

Navigating Consumer Minds: A Neuromarketing Perspective on Employer Branding in the IT Industry using Eye-Tracking

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Abstract

This research explores the effectiveness of employer branding campaigns within the IT industry through an eye-tracking analysis of the visual engagement of potential employees. The study tries to figure out what resonates in terms of branding through messages or images and, later, influences decision-making towards the brand by IT professionals and job seekers. The experiment was conducted with a randomized block design approach in which the subjects were divided into two groups: those working in IT at that time and others seeking a career in IT for the first time. All the subjects were exposed to six employer branding campaigns launched by top IT companies, and their eye movements were recorded with the help of eye-tracking devices. Heatmaps and scan paths resulted from the eye tracking analysis confirmed that, the areas that interested users the most were those text sections that dealt with career development, work-life balance, and job stability. Corporate imagery received relatively low engagement, especially from those participants looking for clear benefits. It was found that the text-laden sections were engaged with for significantly more time by the participants, especially those that were to derive practical benefits concerning the themes of career growth and flexibility in jobs. To sum up, this study states that eye-tracking technology offers objective insights into the visual interaction of IT professionals with branding campaigns in a way that is highly valuable for the optimization of employer branding strategies. Such results can afford companies with more precise and specific campaigns to target the information that will attract potential employees based on their needs and interests. The study can be used as a new contribution to the field of employer branding by testing how effective neuromarketing tools are in refining recruitment strategies based on a pattern of visual engagement. Thus, it gives an evidence-based approach to improving efforts of talent acquisition in the IT sector.

Keywords: Neuromarketing, Eye-tracking, Employer Branding, IT Industry, Visual Engagement.

JEL classification: M31.

Introduction

In the fast-moving world of the IT sector today, employer branding has become one of the powerful tools for attracting, holding, and keeping the best forces. In this regard, a company simply has to stand above the rival by having a strong and charismatic brand capable of winning the hearts of the prospective workers. This paper presents an eye-tracking study on how branding elements in images and text seize attention, catering to the needs of both IT professionals and potential seekers by offering insights through the key element neuromarketing.

Employer branding is the process of creating the identity of choice for people with talent to attract a company (Ambler & Barrow, 1996). The field of IT is part of a more competitive field; thus, employer branding is considered seriously relevant only in recruitment and retention strategies (Backhaus & Tikoo, 2004). On the other hand, measures of effectiveness in branding are mostly descriptive survey methods, having a high potential for self-report bias. To offset this, in the present research, eye-tracking was used to collect objective, real-time responses from participants on their interactions with branding campaigns.

This paper aims to study employer branding in a data-informed way, using eye-tracking technology. The study investigates the eye movements of IT job seekers to determine which elements of branding campaigns are most effective in capturing their attention and affecting decision-making. This will be of help in understanding the optimization of employer branding strategies with tools of neuromarketing.

1. Literature Review

Neuromarketing is a burgeoning field that merges neuroscience with the exploration of subconscious factors influencing consumer choices. It aims to understand how various stimuli affect emotions, perceptions, and decision-making processes, as highlighted by Ramsøy (2015). In today's competitive marketplace, neuromarketing enables organizations to delve deeper into the emotional and cognitive motivations behind consumer behaviors, which is crucial for capturing consumer attention. The applications of neuromarketing are vast, ranging from product design to enhancing advertising effectiveness, as noted by Kumar (2015), and it provides valuable insights into emotional bonding in branding (Arthmann & Li, 2017). Research indicates that approximately 70% of purchase decisions occur unconsciously (Krajnovic et al., 2012), emphasizing the need for marketers to investigate the subconscious elements that shape consumer preferences, a gap that traditional marketing research often overlooks (Boksem and Smidts, 2015).

Employer branding is crucial for organizations to communicate their values and culture to attract and retain talent, particularly in competitive labor markets (Ambler & Barrow, 1996; Backhaus & Tikoo, 2004). Utilizing neuromarketing techniques, such as eye tracking, can provide insights into candidate engagement with branding materials, revealing emotional triggers that enhance organizational attractiveness (Lee et al., 2007). Strong employer branding not only attracts candidates but also fosters employee engagement and retention, especially in the fast-paced IT industry where competition for talent is fierce (Hadi & Ahmed, 2018; Berthon et al., 2005).

