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Using Social Media As a Marketing Tool for Businesses

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Using Social Media As a Marketing Tool for

Businesses

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Abstract

Businesses turn to social media to increase market share and profits. Many social media platforms provide a unique customer experience between the company and social media. The analysis discusses how businesses to use social media platforms as one of the marketing strategies. It includes about four businesses cases, which includes two big companies Starbucks and Nike, two small local companies Coava Coffee Roaster and Portland Gear. When using social media, a company needs to be aware of the safety concerns of its customers, to the best of their ability, that they are protected. Two examples of Facebook "Like" button and YouTube recommendation system shows the information exchange between social media platforms and businesses. With the comparison between Facebook APIs and Twitter APIs, businesses can know how to send advertising to the target customers and get more new customers by using the APIs.

1.0 Introduction

Social media provides a platform for individual users to connect with their friends. Businesses users incorporate social media as a marketing tool to connect with customers and partner companies. Current social media platforms allow users to post photos, upload videos, make new connections ("friends"), post promotions, advertise, share information, and communicate with customers and partners which based on the Internet.

In order to discuss the relationship between social media and business, this analysis first exame how businesses use social media as one of marketing tools. Secondly, it discusses the Application Program Interface (API) and its contributions to marketing.

Many companies use social media as a marketing tool. Businesses receive many benefits from social media, including increased exposure, traffic, and sales. They can also develop loyal fans, marketplace insight, leads, search rankings, better business partnerships, and reduced marketing spending.[1] Companies can get customer data from social media companies who use API. With the development of social media and networks, companies who have already used social media can come up with better marketing strategies. Social media marketing usage rate is increasing year by year. The chart Figure 1.1 shows social media usage rate in 2017 is around 90 percent.

Social media marketing usage rate in the United States from 2013 to 2017

Figure 1.1: Social media marketing usage rate in the United States from 2013 to 2017
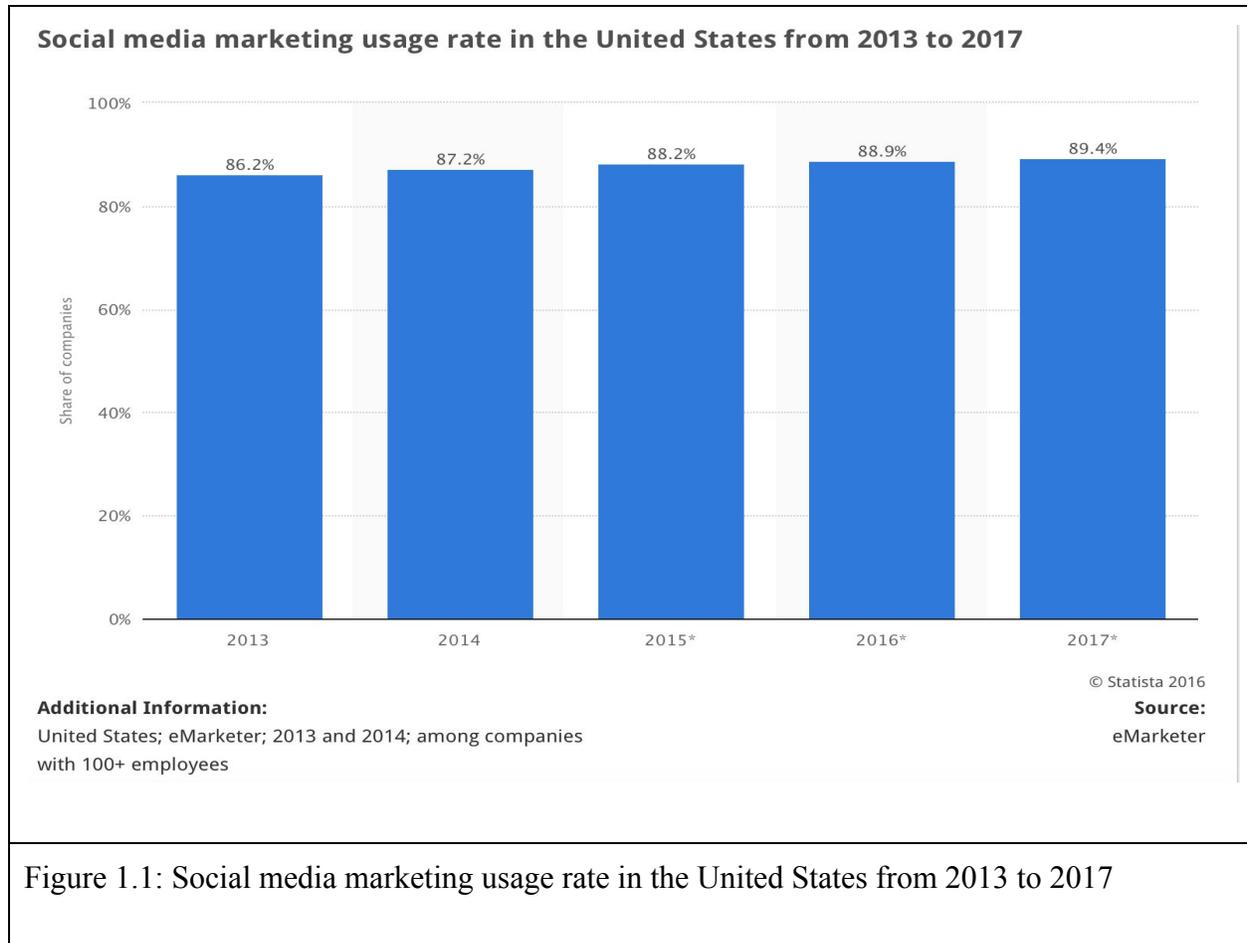
JetBlue focuses on customer service on Twitter. The most of JetBlue posts include @replies. This method has helped the brand to build a strong reputation among its customers. Another company Uber also use social media to get more customers and profits. Around 84 percent of people make decisions about the purchase based on their friends' recommendations. Customers share Uber offers between friends in social media platforms to receive promotions. These two examples show companies use social media successfully.[2]

Starbucks is one of the prominent businesses that have used social media as a successful marketing tool. Apart from large multi-national corporations like Starbucks and Nike, many local small businesses have also used social media as a marketing tool, such as Coava Coffee and Portland Gear in Portland. With increased advertising spending in social media platforms, using

social media has become one of the principal methods for companies to increase sales and get more new customers. Using social media looks like an important strategy for businesses. About 90 percent of companies use the social networks in the United States. Around 91 percent of brands use more than one social media platform, and 84 percent of marketers who are business to business companies use social media in some form. Companies ought to notice the importance of using social media and start to use social media as a marketing tool.

Using social media marketing is not without some drawbacks. These include using social media in a way that bothers customers, partners, or other businesses such as sending spam messages, useless information, and promotions, or promoting public humiliation, sneak attacks, political maelstrom and blending work and business or creating contract violations. Identifying and discussing problems like these and finding solutions for them is critical to the effective use of social media as a marketing tool. These are solvable problems, however, and should not keep businesses from using social media as a marketing tool. After assuring they have a clean and functional site, the next step is to implement API, which is collected by Facebook, Twitter, and other social media companies, into their marketing strategies. API is the tool that can help businesses to understand users' data and information letting companies know more about their customers and what their customers needs are. With this kind of targeted information, businesses can make more effective use of their marketing dollars on social media.

2.0 Background

2.1 Definition of Social Media

Social network sites provide services based on Internet that allow individual users to create a public or semi-public profile within a bounded system. They can share a connection, upload videos and communicate with each other among other things.[3]

Social media used as a marketing tool for companies connects them directly to their customers. It is also a platform for the customers where they can find new friends and communicate with each other, post photos, and upload videos which are based on networking through the product's site.

2.2 Background of Social Media

Around 90 percent of companies in the United States use social media as a marketing tool. Also, more than 90 percent of brands use more than one social platform to raise awareness of their brand. Over 50 percent of business to business (B2B) marketers think that advertising on social media platforms is a low-cost, high benefit method for searching and displaying product information.

In terms of traditional media, television is predicted to decrease by another 1 percent in 2017. Newspaper and magazine media declined around 10 percent in 2016, and are predicted to continue that decline by another 13 percent in 2017.[4]

Mobile ad sales in digital media, on the other hand, expect to grow by 45.4 percent in 2016 and increase 31.7 percent in 2017. Social ad sales are predicted to increase by 43.7% in 2016, and growth in 2017 is predicted to be an additional 23.7%.[4] The chart shows the traditional media and digital media ad revenue trends forecasted in 2016 and for 2017. Traditional media has negative, increasing revenue in 2016 and 2017.

Figure 2.1: Net US Media Owners' Ad Revenue Trends Forecast
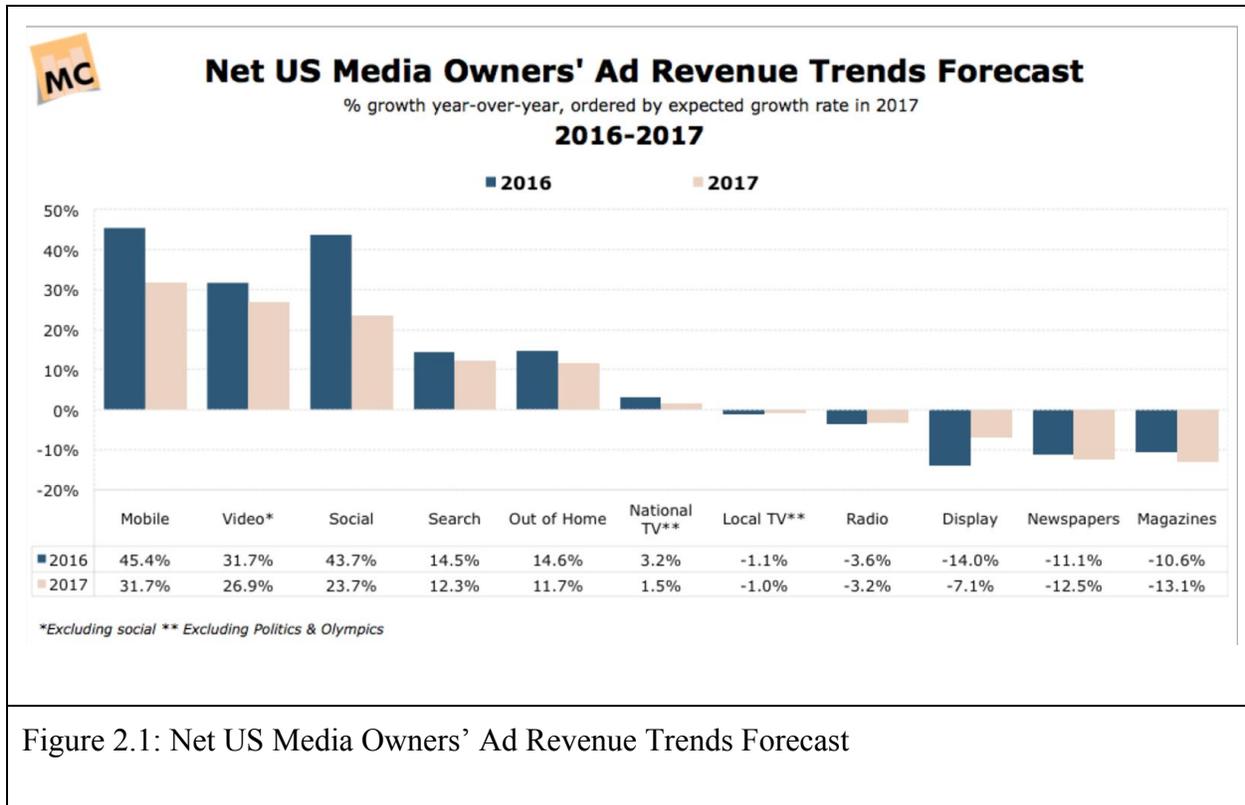
2.3 History of Social Media

The invention of the internet was a significant milestone for social media. The earliest internet platform was developed in the 1960s. According to the research, there were around one million internet users over the world in 1995. Surprisingly, the number of users increased rapidly so that by 2016 there were more than 7 billion users.
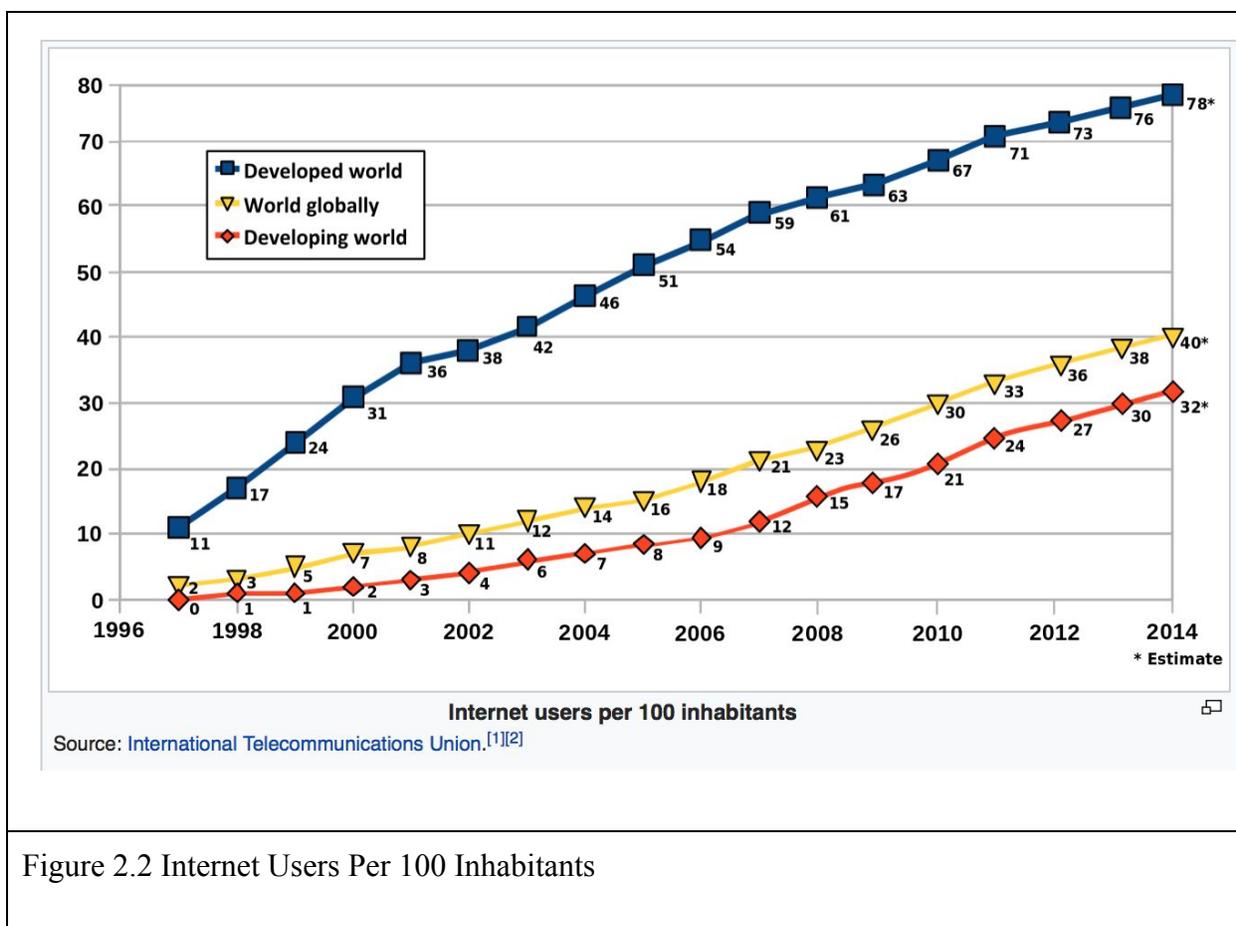
Figure 2.2 Internet Users Per 100 Inhabitants

After the invention of the computer and internet, the first recognized social media

platform, SixDegrees.com, allowed users to create their profiles, invite friends, organize groups,

and get others profiles. However, users can no longer use SixDegree.com. Two years after

SixDegree.com, another social media site, BlackPlanet.com was established, which people can

still use today. It has more than 8 million visitors per month. BlackPlanet.com functions as an

African-American social networking service, focusing on job postings and matchmaking. Users

also can discuss political and social issues on the forums. In 2003, the social media site LinkedIn

started providing business people with a networking resource to connect with other professional

people. Facebook started at Harvard University in 2004, then opened to the general public in

2006.[5] Younger users prefer Instagram which launched in 2010 as a very popular social network on mobile phones or tablets; users post photos and videos on the Instagram platform.

More and more companies use social media as a marketing method. This chart shows the usage of social media for businesses.

Social media usage of small business owners in the United States as of January 2016

Category	Percentage
To connect with customers	79%
To market or promote business and products	77%
To build an online reputation	74%
For advertising	69%
To learn what is being said about your business	64%
To lean what is being said by your competitors	47%
For hiring purposes	24%

Share of respondents

© Statista 2016

Additional Information:
United States; Wells Fargo; Gallup; January 11 to 15, 2016; 288

Sources:
Wells Fargo; Gallup

Figure 2.3: Social Media Usage of Small Business Owners in the United States as of January 2016

3.0 Statement of the Problem

3.1.Why Do Companies Use Social Media As a Marketing Tool?

