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Svetlana Bialkova, Emiel Ros*

Enhancing Employer Branding via High-Tech Platforms: VR and Digital, What Works Better and How -

Abstract

A growing concern for the future of organisations in the age of digital transformation challenges the existing theories and calls for new exploration. The current paper addresses this challenge looking at how virtual reality (VR), the most re-cently emerging technology could be best used to enhance employer branding. In particular, we asked potential job seekers to experience either a VR platform, online digital video, or both platforms combined to promote the employer. VR experience (i.e. naturalness, presence, engagement, liking) and employer evaluation (i.e. familiarity, image, reputation, perspectives, attractiveness) were addressed as dependent variables. The results are clear in showing that experience was evaluated and liked better when both, VR and digital video were presented, in comparison to a single platform experience. Employer image, reputation, and attractiveness were also higher when both VR and digital video were presented (than a single platform). The augmented employer evaluation further increased the intention to pursue a job with the employer. These results suggest that appropriate combination of VR and digital platforms could extend experiences, and thus, enhance the employer branding and job pursuit. Current outcomes could be directly implemented by managers to reshape not just the employer branding, but the future of organisations by implementing high tech VR platforms.

Keywords: VR, digital, corporate, branding
(JEL: J5, M5)

Introduction

With the implementation of digital technologies, organisations face a massive transformation in their work design and leadership (Schwarz Müller, Brosi, Duman, & Welp, 2018). As a result, the way they recruit, select and retain employees is changing. The recent technological advances, therefore, challenge management research to examine previous assumptions (Colbert, Yee, & George, 2016) and to

* Dr. Svetlana Bialkova, Liverpool Business School, Redmonds Building, Brownlow Hill, Liverpool, L3 5UG, United Kingdom. E-mail: s.bialkova@ljmu.ac.uk
Emiel Ros, Academy for Digital Entertainment NHTV, The Netherlands

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provide understanding on the real impact of digital transformation for the future of organisations (Durst, Temel, & Pia, 2019).

Part of the challenge is to build an image in the minds of the (potential) employees (Allen, Mahto, & Otondo, 2007; Berthon, Ewing, & Hah, 2005) that the organisation is a 'great place to work' (Ewing, Pitt, de Bussy, & Berthon, 2002) and the employer brand has competitive advantages (Keller, 1993). Although the employer branding lexicon was introduced a while ago (Ambler & Barrow, 1996; Gatewood, Gowan, & Lautenschlager, 1993), selecting strategies and (digital) tools that most appropriately extend and complement the employer brand is not an easy task.

Furthermore, previous studies addressing the digital transformation of organisations are not univocal on its efficiency, delivery and costs (Parry & Tyson, 2011; Stone, Deadrick, Lukaszewski, & Johnson, 2015). While some digital technologies have been used for a while (Dineen & Allen, 2013) and their effect on employer branding has been addressed previously (for a review see Stone et al., 2015), virtual reality (VR) is the most recently emerging technology, and its potential in employer branding has not been explored in full (Bialkova & Ros, 2019; Colbert, Yee, & George, 2016).

The goal of the current paper therefore is to understand: *Whether and how high tech virtual reality and digital video platforms could be used to best enhance employer branding? What works better and how?*

To answer the above questions, we focus on the effect of different platforms (VR and digital) on experiences and employer evaluation. In particular, the paper objectives are to provide understanding on: (a) how an employer is evaluated in terms of perceived reputation, image, perspectives, attractiveness, and (b) how these parameters are modulated by the type of the high tech platform used. We further ask: (c) how the experience and evaluation could navigate the intention to pursue a career with a particular employer.

To better understand the key parameters determining employer evaluation when potential labour market is exposed to high tech platforms (VR and digital), we first look at the experiences offered by these platforms.

The Potential of High-Tech Platforms: VR and Digital

Information technologies transformed the way organisations recruit, select and retain employees. Various forms of technology have been introduced to Human Resource Management, HRM (Parry & Tyson, 2011; Stone et al., 2015), ranging from passive one-way technologies (e.g. job boards, web-based job ads) to more interactive technologies (Web 2.0, social media, blogs, virtual job previews, online chat tools). Note however, previous literature is not univocal on the efficiency of HRM digitalisation. No direct indication was reported that attracting a large pool of talented and diverse job applicants has been actually enhanced by the

implementation of digital technologies (Allen et al., 2007; Chapman & Webster, 2003; McManus & Ferguson, 2003). It was further argued that technologies using static or one-way communication processes preclude interaction with organisational members and hardly provide detailed information to applicants about the job openings and the employer (Stone et al., 2015). Therefore, a more interactive way of communicating the job and the employer is needed.

Implementing emerging digital technologies was recognised as a way to enhance job previews and interactions, and thus, to increase the efficiency of employer communication (Stone et al., 2015). Job previews and employee's testimonials via digital video channels were incorporated, aiming to introduce the job as well as to endorse the working environment and the employer. While the role of digital (video) channels and web-based technology has been addressed in several studies before (e.g. Allen et al., 2007; Dineen & Allen, 2013; Parry & Tyson, 2011), the potential of virtual reality (VR) in employer branding and communication invites further investigation.

