variables in question using the  $\chi^2$  test of independence in a contingency table. Having performed this test, we were able to reject H1 and H2, and confirm H3.

The dependence between "the quality of career websites" and "organizational culture information availability" was not confirmed using this test. The p-value reached 0.248. Also, the value of Spearman's rank correlation coefficient reached a mere 0.249. To verify their independence, the Gamma coefficient was also computed based on measuring the concordant and discordant pairs of the participating companies. Its value (0.264) also indicates independence of the observed indicators.

The dependence between "the quality of career websites" and "positive image creation" was not proven, either. The values of the "positive image creation" variable are entirely independent of the values of the "quality of career websites" variable. The p-value reached 0.928; Spearman's coefficient 0.018, and the Gamma coefficient 0.019. That means that there is almost absolute independence between the variables in question.

On the other hand, dependence between the variables "organizational culture information availability" and "positive image creation" was proved. As the p-value reached 0.041, the hypothesis of independence of these variables was rejected by testing at the standard 5% significance level. Also, Spearman's correlation coefficient reached a statistically significant value of 0.421. The Gamma coefficient was 0.463. This indicates a medium level of dependence. These test results confirmed the theoretical assumptions stated in the previous section of this paper. The organizational culture, the key values of employers, the corporate social responsibility of a company and its long-term aspirations, and a positive working environment are factors that Millennials consider important when choosing an employer. What is also crucial for Millennials is information about opportunities for employee growth and development, well-being, and work/life balance. The analysis led to the finding that employers who focus on communicating their organizational structure also try to build a positive image for Millennials by presenting these factors on their career websites.

The results of the tests conducted are clearly summarized in Table 10.

Table 10. The results of $\chi^2$ test of	f independence, Spearman's	correlation coefficient and
Gamma coefficient		

	Quality of career websites vs. organizational culture information availability	Quality of career websites vs. positive image creation	Organizational culture information availability vs. positive image creation	
P-value	0.248	0.928	0.041	
Spearman's correlation coefficient	0.249	0.018	0.421	
Gamma coefficient	0.265	0.019	0.463	
Source: own compilation	วท			

We assumed that there was a direct correlation between the quality of career websites and the quality of social media sites used in recruiting Millennials, that is, a high quality of career websites speaks in favor of a high quality of social media, i.e., Facebook and LinkedIn. Spearman's correlation coefficient and the Gamma coefficient were again used to ascertain the intensity of this correlation. The result was a medium intensity of dependence between the quality of career websites and the use of Facebook to recruit Millennials. Spearman's correlation coefficient reached the value of 0.468 and the Gamma coefficient 0.436. A strong intensity of the correlation was proven to exist between the quality of career websites and the use of LinkedIn in recruiting Millennials. Spearman's correlation coefficient was 0.687, the Gamma coefficient then 0.649 (H4 is supported). From the practical point of view, this finding means that in addition to the use of career websites, companies also use social media for the purpose of recruiting Millennials, and vice versa. Employers either actively use all the options available or do not assign too much significance to career websites or social media and fail to use them. The highest degree of dependence was identified between the use of career websites and LinkedIn, where using Spearman's correlation coefficient we discovered that the higher the quality of a company's career website, the higher the quality of its LinkedIn page. In other words, if a company's career website is at a high level (the company received a high rating for its career website), its LinkedIn profile is also at a high level (it has a highly rated LinkedIn presentation). These findings are confirmed by a worldwide trend in the use of the professional social media site LinkedIn for the purpose of gaining new employees (Jobvite, 2016). A company that focuses on a high-quality career website prefers LinkedIn to Facebook in recruiting new employees.

Table 11 displays the answers to the research questions and hypotheses expressed in the chapter Methodology.

		Value	Result
RQ1	Do the majority of the best Czech employers follow current (personal, recruitment) trends and use them in their communication on their career websites to attract Millennials?	78%	YES
RQ2	Do the majority of the best Czech employers follow current (personal, recruitment) trends and use them in their communication on their social media sites to attract Millennials?	33.30%	NO
RQ3	Which employers are the most attractive for Millennials?	See tables 8 and 9	
H1	There is a dependence between the professionalism of career websites and the communication of organizational culture.	p-value 0.248	Rejected
H2	There is a dependence between the professionalism of career websites and the organization's image.	p-value 0.928	Rejected
Н3	There is a dependence between the communication of organizational culture and the organization's image.	p-value 0.041	Supported
H4	There is a dependence between the use of career websites and social media sites for the recruitment of Millennials.	Spearman – 0.468 and 0.687	Supported

