

Social Media and University Enrollment

Can social media be used to raise awareness of university programs?

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Abstract

Instagram was used during a seven-week study to examine how using social media influenced students' decisions about enrolling in the merchandising program at a southeastern regional state university. Attempts to increase merchandising program awareness were conducted by developing innovative content on the program's Instagram page for three targeted audiences: incoming students, current students, and alumni of the program. The researchers examined the most popular Instagram content, the most popular time for interacting with the Instagram page, and the demographics of the Instagram followers. Results can be used by the university and other universities to create more effective social media campaigns attempting to increase student enrollment.

Introduction

The use of social media platforms is increasing in popularity every day. In 2017, there were 2.46 billion people on some type of social media platform and predictions suggest that 3.02 billion people will be using a social media platform by 2021 worldwide ("Social media & user-generated content," 2019). As of June 2018, there were over one billion Instagram social media users worldwide ("Social media & user-generated content," 2019). Social media platforms, such as Facebook, Instagram, and Twitter are not only being used by individual consumers to engage with one another, they are enabling businesses and organizations to expand visibility on the Internet. Digital marketers have new advantages, such as online consumer behavior tracking, A/B testing, placing cookies in consumers' devices about a product or service for future advertising, and communicating through social media platforms to reach individuals when organizations are recruiting and marketing (Laudon & Traver 2017). Reach is the total number of users who viewed an account's social media post within the day (Hitz, 2019). In 2016, Habibi, Laroche, and Richard examined various online brand communities, the relationship of individuals' consumer behavior, and the impact social media communities had on users. The researchers explained organizations that utilized social media outlets (i.e., Apple, Samsung, Nike, Starbucks) influenced consumers' perspectives about the organization, such as brand's performance, loyalty, trust, and awareness, all of which impacted the social media users' relationship with the brand (Habibi et al., 2016).

Just as customers generate revenue for businesses, student enrollment is a sizeable factor for funding a university's academic programs. Can universities use social media platforms to attract

students and increase enrollment? The researchers of the present study sought to understand how social media platforms, specifically Instagram, influenced student behavior. The purpose of the study was to determine whether or not social media outlets could be used to raise awareness of a university's merchandising program. Important consumer behavior topics related to using social media platforms include: how individuals' attitudes are formed about brands based on the functional use of the website, the importance of choosing the correct social media platform for an organization's target consumers, how to develop strategic social plans, the importance of forming appropriate social media content to reach target audiences, and outcomes of social media analytics. The literature related to each of these topics was examined and taken into consideration for the study.

In 2016, Richard and Chebat examined online consumer behavior with a model incorporating six major personality variables: online emotions, online cognitions, online entertainment, flow, online attitudes, and purchase intentions. In their study, online emotions encompassed pleasure, arousal, and dominance; online cognitions related to a website's functional characteristics; online entertainment related to a website's hedonic characteristics; flow described an enjoyable state occurring during internet navigation accompanied by a sense of playfulness; online attitudes described attitudes of the website and product; and purchase intentions related to a consumers' intent to make a purchase in the future (Richard & Chebat, 2016). The model was fully supported. Specifically, flow led to higher pleasure and flow had a direct effect on purchase intentions. The researchers of the present study attempted to utilize variables (i.e., cognition, emotions, entertainment, flow, online attitude, and purchase intentions) proposed by Richard and Chebat (2016) for the study of the merchandising program's Instagram account.

Social media platforms allow individuals to create unlimited amounts of user-generated online content empowering individuals by giving him/her the opportunity to create and share ideas and content (Tiago & Verissimo, 2014). Tiago and Verissimo (2014) stated that organizations need to effectively establish the correct social media channel to provide individuals with information and to connect with the target audience or stakeholders to produce sales for the organization. In another analysis conducted by Colicev et al. (2018), the researchers explained how social media platforms affect consumers' mindsets and an organization's stakeholder value. The researchers argued that brand awareness, purchase intent, and customer satisfaction influenced consumer behavior through social media outlets, which raised the organization's stakeholder value (Colicev et al., 2018). Marketing tactics that persuaded an individual's purchase intent, brand awareness, and consumer satisfaction on Instagram to increase the stakeholders' value of the organization were employed in the present study (Colicev et al. 2018).

