

Leveraging Facebook Lead Ads for Higher Education Enrollment Management

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ABSTRACT

In today's highly competitive higher education market, it is becoming more challenging for educational institutions to recruit, retain, and instruct students who possess exceptional abilities. Word-of-mouth, job fairs, and newspaper advertisements are examples of traditional techniques of recruitment that may be time-consuming, expensive, and unsuccessful with regard to the recruitment process. Because of the exponential rise of digital platforms, social media has developed into a useful instrument for the administration of registrations. Using Facebook Lead Ads, educational institutions have the opportunity to meet prospective students in a way that is not only economical but also measurable.

Through the use of Lead Ads, educational institutions have the opportunity to save time and avoid sending potential students to different landing sites by collecting their information directly on Facebook. This makes the process of asking questions easier to do. Not only does this straightforward approach improve the user experience, but it also increases the possibility of acquiring leads of a high quality. Educational institutions have the ability to engage with prospective students who are more likely to apply and enroll in their programs by using sophisticated audience targeting strategies that take into consideration criteria such as location, hobbies, and behaviors on the internet. If lead data is integrated to customer relationship management systems, then the information of prospective students can be maintained more effectively, follow-ups can be automated, and interactions can be tailored.

In order to enhance registration management, the goal of this study is to investigate the potential of Facebook Lead Ads to do so by increasing brand recognition, preserving lead interest, and eventually increasing enrollment. Some of the best practices that are emphasized include clear value statements, adverts that attract people's attention, adaptable design, and speedy follow-up emails. After that, it goes on to discuss how statistics may be used to evaluate the effectiveness of a campaign, check the return on investment, and make adjustments to specific techniques. It may be possible for higher education institutions to increase student enrollment and the degree to which the student is a good match for the institution by making strategic use of Facebook Lead Ads to connect recruiting workers with prospective students.

Keywords: Facebook Lead Ads, Student Enrollment Management, Higher Education Marketing, Digital Recruitment Strategies.

INTRODUCTION

Since the Internet first became available, there has been an increase in the number of networks that enable the sharing of information. The word "World Wide Web" (WWW) [1] is known to almost every individual. "Online social networks" are a novel kind of information network that have come into the scene in the last few years. These networks rapidly accumulate both a user base and popularity in compared to the original World Wide Web. In this day and age, a significant number of people use social networking sites such as Facebook [2], LinkedIn [3], and MySpace [4] in order to meet prospective love partners. LinkedIn has more than 380 million "professionals," while MySpace has more than 50 million members. The total number of LinkedIn users is 968 million. Users who are members of other social networks, like Flickr [5], Google Video [7], and YouTube [6], may also publish video content. Blog hosting sites such as BlogSpot [12] and LiveJournal [8] are also home to a big number of bloggers.

While the first version of the World Wide Web did not rely on information, the current version of Web 2.0 does. People who are active on these social networking platforms are usually represented as being of higher quality than other people. It is possible for users to become "friends" with one another when they have joined a network and shared

content that they have made. This user-to-user connection structure makes it simpler to locate other users who have similar interests, as well as to get access to information and content that "friends" have either contributed or approved. It is responsible for organizing relationships in both the offline world and the digital realm.

As a result of their widespread use and quick expansion, the present time is an excellent opportunity to get acquainted with these online social networks, to gain an understanding of how they operate, and to take use of the many features that they provide. Through the study of the development and structure of online social networks, we will be able to use this information to develop new technologies and assess those that are already in existence. Because of this, it is possible that future systems that are based on online social networks may be developed more effectively, and their effects will be better understood.

via communicating with others on the internet via social media Institutions of education havethe potential to be greatly improved by the use of internet social networks. that are located at the university level. The provision of such services may be advantageous to higher education institutions (HEIs) in a variety of ways. For instance, they may be able to assist in the management of information distribution, the development of novel approaches to teaching and learning, and the provision of creative resources to both students and faculty.

We This study will give college campuses with a greater comprehension of (a) the principles of online social networks and (b) the utilization of this knowledge in order to generate predictions and suggestions based on the real Facebook social networks that are seen on college campuses. Each of them is explored in further depth in this section.

In addition to developing techniques for collecting data from offline social networks, our major purpose is to get an understanding of the structure of online social networks, especially those that apply to the persons who are linked with them.