2. Research Methodology

This study applied a holistic quantitative approach using eye-tracking technology to assess how job seekers engage with employer branding campaigns in the IT industry. The research design was set in a methodologically structured manner to detailly explain the subconscious visual engagement patterns and provide an objective evaluation of effectiveness in employer branding.

2.1. Study Design

This study adopted a randomized block design, the appropriate level of control over the variability among participants would be established, as well as a balanced representation regarding different demographic and professional backgrounds. The major classification involved segmenting respondents into two major groups: those already working as IT professionals and those seeking jobs to enter into the IT sector. This categorization was important in ensuring that different strata of the workforce would respond to the employer

branding campaigns differently and, hence, provide a comparative overview while taking into consideration experienced professionals and newcomers during data collection.

2.2. Purpose

This study has thus aimed to establish the factors which influence the effectiveness of employer branding strategies specifically in the IT business. This research aims at investigating and understanding the various determinants of the effectiveness of these strategies, focusing on how they influence prospective and current employee perceptions and choices. Thus, through identifying these processes, the study seeks to provide pragmatic implications that would assist IT organizations to enhance their branding strategy for more effective recruitment and retention of top talents.

2.3. Objectives

The scope of the research will be to critically investigate the various factors that attract and retain personnel in the IT sector. The Key areas of focus are expected to include:

1. To assess if and how different attributes of employer branding strategies, for instance, company reputation, remote work, career growth, passion for technology, the desire to make a positive impact through technology, salary affect potential candidates' motivation and decisions to take up IT related jobs.
2. Assessing how communication content together with campaign design elements jointly affects perceptions, attention, and motivation among the target audience.
3. Evaluate the effectiveness of employer branding campaigns in IT using eye-tracking to understand subconscious engagement patterns.

2.4. Hypothesis

The research study makes several critical assumptions on which the methodology of investigation is based. The first of these is that human visual attention can be captured by cognitive engagement and interest in the branding components. This implies that once attention has been drawn, there exist possibilities of cognitive processing being further activated and hence reception and engagement with the presented content. There has been sound evidence confirming that the characteristics of visual stimuli influence visual attention concerning them as gauged by eye-tracking indicators of fixation time which might indicate the level of cognitive involvement and interest (Orquin and Holmqvist, 2018; Rubo and Gamer, 2018).

Perceptions and preferences of participants toward workplace branding are alleged to be influenced by a concoction of inner and external factors. While interests and preferences are associated with intrinsic motivations, the nature of promotional content can be that external variable that makes all the difference. The above description underscores the complexities of decision-making processes and attempts to perceive the internal causes as well as the external stimuli that affect individual responses to workplace branding activities. Such as, the campaign having the salary element in its content is the most effective.

The experiment relies on the assumption of the preciseness of eye-tracking technology to unveil visual and cognitive reactions by participants towards brand cues beyond a superficial level and thereby demonstrate finer differentiations in attentional patterns and cognitive operations. This assumption thus indicates that eye-tracking data provides a unique insight for researchers about participants' complexity in engaging employer branding campaigns. (Lang, 2014; Wedel et al., 2019)

2.5. Participant Selection

A total of 30 respondents were considered for the study. Among them, 13 were currently working IT professionals fulfilling certain criteria and 17 were job seekers willing to make a career in the field of IT. The respondents were approached through an online survey link, social media websites, and with the help of specific IT professional networks. The inclusion criteria set ensured that the respondents have at least one year of experience (for professionals) or the minimum required qualification (for job seekers) in the IT sector.

The study aimed at selecting respondents carefully, making sure they belonged to different genders, ages, and experience levels to reflect the diversity that prevails in the IT industry. This sample was thus a representative one that could reduce bias, and let the research make more general conclusions about individual visual engagement patterns, across segments of the IT labor market.

