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Facebook and user experience: Evaluating brand equity of Purdue University residences

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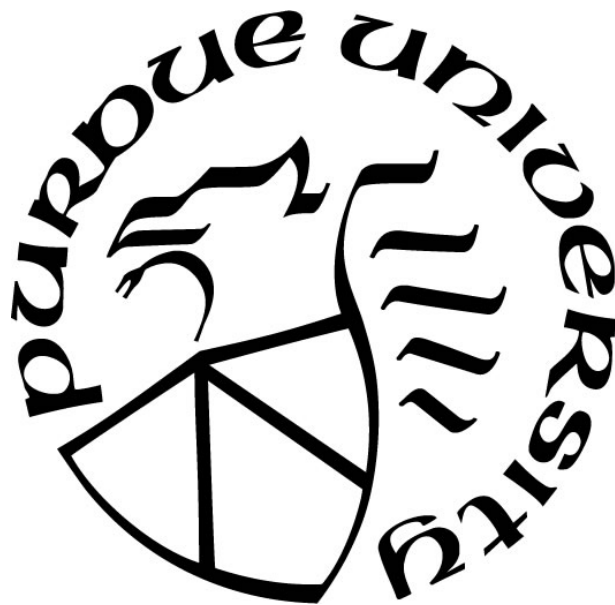
**FACEBOOK AND USER EXPERIENCE: EVALUATING BRAND
EQUITY OF PURDUE UNIVERSITY RESIDENCES**

by
Jackelyn Perkins

A Thesis

*Submitted to the Faculty of Purdue University
In Partial Fulfillment of the Requirements for the degree of*

Master of Science



Department of Computer Graphics Technology
West Lafayette, Indiana
December 2016

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I dedicate this project to multiple people in my life.

To the three most important men in my life: my father, my husband and my son. To my father for always motivating me to strive for excellence. To my husband for his countless hours of support and listening in times of panic. And to my son, who inspires me to lead by example.

To the most important woman in my life, my mother. She instilled in me that if life does not go as planned, the important thing is to keep trying.

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ABSTRACT

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Title: Facebook and User Experience: Evaluating Brand Equity of Purdue University Residences

Major Professor: Dr. Mihaela Vorvoreanu.

This study investigated how brand equity was perceived on the Purdue University Residences' Facebook page by applying a user experience method. From a review of previous literature, Website Experience Analysis was identified and performed to evaluate brand equity. This study addressed and explored various themes throughout the data. The results showed how page content and user interactions within a Facebook page influence participants' perceptions of brand equity.

CHAPTER 1. INTRODUCTION

Since its inception in 2004 (Phillips, 2007), Facebook has grown from a photo “Facebook” of women at Harvard University to a community of over one billion users world-wide (“Stats”, 2016; Vance, 2012). The population of Facebook is continuously growing and with the introduction of Pages in 2006 (Lacy, 2006), it was only a matter of time before marketing for brands was actively pursued by businesses.

Besides a web presence, having a Facebook page is now a must-have for brands to communicate with their consumers. While businesses flock to Facebook in hopes of solving all their marketing needs, do we really know what users want? Can we apply the same marketing practices we have used offline for many years? Studies show that users are annoyed with the loss of exclusivity to others/businesses (Vorvoreanu, 2009) but since Facebook is constantly evolving, have the initial opinions changed? The goal of this research is to gain a greater understanding of how or if a Facebook page can contribute to a consumer’s perception of a brand.

1.1 Statement of the Problem

With an active monthly user base of 1.71 billion, Facebook is an ideal addition to a company’s brand strategy (“Stats,” 2016). Facebook recognized the potential communication power for companies and in 2007 created “pages” that allow users to follow, like, and interact with brands within Facebook (“Pages,” 2016). Companies have the opportunity to interact with a captive community of consumers who follow their brand pages. While Facebook provides a litany of quantitative analytics for Facebook pages (like total views and organic reach), pages lack any form or tool to evaluate qualitative data on users. While visual clues such as logos and photos can provide identity for a brand, there is a lack of research that provides an evaluation of user experience on a brand’s Facebook page. There seems to be no real way of evaluating actual user experience of brand equity on Facebook Pages.

1.2 Research Questions

Do interactions with a brand Facebook page contribute to the user perception of a brand's equity?

Which interactions with a brand Facebook page contribute to the user perception of a brand's equity?

1.3 Significance of the Problem

Brands strive to differentiate themselves from their competitors in various forms of communication and marketing (Kotler & Gertner, 2002). While surveys and other research do exist in traditional marketing, it is becoming increasingly difficult to evaluate the actual customer experience in different online marketing channels. A brand's online presence can now be arguably its most important marketing channel.

Facebook and other social media sources act as an important tool in marketing, but lack a sufficient body of research in evaluating the user experience online. Marketers spend countless hours and much effort enhancing Facebook pages, which shows an even greater need for research in user experience in social media. Many user experience (UX) evaluation methods exist, like heuristic evaluation and website experience analysis. However these methods evaluate websites in terms of functionality or public relations (PR) theory, not in marketing. With the lack of academic marketing research in this technology, this study's goal is to fill a major gap in the current research.

1.4 Purpose of Study

In this technology-driven society, user experience off and online adds to perceptions of a brand. Multiple channels of communication are expanding rapidly and brands are gravitating to popular channels to market to a captive audience. With the addition of social media, it has become increasingly important to optimize traditional marketing messages to fit the user's fast paced expectations. With the researcher of this study being a marketing professional over the last 10 years, the rise of social media has

been experienced first hand as well as the rise in the importance of the platform in marketing.

This study aims to gather data to help evaluate actual user experience from the consumer's perspective online by combining the method of Website Experience Analysis (WEA) with Keller's customer-based brand equity theory.

User experience (UX) and marketing are currently thought of as two separate ideas with UX being more reactive and marketing being more proactive. While both ideas can embody aspects of each, the marriage of the two ideas lacks research. Online marketing typically relies heavily on quantitative analytics when evaluating online experiences and UX has multiple methods of evaluating user's perspectives with qualitative data.

Traditional qualitative marketing analysis methods do exist, such as focus groups. However, these methods seem to lack an application in evaluating the technology or being able to be performed remotely. This research aims to combine UX methods with marketing theology, specifically branding and brand equity. Literature from both areas is reviewed and applied to help generate suggested best practices for cultivating a brand's equity online. Online marketing channels are extremely diverse, and it would seem quite daunting to evaluate multiple channels successfully. This study focuses on the social media channel of Facebook.

With the media channel focus of this study being Facebook, this gives the research an opportunity to evaluate a specific brand. This research will look at the Purdue University Residences Facebook page. With that being said, a secondary goal of this research is to provide implications for the marketing professionals of Purdue University Residences. While Purdue University Residences targets Purdue students or potential Purdue students in their advertising but no concrete strategy has been published for the University Residences Facebook page. It is important to have measureable goals to evaluate the work placed into this platform and is able to justify its actions. This study hopes to provide suggestions to bolster the Purdue University Residences Facebook page and replicate the sense of community online that is produced in the residences offline.

Facebook's ideology rests on their platform of being an online community. Because of this, the branding marketing theology was selected because branding is rooted heavily in establishing a positive consumer community. Using a base in branding and successful proven methods in UX, participants in this study are interviewed with a set of questions derived from previous research. The ideal sample for this study is participants who are involved with Facebook and interact with brands regularly.

1.5 Definitions

Brand: "Name, term, sign, symbol, or design, or a combination of them intended to identify the goods and services of one seller or groups of sellers and to differentiate them from those of the competition" (Kotler & Gertner, 2002, p. 249).

Marketing: an "activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners and society at large" (American Marketing Association, 2007).

User Experience (UX): the idea that "technology fulfills more than just instrumental needs in a way that acknowledges its use as a subjective, situated, complex and dynamic encounter" (Hassenzahl & Tractinsky, 2006, p. 95). This train of thought focuses on the importance of the perception and actual experience of a user with an interface.

Website Experience Analysis: a method that takes an "experience-centered" perspective on how to evaluate data in online relationship building between a company and their publics. Using a public relations approach, the method evaluates participants' opinions/thoughts on a website's content that would make a public view of a company as credible, trustworthy, committed, open and involved (Vorvoreanu, 2008).

Brand Equity: The differential effect of brand knowledge on a consumer response to the marketing of the brand" (Keller, 1993, p. 2).

1.6 Assumptions

The assumptions for this project include:

- Participants answer honestly.
- Participants understand the University Residences brand.

1.7 Delimitations

The delimitations for this project include:

- The method created applies to Facebook only, not to any other social media sites.
- This study cannot predict Facebook updates during the research.
- Since the data collection is done remotely, quality control of feedback can suffer.
- People who do not have Facebook accounts are not included in the study.
- The age of participants is a delimitation within the study: a range of 18-24.
- Of marketing concepts, only brand equity is addressed in this study.
- This study concentrates on Purdue University Residences, not Purdue University as a whole.

Chapter One states and defines the problem as the lack of a sufficient measurement of brand equity on Facebook. Since brands are continuously striving to differentiate themselves from competitors, a reliable and proven assessment tool would help marketers plan and assess their brand strategy efforts. Many methods exist that evaluate interfaces, like UX, but no assessment tools combine UX and brand equity. In the following chapter, three main areas are addressed: branding, Facebook & marketing, and UX. This review of literature helps define the academic ideas in which this research is framed.

CHAPTER 2. REVIEW OF LITERATURE

In U.S. society, every consumer interacts with brands. In order to make a brand memorable, it takes planning and strategy to communicate effectively with customers. Branding addresses the importance of a consistent strategy across multiple touch-points, which is very important in the current digital world. Besides traditional channels of marketing, an online presence (specifically social media) is now essential. With the increased importance of online communication, research is needed to help companies evaluate the actual consumer experience beyond page views. With the interface evaluation theology of user experience (UX), branding strategy could benefit from the use of various UX methodologies in evaluating equity.

Within this literature review, four main research areas are highlighted. First, marketing (specifically branding strategy and equity) are explained. Then current university marketing is examined followed by current Facebook research. Finally, user experience is defined and compared to the previous subsections.

2.1 Branding

Branding is often a misunderstood marketing concept and commonly, people believe that a brand just encompasses a name and logo. Chernatony (2002) says, “brands succeed because they offer added values and these are recognized through the brand name” (p. 198). Branding is a marketing function that requires planning, strategy and teamwork before the brand even enters the market (Carpenter, 1989; Chernatony, 2002; Douglas, Craig, & Nijssen, 2001; Kerin, Kalyanaram, & Howard, 1996; Norris, 1992). Knox and Bickerton (2003) define a brand in a customer-centric approach as “a product or service, which a customer perceives to have distinctive benefits beyond price and functional performance” (p. 999). While multiple brand definitions exist, a recurring theme appears throughout literature: a brand’s goal is to differentiate itself within the market (Bergstrom, 2000; Kolter & Gertner, 2002).

Brands are more than just a product or service; research has been done branding a country (Kolter & Gertner, 2002) and even a lifestyle (Douglas Evans, Wasserman,

Bertolotti, & Martino, 2002). In those cases, selling a product might not be the goal, but rather bringing recognition to the brand's mission (Douglas Evans, Wasserman, Bertolotti, & Martino, 2002; Kolter & Gertner, 2002). Branding is important because products/services can be easily replicated (Norris, 1992). Branding helps differentiate their product/service from a competitor's (Norris, 1992).

Strategically, brands fulfill two basic consumer needs. First, the consumer is looking for a brand to fulfill a void that Chernatony (2002) defines as a *functional need*. A functional need focuses around the actual use of the brand and what it was created to accomplish (Chernatony, 2002). The second fills a personal agenda known as an *emotional need* (Chernatony, 2002). Whether it is to fit in with a group of people or to imply a status (Chernatony, 2002; Park, Jaworski, & MacInnis, 1986), each consumer's *emotional need* can differ. Various readings have coined various names for these basic needs; Social and emotional values (Kolter & Gernter, 2002), Functional & emotional (Chernatony, 2002), and function, symbolic and experiential needs (Park, Jaworski, & MacInnis, 1986).

