Moving On: Predicting Continuance Intention on Social Networking Sites through Alternative Products

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Abstract

Social networking sites (SNS) have growing popularity and several sites compete with each other. This study examines three models to determine how competition between Facebook and other social networking sites may affect continuance intention on Facebook. The first model examines the relationship between having an account on four different SNSs and its impact on Facebook. Twitter users have lower intentions to continue using Facebook; Instagram users have higher intentions. The second model examines attitudes toward specific alternatives and found that users who felt alternatives were attractive have lower intentions to continue using Facebook. The third model examined general attitudes about alternative attractiveness and attitudes toward switching; this model explained a moderate to substantial amount of the variance in continuance intention. This study makes important contributions to both research and practice.

1. Introduction

Social network sites (SNS) are composed of a series of dynamic processes; users join the site, connect with users, share content, interact with users, disconnect from users, take breaks from the site and abandon the site. Users who initially adopt the site may continue to use the social networking site, take breaks from the site or stop using the site all together [21]. How the use of alternative social networking sites contributes to users’ continuance intentions on social network sites is not well known. This research provides the theoretical background, motivation and methods to examine social networking site continuance intentions of users based on how users are attracted to alternative products and their attitudes toward switching to other sites. Marketing literature often uses attractiveness of alternatives as a measure to examine service provider switching [13, 2, 24]. The research examines how attitudes toward alternatives and toward switching to competing sites predict continuance intention on a social networking site.

There has been an evolution in how users engage in social networking sites; sites that were once popular can and often do show declines in user engagement [8]. Competing social networking sites introduced in the marketplace can lead users to abandon one social networking site for another. There is considerable research into why users join sites and how social networking sites grow, there is less known about why a user decides to continue to use a social networking site [12, 8]. Social networking site users have largely abandoned sites that were once popular for new social networking sites and indicate that site users make decisions to discontinue use of once successful sites [8].

Bhattacherjee [3] examines the longer term consequences of continuance intention through the IS continuance intention theory. Information system continuance theory includes three constructs: perceived usefulness, confirmation, and satisfaction, to predict IS continuance intention. IS continuance is primarily determined by the consumers satisfaction of prior use, i.e. consumers who have a positive experience with software tend to have higher continuance intentions than others. But, continuance decisions are not made in a vacuum, alternate services are available in the market and may influence a decision to stay with a product whether the user is satisfied or not. Whether one person stays on a site may depend on whether they perceive other products are more attractive, their attitude toward switching, and their assessment of specific alternative products, such as Twitter, Tumblr, Instagram or Pinterest, are a viable alternative to their current service. This research will address the gap about both specific social networking site alternatives and how general attitudes toward alternatives and attitudes toward switching to new services predict continuance intention of an incumbent service.

The are important consequences to users’ continuance decisions on social networking site where competition exists through alternative products. Social networking sites need to retain users and user-generated content because the majority of the content that people see come from the users themselves. Popularity is not a guarantee of long term success, previous general purpose social networking sites have declined as alternatives networks...
gained acceptance. Likewise, network effects may only partially explain why a site is important to its users, but can not explain all of continuance intention as once popular sites have subsequently lost their popularity (e.g. Friendster and MySpace). The rise of one social network site may signal the decline of the dominant social networking site [8]. This research also provides an exploratory model where the existence of an account may be seen as a substitute or complement to a different social networking site. The research investigates both the impact of individual alternative products (Twitter, Tumblr, Instagram and Pinterest) and general attitudes about alternatives. This research contributes to the larger IS continuance research in that it focuses on hedonic systems where continuance intention may be impacted by the rise alternative products.

There were two major approaches in this study to determine how alternative services may predict continuance intention. First, we investigate how specific products like Twitter, Tumblr, Instagram and Pinterest may predict the continuance intentions on social networking sites like Facebook. Individuals who use alternative sites may develop an attitude that the alternative service may provide a better experience than the incumbent. Second, the research examines how alternative attractiveness and attitude toward switching may predict continuance intention on Facebook. Social networking site users may develop a general attitude about whether sites are better suited for their needs and develop an attitude toward switching that may impact their decision to continue or discontinue use of a site or add an additional social networking site.

There are three major research questions this study addresses:

1) Does having an account at one of four specific alternative social networking site (Twitter, Tumblr, Instagram and Pinterest) predict continuance intention on Facebook?
2) Do attitudes formed from the use of specific alternative social networking site (Twitter, Tumblr, Instagram and Pinterest) predict continuance intention on Facebook?
3) How do perceptions about the attractiveness of alternative social networking sites and attitudes toward switching predict continuance intention on Facebook?

