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Making the Case: Classroom Case Study Exposure as a Strategic Brand Touchpoint

By Robert Mackalski[*]*, Seth Polsley*[±] *& Kasey Uran-Linde*[°]

Business case studies are very popular educational pedagogy which expose students to brands in educational settings. Yet, little research has examined whether this exposure influences brand advocacy or employment interest. This exploratory study examines the classroom case study as a potential strategic brand touchpoint and investigates whether experiential interactions in the classroom boost these effects. Using a quasi-experimental, two-group pre-post design, 402 undergraduate marketing students read the same case featuring a well-known regional brand. The treatment group interacted with the case protagonist (a company representative), and sampled the company's product before completing the post-test. The control group received the experiential interventions with the case protagonist and product after taking the post-test. Both groups had increased likelihood of recommending the brand following case exposure. The effect was significantly greater in the experiential treatment group. Employment interest also increased in both groups, with significantly stronger gains among students receiving the experiential treatment. The findings provide initial evidence that classroom case exposure may influence brand advocacy and employer attractiveness. The findings also provide early indications that experiential elements can strengthen these effects. The study positions case-based education as an underexamined setting for brand equity formation and suggests that company participation in case-based learning may offer benefits extending beyond the classroom.

Keywords: *brand equity, case method, experiential learning*

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Introduction

A common brand touchpoint for many emerging professionals is the time-honored business case study. Pioneered at Harvard University, case studies have been used in business schools worldwide for over 100 years. A recent report found that Harvard Business School (HBS) devotes 80% of students' education to cases, compared to 75% at Ivey, 74% at Darden, 70% at IESE Business School, and 50% at Dartmouth (Quinn, 2022a). Case publication is big business, with massive distribution from Harvard, Ivey, Darden, Yale, Thunderbird, and other prominent schools. In 2024, Harvard alone sold ~17 million case studies globally, a figure that has risen year after year (Harvard Business School, 2024). While case studies are a ubiquitous feature of management classrooms, they may be underused by firms as a means of brand exposure, one that can shape brand meaning and employer attractiveness in ways worth measuring.

Case studies illuminate the operations of real-world companies by immersing students in the perspective of a decision-maker — often a business owner, company founder, CEO, or other stakeholder — who is tackling a problem. Through the detailed narrative of a case study, students engage in a self-guided learning process by placing themselves in the protagonist's shoes to develop their own solution (Quinn, 2022b). Cases also offer content for collaborative learning through class discussions. To heighten the interactive, experiential aspects of the case method, instructors may invite the case protagonist or another company representative as a guest speaker, and/or bring product samples or other relevant materials into the classroom. From a branding perspective, these guest speakers can act as influential representatives of the brand.

For marketing professionals, classroom case study assignments have special value because they provide students with the kind of information exposure that David Aaker (1991) and Kevin Lane Keller (1993) deem instrumental in the construction of brand meaning. According to brand equity theory, brand meaning is constructed through cumulative associations formed via information exposure and high-involvement processing (Aaker, 1991; Keller, 1993). By exposing students to information about brands, case study assignments and discussions help develop brand meaning among future generations of managers and decision-makers. Firms featured in widely adopted business cases thus have the potential to shape brand associations and employer attractiveness in ways largely unobserved and unmeasured in the literature.

These potentialities raise questions about case study methodology as an intervention in brand equity, the added value generated by a known brand name. This aspect of the case study method reveals two sizeable gaps in the marketing literature. First, and most significantly for brand management, no existing research directly measures brand equity shifts as an outcome of case-based learning. Second, no studies gauge the impact of cases on students' employment interest, a spillover effect with further ramifications for employer branding. To address both areas, the co-writers performed an exploratory study using quasi-experiments to study the relationship between case studies and brand equity. Four hypotheses were tested:

H.1. Case study exposure will have measurable effects on brand equity.
H.2. The addition of experiential elements (e.g., guest speakers and product sampling) will further enhance brand equity by a measurable amount.
H.3. Classroom exposure to a case study on a brand will increase students' employment interest in the company.
H.4. Combined exposure to both a case study and experiential interaction with the case protagonist will yield greater employment interest than exposure to the case study alone.