Utilizing the knowledge that we have on the inner workings of online social networks, our second purpose is to investigate the Facebook groups that are associated with higher education. An exhaustive study of Facebook groups that are related to higher education was carried out as part of the research, which resulted in the collection of a plethora of information on the individuals who are members of the groups. In the present moment, there are no real-world data sets that can be accessed because of fierce competition and commercial interests. The data sets that were needed for the inquiry were obtained via the usage of open-source Network Analysis Software Applications (NASA) that were accessible online. The study comes to a close by providing projections and providing advise to higher education institutions that make use of NASA.

LITERATURE REVIEW

The conceptual literature on higher education enrollment management emphasizes the transition from traditional recruitment models to digitally driven, student-centered approaches. Enrollment management is viewed as a strategic process that integrates marketing, admissions, retention, and institutional branding to attract and enroll students who are well aligned with institutional goals. Scholars argue that digital transformation has reshaped how institutions communicate value propositions, build trust, and maintain engagement with prospective students throughout the decision-making journey.

Social media marketing theory highlights platforms like Facebook as interactive ecosystems that facilitate two-way communication, personalization, and relationship building. Facebook Lead Ads align with relationship marketing and customer journey models by reducing friction in the inquiry process and capturing intent-driven leads directly within the platform. Theories such as the Technology Acceptance Model (TAM) and Engagement Theory further support the adoption of Lead Ads, as ease of use, perceived usefulness, and timely interaction significantly influence student responsiveness and intent to apply.

From a branding perspective, literature suggests that repeated exposure to targeted digital advertisements strengthens institutional visibility and recall. Facebook Lead Ads contribute to brand awareness and consideration stages by delivering tailored messages based on user demographics, interests, and behaviors. Conceptually, these ads serve as a bridge between awareness and action, enabling institutions to nurture prospects efficiently and strategically within a competitive higher education marketplace.

III BACKGROUND AND RELATED WORK

In The purpose of this part is to provide you an introduction to the ways in which online social networks operate. The qualities, development factors, and relationships between members of these networks will be addressed. Following that, we will go further into the inner workings of online social networks and discuss the need of understanding their architecture and features in order to create possible applications. The next paragraphs will provide a discussion on the measurement principles that are required for the analysis of complex graph data.

A. About Online Social Media Networks (OSMN)

By Users of an online social network have the ability to (a) speak with one another directly, (b) browse the profiles and connections of other users, and (c) adjust the visibility level of their profile to a partial public view. [22] Previous study has made use of each and every one of these terms simultaneously.

The findings of the study suggested that all social networking sites (SNA) serve three major functions, despite the fact that online social media networks (OSMNs) may be beneficial in a variety of different ways. To begin, online social networks (OSMs) assist users in maintaining communication with one another, repairing broken relationships, and establishing new ones. persons are able to be "expressive and build noticeable peer networks" via the use of social networking sites because they allow them to "connect with other online people or groups whom they want to be part of their prolonged (or lengthen) social network" [22]. For the simple reason that every user that is connected to the network contributes their own material to OSMNs, which then store that content. The last point is that official social media networks, also known as OSMNs, provide users with assistance in their search for interesting content by curating, organizing, and recommending postings that are created by normal people. Across different social media platforms, it seems that people's social media accounts and the content that they post on those accounts are different.

B. Significance of study Online Social Media Networks (OSMN)

Online Despite the fact that it is still in its infancy, a great number of apps that have achieved great success have their origins in an online social networking site. The findings of the study indicate that as this model continues to grow, more complicated applications will take shape. It would not be out of the question to imagine a future in which social media platforms make up the majority of the main venues for making personal and professional relationships. The research provides a list of some of the many possible applications that may be gained by having a grasp of the design and flow of such networks. There is a possibility that the material that was acquired for this thesis might be useful to other areas of research.

IV NETWORK ANALYSIS SOFTWARE APPLICATIONS

The Over the course of this chapter, we will investigate Facebook and other "online social media networks" (OSMN) from the point of view of interpersonal connections and friendly interactions. Of all the social networking sites, Facebook is by far the most well-known example. In this section, we focus mostly on the structure of the Web Mining tool and how it is used to investigate the social networks that Facebook (FB) maintains. In addition to this, the study investigates the many technical challenges that are encountered when individuals seek to get data from Facebook.

