Examining the Factors Affecting Corporate Image from Social Networking Fan Page Usage Using the Elaboration Likelihood Model

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Abstract

As an intangible asset, corporate image is both key to earning profits and an important indicator of business’ success. Several studies have examined the factors affecting corporate image, suggesting both emotional (e.g., feelings or impression) and functional (e.g., quality of products) components. While this body of research has examined corporate image, the present study measures corporate image from a communications perspective by employing social networking sites (SNS) and its fan page subscribers. Testing this study’s hypotheses using an elaboration likelihood model (ELM) as a theoretical lens and using structural equation modeling (SEM) method, the authors invited Facebook users who subscribe to fan pages to answer survey questions. Research findings reveal that page subscribers rely on less cognitive routes of information processing to perceive an informative posting, thereby impacting corporate image. We also discuss the implications and limitations of this research.

1. Introduction

As an intangible asset influencing company’s potential profits, corporate image has been a popular topic among researchers across academic disciplines. Corporate image is not a customer’s single impression of the company’s products or services: it is a cumulative impression formulated from diverse aspects [20]. The driver of corporate image varies. For example such psychological factors as feelings, emotion, personal preferences and experiences can become image determinants and creators [13]. A company’s products, characteristics, and business activities are also primary elements to form corporate image. Prior literature has found significant antecedents impacting corporate image. For example, technical quality and its service to customers are key to building corporate image [9]. Customer satisfaction, the perceived values of a service, and service quality are also significant factors affecting corporate image [11].

While many factors play a salient role in the formation of corporate image, our study extends its scope to Information Systems (IS) and communication studies by employing computer-mediated communication (CMC) media, specifically focusing on social networking sites (SNS). The use of SNS acts as an important communication tool for company because of both its pervasiveness among the public and its ease of access via mobile devices regardless of time and geographical location. Companies using SNS generally act upon three popular options: (1) launching direct advertisements in SNS; (2) posting promotional content for each SNS user; and (3) opening an SNS fan page. Among those options, opening a fan page has proven prosperous free-of-charge use and its role providing communication channels between SNS users and companies. Once SNS users subscribe to a fan page or follow the page, the company benefits from a large number of fans who potentially become profitable customers. In addition, personal networks of fan page followers (i.e., a user’s Facebook “friends”) are also potential customers the power of viral marketing and the word-of-mouth effect [12].

Our study uses as a starting point companies’ opening of fan pages via SNS, focusing on examining corporate image and how page subscribers perceived corporate image from reading page postings regarding products or service. Specifically, we are interested in identifying page followers’ processes for posting information on fan pages as well as which chosen process is most influential and thus impacts corporate image. Accordingly, the purpose of this study is to examine the factors affecting corporate image and its
relationship to fan page subscribers’ perception of the page posting’s informativeness using a theoretical foundation. We also examine SNS page followers’ perceived uncertainty regarding products or services posted on the page, and how that perception moderates the relationship between information processing routes and perceptions of informativeness. As a theoretical underpinning for the study’s research, we employ an elaboration likelihood model (ELM) consisting of two influential routes for processing information: central and peripheral [2, 24]. These two routes differ from each other in terms of how much effort or information processes are involved. Based on the theoretical ELM and corporate image, we therefore raise two research questions regarding SNS and companies’ fan pages:

**RQ1:** What information processing routes form corporate image, and which process is most influential?

**RQ2:** Does posting readers’ perceived uncertainties affect their perception of a posting’s informativeness when using influential processing routes?

Our study contributes to understanding how posting readers’ selection of which information processing routes to influence corporate image on SNS. Furthermore, our research academically enriches the studies of corporate image as well as information processing research. Practically, this research provides some insights for SNS page owners in enhancing corporate image when they decide to use SNS to communicate with customers.

### 2. Theoretical background

#### 2.1. Elaboration likelihood model (ELM)

We employ the elaboration likelihood model (ELM) as a theoretical background to examine corporate image when SNS page followers read and evaluate postings on fan pages using information processing routes. ELM consists of three key factors: central route, peripheral route, and elaboration likelihood. While both routes require different amounts of cognitive effort when processing information [2], ELM posits that both routes eventually affect the changes in an individual’s attitude as a consequence of using those routes for information processing. Elaboration likelihood moderates the relationships between central (or peripheral) routes and changes in attitude.