2. Literature Review

Consumer behavior research in the marketing field has examined reasons for consumer discontinuance and switching from one provider to a different provider of products and services. Keaveney [14] developed an eight category typology for consumer switching behavior for service providers. Bansal and Taylor [1] developed a psychometric model based on Keaveney [14] and the theory of planned behavior [6] called the service provider switching model (SPSM). Keaveney and Parthasarathy [15] examined customer switching behavior in the context of online service providers and used attitudes, behaviors and demographics to predict switching behavior. Burnham et al. [4] examined customer switching behavior through three different costs and satisfaction to predict switching behavior. Many studies of consumer switching behavior use satisfaction as a factor in the model; however, researchers also add additional factors to increase the explained variance in the model to increase predictive power [14, 15, 4].

Customer switching is a concern because customer acquisition and retention costs can be high [15, 19]. Rapidly changing markets may experience more customer churn where customer retention is a concern of service providers. Lowering the rate customer switching may increase revenues and lower costs of service providers [15]. Customer satisfaction and service quality are found to have a strong relationship with switching intentions in a variety of studies [14, 15, 1, 4, 23]. Studies also note that researchers should consider other causes of switching beyond satisfaction [15, 19, 4]. Facebook notes that its active user growth rate will decline over time as higher market penetration rates are achieved. Facebook’s 10-K filing notes that, “A number of other social networking companies that achieved early popularity have since seen their active user bases or levels of engagement decline, in some cases precipitously. There is no guarantee that we will not experience a similar erosion of our active user base or engagement levels.”

Jones et al. [13, p. 262] defines attractiveness of alternatives as the, “customer perceptions regarding the extent to which viable competing alternatives are available in the marketplace.” Conceptually, consumers who perceive that there are fewer alternatives to using a given service are more likely to stay with the service, and consumer who perceive that there are more available alternatives are more likely to switch [13]. Sharma and Patterson [24] note that a lack of alternative service providers benefits service providers in customer retention and that customers who are unaware of attractive alternatives may stay in the relationship despite perceived low satisfaction levels.

Bansal et al. [2] examined both alternative attractiveness and attitude toward switching to predict stickiness intention [continuance intention] and switching
behavior. Alternative attractiveness is described as a pull factor, or a factor that may pull the service user away from an existing service provider to a new service provider. Bansal et al. [2, p. 100] claims that alternative attractiveness is the, “only existing variable from the service switching literature that conforms to this conceptualization [push-pull effects] is alternative attractiveness.” The attitude toward switching measures the degree to which a service consumer may be favorably disposed to switching service providers. Having a favorable attitude toward switching may indicate that the consumer is more willing to switch.

3. Research Model & Hypotheses

3.1. Specific alternative social networking site

Social networking site users who use websites may develop attitudes about those sites and allow the user to evaluate whether an alternative site will be more beneficial than the site they are currently using (e.g. Facebook) and may impact a person’s continuance intention. Social networking sites span a variety of contexts from general purpose social sites like Facebook, Google+, and Twitter (micro-blogging), to content focused sites like LinkedIn (professional), YouTube (video), Instagram (photo sharing), etc.

The alternative sites are not necessarily direct competitors as they appear to serve different purposes; alternative sites may behave like substitutes or complements. The four specific sites were chosen because they have a large subscriber base (e.g. Twitter has 302 million monthly active users)\(^2\), Tumblr because it is popular with the youth bloggers between the ages of 18 and 29 [5], Instagram because it was purchased by Facebook and adds an image dimension to SNSs and maintains a distinct identity, and Pinterest which provides virtual scrap booking and is popular with women [5]. PewInternet [5] has presented in depth research on the demographics of each of these sites and indicates interest about these sites to researchers and marketers in the social media product space.

Four hypotheses to predict how perceptions of the four alternative sites may impact continuance intention on Facebook were generated.

**H1:** Twitter users who view the site as a positive alternative to Facebook will negatively impact continuance intention on Facebook.

**H2:** Instagram users who view the site as a positive alternative to Facebook will negatively impact continuance intention on Facebook.

**H3:** Tumblr users who view the site as a positive alternative to Facebook will negatively impact continuance intention on Facebook.