The concept of virtual reality as a computer-simulated 3D environment mimicking real life environments and scenarios (Steuer, 1992) has been introduced a while ago. Note however, VR currently is considered as one of the most promising emerging technologies in terms of business innovation (e.g. Alcañiz, Bigné, & Guixeres, 2019; Bialkova, 2019). The VR technologies enable users to experience places and environments in an immersive way (Lessiter, Freeman, Davidoff, & Keogh, 2001), even when one is physically situated in another environment (Witmer & Singer, 1998).

Taken the advance of VR technology to translate people in-between places and enabling them to experience various environments, we implement VR in the current context. More specifically, we assume that clarifying employer benefits and presenting the working environment as a desirable place to work (Berthon et al., 2005) will enhance the organisation's image (Stone et al., 2015). Therefore, we focus on providing VR experiences that may extend and compliment the employer environment.

Naturalness of the environment (Freeman & Lessiter, 2001), and perceived presence (Witmer & Singer, 1998) emerged as pivotal factors driving the VR experiences. Believability of the depiction of the environment itself and events within the environment determine its *naturalness* (Freeman & Lessiter, 2001). *Presence*, defined in terms of subjective experience of being in one place or environment (Witmer & Singer, 1998), may be achieved, even when one is physically situated in another environment (McMahan, 2003). Perceived presence was assumed to further influence engagement (Steuer, 1992). In the context of 3D VR environments, *engagement* reflects the degree of involvement and immersion (Freeman & Lessiter, 2001).

A recent study, in the context of VR application for entertainment industry, reported a causal relation between the above-mentioned parameters, namely naturalness and presence enhance engagement (Bialkova & van Gisbergen, 2017). A good engagement provides the feeling of being inside the environment which is experienced by the user. Furthermore, the more people were engaged within the VR environment the more they liked the VR experience (Bialkova & van Gisbergen, 2017). Put differently, *liking* the VR experience seems to be an important facet in experience evaluation (Bialkova, 2018, 2019).

As known from the brand-equity theory, liking and recommending a product/service correlates with the level of satisfaction when experiencing the product. A favourable experience would lead to a favourable brand evaluation (Aaker, 1996), and favourable evaluation implies superiority over other brands (Keller, 1993). Therefore, translating these theoretical notions in the current context, we ask whether and how VR platforms may augment the (employer) brand experiences, and thus, lead to favourable employer evaluation. We predict:

H1: Augmented experiences when VR and digital platforms are used together, in comparison to a single channel.

It is further expected that augmented experiences would lead to a better employer evaluation.

Factors Determining Employer Evaluation and Choice

Each employer wants to be evaluated positively by current and potential employees. Not surprisingly then, many companies have expanded recruitment efforts in properly advocating the employer brand. **Employer brand** defined as “the package of functional, economic and psychological benefits provided by employment, and identified with the employing company” (Ambler & Barrow, 1996, p.187) is central to the process of brand building.

Building strong brands is crucial to improve the efficiency of marketing programmes and to increase the competitive advantage (Keller, 1993). Note however, that creating an image in the minds of the potential employees (Allen et al., 2007; Berthon et al., 2005, Cascio & Graham, 2016) that the company is a ‘great place to work’ (Ewing et al., 2002) and the brand has competitive advantage (Keller, 1993) is not an easy task. **Employer image**, determined as the general impressions about the organisation (Gatewood et al., 1993; Ewing et al., 2002), consists of the job seeker’s own beliefs about the organisation (Cable & Turban, 2001). Job seekers may also have beliefs about how the organisation is evaluated by others, the latter known as reputation (Cable & Turban, 2001). **Employer reputation** is based on the firm’s position relative to competitors (Gatewood et al., 1993). Reputation was reported to be biased by affective evaluation components (Collins, 2007) and to further influence employer attractiveness (Cable & Turban, 2003).

Employer attractiveness is defined as the envisioned benefits that a potential employee sees in working for a specific organisation (Berthon et al., 2005). It was argued that positive experiences may increase brand attractiveness to employees (Highhouse, Lievens, & Sinar, 2003), its quality, pride, and engagement levels (Cable & Turban, 2003). Attractiveness was assumed to reflect not just job seeker's beliefs and experiences, but also might reflect job seeker's perception about how the organisation is evaluated by others, i.e. employer reputation (Cable & Turban, 2001). It was reported that when the job is offered by an organisation with a positive reputation, the given job is more attractive to job seekers (Gatewood et al., 1993). Other studies, however, claimed that reputation measures are employed in addition to organisation attraction measures and that the scales used are generally only moderately correlated (Highhouse et al., 2003). The discrepancy in previous findings invites further exploration on the relationship between the variables hypothesised to determine employer evaluation, i.e. image, reputation, attractiveness, and the willingness to pursue a career with a particular employer. We assume:

- H2: The more positive the employer image and reputation are perceived, the higher its attractiveness will be.*
- H3: The higher the employer attractiveness is, the higher the willingness to pursue a job with this employer will be.*

We take a step further and look whether and how employer attractiveness and thus willingness to pursue a career are influenced by the job perspectives (relative to functional, economic, psychological benefits). While the job benefits have already been addressed as important assets in the employer branding (Ambler & Barrow, 1996; Berthon et al., 2005), the notion of job perspectives invites further investigation. *Job perspectives* could be operationalised in terms of whether the organisation has good opportunities for career advancement, or the organisation would provide the type of job wanted (Collins, 2007). Therefore, we hypothesise:

- H4: The more positive the job perspectives are perceived, the higher the attractiveness will be, and thus the willingness to pursue a job with the employer.*

As the scope of the current paper is to understand whether and how high-tech platforms influence employer evaluation and choice, we will have a close look at the parameters defined above. In particular, we expect better employer evaluation with augmented experiences, i.e. when VR and digital platforms are combined, in comparison to a single channel. We assume:

- H5: Employer image, reputation, attractiveness, job perspectives, and willingness to pursue a job with the employer are higher when VR and digital platforms are combined.*

The hypotheses addressed are tested in a between-participants design study, as described in detail in the method section.