2.6. Employer Branding Campaign Selection

Respondents were exposed to ten employer branding campaigns and analyzed six of them as shown in Figure 1. Respondents were at the time exposed to the two campaigns in the beginning where the respondents had the most focus, two other campaigns in the end where respondents had the least focus, from major IT companies based on their focus on various aspects of employer branding. The choice and exposure to the campaigns were made by me looking at the fact that I had eliminated the logo from each of the poster images so as to find out how specific text and images would influence the decision to apply for that company. The campaigns varied in terms of giving importance to the key employer brand elements – company reputation, remote work, career growth, passion for technology, the desire to make a positive impact through technology, salary. Each campaign used both text and visual compositions (such as pictures of employees and certain elements from that employer) to express the company's employer brand value proposition.

The campaign had to be diverse enough in style and message strategy for the study to judge the impact that differing approaches to employer branding might have on engagement. The campaign also had to reflect those branding styles most characteristic of the IT industry – from highly textual to visually driven, and everything in between.



Figure 1. The 6 employer branding campaigns that were analysed in the eye-tracking experiment.

2.7. Eye-Tracking Setup

The primary tool used was a high-tech eye-tracking device with the capacity to capture real-time data on patterns of visual engagement. Frequently utilized in eye-movement tracking because of the accuracy involved, it provides crucial details to the researcher about where the participants are looking, their duration of looking at specific elements, and in which pattern they scan visually through the elements. The eye-tracking device was calibrated before the start of each session so that measurements were accurate.

Each participant sat in front of the screen as the branding campaigns, in order, were shown. It recorded fixation duration, which is the time amount that the participant's eye spends on some element of branding material, and saccades – rapid eye movements between fixations points – to measure the flow of attention.

2.8. Data Collection and Analysis

The data obtained in the eye-tracking sessions was processed with post-analytics of heatmaps, scanpaths, and gridded AOIs. These visualizations aimed to show in detail where the participants paid their attention to and how they navigated visually through branding campaigns. Areas of the highest visual engagement are illustrated by coloring in heatmaps, which provides a quick overview of them. (e.g., red for high engagement, blue for low engagement).

With scan paths, you can see how attention flowed sequentially from one area to another – the course, in other words, that attention took in moving from element to element of this branding campaign. For example, a scan path might show that users first looked at a big headline and only afterward looked at images or subtext.

Gridded AOI analysis meant segmenting the branding materials (headline, subtext, images) and reporting what percentage of time subjects viewed or engaged with each segment. This data was very important in understanding which specific elements were most/least effective in capturing attention or driving engagement.

2.9. Ethical considerations

The study abides by ethical standards of confidentiality, informed consent, and data protection. All participants were informed regarding the objective of the study, and their identities were kept confidential throughout the research process.

3. Research Results

These findings are eye-tracking based insights into how potential employees in the IT sector and professionals engage with employer branding campaigns. Eye-tracking data brought out clear patterns of attention distribution and fixation duration and effectiveness on various branding elements in attracting interest. Each part of the results is supplemented by the corresponding visual data in the form of heatmaps, scan paths, and Areas of Interest (AOI) analyses, represented in the figures below.

In the first campaign, for the "intent group", a composite grid with numbers superimposed on an ad showing a female figure and the copy "never stop developing" points up regions of highest interaction around the headline of the primary text and the face of the woman. The group of IT professionals would then show either like patterns or some major difference in engagement that would center around the salient aspects of the content's focus and message, with the grid values specifying which elements do or do not catch the eye. The first heat maps use color gradients to show where readers are most intensely looking, red and yellow especially around major text and graphic features to indicate high engagement. Refer to Figure 2 for a comparison.



Figure 2. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the first campaign

For the second campaign, the results portray that importance of working remotely respondents for those planning to work in IT and already working in IT and a slight focus on the QR code. These are illustrated in Figure 3.

