InstaAudit

California State University | Long Beach

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Preface

Our project seeks to estimate the performance of an Instagram post before it goes live. A business owner who markets to their customers through Instagram could benefit from a tool that checks the quality of their posts algorithmically before posting. Our technological innovation plans on training a machine learning algorithm with a dataset scraped from business accounts located on Instagram. Other Instagram tools offer ways to schedule and edit postings before they go up, but Insta-Audit will allow a level of precognition to the process of brand marketing.

Strategy

Problem	Solution	Value Proposition	Unfair Advantage	Customer Segments
1) Unforeseeable advertisement effectiveness 2) Posts are not hitting algorithm and reaching out to a large audience 3) Low quality images and mediocre outreach potential	1) Give customers an estimate of how many people their post may reach out to before they post on Instagram 2) Give customers advice on how to adjust their post to increase the likelihood of their post be more effective and to have more people to click on the post 3) Give customers a "mock" view of how effective their post will be before posting it on Instagram	Our solutions will help businesses and marketing advisors enhance and improve their advertisement posts before posting it online to increase their potential sales and customer base.	Our program will have a machine learning algorithm that will look through Instagram API and other collective databases to create an ideal guideline that will help determine if a post will attract people according to the data collected. The model will process different images and compare the like/follow ratio of various posts to create this guideline for our customers.	Business Owners Marketing Advisors Marketing Teams Advertisers

SWOT Analysis

Strengths:	Weaknesses:
● Instagram is a massive site 　○ Over 1 Billion Users 　○ Makes it a popular location for advertising and brand marketing. 　○ Allows for a large dataset to scrape from. ● No application based competition at this time. ● Ability to gain large datasets to train our model.	● Business accounts are relatively few compared to individual accounts 　○ Smaller demographic to market our product to. ● Different models will need to be trained for each type of product (clothing, make-up accessories, food and beverage, etc.) ● Relatively new to the field of Machine Learning so optimization of models could be improved upon as compared to competitors.
Opportunities:	Threats:
● Can easily extend the functionality of our software to support more instagram tools later on resulting in more potential revenue for our consumers 　○ Basic Image Editing 　○ Caption Suggestion 　○ Auto-Posting from a backlog	● Theres quite a few instagram tools on the market already 　○ Auto-interactions 　○ Photo editing 　○ Auto-hashtags 　○ LikelyAI 　　■ Evaluates photos and displays computer-vision metrics

Market Segments

Marketers Segment Profile			
Geographic	Demographics	Behavioural	Buyer Power
Reside in large cities or near any technically inclined companies.	Companies they represent must have Social Media Managers and have a brand or product to push	60% of the top brands on Instagram all use the same filter on most of their posts	The only important aspect of a Social Media business profile is how well it generates sales.
Size		Growth Potential	
During 2019 25 million business accounts were active on instagram, nearly doubling in size after two years. Also in 2019 2 million monthly active advertisers captured the eyes of Instagram's' users.		89% of marketers taking a survey responded that Instagram was the most influential Social Media	

Marketers Criteria:
1. Identifiable: Must have an employer, their main function as an employee is managing a business Instagram account.
2. Substantial: There were 5.6 million employer businesses in the US as of 2016. Merge that statistic with the fact that in 2019 70% of US companies use Instagram for marketing. Therefore, approximately 3.92 million companies rely on Instagram for marketing.
3. Accessible: Marketers, specifically involved in handling social media, are far more technically inclined. Marketers actively search for new tools and tricks on how to perform their roles.
4. Stable: The Marketing industry is quite old and a reliable method for selling products. As long as companies exist the marketing industry will thrive.
5. Differentiable: Marketers have a desire to increase brand awareness and increase sales of company products.
6. Actionable: Marketers rely on many third-party tools to aid them in expanding their presence and utilization of Social Media.