Social media provides an avenue to increase market share and profits.

Funds for marketing are limited. If companies do not understand how to integrate social media effectively into their current marketing plan they choose other platforms to market their goods and services.

There are a variety of successful approaches. Four business cases show how Nike, Starbucks, Coava and Portland Gear have used social media in their marketing strategies.

3.2 The Security Problem in Using Social Media

Customers expect to be safe when they use social media, and that security will be provided either directly by the site or through the third party.

Customers want to know how their personal information is used by the social media website and how to protect their personal information.

Understanding how the information exchange happens on the social media website and the company is very important.

3.3 The Differences Between Social Media Platforms

Application Program Interface (API) provides a unique experience for customers on a company's website.

Because social media platforms lack a common interface (API) many companies have difficulty using API's data to customize the experience their customers have with social media web sites.

A comparison between the Facebook and Twitter APIs illustrate the differences and similarities.

4.0 Business Component

4.1 Starbucks and Coava Coffee Roaster

Starbucks offers specialty coffee and snacks to its customers, and holds the title of most recognized and respected coffee brand. The first Starbucks located Seattle in 1971. This chart showed the revenue of the primary coffeehouse chains all over the world in 2015. It shows that Starbucks leads dramatically.

Figure 4.1: Revenue in Million U.S. Dollars
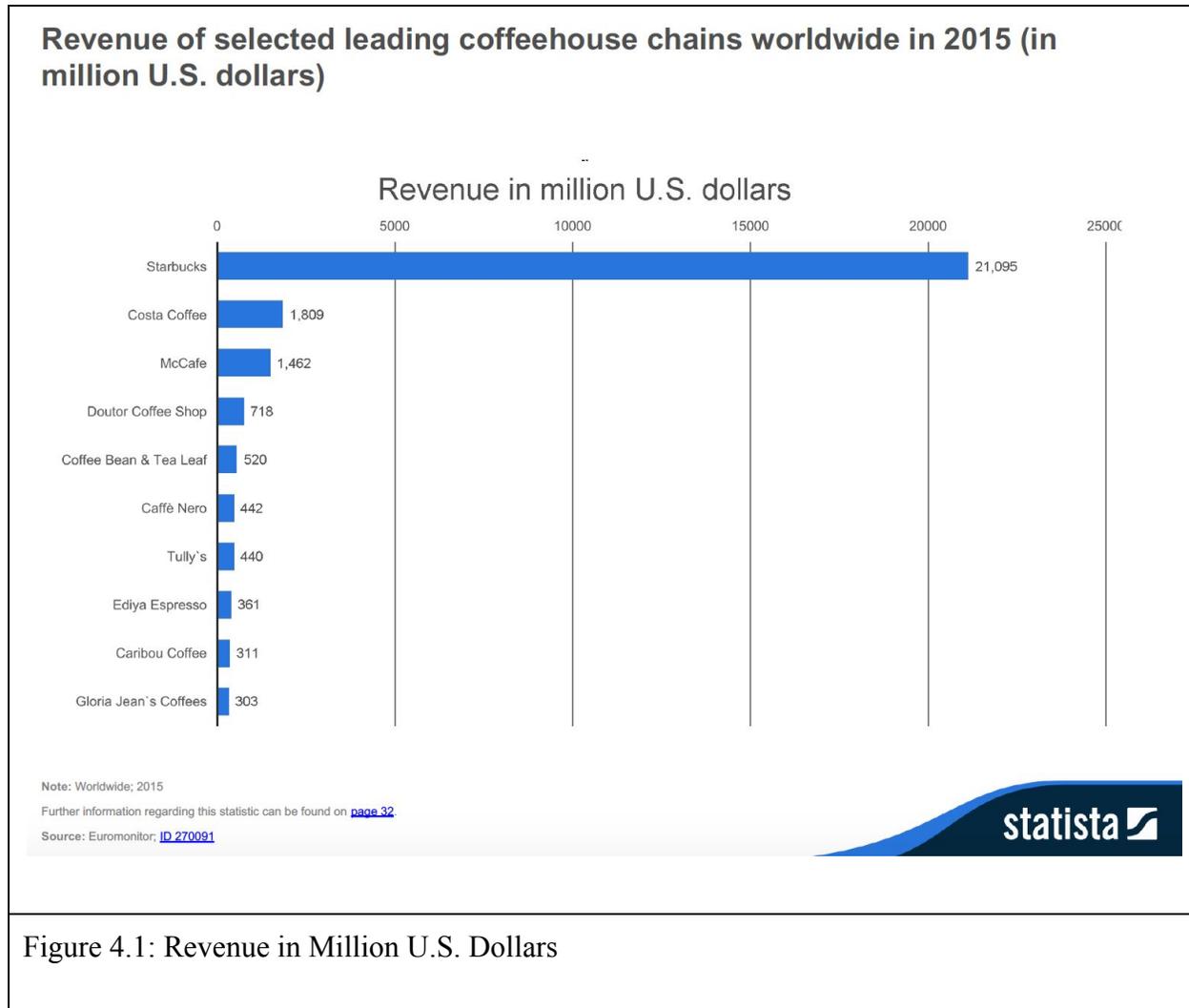
As the most famous coffee store in the world, Starbucks has used multiple marketing strategies to make its customers recognize its products and to increase its sales. Starbucks has used traditional media such as TV, magazines, radio and newspaper. Starbucks has also used "new media", in other words, social media to improve its brand equity. It uses social media as a valuable marketing tool to get more market share, increase profits, and provide better customer service. This chart shows Starbucks advertising expenditures over the past five years.

Starbucks Corporation's advertising spending worldwide in the fiscal years 2011 to 2016 (in million U.S. dollars)*
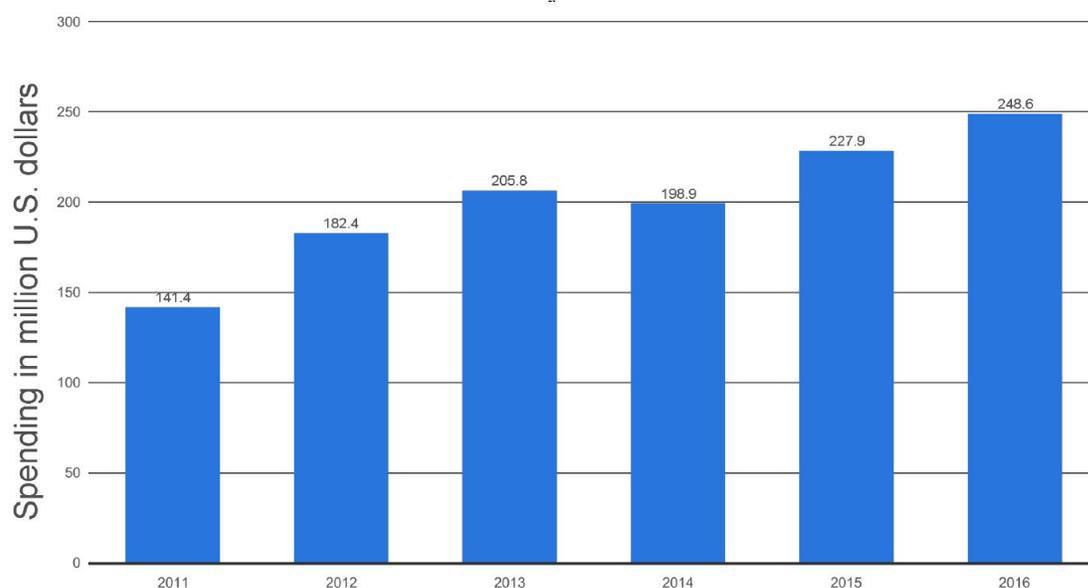
Figure 4.3: Starbucks Corporation's Advertising Spending Worldwide in the Fiscal Year 2001 to 2016

Starbucks uses social media as one of its platforms to communicate with its customers. It has an official account on most of the popular social media websites, Facebook, Twitter, Instagram, Pinterest, LinkedIn, and YouTube. Starbucks does an excellent job promoting its products through social media. It invites its customers to take photos of its products, share them with their friends and share their ideas with the Starbucks company. In this way, Starbucks increases its current customers' loyalty, and finds new customers when its current customers post photos on the social media page. When customers communicate with Starbucks, Starbucks

makes them feel special by replying. Customers feel important when Starbucks takes the time to reply to their posts. In addition, Starbucks customers can post their ideas on Starbucks official website.


Figure 4.4: My Starbucks Idea

Coava Coffee Roaster started in Matt Higgins' garage as a local small business, in 2008, located in Portland, OR. Coava Coffee focuses on making eco-friendly or "green" coffee. It pays attention to its relationship with farmers, customers, and staff. Customers can find a lot of information about its story, sourcing of products, coffee producers, and coffee bean production, processing, and roasting on its official website. On the processing page, visitors can see the steps the coffee bean goes through before roasting, washing coffee, semi-washing coffee, natural

coffee, drying, and milling. Also, Coava Coffee posts information about how to roast coffee on the Roasting page. The processing of the coffee bean is what makes Coava Coffee special and what sets it apart from Starbucks. Its sorts of information is definitely not available on Starbucks' official website. Figure 4.5 shows the steps of roasting.

Figure 4.5: Coava Coffee-Roasting

   People can sign up for Coava's monthly newsletter for updates, brew tips, and exclusive deals. Coava Coffee focuses on making perfect "green" coffee. Most of its customers come from Portland, Oregon although anybody can buy merchandise via its webpage. The company's website is engaging, and coffee aficionados enjoy spending their spare time on Coava Coffee's website.

4.1.1 Facebook

Starbucks has over 34 million followers on its Facebook page. It posts photos and videos frequently. Starbucks uses Facebook as one of the platforms where it can communicate with its customers, and customers can share their ideas, suggestions, or comments. Starbucks replies to almost all of them personally. On the Facebook page, customers can ask questions about Starbucks.The Starbucks staff answers their questions as soon as possible. Figure 4.6 shows the Starbucks Facebook official account webpage.

Figure 4.6: Starbucks Facebook Webpage

   Coava Coffee posts some photos and links to let people know how nice the coffee it makes is by using the Facebook platform. Coava emphasizes some of its recent accomplishments, such as being selected by the Best of Portland Readers' Poll. When visitors notice that, they can click the link to get more information. It looks interesting to know more about coffee drinks or other food restaurants. For instance, one report- "The 21 Best Coffee Roasters in the Country" is mentioned in Coava's Facebook page. Coava believes that good coffee should use excellent coffee beans, so it selects the best coffee beans from each country. In the Instagram platform, Coava Coffee posts its "life story" photos and products photos, it lets visitors see more about the Coava store and its products. Figure 4.7 shows Coava Coffee advertising its new product and shows how some of the the customers feel about the new service. It looks like they are pleasantly surprised!

Figure 4.7: Coava Coffee Facebook Webpage

Coava Coffee also posts many photos about its store and facilities.
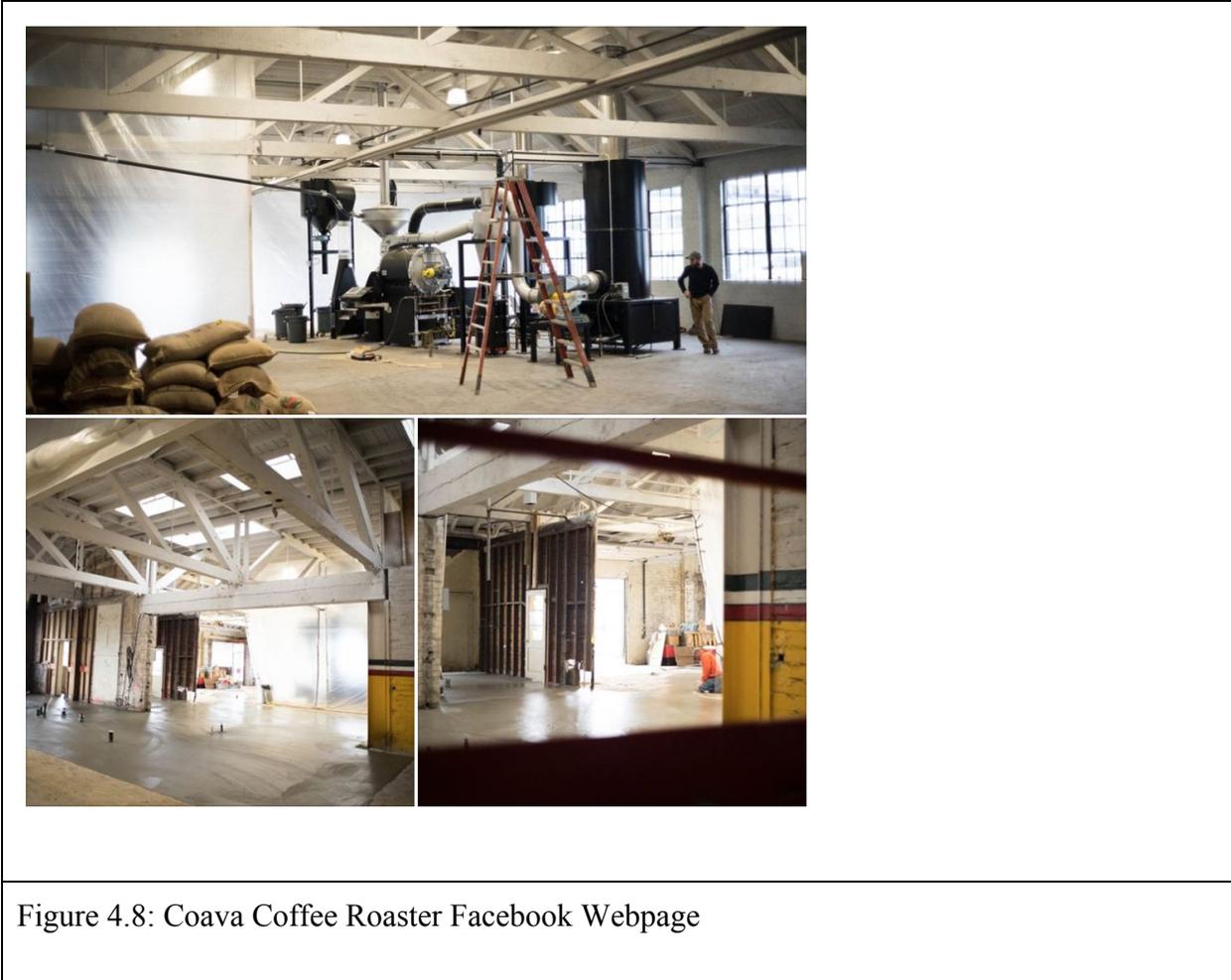
Figure 4.8: Coava Coffee Roaster Facebook Webpage

Figure 4.9 shows the links Coava Coffee posts on the Facebook page.

Figure 4.9: Coava Coffee Roaster Facebook Webpage

Starbucks focuses on the relationship with its customers, Coava focuses on providing more information about its store and products on its Facebook webpage. Coava's posts might make customers want to go to the official webpage to see the details about its product, and go to its store to enjoy a cup of coffee.

4.1.2 Twitter

Starbucks has nearly 11.8 million followers. It encourages its followers to respond to queries and to re-tweet what others say about Starbucks. Starbucks offers its followers e-coupons for a new coffee or to help create virtual drinks and share them on the Twitter platform. Also, Starbucks advertises its new products, and posts or retweets some interesting GIF photos which

can make the visitors feel relaxed on its Twitter page. Figure 4.10 shows the Starbucks Twitter

official account webpage.

Figure 4.10: Starbucks Twitter Webpage

Coava Coffee posts photos for its products, such as gift sets, mugs, T-shirts. In addition, it posts more information about its store and its production. It posts photos of real coffee bean producers. This makes the coffee experience more personal for the consumer.

Coava Coffee @coavacoffee · 28 Dec 2016

Coavacoffee.com
⚡Producer profiles, recipes, farm info, pretty images, a new shop, and a subscription service. ⚡
Check. It. Out.

Coava Coffee @coavacoffee · 7 Dec 2016

DAVID MANCIA IS BACK! Honduran coffee time is here, either location has 'em lined up. Come see us!!!

7

Figure 4.11: Coava Coffe Twitter Webpage

In Twitter, Starbucks provides coupons to its customers. It is trying to accelerate purchases from its existing customers. Coava Coffee focuses on telling the coffee story. These two companies have different tweets in their Twitter webpages. Coava does not focus on its products, it posts photos about its coffee farmer, official webpage and other stuff which help visitors to know more about its story.