**H4:** Pinterest users who view the site as a positive alternative to Facebook will negatively impact continuance intention on Facebook.

3.2. Alternative Attractiveness and Attitude Toward Switching

Social networking site users can switch from their existing service provider based on their perceptions of the attractiveness of alternatives and their attitude toward switching. Users of Facebook may feel a pull to a new SNS despite being relatively satisfied with Facebook. Social networking site users may feel that alternative products may provide benefits that Facebook does not provide.

Bansal et al. [2] describes the effect using a push-pull conceptualization where users may be pulled to service provider. Some users may be favorably disposed to switching service providers by their attitude toward switching where a favorable attitude toward switching may lead to consumer switching behavior. Users with a favorable attitude toward switching may have more variety seeking tendencies [2]. Givon [9] examined customer switching behavior through the lens of variety seeking behavior - operationalized as, “as a measure of individual tendency to vary consumption. This tendency is measured on a continuum that extends from extreme tendency to vary consumption to an extreme tendency to avoid variety” [9, p. 2]. Givon [9] notes that it may be easier to introduce new products to consumers who exhibit higher levels of variety seeking behavior - but it may be harder to keep them from switching to alternate products as well.

Madden et al. [17] noted that teens have decreased enthusiasm for Facebook citing issues like disliking

\(^2\)https://about.twitter.com/company

![Figure 1. Specific Product Research Model](image-url)
the presence of adults, too much drama, and excessive sharing while at the same time the report notes that Twitter has seen an increase in teens who use Twitter [16]. Teens have not actually discontinued their use of the Facebook or deleted their accounts in large numbers; approximately 94% of teens had an account in 2013 an increase of 1% over their 2011 figure, whereas Twitter garner approximately 26% of teens [16]. Teens may be adding additional SNSs and using the site for different purposes [16]. There is a high degree of voluntariness on SNSs and low or no financial cost (all of the SNSs in this study have no financial burden to create an account) so users can create accounts at multiple SNS but with more sites users will likely limit the amount of time they can spend at each site given time constraints.

The research model includes the attitudes about each specific alternative to predict both alternative attractiveness and attitude toward switching. Using a site like Twitter may impact how the user feels about whether the site is a viable alternative (alternative attractiveness) and if they would like to switch (attitude to switch). While the four sites under consideration are not the full set of all SNSs it is likely that these sites may explain a portion of the variance in both alternative attractiveness and attitude toward switching. Attitude toward switching is coded as having a more favorable attitude to switch so larger values would lead to lower levels of continuance intention; i.e. a higher attitude toward switching would lead to more switching behavior and lower continuance.

Two hypotheses for alternative attractiveness and attitude toward switching to predict continuance intention on Facebook were generated:

**H5:** High alternative attractiveness will negatively impact continuance intention on Facebook.

**H6:** High attitude toward switching will negatively impact continuance intention on Facebook.

### 3.3. Control Variables

Demographic questions about age and gender will be used as covariates to adjust the results. Madden and Smith [18] noted significant gender differences in the way men and women manage their profiles. Zhang et al. [26] investigated the role of gender in bloggers’ switching behavior and found that gender was a significant moderating factor between satisfaction and continuance intention and gender was a significant moderating factor between attractive alternatives and continuance intention. Rainie et al. [21] noted that younger Facebook users were more likely to say they plan to spend less time on Facebook in the coming year which may be a predictor in continuance intention. The control variables are not the primary predictive variables in this research but are used to control for user differences.

### 4. Study Design

This research was conducted using an internet-based survey to determine survey respondents’ opinions about social networking site continuance. The survey questions are established constructs from marketing research studies in service switching and adapted for this investigation [2]. The survey questions on alternative product attitudes are adapted from Bansal et al. [2] - see Tables 1. and 2. The number questions were reduced from five questions to three questions to measure the survey respondent’s alternative attractiveness. The three questions were found to have high reliability in pretests of the survey. All of the survey items, except demographic information, were measured using a 7-point Likert scale from *Strongly Disagree* (1) to *Strongly Agree* (7). The survey screened users to determine if the person is over 18 and ever had a Facebook account. Users were asked to identify whether they used any of four alternative products (Twitter, Tumblr, Instagram, and Pinterest) and, if so asked the user specific questions regarding their attitudes about that product.

