

Methods of Career Guidance Activity of the Department of Higher Education Institutions in Social Networks

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Abstract

The article analyzes the research of the informational image of the institution of higher education and career guidance activities in the social environments of the Internet. Social networks were analyzed for the formation of the informational image of the units of the higher education institution and for career guidance activities. A formal model of the information image of units of a higher education institution has been developed. The requirements for creating and managing the official page of the unit have been developed. The stages of managing career guidance activities in social networks have been developed. The obtained results are demonstrated on the official pages of the Department of Social Communications and Information Activity of Lviv Polytechnic National University in social networks Facebook and Instagram.

Keywords 1

Social network, department, Higher Education Institutions, Instagram, Facebook, career guidance, admission campaign

1. Introduction

For a long time now, all advertising activities have been moving to social media on the Internet. The period of the covid-19 pandemic and the martial law in Ukraine accelerated this process. If, three or four years ago, a certain product or service did not need to be presented in the social environment of the Internet, now it is difficult to avoid that something cannot be found on the Internet. Institutions of higher education were no exception. Universities, faculties, departments and other units also need advertising activities to attract applicants and branding. Attracting applicants by informing them about university departments is a career guidance activity.

Prior to full-fledged online education, the department's career guidance and advertising activities were carried out by distributing information directly in secondary schools. It took place in school assembly halls, where high school students were gathered and representatives of departments presented their educational programs and the advantages of studying in a particular specialty. However, with the advent of distance learning, information and advertising activities of higher education institutions in social networks began to gain popularity.

Therefore, the creation of informational representations of university department in social networks is relevant today. Information filling and interaction between users of different age categories and interests takes place precisely in social networks.

That the purpose of the article is to develop a method of creating a department page in social networks, to develop requirements for the department's official page, to develop a method of using the official page for career guidance activities.

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2. Related Works

According to the Law of Ukraine on Education [1], there are the following types of career guidance activities:

- professional information;
- professional education;
- professional consultation;
- professional diagnostics;

Professional information involves getting students to know the types of professions and the rules for choosing them. And this professional informing takes place in many ways, for example: trainings, printed materials, virtual reality platforms, games, etc.

The study of the informational image of a higher education institution in the social environment of the Internet is a relevant and popular task. Today, any public institution must have a representation in the social environment of the Internet in the form of a website. However, the younger generation increasingly consumes information content from social networks. Often, scientists study only the general image of the university or the formation of the information image generator of the institution of higher education. Scientists such as: Korzh, Peleshchyn, Fedushko and Syerov, which investigate the formation of the informational image of higher education institutions of Ukraine in the social environments of the Internet, have developed the stages of building a holistic image of a higher educational institution in the social environment of the Internet [2], developed an algorithm for determining the effectiveness of information activities on the Internet [3], developed the architecture of a software-algorithmic complex for ensuring management activities administrative and informational divisions of higher education institutions and the information activities of basic divisions on the Internet [4], an analysis of the formation of the informational image of higher educational institutions was carried out, namely: the natural unmanaged process of forming the informational image of higher educational institutions, the informational image of higher education institutions as an element of the rating system of higher education, the analysis of the sources of formation. information image of universities, management of the information image formation process [5]; ways of ensuring the analysis of the integrity and completeness of coverage of the information image of higher education institutions have been developed [6]. Representation of higher education institutions and their divisions in social networks has not been fully investigated.

If we talk about the research of career guidance activities, most often scientists analyze the forms of career guidance and methods of counseling on future career issues. In the article [7], the authors describe the methods and means of career guidance and counseling for university students in China. In [8], the use of social media for career guidance in the field of higher education in the United Arab Emirates was investigated. [9] describes career planning among high school and college students in Germany by analyzing social networks. Information systems and models of vocational guidance management systems are also popular. Also, scholars propose a framework for career information management and guidance systems (CIMGS) to support career decision-making by providing relevant career information and recommending appropriate training courses based on individual characteristics [10]. Also, an intelligent school guidance system called "ETC Guidance System" in Morocco is discussed and researched [11]. Today, there is a developed model of the professional orientation management system (VGMS) - an online information system for a vocational school, which is also connected to the labor market system [12]. Also, scientists investigate the importance of contextual factors that influence career guidance activities and their results [13]. Such systems are useful for applicants to get a list of possible specialties and directions according to preferences and educational opportunities. Such systems are also useful for developers to obtain information about school graduates.