ELM first posits that central routes cause changes in attitude because of an individual’s critical thinking and the elaboration of the given information. Central routes are a key cognitive evaluation process which involves enhanced cognitive efforts when individuals read or process message arguments [2]. During this cognitive process, information recipients devote a great amount of time and energy to process information, thus resulting in long-term rather than temporal changes in attitude [6]. ELM uses argument quality to represent central routes, which refers to “the persuasive strength of arguments embedded in an informational message” [2, p. 811]. We adopt posting quality on SNS fan pages as a proxy for both argument quality in ELM and a core dimension of central routes. As an additional core route in ELM, peripheral routes involve the recipients of information relying on third-party opinions, reputation, or emotional affinity toward professionals’ opinions when processing information.

When using peripheral routes, individuals process information using less cognitive effort. As a result, attitudinal changes are deemed as temporal or short-term. ELM uses source credibility to represent peripheral routes, cited as “the extent to which an information source is perceived to be believable, competent, and trustworthy by information recipients” [2, p. 811]. Our study adopt poster credibility as a proxy for source credibility on SNS fan pages.

Finally, ELM posits that, because of the role of elaboration likelihood, information recipients’ attitudinal changes vary in degree when processing information using either central or peripheral routes. Elaboration likelihood is defined as “the likelihood one engages in issue-relevant thinking with the aim of determining the merits of the arguments for a position rather than the total amount of thinking per se in which a person engages” [22, p. 674]. Prior literature refers to two aspects of elaboration likelihood: information recipients’ ability and motivation [2]. Accordingly, elaboration likelihood plays an important role in constraining or reinforcing the impacts of attitudinal changes along central or peripheral routes. Elaboration likelihood is “not a personality trait or an individual difference, but rather a temporal state that may fluctuate within situational contexts and time, even for the same individual” [2, p. 809]. A high elaboration likelihood state therefore urges a higher cognitive process of information. Less elaborate likelihood states, in contrast, tend to rely more on peripheral routes because the demotivation of thoughtful considerations, or of critical thinking in arguments.

Based on the above arguments about posting quality and poster credibility, we examine which process is most impactful when SNS users read companies’ postings on their fan pages, observing how those impact corporate image. Although the body of prior literature has identified the direct impact of
influential processes on behavioral changes, our study extends this scope by adding a mediating factor of users’ perceived informativeness of postings. As an elaboration likelihood construct, we employ the perceived uncertainty of products or services as a motivating factor influencing users’ willingness or not to read further postings. Uncertainty refers to “the degree to which the future states of the environment cannot be accurately anticipated or predicted due to imperfect information” [23]. We consider perceived uncertainty as a salient moderating factor impacting on informativeness because it affects individual’s perceptual changes [23]. We use this construct as a proximity of elaboration likelihood construct.

2.2. Informativeness

Informativeness refers to “the ability to inform customers about product alternatives” and depends on “information timelines, accuracy, usefulness, and completeness” [17]. When compared with quantifiable cues, informativeness is a perceptual construct [8, 3]. Regarding e-business and computer-mediated communication (CMC) media, informativeness primarily refers to websites and CMC media providing perceptually useful information to buyers and/or media users [18, 8]. Researchers assess website informativeness by “any information that buyers find useful, such as the seller’s selling practices, privacy and security practices, and product description” [23]. In terms of communication functionality, good website informativeness reduces visitors’ efforts to access information about products or services. In other words, buyers’ perception of website informativeness raises when they perceive information released about products and services as useful [23]. Our study extends website informativeness to propose “posted message informativeness” regarding a company’s SNS fan page. We suggest that posted message informativeness refers to all information posted via a company’s SNS pages that users perceive as useful. Message postings regarding tangible (e.g., product) or intangible (e.g., special promotions) material enhance the reader’s perception of the posting informativeness, as it reduces the posting reader’s additional efforts to collect information from other resources.