Method

To understand whether and how employer branding could be best enhanced, we conducted a study comparing the effect of various high-tech platforms on experiences and evaluation. The tech platforms (VR vs. digital video vs. VR and video combined) promoted the employer, a leading international insurer. After experiencing the tech platforms, participants had to complete a survey. Employer image, reputation, attractiveness, job perspectives, and the willingness to pursue a job with the employer have been addressed as dependent variables. VR and digital experiences were also evaluated.

Participants

90 (61 male and 29 female) respondents took part in the study. They were native Dutch, aged 18 to 28, potential job seekers. 55 % had an university degree (BSc or MSc). Majority of the respondents, 53 % reported that the leading criteria when they look for a job are functional (e.g., nice working environment, possibility for career/personal development), see Figure 1 for details.

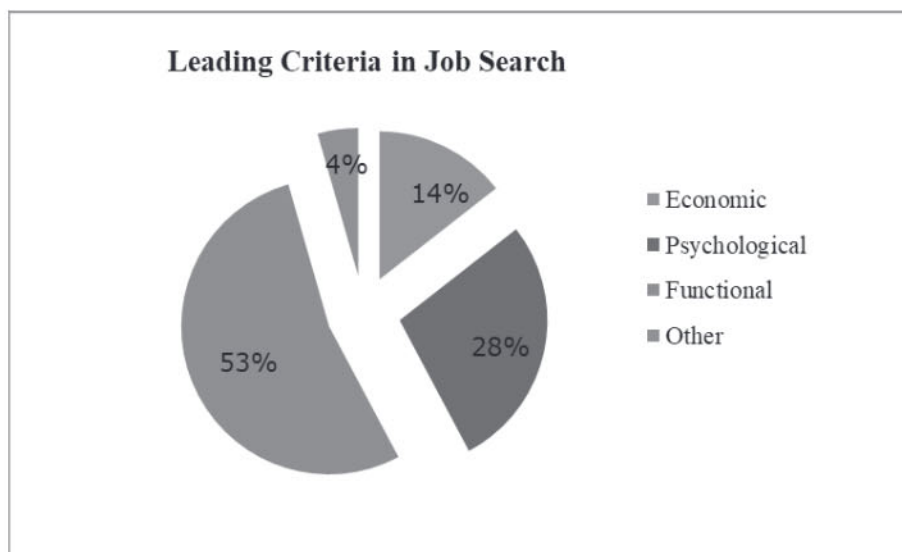


Figure 1. Leading criteria when looking for a job.

For 36 % of the participants, this was the first VR experience. 9 % considered to have intermediate knowledge about VR, 31 % considered to have basic knowledge, and 27 % had no knowledge about VR.

Respondents were assigned randomly to one of the three experimental conditions, as described below.

Stimuli and Design

One third of the participants experienced a VR platform, one third a digital video, and one third both the VR and the video. The VR environment was created by the technical team of our lab, and the video was selected from the YouTube channel of the employer. Both the VR and the digital video presented the employer work environment, see Figure 2 for screenshots. The video featured an employee introducing himself, presenting his department and the company in general. The video (lasting 2 minutes) was screened on a laptop. The VR platform offered experiences one might have when physically visiting the company, i.e. entering the main hall of the headquarters. The user can then navigate to 360-degree captures of an office space, a meeting room, and a dining corner when other employees have lunch together (reflecting the real physical environment). The VR application was run on Samsung Gear VR (Samsung Galaxy S6 smartphone), and Samsung headphone set was used to play the sound.



Figure 2. Screenshot examples from the VR platform (left panel) and the video (right panel).

Procedure

The study started with a short introduction and then a consent form was provided. In the second part, participants had to experience either the VR platform (condition 1), to watch the video (condition 2), or to watch the video followed by the VR platform experience (condition 3). In the third part, participants had to complete a survey. The survey encompassed respectively, video experience evaluation (after experiencing the video), VR experience evaluation (after experiencing the VR) followed by employer evaluation and questions capturing demographics. Section *Instrument* provides details on the constructs used in the survey.

Instrument

The VR experience evaluation encompassed constructs *naturalness*, *presence*, *engagement* and *liking*. Construct *naturalness* included 4 items, *presence* – 6 items, *engagement* – 3 items, and *liking* – 3 items (see Table 1). Constructs *naturalness*, *presence*, and *engagement* were adapted from Lessiter et al. (2001). Construct *liking* was adopted from previous studies on liking of VR experience (Bialkova & van Gisbergen, 2017). All items were measured with 7-point Likert scales (1 = strongly disagree, 7 = strongly agree).