These hypotheses were applied to the specific classroom experiences and outcomes of marketing students assigned a case study on a popular regional brand, a midwestern fast-food chain in the United States. Two groups of students were examined: a control group that read the case, versus a treatment group that read the same marketing case but also had experiential interactions with the case protagonist and product samples. The different outcomes exhibited by two groups provide data on the potential effects of the case study method and experiential elements on both brand equity and employment interest, with crucial implications for brand strategy and the role of brands in case-based education.

Integrating the strategic goals of brand advocacy and employer branding, the four lines of enquiry in this study can help brand managers understand how educational exposure to a brand may strengthen emotional attachment and advocacy behaviors, with the Net Promoter Score (NPS) serving as a proxy for brand outcomes (Mackalski, 2014), and talent attraction, while identifying activities that generate value creation for the brand. Hypothesis 1 explores the potential for case studies to enhance marketing through deep engagement with the brand outside of traditional marketing, while hypothesis 2 examines the possible brand equity benefits of the sensory and emotional connections fostered by experiential learning. The outcomes of hypotheses 3 and 4 can give brand managers insights into the perception of their brand by potential future employees, and how brand representatives' interaction with students can be a form of brand advocacy. The study findings can help brand managers understand the potential value of case studies for enhancing consumer brand equity through heightened awareness, brand advocacy, and employer branding through greater employment interest and talent attraction.

The remainder of the paper is organized as follows. We review the relevant literature on brand equity, experiential learning, and discuss case studies. Our experimental methodology is then presented followed by results, discussion and implications. The paper concludes with limitations and areas for future research.

Literature Review

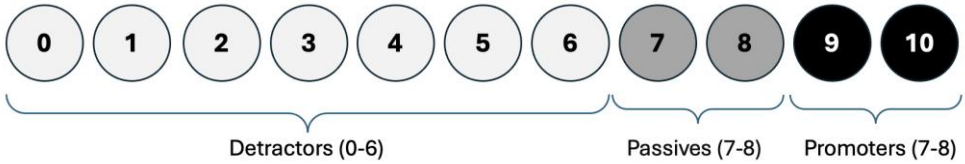
Relevant Theories

Concepts from marketing and business education literature inform the present study's examination of the case method as a brand touchpoint. The study's concept of brand equity derives from K. L. Keller's (1993) Customer-

Based Brand Equity (CBBE) theory, which established that customers' experiences and knowledge about a brand determine its equity. Prior brand knowledge thus affects how consumers respond to marketing efforts, while favorable consumer reactions to a brand's marketing mix, in turn, improve its CBBE.

Of the many metrics relevant to brand equity, Net Promoter Score (NPS) is one of the most useful for managers. Developed to help gauge growth and loyalty, NPS has been studied as a measurement of recommendation propensity with potential value as an indicator of brand advocacy and brand equity (Mackalski, 2014). NPS is a number from 0 to 10 representing a customer's likelihood of recommending a product or service to a friend or family member ("How likely is it that you would recommend [company/product/service] to a friend or colleague?"). The NPS is then measured by calculating the percentage of responders deemed promoters minus the percentage of responders deemed detractors (see Figure 1) (Reichheld, 2003).

Figure 1. *Net Promoter Score (NPS)*
NET PROMOTER SCORE
(NPS = % Promoters - % Detractors)



Source: diagram created by authors

To demonstrate how case education fosters brand meaning through direct encounters, the study draws on the tenets of experiential theory. This branch of the literature defines experiential learning in terms of hands-on experiences (Byrd et al. , 1989; Wortman, 1992). In marketing courses, these experiences may include product sampling, sensory experiences, and other in-class brand interactions. Reinforcing this concept of meaning-making, Kolb (2014) emphasizes the transformation of experiences into knowledge through a dynamic four-stage cycle of doing, reflecting, thinking, and acting (Kolb & Kolb, 2012). Applied to case study assignments, this cycle suggests that students develop brand meaning not only through exposure to the brand, but also by having brand experiences, reflecting on those experiences and having them incorporated into their existing knowledge.