2.3. Corporate image

Prior literature has described corporate image as the “net result of all experiences, impressions, beliefs, feelings and knowledge people have about a company and it is not a single entity” [13, p. 220]. This formation of image ranges from subjective impressions (e.g., emotion, feelings) about products/services to the rational assessment of a product’s value from the flow of information [26]. Likewise, there are two distinct approaches to studying corporate image: the functional and the emotional [20]. The functional approach studies corporate image according to perceived quality and empirical characteristics, whereas the emotional approach studies the psychological value dictated by prior satisfaction and attachment toward a particular company.

As prior literature has regarded corporate image as an intangible asset, it has focused on intrinsic values. Additionally, corporate image stems from customer interactions and their approval of a company’s beliefs, credibility, and perceptions [19, 5]. In other words, purchasing products or services delivers not only a physical commodity to the buyer (i.e., a tangible asset), but also inherent, non-monetary value in formulating consumer preferences or likings (i.e., an intangible asset of a company). More importantly, corporate image results from a psychological process comprised of prior experiences and impressions, wherein a person’s experiences cumulatively create corporate image after interacting with that company over a prolonged period [21, 20]. Prior empirical studies have identified intention, liking, and trustworthiness as factors affecting corporate image, considering such behavioral aspects as repeat purchases and a strong willingness for voluntary expenditures [16]. To examine corporate image via their fan page activities, our study therefore focuses on companies that use SNS fan pages to communicate with either their current subscribers or future SNS users.

3. Hypotheses and research model

Based on theoretical argument state above, we suggest the research model and hypotheses below (see Figure 1). For information processing, we use ELM’s core constructs of posting quality and poster credibility. Additionally, our research model uses perceived uncertainty as a moderating factor influencing the relationship between information processing routes and perceived informativeness.

Our research model employ posting quality as a proxy of argument quality, a central route in ELM. Regarding page subscribers and postings on fan pages, readers may need higher critical thinking when postings (1) contain highly complicated contents or (2) compete with alternative products or services. Furthermore, high posting quality demands higher critical thinking and a scrutiny of any relevant merits embedded within the message.
Along with prior ELM studies and the role of central routes, we posit that companies’ posting quality acts in the place of argument quality to influence changes in users’ perceptions. Company postings on fan pages tend to embed strong, convincing, and informative messages because they aim to both attract potential customers and generate profit. Accordingly, high posting quality requires readers to invest a great deal of cognitive effort when processing information embedded in SNS postings. Therefore, persuasive and informative postings involve individual readers’ rational judgment, rather than simple emotion, thus leading to users developing strong beliefs in product or service information. For example, the vivid delineation of products and services on Facebook fan pages delivers “relevancy, sufficiency, accuracy and currency” of product features to users [27, p. 1519]. Users’ activity of central routing eventually affects their degree of information quality, and thus their future behavioral intentions. Given the definition of central route in ELM described above, more persuasive arguments are able to deliver a higher degree of “awareness of known” [15, p. 186]. We therefore posit the following hypothesis for SNS and a company’s fan page and its subscribers:

**H1**: SNS users’ perceived quality of a posting on a fan page positively associates with their perceived informativeness of postings.

ELM assumes that attitudinal changes from the peripheral routes of information processing demand less cognitive effort and comprehensive evaluation than a central route. During information processing via the peripheral route, information recipients’ familiarity or credibility of posting entities can be regarded as an informational cue because prior interactions and experiences evoke negative or positive familiarity with the targets. Because of the many cues provided, less cognitive efforts for processing information may thus determine follow-up transactions or perceptual changes. As a result, such cue factors as prior experience, the reputation of posters, opinions from third parties, or users’ affinity or feelings of prior satisfaction with that poster provide higher importance to users [4]. As such a favorable emotional state becomes a key motivator for enhancing users’ perceived informativeness of postings provided on fan pages, this study therefore posits the following:

**H2**: SNS users’ perception of poster credibility on fan pages positively associates with perceived informativeness of postings.