The video evaluation included two constructs, *liking* and *experience evaluation* (see Table 1). Construct *liking* had 3 items, adapted in the current context based on classical marketing literature on liking of products and services (Aaker, 1996) and was validated in previous studies from our lab (Bialkova, 2019; Bialkova & Ros, 2019). Video experience encompassed 6 items, and it was self-developed, based on extensive literature review and pilots from our lab (Bialkova & Ros, 2018, 2019). All items were measured with 7-point Likert scales (1 = strongly disagree, 7 = strongly agree).

Table 1. Details on Constructs and Measuring Scales Used for Video and VR Experience Evaluation

Construct	Measuring scale	Cronbach's α
Video experience evaluation		
Liking	3 items; adapted from Aaker (1996) e.g., 'I would have liked the video to continue'	.72
Appraisal	6 items; Bialkova & Ros (2019) e.g., 'The video was enjoyable'	.84
VR experience evaluation		
Liking	3 items; adapted from Bialkova et al. (2017) e.g., 'I would have liked the VR experience to continue'	.85
Engagement	3 items; adapted from Lessiter et al. (2001) e.g., 'I felt myself being 'drawn in''	.73
Naturalness	4 items; adapted from Lessiter et al. (2001) e.g., 'The displayed environment seemed natural'	.82
Presence	6 items; adapted from Lessiter et al. (2001) e.g., 'I felt I was visiting the places in the displayed environment'	.80

The employer evaluation encompassed constructs *familiarity*, *reputation*, *image*, *job perspectives*, *attractiveness*, *intention to pursue a job with this employer* (see Table 2). The construct *Familiarity* (defined as the level of awareness that a job

seeker has of an organisation, Cable & Turban, 2001) had 3 items adapted from Collins (2007). Reputation construct included 6 items based on Highhouse et al. (2003). For employer Image, 3 items were adopted from Berthon et al. (2005). For Job perspectives, 8 items were adopted from Collins (2007). Attractiveness construct encompassed 4 items, adopted from Highhouse et al. (2003). For Intention to pursue a job with this employer, a 6-items scale was employed (based on Highhouse et al., 2003). All items were measured with 7-point Likert scales (1 = strongly disagree, 7 = strongly agree).

The demographics captured age, gender, education, top criteria when looking for a job, as well as previous VR experience and knowledge.

Table 2. Details on Constructs and Measuring Scales Used for Employer Evaluation

Construct	Measuring scale	Cronbach's α
Familiarity	3 items; adapted from Collins (2007) e.g., 'X is one of the first to come to mind when I think of an employer'	.58
Image	3 items; adapted from Berthon et al. (2005) e.g., 'It seems X has a happy working environment'	.73
Reputation	6 items; adapted from Highhouse et al. (2003) e.g., 'X is a reputable company to work for'	.83
Job perspectives	8 items; adapted from Collins (2007) e.g., 'X would provide me the type of job that I want'	.83
Attractiveness	4 items; adopted from Highhouse et al. (2003) e.g., 'X is attractive to me as a place for employment'	.90
Job pursuit (intention)	6 items; adopted from Highhouse et al. (2003) e.g., 'If I see a job opening at X, I would apply for it'	.87

Analytical Procedure

First, a reliability check was performed. The scales employed to evaluate the VR experience and video experience demonstrated a good reliability (all Cronbach's $\alpha > .7$), see Table 1 for details. The scales used for the employer evaluation, also demonstrated a good reliability (Cronbach's $\alpha > .7$), except the construct familiarity (Cronbach's $\alpha = .58$), see Table 2 for details. We turn to this point in the general discussion.

T-tests were conducted to investigate whether VR experience evaluation (i.e. naturalness, presence, engagement, liking) differs depending on the tech platform used

(VR vs. VR and Video combined). T-tests were conducted to explore whether video experience evaluation (i.e. liking, appraisal) differs depending on the platform used (Video only vs. VR and Video combined).

ANOVAs were run to investigate whether and how employer evaluation (i.e. familiarity, image, reputation, job perspectives, attractiveness, intention to pursue a job) depends on the type of the tech platform used (VR only vs. Video only vs. VR and Video combined). The relationship between variables hypothesised to determine employer evaluation were further explored with multiple linear regression modelling.

Results

VR and Video Experience Evaluation

Although, participants were equally engaged within the VR ($p > .7$), the experience was liked better when participants were presented with both platforms (VR and video combined, hereafter referred to as VRV) than only with VR, $t(58) = 2.15$, $p < .05$. The VR experience was perceived as more natural when both platforms were presented, $t(58) = 2.53$, $p < .05$. Perceived presence was higher when participants were presented with both platforms (VRV) than only with VR, $t(58) = 2.10$, $p < .05$. Figure 3 presents in detail the key parameters determining VR experience evaluation (naturalness, presence, engagement, liking) as a function of the platform used (VR vs. VRV).