Business scholars corroborate the experiential function of the case method. Robert Kennedy, former Dean of Ivey Business School (2013-2017), maintains how case studies make their topics more real for students by using contextualized decision-making to cultivate critical thinking (Ivey Business School, 2017). Nitin Nohria, Harvard Business School's former Dean, similarly observes how the case method prepares learners for their future careers by fostering critical analysis, judgement, decision-making, and action (Nohria, 2021). Experiential contact through case-based learning can thus impact employer branding when

students interact with case protagonists such as CEOs or founders, whose accounts of their decision-making process can help to shape students' perceptions of the company as a potential workplace.

Pedagogical literature likewise upholds the value of experiential elements for brand equity and employer branding. As recent research indicates, the diverse perspectives of guest speakers can deepen students' connection to the subject matter, (Alshahrani, 2024) including the brands and companies featured in case studies. These potential impacts have been overlooked in previous branding studies. Although the existing literature on employer branding is well-developed, little research has directly examined the case study method as a brand equity intervention, suggesting a need to approach the classroom itself as a site for the cultivation of brand meaning and employment interest. While Ambler and Barrow (1996) found that a company's messaging determines its appeal and drives people to apply for jobs, this stream of research focuses almost exclusively on recruitment communications, websites, or job fairs, and not on curriculum-based exposure (Cable & Turban, 2001, 2003; Highhouse et al., 2003; Turban & Greening, 1997). The omission of classroom case study exposures as a brand touchpoint neglects the significant value of business students as a sought-after labor market group.

The findings of practitioner-oriented organizations such as The Case Center further support the influence of case competitions and classroom engagement on students' perceptions of firms and even recruitment outcomes. These claims, however, derive largely from anecdotal evidence rather than systematic empirical testing. Rigorous, peer-reviewed investigation of case study exposure as a driver of brand equity is needed to substantiate such findings.

The present study is among the first to empirically examine the potential impacts of structured classroom engagement with a specific company case on both customer-based brand equity perceptions and employment interest toward the focal firm. Building on the premises of experiential theory, this research contributes to branding literature by offering empirical evidence that richer and more salient exposure via the case study method can strengthen both brand meaning and the propensity for recommendation.

Methodology

Design and Sample

A quasi-experimental, two-group, pre-post study design was used to assess the effects of case studies and experiential learning elements on brand equity and employment interest.

The study participants were recruited from the students of two undergraduate 300-level Introduction to Marketing classes that occurred within the same semester at a large Midwestern university. A combined total of 402 students from the two classes (N = 402) consented to participate in the study.

Participation was voluntary, and responses were anonymous. No course credits or penalties were tied to participation. Only students who provided informed consent prior to data collection responses were analyzed.

Groups

The two classes were designated respectively as the control group and the treatment group, both of which were assigned to read the same case. In total 402 respondents agreed to participate in the study. The students in the treatment group (N=291) interacted with the visiting case protagonist and sampled the flagship items of the quick service company prior to taking a post-test on the case. The students in the control group (N=111) completed the same post-test before having the combined interaction with the protagonist and product sample.

Procedure

The steps of the study were conducted as follows. A brand equity pre-test was administered to both groups, which were subsequently assigned the Ivey Published case study titled "Runza: From Nebraska Icon to National and International Brand" (Di Muro et al., 2022), detailing a marketing dilemma faced by the popular regional brand. After reading the case, students in the treatment group then experienced a classroom visit from Runza's Vice President of Marketing and sampled a mini Runza sandwich prior to taking a post-test. Rather than being treated as two separate factors with isolated effects, the students' exposure to the VP and product was experienced as a combined brand interaction with bundled treatment effects. The order of events was reversed for the control group, who took the post-test before interacting with the VP and sampling the food. In the pre- and post-test, both groups were asked the questions, "On a scale from 0 to 10, how likely would you be to recommend Runza to a friend? and "How interested are you in working at Runza?" Geographic characteristics of the respondents were also collected. Their answers were recorded and analyzed.

Table 1.