The next hypothesis offers a positive association between perceived informativeness of postings on fan pages and the reader’s degree of perceived corporate image. Prior literature found that informativeness among online retailers who provide accurate, up-to-date information positively influences customers’ positive emotional state (e.g., satisfaction) [17]. Other research findings have indicated in addition that informativeness (i.e., product reviews on websites) significantly affected study participants' perceptual changes in the context of products review readers on websites.

We claim that the flow of mutual communication via fan pages with readers creates a better impression of a company’s brand by offering in-depth elaboration on company products or services. Furthermore, message informativeness on SNS fan pages positively affect corporate image, wherein readers believe that they are better off with the consistent usefulness of messages. This proves a salient factor, as the term *image* refers to “a hierarchical network of meanings stored in memory that range from holistic general impressions to very elaborate evaluations of objects, and these meanings are proposed to be linked to the individual’s personal values” [21]. Accordingly, we posit that the communication between a company and its customers plays an important role in creating positive image, resulting from favorable feelings and rational assessments of a company’s products or services. Therefore, we posit:

**H3**: The perceived informativeness of postings on fan pages positively associates with corporate image.

Our last hypothesis is that SNS users who (1) subscribe to companies’ fan pages and read postings and (2) perceive an uncertainty toward products or
services moderate the relationship between information processing routes and users’ perceived informativeness of postings. In terms of perceived uncertainty levels within the buyer-seller relationship, successful transactions significantly rely on a seller’s promised fulfillment of a buyer’s request (e.g., product orders or service inquires) on account of the buyer’s intrinsic uncertainty and perceived risk of the transaction. This stems from both a lack of prior transaction experience and uncertainty about the seller [23]. Additionally, due to intentional or unintentional fraud from sellers, buyers tend to overestimate the possibility of future loss or risk, intensifying their perceived risk levels [23].

Regarding SNS fan pages and their followers, we extend the buyer-seller relationship stated above, in that individual page followers are expected to “seller quality uncertainty” including exaggerated expressions, unreliable characteristics, and defrauding [23]. Furthermore, followers might have already experienced such “product quality uncertainty” as overpriced or lower-quality products/services than expected, which increases both the perception of risk and uncertainty levels, inhibiting reciprocal communication or causing users to avoid reading future postings. We posit that the uncertainty of products or services introduced via page postings affect the degree of information processing for both central and peripheral routes. In other words, a level of uncertainty requires readers to be more attentive and give higher cognitive efforts, thus adjusting their degree of perceived informativeness due to the intrinsic risk of the postings which they rely on. Based on the arguments above, we therefore posit the following:

**H4:** The perceived uncertainty regarding products or services moderates the relationship between posting quality and perceived informativeness (H4a), as well as between poster credibility and perceived informativeness (H4b) of postings on a fan page.

### 4. Research method

#### 4.1. Research context

To examine SNS users’ perceptions of corporate image, we adopted Facebook users who follow or subscribe to at least one company’s fan page. At the time of study, Facebook retains the greatest number of active users with 1.44 billion monthly users and 936 million daily active users. Users speak over 70 different languages, and 82.8% of daily active users live outside the U.S. and Canada. 1.25 billion monthly and 798 million daily active users use mobile devices to access Facebook [7]. Regarding companies’ use of Facebook, over 100,000 brand pages are active across the world as of March 2014 [25].

### 4.2. Measurement items

We measured a total of five constructs using web-based survey questions after having modifying items from prior literature (see Table 1).

The authors assessed all survey items via a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

#### Table 1. Measurement item

<table>
<thead>
<tr>
<th>Constructs</th>
<th>References</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Facebook usage</td>
<td>N/A</td>
<td>6</td>
</tr>
<tr>
<td>Posting quality</td>
<td>Bhattacharjee and Sanford [2]</td>
<td>3</td>
</tr>
<tr>
<td>Poster credibility</td>
<td>Pavlou, et al. [23]</td>
<td>3</td>
</tr>
<tr>
<td>Perceived uncertainty</td>
<td>Lin [17]</td>
<td>3</td>
</tr>
<tr>
<td>Perceived informativeness</td>
<td>Nguyen and Leblanc [20]</td>
<td>4</td>
</tr>
<tr>
<td>Corporate image</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total items</td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