The questions regarding alternative attitudes about specific sites were adapted from Bansal and Taylor [1] questions. The items were adapted in two ways, they ask survey respondents to compare specific sites to Facebook (e.g. “All in all, <Twitter, Instagram, Tumblr, and Pinterest> would be much more fair than Facebook is”) and the number of questions were reduced. There are five items from Bansal and Taylor [1] alternative attractiveness construct but two were removed as the construct reliability was very high and survey respondents considered some questions to be redundant in pretests. Survey respondents were asked which SNSs they used and were followed up with more specific questions about their opinions of those sites.
Table 1. 
**ADAPTED STUDY QUESTIONS - ALTERNATIVE ATTRACTIVENESS** 
- BASED ON Bansal et al. [2]

| All in all, other social networking sites would be much more fair than Facebook is |
| Overall, other social networking sites’ policies would benefit me much more than Facebook policies |
| I would be much more satisfied with the service available from other social networking sites than the service provided by Facebook |
| In general, I would be much more satisfied with other social networking sites than I am with Facebook |
| Overall, other social networking sites would be better to use than Facebook |

**Adapted Study Questions specific to an alternative**

| Overall, <Twitter, Instagram, Tumblr, and Pinterest> policies would benefit me much more than Facebook policies |
| In general, I would be much more satisfied with <Twitter, Instagram, Tumblr, and Pinterest> than I am with Facebook |
| Overall, <Twitter, Instagram, Tumblr, and Pinterest> would be better to use than Facebook |

Table 2. 
**ADAPTED STUDY QUESTIONS - ATTITUDE TOWARD SWITCHING** 
- BASED ON Bansal et al. [2]

| For me, switching from Facebook to a new social networking site within the next 6 months would be: |
| A bad idea ... A good idea |
| Useless ... Useful |
| Harmful ... Beneficial |
| Foolish ... Wise |
| Unpleasant ... Pleasant |
| Undesirable ... Desirable |

5. Results

5.1. Data Collection

Surveys were collected between April 22nd and April 30th, 2014 for 8 total days. A total of surveys 3,007 were started and 1,370 were completed; 45.5% of those who started the survey completed the survey. Survey respondents’ age ranged from 18 to 75+; the median age range was age 35-39 and gender was 60.3% female and 39.4% male (0.3% are not applicable). Outlier analysis was performed to reduce the effects influential cases that have a disproportionate influence in the regression analysis [11]. Outlier analysis was performed remove outliers at the 95% confidence level (α = .05) thus 1,302 surveys are usable. The dataset includes 918 survey respondents who used one or more alternative social networking sites; 70.5% of the survey takers had a Facebook account and at least one other SNS and 29.5% only had a Facebook account. This research uses the 918 survey respondents in the analysis - see Table 3.

Table 3. 
**NUMBER OF SOCIAL NETWORKING SITES USED**

<table>
<thead>
<tr>
<th>Number of Sites Used</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>384</td>
<td>29.49%</td>
</tr>
<tr>
<td>1</td>
<td>395</td>
<td>30.34%</td>
</tr>
<tr>
<td>2</td>
<td>271</td>
<td>20.81%</td>
</tr>
<tr>
<td>3</td>
<td>198</td>
<td>15.21%</td>
</tr>
<tr>
<td>4</td>
<td>54</td>
<td>4.15%</td>
</tr>
<tr>
<td>Total</td>
<td>1302</td>
<td>100%</td>
</tr>
</tbody>
</table>

5.2. Method

The survey data was collected and analyzed with the appropriate statistical tools. ANCOVA was used to determine whether users who hold accounts with four alternative social networking sites have different continuance intentions by comparing the means of account holders to those who do not have accounts. Partial least square - structural equation modeling (PLS-SEM) software SmartPLS 2.0 [22] were used to evaluate the research hypotheses. A measurement model and structural model were developed and tested to evaluate the hypotheses generated.

The factors were evaluated for reliability, average variance extracted (AVE), and discriminant validity. The factors were examined to ensure they meet the assumptions of the analytical method prior to the development of the structural model. The sample size in this research met the recommendations for marketing research established by Hair et al. [10].

