

Application of the Instrumental-Symbolic Framework within an Employer Positioning Context: A Test Using Perceptual Maps

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This study investigates the use and validity of perceptual mapping as a tool for employer positioning from a human resources management standpoint. The main objective of this research aims at assessing the potential use of perceptual maps for employer positioning. Hence, based on the identification of singular attributes specific to every employer, this study tends to evaluate the incremental value that perceptual maps can offer to the development of a value proposition. Results show potential for the use of perceptual mapping within an Employer Branding context. Theoretical and practical recommendations concerning the application of this technique close the paper.

INTRODUCTION

Branding is well established as a marketing strategy (Gardner & Levy, 1955), and for most organizations today no market is more competitive than the market for employees. The employer brand establishes the identity of the firm as an employer. *"It encompasses the firm's values, systems, policies, and behaviors toward the objectives of attracting, motivating, and retaining the firm's current and potential employees"* (Conference Board, 2001; p. 10). As for Employer Branding (EB), it can rather be defined as: *"the effort to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer"* (Backhaus & Tikoo, 2004; p. 502). Implicitly, these definitions put emphasis on the importance of differencing the characteristics of a particular organization with those of its competitors. Thus, EB entails distinguishing the company's branding message so as to appeal to current and future employees, in a way that set it apart from competitors fighting for the same talent pool (Sutherland, Torricelli, & Karg, 2002).

In the literature, employer brand is generally conceived as resulting from a substantial process that is made up of three different stages. First, there is the elaboration of the *"value proposition"*. This proposition represents in concrete terms what an employer offers to his employees or to potential employees (e.g. a stimulating job, good working conditions). Secondly, the value proposition has then to be publicized through the promotion mechanisms given to the company (e.g. recruitment campaigns, employment agencies). The *"external"* marketing of the proposition aims mainly at attracting new talented candidates. Although promotion is usually made from outside the walls of the firm, it must be recognized that these promotional efforts do not go without influencing current employees' perception of the company. For example Lievens, Van Hove and Anseel (2007) found that employees grant significant

importance to the way their employer is perceived by the general population. Thirdly, the proposition's "internal" marketing represents the last stage of the process and aims essentially at promoting it within the company. It is on this last stage that rests all the success of the firm's strategy, considering the fact that it portrays the different aspects of the psychological contract on which is built the employees-employer relation (Moroko & Uncles, 2008).

Perceptual Mapping in Marketing

Analysis of consumer perceptions occupies, still today, a large place in the marketing literature, both on the scientific level (e.g. Bloom, Hoeffler, Keller, & Basurto Meza, 2006; Tamsamani, Mathieu & Parissier, 2007) and functional (or business) level (e.g. Carpenter & Moore, 2006). The majority of experts consider that perceptions are at the basis of marketing mix objectives determination of an organization, given their influence on consumer preferences (Murphy & Butt, 2007). Indeed, knowledge of a buyer's perception of a given object (e.g. a brand, a store or an advertisement) enables us to forecast their preferences for that same object (d'Astous, 2005).

Perceptual maps are used since the sixties by marketing managers to analyze consumer perceptions (e.g. Hauser & Koppelman, 1979). Hence they have the unique characteristic of making it possible to illustrate complex relationships between competitors in a market, and the attributes used by consumers to make their purchase decisions. They allow managers to have a global vision of the strengths and weaknesses of their product and service offering, in connection with those of their competitors (Lilien, Rangaswamy, Bruggen, & Starke, 2004). Two of the methods most commonly used by marketing specialists are Factor Analysis and Discriminant Analysis (Nargundkar, 2003). Factor Analysis is essentially a data reduction technique whose objective is to represent a group of attributes in a smaller number of what is commonly known as factors. Thus, after identifying the factors, they are used to position the compared products in the perceptual space (Malhotra, 2007). Similarly, Discriminant Analysis (DA) aims also at reducing a number of attributes to a smaller quantity of dimensions. However, DA targets attributes that demonstrate the strongest differences between products. As a result, DA usually produces a smaller number of dimensions than Factorial Analysis. Also, Factorial Analysis tends to create dimensions which contain a good part of the total variation, even if these dimensions do not significantly explain the differences between the compared products (Hauser & Koppelman, 1979). Preference for either of the methods depends on the main objective of the research.