Presently, consumer expectation of their emotional connection (or need) with a brand seems to be growing in importance. Besides the quality of a product, consumers are interested in a brand's social implications, corporate values (Einwiller & Will, 2002; Kay, 2006; Knox & Bickerton, 2003) and even country of origin (Douglas, Craig, & Nijssen, 2001). Due to expanded expectations and focus on the fulfillment of consumers' emotional needs, there is a high demand for corporate transparency and accurate, consistent communication within branding channels (Balmer, 2001; Einwiller & Will, 2002; Kay, 2006).

A brand acts as a communication tool between the company and the customer in reference to the product/service/idea from a company (Norris, 1992). When purchasing a known brand, a customer assumes the added value/quality (Chernatony, 2002) and tends to be more loyal to premium brands (Vishwanath & Mark, 1997). When a brand is positioned correctly in the market, it becomes successful. But if it is positioned incorrectly, it can lead to problems (Chernatony, 2002; Norris, 1992). By a brand being positioned incorrectly, a customer becomes confused and feels misled (Vishwanath, &

Mark, 1997). This illustrates the importance of a sound brand strategy, which is covered in the next sub-section.

2.1.1 Brand Strategy

When addressing brand strategy, a company should focus on the purpose in which the brand should position itself (Carpenter, 1989; Vishwanath & Mark, 1997). There are multiple thoughts on brand strategy throughout literature.

Carpenter (1989) introduces the concept of the “ideal point.” The “ideal point” refers to the optimal situation for the brand (in reference to market share) (Carpenter, 1989). In order for a brand to become successful, it has to move closer to the “ideal point” but further from the competitor in the market in order to be successful and profitable (Carpenter, 1989). Characteristics like brand price or advertising-distribution expenditure can help a brand move to this “ideal point” (Carpenter, 1989). Carpenter (1989) stresses the importance of knowing the market as well as the competitors.

While Carpenter believes in the “ideal point,” Vishwanath and Mark (1997) believe that the two dimensions (category and market share) are important when establishing a brand’s position. Category refers to whether the brand is premium or not and market share refers to if the brand has a high or low share of the customer base (Vishwanath & Mark, 1997). By knowing how a brand is positioned in the market, consumers know, remember and expect a certain quality (Norris, 1992). From this, different brand strategies can be applied to help further brand position.

Overall, brand strategy is a plan set forth by a company to help strategically place a brand within a market (Norris, 1992; Rao, Agarwal, & Dahlhoff, 2004). Of the readings reviewed, there are three major brand strategies: Corporate, House-of-Brands and Mixed.

First, Rao, Agarwal, and Dahlhoff (2004) define corporate branding as:

The corporate name is dominant in endorsing all or part of the firm’s product and service brands. At the least, the corporate name is an element of the product brand names. This holds throughout all its subsidiaries and at all company levels. Examples of companies that employ this strategy are Hewlett-Packard, McDonald’s, and FedEx (p. 127).

Corporate branding seemed to be the most common strategy as well as the most researched (Balmer, 2001; Einwiller & Will, 2002; Kay, 2006; Knox & Bickerton, 2003).

Secondly, House-of-brands strategy refers to a company choosing different names for their brands whereas the strategy does not contain an initial corporate brand name (Rao, Agarwal, & Dahlhoff, 2004). While one would question the move away from a successful flagship brand, the benefit of a house-of-brands strategy is that it allows a company to give each product a different voice and even hit different audiences (Rao, Agarwal, & Dahlhoff, 2004).

Lastly, a mixed branding strategy combines both corporate branding as well a house-of-brands (Rao, Agarwal, & Dahlhoff, 2004). Rao, Agarwal, and Dahlhoff (2004) mention that mixed branding strategy typically happens when corporate brands merge with other brands. Brands can also follow several branding strategies depending on their needs (Rao, Agarwal, & Dahlhoff, 2004).

The Purdue University Residences brand is the focus of this research, which applies a mixed branding strategy. University Residences is a brand within the Purdue University institutional brand. There is limited research in House-of-Brands strategy and mixed branding in comparison with corporate branding strategy (Balmer, 2001; Einwiller & Will, 2002; Kay, 2006; Knox & Bickerton, 2003), which shows a need for investigation.

2.1.2 Brand Equity

While multiple brand strategies do exist, each strategy depends on the relative market and customer perception (Norris, 1992). Whether or not it is a product, service, or even a symbol (Kapferer, 1997 as cited in Knox & Bickerton, 2003), some consider brands to be socially constructed within a culture (Kay, 2006; Knox & Bickerton, 2003). This means that consumers can contribute to branding. Brands rely heavily on their connection with the consumers and how the consumers view the brand, which is known as brand equity. Lassar, Mittal and Sharma (1995) define brand equity as "... the consumers' perception of the overall superiority of a product carrying that brand name when compared to other brands" (p. 13). Aaker (1991 as cited in Rao, Agarwal, &

Dahlhoff, 2004) highlights the importance of brand equity stating “The customer always knows the product/service will be the same if the brand is reliable or has higher brand equity” (p. 126).

Brand equity is important because having a high equity means a brand is recognizable and preferred (Aaker, 1996 as cited in Douglas, Craig, & Nijssen, 2001; Douglas, Craig, & Nijssen, 2001; Keller, Norris, 1992, Keller, 1993). Because of this, the need to evaluate brand equity is important. One way a brand can evaluate equity is by reviewing “marketing touch points” (Keller, 1993, p. 2) and that is what this study aims to do. Yoo & Donthu’s (2001) research links increased advertising to positive view of brand, which further validates the need for this research.

In the next two sub-sections two different viewpoints of brand equity are outlined: Aaker’s branding equity model and Keller’s Customer-based brand equity.

2.1.2.1 Aaker’s Brand Equity Model

According to Aaker (1996), brand equity has 5 major categories with 10 branding measures. Aaker’s five major categories of brand equity are loyalty, associations, perceived quality, awareness and market behaviors (Aaker, 1996). Of these five categories, loyalty is deemed the most important with the use of price premium as an indicator (Aaker, 1996). Aaker (1996) further explains the 10 attributes to brand equity, which are: differentiation, satisfaction or loyalty, perceived quality, leadership or popularity, perceived value, brand personality, organizational associations, brand awareness, market share, and market price and distribution coverage.

The idea is that each one of these attributes is reviewed individually and there is not really an overall score for equity (Aaker, 1996 as cited in Douglas, Craig, & Nijssen, 2001). To measure all of these different attributes, it takes different forms of measurement with an overall analysis report (Aaker, 1996). Brand equity acts as a survey to see where a brand might be lacking (Aaker, 1991 as cited in Rao, Agarwal, & Dahlhoff, 2004) and areas for improvement. In addition, not every brand needs to measure every attribute; brand managers can select which are most applicable to their brand (Aaker, 1996).

2.1.2.2 Keller's Customer-Based Brand Equity

Keller's customer-based brand equity (CBBE) defines brand equity as "The differential effect of brand knowledge on a consumer response to the marketing of the brand" (1993, p. 2). In CBBE, the value of brand equity is important because it can lead to the worth of a brand (Keller, 1993; Keller, 2003), which is beneficial in accounting and acquisition functions (Barwise et al., 1989 via Keller, 1993; Keller, 1993). Besides the monetary worth of brand equity, the strategy behind it is equally important because it helps provide insight about the consumer base (Keller, 1993). Within Keller's CBBE, he outlines a model known as the Brand Knowledge model. This model contains two constructs: Brand Awareness and Brand Image (Keller, 1993; Keller, 2003).

Brand Awareness is defined as the strength of the brand in a consumer's memory (Keller, 1993; Keller, 2003). Awareness encompasses how a consumer may recall a brand or how a consumer may recognize a brand (Keller, 2003). Brand Image is defined as the perceptions of the brand and associations from a consumer's memory (Keller, 1993; Keller, 2003). Keller highlights the importance of brand associations when it comes to type, favorability, strength and uniqueness (Keller, 2003).

It is important to understand that type, favorability, strength and uniqueness of brand image associations interact and work with one another (Aaker, 1997; Keller, 1993; Keller, 2003; Muniz & O'Guinn, 2001; Yoo & Donthu, 2001). These interactions have been linked to social constructs of brands such as brand communities (Muniz & O'Guinn, 2001) and brand personalities (Aaker, 1997).

Brand Knowledge can be measured two ways: an indirect or direct approach (Keller, 1993; Mackay, 2001). The indirect approach involves measures where brand awareness and associations are coming from, and the direct approach involves evaluating elements in the marketing mix (Keller, 1993; Mackay, 2001). In this study, the researcher is using a direct approach in evaluating Facebook as part of the University Residences marketing mix.

To measure brand equity, Keller has eight dimensions in measuring Brand Knowledge that include Awareness, Attributes, Benefits, Images, Thoughts, Feelings, Attitudes and Experiences (Keller, 2003). These dimensions are used as a theoretical framework in this research.

The table below defines the eight dimensions.

Table 2.1 - Keller's Brand Knowledge Dimensions

Dimension	Definition
Awareness	“category identification and needs satisfied by the brand” (Keller, 2003, p. 596)
Attributes	“descriptive features that characterize the brand name product intrinsically or extrinsically” (Keller, 2003, p. 596)
Benefits	“personal value and meaning that consumers attach to the brand” (Keller, 2003, p. 596)
Images	"visual information, either concrete or abstract in nature" (Keller, 2003, p. 596)
Thoughts	"Personal cognitive responses to any brand-related information” (Keller, 2003, p. 596)
Feelings	"personal affective responses to any brand-related information" (Keller, 2003, p. 596)
Attitudes	"summary judgments and overall evaluations to any brand-related information" (Keller, 2003, p. 596)
Experiences	"purchase and consumption behaviors and any other brand-related episodes" (Keller, 2003, p. 596)

Previous research has expanded on the Brand Knowledge Model when analyzing corporate companies (Krishnan, 1996; Netemeyer et. al., 2004; Muniz & O’Guinn, 2001; Yoo & Donthu, 2001) but research lacks in analyzing higher education. In the next subsection, brand equity online is explored.

2.1.2.3 Brand Equity Online

Brand equity is important because the higher the equity, the more recognizable and preferred a brand is (Douglas, Craig, & Nijssen, 2001). Recent branding research has focused more on the relationship with the consumer (Knox & Bickerton, 2003) and social media seems to be an ideal channel that can help address those needs.

While the idea of branding strategy is heavily researched (Balmer, 2001; Einwiller & Will, 2002; Kay, 2006; Knox & Bickerton, 2003; Norris, 1992; Rao, Agarwal, & Dahlhoff, 2004), there seems to be a lack of research in evaluating brand equity in online channels, specifically social media. In Aaker’s research from 1996, he mentions the extreme difficulty in measuring, “...intangible assets such as ... information technology and people...” (p. 120). While this is older research, it highlights

the historic struggles in measuring different technology channels. This study aims to measure the difficult assets of social media (information technology) and the community of Purdue University – University Residences (people).

With the lens that branding is socially constructed (Kay, 2006; Knox & Bickerton, 2003), evaluating an online social channel for a brand makes sense. To take it a step further, this research evaluates a brand that is a residential community, which is also socially constructed. The branding research presented opportunities that would include further research in mix-branding strategy, analyzing a brand's emotional need in a highly social online community and the importance of knowing a brand's market (Carpenter, 1989). In the next section, previous research referencing university marketing is reviewed.

2.2 University Marketing

General marketing techniques can be applied to marketing for a university but specialized strategies exist for higher education. Current research in higher education marketing is separated into strategies for four-year universities (Ali-Choudhury & Savani, 2009; Durkin & McKenna, 2011; Knight & Johnson, 1981) and community colleges (Absher & Crawford, 1996). Even though both experiences have similarities and differences, the major marketing goal in both is student recruitment and increased enrollment (Ali-Choudhury & Savani, 2009; Licata & Frankwick, 1996).

Besides the type of institution, university marketing strategies focus on the importance of the segmentation of its customer-base (Durkin & McKenna, 2011; Knight & Johnson, 1981; Licata & Frankwick, 1996). Segmentation of a university market may include students, alumni, taxpayers and so on (Licata & Frankwick, 1996), but the major segments are the student and potential student groups (Absher & Crawford, 1996; Ali-Choudhury & Savani, 2009; Durkin & McKenna, 2011; Knight & Johnson, 1981; Licata & Frankwick, 1996) rather than parents (Durkin & McKenna, 2011). The idea of the "Student as the Customer" appeared a couple times in research (Durkin & McKenna, 2011; Knight & Johnson, 1981) with the student audience highlighting diversity, employability and ambience as important characteristics of choosing a university (Ali-Choudhury & Savani, 2009).