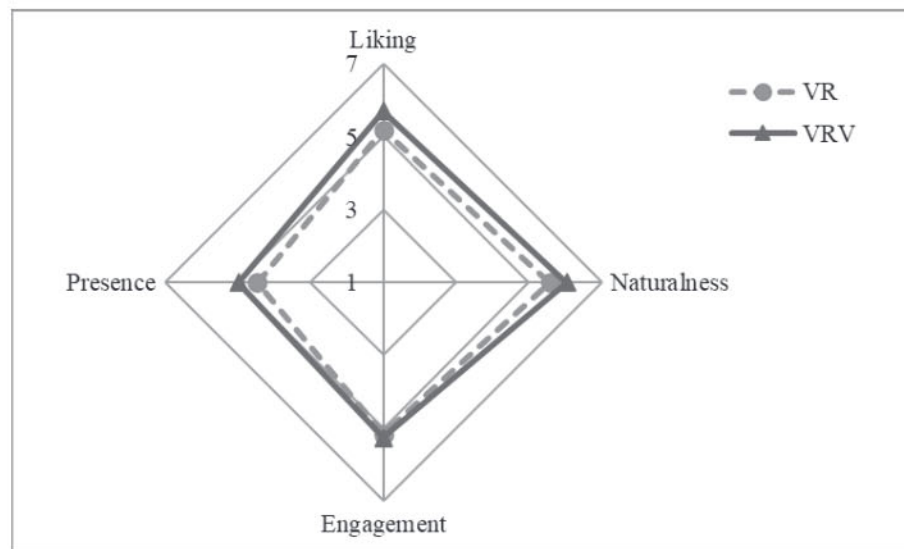


Figure 3. Key factors determining the VR experience, respectively when VR and Video were presented (red solid line) vs. VR only (blue dashed line).

Concerning the video, participants liked it better when being presented with both, VR and video combined ($M = 4.58$), than being presented with the video only ($M = 3.93$), $t(58) = 2.59$, $p < .05$. There was a tendency for a better video experience when both VR and video ($M = 5.11$) than only video was experienced ($M = 4.68$). Note however, this tendency was not substantiated statistically, $t(58) = 1.86$, $p = .068$.

Employer Evaluation

Employer reputation was evaluated to be highest after experiencing both, the VR and the video combined, in comparison to a single channel experience, $F(2, 87) = 8.88$, $p < .0001$ (see Table 3 for details). The same tendency, hold for employer image ($F(2, 87) = 5.39$, $p < .005$) and attractiveness ($F(2, 87) = 4.87$, $p < .01$), i.e., better image and attractiveness when VR and video were combined. Intention to pursue a job with the employer also was highest when participants were presented with both, VR and video, $F(2, 87) = 6.23$, $p < .005$. Neither familiarity ($p > .1$) nor job perspectives were modulated by the media used ($p = .066$).

Table 3. Summary of the Statistics for the Employer Evaluation, as a Function of the Platform Used

	VR	Video	VR & video	F value, p value
Familiarity	$M = 3.56$ ($SE = .18$)	$M = 3.19$ ($SE = .22$)	$M = 3.76$ ($SE = .21$)	$F(2, 87) = 2.03$, $p > .1$
Image	$M = 4.89$ ($SE = .15$)	$M = 4.98$ ($SE = .15$)	$M = 5.47$ ($SE = .09$)	$F(2, 87) = 5.39$, $p < .005$
Reputation	$M = 4.91$ ($SE = .11$)	$M = 5.20$ ($SE = .12$)	$M = 5.58$ ($SE = .10$)	$F(2, 87) = 8.88$, $p < .0001$
Job perspectives	$M = 4.89$ ($SE = .13$)	$M = 4.80$ ($SE = .12$)	$M = 5.20$ ($SE = .11$)	$F(2, 87) = 2.81$, $p > .05$
Attractiveness	$M = 4.25$ ($SE = .22$)	$M = 3.93$ ($SE = .23$)	$M = 4.90$ ($SE = .21$)	$F(2, 87) = 4.87$, $p < .01$
Job pursuit (intention)	$M = 4.22$ ($SE = .18$)	$M = 3.89$ ($SE = .16$)	$M = 4.73$ ($SE = .17$)	$F(2, 87) = 6.23$, $p < .005$

To better understand the relationship between variables hypothesised to determine employer evaluation, multiple linear regression models were performed, across all conditions. Employer image explained 26 % of the variance in attractiveness, $R^2 = .26$, $F(1, 88) = 31.16$, $p < .0001$. Adding reputation to the model slightly improved the explanatory power, $R^2 = .32$, $F(2, 87) = 20.14$, $p < .0001$. The better the image ($\beta = .32$) and the reputation ($\beta = .30$) were perceived, the higher the employer attractiveness was (see Figure 4). The results showed that the employer image and reputation also affected the way the job perspectives are perceived. The more positive the image was, the better the job perspectives were perceived, $R^2 = .26$, $F(1, 88) = 30.76$, $p < .0001$. Adding reputation to the model doubled its explanatory power, R^2

$=.51$, $F(2, 87) = 45.33$, $p < .0001$. Namely, the more positive the image ($\beta = .11$), and the higher the reputation ($\beta = .64$) were, the more positive the job perspectives were perceived. Job perspectives further affected employer attractiveness. The more positive the perspectives were perceived, the higher was the attractiveness, $R^2 = .36$, $F(1, 88) = 49.75$, $p < .0001$. Attractiveness influenced the intention to pursue a job, explaining 66 % of the variance in the intention. The more attractive the employer was, the higher was the intention to pursue a job with this employer, $R^2 = .66$, $F(1, 88) = 171.40$, $p < .0001$. Figure 4 summarises the outcomes of the regression modelling.