Table 11. Overview of research questions and hypotheses results

### **Discussion and conclusion**

Many companies strive to be perceived as an "attractive" or even "the best" employer. Nowadays, this label represents a competitive advantage, thanks to which companies can attract talented employees from Generation Y. According to Manpower (2016), by the year 2020 this generation will make up 35% of the world's workforce, therefore, it is important that employers know their needs and requirements and know how to capture the interest of these prospective employees. One way in which companies can target these prospective job seekers is through the Internet. The Internet has become one of the most popular sources of information among job seekers from Generation Y, which is the result of the fact that Millennials have grown up in a world dominated by the Internet. The Internet has revolutionized the way people learn about companies and allows companies to build their own brand and image, thus making them more attractive. In this paper, we focused on whether companies utilize the Internet to attract Millennials. Based on professional literature, two main on-line communication channels were chosen - career websites and social media sites. The TOP 60 Czech employers in 2016 were chosen as a sample of employers for the purpose of this research, and thus it could be useful mainly for managers and HR staff of the organizations examined. The aim of our research study was to determine whether these employers can attract Millennials using their career websites and social media sites, and to identify those that could be described as the "most attractive employers for Generation Y". These employers were evaluated according to the career websites evaluating matrix and social media evaluating matrix, which were compiled based on a literature search and the identification of key areas for the decision-making process of Millennials when choosing a future employer. The results of our research study indicate that companies utilize career websites to attract Millennials (78% of employers); however, the use of social media sites is insufficient (only 33% of employers). There is room for improvement especially in the area of social media sites, thanks to which employers will gain new opportunities to attract employees from Generation Y. The evaluation of organizations resulted in a group of employers whose career websites and social media sites are at a high level, i.e., through these communication channels companies present the key factors that Millennials take into account when deciding on a future employer. This group consists of what can be described as the most attractive employers for Millennials. In terms of its composition, this group is made up of companies that are very successful in the market and are very profitable. They are mainly companies with foreign participation that rank among the largest companies in the Czech market or internationally. Thanks to their global reach, they constantly follow the latest trends, which ensures their competitiveness and leadership role in their industries. They are mostly companies operating in the automotive, mechanical engineering and ICT industries, plus a large share of companies in the consumer industry. The research results also confirmed the existence of a dependence between communicating the organizational culture and a positive image of the organization. Also confirmed was the dependence between the use of career websites and social media sites to attract and recruit Millennials, which in practice means that companies utilize the potential of all communication channels available (both career websites and social media sites) and are aware of the importance of these channels in communicating with Millennials, or on the other hand do not assign too much significance to them and thus their communication through these channels is at a low level. The biggest shortcomings were identified in the communication of organizational culture and positive image creation. A large number of employers did not include their long-term aspirations or information about opportunities for employee growth and development and, most importantly, there was no information on CSR – what the company has done or is doing in this area. Overcoming these shortcomings will help to increase their attractiveness for talented young people who are looking for a future employer.

# References

Agresti, A. (2013). Categorical data analysis. New Jersey, Hoboken: John Wiley & Sons.

- Allen, D. G., Mahto, R. V., & Otondo, R. F. (2007). Web-based recruitment: Effects of information, organizational brand, and attitudes toward a web site on applicant attraction, *Journal of Applied Psychology*, 92, 1696-1708.
- Ambler, T., & Barrow, S. (1996). The employer brand. *Journal of Brand Management*, 4(3), 185-206.
- Amidigital. (2016). *AMI Digital Index: dominuje YouTube a Facebook, začněte se ale učit Snapchat*. Retrieved September 19, 2017, from http://www.amidigital.cz/digikydy/ami-digital-index-dominuje-youtube-a-facebook-zacnete-se-ale-ucit-snapchat/
- Axelrod, E.L., Handfield-Jones, H., & Walsh, T.A. (2001). War for talent, part two. *McKinsey Quarterly*, 2, 9-12.
- Arachchige, B., & Robertson, A. (2011). Business student perceptions of a preferred employer: A study identifying determinants of employer branding. *The IUP Journal of Brand Management*, 8(3), 25-46.
- Backhaus, K., & Tikoo, S. (2004). Conceptualizing and Researching Employer Branding. *Career Development International*, 9(5), 501-517.
- Backhaus, K.B. (2004). An exploration of corporate recruitment descriptions on Monster.com. *Journal of Business Communication*, 41(2), 115-136.
- Baruch, Y. (2004). Managing Careers: Theory and Practise. PrenticeHall, London.
- Baum, M., & Kabst, R. (2014). The Effectiveness of Recruitment Advertisements and Recruitment Websites: Indirect and Interactive Effects on Applicant Attraction. *Human Resource Management*, 53(3), 353-378.
- Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: dimensions of attractiveness in employer branding. *International journal of advertising*, 24(2), 151-172.
- Cable, D. B., & Turban, D. M. (2001). Establishing the Dimensions, Sources and Value of Job Seekers' Employer Knowledge During Recruitment. *Research in Personnel and Human Resource Management*, 20, 115-163.
- Cable, D.M., & Turban, D.B. (2003). The value of organizational reputation in the recruitment context: a brand-equity perspective. *Journal of Applied Social Psychology*, 33(11), 2244-2266.
- Chandy, R. K., Tellis, G. J., MacInnis, D. J., & Thaivanich, P. (2001). What to say when: Advertising appeals in evolving markets. *Journal of Marketing Research*, *38*, 399-414.
- Czech Statistical Office (2017). *Age structure on December 31st, 2017*. Retrieved April 27, 2018, from https://www.czso.cz/staticke/animgraf/cz/
- ČeSU & ASA. (2016). Almanach Top zaměstnavatelé 2016, Praha: ASA.
- Deloitte (2016). Winning over the next Generation of leaders. *The 2016 Deloitte Millennial survey*. Retrieved May 5, 2017, from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-millenial-survey-2016-exec-summary.pdf
- Dineen, B. R., Ling, J., Ash, S. R., & DelVecchio, D. (2007). Aesthetic properties and message customization: Navigating the dark side of web recruitment. *Journal of Applied Psychology*, 92, 356-372.