All items were specific to Facebook: a question about posting quality, for example, said “The information provided from companies’ Facebook fan pages that I ‘Liked’ is complete”. An item for poster credibility said “My ‘Liked’ companies’ Facebook fan pages providing the information are trustworthy”. An item on perceived uncertainty said “After reading a description of products, services, or promotional events on companies’ Facebook fan pages (that I ‘Liked’), I feel uncertainty associated with the contents on postings is low regarding products or service”. An item on perceived informativeness said “The companies’ postings from ‘Liked’ (or subscribed) company pages provide up-to-date information”. An item on corporate image said “I have always had a good impression of the ‘Liked’ (or subscribed) companies when they post messages.”

#### 4.3. Data collection

We used a web-based survey to collect data from Facebook users. First, they invited participants and informed them of the purpose of this study and how to
answer survey questions. The participants were able to join via a link provided from an email invitation and could freely leave if they don’t wish to participate. A total of 353 participants joined the survey, with 178 surveys being usable (50.4%). Sixty one percent of participants were female, and 39% were male. Thirty six percent of participants were 19–29 years old, and 24.7% of participants were 30–39 years old. Twenty five percent of participants were 40–59 years old, and 4% of participants were over 60 years old. At the time of survey, more than 50% of participants had been using Facebook for over five years, while 45% of participants indicated that they have used Facebook between one and three years. Only less than 2% of participants were six month or less Facebook users.

5. Results

We analyzed survey data using the partial least squares (PLS) method via WarpPLS 5.0 [14]. All adopted constructs are reflective.

5.1. Measurement model assessment

5.1.1. Convergent Validity. We examined convergent validity in three ways: (1) composite reliability; (2) coefficient alpha (Cronbach’s alpha); and (3) average variance extracted (AVE). The composite reliability of constructs ranged from 0.7 to higher (0.88 to 0.94) [1]. All coefficient alphas ranged from 0.70 to 0.90 (the recommended criteria of 0.6) [10]. All constructs exhibited above-acceptable levels of average variance extracted (0.50), ranging from 0.72 to 0.84, thus indicating convergent validity (see Table 2).

Table 2. Convergent validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ</td>
<td>0.90</td>
<td>0.83</td>
<td>0.75</td>
</tr>
<tr>
<td>PC</td>
<td>0.94</td>
<td>0.90</td>
<td>0.84</td>
</tr>
<tr>
<td>PI</td>
<td>0.93</td>
<td>0.89</td>
<td>0.82</td>
</tr>
<tr>
<td>CI</td>
<td>0.92</td>
<td>0.87</td>
<td>0.79</td>
</tr>
<tr>
<td>PU</td>
<td>0.88</td>
<td>0.70</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note: PQ – Posting quality, PC – Poster credibility, PI – Perceived informativeness, CI – Corporate image, PU – Perceived uncertainty

5.1.2. Discriminant validity. We assessed discriminant validity in two ways: (1) examining correlations among constructs with the square root of AVEs; and (2) examining cross-loadings among items and constructs (Chin, 1988). All square roots of the AVEs were higher than the correlations among the constructs, resulting in a good benchmark for acceptable discriminant validity (see Table 3). The observation that all rotated cross-loadings were less than factor loadings for each item across all constructs indicated discriminant validity.

Table 3. Discriminant validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>PQ</th>
<th>PC</th>
<th>PI</th>
<th>CI</th>
<th>PU</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>0.59</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>0.53</td>
<td>0.67</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>0.51</td>
<td>0.61</td>
<td>0.76</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td>0.37</td>
<td>0.38</td>
<td>0.39</td>
<td>0.45</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Note: PQ – Posting quality, PC – Poster credibility, PI – Perceived informativeness, CI – Corporate image, PU – Perceived uncertainty; Square roots of Average Variances Extracted (AVEs) shown on diagonal

5.2. Structural model assessment - Hypothesis testing

Posting quality ($\beta = 0.21$, $p < 0.01$) and poster credibility ($\beta = 0.56$, $p < 0.001$) had a significant effect on SNS users’ perceived informativeness of postings on Facebook fan pages. Page subscribers’ perceived informativeness of posting also contributed significantly to corporate image ($\beta = 0.78$, $p < 0.001$) (see Table 4). Overall, Facebook users’ perceived posting quality and poster credibility explained 49% (adjusted $R^2 = 0.48$) of the total variance of perceived informativeness of company postings on fan pages. Perceived informativeness explained 61% (adjusted $R^2 = 0.60$) of the total variance of corporate image (see Table 4).