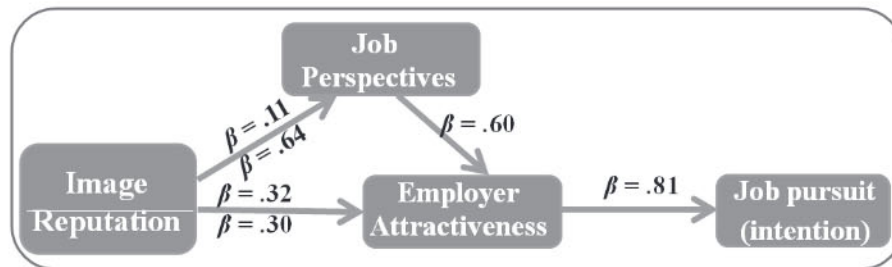


Figure 4. Summary of the regression modelling (Significant regression coefficients).

Discussion

The aim of the current study was to provide the needed understanding on the real impact of digital transformation for the future of organisations. In particular, we explored the potential of high tech platforms (Virtual reality and online digital videos) in employer branding.

We hypothesised augmented experiences when VR and digital platforms are used together (in comparison to a single channel). We further explored how augmented experience might enhance employer image, reputation, attractiveness and the willingness to pursue a job with the employer, depending on the type of the high tech platform used.

The Role of VR and Digital Platforms

Following market trends that VR is one of the most promising emerging technologies in terms of business innovation, brand leaders have begun expanding their portfolio incorporating VR and digital platforms (for an overview see Alcañiz, Bigné, & Guixeres, 2019). Emerging VR and digital technologies have been recognised as a way to increase the effectiveness of employer branding and communication (Stone et al., 2015; Bialkova & Ros, 2018, 2019). Yet, inviting further investigation to understand what works better and how, and thus, to optimise the efficiency of high tech platforms implication in the context of employer branding.

The current study addressed this issue in the challenge to select the marketing (communication) tools that most appropriately extend and complement the employer brand. The results are unambiguous in showing that appropriate combination of VR and digital video platforms might augment the experiences better than a single channel communication (**H1** confirmed). As a consequence, employer evaluation (e.g., image, reputation, attractiveness) as well as willingness to pursue a job with the employer were higher when VR and digital video platforms were combined, in comparison to a single channel (**H5** confirmed). These outcomes bring new insight on how to appropriately communicate employer branding, and thus, provide extra value in building a strong image and reputation.

Note that, although participants were equally engaged, the naturalness and presence within the VR environment were perceived better when both, VR and digital video platforms were experienced, than a single platform only (see Figure 3). Moreover, participants liked the experience better when both VR and digital video platforms were experienced (in comparison to a single channel). The more positive the naturalness, presence and engagement were perceived, the more the experience was liked, confirming previous findings for a causal relation between liking and the key determinants of the VR experience (Bialkova, 2019; Bialkova & van Gisbergen, 2017).

We have to point out here, that liking a product (and/or service) correlates with the level of satisfaction when experiencing the product, as known from the brand-equity theory. Thus, in the present context, a favourable experience is expected to create a favourable brand evaluation (Aaker, 1996). Put differently, augmented experiences should lead to a favourable employer evaluation. Fostering favourable image implies superiority over other brands (Keller, 1993) and would increase brand attractiveness to employees (Highhous et al., 2003).

Current results demonstrated that augmented experiences indeed led to a favourable evaluation (see Table 3 for summary of the statistics). The VR platform enabled participants to experience the workplace in an immersive way. Despite the fact they were physically situated in another environment (Lessiter et al., 2001; Steuer, 1992; Witmer & Singer, 1998), participants were well engaged. By transferring (potential) job seekers to the employer work environment in a natural and engaging manner (Bialkova & Ros, 2019), the VR platform offered possibility to visit, walk, and see whether the workplace is the desired one. As mentioned earlier, building an image in the minds of the (potential) employees that the company is a 'great place to work' (Allen et al., 2007; Berthon et al., 2005; Ewing et al., 2002) is not an easy task. In this respect, combining the VR platform with digital video channel might add extra value to the experience, to provide unique opportunity to enrich general impression about the organisation, and thus, to enhance the employer evaluation.

Key Determinants of Employer Evaluation and Choice

Employer image, reputation, and attractiveness have been addressed in various studies before, and recognised as potential drivers of employer branding (e.g., Berthon et al., 2005; Cable & Turban, 2003; Ewing et al., 2002; Gatewood et al., 1993). Note however, the scope of the previous studies was not on the role of VR and digital technologies in employer branding. In this respect, the current study provides a corner stone to build around.

Employer image, reputation and attractiveness were highest when both, the VR and digital video were experienced (see Table 3). Moreover, the higher the employer reputation and image were perceived, the higher the employer attractiveness was (see Figure 4). These results confirm **H2**, and nicely cohere with previous findings that employer attractiveness is biased by organisational image (Gatewood et al., 1993; Ewing et al., 2002) and reputation (Cable & Turban, 2001; 2003).

Employer attractiveness influenced further the willingness to pursue a job with the employer. Attractiveness explained 66 % in the variance of job pursuit, as the regression modelling reported (see Figure 4). The higher the employer attractiveness was perceived, the higher the willingness to pursue a career was, and thus, confirming **H3**. While previously only moderate correlation was reported (Highhouse et al., 2003), and thus questioning the relationship between hypothesised parameters, current outcomes are very strong in demonstrating correlation between employer attractiveness and willingness to pursue a job. A plausible explanation for difference in findings could be that the scope of the earlier study was not on the effect of the technological advancement, while our main manipulation concerned the potential impact of the high tech VR and digital platforms. As demonstrated hereby, these new platforms indeed modulate the employer evaluation and consequent job pursuit.