Jonathan Jones

Title: Brand Ambassador
Decision-Maker: No
Industry: Retail
Age: 24
Salary: $33,000/year
Education: Highschool Diploma

Goals: Maintain a company's brand and increase customer engagement through Social Media.

Challenges: It is difficult to know all of the intricacies of online culture and to pinpoint what really resonates with a community.

How we Help: Discern the patterns in posts on Instagram that receive a lot of engagement.

Messaging Strategy: Focus on increasing Instagram post engagement by providing a machine learning model that determines which posts will gather more attention.

Sammy Sosa

Title: Small Business Owner
Decision-Maker: Yes
Industry: Pharmaceuticals
Age: 55
Salary: $100,000/year
Education: Masters in Business

Goals: Quickly balance their Social Media account so that they can focus on other things.
Challenges: Having to choose between multiple advertising methods.
How We Help: Ease the process of creating posts and increasing confidence in selected photos.
Messaging Strategy: Present ourselves as an affordable method for increasing engagement with little work required from our customers.

Small Business Owner Segment Profile			
Geographic	Demographics	Behavioural	Buyer Power
Reside just outside of large cities, mostly in middle America	Many small business owners are minorities and are predominantly male	Very stressed with multiple functions they must maintain for their business	The only important aspect of a Social Media business profile is how well it generates sales.
Size		Growth Potential	
During 2016 24.9 million nonemployer businesses existed.		Even if a majority of small businesses fail there are always upcoming small businesses that will fit our profile.	

Small Business Owner Criteria:
1. Identifiable: More independent which would require more effort in getting their attention.
2. Substantial: There are many small business owners that fulfill a variety of demographics.
3. Accessible: Small business owners have less time to spend on researching new tools so our marketing would have to be more proactive in getting their attention.
4. Stable: Many small businesses fail, but there is always a surplus of new businesses to take their place. Adaptability will have to be a priority for staying relevant to business owners.
5. Differentiable: Small business owners have an emphasis on getting their product to many different people to establish a solid community.
6. Actionable: Small businesses benefit greatly from incorporating many different tools to help them manage every part of their business.

Statistics

- 25 million business profiles on Instagram in August 2019 up from 15 million from July 2017.

- 2 million monthly advertisers up from 1 million from march 2017 on Instagram

- 60% of the top brands used the same filters on their posts.

- 70% of US companies will be using Instagram for marketing, stealing the lead from twitter.

https://www.wordstream.com/blog/ws/2017/04/20/instagram-statistics

- 90% of Instagram accounts follow at least one business account.

- Out of a survey 83% say they find new products on Instagram.

- According to surveyed marketers 89% of them said Instagram was the most influential.

https://sproutsocial.com/insights/instagram-stats/#ig-brands

- There are 5.6 million employer businesses in the US in 2016.

- There are 24.8 million non-employer businesses in the US in 2016.

https://sbecouncil.org/about-us/facts-and-data/

Primary Market Research

1. Do you use Instagram to market your product?   (y | n)
2. Would an instagram tool that tested your post before posting be beneficial to your company's advertising efforts?   (y | n)
3. Have you ever made a post that received very low user engagement?   (y | n)
4. Does poor marketing performance have a negative impact on your business? (y | n)

We surveyed 25 social media marketers in the Long Beach area; the results can be seen below.