The measurement and structural model will be evaluated based on goodness of fit measures, coefficient of de-
Table 4.
FOUR ALTERNATIVE SNS ACCOUNT IMPACTS

<table>
<thead>
<tr>
<th>N</th>
<th>CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses Twitter</td>
<td>708</td>
<td>4.483</td>
</tr>
<tr>
<td>Does Not Use Twitter</td>
<td>210</td>
<td>4.866</td>
</tr>
<tr>
<td>Uses Pinterest</td>
<td>460</td>
<td>4.594</td>
</tr>
<tr>
<td>Do Not Use Pinterest</td>
<td>458</td>
<td>4.738</td>
</tr>
<tr>
<td>Uses Instagram</td>
<td>420</td>
<td>4.863</td>
</tr>
<tr>
<td>Do Not Use Instagram</td>
<td>294</td>
<td>4.431</td>
</tr>
<tr>
<td>Uses Tumblr</td>
<td>159</td>
<td>4.798</td>
</tr>
<tr>
<td>Do Not Use Tumblr</td>
<td>759</td>
<td>4.542</td>
</tr>
</tbody>
</table>

CI is the continuance intention on Facebook, *: p < .05

termination (R²), Fornell and Larcker [7] criterion, standardized path coefficients (β) following the heuristics in Hair et al. [11], Wetzels et al. [25], Fornell and Larcker [7]. Goodness of fit measures will be computed as the geometric mean of average communality and average R² for endogenous latent constructs according to Wetzels et al. [25]. The loadings and statistical significance for each of the factors will be evaluated and shown as necessary. The hypotheses will be tested for statistical significance through boot-strapping.

5.3. Four Alternative Social Networking Site Account Impact

An exploratory study was conducted to determine whether simply having an account with one of four sites impacts continuance intention. Having an account with an alternative site could lead to more use if the site is complementary or discontinuation if the site is a substitute. ANCOVA was analyzed to measure statistically significant differences between account holders of the specific sites and non-account holders. The analysis included covariates age and gender to adjust for differences. The dependent variable is continuance intention on Facebook. Two sites had statistically significant impacts: Twitter users were more likely to discontinue use of Facebook than those who did not use Twitter, and Instagram users were more likely to continue to use Facebook than those who did not use Instagram. Whether a user had a Pinterest or Tumblr account did not make a statistically significant difference on continuance intention. The adjusted coefficient of determination (R²) was .057 and indicates that the model has less than a weak level of explanatory power [10]. See Table 4. for details.

5.4. Measurement Model

The latent factors were analyzed for convergent and discriminant validity by analyzing the factor loadings, average variance extracted (AVE), construct reliability (CR) and cross loading through correlation of constructs using the alternative attractiveness and attitude toward switching model as all factors are present in this model for the two models that will be analyzed. Factor loadings for the items for the latent constructs alternative attractiveness, attitude toward switching, continuance intention, Instagram attractiveness, Pinterest attractiveness, Tumblr attractiveness and Twitter attractiveness were all greater than .70 and indicate that the items converge on the latent construct at adequate levels [11]. Composite reliability and validity was examined for appropriateness; the composite reliability for all factors ranged from 0.878 to 0.947 and exceeds 0.70 which suggests adequate reliability [11]. Table 5. shows the correlation estimates between the constructs and the square root of the average variance extracted (AVE) for each construct on the diagonal. The square roots of the AVE range from 0.814 to 0.906. The square root of the AVEs are higher than the correlation estimates, which range from 0.55 to 0.72. The correlation estimate between constructs range from 0.185 to 0.678 and there is little cross-loading among the measured variables.

Common method variance was tested using the common method factor approach of Podsakoff et al. [20]. The results show that the average substantively explained variance of the indicators is 0.767, while the average common method-based variance is 0.004. The ratio of the substantive variance to method variance is approximately 189:1. It is unlikely that the survey method is biased for this study based on the ratio of substantive variance to method-variance. Overall, these results support the discriminant validity of the model.

5.5. Four Alternative Social Networking Site Structural Model Results

The structural model for the four specific alternative social networking site models was assessed for its goodness of fit (GoF), explanatory power (R²), and path coefficients. The model’s overall goodness of fit is 0.542 and is considered large[25]. The model’s explanatory power, or amount of explained variance, is 0.371; the model explains approximately 37.1% of the variance of continuance intention, and is considered to have a weak to moderate level of explanation.4 Path coefficients and t-statistics are shown in Table 6. All of the four specific products are statistically significant. One control variable, gender, is statistically significant and age is not considered statistically significant. Attitudes about Twitter as an alternative service had the strongest standardized path

3(GoF >=0.36 are considered large)
4Hair et al. [10]- R² of 0.75 is substantial, 0.50 is moderate, and 0.25 is weak.
coefficient (β) as a predictor of continuance intention, followed by Pinterest, Tumblr, gender, and Instagram.