Another explanation could be found when closely looking at the parameters hypothesised as key drivers of employer branding. Note that in addition to image, reputation and attractiveness, we have also explored the role of familiarity and job perspectives.

Despite that employer familiarity was recognised as a factor in the recruitment process (e.g., Cable & Turban, 2001), it turns out that familiarity did not determine significant differences in employer evaluation (see Table 3). The scale used for familiarity (adopted from Collins, 2007) were just at the margin, Cronbach's $\alpha = .58$. Thus, we have been not able to substantiate statistically any correlation between familiarity and the other parameters hypothesised to be crucial for the employer evaluation. It may be however the case that our participants were not very familiar with the employer. Although speculative, this explanation is worth paying attention. It invites further investigation to establish the value of familiarity

in the recruitment processing, and to possibly expand communication efforts in enhancing familiarity with the employer.

Concerning job perspectives, regression modelling reported that both employer image and reputation play a role (see Figure 4). Job perspectives further modulated employer attractiveness, explaining 36 % of the variance in attractiveness, confirming H4. Further support for the impact of job perspectives came from the control question concerning leading criteria in job search (see Figure 1). The findings are in line with previous studies that job benefits (e.g., functional, economic, psychological) are important assets in the employer branding (Ambler & Barrow, 1996; Berthon et al. 2005). Moreover, managers should take into account current outcomes to advocate the job advantages through the high tech platforms as realised hereby, and found to be crucial for the employer branding.

Finally, as part of the design, we did additional analyses. Regression modelling reported that job perspectives also influenced the willingness to pursue a job with the employer, explaining 26 % of the variance in the model. Adding to the model attractiveness ($\beta = .77$) outperformed job perspectives ($\beta = .07$), $R^2 = .66$, $F(2, 87) = 85.92$, $p < .0001$. For a comparison, the model encompassing only attractiveness had a better explanatory power on job pursuit ($R^2 = .66$, $F(1, 88) = 171.40$, $p < .0001$), see Figure 4. These regression models clearly suggest that job perspectives have mediation role in the willingness to pursue a job via enhanced employer attractiveness, and thus are important assets in the brand building process.

Conclusions

Management research is challenged more than ever to disentangle the real impact of digital transformation for the future of organisations (Durst, Temel, & Pia, 2019). To address this challenge, the present study explored the potential of Virtual reality, currently considered as one of the most promising emerging technologies in terms of business innovation. In particular, a VR platform (mirroring real employer environment) was created offering possibilities to visit and see whether the workplace is the desired one. Current results demonstrated augmented experience when VR platform was presented, and this experience was further enhanced when combining both VR and digital video platforms.

Participants had the opportunity to experience the work environment in immersive and engaging manner, reflecting in a better liking and favourable evaluation. Current outcomes nicely cohere with classical marketing literature on brand equity, predicting favourable brand evaluation when a product is liked (Aaker, 1996), and thus, being a prerequisite in fostering a favourable image over other brands (Keller, 1993).

Moreover, combining the VR platform experience with digital video experience added extra value, enriching the general impressions about the organisation, and

therefore, extending the employer brand. In particular: (1) Extended branding via augmented experiences reflected in favourable employer evaluation. (2) Enhanced employer image and reputation influenced attractiveness, and consequent willingness to pursue a job with the employer. (3) The better the employer image and reputation were perceived, the higher was the attractiveness, and thus, the intention to pursue a job with the employer, as reported from the regression modelling (see Figure 4).

Current outcomes support previous findings that a job is more attractive when offered by an organisation with good image and reputation (Cable & Turban, 2003; Gatewood et al., 1993). Note however, other studies reported moderate correlation, and thus questioned the relationship between the above parameters (Highhouse et al., 2003). Present study provides very strong evidences supporting the relationship between employer image, reputation, attractiveness and the intention to pursue a job, possibly due to the impact of high tech platforms application. As reported hereby, the parameters determining employer branding have been modulated by the type of the platform used. In other words, the implementation of high tech (VR and digital video) platforms demonstrated augmented experience and enhanced employer brand evaluation.

Another important contribution of the current research concerns the complementation of the job pursuit model. Job perspectives (e.g., functional, economic, psychological) emerged as crucial factors driving employer attractiveness, i.e. the more perspective the job is perceived to be, the more attractive is the employer (see Figure 4). We have to point out here that the package of functional, economic and psychological benefits provided by employment has been recognised as a crucial determinant in employer branding, decades ago (Ambler & Barrow, 1996). However, for many years, leading brands struggled to find the marketing (communication) tools that best extend the employer brand, and thus, to most appropriately advocate it to the labour market.

Current outcomes show that today's development of technologies might provide solutions of the above challenge in an interactive, immersive and engaging way. Incorporating high tech VR and digital platforms might not just change the way employer brands are communicated but will open avenues for business innovations reshaping the future of organisations.