Perceptual Mapping in Human Resources Management

Most specialists agree to recognize that the EB concept could contribute greatly to human resources management (Berthon, Ewing, & Hah, 2005; Ewing, Pitt, Bussy, & Berthon, 2002), and this notably by applying principles related to marketing theories (Ambler & Barrow, 1996; Cable & Turban, 2001). The literature on the subject provides a number of characteristics that might influence the success of an organization in terms of EB. Generally, researchers agree that two categories of different attributes should be retained, referring to the so-called instrumental and symbolic framework (Backhaus & Tikoo, 2004; Kausel & Slaughter, 2011; Lievens, 2007; Lievens & Highhouse, 2003; Lievens, Van Hoye, & Anseel, 2007; Van Hoye & Saks, 2010; Walker et al., 2011). The instrumental attributes refer to the factual conditions bound to the job occupied by the worker (e.g. basic salary, fringe benefits). As for symbolic attributes, they rather make reference to abstract and intangible perceptions of the benefits of working for a particular company (e.g. fun work environment, acceptance and belonging).

Research Objectives

The main objective of this study aims at assessing the potential use of perceptual maps for employer positioning. Hence, based on the identification of singular attributes specific to every employer (i.e. instrumental and symbolic); our study aspires at evaluating the incremental value that perceptual maps can offer to the development of a value proposition.

METHOD

Step 1 – Development and Validation of Independent and Dependent Measures

Participants

Sixty-three (n = 63) students, enrolled in business administration at a Quebec (Canada) University, participated in this first part of the study. Their age varies from 19 to 48 (M = 23.60; SD = 4.86). The sample consisted mainly of women (36; 57.4 %).

Procedure

First, we made a review of the literature of the most recent writings on the issue of EB and conducted a series of focus groups with doctoral students and university professors. The idea was to bring them to consider attributes that may appear in a value proposal made by an employer. This exercise helped produce a prior list consisting of 20 potential attributes. Each of the attributes on this first list was formulated as a generic statement (e.g. *Opportunities to take part in training and development activities*).

Secondly, the list of attributes was presented to a group of undergraduate students. Two specific instructions were given to participants: a) classify statements as to their capability to depict the level of attractiveness of a potential employer, by ranking first the statement which corresponded to a maximum level of interest, and last the one being linked with the least level of interest and b) score each statement, using a ten-point relative importance scale (0 = Not at all important for me; 10 = Very important for me). Rankings, means and standard deviations of each of the attributes appear in Table 1.

TABLE 1
RANKINGS, MEANS AND STANDARD DEVIATIONS OF THE EMPLOYERS ATTRIBUTES

	Ranking	M	SD
1. A fun working environment*	1	9.28	1.41
2. A competitive and above average salary*	2	8.23	2.24
3. The organization offer possibilities to balance work/life	3	6.61	2.79
4. An attractive <i>overall</i> compensation package*	4	8.30	1.42
5. Opportunities to take part in training and development activities*	7	8.03	1.81
6. A secure and healthy working environment*	5	7.43	2.36
7. Working for a prestigious organization (employer of choice)	15	3.84	2.53
8. Feeling good about yourself as a result of working for a particular organization	11	7.04	2.21
9. Recognition/appreciation from management	12	7.63	1.70
10. Working for an employer who respect human, morale and ethical values	13	6.40	2.54
11. Humanitarian organization – gives back to society	18	4.49	2.49
12. The organization produces high-quality products and services	19	4.21	2.19
13. The financial performance of the organization is high	17	4.05	2.14
14. Gaining career enhancing experience*	6	7.69	2.23
15. Having a good relationship with your supervisors*	10	7.16	2.46
16. Having a good relationship with your colleagues*	9	7.56	2.07
17. Inovative employer – novel work practice/foward-thinking	20	4.44	2.33
18. Job security within organization	8	6.86	2.07
19. Opportunity to travel (job related)	16	5.91	2.97
20. The organization is flexible in regards the way you accomplish your work	14	7.27	2.05

It should be noted that only attributes marked with an asterisk have been selected for the second part of the experiment. In order to be retained, an attribute needed to satisfy two conditions, that is, a) to be ranked in the top 10 for the attractiveness measure and b) to have an average score of at least 7 on the relative importance scale. Based on these indicators, and considering prior marketing research (e.g. Aaker, 2000; Ahluwalia & Gürhan-Canli, 2000; Meyvis & Janiszewski, 2002), only eight (8) attributes were kept.