2.2.1 Marketing and University Culture

Marketing has been a bit of a struggle in higher education due to “University Culture” (Durkin & McKenna, 2011). Traditionally, higher education administrations felt that marketing was inappropriate for academia because they felt it cheapened the idea of education (Knight & Johnson, 1981). They felt that they did not need to sell academia because of the importance and necessity of it (Knight & Johnson, 1981). Universities already tend to be slower to react to change (Durkin & McKenna, 2011), which can lead to delayed marketing messages or even underutilized new marketing channels.

Knight and Johnson state the importance of understanding and embracing a university’s perception (1981). With the need to focus on perceptions, application of brand equity measures seems to be a natural fit.

Recently, a stronger emphasis has been placed on marketing in higher education. Licata and Frankwick’s (1996) research points out budgetary cuts in state funding for education have left a financial need for universities. In order to attract quality students to a university (which helps the university in multiple ways), marketing is now necessary. The need for affordable marketing is more important now and growing. Social media is affordable and is seen as a viable marketing channel that is an ideal fit. In the next section, marketing and branding within the social media site Facebook is examined.

2.3 Facebook and Marketing

With the speed of information in our current culture, consumers have access to information and other consumer reviews at their fingertips. Grewal, Roggeveen, and Runyan (2013) highlight that social media now plays a part in the consumer decision-making process, specifically during the pre-purchase and purchase stages. While research shows that Facebook is a tool for people to maintain relationships online (boyd & Ellison, 2008; Ellison, Steinfield, and Lampe, 2007), research now also focuses on social commerce (Pöyry, Parvinen, & Malmivaara, 2013). Facebook users like the social side of Facebook and are now open to interact with brands (Kaplan, 2009; Kwok & Bei, 2013; Vorvoreanu, 2009).

Brand/consumer relationships seem to be a perfect fit for Facebook as a marketing channel. Research that was found on Facebook as a marketing channel only focuses on a selected brand(s) generally rather than if a brand is successful or has positive equity (Kwok & Bei, 2013). Also, most analysis is based on a quantitative number of interactions, not qualitative perception of users (Haigh, Brubakers, & Whiteside, 2013; Kwok & Bei, 2013). While research exists on perceptions of corporations on Facebook (Vorvoreanu, 2009), most research tends to focus primarily on public relations and not branding (Haigh, Brubakers, & Whiteside, 2013; Vorvoreanu, 2009).

2.3.1 Facebook and Branding

Even though Facebook focuses on maintaining personal relationships (boyd & Ellison, 2008; Ellison, Steinfield, & Lampe, 2007), users do understand the appeal of marketing on social media from a business perspective (Vorvoreanu, 2009). A study even shows that users interacting with a page “bolster” their attitudes towards that brand (Haigh, Brubakers, & Whiteside, 2013). Bunker, Rajendran, Corbin, and Pearce (2013) found customers who ‘like’ a brand on Facebook have a higher involvement with the brand and are more likely to spread their experiences by word-of-mouth (Bunker et al., 2013). Even non-customers (those who have never purchased the product) like a brand based heavily on social norms (Bunker et al., 2013).

While user actions help “bolster” a brand page (Haigh, Brubakers, & Whiteside, 2013), companies should be aware of a less positive side of interaction. Kwok and Bei’s (2013) research shows users tend to interact with more conversational marketing messages. However, users expect communications on social media from brands to be humble (Kaplan, 2009), honest (Vorvoreanu, 2009), and socially responsible (Haigh, Brubakers, & Whiteside, 2013). Pöyry, Parvinen and Malmivaara (2013) found that users who are looking to purchase a product tend to browse Facebook pages and not necessarily interact with the page. In contrast, Pöyry, Parvinen, and Malmivaara (2013) discovered that those users who actively interact with a page are there just for entertainment or fun.

Besides relationship studies on Facebook, additional research touches on the type of content a brand should produce. Xia (2009) analyzed library Facebook groups and

discovered that while participants like to participate, it was necessary for librarians to post general topics to continue the online discussion. Pöyry, Parvinen, and Malmivaara (2013) conclude, “Focusing on providing useful and relevant information on their Facebook pages might actually be a more effective strategy for companies to enhance performance outcomes” (p. 223). While general advertising might seem like an answer, thoughtful information is more successful at keeping the Facebook community alive (Pöyry, Parvinen & Malmivaara, 2013; Xia, 2009).

Current Facebook analytic resources highlight interactions on the page but the question arises if they actually address the user experience or the perceived brand equity. In reviewing previous research, there is a gap in evaluating the actual user experience of potential customers on Facebook, not just the “brand fans” who participate on the pages for entertainment purposes (Pöyry, Parvinen & Malmivaara, 2013).

2.4 User Experience

User experience (UX) is a broad idea that addresses an end-user’s emotional response to an interface and interaction with a company as a whole (Battarbee & Koskinen, 2005; Hartson, & Pyla, 2012; Law, Roto, Hassenzahl, Vermeeren, & Kort, 2009; Nielsen & Norman, 2013). UX can be generally thought of as a subjective concept that concentrates on the user’s evaluation to identify potential benefits (Law et al., 2009). Often usability is mentioned when referring to UX. While usability is rooted in more of a product or a website shortcoming, UX aims to encompass the entire experience during interaction as well as the lasting impressions from the experience (Hartson, & Pyla, 2012; Law et al., 2009; Nielsen & Norman, 2013). In the next sub-sections, the two different methods of Usability and Website Experience Analysis are explained.

2.4.1 Usability

Hassenzahl (2006) states “UX has gained momentum in recent years, mostly as a countermovement to the dominant, task- and work-related ‘usability’ paradigm” (p. 91). Usability focuses on the problems of the interface while UX focuses on creating a positive overall experience (Hassenzahl, 2006). Krug (2006) further outlines usability in his book *Don’t make me think!* by stating a user generally scans a page for information

and concentrates on navigating the page/interface. Nielsen and Norman (2013) clarify that usability is “a quality attribute of the UI [UX], covering whether the system is easy to learn, efficient to use, pleasant, and so forth.”

2.4.2 Website Experience Analysis

While usability is one method of analyzing a website, other forms do exist in the realm of user experience. Website Experience Analysis (WEA) is another user-centered method that uses a public relations framework (Vorvoreanu, 2008). The idea behind this research protocol is that it links interpretation with prominence (Vorvoreanu, 2008). WEA aims to take interpretations of an online experience and link them to features on the interface (Vorvoreanu, 2008). This protocol uses the five dimensions of public relations as its framework (Vorvoreanu, 2008). WEA evaluates participants with paired questions focusing on the dimensions of trust, commitment, involvement, openness and dialogue (Vorvoreanu, 2008). WEA provides procedural framework for this study.

2.4.3 UX and Branding

The connection between UX and branding has previously been mentioned in research. Branding has been mentioned in UX studies (Law et al., 2009). Law et al. (2009) explain that “Brand experience affects the user experience when you interact with the product; you forgive flaws for a loved brand and blame loudly the flaws in the products of a bad brand” (p. 726). However, Law et al. (2009) made a point to say that brands and UX are two different things. Law et al. (2009) argue that a brand encompasses all interactions a user has with the brand and UX only highlights the experience the individual has with said interface.

While Law et al. (2009) believe UX and branding have distinct differences; Battarbee and Koskinen (2005) introduce the idea of UX as a “co-experience.” These researchers believe that UX is an experience not just of an individual, but all the interactions associated with the interface (Battarbee & Koskinen, 2005). They believe that from these interactions, users develop experiences that are more meaningful (Battarbee & Koskinen, 2005). These social interactions thrive on the way people “...create, elaborate and evaluate experiences together...” (p. 15). Battarbee and

Koskinen (2005) introduce the idea that UX is a shared perception from multiple channels, like the concept of branding (Chernatony, 2002; Kay, 2006; Knox & Bickerton, 2003; Norris, 1992; Vishwanath, & Mark, 1997).

Referencing research from the branding section, many of these branding strategies seem to overlap with User Experience methods. While branding works to fill the two major needs of functional and/or emotional (Chernatony, 2002), UX evaluates in terms of hedonic and utilitarian users (Pöyry, Parvinen, & Malmivaara, 2013). Hedonic users are interested in fun and entertainment (Pöyry, Parvinen, & Malmivaara, 2013). It can closely be associated with an emotional need that branding fulfills (Chernatony, 2002). Utilitarian users are interested in the result or the functional (Pöyry, Parvinen, & Malmivaara, 2013), which can directly apply to a functional need (Chernatony, 2002).

Facebook page insights seem to lack research in how to evaluate customer perceived experience. There seems to be a research gap in measuring the actual user experience on Facebook as it relates to user perception of brand equity. Vorvoreanu (2008) shows a need for user-centered research in areas of study not necessary founded in technology, and this thesis' goal is to create a similar user-centric questionnaire. Rooted in branding, the goal of this research is to evaluate the actual user experience online and how it affects/adds to perceived brand equity.

CHAPTER 3. METHODS

The goal of this study is to provide two resources. First, this study provides an assessment tool (questionnaire) to help evaluate the perceived brand equity experience on Facebook. Secondly, this study provides important implications for marketing professionals to help cultivate strong branding on Facebook. This assessment tool was tested on a sample of participants to prove the practicality and was analyzed for emerging themes. The framework of this research employs Keller's (1996) customer based brand equity (CBBE), specifically the Brand Knowledge Model. The structure of this assessment tool was based on the UX method of Website Experience Analysis (WEA). WEA is a research protocol that links user interpretation of an experience online with features of the interface being experienced (Vorvoreanu, 2008).

The interpretive paradigm was focused on in this research, specifically the phenomenological approach. Patton (2001) states that a phenomenological approach "...focuses on exploring how human beings make sense of experience and transform experience into consciousness..." (p. 104). Since the focus of this research relied on the perceptions of the sampled group and the interpretation of their experience, the phenomenological approach was the best fit. The goal was to gain an understanding of an interpretation of a "shared experience." Patton's (2001) idea of "shared experience" directly connects with this research on two levels. First, the idea of UX evaluates an interface based on an experience. Second, a brand (specifically equity) is based on consumers' shared perception. The combination of evaluating brand equity with UX methods (a shared perception evaluation based on experience) seemed like a good fit with the phenomenological approach.

In addition to the framework of the methods, the background of the researcher was taken into account throughout this research. The researcher is currently a marketing professional with 10 years of experience. Her professional marketing experience includes various areas from financial to fundraising with a majority of the experience being in higher education (7 years). The researcher is currently a marketing professional at Purdue University that works in a department that provides marketing support for Purdue

University Residences. While the researcher interacts with the Purdue University Residences Facebook page, it is not a direct responsibility for the researchers. The researcher always has been interested in using social media to enhance a brand strategy and has helped in the support and establishment of various accounts across multiple platforms. For more detailed information, a full researcher identity statement is provided in Appendix B of this thesis.

3.1 Questionnaire Content & Structure

Focused on Keller's Brand Knowledge dimensions (2003) and Vorvoreanu's (2008) research protocol, the goal of this assessment tool was to gain insight on brand equity and sentiment of Purdue University Residences on Facebook.

3.1.1 Questionnaire Content

This questionnaire used Keller's Brand Knowledge dimensions as a base for the questionnaire content. Seven out of the eight dimensions were used in this study. Keller's Brand Knowledge dimensions that are included in this questionnaire are: Awareness, Attitudes, Benefits, Images, Thoughts, Feelings and Experiences (Keller, 2003; Netemeyer et al., 2004). Below is a table that defines the dimensions that were used:

Table 3.1 - Questionnaire Dimensions

Dimension	Definition
Awareness	"category identification and needs satisfied by the brand" (Keller, 2003, p. 596)
Benefits	"personal value and meaning that consumers attach to the brand" (Keller, 2003, p. 596)
Images	"visual information, either concrete or abstract in nature" (Keller, 2003, p. 596)
Thoughts	"personal cognitive responses to any brand-related information" (Keller, 2003, p. 596)
Feelings	"personal affective responses to any brand-related information" (Keller, 2003, p. 596)
Attitudes	"summary judgments and overall evaluations to any brand-related information" (Keller, 2003, p. 596)
Experiences	"purchase and consumption behaviors and any other brand-related episodes" (Keller, 2003, p. 596)

While eight dimensions in Brand Knowledge exist, the questionnaire in this research excludes the dimension of Attributes. Since participants are prompted to think hypothetically and have no prior experience with Purdue University Residences, it would be difficult for participants to evaluate Purdue University Residences without having experienced performance of the brand (Keller, 2003). For the study, the questions were dispersed in an order that would also make sense to the participant.