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References

- Aaker, D.A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38(3), 102–120.
- Allen, D. G., Mahto, R. V., & Otondo, R. F. (2007). Web-based recruitment: Effects of information, organisational brand, and attitudes toward a web site on applicant attraction. *Journal of Applied Psychology*, 92(6), 1696 – 1708.
- Alcañiz, M., Bigné, E., & Guixeres, J. (2019). Virtual Reality in Marketing: A Framework, Review, and Research Agenda. *Frontiers in Psychology*, 10, 1530–1545.
- Ambler, T. & Barrow, S. (1996). The employer brand. *Journal of Brand Management*, 4(3), 185–206.
- Berthon, P., Ewing, M., & Hah, L.L. (2005). Captivating company: dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2), 151–172.
- Bialkova, S. (2019). Consumers Journey Enhancement: The VR Impact. In *Proceedings of the 48th European Marketing Academy Conference, EMAC2019*, (Hamburg, Germany, May 28–31, 2019).
- Bialkova, S. (2018). From Indoor to Outdoor: How Virtual Reality Reshapes Advertising? In Bigné, E., ed. (2018). *Brand communication with multi touchpoints, ICORIA2018*, (Valencia, Spain, June 21–23, 2018).
- Bialkova, S., & Ros, E. (2019). Talent management: The potential of VR and digital innovations, In *proceedings of the European Academy of Management Conference, EURAM2019*, (Lisbon, Portugal, June 25–28, 2019).
- Bialkova, S., & Ros, E. (2018). Augmenting Employer Brand Experiences and Evaluation. The Role of Innovative VR and Digital Platforms. In Gounaris, S. et al., eds. (2018). *People make marketing. EMAC2018*, (Glasgow, UK, May 29 – June 1, 2018).
- Bialkova, S., & van Gisbergen, M.S. (2017). When sound modulates vision: VR applications for art and entertainment. In *Proceedings of the 3rd Workshop of Everyday Virtual Reality, IEEE VR2017*, (Los Angeles, US, March 18–22, 2017). IEEE Xplore Digital library.
- Cable, D. M., & Turban, D. B. (2001). Establishing the dimensions, sources, and value of job seekers' employer knowledge during recruitment. *Research in Personnel and Human Resources Management*, 20, 115–163.
- Cable, D. M., & Turban, D. B. (2003). The value of organisational reputation in the recruitment context: A brand-equity perspective. *Journal of Applied Social Psychology*, 33(11), 2244–2266.
- Cascio, W. F., & Graham, B. Z. (2016). New strategic role for HR: leading the employer-branding process. *Organisation Management Journal*, 13(4), 182–192.
- Colbert, A., Yee, N., & George, G. (2016). The digital workforce and the workplace of the Future. *Academy of Management Journal*, 59, 731–739.
- Collins, C. J. (2007). The interactive effects of recruitment practices and product awareness on job seekers' employer knowledge and application behaviors. *Journal of Applied Psychology*, 92(1), 180–190.
- Chapman, D. S., & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. *International Journal of Selection and Assessment*, 11 (2/3), 113–120.

- Dineen, B. R., & Allen, D. G. (2013). Internet recruiting 2.0: shifting paradigms. In K. Y. T. Yu, & D. M. Cable (Eds.), *The Oxford Handbook of Recruitment* (pp. 382–401). New York: Oxford University Publishers.
- Durst, S., Temel, S., & Ulvenblad, P. (2019). The future of organisations in the age of digital transformation – A critical discussion beyond marketing and buzz words. Editorial, *Management Review: Socio-Economic Studies*, This issue
- Ewing, M.T., Pitt, L.F., de Bussy, N.M. & Berthon, P. (2002). Employment branding in the knowledge economy. *International Journal of Advertising*, 21(1), 3–22.
- Freeman, J., & Lessiter, J. (2001). Here, there and everywhere: The effect of multichannel audio on presence. In *Proceedings of ICAD 2001*, (Espoo, Finland).
- Gatewood, R.D., Gowan, M.A. & Lautenschlager, G.J. (1993). Corporate image, recruitment, image and initial job choice decisions. *Academy of Management Journal*, 36(2), 414–427.
- Highhouse, S., Lievens, F., & Sinar, F. (2003). Measuring attraction to organisations. *Educational and Psychological Measurement*, 63(3), 986–989.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- Lessiter, J., Freeman, J., Davidoff, J., & Keogh, E. (2001). A cross-media presence questionnaire: The ITC-Sense of Presence Inventory. *Presence*, 10(3), 282–297.
- McMahan, A. (2003). Immersion, engagement and presence. A method for analyzing 3D video game theory reader, In *The Video Game, Theory Reader*, Mark J.P. Wolf and Bernard Perron, eds. (pp. 67– 86). New York, US: Routledge, Taylor & Francis Group.
- McManus, M. A., & Ferguson, M. W. (2003). Biodata, personality, and demographic differences of recruits from three sources. *International Journal of Selection and Assessment*, 11(2/3), 175–183.
- Parry, E., & Tyson, S. (2011). Desired goals and actual outcomes of e-HRM. *Human Resource Management Journal*, 21, 335–354.
- Schwarz Müller, T., Brosi, P., Duman, D., & Welp, I.M. (2018). How Does the Digital Transformation Affect Organisations? Key Themes of Change in Work Design and Leadership. *Management Review: Socio-Economic Studies*, 29(2), 114 – 138.
- Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of Communication*, 42(4), 73–93.
- Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216–231.
- Witmer, B. G., & Singer, M. J. (1998). Measuring presence in virtual environments: A presence questionnaire. *Presence: Teleoperators and Virtual Environments*, 7(3), 225–240.