The third step was the choice of companies to be tested, this to draw up a list of potential employers for the participants in the second part of the research. This selection was made by using business indexes found in the specialized print media. For the purposes of our study, we chose to use ranking indexes published by *Les Affaires* newspaper which publishes, among others, two business classification indicators, namely: a) a ranking based on profitability and b) a ranking based on popularity. Two key premises guided our judgment in the choice of the employers. First, to be retained, the companies had to be included in the list of the 100 most profitable Quebec companies. Then, those that met this criterion had also to appear in the list of the 150 companies most admired by Canadians. Finally, they had to be part of distinct industrial or commercial sectors and be easily recognizable by undergraduate business administration students. Backed up by these criteria we made a selection consisting of only five (5) employers. These employers, as well as their respective positions on each of the indexes, are presented in Table 2.

TABLE 2
LIST OF THE EMPLOYER CHOSEN AND THEIR RANKING ON THE TWO INDEXES

	Profitability index	Popularity index
A. Rona	4	5
B. Desjardins	1	53
C. IGA	3	21
D. Via Rail	87	30
E. Bombardier	7	22

Step 2 - Elaboration of the Perceptual Map

Participants

Sixty-one (n = 61) students enrolled in business administration at another Quebec University, participated in this second part of the study. Their age varies from 19 to 31 (M = 23.30; SD = 2.60). The sample consisted mainly of women (37; 60.1 %). No significant statistical differences between data coming from the first and second samples were found, leading us to conclude that the samples used for the purposes of this study are similar regarding to the age and sex of the participants.

Procedure

A questionnaire was administered to the second group of undergraduate students. Once again, participation to this second part of the study was on a voluntary and anonymous basis. Participants were required to evaluate the five potential employers using the eight attributes retained after stage 1, using a five point Likert scale (1 = Strongly disagree; 5 = Strongly agree). Employers were depicted in the questionnaire through the use of their corporate logos, on which the business name was clearly visible. Multiple versions of the questionnaire were produced, in order to vary the display of the employers and attributes, and to avoid any unwanted effect that could have influenced the outcome. The students were also notified to particularly pay attention to the meaning of each criterion while carrying out their

evaluations. Finally, students were also instructed to evaluate the employers with the viewpoint of occupying, after graduation, a staff position with each of them.

RESULTS

Preliminary Analyses

Skewness and Kurtosis were calculated in order to verify that all variables were normally distributed. Our observations indicate that all the variables in the study are distributed within the accepted limits of normality (Tabachnick & Fidell, 2006). The symmetry coefficients observed for each attributes range from -0.61 to -0.15 (SD = 0.14 to 0.15), while flattening coefficients vary between -1.04 and 0.66 (SD = 0.27 to 0.28).

Respect of Underlying Principles and Conditions

To ensure compliance with the conditions underlying the DA, we performed the Box and Wilks' Lambda tests. The Box test result gives an M value of 206.74 ($p < .01$). This enables us to conclude that intra-class covariance matrices are different. The Wilk's Lambda test allows us to verify if the mean vectors for the various groups are equal or not. For this second test, we obtained a result of 0.29 ($p < .01$), which enables us to conclude that at least one of the 5 group eigenvector means is different from another.

The DA produced a four factor solution. This is typical considering that the maximum number of factors is equal to $k-1$ (when $n > p > k$), where n is the number of observations, p the number of explanatory variables, and k the number of groups. Eigenvalues, proportions of explained variance as well as the canonical correlation coefficients related to each factors are displayed in Table 3. The first factor produced accounts for 71.77 % of the explained variance. A second factor explains 25.56 % of the variance. The two residual factors induced account for only 2.30% and 0.49% of the explained variance. Together, the first two factors monopolize 97.21 % of the variance produced by the eight explanatory variables, which therefore tends to confirm the existence of a two-dimensional perceptual space.