Table 4. Main effect model

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Base Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Std. Error)</td>
</tr>
<tr>
<td>H1 PQ $\rightarrow$ PI</td>
<td>0.21 (0.07)</td>
</tr>
<tr>
<td>H2 PC $\rightarrow$ PI</td>
<td>0.56 (0.07)</td>
</tr>
<tr>
<td>H3 PI $\rightarrow$ CI</td>
<td>0.78 (0.06)</td>
</tr>
<tr>
<td>H4a PQ $\times$ PU</td>
<td>–</td>
</tr>
<tr>
<td>H4b PC $\times$ PU</td>
<td>–</td>
</tr>
<tr>
<td>$R^2$ (Adj. $R^2$) of PI</td>
<td>0.49 (0.48)</td>
</tr>
<tr>
<td>$R^2$ (Adj. $R^2$) of CI</td>
<td>0.61 (0.60)</td>
</tr>
</tbody>
</table>

Note: PQ – Posting quality, PC – Poster credibility, PI – Perceived informativeness, CI – Corporate image, PU – Perceived uncertainty
We examined the moderating effects of perceived uncertainty of products or services on Facebook fan pages, with the findings indicating that perceived uncertainty moderates the main effects only of H1 ($\beta = -0.17, p = 0.01$) (see Table 5).

### Table 5. Moderating effect model

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Moderating Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Std. Error)</td>
</tr>
<tr>
<td>H1 PQ → PI</td>
<td>0.16 (0.07)</td>
</tr>
<tr>
<td>H2 PI → PI</td>
<td>0.56 (0.06)</td>
</tr>
<tr>
<td>H3 PI → CI</td>
<td>0.77 (0.06)</td>
</tr>
<tr>
<td>H4a PQ * PU</td>
<td>-0.17 (0.07)</td>
</tr>
<tr>
<td>H4b PC * PU</td>
<td>-0.01 (0.06)</td>
</tr>
<tr>
<td>$R^2$ (Adj. $R^2$) of PI</td>
<td>0.52 (0.51)</td>
</tr>
<tr>
<td>$R^2$ (Adj. $R^2$) of CI</td>
<td>0.60 (0.59)</td>
</tr>
</tbody>
</table>

Note: PQ – Posting quality, PC – Poster credibility, PI – Perceived informativeness, CI – Corporate image, PU – Perceived uncertainty

Additionally, the results identified a moderating effect of 6.0%, indicating that a significant moderating effect does indeed weaken the main effect of H1. Except for H1 and the moderating effect upon it, we identified no other significant moderating effects (see Table 6).

### Table 6. Effect sizes for path coefficients

<table>
<thead>
<tr>
<th>Construct</th>
<th>PQ</th>
<th>PC</th>
<th>PI</th>
<th>PU*PQ</th>
<th>PU*PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td></td>
<td></td>
<td>0.09</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>0.09</td>
<td>0.38</td>
<td>0.06</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: PQ – Posting quality, PC – Poster credibility, PI – Perceived informativeness, CI – Corporate image, PU – Perceived uncertainty

### 6. Discussion and implications

#### 6.1. Discussion

We first examined how posting quality affects users’ perception of a posting’s informativeness fan pages, with results showing that both posting quality (H1) and poster credibility (H2) positively associate with page followers’ perceived informativeness. This indicates that higher degrees of cognitive thinking or the elaboration of postings leads to users’ perceiving postings as more informative. Likewise, survey respondents’ prior experience or reliance upon third-party opinions played a salient role in enhancing the degree of perceived informativeness of postings. While both path coefficients are significant antecedents influencing perceived informativeness, poster credibility has a greater effect on users’ perceived informativeness of a posting than the posting quality ($\beta = 0.21, p < 0.01; \beta = 0.56, p < 0.001$, respectively). This finding shows that users tend to evaluate informativeness by such external factors as key opinion providers or poster’s reputation.