Additional resources were used in the creation of the content in this questionnaire. Netemeyer, Krishnan, Pullig, Wang, Yagci, Dean, Ricks and Wirth's (2004) research provided a questionnaire that was rooted in Brand Knowledge. Netemeyer's et al. (2004) questionnaire was also used in the creation of this study's assessment tool.

3.1.2 Questionnaire Structure

This assessment tool was modeled after Vorvoreanu's (2008) method, Website Experience Analysis (WEA). The goal of WEA is to link users' interpretations with the features on an interface that influence those interpretations (Vorvoreanu, 2008). In Vorvoreanu's (2008) research, participants were given a website to evaluate with an accompanying questionnaire based in public relations theory (Vorvoreanu, 2008). In this research, participants were given the University Residences Facebook page to evaluate with an accompanying questionnaire based in brand equity theory.

The format of the questions was modeled after the pair approach used in WEA (Vorvoreanu, 2008): one closed-ended question followed by an open-ended question. This questionnaire closely followed that format for each Brand Knowledge dimension. For this study, each dimension had two sets of paired-questions, four questions total (two close-ended and two open-ended).

The first question rates the participants' perception of the Brand Equity dimension on a scale of 1 to 5, 1 being in disagreement with the question (lack of presence of the dimension) and 5 being in agreement with the question (strong presence of dimension.) The second question in the paired set is open-ended asking the participant what on the Facebook page contributes to their perception. The interview schedule is located in Appendix A. For the interview, the questions are dispersed in a way that would make

sense to the participant. To validate the questionnaire for feasibility and accuracy, part of the researcher's graduate committee validated the questionnaire and provided approval.

While the content of the questions is based on Keller's Brand Knowledge, the format of the questions was modeled after the pair approach used in WEA (Vorvoreanu, 2008). The first question rates the participants' perception of the Brand Equity dimension on a scale of 1 to 5, 1 being in disagreement with the question (lack of presence of the dimension) and 5 being in agreement with the questions (strong presence of dimension.) The second question in the paired set is open-ended asking the participant what on the Facebook page contributes to their perception. Please reference the example below of a question set used in evaluating the dimension of Awareness.

*Q1: If I came to Purdue University, when I would think of Campus Housing, Purdue University Residences would be the brand that first comes to mind.
(Not at all) 1 2 3 4 5 (Definitely)*

Q2: What on the Facebook page makes you feel this way?

*Q3: If I came to Purdue University, Purdue University Residences would be a brand of campus housing that I would be very familiar with.
(Not at all) 1 2 3 4 5 (Definitely)*

Q4: What on the Facebook page makes you feel this way?

The measurements for Q1 and Q3 were measured on a 1-5 Likert scale that provided level of agreement from the participant and the method for sorting the open-ended comments into groups. The measurements for Q2 and Q4 were sorted based on the corresponding close-ended question. Once the comments were separated into the groups of low (1-2), neutral (3) and high (4-5) agreement, they were reviewed and coded for emerging themes. The entire questionnaire is located in Appendix A.

3.2 Procedures for Data Collection

This study's data was collected from participants in an un-moderated, online environment. Data was collected using a web-based, video recorded, remote user-testing platform called usertesting.com. Features of usertesting.com allowed for the implementation of robust qualitative research. Utilizing usertesting.com, the

questionnaire was posted within the platform. The platform also allowed for researcher note taking and bookmarking while reviewing the interviews.

All interviews were recorded with the knowledge of the interviewees and transcribed by the researcher. All interviews were recorded using a feature within [usertesting.com](https://www.usertesting.com). This allowed for audio recording of the interviewee and visual recording of the interviewee's computer screen. This provided a way for the researcher to see where the participant interacted on Facebook to help answer the questions. Lastly, researcher/recap notes were captured during and after the interviews.

Because each participant had different experiences, it was important that the assessment tool was clear and direct. In order to ensure clarity of this data collection, a pilot interview process was performed. From this pilot, questions and resources were validated and fine-tuned under the direction of the graduate committee chair.

To help participants evaluate and recall information, they had access to their personal computers and were asked to access their Facebook accounts while participating in the interview. Participants evaluated Purdue University Residences Facebook page while having their screens recorded.

3.3 Data Types

There were three major data types used in this research. The data types collected were a mixture of quantitative and qualitative data.

Of the quantitative data that was recorded, there were two different sets of data. First, the close-ended questions provided ranked responses. These were based on a Likert scale from 1-5 that helped participants define level of brand equity in that dimension. These questions also provided a way for the researcher to sort the responses into groups. There were 20 participants in this study, which led to 40 responses per brand dimension. To further explain, since there were two ranked questions per dimension, each participant had two ranked answers per dimension (20 participants with two responses each was 40 responses total per dimension.)

The second quantitative data set that was recorded were typed responses from participants. Participants were prompted with questions that asked for their suggestions and what they felt was going well on the Facebook page. The third quantitative data set

that was recorded was demographic information. Participants were asked to self-identify on various questions based on gender, ethnic group, education level, etc.

There were two sets of qualitative data that were recorded. The first set of qualitative data was the audio-recorded comments from the open-ended questions taken in the survey. These answers were listened to and transcribed by the researcher. These qualitative comments were reviewed in groups based on levels of agreement with the brand dimension. The second set of qualitative data that was reviewed was the screen recordings from each participant. These helped provide the researcher with a visual reference for each participant. This helped provide insight into what Facebook features were used by participants to answer questions throughout the study.

3.4 Sampling Strategy

In order to collect data to help answer the presented research question, surveys were conducted remotely with paid participants. Through a grant with usertesting.com, usertesting.com provided the participants for this study. The participants were paid by usertesting.com and the researcher did not provide any additional compensation to the participants. A criterion sampling was applied in order to deliberately evaluate a specific group (Maxwell, 2005). The sampling group had no relation with the researcher. The participation criterion for the group was participants who had to be on Facebook. Participants were between the ages of 18-24, both male and female. This was ideal because according to a recent Pew Research Center Study, 18-29 and 30-49 are the two most active groups on Facebook (“The demographics of,” 2013) and University Residences target audience group is 18-24.

The goal of saturation in data is very important to ensure perceptions are accurately represented (Creswell, 1998; Mason, 2010; Morse, 1994 as cited in Mason, 2010). To define the sample size, Creswell (1998) states for a study in phenomenology, the sample size should be between 5-25 (p. 64) and Morse (1994) further defines by stating the sample should be more than six (p. 225 as cited in Mason, 2010). For this study, the researcher had a sample size of 20 participants.

3.5 Data Analysis

In this study, the major focus was on the participants' perceptions of Purdue University Residences brand equity. This study provided three data sets: quantitative answers, audio-recorded qualitative comments and video recordings of participant screens. The quantitative data was used to sort qualitative data and provide levels of agreement with various brand equity dimensions. A thematic analysis was performed on the study's qualitative data in order to explore emerging themes and provide suggestions. Video recordings were observed and recorded by the researcher.

The quantitative data in this study was used to sort the qualitative data (the open-ended questions). The major quantitative measure used in this study was a Likert scale to evaluate the level of agreement in a specific dimension. The quantitative data was measured in the first question of the paired questions. This was modeled after Website Experience Analysis (Vororeanu, 2008). This measure gave overall agreement levels in the various dimensions. The data from these responses was also used to help sort the open-ended responses into three groups: High agreement (4-5), neutral agreement (3) and low agreement (1-2) with the corresponding brand dimension. This scale was used to help categorize comments for thematic analysis. Each dimension typically had 40 ranked responses per dimension that were sorted into groups. Because there were 20 total participants in this study and two ranked questions per dimension, this gave 40 responses to analyze per dimension.

The qualitative data was a major focus in analysis. Since the data collected was the perceptions of the participants, research states a thematic analysis is the best choice for analysis (Berg & Lune, 2012; Patton, 2001). In Braun and Clarke's (2006) thematic analysis, there are six major steps that need to be followed: familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report.

First, the researcher became familiar with the data in two ways. The researcher first listened to each interview and took brief notes of important things they noticed. Next, the researcher transcribed all the interviews. This helped to further the familiarity with the data and also helped with the following steps in the thematic analysis.

Next, the researcher generated initial codes within each brand knowledge dimension per each level of dimension group. Initial codes were mainly generated off specific sentiments of the dimension on the page or which Facebook attributes were used in the participants' response. This could be the overall response or reoccurring words that were used in multiple responses. After these initial codes were generated, the researcher then looked over the codes within each level dimension and analyzed for themes. These themes were then defined and named to produce the final report.

To summarize, each open-ended comment was sorted into agreement groups depending on the quantitative response and analyzed for the emerging themes. The comments were analyzed within the groups mentioned above (high, neutral, and low) to show what those in disagreement feel verse those in agreement or neutral. The researcher reviewed the transcripts multiple times until major themes emerged from the data. The major themes are presented in the results chapter.

Lastly, the researcher reviewed the video recordings. Per each dimension, the researcher recorded which Facebook features were used by participants to answer the questions. This was done to show which features might have been used that were not mentioned in the qualitative comments. These observations were compiled in a general list sorted by dimension. In the results, the most popular features were mentioned.

To tie everything together, the following is an example of how data was collected from one participant for one dimension in this study. For example, the dimension of Awareness is used again. Below are the questions from that dimension for reference:

Q1: If I came to Purdue University, when I would think of Campus Housing, Purdue University Residences would be the brand that first comes to mind.

(Not at all) 1 2 3 4 5 (Definitely)

Q2: What on the Facebook page makes you feel this way?

Q3: If I came to Purdue University, Purdue University Residences would be a brand of campus housing that I would be very familiar with.

(Not at all) 1 2 3 4 5 (Definitely)

Q4: What on the Facebook page makes you feel this way?

First, the researcher would review Q1 and Q3. These ranked responses help sort the following qualitative comments that were provided from Q2 and Q4. If a participant

ranked Q1 and Q3 at 4, the comments from Q2 and Q4 would be sorted into the high brand awareness group (4-5 rankings) and reviewed. If a participant ranked Q1 at 3 and Q3 at 5, the comments were sorted into different groups. Q2 comments were sorted into the neutral brand awareness group (3 ranking) and Q4 comments were sorted into the high brand awareness group (4-5 rankings).

In the next step, the researcher reviewed the comments and coded the qualitative comments in the perspective groups. A thematic analysis was done on these comment groups and reported in the results chapter. Lastly, the researcher reviewed the video clip that corresponded with the question and recorded which Facebook features were used.

3.6 Credibility and Validity

The researcher has taken measures to ensure credibility and validity. First, research was conducted remotely without the researcher present. This allowed for participants to give honest and open feedback without any influence from the researcher. Ideally, this would eliminate any researcher bias on the participants' answers.

Data saturation has been taken into consideration for this study in reference to sample size. As mentioned previously in this section, Creswell (1998), Mason (2010) and Morse (1994 as cited in Mason, 2010) state the importance of a sample size more than six. With 20 participants, the data was reviewed and data saturation was reached.

Next, all data types collected were transcribed and summarized by the researcher. By completing transcription, this immersed the researcher in the data. By examining the data in detail, the researcher was able to see patterns and connect meanings within the data (Miller & Crabtree, 1992).

Lastly, researcher reflexivity is addressed in this study. While only one researcher was able to perform the data, the researcher kept a reflexive journal. A reflexive journal is a diary wherein the researcher journals often about the research process (Lincoln & Guba, 1985). In addition, a researcher identity statement has been created to explain the researcher's background and passion for this research (appendix B). This statement helps frame where the researcher is coming from and further adds to the reliability and validity of the research.

CHAPTER 4. RESULTS

The purpose of this study is to determine which elements of a Facebook page experienced by participants contribute to various perceived dimensions of brand equity. A web-based remote user-testing platform was used to deliver a questionnaire to participants. The questionnaire asked participants to explain what characteristics of a Facebook page are contributing to their perceptions of University Residences. The questionnaire contained both closed-ended and open-ended questions. Closed-ended questions measured their level of agreement in various brand equity dimensions on a 5-point Likert scale. Open-ended questions asked participants to identify the various features of Facebook they associated with their respective perceptions of Purdue University Residences.