TABLE 3
FACTOR SOLUTION OF THE DISCRIMINANT ANALYSIS

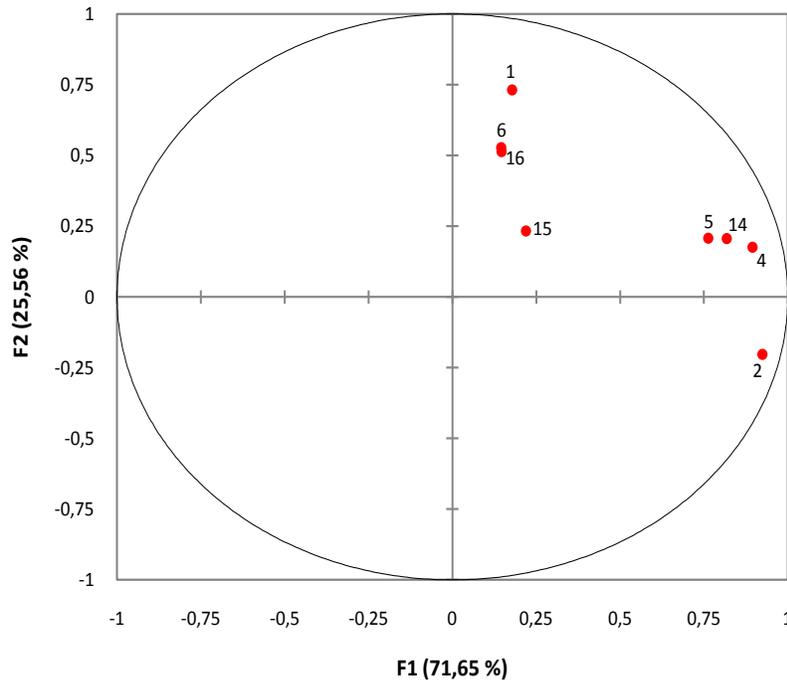
Factors	Eigenvalue	% of Variance	Cumulative %	Canonical R
1	1.26	71.77	71.77	0.75
2	0.45	25.56	97.21	0.56
3	0.04	2.30	99.51	0.20
4	0.01	0.49	100.00	0.10

Results of the Discriminant Analysis

The five selected organizations served as dependent variable for the DA, while the eight attributes served as independent variables. Graph 1 illustrates how the eight explanatory variables are correlated with the two significant factors. Reading the chart, it is possible to identify the attribute groupings contributing to the explanation of employer perceptions. Actually, it seems that the first factor represents instrumental attributes, namely: 2-*A competitive and above average salary* [Factor loading = 0.92]; 4-*An attractive overall compensation package* [Factor loading = 0.90]; 14-*Gaining career enhancing experience* [Factor loading = 0.82]; 5-*Opportunities to take part in training and development activities* [Factor loading = 0.76]. As for the second factor, it consists of symbolic attributes, namely: 1-*A fun working environment* [Factor loading = 0.73]; 16- *Having a good relationship with your colleagues* [Factor loading = 0.53]; 6-*A secure and healthy working environment* [Factor loading = 0.51]. The degree

of affiliation of all the attributes with their respective factor seems adequate, considering the fact that they hold a factor loading greater than 0.50 on the factor of attribution and lower than 0.35 on the opposite factor (Tabachnick & Fidell, 2006), except for attribute 15 (i.e. *Having a good relationship with your supervisors*), which cannot be clearly associated with any of the factors.

GRAPH 1
FACTOR AFFILIATION AND ATTRIBUTE GROUPINGS



Graph 2 presents an arrangement of the data such as issued by the participants in the study (n = 61) on both previously discussed factorial axes. This chart also enables us to locate the *centroids* corresponding to each of the employers. The centroids represent the average scores obtained by the five employers on both discriminate functions. They thus summarize the position of the employers in the space defined by the discriminant functions.

At first glance, it appears that respondents have perceived in the most favorable way the working conditions offered by employer B (i.e. Desjardins), and this, both in regards to the instrumental and symbolic attributes. This result explains the distinctive positioning of that particular employer in regard to the others.