5.6. Alternative Attractiveness and Attitude Toward Switching

The structural model for the four specific alternative social networking site models was assessed for its goodness of fit (GoF), explanatory power (R²), and path coefficients. The model’s overall goodness of fit is 0.541 and is considered large [25]. The model’s explanatory power, or amount of explained variance, is 0.544 or the model explains approximately 54.4% of the variance of continuance intention and is considered to have a moderate to substantial level of explanation. Path coefficients and t-statistics are shown in Table 8. All of the paths are statistically significant. Alternative Attitudes had the strongest standardized path coefficient (β) as a predictor of continuance intention, followed by attitude toward switching, gender and age. The model has an explanatory power (R²) of 0.351 for alternative attractiveness and 0.248 for attitude toward switching from the four specific product attitudes.


Note 3: GoF >= 0.36 are considered large

Hair et al. [10]- R² of 0.75 is substantial, 0.50 is moderate, and 0.25 is weak.
6. Discussion

This research looks beyond models that examine continuance intention based on how users view one product and examines how other alternative products and attitudes about alternatives affect continuance intention. These results show that simply having an account on an alternative site impacts continuance intentions on a site like Facebook. Stronger results on how survey respondents’ alternative attitudes and attitude to switch were found that explained a moderate to substantial amount of the variance in continuance intention. The results indicate that a moderate to substantial amount of the variance for why someone will stay on Facebook has no direct relationship with their satisfaction level on Facebook (although it is possible there is an indirect relationship).

This research analyzed three models to determine continuance intention and have large differences in the amount of explanatory power of continuance intention. Whether someone has an account on an alternative social networking site explained a small amount of the variance. The attitudes developed by the four SNS model explained a weak to moderate amount of variance in continuance intention. General attitudes about alternative attractiveness and attitudes toward switching explained a moderate to substantial amount of variance in continuance intention.

The results show how having an accounts on the four specific SNSs (Twitter, Tumblr, Pinterest and Instagram) impacts continuance intention on Facebook. The model explains approximately 5.7% of the variance in continuance intention and is considered low; this indicates that other factors are important and not in this model. Instagram, which was purchased by Facebook had a positive effect on continuance intention and may be considered a complementary product to Facebook.

Instagram users show an increase of continuance intention on Facebook; it may be that strong integration between the two products is helpful to both products. The products may be complementary in that the status updates in Facebook are text based and Instagram adds a visual component. Users who have Twitter accounts, on the other hand, have lower intentions to continue using Facebook. It appears that Twitter may be behaving more like a substitute product where use of Twitter leads to lower intentions to continue using Facebook. The users may use the sites differently; cross-posting of text is possible between the two sites can be configured but may not be particularly helpful to the users. Both Twitter updates and Facebook updates are largely text based, with Twitter only allowing for tweets of 140 characters compared to Facebook’s more generous text allocation. In this case, having text from one site cross-posted to another site may not be considered particularly useful. Pinterest and Tumblr account holders had no statistically significant difference in continuance intention on Facebook. The mean values for account holders indicate that the majority of the survey respondents planned to continue using Facebook, but the results also show differences in the strength of that relationship.

The results on how survey respondents’ viewed the four specific social networking sites as an alternative explained a weak to moderate amount of the variance in continuance intention (37%) and is a large improvement effect ($f^2$) over the account holder model. All of the theoretical paths are supported; gender is a statistically significant covariate that predicts continuance intention (women are more likely to continue using Facebook than men), and age was not a significant factor. The alternative constructs measure whether a user perceives that alternative products would be better to use, provide better policies, and more satisfaction compared to Facebook; e.g. “In general, I would be much more satisfied with Twitter than I am with Facebook.” Twitter users who developed an attitude that Twitter would be a strong alternative to Facebook had the highest path coefficient in the model (-0.388). Twitter and Facebook may be considered the most similar of the four SNSs and may be perceived more as substitutes than complements.

Pinterest attitudes and Tumblr attitudes had the second and third highest path coefficients (-0.184 and -0.127, respectively) and are relatively similar in value. Pinterest and Tumblr may have smaller impacts on continuance intention because they serve different functions than Facebook where Pinterest is a social scrap booking site and Tumblr focuses on image content. Attitudes about Instagram also are associated with lower continuance intention on Facebook despite Facebook’s ownership of Instagram, its strong integration, and that it serves a different purpose (images) vs. Facebook. Instagram account holders had higher levels of continuance; however, attitudes about Instagram as a substitute is associated with lower continuance intention on Facebook ($\beta = -0.095$). Gender is also associated with higher continuance intention; women were more likely to stay on Facebook than men. Age had no statistically significant effect on continuance intention.