In a study conducted by Felix et al. (2016), the researchers examined elements marketing personnel need to consider when constructing a social media plan for an organization. The researchers stated that digital marketers must be aware of positive and negative feedback on organizations' social media accounts (Felix et al. 2016). An organization's tactical social media plan should include, "...stimulating sales, increasing brand awareness, improving brand image, generating traffic to online platforms, reducing marketing costs, and creating user interactivity on platforms by stimulating users to post or share content" (Felix et al., 2016, p. 2). These objectives can also be used to improve the brand of a university's program in the mind of the target customer.

Constantinides and Stagno (2012) examined the role of a university's social media presence on university attendance. The investigators stated that contemporary individuals making a decision about which school to enroll in preferred user-generated content in an online atmosphere over traditional marketing strategies, such as print advertisements, direct mail, telemarketing, etc. (Constantinides & Stagno, 2012). In this study, they explained that digital marketers need to use original and modern content to gain online individuals' attention. Further, they stated that universities should construct two-way communication channels through social media platforms allowing digital marketers to converse and engage with the brand's audience. The researchers of the present study utilized the merchandising program's Instagram account to raise awareness about the program targeting incoming students, current students, and alumni of the merchandising program. These target audiences, suggested by Constantinides and Stagno's (2012), were chosen because supporting and continuing relationships with these individuals should impact program enrollment.

Michaelidou and Micevski (2018) investigated consumer perceptions of social media analytics and the outcomes social media analytics provide organizations. The researchers defined social media analytics as, "...the acquisition, analysis and dissemination of brand-relevant or personal information (e.g., consumer opinions, posts, and metadata such as demographic information) from social media sites to assist with business decisions and strategies" (Michaelidou & Micevski, 2018, p. 1). In another analysis conducted by Holsapple et al. (2018), the investigators examined businesses' social media analytics as a framework. The researchers stated that social media analytics allowed organizations to measure the brand's feedback on services to help develop and advance the organization's marketing strategy (Holsapple et al., 2018). The researchers developed a digital marketing plan for the merchandising program's Instagram account to advance the program's understanding of the users through social media analytics and feedback.

The review of literature on examining online consumer behavior, establishing the correct social media channel, constructing a social media plan to raise consumer awareness, and measuring the marketing strategies using social media analytics enabled the researchers to create a social

media marketing campaign to better understand the target markets' attitudes towards the merchandising program's Instagram content. The researchers attempted to gain a better understanding of whether or not social media platforms raised awareness of the merchandising program's target audience and increased enrollment for the program.

Methodology

The researchers posted various types of content on the merchandising program's Instagram account for seven weeks to reach the target audiences. The four overall goals of the study were: a) to raise awareness of the merchandising program by developing innovative content to interact with the merchandising program's Instagram followers; b) to discover what type of content was the most popular for the merchandising program's users; c) to determine when the Instagram users were interacting with the merchandising Instagram profile; and d) to understand more about the Instagram followers by examining demographic variables (e.g., gender, age, location). Instagram Insights provides analytics tools for business and organization accounts that assist with understanding the followers and consumers interacting with the Instagram account.

Results

During the seven weeks of the study, the researchers posted content on the social media platform to engage with the merchandising program's target customer. Content varied but could be categorized as: alumni spotlight posts showcasing careers for potential and current merchandising students; relatable posts to entertain; educational posts about existing merchandising courses; current merchandising job opportunities; and relevant social or news events occurring at the university.

The merchandising program's Instagram account contained 98 followers at the start of the study. Followers are users that subscribe to an account on a social media platform to see posts and updates about the subscribed account (Aichner & Jacob, 2015). By week seven of the study, the merchandising program's Instagram had a total of 186 followers- an 89.8% increase in followers (see Table 1). The researchers noted that the new followers were students currently enrolled in the program or merchandising alumni. The researchers also noted that numerous Instagram users that followed the merchandising account were false accounts soliciting business. Users are individuals who participate on social media platforms (Lee, 2012). The authors considered the following types of users "false accounts." The false accounts were users soliciting business to the merchandising account, such as selling digital marketing packages, fitness programs, and beauty products. The increase in false users on Instagram could be due to certain general hashtags the posts contained in the description, such as #marketing #fashion. The researchers used vague and specific hashtags in an attempt to reach a larger audience on the Discovery page using online flow. Due to the difficulty of separating the false accounts from

actual users, the researchers kept the false accounts in the sample to determine what hashtags led the accounts to the merchandising program's Instagram profile and content.