4.1.3 Instagram

Starbucks uses the Instagram platform to post many colorful photos about its products. It also encourages customers to post their Starbuck photos. This allows the customer to more engaged with the brand.
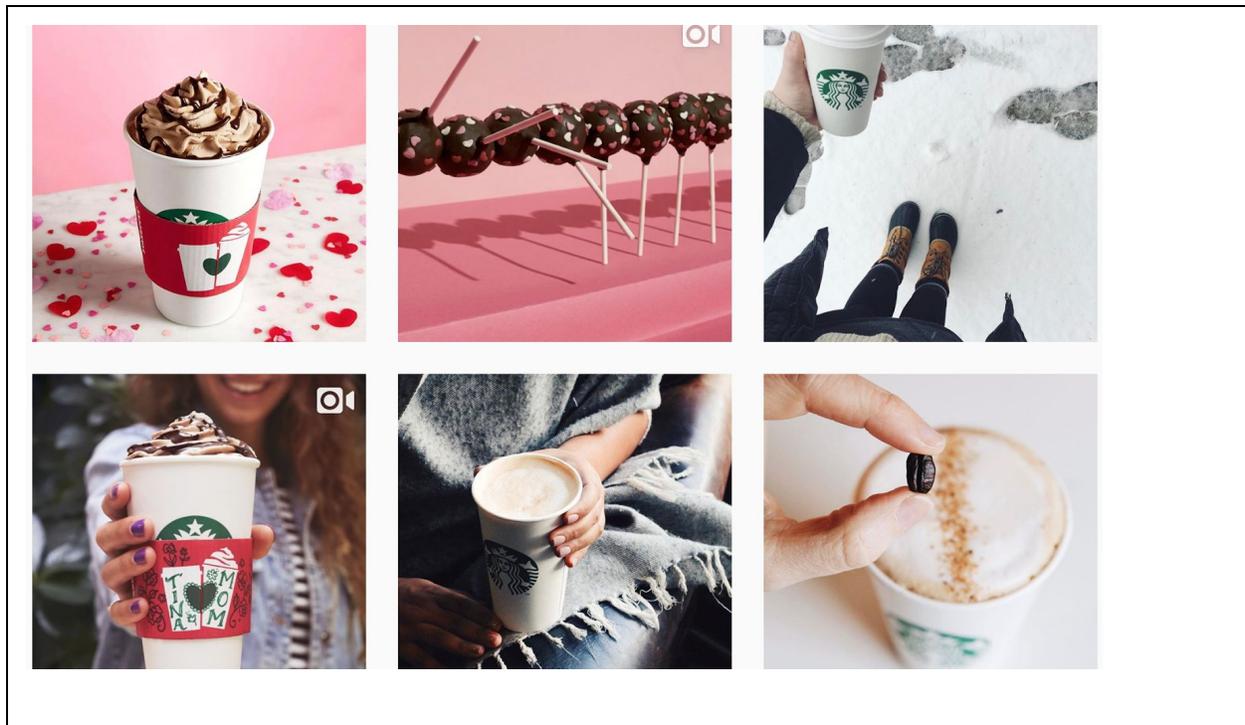

Figure 4.12: Starbucks Instagram Webpage

Coava Coffee posts photos about its products, store, staff, and activities.

Figure 4.13: Coava Coffee Instagram Webpage

Starbucks has colorful photos on its Instagram webpage, it can attract to more visitors to be interested in its products. Coava posts photos about its staff, store, and events. It might make its customers feel closer to Coava in their lives.

4.1.4 Other Social Media Platforms

Starbucks has 126 thousands people subscribing to its YouTube Channel. Starbucks provides several episodes on its YouTube Channel. Its videos on YouTube are related to coffee in general but focuses on its products and brand. Starbucks uses marketing videos to provide information and connect with its followers and viewers. Starbucks shows information about different coffee blends, making a perfect cup of coffee and much more. Also, Starbucks allows

people to post its videos anywhere on its website. Figure 4.14 shows the Starbucks YouTube
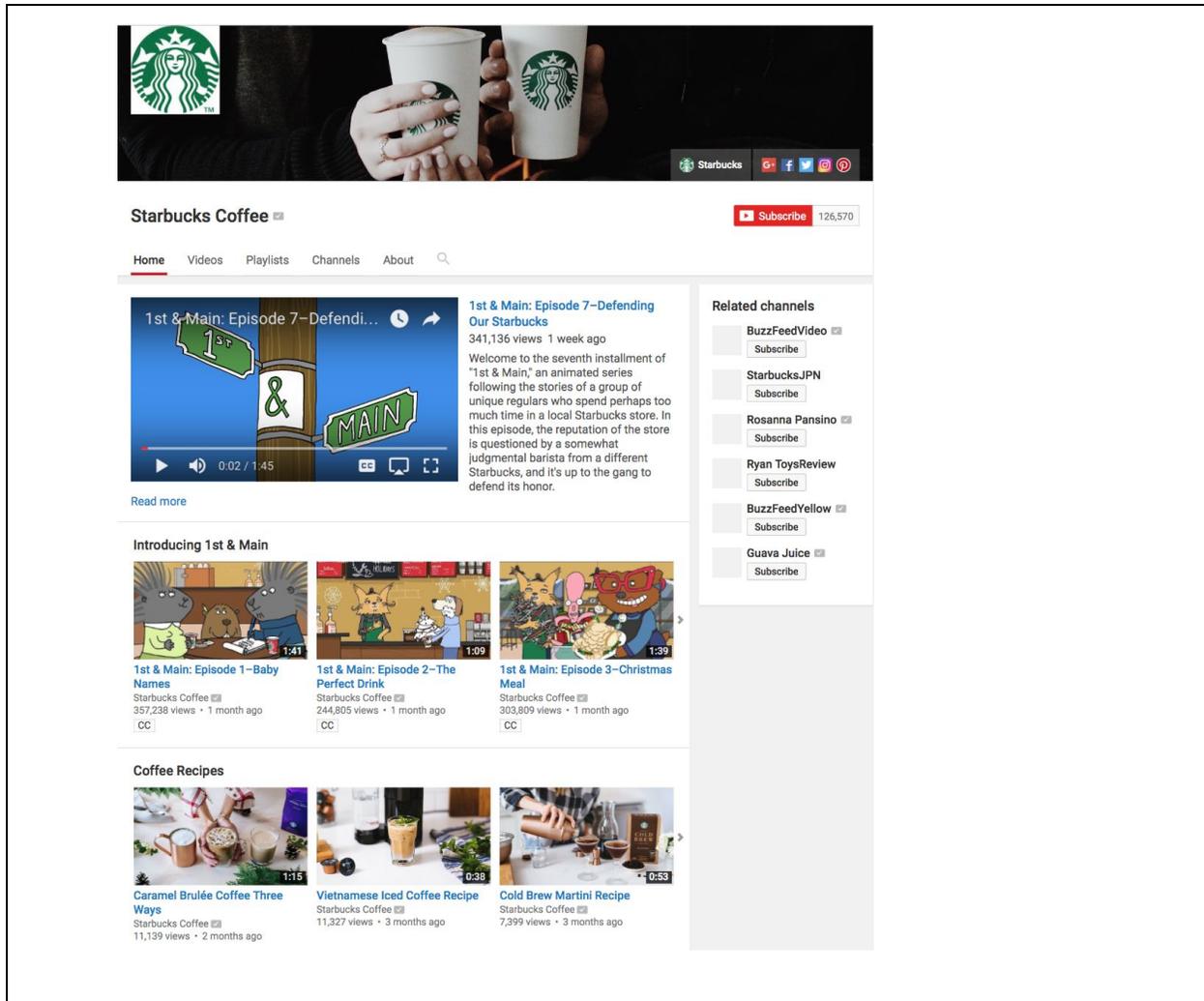
webpage.

Figure 4.14: Starbucks Youtube Webpage

Starbucks and Coava Coffee are the examples of the Coffee industry. They do well in

social media marketing strategies. Starbucks uses social media platforms to provide good

customer service to its customers. Increasing awareness is one of the main effects for Coava

Coffee by using social media. Besides the coffee industry, apparel companies also use social

media to do marketing, such as the big company Nike and the small local company Portland Gear.

4.2 Nike and Portland Gear

Nike is one of the most popular athletic apparel companies in the world. It has huge sales and invests heavily in marketing strategies for its products. Nike started using digital platforms in 1996 when it launched Nike.com. In 2004, Nike worked with media company Gawker to launch "Art of Speed." This was the first time Nike moved into the social media space. During 2005 and 2006, Nike began a partnership with Google to create Joga.com which provided a social network platform to customers on Orkut. Nike also joined MySpace and YouTube. From 2008 to 2009, Nike joined social soccer communities all over the world, such as QQ in China, Vkontakte in Russia, and Mxit In South Africa.[6]

Marcus Harvey launched Portland Gear which provided people with T-shirts, hoodies, hats, mugs, pint glasses, and other clothing in 2015. Marcus Harvey started the company with two iconic T-shirts and two photos on the @Portland page on Instagram. Since then Portland Gear has shipped a piece of Portland to nearly every state in the USA and to 25 countries. Marcus Harvey hopes to build a community around the city and people, and people enjoy wearing and sharing its products. The merchandize has the word "PORTLAND" or the letter "P" with a map shape of Oregon making up the upper space in "P" on its products.

Portland Gear uses social media platforms as one of its marketing strategies. It uses Facebook, Twitter, and Instagram. On staff, it has a "digital strategist" Cortney White. Also, @portland posts its products' photos on the Instagram page.

4.2.1 Facebook

Nike has separate Facebook pages for its products, including golf, snowboarding, football, and FuelBand, to name just a few.
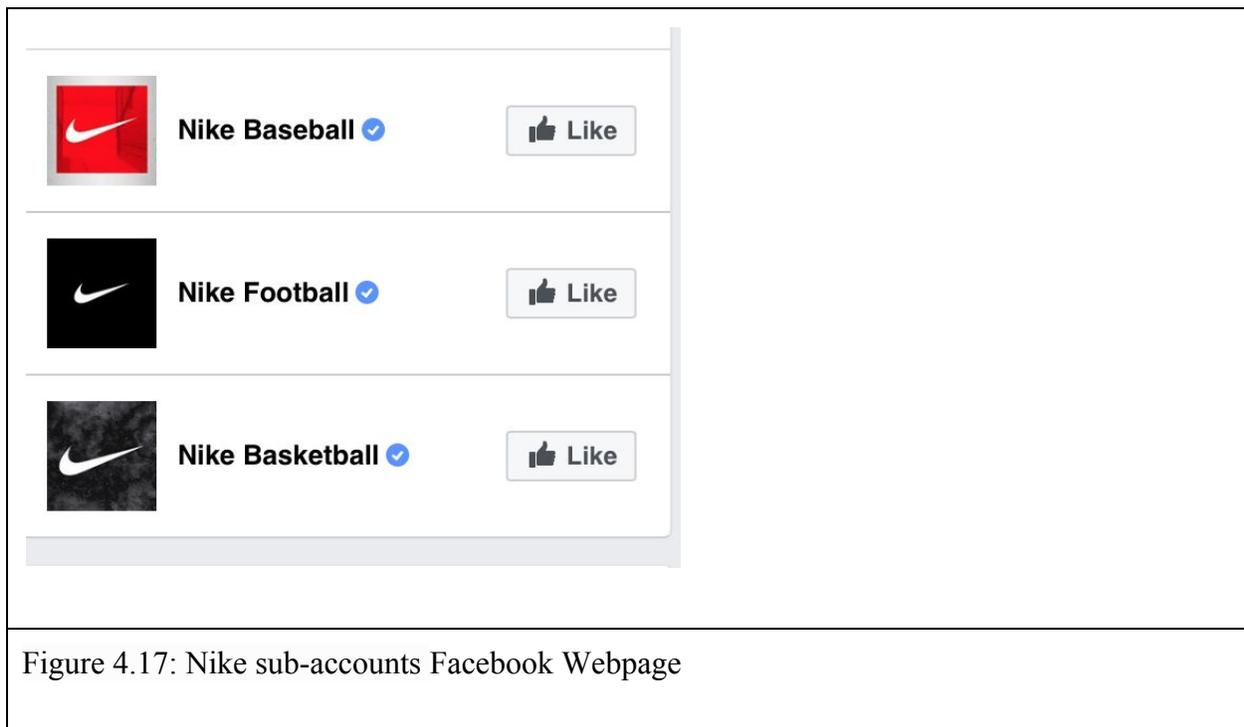

Figure 4.17: Nike sub-accounts Facebook Webpage

Nike does not post sales promotions in social media platforms. It uses social channels to promote massive marketing campaigns, such as "My Time Is Now" and "Make it Count." It posts advertising photos and videos on its Facebook page. Nike does not communicate directly with its customers frequently. Nonetheless, "Data from Experian Hitwise shows that Nike achieved a 6% growth in its number of Facebook fans and a 77% boost in engagement on its Facebook page compared to 2% and 59% respectively for Adidas."[7] Because of the huge scale Nike has, it does not focus on communication with its customers on the social media platforms.
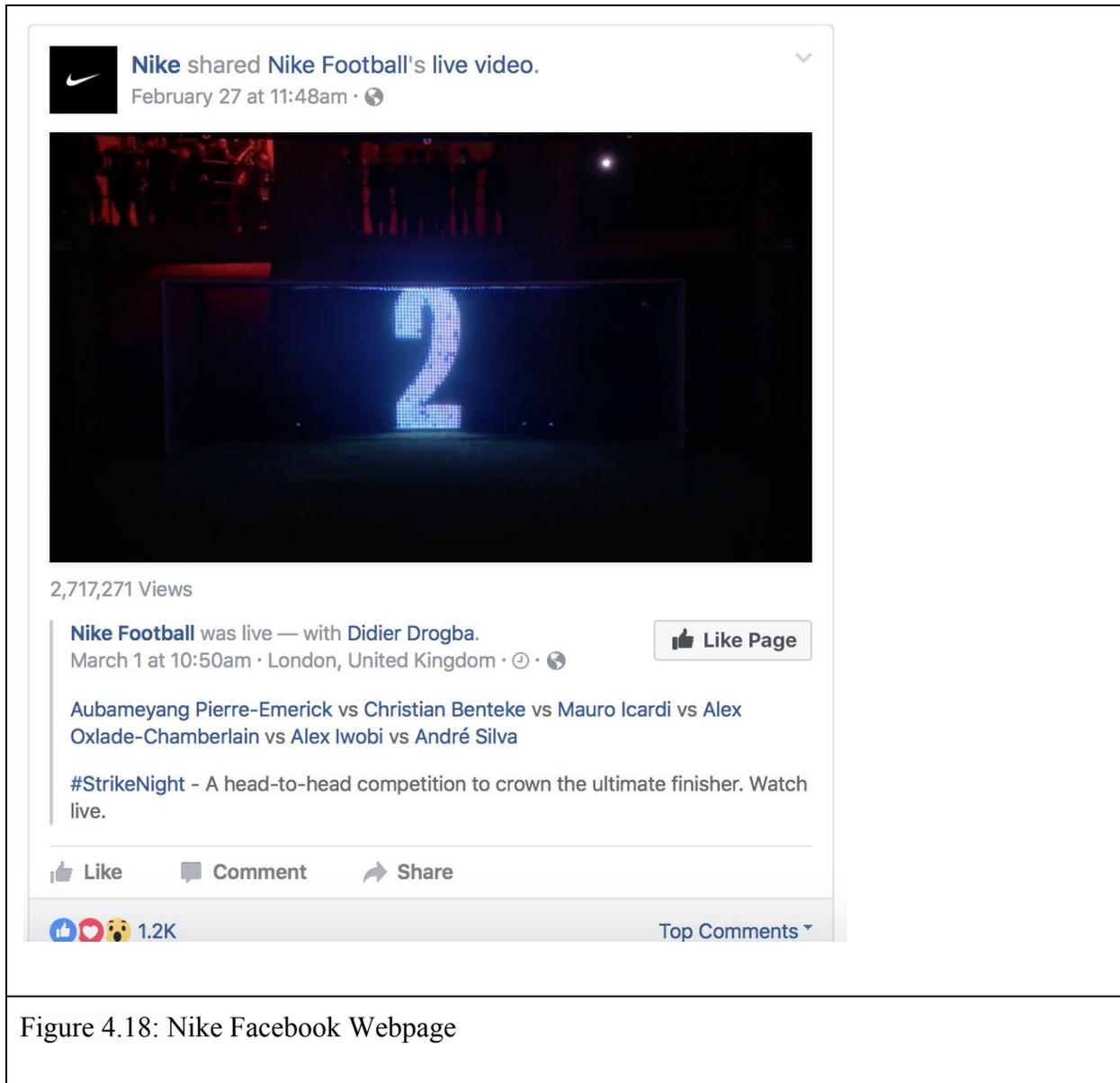
Figure 4.18: Nike Facebook Webpage

Portland Gear uses its Facebook platform to advertise its products. For instance, the new products, the backstory of the products, and product links to the page where people can buy merchandize directly. Figure 4.19 shows the latest products and the links to buy items at Portland Gear's official webpage.