The results on how survey respondents alternative

<table>
<thead>
<tr>
<th>Hyp</th>
<th>Support</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5</td>
<td>Yes</td>
<td>High alternative attractiveness will negatively impact continuance intention on Facebook</td>
</tr>
<tr>
<td>H6</td>
<td>Yes</td>
<td>High attitude toward switching will negatively impact continuance intention on Facebook</td>
</tr>
</tbody>
</table>

Table 9.

HYPOTHESES

- Hypothesis 5: High alternative attractiveness will negatively impact continuance intention on Facebook
- Hypothesis 6: High attitude toward switching will negatively impact continuance intention on Facebook

946
attitudes and attitude to switch explained a moderate to substantial amount of the variance in continuance intention (54.4%) and is a large improvement effect ($\beta^2$) over the four product attitude model. The two paths were statistically significant with the path coefficient for alternative attractiveness being stronger than attitude toward switching (0.454, 0.336, respectively). This model more broadly surveyed whether they respondents believed another social networking site would be an attractive alternative to Facebook without specifying an alternative site. Survey respondents may be considering the four specific products in this investigation or any other SNS, e.g. Google Plus, LinkedIn, YouTube, etc. when asked about alternatives. Attitude toward switching indicates that survey respondents who had a favorable attitude to switch had lower continuance intention. Attitude toward switching has a lower path coefficient than alternative attitude and may indicate that it is not that SNS users are favorably inclined to switch as much as they find other alternative products attractive. Gender and age were both statistically significant; women and older survey respondents were more likely to continue to use Facebook.

Twitter attractiveness had a much stronger relationship with general alternative attractiveness ($\beta = .434$) and attitude toward switching ($\beta = .332$) than the other three products in the model. This finding may provide more evidence that Twitter is a substitute product for Facebook instead of a complement. The path coefficients for the remaining three products on alternative attractiveness and attitude toward switching were statistically significant but much lower in magnitude.

Instagram may be a complementary product for Facebook as evidence by the four accounts’ model where those who had Instagram accounts had higher continuance intention on Facebook; however, Instagram attractiveness had positive effects on both alternative attractiveness and attitude toward switching. The alternative attitudes and attitude toward switching has much more explanatory power than the four accounts model and may be more helpful in understanding the role of attitudes toward a product as an alternative compared to how being an account holder predicts continuance intention.

7. Implications

There are implications for practice and for researchers found in this research. For researchers, models that predict continuance intention should include factors beyond the product itself. IS continuance theory of Bhattacherjee [3] examine satisfaction and perceived usefulness as direct predictors for continuance intention. The model also includes perceived usefulness and confirmation as direct factors for satisfaction. The model does not look beyond the product under consideration; however, this research shows that attitudes about alternatives and attitudes toward switching does affect continuance intention. Continuance intention decisions are made beyond a single product and include attitudes about alternative products.

For practice, social networking site companies need to be aware of the possible alternative products and develop strategies to reduce any negative impacts. Products that are considered alternatives and complementary to a product may be an acquisition target. Facebook purchased Instagram in that capacity; Instagram was a strong social networking site that specialized in photos and Facebook needed a stronger offering in that area. The brands have retained their identities but are owned by Facebook. In addition, simply measuring satisfaction of your product may not be enough, a user’s attitude toward alternatives and attitude to switch have important effects on continuance intention.

8. Conclusions

This research focuses on three research questions about continuance intention on Facebook. The best model in this research explains moderate to substantial amount of the variance in continuance intention on Facebook based on alternative attractiveness and attitude toward switching. When social networking site users perceive that alternatives are attractive and are favorably disposed to switch to new services then continuance intention on Facebook is lower. Of the four products studied in this research Twitter had the strongest relationship with decreased continuance intention. Survey respondents who perceive the three alternative products (Pinterest, Tumblr and Instagram) as an attractive alternative to Facebook have lower continuance intention on Facebook. This research helps explain how alternative social networking sites and general attitudes about alternatives and attitudes toward switching is associated with discontinuance intention on Facebook.

References