	TREATMENT GROUP (N=291)	**CONTROL GROUP** (N=111)
STEP 1.	Took a pre-test.	Took a pre-test.
STEP 2.	Read the case.	Read the case.
STEP 3.	Interacted with the guest speaker and product sample.	Took the quiz and post-test.
STEP 4.	Took the quiz and post-test.	Interacted with the guest speaker and product sample.

Brand Selection and Pretest Results

The case study on the Runza brand, was chosen for its high level of familiarity among the participants. In the pretest, all but one student had prior recognition of the brand, indicating high levels of brand awareness (Keller,

1993). In a pretest measuring aided brand recall of fast food restaurants the brand was shown to have higher levels of recall awareness of the brand lower McDonald's but higher than Chick-fil-A, Burger King and Wendy's, further indicating strong brand equity (Keller, 1993). The pretest also revealed that the brand had a high Net Promoter Score and a high ratio of lovers-to-haters, suggesting the brand had strong and favorable associations linked to it (Mackalski, 2014).

Study Results

Overall Results

	Treatment SEC 001 (n, mean)	Control SEC 002 (n, mean)	Test statistic	p-value
Initial Group	291, 6.313	111, 6.506	U=15390.5	0.462
Recommend Shift	291, 1.265	111, 0.856	U=18398.5	**0.028**

The means scores from the pretest NPS measures revealed there was no significant difference between the treatment group and the control group (p=.462). For confidentiality purposes, the actual NPS score is not being reported but the scores between the treatment and control groups were remarkably similar.

Both groups expressed that they were more likely to recommend Runza after the case study. The treatment group was significantly more likely to recommend the brand, suggesting higher levels of loyalty, growth, and brand equity for Runza (Reichhel, 2003, Mackalski, 2014). However, the mean scores represented a statistically significant difference (p=.028) between the treatment and control groups. In other words, the curve of the NPS increased more in the treatment group. All means were evaluated using the Mann-Whitney U test for non-parametric data.

NPS Score Shifts

After being asked if they would recommend Runza to a friend or family member, both groups exhibited a statistically significant difference in brand equity between their pre and post-test responses. The treatment group showed a 36.7-point increase in NPS, while the control group increased by 20.7 points.

Among the control group participants, detractors decreased 13.5%, while promoters increased 7%. In the treatment group, brand detractors decreased 22%, while brand promoters increased 14% - double the amount of the control group's rise.

Employment Desirability

	Treatment SEC 001 (n, mean)	Control SEC 002 (n, mean)	Test statistic	p-value
Initial Group	285, 1.839	108, 2.120	U=14187.5	0.153
Work For Shift	285, 1.488	108, 1.028	U=17413.0	**0.036**

For the question on "How interested are you in working at Runza?" any participants who worked at Runza were filtered out, changing the sample sizes to 285 (treatment) and 108 (control). Prior to the study, the treatment and control groups exhibited no difference in interest level regarding the Runza brand (p=.15). However the post-test showed that interest levels increased for both groups after reading the case alone, while the combination of the case and the experience of the guest speaker also had a significant difference (p=.036) in the Mann-Whitney U test.

Taken together, the key findings suggest that:

1) Brand advocacy, loyalty, and equity improved when students read the case study.
2) Brand advocacy, loyalty, and equity improved more when students both read the case and had the product experience and interacted with the protagonist.
3) Students expressed an increased desire to work at the company after reading the case, but even more so after reading the case, having the product experience and interacting with the protagonist.

Discussion

The use of the case study alone improved the NPS score, which captures loyalty, growth, and brand equity (Reichheld, 2003, Mackalski, 2014). This result supports the existing research findings that the quality and quantity of information about a brand, in this case from studying the brand in a case study and/or having a direct experience with the brand, contributes to its overall brand equity (Keller, 1993). The literature also gained support from the demonstrated impact of classroom experiences on students.