Figure 4.19: Portland Gear Facebook Webpage

Portland Gear posts some activity photos and links on Facebook that people can use to find more information about its store. Figure 4.20 shows what activities Portland Gear has participated in, and the links to find more information about old and future events.
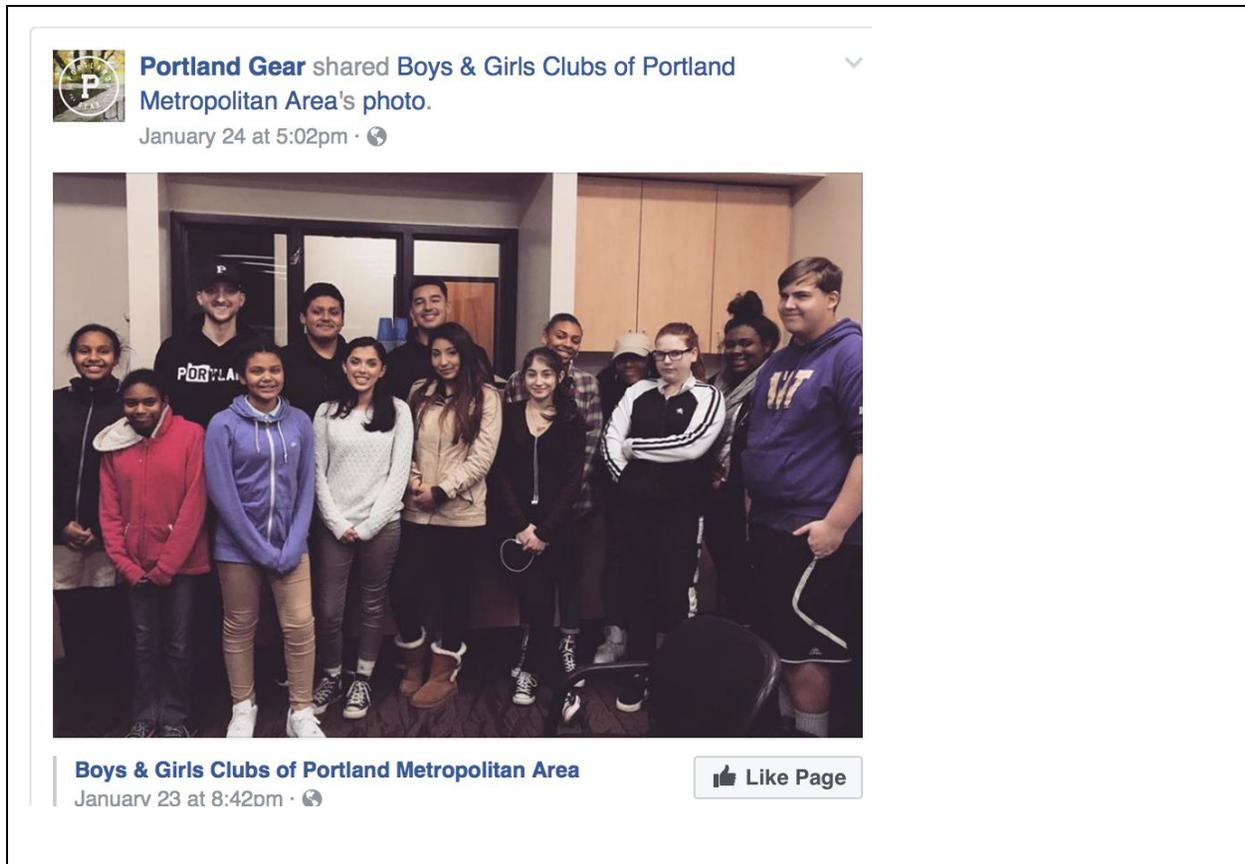
Figure 4.20: Portland Gear Facebook Webpage

Portland Gear also posts promotions on its Facebook webpage. Figure 4.21 shows that the customers can use the discount code on Portland Gear's official webpage.

Figure 4.21: Portland Gear Facebook Webpage

4.2.2 Twitter

Nike also has separate accounts on Twitter, including golf, football, FuelBand, and Nike.com. Nike focuses on responding to @mentions rather than posting marketing messages and videos. When Nike does post photos or videos and @mentions, they are usually posted by Nike-sponsored athletes. Figure 4.22 shows Nike mentioned tennis great Roger Federer.
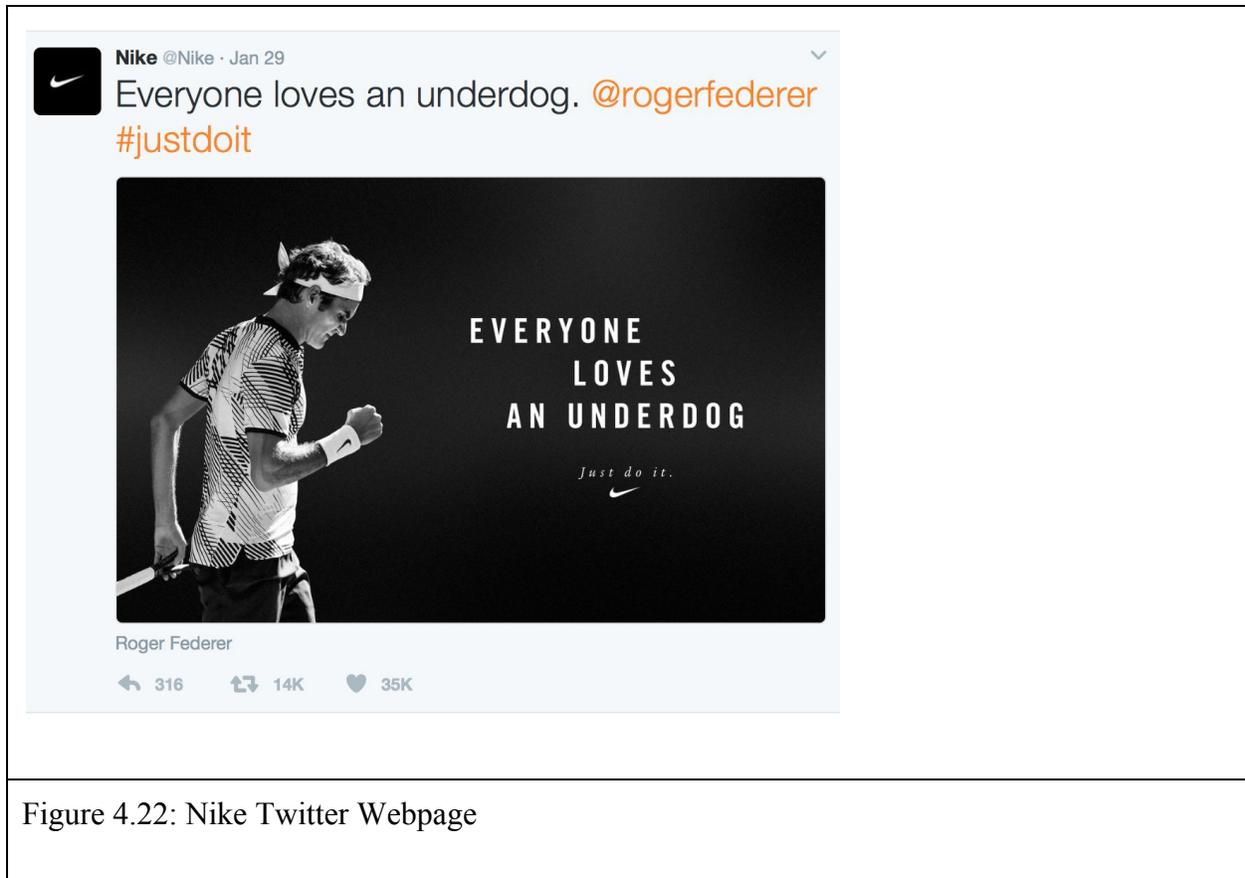
Figure 4.22: Nike Twitter Webpage

Also, it has some popular accounts to answer users questions about order queries, product information, store information, and so on. Figure 4.23 shows the reply information in Nike.com account.
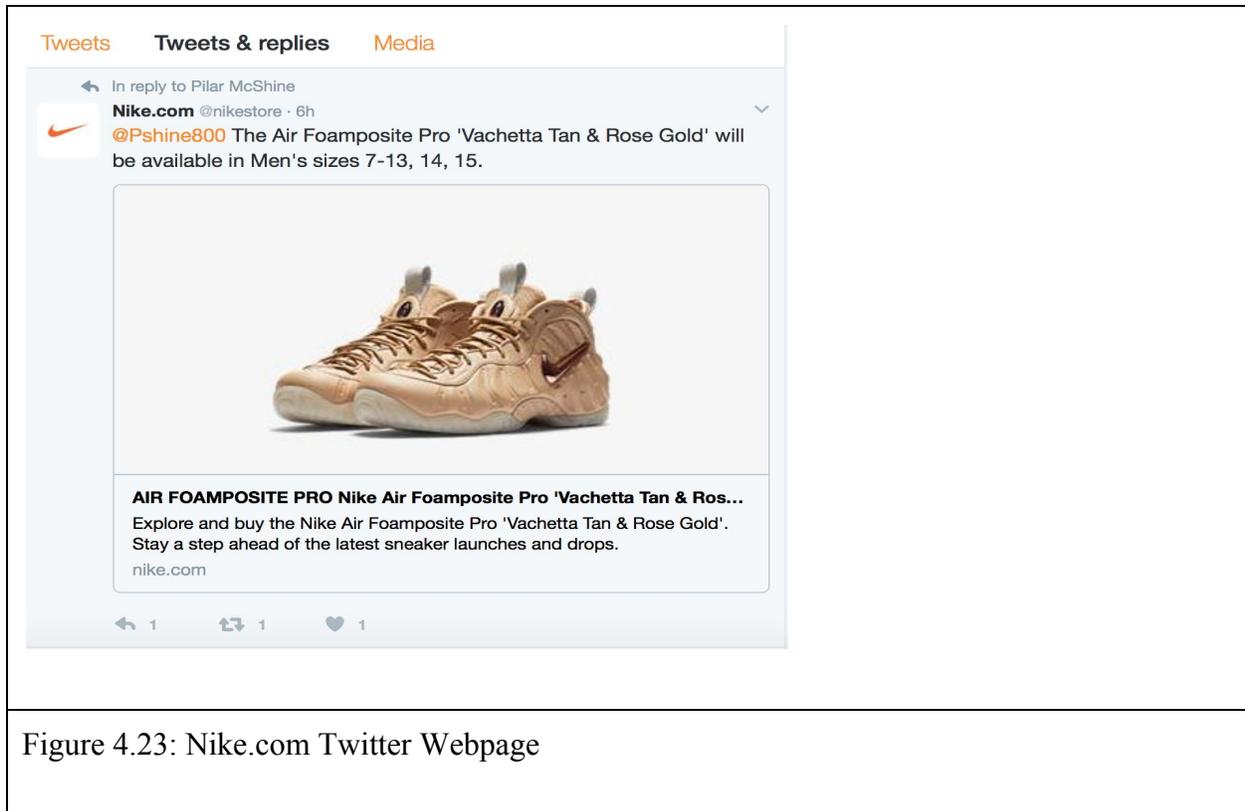
Figure 4.23: Nike.com Twitter Webpage

At the Nike Football account, Nike gives users training advertising, product information, and encouragement. Nike Running gives motivational advice and discusses training schedules. Nike provides a good experience for its customers. Customers can get direct advice from Nike when they are buying Nike products.

Along with Facebook, Portland Gear also uses Twitter to advertise, show activities, and promote its products. In addition, it retweets to show even more information to its visitors.

Portland Gear posts the same photos to advertise its products. It retweets more when its customers or partners mention @portlandgear. Retweets look like a good method for Portland Gear to advertise its products through its customers, and increase the loyalty of the clients. Figure 4.24 shows retweeted information between Portland Gear and its customer Pat Connaughton.

Figure 4.24: Portland Gear Twitter Webpage
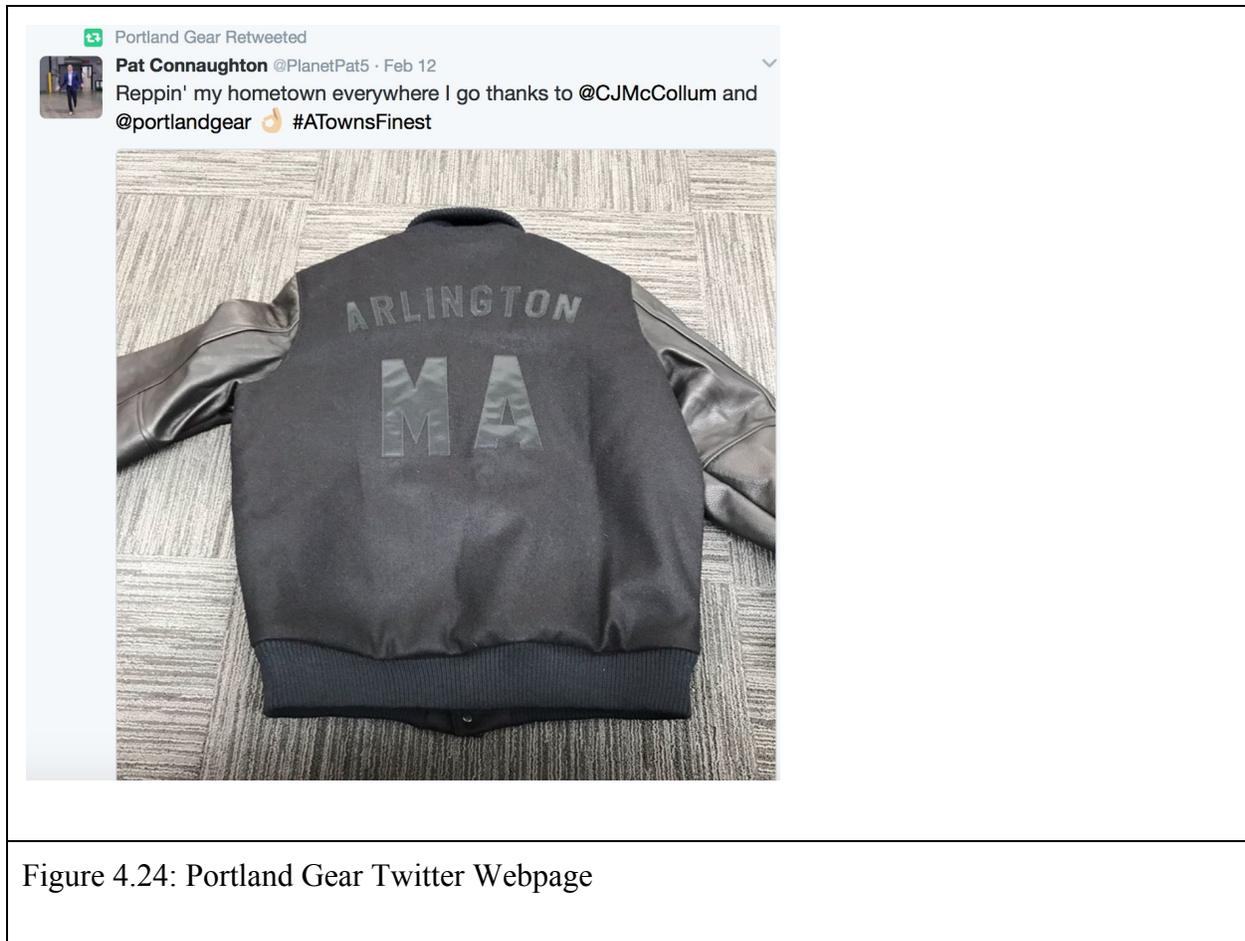
4.2.3 Instagram

Nike uses the Instagram platform to post photos about sports, games, and athletes, but less about specific products.
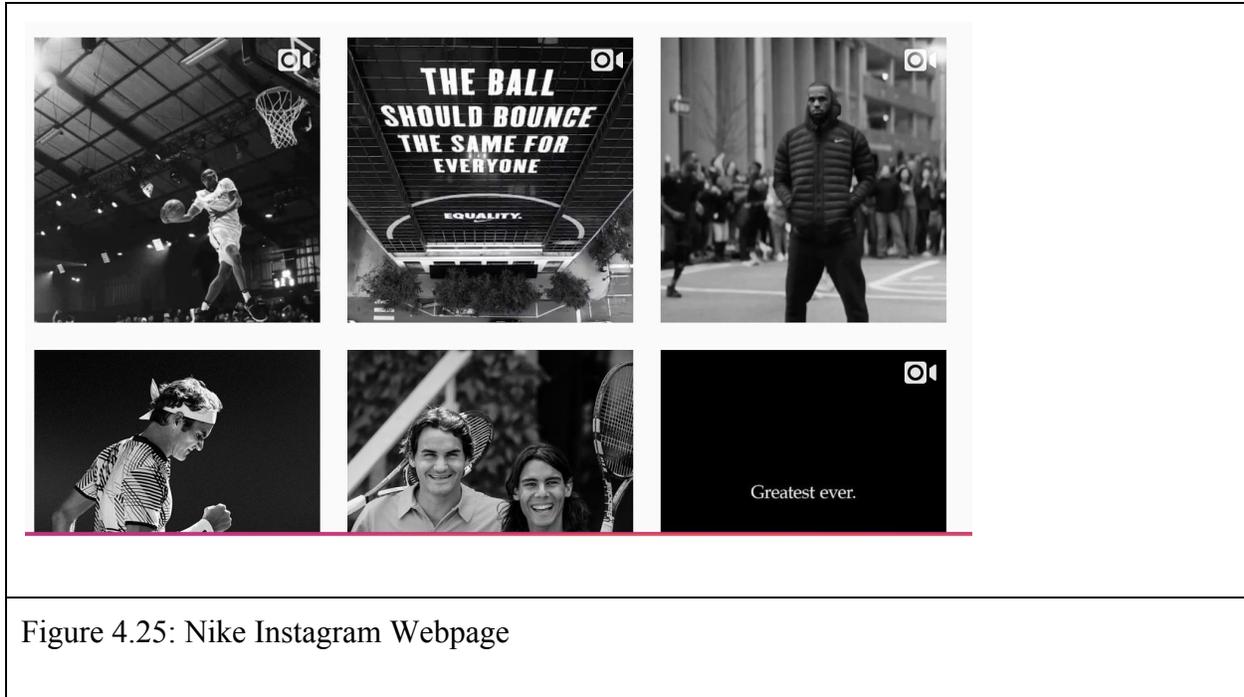
Figure 4.25: Nike Instagram Webpage

Portland Gear posted its first two products' photos on @Portland Page on Instagram. It

focuses more on the Instagram platform. Portland Gear has more than 53 thousand followers.