An additional conclusion relates to the locations of the four remaining employers, which were divided into two distinct groupings. The location of the first grouping of employers, consisting of A (Rona) and C (IGA), shows that they have been less well perceived by respondents throughout their evaluation. This is accounted for, in particular, because of low scores held by these employers, as much for the instrumental attributes than for the symbolic ones.

As for the second grouping of employers, consisting of D (Via Rail) and E (Bombardier), it appears the respondents favorably perceived the working conditions offered by these employers on the instrumental attributes front, but to a lesser extent on symbolic attributes.

**GRAPH 2
CARTOGRAPHY OF EMPLOYER POSITIONING**

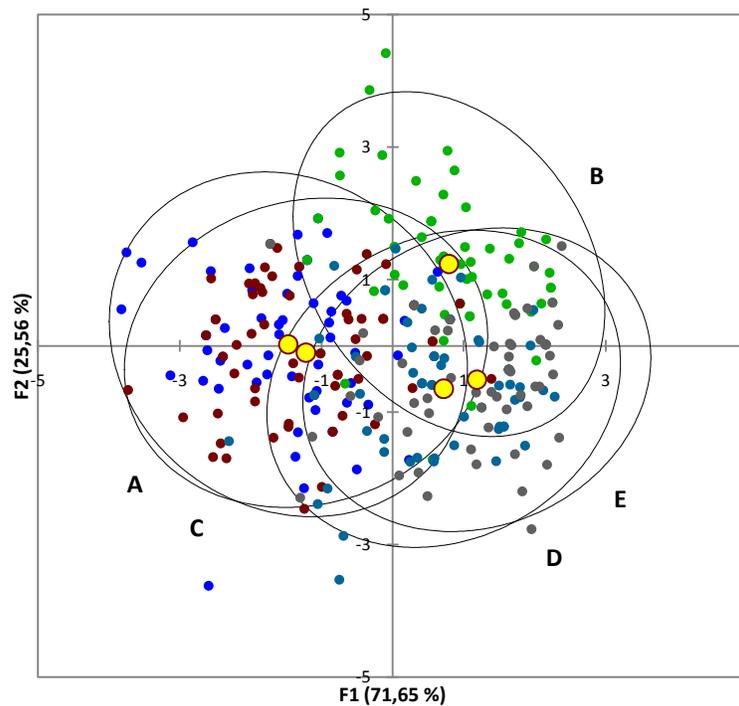


Table 4 depicts the confusion matrix used to assess the validity of the results generated by the DA. The genuine category memberships are displayed by rows, while those predicted by the analysis are distributed by columns. The last column of the matrix shows the rates (%) of successful reclassification, based on the information obtained for the eight attributes. A detailed analysis of the matrix allows us to corroborate the findings observed previously. In fact, it is not surprising that the company that was reclassified with the best success rate was Desjardins (77.05 %; 47/61), while Bombardier got the lowest rate with 52.46 % (32/61).

**TABLE 4
CONFUSION MATRIX FOR THE ESTIMATION SAMPLE**

	A	B	C	D	E	Total	%
A. Rona	38	5	15	1	2	61	62.30
B. Desjardins	2	47	2	4	6	61	77.05
C. IGA	18	2	34	1	6	61	55.74
D. Via Rail	2	5	4	37	13	61	60.66
E. Bombardier	3	9	2	15	32	61	52.46
Total	63	68	57	58	59	305	61.64

Overall, the five employers have been reclassified with a success rate of 61.64% (188/305), which is much higher than the percentage of assessments that would have been assigned to employers by chance (i.e. 20.00%). Further analysis of the matrix allows us to point out that the vast majority of bad

reclassifications are for the two employer groupings previously identified. Thus, the majority of assessments wrongly classified for IGA were assigned to Rona (66.66%; 18/27), while the reverse has occurred in 65.22 % (15/23) of cases. Similar results were observed for Via Rail and Bombardier. As a matter of fact, we notice that the majority of evaluations incorrectly classified for Via Rail were credited to Bombardier in a 54.16% (13/24) proportion, while the opposite occurred at a rate of 51.72 % (15/29).