The scientists propose the application of augmented reality in the web environment for a career guidance quest system using WebAR technology and present a prototype of this system [14]. The quest system involves solving intellectual and search tasks in the game related to the future career.

The use of social networks for branding of higher education institutions and their divisions is not fully explored. Also, the use of official pages in social networks for career guidance activities has not been investigated.

However, there is an absent and unexplored question of where exactly the chosen profession can be obtained. That is, in which institute and department do they teach the chosen specialty. And, in fact, the use of official pages of departments of higher education institutions is a relevant way to inform about specialties and carry out advertising activities. And posts with information about the specialty are important.

The purpose of career guidance posts on the official pages of the departments is to encourage the applicant to choose to study a specialty at your department and to get acquainted with the admission requirements directly to you. After all, different institutions of higher education for the same specialty may have different study programs, different costs and study conditions.

The official pages of the department in the social media of the Internet include:

- Website;
- Section on the official website of the institution of higher education;
- pages in social networks (Facebook, Instagram, etc.);
- Wikipedia article.

3. Methods of Career Guidance Activity of Department of Higher Education Institutions in Social Networks

To achieve the goal of the work, namely: methods of career guidance activity of department of higher education institutions in social networks the following tasks must be completed:

- analyze social networks that are the most popular for forming the branding of a higher education institution;
- develop a formal model of the informational image of the institution of higher education;
- develop requirements for the formation of official pages of divisions of the institution of higher education, which will correspond to the target audience and do not contradict the principles of the institution;
- develop an algorithm for creating the official page of the units of the higher education institution;
- develop stages using the official page of the unit during career guidance activities;
- implement the developed algorithms in management the official pages of the Department of Social Communications and Information Activity of Lviv Polytechnic National University in social networks Facebook and Instagram and analyze the results of career guidance activities.

3.1. Means of information activity of university departments in social environments of the Internet

An official page must be created to carry out information activities of the university's divisions in the social environment of the Internet. The creation of the official page of the university's subdivisions takes place by creating pages in social networks.

The most popular social networks for creating official pages of university divisions in the social environments of the Internet are such as: Facebook, Instagram, Telegram.

Facebook is a social network on the Internet created for students of American universities. Today, the social network is the most popular and has the largest number of users. Facebook provides the opportunity to create pages for personal branding and create virtual communities of various types. The network is popular for event planning, live broadcasts, and the ability to create a store.

Telegram is a cloud messenger for exchanging messages, photo and video files, which can be accessed from any device with Internet access. Another feature of the messenger is the ability to create channels (chats) and telegram bots. This feature of the messenger is a good function for quickly informing a large number of people.

Instagram is a social network of photo and video content. Instagram allows you to create photos and videos, apply filters to them, and share them on other social networks (such as Facebook). The social

network Instagram provides an opportunity to develop opinion leaders, who are called influencers there, and a new concept of "influence marketing" is emerging.

It is worth noting that the informational image of the unit can form several official pages in social networks of the Internet.

3.2. A formal model of the informational image of the university department in the social environments of the Internet

The formal model is presented in the formula (1):

$$InfImage = (Platform, User, Arm), \quad (1)$$

The components of the model are: *Platform* – platforms (social networks, sites) to create an informational image, *User* – users of official communities, *Arm* – the number of performers, that is, responsible for managing official pages in social media on the Internet. The platforms for creating and managing the information image of the university unit can be: sites, virtual communities in social networks, accounts (personal pages) in social networks, etc. [15-16] The choice of platform is made by the manager and responsible for the management of the official pages based on the analysis of the subject area and reference communities.

$$Platform = \{Platform_i\}_{i=1..N^{(Platform)}}, \quad (2)$$

where *Platform_i* – i-th information image platform, *N^(Platform)* – the number of platforms involved in the formation and management of the information image.

The number of users depends on the subject area and the type of platform [17-18]. Depending on the platform, participants can be: site users, members of virtual communities, followers of a personal page (account) in social networks.

$$User = \{User_j\}_{j=1..M^{(User)}}, \quad (3)$$

where *User_j* – the j-th user, *N^(User)* – number of users.