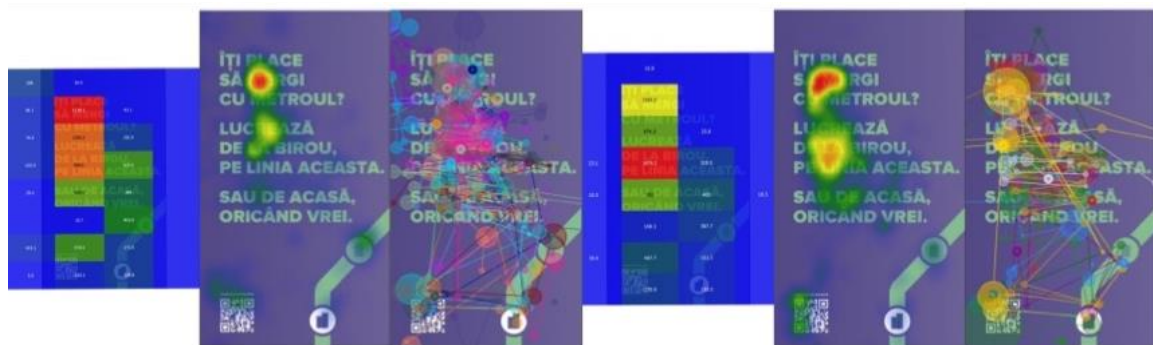


Figure 3. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the second campaign

In the third campaign, as clearly illustrated in Figure 4, the major differences are for those interested in working in IT, there is a distinct graphic image with color-coded areas implying increasing levels of attentiveness and putting special importance on key language parts such as "Tech moves fast. We move smartly." and "Write your success story with one of the fastest-growing IT companies," which infers—looking for a company that has room for career growth and financial security. If there is a comparison in the pattern of interaction for those already working in IT, then this hints at a consistency in viewer behavior towards textual information in advertising. If it is different, then this may imply a shift of attention, either bearing the nature of the message or visual layout.

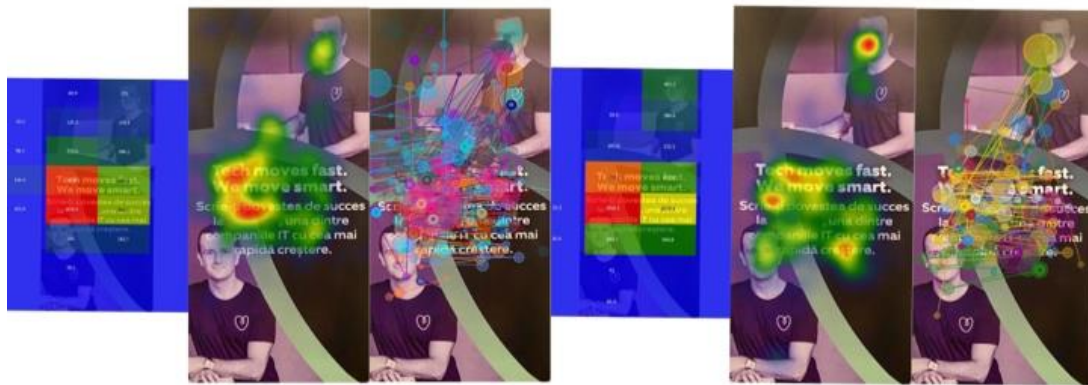


Figure 4. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the third campaign

The fourth campaign results in “People working in IT” details are numerically mapped across a few areas of an advertisement featuring a woman. The words “Say HI* Human Intelligence” and “We work on challenging projects in multidisciplinary teams” score high in attention value, stating that these areas of text are particularly engaging to the viewers and that one key aspect of getting hired is that the projects one will supposed to work on are very important. People who are already working in IT might see whether similar text segments or some other parts, like the woman’s face or any other graphic features, bring out more attention. The analogy can be observed in Figure 5.



Figure 5. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the fourth campaign

The fifth campaign testifies to the difference in the groups because the group that already works in IT picked out words like, "The intelligent & autonomous car of the future will run on your code," which should be indicative of an advertisement's key technological features. Meanwhile, the group that wants to work in IT paid more attention to the visual representation with the car images and road layout; some of them misunderstood the whole message of the campaign and they were even trying to find out if they know that roundabout or not. (Refer to Figure 6).