Comparing to only about 7000 followers on Facebook and around 4000 Twitter followers,

Portland Gear is most effective on the Instagram platform. There it posts photos of products,

activities, support of community sports, customers who use its products and many other things.

Figure 4.26 shows Portland Gear also advertises on the @Portland Instagram page
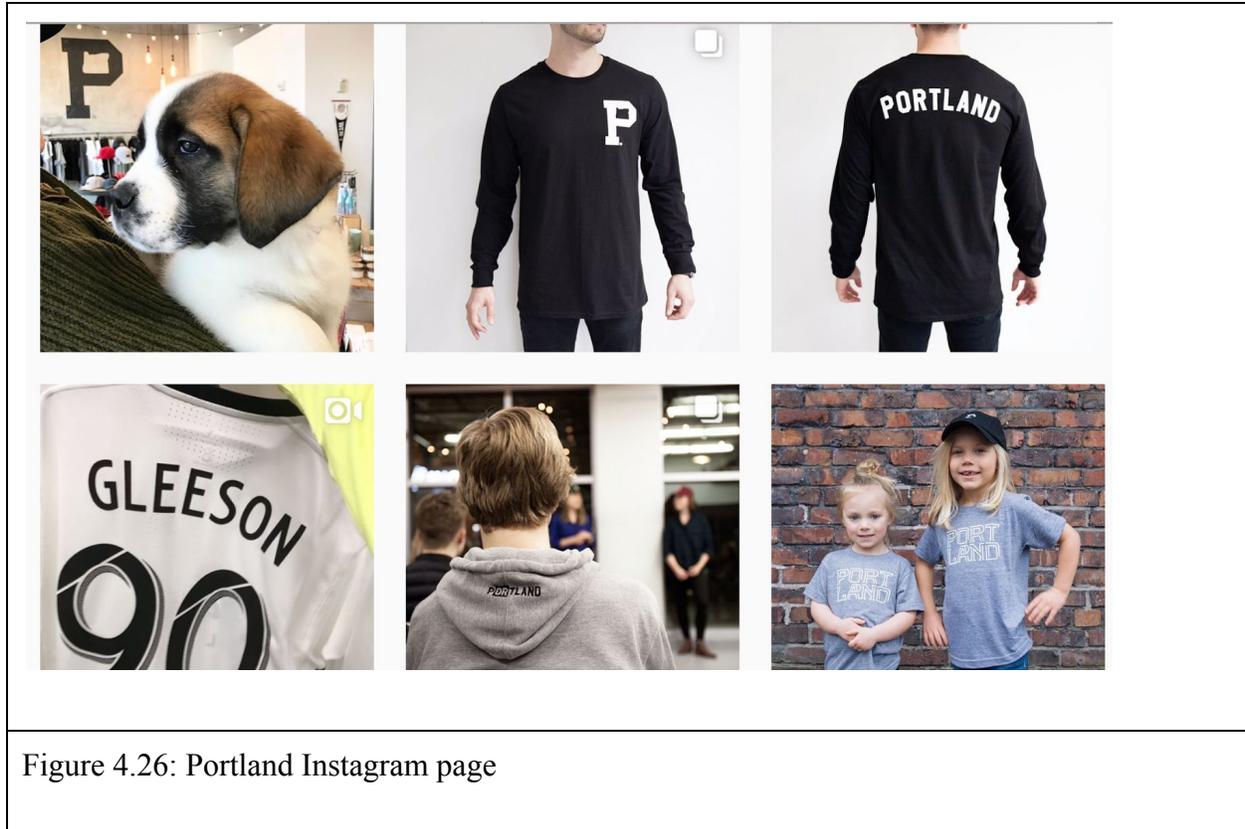
Figure 4.26: Portland Instagram page

4.2.4 Other Social Media Platforms

Pinterest provides a good platform for companies to develop the brand identity and create pinboards to create the business's value. However, Nike just uses it to extend its product catalog. Nike only has its Nike Women's account on Pinterest. Nike has 38 Boards and many pins, but all of the pins shows women's products and provide links back to Nike official website. That seems to be a very limited usage for Nike in the Pinterest platform.
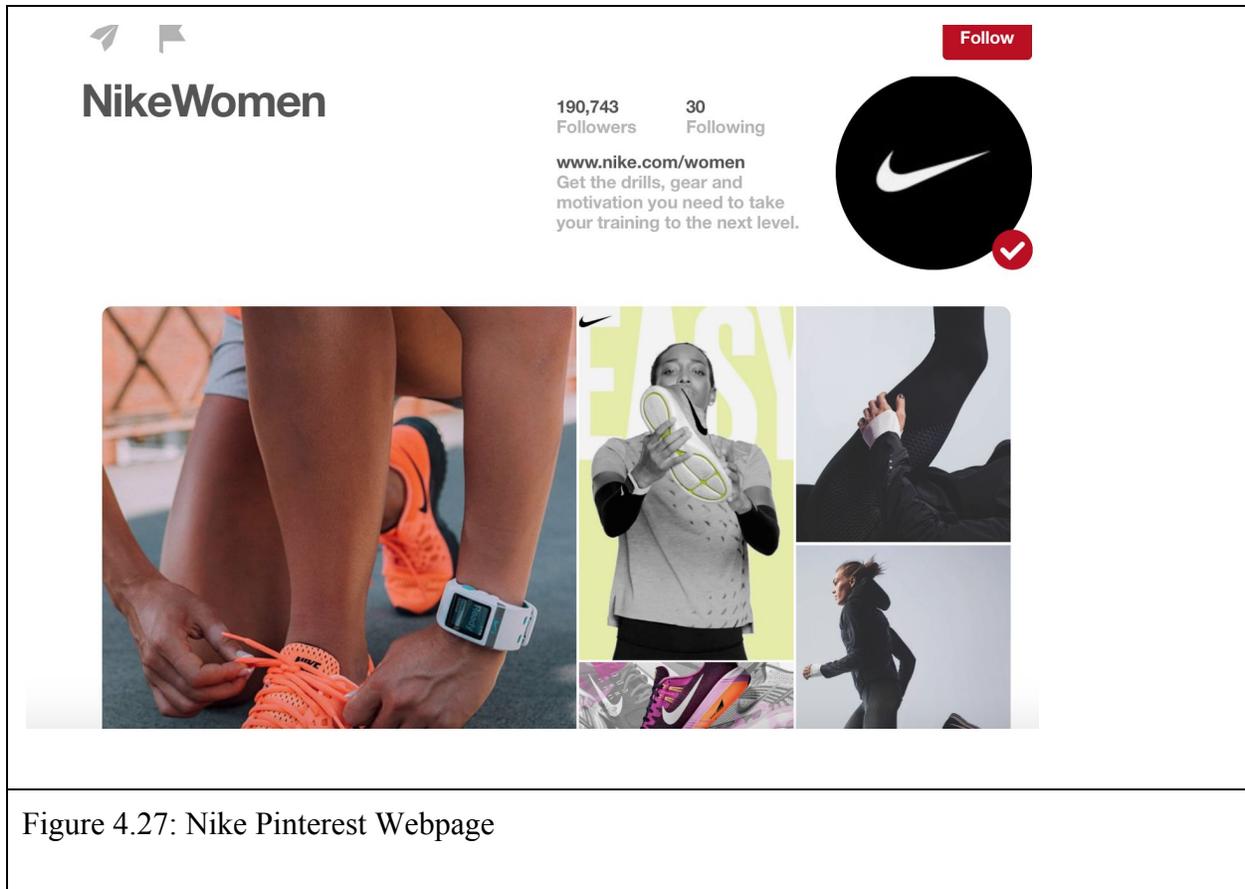
Figure 4.27: Nike Pinterest Webpage

Nike only has one official account on Google+ page, and it has the bare minimum of attention. The newest post in Google+ account is from April 30, 2015.
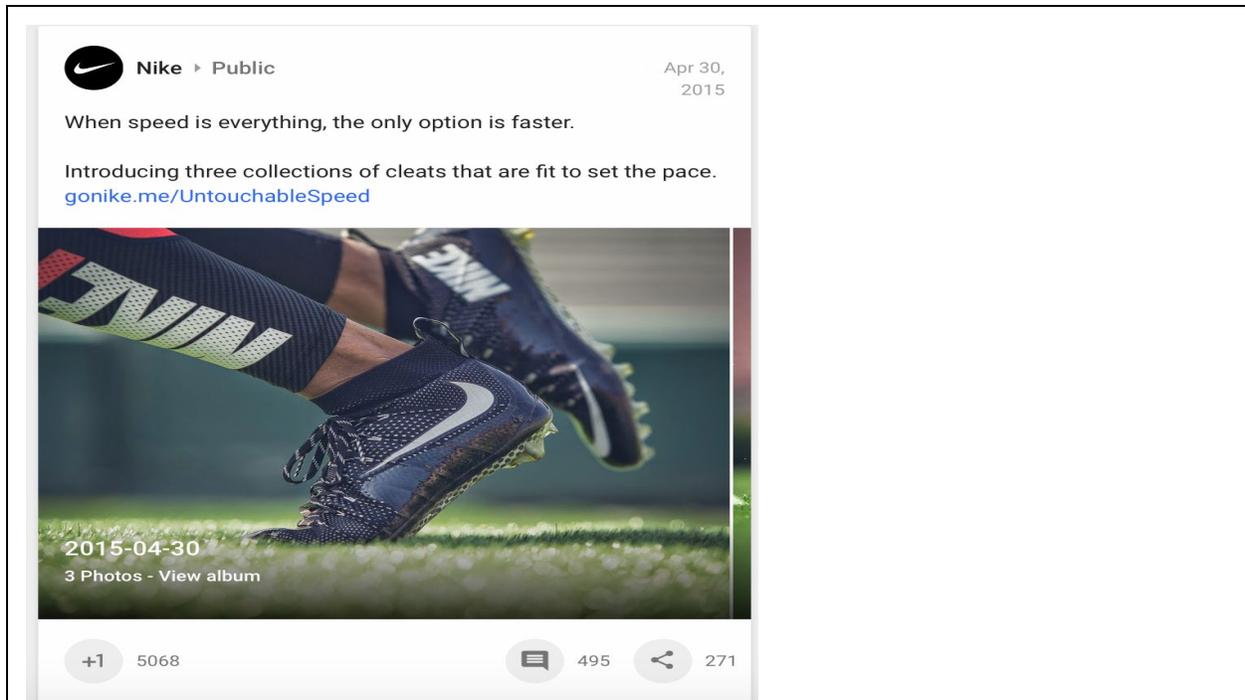
Figure 4.28: Nike Google+ Webpage

Nike launched its own social network Nike+ with Apple which helped users to track their

running records and health stats, challenge their friends, and so on. Nike's first non-Apple

wearable device the Nike Fuel Band was introduced in early in 2012. Fuelbands can be used to

measure how active the user is during the day. If users reach their goals, they achieve a

Foursquare and little "ata boy videos". Nike+ has a running app for both iPhone and Android

operating systems. Users can see the miles they run, where they run, and their speed when they

sync up. Also, Nike has Nike+ Basketball which shows people how Nike tailors each application

for the single sport.[7] Users can connect Facebook and Twitter accounts of NikeFuel when users

go to hashtag #MakeItCount.

The social media platforms for Nike have different usages. Nike uses them to post marketing messages, communicate with its customers, promotion, and so on. Nike focuses on Facebook and Twitter these two popular social media platforms.

5.0 Technology Component

5.1 The definition of API

Application program interface (API) can build a software application by using routings, protocols, and other tools. A good API can provide all the building blocks to develop a program much easier, then the programmer puts all the blocks together. API shows the software components how to interact, and the programmers use APIs to program graphical user interface (GUI) components.[8]

5.2 Types of API

The most popular APIs include Google Map API, Youtube API, Amazon Product Advertising API, Twitter API, and Facebook API.

Facebook Graph APIs are programing tools which support access to conventions on the Facebook platform. People think of Facebook's platform as a "social graph", which takes the responsibility for the convenience of building relationships between through people, places, social commentary and other media.

Twitter APIs include the REST API which allows developers to access the core Twitter data, and Search APIs offer developers the ability to interact with Twitter Search and trends data.

Google Maps API allows developers to insert Google Maps on web pages by using Flash Interface or JavaScript.

Youtube API includes YouTube Analytics API, Data API, Live Streaming API, and others. Additionally, Google's API allows developers to insert YouTube videos and other functionalities into websites or applications.

Amazon Product Advertising API allows developers to have access to Amazon's advertising, product selection and discovery functionality and the ability to monetize a website.

5.3 The Security Problem

Social media provides a convenient method for users to use social media platforms to share and connect with each other. Along with the benefits, people get by using social media, the security problem also comes up. Besides the developers, the businesses and customers also face the security problems by using social media.

5.3.1 The Security Problem for Customers

Customers face the security problem when they use social media platforms directly or through the third-party. For instance, users log into a game through their Facebook or Twitter account. Customers can then get spam messages if their personal account information is attacked by a hacker through a connected business's website. When the customers log into the business's account through Facebook, Twitter, or other social media account, the social media platform

shares the customer's personal information with the business. If the hacker attacks the business website, the customer's privacy information, which was obtained from Facebook, can allow the hacker to proceed into the customer's business account and steal more sensitive information such as bank accounts and the passwords.

Facebook shares the users' personally identifiable information with partners, advertisers, and developers. It means that people can access the Facebook users information easily when they become the partner, developer, or advertiser with Facebook. Twitter reserves the right for companies to see all the users' information or to transfer all of the data during a bankruptcy, sale, merger, or acquisition phase. Pinterest allows companies to share the user's personal information with third-party companies and security consultants.[9]

5.3.2 The Tips for Customers in Security Problem

First, do not use personally identifiable information unless it is absolutely required. Users should avoid using their full name as profile name; just use the first name and middle name.[10]

Second, set up a secondary email account. If people use the secondary email address to sign up, then they do not worry about the primary email being inundated with spam mail or attacking by hackers through the virus email.[10]

Third, users can use a virtual private network(VPN) to protect their actual IP address, and all information connect with the IP address. User's Internet service provider(ISP) is the way that the users access the internet. Through that a company can track the user's home address, and other personal information. Users can efficiently hide the private information from companies, hackers, and other people who want to access it by using a VPN to log into the internet.[10]

Fourth, do not forget to logout from the laptop or computer, close the browser, and clear the browsing history, especially using the public computer. Additionally, do not tell others the account password. No social media websites will never ask for a user's account password.

Fifth, do not click on enticing ads. When users visit the business website or social media website, sometimes enticing ads come up. If you do not know if ads are safe or not, do not click on one. Some viruses and malware often get onto the user's computer through enticing ads.

Sixth, do not connect with strangers. Do not agree to friend requests from strangers. That way people can be sure that they do not share their personal information with strangers. Additionally, if users receive friend requests they are already connected with through the same site, that would someone has set up a fake account.

Seventh, make sure you know the third-party application or website before viewing and sharing on a social media account.[11]

5.3.3 The Security Problem for Businesses

If a business's employees do not monitor a social media account, then the followers might receive spam messages and lose trust and confidence in the company. For example, if the staff leaves an account unmonitored, then a hacker might attack it via s virus. Many employees can use the social media account, and this increases the security risks because so many people know the account and password.

Human error is probably the most common social media security problem, which often causes scams, phishing attacks, and other cyber problems. The employees might click on virus

links, spammy ads, communicate with fake accounts, share confidential personal information on public forums, or fill out the sensitive information on a spammy form.

The employees can destroy the company's reputation if they post the wrong photos or type some wrong words, such as the racial discrimination, gender discrimination, etc.[12]

5.3.4 The Tips for Business in Security Problem

First, all employees should understand the definition of the company's social media policy. They should know which social media website to use, and approved access to the business's official website.

Second, the employees must use trustworthy applications, interact with the trustworthy accounts, and click the trustworthy links. In addition, they must use a strong password for each account. Policies of the company must limit the amount of personal information about the business that a third-party application can access.