Weeks	Dates	Followers	Percentage Increase
Week One	Feb 23- March 1	98	NA
Week Two	March 2-March 8	107	9.18%
Week Three	March 9-March 15	115	7.48%
Week Four	March 16-March 22	117	1.74%
Week Five	March 23-March 29	129	10.26%
Week Six	March 30-April 5	148	13.95%
Week Seven	April 6-April 12	186	25.68%

Table 25 Instagram follower increase by week.

The data showed that the majority of users on Instagram were females (see Table 2). Although there was a slight change in the gender percentages during week seven of the data collection, the female user percentages on the program’s Instagram account remained around 80% throughout the course of this study. Results suggested that the Instagram posts could have been more attractive to females based on the style and type of content published.

Weeks	Dates	Female	Male
Week One	Feb 23- March 1	82%	18%
Week Two	March 2-March 8	81%	19%
Week Three	March 9-March 15	82%	18%
Week Four	March 16-March 22	82%	18%
Week Five	March 23-March 29	79%	21%
Week Six	March 30-April 5	80%	20%
Week Seven	April 6-April 12	75%	25%

Table 26 Instagram followers by gender.

Next, the researchers analyzed the location of the Instagram users when accessing the merchandising Instagram account. Five cities were identified as most frequent user locations (see Table 3). The percentages throughout the seven weeks remained fairly consistent for each city. Most of the Instagram users viewing the merchandising account were located in city A, which is where the southeast regional state university resides. Cities B, C, D, and E were located within a forty-mile circumference of the university. The data suggested that the merchandising program followers are primarily located in the region.

Weeks	Dates	City A	City B	City C	City D	City E
Week One	Feb 23- March 1	43%	8%	7%	7%	4%
Week Two	March 2-March 8	43%	8%	7%	7%	4%
Week Three	March 9-March 15	42%	8%	7%	7%	4%
Week Four	March 16-March 22	41%	8%	6%	8%	4%
Week Five	March 23-March 29	38%	8%	8%	7%	4%
Week Six	March 30-April 5	42%	8%	7%	6%	3%
Week Seven	April 6-April 12	37%	7%	4%	6%	2%

Table 3 Instagram followers by location.

Next, the age range of Instagram followers was investigated. The most frequent age range of visitors who viewed the merchandising Instagram account were between 25-34 years old (see Table 4). The second most frequent age range was between 18-24 years old. Though the age range 18-24 years old increased eight percent over the course of the seven weeks, the percentages throughout the seven weeks of this analysis remained somewhat consistent. The age ranges 18-24 and 25-34 years old are the age ranges of the merchandising program’s current students and alumni. The data suggested the target audience of the study (i.e., individuals enrolling in the university, students already enrolled in the university, and previous alumni of the program) was reached.

Weeks	Dates	Age 13-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Week One	Feb 23- March 1	1%	20%	43%	18%	12%	5%	1%
Week Two	March 2-March 8	1%	21%	38%	20%	14%	5%	1%
Week Three	March 9-March 15	1%	21%	36%	21%	15%	5%	1%
Week Four	March 16-March 22	1%	21%	36%	20%	16%	5%	1%
Week Five	March 23-March 29	1%	25%	36%	17%	15%	5%	1%
Week Six	March 30-April 5	1%	29%	36%	16%	13%	4%	1%
Week Seven	April 6-April 12	1%	28%	35%	16%	13%	7%	>1%

Table 4 Instagram followers by age range.

Next, the days of the week were examined to determine the most frequent days and times for Instagram followers to view the merchandising Instagram account (see Table 5). The most frequent time for Instagram users to view the merchandising Instagram account was between 9PM-11PM throughout the seven weeks of the data collection. The researchers then examined which day Instagram users visited the merchandising account. The most frequent day for Instagram followers to visit the merchandising account was Wednesday. Instagram followers’ second most frequent days for visiting the merchandising Instagram account was on Tuesdays and Fridays. The researchers recommend that the university’s Instagram account managers publish important content on the social media platform on Wednesdays between 9PM-11PM. The researchers should collect more data to understand why Wednesday and 9PM-11PM was the most frequent times and day to publish content on Instagram.