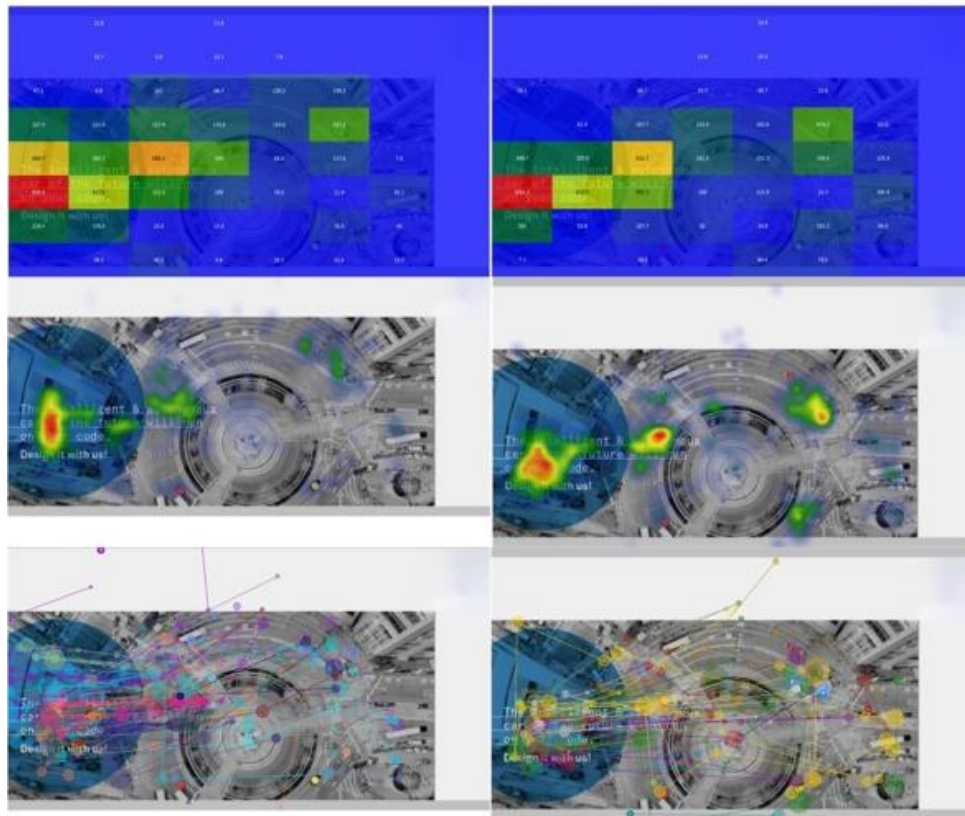


Figure 6. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the fifth campaign

For the sixth campaign, those currently working in IT place by far the most emphasis on salary, which was the most important criterion in selecting an employer, while those not currently working in IT but hoping to work in the industry divide their attention a bit more and also note the little man of the campaign, so much so that they are not giving salary as much weight as those already working in IT. See Figure 7 for the comparison.

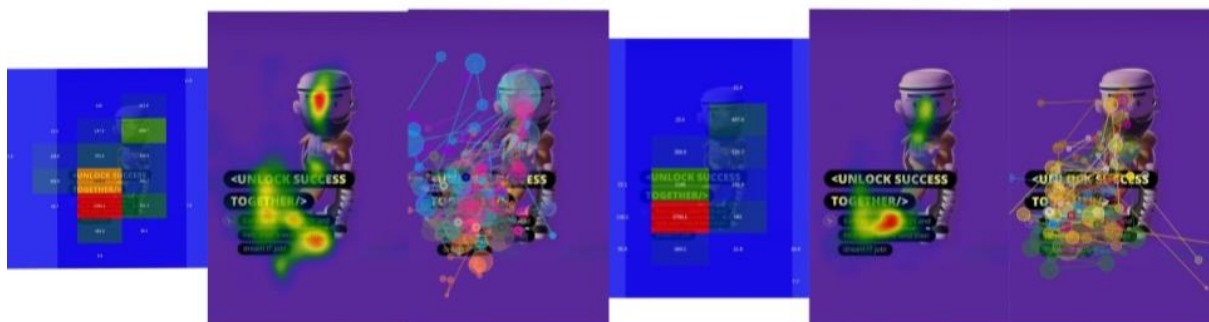


Figure 7. The Gridded Areas of Interest, Heat Map and Scan Path comparison between groups for the sixth campaign