Sorted by each brand equity dimension, the paired questions were grouped by closed-ended questions. These groups were based on the ratings and sorted by Disagreeing/negative (1-2), Neutral (3), and Agreeing/Positive (4-5). Participants' comments in the open-ended questions were analyzed and coded for themes.

To further examine how Facebook contributes to brand equity, the following sections provide a research corpus, reoccurring themes per equity dimension and summary of findings. Comments from participants have been inserted to help provide validity to emerging themes. Before an in-depth analysis of the dimensions, a brief data corpus was addressed.

4.1 Participant Demographics

There were 20 participants in this study, 16 females and 4 males. 18 participants identified as Caucasian, one participant as Latino and one participant as Asian/Pacific Islander. 13 participants were undergraduate students, 4 were graduate students and 2 considered themselves prospective college students. One participant did not identify with any of the previous educational background selections. 8 of the participants had degrees: 3 had an associated degree, 4 had a Bachelor's degree and one participant had a master's degree. 13 of the participants had not living in on-campus housing before while 7

participants had lived in on-campus housing before. 18 of the total 20 participants made 100,000 or less annual salary with 12 of those participants reporting less than \$40,000 a year. Participants ranged in age from 18 to 24. 1 participant was 18, 3 were 19, 2 were 20, 5 were 21, 4 were 22, 1 was 23 and 4 participants were 24. All participants lived in the United States.

Participants used three different web browsers. 14 participants used Chrome, 2 used Firefox and 4 used Safari. 10 participants used a Windows operating system and 10 participants used a Mac operating system. All participants were relatively active in social media. All participants had to have a Facebook account to participate in this study. All participants did not follow Purdue University Residences Facebook page before this study. Of these participants, 45% had accounts on LinkedIn, 70% on Pinterest, 70% on Twitter and 55% on google+.

4.2 Data Corpus

This data was collected on June 8th, 2016 using the web-based, remote user-testing tool, usertesting.com. There were over seven hours of recorded video with an average length of 21 minutes per video. These videos were transcribed by the researcher, which totaled 132 typed pages.

4.3 Overall Ratings

Participants generally felt a neutral to high level that Facebook contributes overall to their perceived brand equity. Means from the different dimensions ranged from 3.6 to 4.55 with the highest mean being the first question in Awareness and the lowest mean being the first question in Images at 3.55.

Medians from different dimensions ranged from 3.5 to 5. The lowest median was question two of the Benefits dimension at 3.5. The highest mean was located in three different questions: Q1 of Awareness, Q3 in Thoughts and Q1 in Feelings.

Table 4.1 - Brand Equity Dimension Means and Medians

Brand Equity Dimension	Means		Medians	
	Q1	Q3	Q1	Q3
Awareness	4.55	3.6	5	4
Attitudes	4.15	4.2	4	4
Benefits	3.6	3.6	4	3.5
Images	3.55	4	4	4
Thoughts	3.8	4.5	4	5
Feelings	4.4	4.35	5	4.5
Experiences	3.85	4	4	4

Generally, means and medians were very similar with medians being higher on average. Overall, all participants seem to be in general agreement that these brand equity dimensions are able to be perceived on Facebook. Participants seem to feel they can gather information from Facebook that contributes to their perception of University Residences.

To break down the data further, the answers to ranked questions were sorted into low level of brand dimension (1-2), neutral level of brand dimension (3), and high level of brand dimension (4-5). Overwhelmingly, participants felt a high level in the dimensions of brand knowledge. Participants felt that Facebook elements added to their perception of a brand, otherwise known as brand equity. 14 questions had ranked answers; 204 responses were categorized as a high level of brand dimensions, 58 responses were a neutral level and 17 responses were a low level of brand dimensions. The highest level of brand dimension perception in this questionnaire was in the Feelings dimension and the lowest level of brand dimension was in the Benefits dimension (both median and means).

Table 1.2 - Total Responses By Group

Brand Equity Dimension	Low	Neutral	High
Awareness	2	6	32
Attitudes	2	6	32
Benefits	3	14	22
Images	6	7	27
Thoughts	1	9	30
Feeling	2	2	36
Experiences	1	14	25
Total Responses	17	58	204
Likert Scale (Out of 5)	1-2	3	4-5

These close-ended questions measured the level of agreement with a brand equity dimension. The open-ended questions provided insight into how participants perceived the dimension. The following sub-section presents emerging themes throughout the seven brand equity dimensions.

4.4 Awareness

Awareness was the first dimension of brand equity addressed in the questionnaire. Awareness was defined as a “category identification and needs satisfied by the brand” (Keller, 2003, p. 596). The first four questions of questionnaire were dedicated to the Awareness dimension and are listed below:

Q1: If I came to Purdue University, when I would think of Campus Housing, Purdue University Residences would be the brand that first comes to mind.

Q2: What on the Facebook page makes you feel this way?

Q3: If I came to Purdue University, Purdue University Residences would be a brand of campus housing that I would be very familiar with.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses recorded in this dimension, 32 of those responses were ranking high in brand awareness, six were ranked neutral and two were ranked low in brand awareness.

Table 4.3 - Brand Awareness Response Numbers

Level of Awareness	Q2	Q4	Total
High	19	13	32
Neutral	1	5	6
Low	0	2	2

4.4.1 High Level of Awareness

In the responses that were a high level of Awareness, a few themes emerge. Overall, multiple participants mentioned that this is the first housing that they have heard of at Purdue. Because of the sampling, most participants did not have a tie to Purdue housing whatsoever except one participant who went to Notre Dame.

The second theme that emerged was the idea of being aware of University Residences by association with Purdue University. Participants felt that because University Residences is linked to Purdue University visually and in name, it would seem like the obvious choice of incoming students. The following comments help illustrate this theme.

“I feel like it’s the first thing to think of right away. It says it’s a campus building. And that tells it’s from the university.”

“I wouldn’t know about specifically the brand of Purdue University Residences but I’d know about Purdue itself.”

“I’m assuming that’s after looking at this [I would be aware]. Seems like it’s official with the Purdue logo and [seems] very professional.”

The third theme to emerge was the importance of ratings. While there does not seem to be a direct link to the “identification and needs satisfied by the brand” (Keller, 2003, p. 596), participants still commented on the ratings.

“I like how you guys have your rating up here. That’s a plus for anything.”

“The review right here is 4.6 out of 5 stars. It speaks miles to me. It seems students generally have a good experience.”

4.4.2 Neutral Level of Brand Awareness

Six of the questionnaire responses felt neutral about the level of brand awareness on Facebook. Throughout the responses, one theme emerged on the importance of photos. Of the neutral responses, the participants felt they needed more information, specifically photos, to feel comfortable with University Residences. One participant stated:

“I would like to see a picture of the dorm rooms or what the building looks like because I haven’t seen it yet. That’s what I don’t feel so familiar.”

While another stated:

“I don’t know how I feel about this. I mean there is not much I can be familiar with now. It doesn’t show student lifestyle which would be a plus if it showed this...”

Showing a visual representation of the brand was important to neutral participants in order to gain some sense of awareness or familiarity with the brand.

4.4.3 Low Level of Awareness

Two of the responses felt a low level of brand awareness on the Facebook page. The common theme that emerged in this group was the need for previous knowledge about Purdue. While the questionnaire asked participants to imagine they are a newly enrolled student at Purdue, two different participants felt confused and stated that the Facebook page had nothing to do with their personal feelings.

“Nothing on the Facebook page makes me feel this way, I just don’t know anything about Purdue University. I’m so unfamiliar – I’m sure if I was enrolled, I’d consider it.”

The Facebook page features that were frequently used by participants in this dimension were the Timeline and page photos. Participants spoke about the posts, specifically the quality of content and the importance of it. Another feature heavily viewed for information was the About page, both the overview and page info sections. The next section addresses brand Attitudes.

4.5 Attitudes

Attitudes was the second dimension addressed in the questionnaire (questions five through eight of Appendix A.) Attitudes was defined as a “summary [of] judgments and overall evaluations to any brand-related information” (Keller, 2003, p. 596). Questions five through eight of the questionnaire addressed brand attitudes and are found listed below:

Q1: If I came to Purdue University, next time I would purchase campus housing, I would plan to live at Purdue University Residences.

Q2: What on the Facebook page makes you feel this way?

Q3: Purdue University Residences seems to be a very popular brand of campus housing.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses, 32 felt a high level of brand attitudes, six were neutral and two felt a low level of brand attitudes.

Table 4.4 - Brand Attitude Response Numbers

Level	Q2	Q4	Total
High	16	16	32
Neutral	3	3	6
Low	1	1	2

4.5.1 High Level of Brand Attitudes

Of the responses that felt a high level of attitudes, two themes emerged. The first theme centered around how content on the page helps facilitate the idea of community. One participant said:

“The handy tips create that sense of community and caring which is good for students in their first year about to live away from home. This is really welcoming and this type of security is what students and parents want.”

Another participant also commented on the environment in reference to content and stated:

“[University Residences] seems to be out for the students. [University Residences] seems to come to you. [University Residences] seems like a welcoming environment. While we are all looking for a place to stay, we are also looking for comfort.”

The second theme that emerged from the responses at a high level was that interactions on the page contribute to popularity. Whether it was likes, check-in's or reviews, the amount and the quality were important in determining if participants felt the brand was popular. The interaction that was the most important to participants seemed to be the reviews. The comments below illustrate this theme:

“[University Residences] seems like a pretty nice place and people like living there based on the reviews.”

“[University Residences] does have 4.6 out of 5 making it seem to be a positive place”

“University Residences seems popular considering it has quite a few reviews, I like how these things are happening. This shows that people are interacting with the page and liking things.”

4.5.2 Neutral Level of Brand Attitudes

Six out of the 40 responses in the Attitudes dimension were neutral. Two themes emerged from the open-ended questions. First, participants felt that additional research of University Residences was needed. This was very important to participants that felt a neutral level of brand attitudes. While participants felt the Facebook page was maintained well, they felt that Facebook is just a part of researching college and lacks all the pieces needed in deciding if they were going to live there or not. One participant said:

“I wouldn’t know at this moment because I haven’t done research looking for other options that are cheaper or offer a better living environment. I think that I would have to have had that experience before I can offer feedback.”

And another participant stated:

“I don’t make decisions like that based on just a Facebook page.”

In addition to more research, neutral participants highlighted the importance of pre-existing interactions on the Facebook page. One participant commented on the lack of interaction:

“They only have 27 reviews and even though 3,000 likes is a lot of people it’s not a lot for a university.”

One participant takes it a step further to mention even more areas that lack interaction. The participant said:

“It has over 3,000 likes, which is good, but posts on page do not have more than 50 likes.”

4.5.3 Low Level of Brand Attitudes

Only two responses felt a low level of brand attitudes. One participant's response was based on their personal experience instead of in a hypothetical response.

"I personally wouldn't go to a residences hall because I'm a senior and I don't want to meet people and I have a standard of living for apartment style living."

The second response that reflected a low level of brand attitudes references the quality of content on the Facebook page in reference to the reviews and lack of interaction.

"Out of the people who have been there, there have only been 27 reviews. I feel like there could be more...People don't seem to be interacting with posts or flocking to the information."

Since only two comments were available, it was hard to state that a theme emerged.

Of the Facebook features used by participants, the timeline was a feature referenced by participants when evaluating Attitudes. Participants also valued others options for attitudes when it came to page interactions (Likes, check-ins and reviews). The next section addresses the benefits dimension.

4.6 Benefits

Benefits was the third dimension addressed in the questionnaire (questions nine through twelve of Appendix A.) Benefits were defined as a "personal value and meaning that consumers attach to the brand" (Keller, 2003, p. 596). Questions nine through twelve of the questionnaire addressed brand benefits and are listed below:

Q1: If I came to Purdue University, living with Purdue University Residences brand would help me excel as a student.

Q2: What on the Facebook page makes you feel this way?

Q3: What I would get from Purdue University Residences brand of campus housing would be worth the cost.

Q4: What on the Facebook page makes you feel this way?