Third, be aware of malicious access to the official social media and make sure that any posted information is approved for release. Post job related information on promotion, travel status, current project, and other topics carefully. Ensure all employee users know internet usage and social media department policies. Report any questionable security incidents to the IT department.[13]

Fourth, limit the number of employees who can manage the social media official account. The more managers, the higher security risks. Make sure each manager has his correct role: Admin, Editor, Moderator, Advertiser, or Analyst. Remove the employees as the page managers when they leave the company. The table show only admin can change another's role.

Figure 5.1: The 5 Different Types of Roles for People Who Manage Pages

5.3.5 The Tips for Developers Regarding Security Problem

Know the threats. Developers cannot always know how the hacker attacks the system. They should know the code that might be the first and most important things to protect. In addition, think about those who would be interested in and want to access the system, data, and strategies. Then developers should know and pay attention to the traditional threat modeling process at open web application security project(OWASP).

Protect APIs from exposure and operation. For instance, remove the old deprecated function calls from the APIs. Do not insert the API keys, password, and other important things into the code directly. Store the information in different files. If developers have to use a config file in an IDE, delete the sensitive and important data before sharing and distributing.

Use updated libraries. Libraries are the largest attack surface for the application, the more code adding, the higher risks. Developers should use the latest version when they use open source, proprietary, or combinations of both. For example, Facebook manages React, Pop, and so on.

Sanitize user input looks like an important method to protect from the web attacks. Do not use the user's input directly, and choose a framework that allows developers to build the higher level thing. Facebook built and open source XHP, a PHP extension to make the front-end code easier to understand and help developers to avoid cross-site scripting attacks.

Protect the code from SQL injection. SQL injection can result in web vulnerabilities and destroy the database. Adopt the input validation technique to authenticate user input against a set of define rules for length, type, and other things, except validating against business rules. Allow the fewest privileges for the fewest individuals to access the database. Limit the applications to access the database. Use strong typed parameterized query APIs with placeholder substitution makers, even when calling stored procedures. Use exec() or concatenating arguments can inject the stored procedure. [14]

5.4 How to Embed the Social Media Icons into the Website

5.4.1 Use wordpress.com to Embed the Social Media Icons into the Website

Developers can use the wordpress.com to insert the social media buttons to the website. Step 1: Select "Sharing" in the option of "My Site".
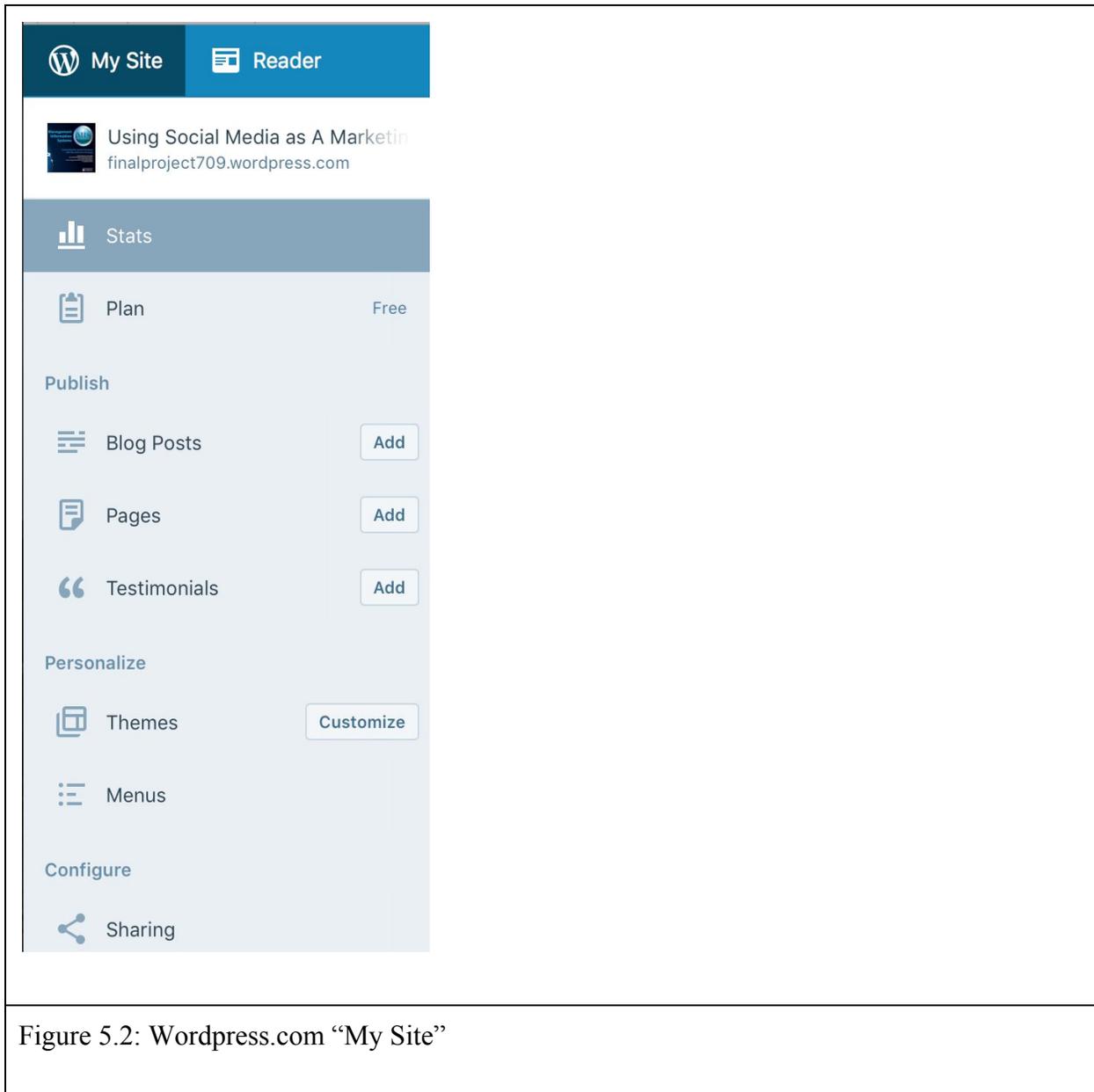
Figure 5.2: Wordpress.com "My Site"

Step 2: Select "Sharing Buttons" to add the social media buttons, such as Twitter and Facebook.

Also, users can edit the "More" button to add more social media buttons.
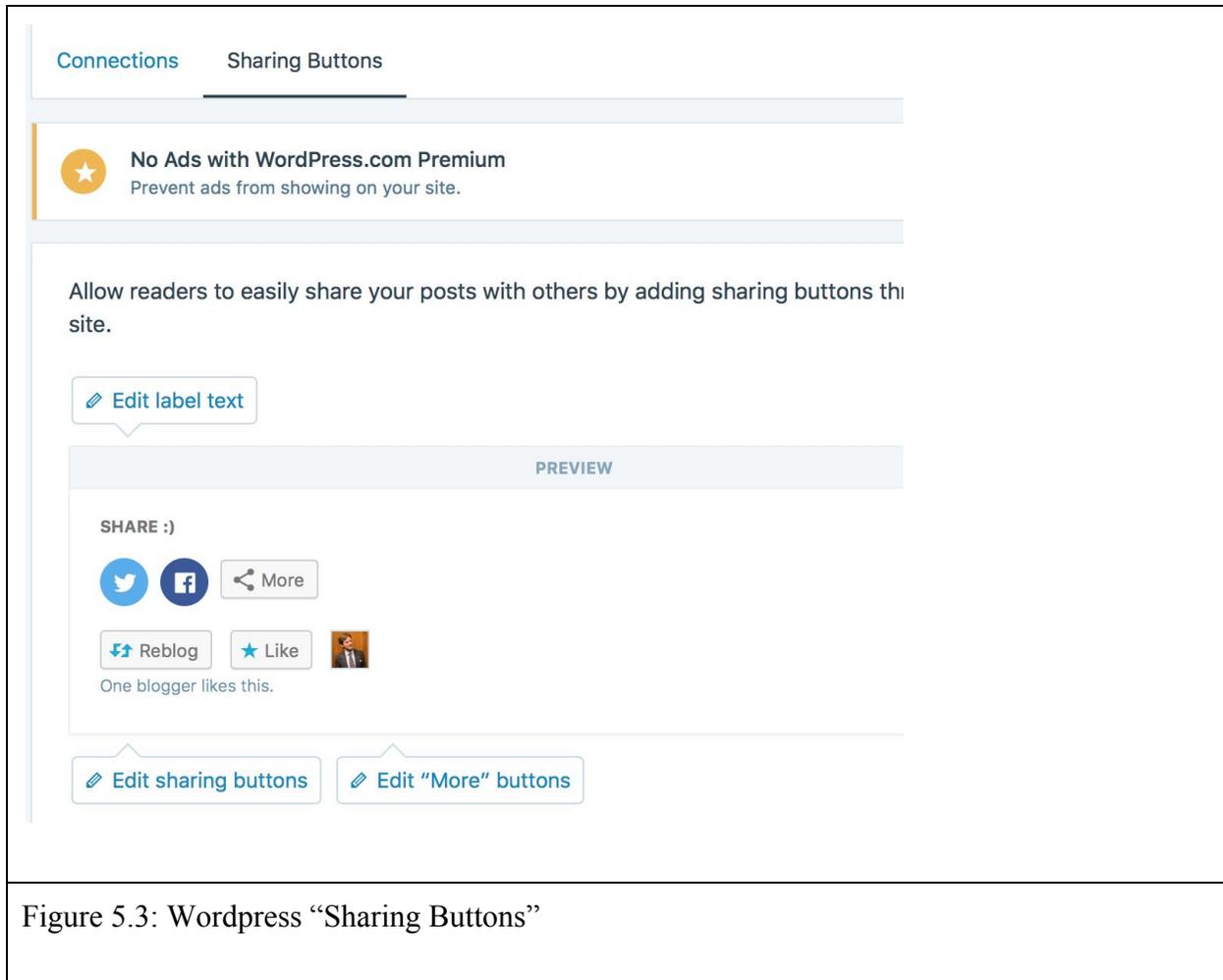
Figure 5.3: Wordpress "Sharing Buttons"

Step 3: Then choose the button style, show the reblog & like button or not. Show the sharing

button on the front page or not, and save all the changes.

Figure 5.4: Wordpress: Button Options

Step 4: Show the social media buttons on the website front page.
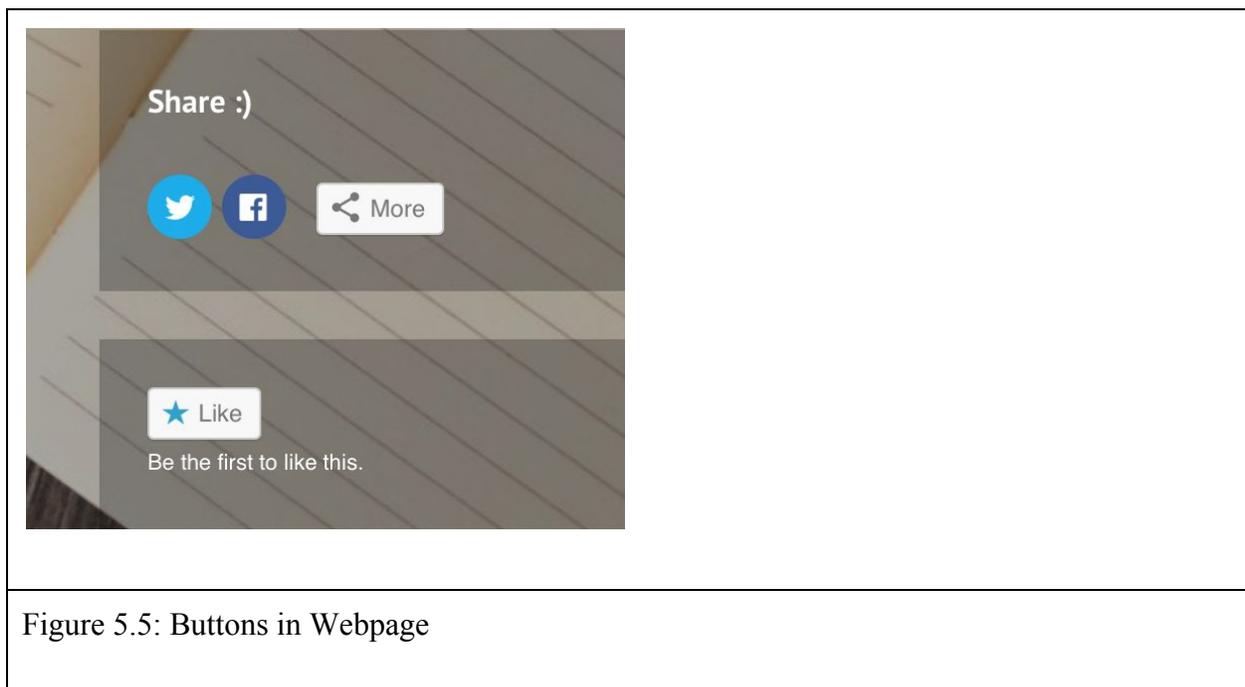
Figure 5.5: Buttons in Webpage

5.4.2 Use niftybuttons.com to Embed the Social Media Buttons

Step 1: Go to niftybuttons.com, and select the social media style.
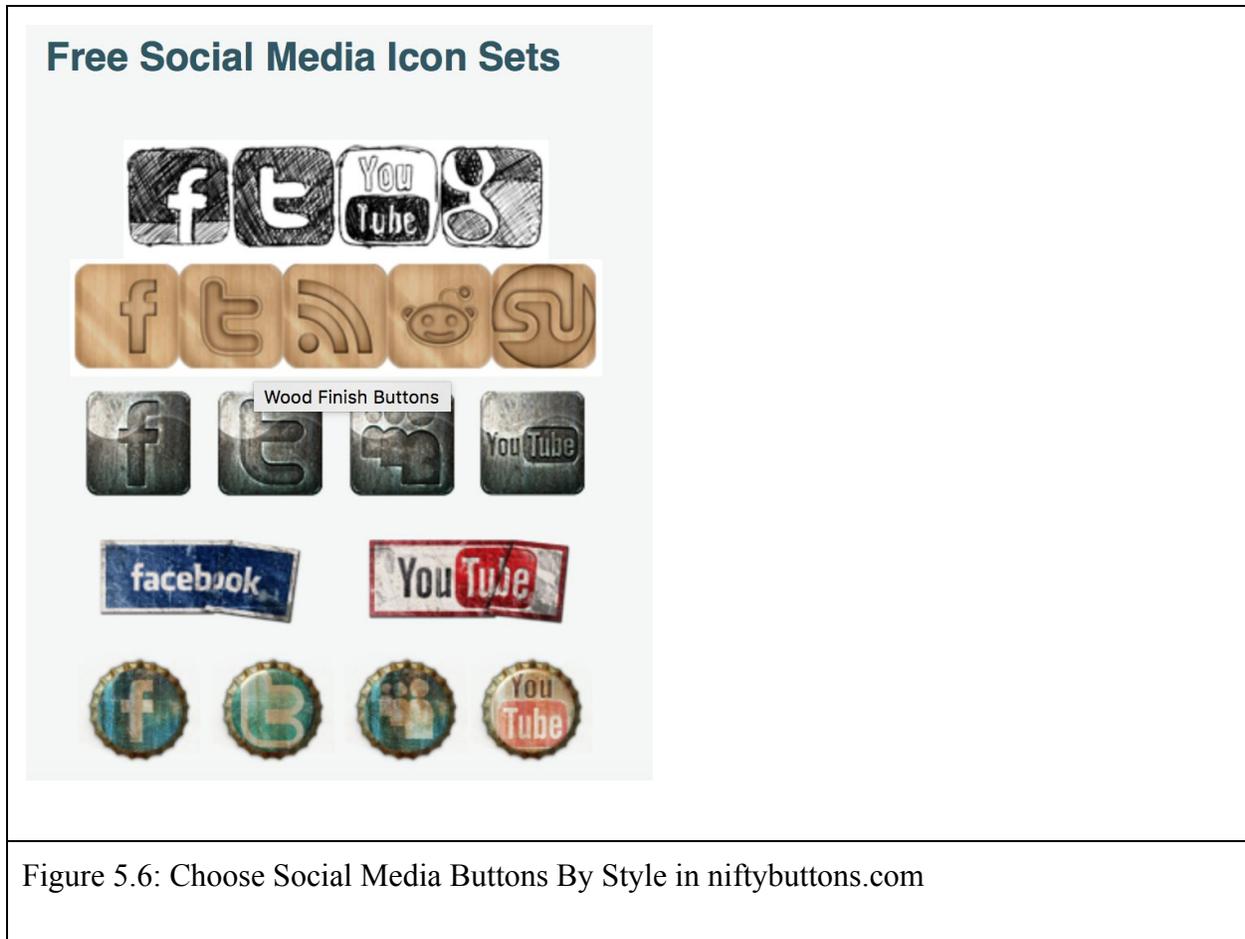
Figure 5.6: Choose Social Media Buttons By Style in niftybuttons.com

Step 2: Paste the URLs of the social media buttons, and submit.