Conclusion and Discussion

The results of this research can serve as strong reasoning for wider use of eye-tracking technology in access to effectiveness of employer branding campaigns, especially in highly competitive sectors like IT. Analysis proved that applicants react more positively to branding materials if these emphasize practical benefits and opportunities to advance a career. This brings support to the literature which puts more weight on emotionally resonant content in the process of talent attraction and retention (Backhaus & Tikoo, 2004).

The results of the eye-tracking analysis indicated that there was considerably higher engagement by participants with the text-heavier sections that explicitly noted job flexibility, clear career growth opportunities, and a supportive corporate culture. Prolonged fixations on specific wording like "Never Stop Developing" highlighted here seem to suggest that potential employees want actionable specifics, not abstract branding – even if the latter concerns corporate identity only. That is an indication that the information technology companies should change their approaches in developing employer branding by openly communicating what the candidates would expect from their experience while working for them.

The gap of who the current workforce in IT is and who the job seeker is further stresses the needed in branding messages to speak very specifically about what people will and will not be concerned about. Current professionals will be most concerned with issues of job security and the revelation of a salary, while job seekers are more concerned with stories of growth and personal development. This also is critical insight for HR professionals and marketers because it reinforces the final custom-tailoring messaging relative to the existing knowledge and pre-formed opinions of audiences about the company.

Moreover, if this study is anything to go by, then most employer branding campaigns that work should be designed to funnel potential employees through a coherent visual journey. The sequential eye fixations evident in the scan path analysis imply that branding materials should guide the candidate from general to specific details concerning employment opportunities and organizational values. That, in a structured manner, does the capturing of attention plus communicates what the organization uniquely offers in the most clear and engaging way.

This study enriches, with the practical application of neuromarketing tools, the strategies for attracting talents through recruitment and therefore makes a significant contribution to the field of employer branding. Yet, no man is without fault – it is likewise important to bear in mind the following limitations. Higher, in the present research is achieved at the expense of scope, as only quantitative measures were used with eye-tracking technology, leaving aside the quality part related to the perception of the candidate. The next step might be developing research that combines qualitative insights from, for instance, interviews or focus groups with eye-tracking data to fully understand how candidates comprehend and react to employer branding materials

Additionally, this study is of course a controlled environment and thus may not capture in full the complexities that define decision-making processes in reality. A possible line for further research would be to assess candidate perceptions in natural settings and observe how the different contextual factors impinge on engagement with employer branding campaigns.

Longitudinal studies need to be done to track the evolution of candidate perceptions spurred by employer branding initiatives over time. The long-term effects of such branding strategies on employee engagement and retention will provide organizations with the ability to better judge the utility of their initiatives.

As work life continues in its remote and digital manner, future research should explore the influence of virtual branding materials on the perceptions of candidates as the website and social media. It can also be critical to investigating how candidates interact with digital branding content through eye-tracking for effective strategies concerning online employer branding.

Even though employer branding campaigns are relatively new in the IT sector, it has been an interesting whirl analyzing eye-tracking metrics during this research. The research proved that the effective branding strategies should focus on the content designed to meet specific needs and aspirations of potential employees, especially in respect to career development and flexibility. Firms could also use these neuromarketing applications in developing an attractive

employer brand that will be relevant to their targeted recruit. This research equips IT companies with actionable steps in developing and improving their employer branding initiatives by emphasizing clear messages that bear benefits and answer personal and professional goals for the candidate.

Limitations and Future Researches

Limitations may include potential constraints with the sample size, participant bias related to self-reported data, and the known constraints of eye-tracking systems. Considering this last research limit, a future study can be done on the field, not in the laboratory, as conditions can change in terms of participants' attention, perturbation factors from the other people (such as those that will somehow cover part of the advertising just because the subway is crowded), as well as the time available in order to notice the ad (depending on the length of the travel).

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