Performers are a team that creates and manages official pages in social media on the Internet. The number of performers depends on the tasks and the platform on which the information image is managed. The web project manager, a specialist responsible for success and management tasks, forms a team that includes specialists of the required field and qualifications [19-20].

$$Arm = \{Arm_k\}_{k=1..K^{(Arm)}}, \quad (4)$$

where *Arm_k* – k-th performer, *N^(Arm)* – number of performers.

Forming a team is an important step in creating and managing an official page. The team is formed from specialists who are responsible for the implementation of a certain direction. The head of the division deals with the selection of necessary specialists and the formation of a team of performers. The executive team will include a number of specialists who will be constantly involved in the process of organizing the life cycle of the page and will form its basis. However, at various stages of creating a page, outsourcing specialists can be involved to perform specialized tasks.

3.3. Requirements for creating a page of the department of the institution of higher education in social networks

The appearance of the main page is one of the most important elements of branding and advertising activities in the social environments of the Internet. The requirements for the pages of higher education institutions and their departments are different from ordinary pages for goods or services, given their specificity and target audience.

The figure 1-2 shows screenshots of the main page of the Department of Social Communications and Information Activities of the Lviv Polytechnic National University filled in according to the requirements [21-22].

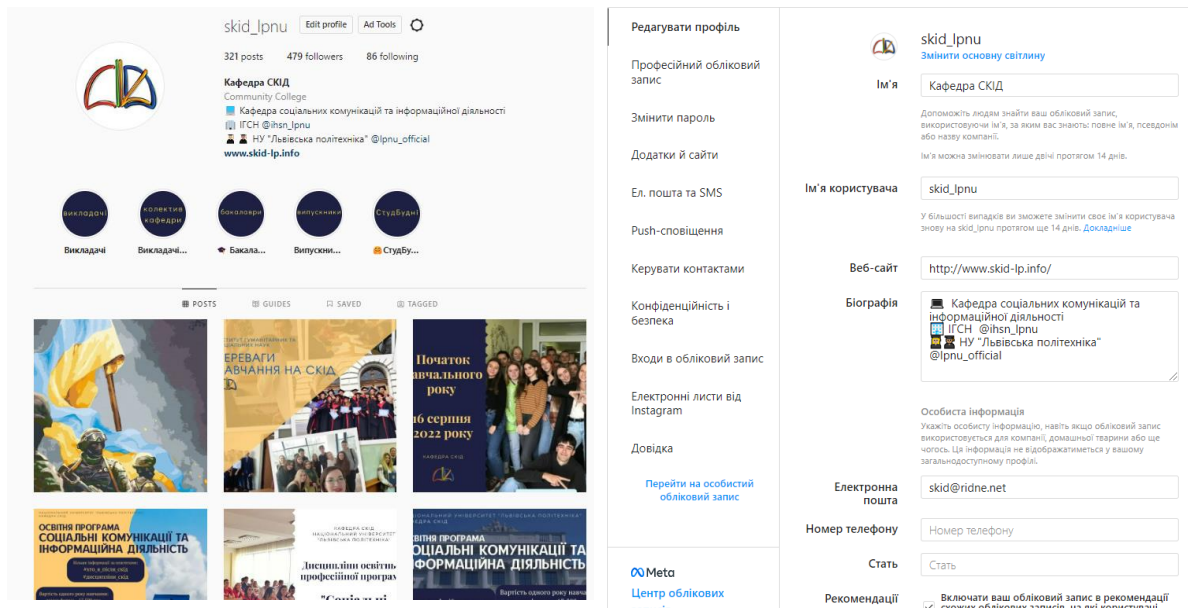


Figure 1: View of the main page of the SCIA department on the Instagram social network