- Eger, L., Egerová, D., & Mičík, M. (2015). Is the Generation Y looking for the employer with higher purpose?. In *Corporate social responsibility and human resource management in V4 countries*, Nitra: Slovak University of Agriculture, pp. 166-175.
- Egerová, D., Lančarič, D., Eger, L., & Savov, R. (2015). Perspectives of talent management: Evidence from Czech and Slovak business organizations. *Economics and Management*, 18(4), 108-120.
- Eisner, S.P. (2005). Managing Generation Y. Advanced Management Journal, 70(4), 4-15.
- Eurostat (2018). *Unemployment statistics*. Retrieved July 27, 2018, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment\_statistics
- Fombrun, C. (1996). *Reputation: Realizing Value from the Corporate Image*. Harvard Business School Press, Boston, MA.
- Gray, E. D. (2009). Doing research in the real world. London: Sage.
- Hebák, P. et al. (2007). Vícerozměrné statistické metody 3. Praha: Informatorium.
- Ipsos (2017). *Generace Y jako cílová skupina výzkumu*. Retrieved July 27, 2018, from https://www.ipsos.com/cs-cz/generace-y-jako-cilova-skupina-vyzkumu
- Gravett, L., & Throckmorton, R. (2007). Bridging the generation gap: How to get radio babies, boomers, Gen Xers, and Gen Yers to work together and achieve more. Career Press, Franklin Lakes, NJ.
- Highhouse, S., Zickar, M. J., Thorsteinson, T. J., Stierwalk, S. L., & Slaughter, J. E. (1999). Assessing Company Employment Image: An Example in the Fast Food Industry. *Personnel Psychology*, 52, 151-172.
- Highhouse, S., Lievens, F.,& Sinar, E. F. (2003). Measuring Attraction to Organizations. *Educational and Psychological Measurement*, 63(6), 986-1001.
- Hieronimus, F., Schaefer, K., & Schroder, J. (2005). Using Branding to Attract Talent. *McKinsey Quarterly*, 3, 12-14.
- Janouch, V. (2011). 333 tipů a triků pro internetový marketing. Brno: Computer Press.
- Jobvite. (2016). *The 2016 Jobvite Recruiter Nation Survey*. Retrieved July 5, 2017, from https://www.jobvite.com/wp-content/uploads/2016/09/RecruiterNation2016.pdf
- 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(2), 228-257.
- 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(3), 241-251.
- Lievens, F., & Highhouse, S. (2003). The Relation of Instrumental and Symbolic Attributes to a Company's Attractiveness as an Employer. *Personnel Psychology*, *56*(1), 75-102.
- Lievens, F., Van Hoye, G., & Anseel, F. (2007). Organizational identity and employer image: towards a unifying framework. *British Journal of Management*, *18*, S1, S45-S59.
- Lloyd, S. (2002). Branding from the inside out. Business Review Weekly, 24(10), 64-66.
- Lowe D., Levitt K.J., & Wilson T. (2008). Solutions for retaining generation Y employees in the workplace. *Business Renaissance Quarterly*, *3*(3), 43-58.
- Manpower (2016). *Millenial Careers: 2020 vision*. Retrieved September 5, 2017, fromhttp://www.manpowergroup.com/wps/wcm/connect/660ebf65-144c-489e-975c-9f838294c237/MillennialsPaper1\_2020Vision\_lo.pdf?MOD=AJPERES.
- Maxwell, G.A. (2005). Checks and balances: The role of managers in work-life balance policies and practices. *Journal of Retailing and Consumer Services*, 12(3), 179-189.
- MediaGuru (2017). *Mileniálové věnují 25 % času prohlížení webu*. Retrieved July 27, 2018, from https://www.mediaguru.cz/clanky/2017/02/milenialove-venuji-25-casu-prohlizeni-webu/