Weeks	Dates	Days and Times with Audience (1 st)	Days and Times with Audience (2 nd)
Week One	Feb 23- March 1	Wednesday 9PM-11PM	Tuesday 9PM-11PM
Week Two	March 2-March 8	Wednesday 9PM-11PM	Tuesday 12PM-2PM
Week Three	March 9-March 15	Friday 6PM-8PM	Saturday 9PM-11PM
Week Four	March 16-March 22	Friday 6PM-8PM	Tuesday 12PM-2PM
Week Five	March 23-March 29	Wednesday 12PM-2PM	Friday 9PM-11PM
Week Six	March 30-April 5	Thursday 9PM-11PM	Monday 3PM-5PM
Week Seven	April 6-April 12	Wednesday 12PM-2PM	Thursday 9PM-11PM

Table 5 Instagram audience visit frequency by day and time.

The researchers also collected the number of accounts that were reached each week by the merchandising program’s profile (see Table 6). This was measured by the number of users that viewed the merchandising program’s content or hashtags on Instagram’s Discovery page. During the first week of the analysis, the Instagram profile reached 104 accounts via Instagram’s Discovery Page. By the seventh week of this examination, the merchandising profile reached 413 accounts, which was a 297% increase from week one. The researchers also identified the day with the highest account reach from the Discovery page. Friday was the day that reached the most accounts from the Instagram Discovery page throughout the seven weeks of the study.

Weeks	Dates	Accounts Reached	Most Accounts Reached (1 st)	Most Accounts Reached (2 nd)
Week One	Feb 23- March 1	104	Tuesday	Thursday
Week Two	March 2-March 8	101	Friday	Monday
Week Three	March 9-March 15	116	Friday	Saturday
Week Four	March 16-March 22	168	Monday	Friday
Week Five	March 23-March 29	362	Wednesday	Sunday
Week Six	March 30-April 5	281	Friday	Thursday
Week Seven	April 6-April 12	413	Friday	Tuesday

Table 6 Instagram reach by day.

Finally, the researchers gathered the number of impressions and profile visits the merchandising Instagram account received over the course of the study (see Table 7). Impressions is the number of times the merchandising account’s content is shown on the social media platform (York, 2019). The number of impressions was 712 during the first week of data collection. The data reported a dip in the impression numbers until week four. By the end of the study, the merchandising Instagram account had impressed over 1,998 Instagram users, which was a 180.62% increase from the first week to the last week.

The researchers also collected the number of profile visits the merchandising Instagram account received during the study (see Table 7). Profile visits are important for determining if the content the researchers published on the organization’s Instagram account was effective at getting users to visit the merchandising profile for further information about the program. Starting on week one of the analysis, the merchandising account had 35 profile visits. The researchers noted a dip in the profile visit numbers until week four. By the end of week seven, there were 80 profile visits on the merchandising Instagram account from the social media users, which was a 128.57% increase from week one.

To gain a better understanding about why the impression and profile visit numbers decreased during those weeks, the researchers examined the content published on the Instagram account during weeks two and three. The researchers propose that the number of impressions

decreased during weeks two and three for a variety of reasons. The students at the university were on spring break during the third week of the data collection. The researchers believe this break decreased the merchandising program’s target audience viewership during that time. Another reason for the decrease in visits could be related to the type of content published on the merchandising Instagram account. The researchers noticed repetitive content (e.g., job position postings) on the merchandising Instagram account during these lower weeks. The merchandising program’s followers did not respond to or react to the job posting content on Instagram as favorably as they did to other types of content.

Weeks	Dates	Impressions	Profile Visits
Week One	Feb 23- March 1	712	35
Week Two	March 2-March 8	442	5
Week Three	March 9-March 15	653	8
Week Four	March 16-March 22	786	23
Week Five	March 23-March 29	1,409	39
Week Six	March 30-April 5	1,426	62
Week Seven	April 6-April 12	1,998	80

Table 7 Instagram impression and profile visit frequency.

Conclusions and Implications

The researchers used Felix et al.’s (2016) recommendations on structuring social media marketing efforts by creating posts that showcased the organization’s characteristics, such as the merchandising program’s specialization to expand the merchandising program’s Instagram followers and the target consumers’ average age ranges. The researchers recommend creating content that gets Instagram users to comment and/or share the program’s content, as well as posting content that is relative to prospective students, current students, and merchandising alumni.