Figure 5.7: Insert the URL Address

Step 3: Copy the code the niftybuttons website provides.

Figure: 5.8: Get the Code

Step 4: Go to the website the developers designed, Wordpress, Squarespace, Wix, and so on. For

instance, Wordpress. Go to "My Site", click the "Home", then click the "Edit".
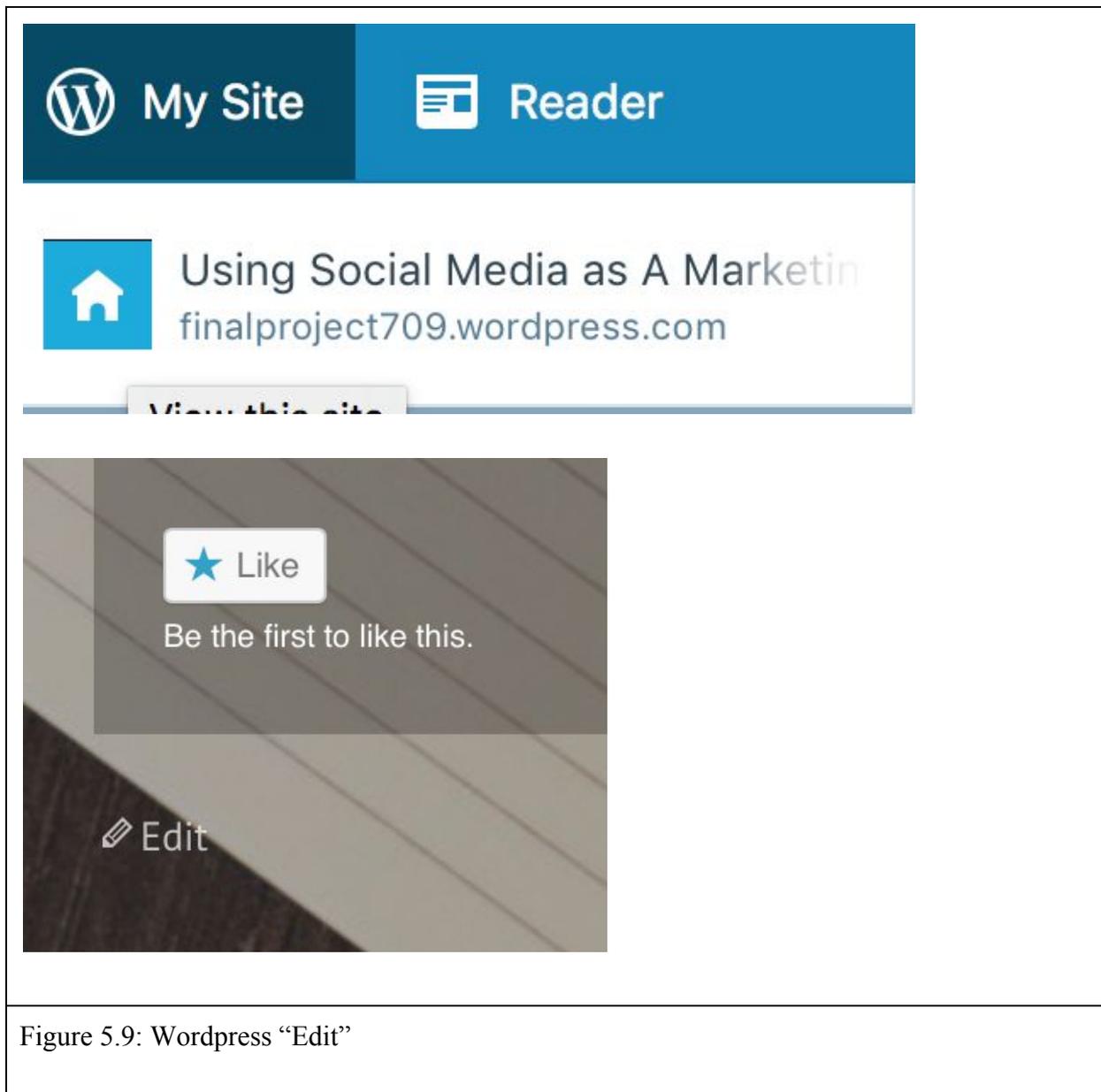
Figure 5.9: Wordpress "Edit"

Step 6: Paste the code from niftybuttons.com into the HTML page in wordpress.com, and

"Update".

Figure 5.10: Paste the code in the HTML page

Step 7: Then the social media buttons show on the website front page.
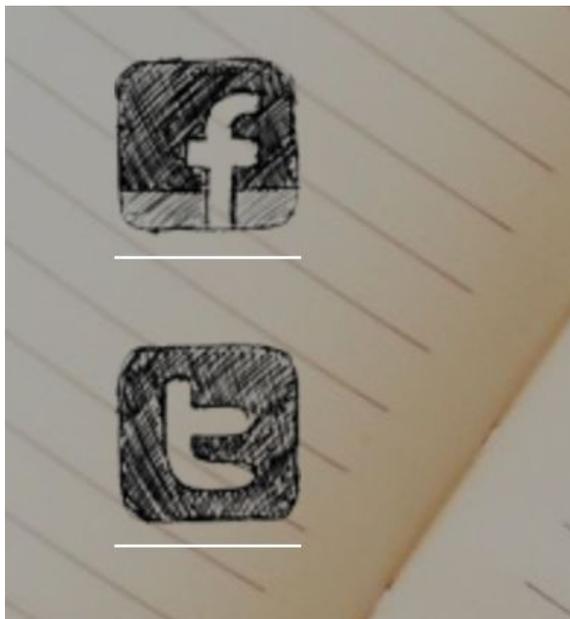
Figure 5.11: Social Media Buttons in the Website Front Page

5.5 How to Use Facebook API to Get the Target Audiences for Businesses

After an advertiser creates an ad on Facebook, they can choose all sorts of elements to send the ads to target users. Targeting audiences include lookalike audiences, mobile app custom audiences, website custom audiences, offline customer audiences, or Facebook Pixel.

Lookalike audiences set some people as a "seed", then Facebook builds the similar people according to the "seed". Advertisers can use lookalikes for business objectives, such as site registration, off-Facebook purchases, coupon claims, increasing awareness of the brand, and so on. The "seed" audiences can be existing custom audience, campaign or ad set conversions, conversion data from pixels, or page fans. Facebook would refresh members in a lookalike every 3 to 7 days if the lookalike belongs to an ad group.

Building mobile app custom audiences is based on users' actions in the application that match the advertiser's criteria. In addition, the advertiser has to accept the Terms of Service for Custom Audiences. For instance, to create an audience for custom TimeOnPanel events:

```
curl \
-F 'name=example2' \
-F 'subtype=APP' \
-F 'retention_days=14' \
-F 'rule={"_application":"55064006", "_eventName":"timeOnPanel'
-F 'access_token=_____' \
'https://graph.facebook.com/<API_VERSION>/act_<AD_ACCOUNT_ID>/
```

Figure 5.12: cURL of Creating an Audience for Custom TimeOnPanel Events

For website custom audiences, the advertisers create ads then send the ads to the target audiences. They can target people by location, demographics, interests, behaviors, connections, and so on. The developers can create customer audiences with a website, who visited or had specific actions on the website by using Facebook Pixel, JavaScript Tag API, and audience rules.[15]

For examples, developers can get target audience by demographic.

```
 Ads API PHP SDK   Ads API Python SDK   Ads API Java SDK   cURL

curl \
  -F 'name=My AdSet' \
  -F 'optimization_goal=REACH' \
  -F 'billing_event=IMPRESSIONS' \
  -F 'bid_amount=2' \
  -F 'daily_budget=1000' \
  -F 'campaign_id=<CAMPAIGN_ID>' \
  -F 'targeting={
    "geo_locations": {"countries":["US"]},
    "industries": [{"id":6009003307783,"name":"Accounting and finance"}],
    "life_events": [{"id":6003054185372,"name":"Recently Moved"}],
    "relationship_statuses": [2,4]
  }' \
  -F 'status=ACTIVE' \
  -F 'access_token=<ACCESS_TOKEN>' \
  https://graph.facebook.com/v2.8/act_<AD_ACCOUNT_ID>/adsets
```

Figure 5.13: cURL of Targeting by demographic

Offline customer audience conversions are based on conversion events uploaded to an

Offline Event Set. These group people who visited the store, called customer service, or took

action offline and targets them with Facebook ads. For example, they may target people who

spend more than $1000 in past the 90 days:

```
curl \
-F 'name=90d High Value' \
-F 'subtype=OFFLINE_CONVERSION' \
-F 'retention_days=90' \
-F 'rule={"event":{"eq":"Purchase"}}' \
-F 'rule_aggregation={"type":"sum", "config":{"field":"value"}
-F 'dataset_id=<OFFLINE_EVENT_SET_ID>' \
-F 'access_token=<ACCESS_TOKEN>' \
"https://graph.facebook.com/<API_VERSION>/act_<AD_ACCOUNT_ID>/
```

Figure 5.14: cURL of Target People Who Spend More Than $1000 in Past the 90 Days

Advertisers can use Facebook Pixel to track events on a website and build audiences

according to this data. With Facebook Pixel, advertisers can also measure cross-drive

conversions, optimize delivery to people likely to take action, automatically build audiences for

website visitors to retarget, create lookalike audiences, run dynamic product ads, and access

audience insights.[16]

Developers can use Graph API Explorer to set the target audiences. They need pay for

Facebook to have the authority to use Ad Manager.

Figure 5.15: Set the audiences by using Facebook Ad Manager

6.0 Results

6.1Why Do Companies Use Social Media As a Marketing Tool?

Social media provides an avenue to increase market shares and profits when funds for marketing are limited. Many companies do not understand how to integrate social media into their current marketing strategies. Consequently they choose other platforms to market their goods and services. Four business cases provide a method for integrating social media into a marketing development plan.

6.1.1 Starbucks

Starbucks as one of the famous international company, considering why it uses social media as marketing strategies, and how does Starbucks use social media platforms to do marketing. Starbucks focuses on the relationship between its customers by using social media platforms. Starbucks has the higher awareness and reputation among people. Therefore, Starbucks cannot get more benefits in these two aspects by using social media. Facebook platform is one of the methods for Starbucks to provide a good customer service. Starbucks uses Facebook to advertise their products and communicate with their visitors. It makes its customers feel they are important and special, Starbucks focuses on the communication with their customers, and answer consumer questions as soon as possible. Starbucks posts some discount products and e-coupons on the Twitter webpage. It is trying to accelerate purchases from its existing customers. It also looks like customer service from Starbucks, it can make customers get more benefits when they use coupons. Starbucks has beautiful photos of its products on the Instagram webpage, such as coffee, cups, and other stuff. It can attract more customers to be interested in its products. The goal of its social media is to engage consumers with the brand. It is an avenue of customer service.

Starbuck has more time and staff to manage the additional social media platforms because it works as an international company. It uses YouTube and other social media platforms. No matter Starbucks use more social media platforms or not, it is one of the communication methods for Starbucks to build the relationship with its customers.

6.1.2 Coava Coffee

Coava Coffee focuses on local customers, and the most popular social media platforms. For a small local company, Coava gets more local customers because it knows more about local conditions, and can change its products and marketing strategies according to the demands of these consumers. Coava posts pictures about its retail space, more information links, and the situation of its store. It lets its customers know more about what Coava does for the customers. According to the photos Coava posts on the Facebook, it has more in store space for its customers to gather together than Starbucks and customers can enjoy their coffee by themselves or with their friends. Coava Coffee posts photos of its producers, the coffee beans farmers. It shows visitors more in depth information about its products. Coava Coffee posts more photos about its store, and lifestyle photos, like staff portraits on its Instagram page. These photos connect more to real life. Coava invites the viewer in to buy a cup of coffee and enjoy the life portrayed in the l vibrant, personal photos.

A strong brand is one of the strengths of Starbucks. It helps Starbucks to get new and repeat customers easily. Starbucks has strong market position, diversified products, and brand recognition which allows the company to stand out from most competitors, and it has the opportunity to further expand its business all over the world. However, Coava does not have the high awareness like Starbucks in the world, it is just well known in Portland area. Besides brand recognition and high-quality products, Starbucks provides the "Starbucks Experience" for its customers, such as the excellent customer service, clean stores that offer a comfortable

atmosphere, nice music, and free wireless in the U.S. Starbucks also has a good customer loyalty program.

Customers can earn loyalty points with purchases to redeem for free products. Starbucks replies to all comments at its Facebook official account to make people feel recognized and important. On the other hand, Coava Coffee does not offer the same kind of two-way communication with its customers on its Facebook webpage. It just does advertising and promotion.

Starbucks has many more followers than Coava Coffee on social media platforms Facebook, Twitter, Instagram. Starbucks adds other social media platforms, such as LinkedIn, YouTube and Pinterest. To this point Coava Coffee, has only used Facebook, Twitter, and Instagram, leaving them with fewer opportunities and areas to advertise than Starbucks. Coava Coffee is limited because it has fewer staff to manage the social media platforms. Twitter and Instagram are more popular than Facebook among young people. Starbucks has huge followers on all social media platforms. They have more than 34 million followers on Facebook, 11.8 million followers on Twitter, 12.9 million followers on Instagram. Coava Coffee just has 7 thousand followers on Facebook, 17.8 thousand followers on Twitter, and 28.1 thousand followers on Instagram.

6.1.3 Nike

Big companies like Nike already have higher awareness from people in different areas, even all over the world. They can put more assets into advertising in different channels, such as TV, magazines, billboard, and so on. Consumers generally already have well formed opinions of

the brands associated with big companies. Therefore the excellent return on investment that a small local company can get from social media is somewhat muted for the big companies and often the bigger company will have different goals for its social media campaigns. When they use social media, maybe they do not focus on advertising their products.

Nike uses social media platforms to post videos of sporting events and Nike sponsored athletes. Nike has separate accounts for its products, such as football, golf, and so on. It also has special account to answer its consumer's questions. It makes its customers feel special when they get the answers from Nike which just for themselves.

As the most famous athletic apparel companies, Nike has more staff to control social media interactions, so it uses more social media platforms than local small businesses use. Besides the popular social media: Facebook, Twitter, and Instagram, it also uses Pinterest, Google+, and others. But for the local small businesses Portland Gear, it just focuses on the most popular social media platforms. However, when Nike use the Google+, the newest update information was in 2015, I do not think Nike will use Google+ as one of its social media platforms to do market. For Pinterest platform, Nike just uses it to advertise its woman products and add the links to products on Nike official webpage. It does not mean that businesses can get more benefits when they use more social media platforms.

6.1.4 Portland Gear

Social media platforms can play a more important role for the local small business than for the big already established company. With a relatively small investment, the local small business can get more benefits from the using social media platforms.

Portland Gear uses social media platforms to advertise its products and posts some photos about its store, products, and events. It has more followers in Instagram than Facebook and Twitter. Portland Gear might get more customers from Instagram because Instagram is very popular among teenagers.

Portland Gear uses Facebook, Twitter, and Instagram these three popular social media platforms as one of its marketing tools. It does not use a lot of social media platforms as Nike, it means that it can put more time to manage social media platforms.

Table 6.1 and Table 6.2 show the differences between Starbucks and Coava Coffee, Nike and Portland Gear in using social media.

Company	Webpage	Facebook	Twitter	Instagram	Others
Starbucks	Lots of information, difficult to navigate, constantly changing	Communication with customers	New products; Interesting GIFs	Most colorful photos of products	YouTube; Pinterest(23 Boards, 3344 Pins); LinkedIn(Events, employees)
Coava Coffee	Main marketing tool for	Coffee information, products,	Products, coffee culture	Closer to customer's lives	No

	sharing Coffee Culture	store			

Table 6.1: The differences between Starbucks and Coava Coffee Roaster in using social media

Company	Webpage	Facebook	Twitter	Instagram	Others
Nike	Products advertising, many subsites	Several Facebook accounts, no communication	Specific account to answer customers' questions	Less content about products	YouTube, Pinterest, Google+, Nike+
Portland Gear	Product photos, easy to place an order	Advertising, coupons to attract customers	Advertising, more information from its customers	Diversified photos: products, events, customers	Focus on three popular social media platforms

Table 6.2: The differences between Nike and Portland Gear in using social media

Using social media reduces the budget needed for marketing in business. This is an

advantage for business, especially for small business, since small businesses have fewer assets to

invest in marketing. Via social media platforms, companies can communicate with their

customers, solve consumer problems and answer customer questions as soon as possible. Social

media is an excellent customer service tool. It helps customers to know more about the business.