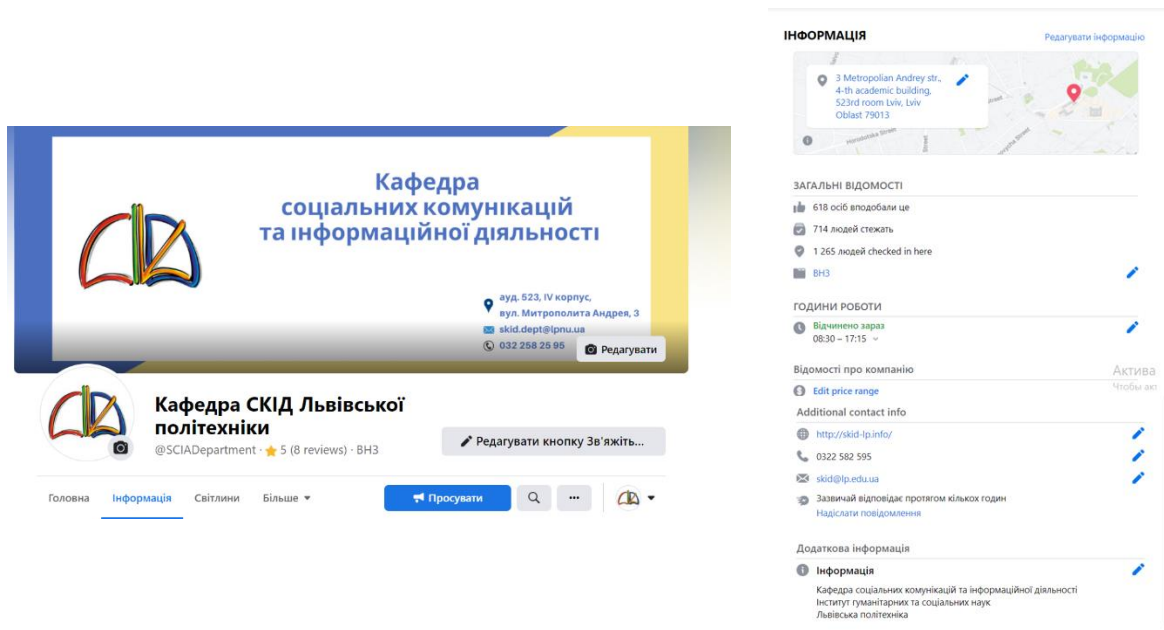


Figure 2: View of the main page of the SCIA department on the Facebook social network

Therefore, the urgent task is to formulate requirements for the general appearance of the official page of the department in social networks. So, the requirements are as follows:

- logo of the department;
- the name of the page of the department with affiliation to the institution of higher education;
- information about the department ("cap" of the profile) with the following data: page title, full subdivision name, institute/university abbreviation, university affiliation, department website, department address, telephone number.

The published information on the page of the department of the institution of higher education must meet the following requirements:

- comply with the content plan agreed in advance with the head of the department (for example, the head of the department);
- should relate to the department and the university, the main areas of its activity;
- should not contradict the Corporate Code of the university;
- be diverse (use all types of content, such as: entertainment, information, user, interactive, advertising);
- use hashtags.

3.4. Process for creating pages of university department in social networks

When creating official pages, it is necessary to observe the main stages of the life cycle of virtual communities. Namely: planning and analysis. It is necessary to carry out a clear and high-quality analysis of the main area of the department, its target audience, and to carry out an analysis of the reference communities of the department. It is important when creating a page and in further management to form a content plan for a certain period of time, and to coordinate it with the head of the department.

Algorithm for creating the official pages of university department in social networks is presented on figure 3. The algorithm was created and improved on the basis of the life cycle of the project [23] and the virtual community [24].