While all the other dimensions in total had 40 responses, Benefits alone had 39. This was because of a glitch on usertesting.com. A participant moved a prompt off their screen and was able to advance without answering the question. The open-ended response was captured for this question but the closed-ended question was not. Because

of this, the qualitative comment could not be grouped and was not included in the analyzed group of comments.

Of the 39 responses, 22 felt a high level of brand benefits, 14 were neutral and 3 felt a low level of brand benefits.

Table 4.5 - Level of Benefit Response Numbers

Level	Q2	Q4	Total
High	12	10	22
Neutral	6	8	14
Low	1	2	3

4.6.1 High level of Brand Benefits

Of the responses that reflected a high level of brand benefits, two themes emerged that focused around the content of the page. The first theme that emerged was that page content helps show perceived quality. Participants commented multiple times on various pieces of content and how they looked at the content as a perceived benefit. The comments below illustrate this:

“I think that for the cost, the Facebook page shows a lot of ways people can benefit from University Residences more so than if they lived off campus or in an apartment.”

“The Facebook page shows a lot of ways that people can benefit from living with University Residences. You get that community sense.”

The second theme that emerged about content was that content helps create perceived community. Participants generally felt that because helpful resources were provided on the page, it means University Residences had a sense of community. One participant stated:

“I think it definitely helps you when you have theses resources. Look at the cover photos. It’s a group in conversation, which is important in college and it helps. That’s what the college experience is all about.”

Another participant added when commenting on content that:

“I would be confident I would be in an environment that would help me excel as a student.”

4.6.2 Neutral Level of Brand Benefits

Fourteen of the responses were categorized as neutral, which was the highest neutral group among the seven dimensions addressed in this study. The Benefit dimension questions ask participants if they felt University Residences would help them excel as a student and if it was worth the cost. Each question had an emerging theme.

When neutral participants were asked if University Residences would help them excel as a student, some stated that where you live does not affect one's academics. The below comments illustrate this theme.

"I don't think or see how this would help me excel as a student"

"Nothing [on this page] makes me feel I'll excel as a student."

The second question within Benefits asks if the participant thinks University Residences is worth the cost. The theme that emerged was the importance of clear cost. Participants felt that the dollar sign graphics under price range on the page do not really state the cost. One participant stated:

"Two dollar signs do not give me a good price range."

Other participants did not even mention the price range feature and stated there was no definitive price and a definite lack of information. The comments following illustrate this:

"There is no information about cost and that kind of annoys me."

"I don't know if it is worth the cost; this is just information for people who already live there."

4.6.3 Low Level of Brand Benefits

Three responses felt a low level of brand benefits on the Facebook page. Within these responses, there seemed to be a theme of distrust. One participant felt it was hard to know if University Residences was worth the price by the Facebook page because of the ease of creating a Facebook page.

"It looks like a friendly place, but it's hard to tell if it is worth the money living there. I feel like every person can make a page"

Another participant felt information was hidden and hard to track down.

“I think that [price] should be something more visible and easily found... I hate when you are researching about a product or service and they hype it up but nowhere can you find a price.”

While various themes existed in Benefits, participants referenced similar Facebook page features that formed their perceptions. A majority of participants reference the About page, specifically the price range that is located in the Page Info section. The participants were split on whether or not the use of dollar signs was enough information to convey price. Another feature that was heavily reviewed was the timeline, specifically the quality of the content on the timeline. Lastly, Images/Photos were a highly viewed and referenced feature. Next, themes in the dimension of images are presented.

4.7 Images

Images was the fourth dimension addressed in the questionnaire (questions 13 through 16 of Appendix A.) Images were defined as “visual information, either concrete or abstract in nature [of the brand” (Keller, 2003, p. 596). Questions 13 through 16 of the questionnaire addressed brand images and are found below:

Q1: Purdue University Residences brand of campus housing has a strong brand image.

Q2: What on the Facebook page makes you feel this way?

Q3: Purdue University Residences brand of campus housing has a consistent brand image.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses, 27 felt a high level of brand images, 7 were neutral and 6 felt a low level of brand images.

Table 4.6 - Level of Image Response Numbers

Level	Q2	Q4	Total
High	12	15	27
Neutral	4	3	7
Low	4	2	6

4.7.1 High Level of Brand Images

In the responses that felt a high level of brand images, three themes emerged from the participants. First, some participants felt that the University Residences tie with Purdue University automatically gave the brand a strong image. One participant stated:

“I mean it’s tied to the university so that gives it a strong image.”

The second theme that emerged was that other user’s interactions contribute to image. Participants mentioned that the high rating contributed to the strong and consistent image. One participant said:

“I feel like they are very popular based on likes and ratings. I feel like they are a strong brand.”

Other participants continued to comment on the importance of interactions and specifically highlighted ratings and reviews. The comments below illustrate this concept:

“The rating is very good. Like I said, the rating is 4.6 out of 5 and that means it has really a really strong brand image.”

“I would also rank this high because of the high page rating again.”

The final theme that emerged in this group was that strong visuals are important in brand image. Participants commented on visuals like the logo in the profile pictures and the cover images. One participant stated:

“University Residences’ is thoughtful of their brand between their logos and the background image of students in the dorm.”

Another participant reaffirmed with this statement:

“There is nothing confusing about this at all. All your profile pictures are the Purdue University Residences logo.”

In addition to just having the visual elements, the professionalism of the visual elements was also commented on. One participant said:

“It’s clean and efficient and wants to get the information out there.”

4.7.2 Neutral Level of Brand Images

Seven of the responses reflected a neutral level of brand images. Most felt it difficult to provide feedback on the strength or consistency of the brand image. Most participants could not give any solid feedback besides being unsure. One participant said:

“That’s hard for me to think about. It’s hard and a little weird as campus buildings aren’t branded to me.”

Another participant stated:

“I wouldn’t say strong [brand image] because it’s hard for me to know if that is a private business or part of the university.”

4.7.3 Low Level of Brand Images

Six of the responses felt a low level of brand images on the University Residences Facebook page. The one theme that emerged from this group was centered on the logo of University Residences. When brand image was specifically mentioned, most participants automatically mentioned the logo. The participants expected a logo but stated it needed to have a catchy design and be displayed throughout the page.

Design was an important aspect of the logo that was brought up by participants. Two participants felt like University Residences did not have their own logo but relied heavily on Purdue University’s.

“When I see Purdue University logo big and the University Residences type small with the logo, University Residences doesn’t seem to have their own logo. I don’t think they have a brand in themselves.”

“There really isn’t a symbol that makes me think Purdue University Residences besides what is in the profile picture. Which really isn’t their own logo, it’s a version of the schools logo.”

Other participants mention the importance of using that logo repeatedly in various content throughout the page. The idea is that it would establish content as University Residences and if the content were shared on other pages, they would know where the content originated.

“When I pull up things that are advertisement for events and whatnot, they don’t incorporate the profile picture. I don’t see the word mark anywhere else but in the profile picture.”

“I think that there should be some kid of logo/picture that should appear throughout all the pictures in the corner or videos so we know, no matter where this is posted, it’s from university residences.”

Overall, the importance of a strong visual logo and application of the logo on various content is extremely important in having a strong brand image.

Of the Facebook features, participants used two features heavily when evaluating brand images; Photos/images and Reviews/Ratings. Photos and images included these various pieces on content, no matter where they were placed. Cover photos and profile photos tended to be the first stop in reviewing images but almost always, participants dove further. Some participants accessed image directly from the timeline while others clicked to the photo portion of the Facebook page and browsed albums. The fifth dimension addressed in next section is brand Thoughts.

4.8 Thoughts

Thoughts was the fifth Brand Knowledge dimension addressed in the questionnaire (questions 17 through 20 of Appendix A.) Thoughts were defined as “personal cognitive responses to any brand-related information” (Keller, 2003, p. 596). Questions seventeen through twenty of the questionnaire addressed brand thoughts and are found listed below:

Q1: Purdue University Residences is honest with its customers.

Q2: What on the Facebook page makes you feel this way?

Q3: Purdue University Residences brand seems to be very consistent in what it stands for.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses, 30 felt a high level of brand thoughts, nine were neutral and one response felt a low level of brand thoughts.

Table 4.7 - Brand Thoughts Response Numbers

Level	Q2	Q4	Total
High	12	18	30
Neutral	7	2	9
Low	1	0	1

4.8.1 High Level of Brand Thoughts

In the responses that felt a high level of brand thoughts, one major theme emerged. Participants felt quality of content leads to the perceived honesty and integrity of the brand. When mentioning quality of content, participants felt that detailed content and its consistency were very important.

In order to establish what the brand stands for, participants felt that the content would help show that. Participants said:

“It seems to stand for students having a place to stay and live but also giving them access to events and resources.”

“You can tell by the kinds of events and all the community things they are posting. These are events where they try to get you to come together.”

Participants also felt that consistency in content helped establish perceived thoughts of the brand. It seemed that the more thoughtful the content was, the more favorable the brand was perceived. Below are comments to illustrate this:

“What I am consistently seeing is that they are supporting students. They want you to strive in academics and other relationships.”

“I love how much you updated this because it shows all the effort you guys put into this page. Which is awesome.”

4.8.2 Neutral Level of Brand Thoughts

Nine responses felt neutral about the level of brand thoughts on the Facebook page. Participants that responded neutral in this dimension felt like they could not give a good answer. However, when asked about honesty, they relied on the Facebook page reviews to provide some sort of guidance. The below quotes help illustrate this:

“The reviews have them rated high. I feel like the people reviewing are saying [University Residences is] good. I would have to say they are honest.”

“You have good ratings. But are you honest? I have no idea. It seems hard to tell from a Facebook page.”

“When you say it’s honest, when you see all these 5 stars, you think something is off.”

Whether the reviews give the participant positive or negative feedback, they are important in perceiving honesty. Participants also seemed cautious when referencing honesty. The feedback showed while the page looked professional, they understand that it is easy for anyone to use Facebook.

4.8.3 Low Level of Brand Thoughts

Only one response out of the 40 total felt a low level of brand thoughts, specifically the question referencing honesty. The participant referenced that the audience of the page does not seem to be incoming students.

“Yes it gives information but doesn’t give an outsider the information they need.”

When reviewing the Facebook page, participants tended to gravitate to the timeline posts. Participants again mentioned they felt that the relevancy of the content and the source of the content were important. Another largely referenced feature was, again, ratings and reviews. Participants feel that feedback from others is important as well as the type of feedback that is available. The next section covers the dimension of Feelings.

4.9 Feelings

Feelings was the sixth dimension addressed in the questionnaire (questions 21 through 24 of Appendix A.) Feelings was defined as “personal affective responses to any brand-related information” (Keller, 2003, p. 596) Questions 21 through 24 of the questionnaire addressed brand feelings and are listed below:

Q1: Purdue University Residences is socially responsible.

Q2: What on the Facebook page makes you feel this way?

Q3: Purdue University Residences brand genuinely cares about their customers.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses, 36 responses felt a high level of brand feeling, two were neutral and two felt a low level of brand feeling.

Table 4.8 - Brand Feelings Response Numbers

Level	Q2	Q4	Total
High	18	18	36
Neutral	1	1	2
Low	1	1	2

4.9.1 High Level of Brand Feeling

In the responses that felt a high level of brand feeling, two similar themes from previous dimensions appeared. The first theme represented in the comments addressed the content, specifically the type and quality. When participants were asked if they felt that University Residences is socially responsible, they commented that the types of content led to their perceptions. At the time of this study, University Residences was having a couple of social conscience events like a blood drive and a donation drive for the less fortunate. Participants commented that these types of content show that University Residences is socially responsible. Participants stated that they felt this content made the brand socially responsible. The comments below illustrate this:

“To involve people with the university, for example the blood drive, to help others give back as well as socialize with others.”

“Definitely socially responsible because the socially responsible events that University Residences is having, from blood drive to giving back.”

Content also added to participants’ perception that University Residences cares. However, instead of addressing the type of content, they commented on the quality of the content. The comments below illustrate this:

“You can see from the front page they are posting a lot of things to get involved with students and how to prepare them for campus. This shows they care.”

“University Residences puts a lot of work into making sure students have resources they need. They are putting a lot of effort into making sure the students have what they need.”

The second theme that was represented was the importance reviews/ratings. This recurring theme across dimensions has been represented in at least one response in every section. The following quotes continue to illustrate the importance of the Facebook page rating:

“I give University Residences a 5 for being caring because of the rating. It seems like people really like it and the people in the photos seem to really like it.”