H.1. Case study exposure will have positive, measurable effects on brand equity.
Supported

H.2. The addition of experiential elements (e.g., guest speakers and product sampling) will further enhance brand equity by a measurable amount.
Supported

H.3. Classroom exposure to a case study on a brand will increase students' employment interest in the brand.
Supported

H.4. Combined exposure to both a case study and experiential interaction with the case protagonist will yield greater employment interest than exposure to the case study alone.
Supported

Implications and Contributions

These findings open an interesting new area in the brand literature. As the first empirical study to directly examine whether student engagement with a specific case study influences both customer-based brand equity perceptions and employment interest, this research yields initial evidence that the company can benefit by participating in case studies—both as having them written about their brands and as active participants in the classroom. The findings indicate that the combination of case methodology and experiential exposure boosts brand equity to a desirable target market. In measuring the impact of both the case itself and the experiential component, it suggests that the case method combined with experiential exposure further increases desire to work in the company.

More broadly, this study introduces opportunities to bridge the gap between classroom practice and marketing outcomes, with potential implications for case study production and its significance for brands. It suggests that the work of case-based education has measurable significance for brand strategy. In demonstrating that the efforts of case writers, instructors, and students are relevant to brand meaning construction, it supports the theories of Aaker (1991) and Keller (1993) while introducing links to their applicability to marketing education. The empirical findings may furnish case writers and publishers with evidence to encourage other companies to have case studies written about them. The potential benefits for brand equity may also encourage greater participation from companies and their representatives in the classroom. From a strategic perspective, participation in case development and the crafting of a thoughtful, balanced narrative framing may represent underappreciated components of long-term brand and talent acquisition strategy.

The study also highlights ways that theoretical perspectives from different disciplines may intersect. By drawing on theories from marketing (customer-based brand equity), organizational behavior (employer attractiveness and organizational identification), and management education (experiential learning), this research highlights potential connections among several streams of literature that have historically developed separately. This interdisciplinary integration may advance scholarship by considering brand equity theory within the domain of education, by exploring employer branding research beyond formal recruitment channels, and by examining the educational setting as a meaningful interface between firms and future talent. From this point-of-view, this research considers the case study not only as a learning tool, but also as an environment for the formation of brand equity and employment interest.

Limitations and future research

The limitations and early findings of this exploratory study prompt several questions and new lines of inquiry.

Firstly, the design was quasi-experimental, with non-randomized sections and unequal group sizes resulting from the enrollment of the two classes, and a short-run outcome window determined by the class schedules. Only one brand and one case were studied, a single-brand setting that raised questions about whether other brands or cases would have yielded different responses from participants. Would a lesser-known brand or an international brand have sparked different outcomes? How would the equity level of the brand being studied in the case study impact the findings? The strength of the guest speaker and the popularity of the product may also have had a unique impact on the students and their employment interest in the brand. Further research could examine how differences in speaker effectiveness, as well as the professional level of the visiting representative (CEO, VP, recent graduate etc.) could shape the outcomes.

Additionally, the question about employment interest may have yielded conservative responses, given the socioeconomic connotations of working in the fast-food industry. Qualifying phrases might have affected the enthusiasm of the responses (e.g., "How interested are you in working in marketing management position at Runza?" versus "working in an entry-level job").

The study sampled non-graduating undergraduate students in a core marketing course, one case, and a single, local high-awareness brand. How might the effects occur across different brands, industries, academic disciplines, and student populations? Furthermore, how might employment interest be impacted students approaching graduation or considering employment opportunities more actively? Relatedly, the case study focused on an iconic local brand. How do respondents' geographic ties to the region interact with the brand's local significance influence their perceptions on brand or interest in employment?

As the timelines of the two classes imposed a short-term outcome window, questions remain about the lasting effects of cases and experiential elements, which future studies could assess via longitudinal tracking.

Finally, how does the content of the case itself or even the publisher of the case have an impact? This case tackled company issues related to distribution, expansion and branding. How might different case narratives or topics impact the outcomes. Additionally, this study was a peer-reviewed Ivey Publishing publication, but would cases published by Harvard Impact or Darden produce different results?