- Meier, J., & Crocker, M. (2010). Generation Y in the Workforce: Managerial Challenges. *The Journal of Human Resource and Adult Learning*, 6(1), 68-78.
- Miller, R.L., & Brewer, J.D. (eds) (2003). The A-Z of Social Research. London: Sage.
- Minchington, B. (2014). 2014 Employer Branding Global Trends Study. Retrieved September 19, 2017, fromhttp://www.brettminchington.com/single-post/2014/08/05/2014-Employer-Branding-Global-Trends-Study
- Ministry of Labour and Social Affairs (2018). Unemployment in June, 2018. Retrieved July 27, 2018, from

https://portal.mpsv.cz/upcr/media/tz/2018/07/2018\_07\_11\_tz\_nezamestnanost\_cerven\_2018.pdf

- Moreau, E. (2016). *The Top 25 Social Networking Sites People Are Using*. Retrieved September 19, 2017, from http://webtrends.about.com/od/socialnetworkingreviews/tp/Social-Networking-Sites.htm
- Moroko, L., & Uncles, M. D. (2009). Employer Branding and Market Segmentation. *Journal* of Brand Management, 17(3), pp. 181-196.
- Ollivier D., & Tanguy, C. (2008). Génération Y, mode d'emploi. Bruxelles, De Boeck.
- Perkins, L. A., Thomas, K. M., & Taylor, G. A. (2000). Advertising and recruitment: Marketing to minorities. *Psychology and Marketing*, 17, 235-255.
- PwC -PricewaterhouseCoopers. (2011). *Millennials at work: Reshaping the workplace*.Retrieved July 1, 2017, from https://www.pwc.com/en\_M1/m1/services/consulting/documents/millennials-at-work.pdf.
- Qenani-Petrela, E., Schlosser, J., & Pompa, R. (2007). Satisfied employees are worth their weight in gold: What motivates Generation Y? *Journal of Food Distribution Research*, 38(1), 113-118.
- Rencher, A. C., & Christensen, W. F. (2012). *Methods of Multivariate Analysis*. New Jersey, Hoboken: John Wiley & Sons.
- Řezánková, H. (2011). Analýza dat z dotazníkových šetření. Praha: Professional Publishing.
- Socialbakers (2016). *Social Marketing Report*. Retrieved September 19, 2017, from https://www.socialbakers.com/resources/reports/czech-republic/2016/
- Soulez, S., & Guillot-Soulez, C. (2011). Recruitment marketing and generational segmentation: a critical analysis based on a sub-segment of Generation Y. *Recherche et Applications en Marketing*, 26(1), 39-55.
- Strauss, K. (2016). An Annual Ranking Of The Most 'Prestigious' Law Firms In The U.S. In 2016. Retrieved September 19, 2017, from http://www.forbes.com/sites/karstenstrauss/2016/06/27/an-annual-ranking-of-the-mostprestigious-law-firms-in-the-u-s-in-2016/#43bd338b5078.
- Stankovičová, I., & Vojtková, M. (2007). *Viacrozmerné štatistické metódy s aplikáciemi*. Bratislava: IURA EDITION.
- Strauss, J., & Frost, R. (2012). E-marketing. New Jersey: Pearson Education.
- Thorne, K. (2004). One-stop guide: Employer branding. Sutton: Personnel Today.
- Todaro, M. (2007). Internet Marketing Methods. Ocala: Atlantic Publishing Group.
- Verma, D., & Ahmad, A. (2016). Employer branding: The solution to create talented workforce. *The IUP Journal of Brand Management*, 13(1), 42-56.
- Wayne, J. H., & Casper, W. J. (2012). Why does firm reputation in human resource policies influence college students? The mechanisms underlying job pursuit intentions. *Human Resource Management*, 51, 121-142.
- Weiss, A., & MacKay, N. (2009). *The talent advantage: How to attract and retain the best and the brightest*. Hoboken, NJ: Wiley.

- Williamson, I., King, J., Lepak, D., & Sarma, A. (2010). Firm Reputation, Recruitment Web Site Attributes, and Organizational Attractiveness Perceptions. *Human Resource Management Journal*, 49(4), 669-687.
- Xie, Ch., Bagozzi R. P., & Meland, K. V. (2015). The impact of reputation and identity congruence on employer brand attractiveness. *Marketing Intelligence & Planning*, 33(2), 124-146.