“I’d give University Residences a 5 because the ranking is high.”

4.9.2 Neutral Level of Brand Feelings

Only one response was neutral out of 40 encoded in the Feelings dimension. The participant felt that the page was more about the establishment than the school.

“I don’t see much about their customers... I don’t think people care about the record number of campus students. Students care about the move-in information.”

4.9.3 Low Level of Brand Feelings

Only two responses felt a low level of brand feelings. In those responses, the importance of interaction was stressed. Participants felt the page should have more interactions whether it is likes on page posts or ways for a viewer to interact with the page. One participant felt there should be more likes in comparison to how large Purdue University is.

“You would think it would have lot of more likes for the amount of people that go to Purdue.”

Another participant mentioned they did not feel valued because of the absence of the page promoting interaction. The participant stated:

“I didn’t really see anywhere [to comment] if you are not enjoying your experience or something. I don’t think that makes you feel like you are valued.”

The most reviewed Facebook features in reference to Feelings were Timeline content and ratings of the page. Like the previously reviewed dimensions, these Facebook attributes led to the perceptions of brand Feelings by the participants. Lastly, the next section addresses brand Experiences.

4.10 Experiences

Experiences was the seventh and final dimension addressed in the questionnaire (questions 25 through 28 of Appendix A.) Experiences were defined as “purchase and consumption behaviors and any other brand-related episodes” (Keller, 2003, p.596). Questions 25 through 28 of the questionnaire addressed brand experiences and are found listed below:

Q1: If I came to Purdue University, compared to other brands of campus housing, Purdue University Residences is of very high quality.

Q2: What on the Facebook page makes you feel this way?

Q3: If I came to Purdue University, using Purdue University Residences brand of campus housing, I would feel like I am getting my money's worth.

Q4: What on the Facebook page makes you feel this way?

Of the 40 responses, 25 responses felt a high level of brand experience, 14 felt neutral and 1 response felt a low level of brand experience.

Table 4.9 - Brand Experience Response Numbers

Level	Q2	Q4	Total
High	12	13	25
Neutral	8	6	14
Low	0	1	1

4.10.1 High Level of Brand Experience

In the responses that reflected a high level of brand experience, two familiar themes emerged: the importance of interactions (comments/ratings) and how content contributes to perceived brand equity. When participants mentioned ratings, they talked about the specific number rating out of 5 (4.6). They commented that it was a high ranking and it made them feel University Residences was of high quality. One participant stated:

“I’m going to say University Residences is of high quality because a high ranking of the dorm says a lot.”

Another participant also stated that:

“4.6 is a good rating. It means a lot of people like it, which is good.”

Participants also mentioned comments and in-depth reviews helped show perceived quality.

The second theme that emerged in the agreement responses was the importance of how content contributes to perceived experiences. Like in previous dimensions, the quality of content was very important in portraying the University Residences community.

“I lived on campus and I feel like I would rather live here. The page seems social and wants everyone to be a part of everything.”

“I would personally would live here because of the social activity and because the sense of community that is conveyed with this page.”

The participants commented that the content of the page was successful in conveying a positive community. The below comments illustrate this:

“As a student this page would make me feel very comfortable living here which is important.”

“The page is just really friendly, very sociable and seems like a really nice, safe, and comfy place to live.”

4.10.2 Neutral Level of Brand Experience

14 of the 40 responses felt a neutral level of brand experiences. In these responses, participants generally felt information was missing. When participants were prompted about University Residences being of high quality, they felt they didn't have much to compare it to. The following comments explain this theme:

“I don't have much to compare to based on what I know from going to other dorms.”

“I don't know what the other housing options are like and I can't really answer that question.”

The second question in the experience dimension asked participants if they felt like they were getting their money's worth. The neutral respondents felt it was difficult to answer this question without a defined price range.

“I don't know about money's worth because I don't know about the housing itself.”

“I can't answer honestly because there is no definitive price range.”

One neutral responding participant felt the price range feature was a bit vague and stated:

“Only two dollar signs? I don't know the price based on that.”

4.10.3 Low Level of Brand Experience

One response felt a low level of brand experiences. The response was referencing whether the participant would feel like they are getting their money's worth. Mentioned

earlier in the findings, the lack of detailed pricing information has left participants wanting to know more.

The most used Facebook page features were content posted on the timeline and the price range located on the About page.

The previous seven sections in this chapter outlined themes that emerged in the research on Brand Knowledge dimensions. The participants' comments that were highlighted were to help illustrate the themes within the seven Brand Knowledge dimensions included in the research.

Participants used multiple Facebook features to define their perceptions in each dimension of brand equity. The previous sections highlighted the most frequently referenced features in each category. Below is a table that illustrates which Facebook features were used by participants to influence their various levels of brand equity dimensions.

Table 4.10 - Most Used Facebook Features Per Brand Dimension

Dimension	Facebook Feature/Attribute
Awareness	Timeline Content, Photos Page, About Page
Attitudes	Timeline Content, Interactions
Benefits	About Page [Price Range], Timeline Content, Photos
Images	Photos, Rating/Reviews
Thoughts	Timeline Content, Rating/Reviews
Feelings	Timeline Content, Rating/Reviews
Experiences	Timeline Content, About Page [Price Range]

The next chapter discusses findings and the implications on online brand equity research.

CHAPTER 5. DISCUSSION AND CONCLUSION

Overall, many themes emerged throughout this study to help marketing professionals evaluate perceived brand equity on Facebook. The completion of this study provides two resources. First, an assessment tool (questionnaire) was provided to evaluate the perceived brand equity on Facebook. Secondly, this study provided important implications for marketing professionals to help cultivate a strong brand on Facebook. The results can be used as insights to evaluate brand equity on Facebook but there is no confirmation that the study can be generalized to be about all college students. In this chapter, the assessment tool is reviewed for practicality, implications are addressed and limitations are mentioned. In the next section, the effectiveness of the assessment tool is outlined and evaluated.

5.1 Assessment Tool Review

The assessment tool (questionnaire) provided in this study is one potential resource for evaluating the effectiveness of brand strategy. Since brand equity is perceived from its consumers, its important to continuously evaluate equity to help improve or validate current brand strategies. The results from this study's questionnaire should be evaluated against a brand's strategy to see if the efforts are worth the cost. In this section, this study's assessment tool is evaluated and suggestions are given for application.

The goal of this assessment tool was to provide a way to gain feedback on consumer's perceived brand equity of an online interface. This assessment tool yielded positive results with participants perceiving a high presence of various brand dimensions. This shows that participants understood the questionnaire and were able to answer the questions intelligently.

This questionnaire can be used to help assess brand equity on Facebook. Ideally, 6 or more participants are needed to get a good sample of a perceived experience. While usertesting.com was used to facilitate this assessment tool, recorded interviews can be performed if usertesting.com is not available or is not a feasible option. This questionnaire was created in order to help marketing professionals but is not necessarily

limited to them. Since many businesses are running their own Facebook pages, this assessment tool is an option for businesses to assess their equity on Facebook.

To further validate the use of this tool, one must pay attention to their sampling strategies. The research suggested the continued use of criterion sampling based on the following two recommendations. First, it is important to know the brand strategy, specifically the target audience of the brand. This helps define the potential pool of participants. Second, it is recommended to use survey participants who are already familiar with the brand in question. For example, for this study, it would have been more beneficial to question those who are enrolled or admitted to Purdue and have already interacted with University Residences. This would help eliminate the use of hypothetically questions, which was not ideal and is further addressed in the limitations sub-section.

5.2 Implications for Marketing and Research

Consumers' perception of a brand's equity can be difficult to assess and this study's results can be directly applied to Facebook, but not limited to just Facebook. In the following sub-sections, implications are outlined for marketing professionals, Purdue University Residences page administrators and researchers interested in this area of study.

5.2.1 Implications for Marketing Professionals

From the results of this study, marketing professionals can use the following suggestions to improve a brand's Facebook content to help bolster a brand's perceived equity:

1. Smart, clear, frequent and quality content is expected from users. Participants extract brand equity from the content a Facebook page provides. It is important to be professional, honest and consistent.
2. Page interactions are the most important Facebook feature consumers use in perceiving a brand's equity. This is also one of the features marketing professionals cannot control. It is important to pay attention to the interactions in order to evaluate what is working and what's not, as well as addressing any

issues users may have. Users understand that not every brand has stellar reviews or positive comments, and they respect when a brand actively tries to solve the issues publicly.

3. Professionalism on a page is very important for establishing the legitimacy of a page. Professionalism consisted of proper grammar, appropriate content and polite responses from the brand. While this may seem like common sense, many participants in this study mentioned how important this is.
4. Visual images are important but so is the representation of the brand on Facebook. Users expect a professional looking logo but also expect professional imagery as well across all content on the page. This comes into play specifically on the creation of flyers and photos that are posted as well as how timeline posts are written.
5. Facebook plays a part in contributing to brand equity and users realize this. Users feel they need additional information and it is important to make those resources easy to find on the Facebook page by possibly pinning important posts to the top of the timeline.

When applying the above recommendations, it is important to identify which (if not all) brand knowledge dimensions you would like to address and which Facebook features can help contribute to those dimensions. For example, if a brand would want to work on bolstering the dimension of Benefits, it is important to have a complete and concise About section and create easy to understand pricing on the page. When reviewing these attributes, it is important to understand if the content is informational or conversational. The About section would be more informational in its nature while interactions with followers are more conversational.

More suggestions can be found by taking a closer look at the research results. A few major suggestions have been shown here to illustrate the results of this study.

5.2.2 Implications for University Residences

This study showed that the administrators of the Purdue University Residences Facebook page do a very good job of connecting with students in this marketing channel.

Participants unanimously stated over and over again how Purdue University Residences does a great job with maintaining their Facebook page when it came to content and etiquette. The participants felt the page was very professional and well maintained. Page content was relevant and the content was from credible sources that made the participants feel comfortable. Purdue University Residences Facebook page did an excellent job catering to current residents that already live with them.

As far as Purdue University Residences Facebook page catering to potential customers, this is what the page administrators need to work on. Participants noted that the page was lacking three major things: Photos, pricing and personal interactions with users.

Participants mentioned they would like to see actual photos of the different residences, common rooms, etc. While there were tons of photos of events and advertising-type images, no photos were easily found of the different residence halls. The second thing participants wanted to see was content about actual pricing of the housing. It is important to display pricing in such a way that it is easy to understand and users know that they would be getting their money's worth living at University Residences. Third, participants were looking for more interaction between users and the page administrators. Besides the administrators' posting content, there was very little other activity going on throughout the page. Participants felt that if administrators commented more on user interactions, this would help increase and encourage more interactions from users.

It is recommended that Purdue University Residences work on a brand strategy to include the media channel Facebook. Currently, content is generated in a reactive manner and also vetted by following other campus Facebook pages. Ideally, Purdue University Residences should shift to a proactive approach and a strategy would help do this.

While the current page does a great job of communicating with it is almost 4,000 followers, a strategy may include how to get the word out to students that Purdue University Residences has a Facebook page. Purdue University Residences houses over 8,000 students a year, which shows the follower count of this page needs improvement. As part of the strategy, a target audience or audiences should be established as well. For this study, assumptions of target audiences were based on researcher's five years of

professional experience working with Purdue University Residences. While the goal is to market to current residents and potential residents, a strategy would help make this clear.

Overall, University Residences has a strong presence on Facebook and with minimal changes, it could appeal to both current and potential residents.

5.2.3 Implications for Researchers

Besides the implications mentioned in the previous sub-sections, there are a few implications recommended for those interested in researching brand equity assessment with UX methods.

First, more investigation is recommended on the social constructed nature of brands and UX. Like mentioned earlier, since brands are socially constructed (Kay, 2006; Knox & Bickerton, 2003), using UX evaluate seems to be an ideal fit. UX aims to evaluate the “co-experience” (Battarbee & Koskinen, 2005) or the thoughts and feelings of users. The continued combination could help evaluate and provide stronger brand equity responses.

In addition to the social constructed nature, branding and UX also share another bond. While branding fulfills the two needs of functional and emotional (Chernatony, 2002), UX breaks these needs out into users. UX can define users in multiple ways but two major ones exist that seem to link perfectly with the two needs fulfilled by branding. Utilitarian users are typically using an interface for a task or functional purpose and hedonic users tend to use an interface for entertainment or emotional purposes. With clear links between needs and users, further research is suggested on how the needs apply to these types users and vice versa.