In my opinion, the big companies have more chance to use more social media platforms,

because they have higher awareness and they have more followers even among those who do not

use and are not interested in their products. But for the local small businesses, the more social

media platforms they use, the more difficulty they have in running the platforms. If they just

focus on the most popular social media, they can get more new visitors with a limited amount of

investment. Social media can have a bigger impact on these smaller businesses. They have a

bigger return on their investments by using the most popular social media platforms. It is

important for small businesses to run the social media as one if the marketing strategies in the

right way. Poorly run Facebook pages, websites, Instagram sites or Twitter feeds can give a

black eye to a small business that may be impossible to overcome. Well managed Facebook

pages, websites, Instagram sites or Twitter feeds can get new customers, and reduce advertising

costs. Although the small businesses do not pay the social media companies to use their

platforms, they must make the commitment to invest in the social media presence if they want to

get the benefits.

6.2 The Security Problem in Using Social Media

Customers expect to be safe when they use social media. Either directly or through the

third party. Customers are concerned about how social media websites use their personal

information website and how to protect their personal information. Understanding how the

information exchange between the social media website and the company is very important.

6.2.1 How Does Facebook "Like" Button Work for Tracking User Information

Social media companies collect all users data when they use the social media platforms. The social media get users data when they click the Like and Share buttons. Facebook places ads for products that track and match the user's searches. Facebook collects information every time a user goes to a webpage with social media buttons whether the user shares with Facebook or other social media or not.[17]

Facebook's "Like" button is clicked around 2.7 billion times every day vis the web each click recording something people care about. Twitter has more than 143 thousand tweets per second globally at its peak. Fifty two percent of the Twitter users in the U.S. are there for news, fewer than on Facebook.[18]

The web browser makes a request to Facebook to get the buttons such as "Like" button. Which means the browser get the Javascript file from Facebook library. The information which comes from the user's machine to Facebook by providing in the request. The information includes the user's IP address, such as user's geographic area; browser version and type; the webpage used; the Facebook cookies on the user's machine; and more information. This exchange occurs whether the user logged into Facebook or not. Facebook then provides the Javascript file, and the browser runs the file and embeds the button in the webpage. Facebook can track users browser history when the cookies in their machines.

Figure 6.3: Facebook Like Button Configurator

6.2.2 How YouTube Recommend Videos to Users

YouTube knows records what music, shows, and celebrities people like to watch and then gives them recommendations. According to the visitor's interests, YouTube would recommend the relative high-quality videos to users. YouTube uses recommendation system to help its users discover personalized video content from the growing videos.[19]
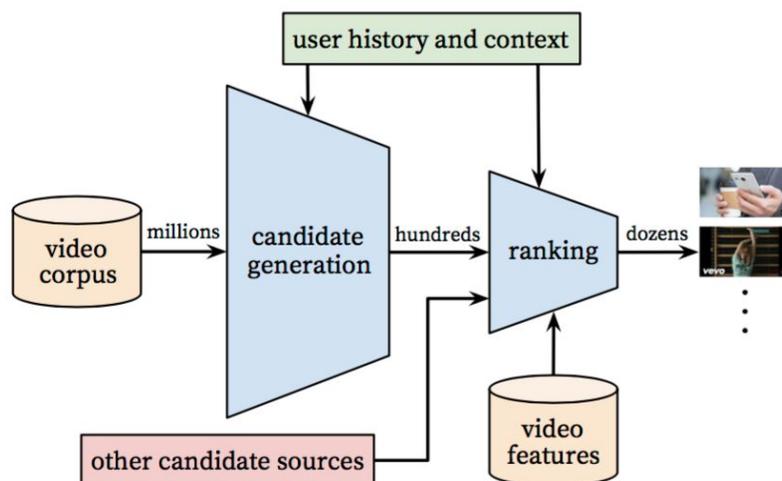
Figure 2: Recommendation system architecture demonstrating the "funnel" where candidate videos are retrieved and ranked before presenting only a few to the user.

Figure 6.4: YouTube Recommendation System

The recommendation system includes two neural networks: candidate generation and ranking. The candidate generation network takes the events from the user's watching history as input, it might be millions of videos. Then retrieves to a small subset, such as hundreds of videos. However, the candidate generation network just provides broad personalization for users through collaborative filtering which is formulated as a deep neural network in and autoencoders in. It just shows the similarity of coarse features such as IDs of videos, demographics, and search query tokens between users.[20]

The ranking network distinguishes relative importance among candidates with high recall by assigning a score to each video according to desired objective function which describes the video and user by using a lot of features. The signals can be three stages of ranking: video

quality, user specificity, and diversification. YouTube will present the highest scoring videos to the user which ranked by the score. The recommendation would engage users to watch. In addition, this system can also blend other candidate sources.[21]

6.3 The Differences Between Facebook and Twitter APIs

Application Program Interface (API) a unique experience for customers on a company's website. Many companies lack the ability to use API's to customize the experience their customers have with social media web sites. Social media platforms lack a common interface (API), requiring a company to learn multiple ones. A comparison of the Facebook and Twitter APIs illustrate the differences and similarities.

6.3.1 The Advantages and Disadvantages of Facebook APIs

Facebook APIs include Graph API, Atlas API, and Marketing API. The Graph API provides the primary way for Facebook's platform to get data in and out. It is based on the low-level HTTP-based API that developers can use it to post new stories, query data, update photos, and other tasks that an app needs to do.[22]

Graph API works in any language that has the HTTP library. A representation of the information on Facebook is composed of nodes, edges, and fields. The nodes include the basic "things", such as a user, a photo, or a page. Edges are the connections between "things", such as a page's photos. Fields mean that information about "things", such as someone's birthday. Users can use Graph API Explorer to make requests to the Graph API and see the formatted results in-lines. They can understand the response means by exploring the connections for each object

and view field descriptions. Users can obtain an access_token with the specific permissions

necessary to access the data. "Select Permissions" allows users to get their specific data, their

friends' data or other extended permission needed. Graph API Explorer allows users to move

between objects in the graph just by clicking "id" in the formatted result. Also, people can use

Graph API Explorer to switch HTTP, GET, POST, and DELETE, to get, create, update, or delete

objects.[23]
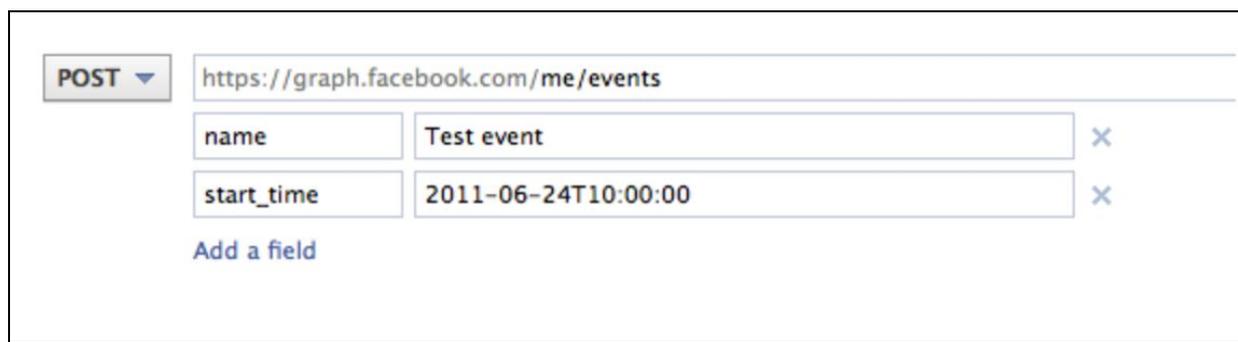
Figure 6.5: Graph API Explorer

Atlas API allows users to manage campaigns, pull reports, view organizations, assign

ads, and manage creatives. An app starts by using the Atlas API.[24]

The Marketing API provides solutions for marketing automation with Facebook's

advertising platform. The Marketing API includes ad management, bidding and optimization,

targeting audiences, ad insights, business manager API and other benefits. The advertising

management solutions provider and advertisers can benefit from using the Marketing API. The

advertising management solutions provider can sell to advertisers or agencies who manage ads

on digital properties. Advertisers manage their ad spending, and have important advertising scale

control specifically on the Facebook platform.[25]

The benefits of the Facebook API include Facebook authentication, enabling developers' applications to interact with the Graph API to provide a single login mechanism between Web, mobile, and desktop applications. Developers can access the user's information via the Facebook API.

The disadvantages of Facebook APIs: there are just three main APIs and relative codes. Twitter APIs include three main APIs and other specific APIs. It can provide more sorts of code for developers. The rate limiting tool of Graph API gives information about how close your app is to being throttled.

6.3.2 The Advantages and Disadvantages of Twitter APIs

Twitter APIs includes REST API, Streaming API, and Ad API. The REST API provides access for users to read and write Twitter data, create a new Tweet, read user profile and follower data. The REST API use OAuth to identify Twitter applications and user. The REST API includes Twitter Search API which allows queries against the indices of recent or popular Tweets and behaves similarly. Search API focuses on relevance and not completeness against a sampling of recent Tweets published in the past seven days. Therefore, some Tweets and users might be missing from search result.[26]

Streaming API gives developers low latency access to Twitter's global stream of Twitter data. Developers can monitor or process Tweets in real-time by using Streaming API.[27]

Twitter Ads API enable developers or partners to integrate with the Twitter advertising platform in their advertising solutions, and allows businesses to create and manage ad campaigns

on Twitter. Twitter API has developer, basic, and standard three phrases when partners develop

their solutions.[28]

The advantages of Twitter APIs include rate limit compliance clarified in the Twitter

using process, performance optimization, Twitter fault tolerance, protection from Twitter API

changes, multiplexed tweet delivery, long-term tweet archive, and Twitter data mining.[29]

The disadvantages of Streaming API include it just focus on real-time tweets, it would

miss some information. REST API just has 15-minute windows. There are 15 calls and 180 calls

every fifteen minutes are available for "GET" requests.

6.3.3 The Similarities Between Facebook APIs and Twitter APIs

Facebook APIs and Twitter APIs all focus on reading and writing data from the social

media users globally by the access token. They all provide services such as code to developers

and partners. In addition, they provide advertisers platforms to manage the advertising by

Marketing API or Ads API. They all have the panels for developers to get the information and

data from their users. Facebook and Twitter also have different codes to create websites and

applications in different systems, such as iOS and Android.

6.3.4 The Differences Between Facebook API and Twitter API

Twitter has more APIs than Facebook. That gives Twitter more specific content for APIs

and developers more versatility. The Facebook API is a REST-based resource that sends data

through the Internet by using "GET" and "POST" operations via the Facebook API REST server.

Facebook API and Twitter API have different methods for accessing data. The Facebook

API methods include administration methods, login/authentication methods, data-retrieval

methods, publishing methods, mobile methods, dashboard API methods, photos API methods, events API methods, and custom Tags API methods. For Twitter, accessor methods require a "GET" operation, and mutator methods require a "POST" operation. Accessor methods include account methods, block methods, direct messages methods, favorited methods, friendships methods, help methods, saved searches methods, search methods, social graph methods, status methods, timeline methods, trends methods, and user methods. There are account, block, direct message, favorites, friendship, notifications, saved searches, and statuses in the mutator methods.[30]

In addition, OAuth is the essential authentication tool for Twitter API to access data. For Facebook API, a developer can use a wide range of tools when they register a Facebook account.

There are differences between the Marketing API in Facebook and Ads API in Twitter, the Marketing API has more clear details in showing to send the advertising to the target audiences. Facebook's Ads Manager allows developers to manage advertising much more easily. Twitter needs more basics business and product information when the developer is working with the API.

Twitter and Facebook also have different "GET" and "POST" panels when the developer uses the access token. The Figure 6.6 and Figure 6.7 show the differences between Twitter and Facebook APIs to use the access token.
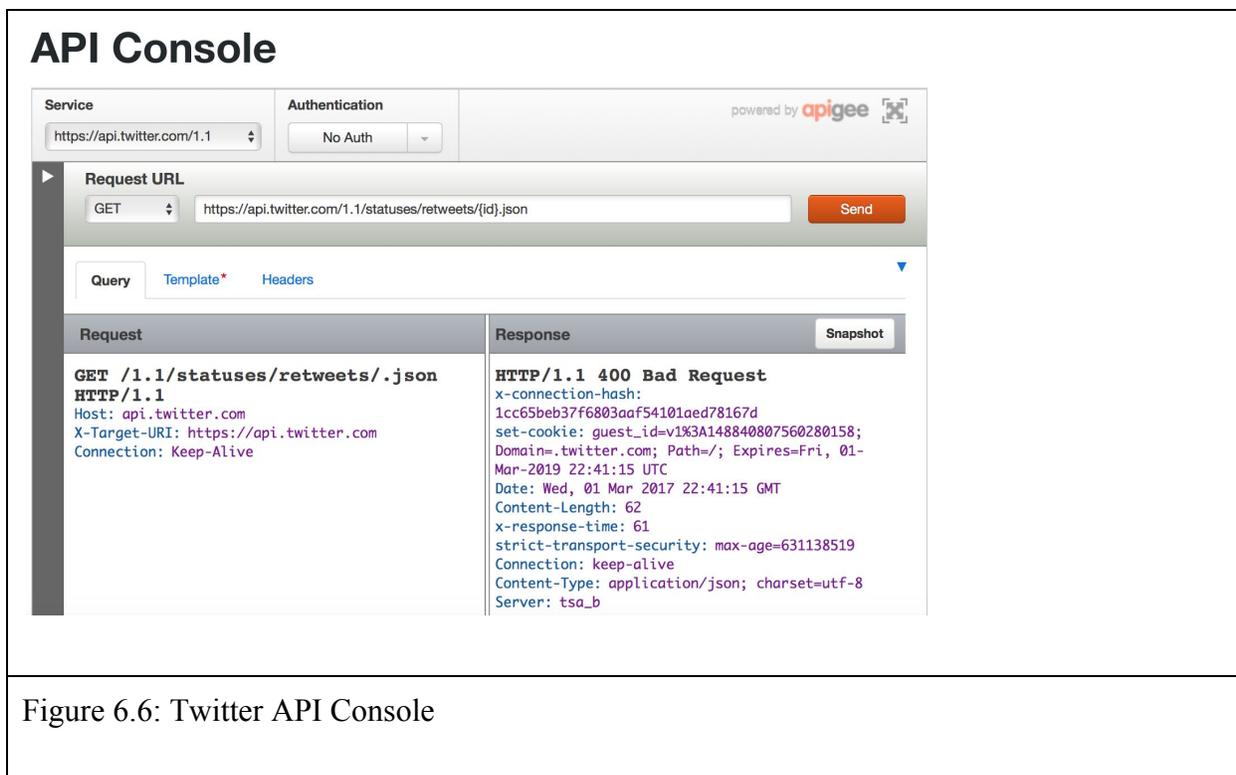
Figure 6.6: Twitter API Console

Figure 6.7: Facebook Graph API Explorer

There are similarities and differences between Facebook and Twitter APIs.

Understanding those differences allows developers to know which APIs and site to use.

7.0 Conclusions

With the development of Internet, the social media have emerged as popular user platforms, and businesses have come to use it as one of their marketing strategies. Social media platforms begin with uploading profiles, then communicating with friends, posting photos and videos. But users can do more in social media platforms. Users can be individuals, businesses, or government. Businesses can get benefits by using social media. Statistics show that the top usage of social media for businesses is communicating with their customers. In addition, businesses use social media to market or promote business and product, build online reputation, advertise, listen to others and, hire staff.

Large companies Starbucks and Nike understand the importance of using social media as the part of the marketing plan. But local small businesses such as Coava Coffee and Portland Gear, show that social media has more effects on small local businesses. Customers are concerned about safety problem when they use social media. They want to know how social media collects information about them on the Internet, and why they receive targeted advertising from social media. Those customers data comes from Facebook and Twitter APIs and are then sent on to the advertising departments of the businesses who contract with the social media platforms. The most successful companies have developers who can work with the APIs in both Facebook and Twitter. Large companies may do more, but even most small companies might just do these two platforms.

In analyzing four companies, looking at safety problems inherent in using social media, and comparing Facebook and Twitter APIs the significance of using social media platforms as a

marketing tool for businesses has become clear. However, this analysis just discusses four

companies as examples, there could be some missing information of other companies. There

should be more companies and industries to compare to get the results. In terms of the safety

problem when customers use social media platforms, this paper analyzed the issue by giving the

customers information about how their usage information is gathered and passed on through the

Facebook Marketing API. There are other APIs and other aspects of the customers' personal

information that need to be protected. In order to provide a truly safe environment for customers,

both businesses and the social media providers must do more development.

8.0 Future Research

With the understanding of the significance of using social media platforms as marketing

tools, there will be more and more businesses starting to use social media or continuing to use it.

With the development of Internet and social media platform functions, visitors might someday

place an order on the social media platforms directly.

Customers will expect to shop in a more convenient, easier, and safe way.

Customers will follow the business social media official account to get more information

about its products and events in real time. In addition, they will expect to buy products as soon as

possible.

With the developers designing the social media platforms, they can use API or other

techniques to make customers use social media platforms to get new information and pay for

new products which the business post on their social media platforms.

People want to save time and money when they go shopping. If customers can buy the company's merchandise on social media platforms, instead of going to its official webpage, the company can get more customers. Social media platforms can be a platform for businesses to sell products, provide their consumer good customer service, and people can communicate with each other with their shopping experience.

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