DISCUSSION

First, it is important to mention that the observed findings, although they do have some rallying features, also show some fogginess. In fact, it appears that regarding the working conditions offered by Desjardins, the average perception of the participants is clearly distanced in regard to that of the other employers. As shown previously, the other four employers have been split into pairs. De facto, based on our observations, we are tempted to conclude that the perceptual map only allows discriminating between three categories of employers, namely those that have to do with: a) retail, b) transport and c) financial services. Clearly, the analysis did not distinguish between Rona and IGA. It seems likely that the majority of participants considered that working conditions are similar in both these organizations, and this, despite the guidelines that had been given to them. The fact that Rona and IGA are both in retail probably explains much of this connection. To a lesser extent, Via Rail and Bombardier were also linked by the participants. It may be assumed that working conditions in these two companies were less well-known by the students and that because they both are related to transport, they may have been drawn together in the minds of the participants.

Complementary analysis allows us, once more, to bring some support to our observations. At the end of the experiment, we asked the respondents to tell us for which employer they would prefer working after graduation (i.e. employer of choice). The results are in line with our findings. Employers have been chosen by participants in the following proportions: 49.18% (30/61) for Desjardins; 26.23% (16/61) for Bombardier; 19.67% (12/61) for Via Rail; 4.92% (3/61) for IGA and no participants have picked Rona.

Limitations, Considerations and Futures Recommendations

A first limit centers on the choice of the attributes for judging the level of attractiveness of a given employer. The attribute list used in this study partly resembled that of Berthon, Ewing and Hah (2005). Hence it is possible that these attributes may be more appropriate for capturing the attractiveness of a given employer, which only represent a portion of the EB reality characterizing that same employer. This being said, we understand that there are numerous ways of defining the attributes comprised in a value proposal promoted by an employer. Some relate to working conditions (e.g. Ambler & Barrow, 1996; Berthon, Ewing, & Hah, 2005; Lievens & Highhouse, 2003), some focus on workers' values (e.g. Stinghamber & Vandenberghe, 2004), while others relate to specific elements of the corporate personality (e.g. Davies, 2008; Davies et al., 2004). Considering our results, despite agreement between researchers in regard to the importance of symbolic attributes for the perception of organizational attractiveness (e.g. Highhouse, Thornbury, & Little, 2007; Lievens, 2007; Lievens & Highhouse, 2003; Lievens, Van Hoye, & Schreurs, 2005; Slaughter, Zickar, Highhouse, & Mohr, 2004), we know little about the antecedent of these attributes or how they develop in the mind of job seekers (Walkers et al., 2011). Past studies, including ours, have used presently available proxies in order to capture the quintessence of symbolism. Still we lack a clear understanding of what actually constitute symbolism and how organizations can manage their symbolic brand image. Hence, we think that more research efforts are needed in order to clarify the nomological net linking each dimension of these typologies to EB, and thus enable employers to elaborate perceptual maps using valid and significant attributes that better capture the essence of their own reality.

A second limit deals with the choice of the various employers acting as the dependent variable in the study. On this, our results are clear. The selected employers do not all activate the same cognitive scheme among the participants. Some of them knew at least one of the employers better than the others. To this we must also add the potential effect of the geographical location of the employers. It may therefore be

difficult for a student (or even a future employee) to accurately evaluate an employer he does not know, or even worse, an employer for which he will probably never even want to work for.

Due to its exploratory nature, we cannot generalize the findings observed in our study to other populations than that of university students. In this regard, Calder, Philips and Tybout (1981) argue that students can be acceptable theory-testing subjects when the object of study is to evaluate the multivariate relationship among constructs (our case), rather than the univariate differences between distinct samples (e.g. students vs workers). It is our opinion that, because they are a year or two away from entering the job market, students may be considered ideal candidates for employer advertising and recruitment campaigns. Also, we only studied the application of perceptual maps for the sake of positioning employers of future workers (see students), while the application of such a technique could yield some significant potential for assessing how clear the value proposal of a given employer is, by using its employees as the target population (Lievens, Van Hoyer, & Anseel, 2007; Van Hoyer & Saks, 2010).

Thus, several lines of thought are offered to the application of perceptual maps with regard to EB. Obviously, future researches are needed in order to deepen the investigation initiated by this study, in order to better understand the mechanisms underlying employer positioning.

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