Lastly, it is important to know the tools for measurement and how they interact with the methods. During this study, the assessment tool was created for IRB approval. This required various explanations added to the questionnaire in order to received approval. When the IRB approval questionnaire was placed in the measurement tool used (usertesting.com), there were some actions that were repeated. For example, the measurement tool required a web address of the interface being evaluated which placed participants on the University Residences Facebook page. The questionnaire approved by IRB had tasks within the assessment tool that directed participants to the University Residences Facebook page.

5.3 Limitations

In this study, there were a few limitations that are highlighted in this section. The limitations of this study focus on a few procedural limitations and a couple of resource limitations.

The first limitation of this study was that it was conducted in June of 2016 when Purdue was in its summer semester. Ideally, the research would take place in the beginning of the spring semester. The content would be more realistic to the community and not as sparse as it typically is during the summer. The beginning of spring semester is also a time when newly admitted students to Purdue would be looking to sign contracts for the following fall.

Second, the sample size was limited based on the grant given by usertesting.com and could not be increased. In addition, the data collection instruments were limited to the functionality of usertesting.com. Ideally, this study would have been conducted in a remote environment where the researcher could interact with the participant to help clarify prompts and answer any questions the participant may have had. Because of the lack of researcher interaction, participants tended to scan and not review the Facebook page fully before answering.

The last procedural limitation in this study was hypothetical question structure. This was done in order to use usertesting.com to collect data faster. Ideally, the sample group would consist of potential college students interested in Purdue University.

Within the limitations, two resource limitations were present. The first resource limitation was the presence of only one researcher in this study. Ideally, multiple researchers would have been ideal to confirm emerging themes and provide triangulation in the study. In addition, the assessment tool was created based on the actual literature read. If more researchers were available, a broader literature review could have been conducted. Thirdly, because of limited funding, transcription services were limited. Ideally, transcriptions by a third party would help in providing further credibility to the study.

5.4 Conclusion

The goal of this study was to find out if a user's interactions with Facebook contribute to a brand's equity. A brand equity theology and a user-centered method were combined to provide an answer to this research question. This study has provided a potential assessment tool for marketing professionals to use when evaluating brand equity. The results of this research showed various features of a Facebook page that are associated with Keller's brand knowledge dimensions of Awareness, Attitudes, Benefits, Images, Thoughts, Feelings and Experiences (2003). Facebook is an important part of marketing a brand and a piece consumers use to help define their perception of a brand's equity. This research highlights the importance of brand equity and the role it plays in consumers' perceptions of a brand.

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APPENDIX A. QUESTIONNAIRE

These are a series of questions that were asked in the remote user testing. The participants had the Purdue University Residences Facebook page open and were able to reference during the recorded session. All sessions were audio and screens were visually recorded.

Awareness

1. *If I came to Purdue University, when I would think of Campus Housing, Purdue University Residences would be the brand that first comes to mind. (Not at all) 1 2 3 4 5 (Definitely)*
2. *What on the Facebook page makes you feel this way?*
3. *If I came to Purdue University, Purdue University Residences would be a brand of campus housing that I would be very familiar with. (Not at all) 1 2 3 4 5 (Definitely)*
4. *What on the Facebook page makes you feel this way?*

Attitudes

5. *If I came to Purdue University, next time I would purchase campus housing, I would plan to live at Purdue University Residences. (Not at all) 1 2 3 4 5 (Definitely)*
6. *What on the Facebook page makes you feel this way?*
7. *Purdue University Residences seems to be a very popular brand of campus housing. (Not at all) 1 2 3 4 5 (Definitely)*
8. *What on the Facebook page makes you feel this way?*

Benefits

9. *If I came to Purdue University, living with Purdue University Residences brand would help me excel as a student. (Not at all) 1 2 3 4 5 (Definitely)*
10. *What on the Facebook page makes you feel this way?*
11. *What I would get from Purdue University Residences brand of campus housing, would be worth the cost. (Not at all) 1 2 3 4 5 (Definitely)*
12. *What on the Facebook page makes you feel this way?*

Images

13. *Purdue University Residences brand of campus housing has a strong brand image. (Not at all) 1 2 3 4 5 (Definitely)*
14. *What on the Facebook page makes you feel this way?*
15. *Purdue University Residences brand of Campus housing has a consistent brand image. (Not at all) 1 2 3 4 5 (Definitely)*
16. *What on the Facebook page makes you feel this way?*

Thoughts

17. *Purdue University Residences is honest with its customers.*
(Not at all) 1 2 3 4 5 (Definitely)
18. *What on the Facebook page makes you feel this way?*
19. *Purdue University Residences brand seems to be very consistent in what it stands for.* (Not at all) 1 2 3 4 5 (Definitely)
20. *What on the Facebook page makes you feel this way?*

Feelings

21. *Purdue University Residences is socially responsible.*
(Not at all) 1 2 3 4 5 (Definitely)
22. *What on the Facebook page makes you feel this way?*
23. *Purdue University Residences brand genuinely cares about their customers.*
(Not at all) 1 2 3 4 5 (Definitely)
24. *What on the Facebook page makes you feel this way?*

Experiences

25. *If I came to Purdue University, compared to other brands of campus housing, Purdue University Residences is of very high quality.*
(Not at all) 1 2 3 4 5 (Definitely)
26. *What on the Facebook page makes you feel this way?*
27. *If I came to Purdue University, using Purdue University Residences brand of campus housing, I would feel like I am getting my money's worth.*
(Not at all) 1 2 3 4 5 (Definitely)
28. *What on the Facebook page makes you feel this way?*

General Experience Follow up Questions

1. Purdue University Residences uses proper social media etiquette on their Facebook page. (Strongly Disagree) 1 2 3 4 5 (Strongly Agree)
 - a. Why do you feel this way?
2. Purdue University Residences presents relevant information on their Facebook page. (Strongly Disagree) 1 2 3 4 5 (Strongly Agree)
 - a. Why do you feel this way?
3. Facebook is an appropriate branding channel for Purdue University Residences. (Strongly Disagree) 1 2 3 4 5 (Strongly Agree)
 - a. Why do you feel this way?
4. Overall, Purdue University Residences manages their Facebook page well. (Strongly Disagree) 1 2 3 4 5 (Strongly Agree)
 - a. Why do you feel this way?
5. Overall, Purdue University Residences responds to their Facebook followers appropriately. (Strongly Disagree) 1 2 3 4 5 (Strongly Agree)
 - a. Why do you feel this way?
6. Please list three things that Purdue University Residences can do to improve their Facebook page.
7. Please list three things that Purdue University Residences is currently doing well of their Facebook page.

Previous Experience/Demographic Questions

1. Have you lived at Purdue University or other on-campus residences halls (dorm)/apartments?
 - a. Yes
 - b. No
2. Before today, were you following the Purdue University Residences Facebook page?
 - a. Yes
 - b. No
3. Education: What is the highest degree level of school you have completed? *If currently enrolled, highest degree received.*
 - a. Some high school, no diploma
 - b. High school graduate, diploma or the equivalent (GED)
 - c. Some college credit, no degree
 - d. Trade/technical/vocational training
 - e. Associate degree
 - f. Bachelor's degree
 - g. Master's degree
 - h. Professional degree
 - i. Doctorate degree
 - j. I choose not to answer
4. I am currently a...
 - a. Prospective college student
 - b. Undergraduate college student
 - c. Graduate college student
 - d. None of the above
 - e. I choose not to answer
5. What is your gender?
 - a. Male
 - b. Female
 - c. Other
 - d. I choose not to answer
6. What is your age?
 - a. [Filled in by participant]
7. What racial or ethnic group(s) do you most identify with?
 - a. African-American (non-Hispanic)
 - b. Asian/Pacific Islanders
 - c. Caucasian (non-Hispanic)
 - d. Latino or Hispanic
 - e. Native American or Aleut
 - f. Other
 - g. I choose not to answer

APPENDIX B. RESEARCH IDENTITY STATEMENT

Branding, online communication and social media have become the main concentration of my career and are heavily involved in shaping my entire life.

From an early age, I enjoyed online communication. I remember when my parents first acquired an AOL account and I got my very first screen name, Redpep4547. Little did I know that online communication would impact my future socially as well as academically. I participated in chat rooms, chatted with friends online and created accounts on Friendster as well as Myspace. I have always looked at online communication as an opportunity and a social adventure.

With this interest in online communication, when social media (specifically Facebook) became popular, I knew I would be involved. Being an undergraduate in college from 2002 to 2006, social media, specifically Facebook, was making a huge impact on my life. It was a communication and socialization outlet that since 2006, I have not stopped using, participating in and researching about.

From my personal experiences, I know social media is a great way to communicate, keep in touch and keep tabs on friends, celebrities and even major companies. Now it has grown into a bustling online social metropolis that was rooted in communication but has multiple other goals and adapted uses. When I was looking to go back to graduate school, I wanted to complete something that complemented my degree in Visual Communications. After thinking about it for a while, it only made sense to pursue a concentration in social media because of my own personal experience with and fondness of it.

After receiving acceptance to graduate school, I started reading more about social media beside the actual capabilities of the interfaces. Multiple papers have been published tying this Internet social construct to theories in sociology, psychology and even marketing. This is when my participation in social media shifted from just general interaction to additionally observing others in my network as well as companies and their marketing. Besides a social pastime, it has now become part of my responsibilities at

work as well. Social media is becoming more integrated with my life everyday beyond the average status update.

Because of the nature of my job, marketing has always been on the forefront of my mind. It seems that every business or client wants to use traditional methods of marketing for establishing a Facebook Page. While this looks good to most marketing budgets because it is free, I believe it is not always the answer (or always free.) I am not negating the fact that brands have been extremely successful on Facebook. But most, if not all of those brands, already have a strong following offline as well as targeted traditional media. My stance on social media marketing is that it is a great tool but it shouldn't be your only tool and it should be used wisely. A marketer can send a message out to followers but are they listening or is it falling on deaf ears (or eyes in this case)? There are extremely well thought out social media marketing campaigns like Million Mile Joe from Honda (Bouchard, 2011) or Old Spice rebranding. These campaigns include both social AND traditional media. They are, in my opinion, borderline genius. Million Man Joe campaign is highlighting a user of their product (Honda) and he hit one million miles (Bouchard, 2011). Honda captured the entire event and posted it on Youtube, but much more was involved. They gave press conferences, organized a parade in Joe's honor and gave him a brand new car. It was so touching, I was teary-eyed the first time I saw it. It is obvious that it takes time and planning to market effectively on social media. Social media can do so much and make a connection beyond traditional media but it is just one more tool in the toolbox.

My personal experience as a consumer with Facebook marketing is that I do not pay attention to the ads, and I know that marketing companies pay Facebook. It is lacking the personal touch and experience that I (and other users) enjoy about being on and participating in social media outlets. However, I do follow favorite brands on Facebook and have received responses/acknowledgement when I participate. I believe that activity and response are important aspects that marketing has to take into consideration. While traditionally we project out to the community, customer service now needs to be in the forefront as well.

With these experiences and opportunities, I approach this subject with the urge to find out why? Why are users changing behaviors? Why do people interact with

companies on Facebook? Why do people need acknowledgement online? Why do people actually like it? Most importantly, I'm interested in how I can creativity integrate social media into marketing. Being a graphic designer by trade, I like the idea of coupling graphics with social media to convey a message to others. Since most of what users do on social media is view images I personally think the two aspects of my life complement each other very well.

The interactions I have with online communications both current and historically have definitely added to potential advantages and disadvantages towards my research and even my thesis. Being exposed to the interfaces and community, I am aware of lingo associated with these sites as well as resources to review to acquire more information on them. In addition, I have taken classes in school that have exposed my train of thought to scholarly articles written on the subjects at hand. While realizing there is more information out there to be aware of, I do not have pre-conceived negative notions of social media. While I have been exposed to horrible stories with in social media, I realize that more good can be done with it than bad. Social media does fill voids, but it does not necessarily fill every void in society. This idea needs to be in my mind constantly because objectivity, while hard to completely achieve, should be strived for. I am definitely excited to begin this new social adventure and report new/supported findings.