Our second hypothesis associated between perceived informativeness and corporate image, with findings revealing a significant relationship between them. The more informative page subscribers perceive a posting, the better the corporate image achieved via page postings. As informativeness enhances information quality, prior literature found that higher information quality saves information seekers’ resources including time, effort, and processing costs [17]. The research findings reveal that enhanced information quality and high informativeness further advance corporate image when company create and use fan pages.

Finally, this study examined the moderating effects of perceived uncertainty for products or services on perceived informativeness jointly with posting quality and the poster’s credibility. The results shows that interaction between posting quality and perceived uncertainty affects perceived informativeness, indicating that higher perceived uncertainty lowers perceived informativeness more when information is processed via cognitive or critical thinking. In other words, a higher level of uncertainty lessens the degree of cognitive evaluation of postings on fan pages, thus lowering the perceived informativeness of postings. Interestingly, however, the results indicate that poster credibility retains a positive association with the perceived informativeness of postings regardless of perceived uncertainty for products or services. This finding reveals that (at least among this research’s respondents) uncertainty for products or services from postings does not contribute to determining informativeness levels.

#### 6.2. Implications

Our research contributes to both ELM and corporate image research in theoretical and practical ways. First, our research extends the theoretical scope of ELM research by applying it to corporate image regarding SNS and their fan page followers. Our research findings indicate the availability of ELM in
the context of SNS, supporting the availability of ELM to explain corporate image. Second, practically, we found that perceived uncertainty plays an important role in moderating the relationship between posting quality and perceived informativeness. This indicates that ambiguous postings for products or services hamper information processing, thus lessening users’ perceived informativeness. Therefore, to improve corporate image page owners should be aware of and remove any associated risk or possible loss of using services or purchasing products due to reading postings. Third, as poster credibility has greater influence than posting quality, page owners on SNS should pay attention to information digestion by page subscribers in terms of both posting quality and the company’s credibility. Credibility is not an outcome of a short-term relationship between a company and future or current customers—rather, it is built up over the time. High posting quality, however, may be achieved if the post creator effectively utilizes the SNS tools provided, as most SNSs keep up-to-date posting support technology (e.g., linking geographical location) as well as communication tools (e.g., instant chat or messengers). Accordingly, companies who own SNS pages must manage both short-term and long-term oriented business tactics in their communicating strategies with their customers to increase their corporate image.

7. Limitation and future research

Our research has some limitations. First, while we measure SNS users’ corporate image through fan pages, our research participants were only users of Facebook. Although Facebook is one of the most popular SNSs at present, SNSs have become diverse and are subdivided in accordance with their target services. Therefore, future research should consider different types of SNSs and company’s accounts or page subscribers on those sites. Second, this research design is rooted in the nature of a cross-sectional study for measuring SNS users’ corporate image and other perceptions. As the majority of study respondents reported themselves as more than five-year users. Therefore, future research should measure SNS users’ perceptual changes over time to identify which information processing routes are determined by time flow. Finally, we did not specify what type of products or service postings where analyzed, nor the industry categories of companies with fan pages. It is easy to understand certain products’ specifications, however, while others are not (e.g., books vs. clothing). Future research should therefore include the types of product, company, and industry that owns fan pages.

8. Conclusion

The purpose of this study is to examine the factors affecting corporate image and its relationship to fan page subscribers’ perception of the page posting’s informativeness using a theoretical foundation. Our research model included ELM as a theoretical underpinning to examine the variety of page subscribers’ perceptions and added their perceived uncertainty of products and services as a moderating factor. Using Facebook as a testing context and a web-based survey, our research findings indicate that page subscribers rely on company’s reputation or other parties’ opinions when they perceive the informativeness of postings, wherein high perceptions of informativeness positively affects corporate image. This theory-based research design offers both insights and implications for both academic researchers and practitioners, which will help socially-oriented IS research on communication-based IS artifacts.

9. References