Conclusion

As a vital yet under-studied vehicle for brand exposure, the case study method holds interest for brand management. Since case studies were first integrated into business pedagogy over a century ago, they have enhanced

students' learning experiences and outcomes by interfacing the classroom with real-world brand interactions. For key players in brand management and strategy, cases may provide a direct means to engage with marketing educators and students in ways that can foster brand advocacy among new generations. The present study reinforces the value of the time-tested case method by providing an early indication of an association between cases studies and improvements in brand equity, with added benefits for employer branding.

The resulting empirical data offers practical value for brand managers and strategists regarding which educational investments may produce measurable benefits, and the relative impact of experiential brand engagement versus passive brand exposure. The findings may encourage the increased participation of brand representatives in classroom case discussions — not merely out of professional goodwill, but to support brand equity and spark interest among potential employees. These early findings further support the integration of experiential brand touchpoints into case teaching as a means of enhancing both educational and brand-related outcomes.

While this research was limited to a single brand and case, its results open the door to further study across industries, educational levels, and types of experiential engagement. By exploring case-based education as a potential ecosystem for marketing and recruitment, this study provides a foundation for exploring stronger, more mutually enriching relationships between the classroom and the business world, with especial value for brand managers. The findings present in-class brand interactions as a potentially valuable source of data for brand strategists and a meaningful site of exposure with potential benefits for brand advocacy and employer branding.

References

Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. Free Press.

Alshahrani, A. (2024). The use of guest speakers in higher education and implications for pharmaceutical teaching: A systematic review of literature. F1000Research, 13, 862. https://doi.org/10.12688/f1000research.153968.1

Ambler, T., & Barrow, S. (1996). The employer brand. Journal of Brand Management, 4(3), 185–206. https://doi.org/10.1057/bm.1996.42

Byrd, S. D., Byrd, D. B., & Nichols, R. L. (1989). Integrating practitioners into graduate course-work in accounting. Journal of Education for Business, 65(2), 56–59.

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. https://doi.org/10.1016/S0742-7301(01)20002-4

Cable, D. M., & Turban, D. B. (2003). The value of organizational reputation in the recruitment context: A brand-equity perspective. Journal of Applied Social Psychology, 33(11), 2244–2266. https://doi.org/10.1111/j.1559-1816.2003.tb01883.x

Di Muro, F., Mackalski, R., Nelson, C., & Ducusin, M. (2022). Runza: From Nebraska icon to national and international brand (Case No. W29265). Ivey Publishing.

Harvard Business School. (2024). Annual report 2024. https://www.hbs.edu/about/annualreport/2024

Highhouse, S., Lievens, F., & Sinar, E. F. (2003). Measuring attraction to organizations. Educational and Psychological Measurement, 63(6), 986–1001. https://doi.org/10.1177/0013164403258403

Ivey Business School. (2017). Why use cases? Leading case practitioner insights [Video]. YouTube. https://www.youtube.com/watch?v=ITKP0onCyO0

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. Journal of Marketing, 57(1), 1–22. https://doi.org/10.1177/002224299305700101

Kolb, A. Y., & Kolb, D. A. (2012). Kolb's learning styles. In N. M. Seel (Ed.), Encyclopedia of the sciences of learning (pp. 1698–1703). Springer.

Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development (2nd ed.). FT Press.

Mackalski, R. (2014). The state and the union of brand measurement [Doctoral dissertation, McGill University]. eScholarship@McGill. https://escholarship.mcgill.ca/concern/theses/9306t2571

Nohria, N. (2021, December 21). What the case study method really teaches. Harvard Business Review. https://hbr.org/2021/12/what-the-case-study-method-really-teaches

Quinn, J. (2022a, March 22). Why the case method? Clear Admit.

Quinn, J. (2022b, March 7). Why the MBA case method should surprise you. Clear Admit. https://www.clearadmit.com/2022/03/why-the-mba-case-method-should-surprise-you/

Reichheld, F. F. (2003). The one number you need to grow. Harvard Business Review, 81(12), 46–54, 124.

Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. Academy of Management Journal, 40(3), 658–672. https://doi.org/10.5465/257057

Wortman, G. B. (1992). An invitation to learning: Guest speakers in the classroom. The Science Teacher, 59(2), 19–22.