Survey Results
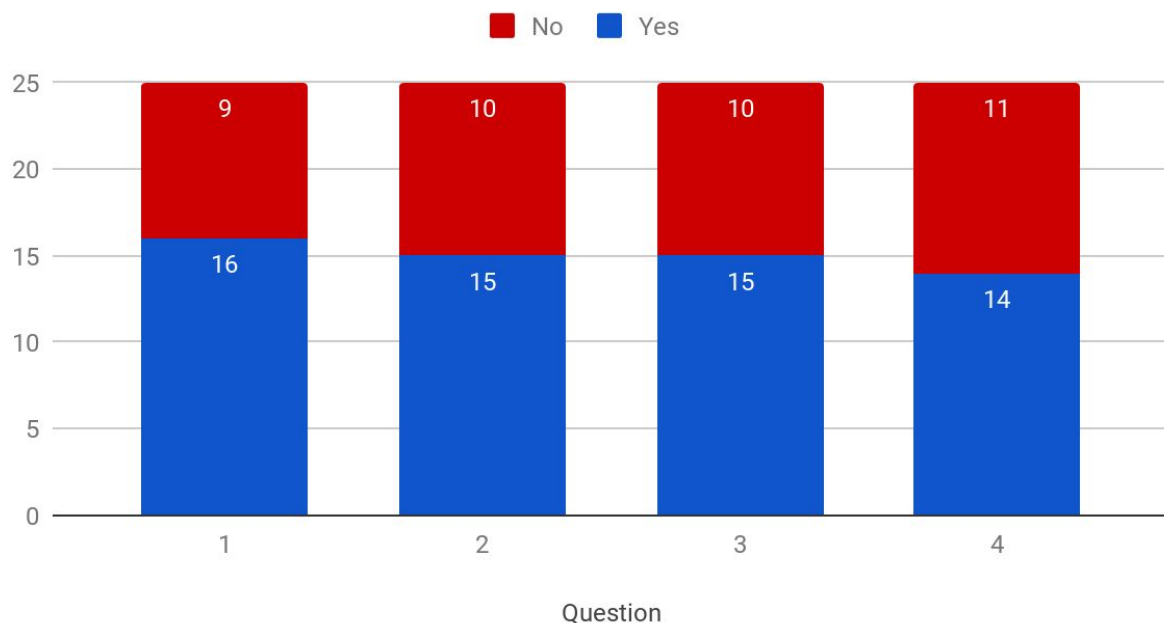
From the results, we can see that, at least in the long beach area, that 64% of local small businesses utilize instagram to market their product; this is slightly less than the national average of 70%. Of those businesses that use instagram,

- 94% believe that their instagram account is beneficial to their business but have had posts that received very low user engagement
- 88% believe that poor marketing performance has a negative impact on their business

Our survey's results conclude that our proposed application would prove to be an immensely beneficial tool for businesses to utilize for their instagram accounts. In hindsight, we will include the following question for our next survery:

- Would you purchase this product if it were on the market today? If not please explain.

Secondary Market Research

Our secondary market research focused on verifying the need for a successful instagram account to promote a business and any current competitors.

From the statistics that were presented in the Marketing Segments section of this document, one can reasonably conclude that Instagram reaches an enormous audience. Along with the massive potential audience, obtaining and maintaining an instagram account to promote your business is magnitudes less expensive than traditional advertising platforms such as television and radio. National television ads cost an average of $115,000 for a 30 second commercial (https://fitsmallbusiness.com/tv-advertising/), quite an exorbitant amount that can't really be justified for a small business. The picture below depicts costs of various advertising platforms.

Television vs Newspaper vs Radio vs Online Advertising Cost

WooCommerce CRM	Best For
Local TV	$5,000 per one million viewers
Local Radio	$3,000 per one million listeners
Regional Newspaper Ads	$693 to $40,855 for ¼-page ad
Google Ads	$2.69 per click
Facebook Ads	$1.86 per click

Sources: SmallBizTrends, Skyworks Marketing

An owner utilizing instagram would only need to pay for the creation of the advertisement and not the distribution as with the above methods of advertising. There would be a recurring cost of obtaining more followers, but once those followers are collected, all of your advertisements reach that audience for free.

One can reasonably conclude that from the data presented in this document, a successful instagram account has an immeasurable positive effect on a business. Therefore, a tool that would aid in the creation and maintenance of such an account, such as InstaAudit, would garner a large amount of demand.

Our closest competitor would be LikelyAI. Fortunately, this application seems to have been abandoned as the current update has remained since October 2017. This unique situation

allows our product to evaluate LikelyAI's feedback and suggestions to improve our product while not concerning ourselves with our competition.