Based on the results of the seven-week study, the researchers disagree with Richard and Chebat’s (2016) study with regard to Instagram flow. Hashtags the researchers used on the merchandising program’s posts allowed the posts to be viewed on the Discovery page by Instagram users not following the merchandising program’s account, which results in Instagram flow. Using hashtags like #marketing, #fashion, and #merchandising resulted in an increase in followers; however, many of these accounts were businesses trying to solicit services and products. The researchers credit the ambiguous hashtags to the increase in false business accounts because the hashtags caused the program’s content to appear on Instagram’s Discovery page. The researchers suggest using more concentrated hashtags that relate to the university’s program, such as #NameofschoolMerchandising or #MerchandisingNameofSchool. These hashtags allow the program’s content to still be discovered using the cognitive behavior flow, but only to select Instagram users who may be interested in the merchandising program at the particular university.

One of the limitations of the present study was the small sample size of Instagram users of a southeastern regional state university. As the merchandising program continues to maintain a more active Instagram account, the number of followers should increase. Another limitation was measuring the impact of social media interaction on the merchandising program's student enrollment. The researchers collected Instagram data during the spring semester of the academic year. Most students enrolling in the merchandising program at this university sign up for the first merchandising courses in the spring. Therefore, the enrollment changes will not be evident until the following spring meaning the researchers are currently unable to observe how online consumer behavior affect enrollment for the program and what type of content affects the enrollment rate for the program. Enrollment data will be collected in spring 2020 to analyze the impact of the social media campaign on enrollment.

A third limitation of the present study was measuring the Instagram impact on the merchandising program enrollment. There are many variables this study did not measure (i.e. word of mouth, university recruiting, university advisement); however, questioning new students enrolling in merchandising courses could influence the understanding social media posts have on enrollment. Social media is becoming one of the variables that could influence individuals' decisions for enrolling in a university program.

Organizations that duplicate the present study can more clearly understand what type of content the organization's Instagram followers prefer versus the organization's Instagram audience. For example, the organization's followers were more responsive on Wednesday from 9PM-11PM and responded to content containing a call-to-action about the merchandising curriculum. Instagram users that found the merchandising program's content under Discovery page were more responsive to the merchandising program's Instagram content on Fridays from 9PM-11PM and responded to content that related to a merchandising course spotlight or an event occurring at the university. Organizations should employ various types of content on different days and times to understand that organization's Instagram followers and audience, and which days and times are most effective for gaining responsive followers.

Organizations that construct a similar study could investigate the ways content attracts Instagram followers and users based on how the content relates to on the organization's Instagram account. The merchandising program created content that related to the target audience's wants and needs based on the relevant literature. The merchandising program found using content that had a call-to-action in the description of the post, contained information about a merchandising course or curriculum, contained information about previous alumni of the merchandising program, and shared important dates and events about the university or the merchandising program attracted more followers and users on Instagram. Other organizations or university programs could use similar posts related to that organization's brand to increase followers and brand awareness on the organization's Instagram account.

In future studies, the researchers plan to track how consumers' reactions to the merchandising program's Instagram content impacts visits to the merchandising program's webpage. The researchers also plan to examine similarities and differences among social media platforms to determine various contents' influence on the merchandising program's target audience.

As stated previously, social media platforms are expected to contain to 3.02 billion people by 2021 ("Social media & user-generated content," 2019). Due to the rise of social media platforms, other university programs and organizations should utilize this study for that program or organization's social media account to determine what type of content to publish, the most popular days and times among the organization's target audiences, and the most dominant demographics for that program or organization. Raising awareness via social media could allow universities and organizations to reach more individuals online when marketing a program, product, or service. Instagram alone contains one billion people, meaning organizations today have more opportunities to focus on the target consumer through social media platforms ("Social media & user-generated content," 2019).

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Keywords: Instagram, online consumer behavior, social media platforms, target customer, social media analytics

Relevance to Marketing Educators, Researchers and Practitioners: Organizations duplicating this study could benefit by gaining a better understanding of: hashtag selections for the organization's Instagram account; types of content to post on Instagram; days and times to post content on the social media platform; content that attracts and increases the organization's audience on Instagram; and what content interests the organization's followers and potential followers. Organizations need to experiment with hashtags related to the organization's content, services, and/or products to create brand awareness on Instagram.

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