Statistics that were gathered in March 2014 indicate that Facebook has 1.28 billion active users on a monthly basis, 609 million active users on a daily basis, and 1.01 billion active users on mobile devices on a monthly basis. There are 81.2% of our daily active users that come from countries other than the United States of America and Canada. The features and services offered by this social network are something that we want to make extensive use of. Obtaining and analyzing the information that is available on the website is the first stage in the process of achieving this objective.

A. The Basic Structure of the OSMN

The Recognizing the Facebook network is not difficult at all. The formation of a friendship and the ability to communicate between any two nodes is possible. The absence of levels in this sort of graph is what gives it the moniker "uni-modal." When the pleasure of one person is increased by the happiness of another, we refer to the relationship as being "bilateral." This Facebook graph is depicted via the equation $G = (V, E)$, where V represents end users and E represents edges, which are connections made between users. In this network, there is no value assigned to any of the nodes since they are all of equal significance. In addition, the graph does not have any way of orientation. In [114], a fundamental, loop-free, unweighted, undirected graph model was used for the social network that is Facebook. The configuration of other online social networks, such as Nobii[115], Flickr, and YouTube[116], is more difficult to do in comparison to the process of setting up Facebook. Twitter asserts that its users are able to participate in a broad range of interactions with one another, including "reply to," "mention," "following," and a great deal of other interactions. There are two topics that will be discussed in the next section: getting data from Facebook and gaining a grasp of the architecture of the Facebook social network.

B. Extracting Facebook Data

Once Upon completion of the data collection process, it may be used to compare and contrast the traits, behaviors, and activities of the individuals. Based on the following considerations, you are able to assess the quality of the data samples: (i) Significance in reference to other mathematical or statistical models that are already in existence; and (ii) Concordance with past research of a similar kind. Businesses that run social media platforms such as Facebook, Twitter, and others do not release user data because they are concerned about protecting the privacy of their users and the security of their data [117, 118]. One of the technical obstacles that prohibits us from accessing the data via a virtual user interface is the presence of an asynchronous script and other similar concerns. It is possible for us to see the

friend list. During the years 2010 and 2011, the Facebook development team used web data mining techniques in order to construct online services such as the "Graph API (Application Programming Interface) [119]" that offered users a glimpse into the architecture of Facebook.

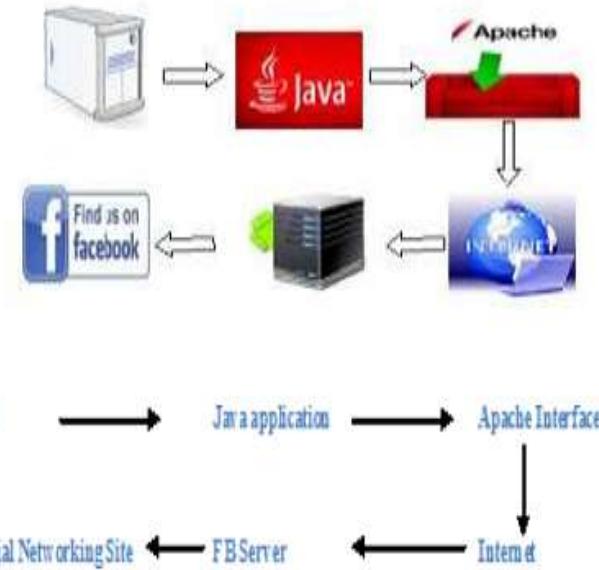


Figure 4.1: Platform Topology for Data Mining

C. Various Network Analysis Software Applications (NASA)

Our In addition to using a wide range of NASA technologies for the purpose of processing and exhibiting "Big Data" in order to make research more accessible, our goal is to provide the social media network analysis of the vast majority of users and academics. As opposed to this, many other popular or empirical techniques to network analysis that depend on computer languages need little more than technical ability, subject knowledge, and practical experience in order to evaluate media datasets that are posted online. Due to the fact that the field of network science is moving away from sectors that are reliant on computers and algorithms, it is of the utmost need to build event-based platforms that are not dependent on code or graphics.

With the help of these network analysis software tools (NASA), you may get or share the dataset, and after that, you can examine it more carefully in order to gain a better understanding of it. For the time being, we are focusing our attention on investigating the OSMN source networks, which begin with conversations that are open to the public, websites that facilitate the exchange of material, and covert networks. During the course of our study, we studied a wide variety of network analysis techniques in order to analyze social media network data sets. Private messaging, chat logs, file sharing, email, and instant messaging are only some of the capabilities that contemporary social networking services on the Internet provide. Other features include instant messaging and email. Through perusing the posts and groups that someone has on Facebook, we may be able to get some understanding of the composition and perspective of the social milieu that they participate in.

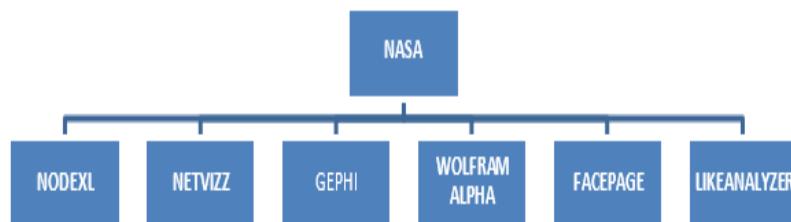


Figure 4.2: A Number of NASA-Required Programs for Network Analysis

D. Network Communities

Communities This chapter focuses on the subject of clusters, which are groups of nodes that are connected to one another by a large number of connections but are connected to other nodes in the network by a small number of connections. The term "Online Social Media Networks," or OSMNs for short, refers to the most widely used social networking sites, such as Facebook. The purpose of this chapter is to provide an explanation of how these networks operate as well as the notion of online generation groups.

The Walk trap approach, the Nibble method, the Fast Community Network Algorithm (FCNA), and the Label Propagation Algorithm (LPA) are all well-known techniques for the identification of communities. All of these are methods that we have addressed in earlier conversations. Despite the fact that the Community Framework (CF) is a fundamental component of OSMNs, there has been no agreement established over the definition of a community on real networks. This chapter strives to offer a brief and comprehensive summary of the group, emphasizing its most important attributes. As a result of this, we were inspired to devise a new technique to deploying the network in the real world. This strategy is straightforward and unique. By using the notion of the shortest paths, we put forth a concerted effort to integrate these meeting sites into the framework of the community. Our technique will beat rival network tactics that use section construction, according to the findings that were obtained.

DISCUSSION

Today, Because of the huge number of users—which includes students, teachers, and staff in the higher education sector—this social media platform is seeing a surge in popularity. The academic community, which encompasses higher education institutions (HEIs), universities, and HEP, among other entities, is under significant pressure to update their teaching and learning practices in order to keep pace with the explosive growth of social media platforms. This pressure to modernize includes the addition of new elements or the modification of existing ones. The latest chapter in the history of higher education has begun. The effectiveness of online groups in improving the learning experience has been investigated via a wide number of research articles, interviews, and observational studies. These studies have looked at social media platforms such as Facebook. There are many who contend that kids would prefer to study on websites with online capabilities, such as Facebook, Moodle, and e-Learning software, rather than sitting in a conventional classroom. In schools all around the world, students depend on electronic devices such as laptops and tablets to a significant extent, and they are constantly on the lookout for the newest and most advanced versions. These technologies might be beneficial not just to instructors but to everyone else as well. With that being stated, it looks as if students and instructors might benefit from the use of social networking sites in the classroom.

CONCLUSION

Originally The first impetus for the development of computer systems sprang from the need to address problems related to computing in the domains of commerce, education, and security. These days, they are beneficial for a broad variety of functions, including enhancing communication and connection with other people. People are able to do a wide range of tasks, such as working, playing, reading, studying, communicating, and expressing themselves, with the assistance of technology, which has become a fundamental component of many people's everyday life.

For the purpose of my thesis, I performed research on online social networks, including their different features, and experimented with several online social systems that implemented these results. Given my belief that there are a million and one possible applications for them, I created this. The subjects that are discussed in this article might be the emphasis of study in the future. The primary arguments that this thesis presents will be summarized in the next section.

This In the last chapter of our study, we evaluate and summarize (i) the primary results and how our research connects to newer domains, as well as (ii) the future directions of our research and the topics covered in this thesis that may be explored further.

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