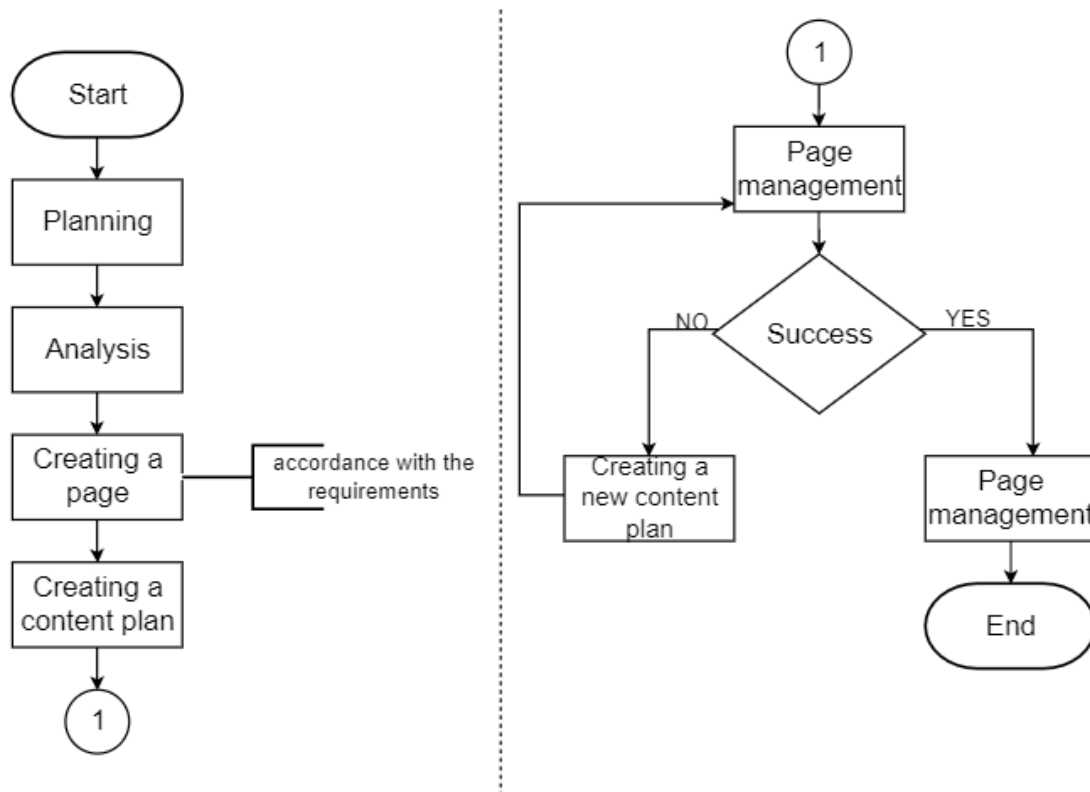


Figure 3: Algorithm for creating pages of university department in social networks.

If the management of the official page is not successful, then it is necessary to develop a new content plan analyzing all the risks and failures of managing the page.

3.5. Use of official pages for career guidance activities during the admission campaign

Management of the official page in compliance with the content plan and requirements for posts is always required. Don't forget to use all types of content for better interaction with the audience of the

page. Usually, the audience of the page consists of employees, students (if we are talking about the department), and interested persons.

Departments and faculties of universities, which conduct educational programs, are most in need of informational and advertising activities in social networks. As in our time, this is one of the best ways to declare yourself to a wide audience. One of the tasks of such departments is the recruitment of students and participation in the admissions campaign. In order to manage the page for career guidance activities during the introductory campaign successfully and efficiently, you need to follow the stages presented in the figure 4.

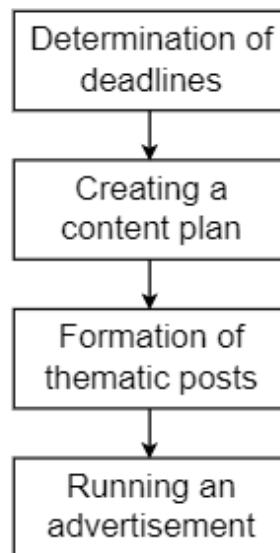


Figure 4: Stages of page management for Career guidance activities.

Stages of page management for career guidance activities:

1. Determination of the terms of career guidance activities for the introductory campaign. The creation of posts and online events to attract applicants should be on a permanent basis and to preserve the informative image of the department. However, there are time limits that require the most attention for vocational guidance activities. These are three months of summer: June, July, August. Entrants have the results of entrance tests, register in the entrance hall and choose a specialty for admission.
2. Creation of a content plan for the introductory campaign period. It is necessary to create at least 2 posts per week on a vocational guidance topic so that the applicant can quickly find the information he needs.
3. Formation of thematic posts. During the admission campaign, 80% of posts should be on topics relevant to applicants. The career orientation topic of the post includes:
 - specialty name;
 - the name of the department that trains specialists in the chosen specialty;
 - terms of study;
 - form of study;
 - cost of education;
 - contact information of the department;
 - licensed volume.Also, you should add posts about disciplines to be studied and future professions.
4. Running of advertising. To the organic coverage of posts, it is worth adding advertising of the post and, with the efforts of the department's employees, spreading the posts in the communities for entrants.

Figure 5 shows a template for creating a picture for a career guidance post for pages in social networks, and Figure 6 shows a ready-made post according to the template on the official page of the department of social communications and information activities on the Instagram social network.

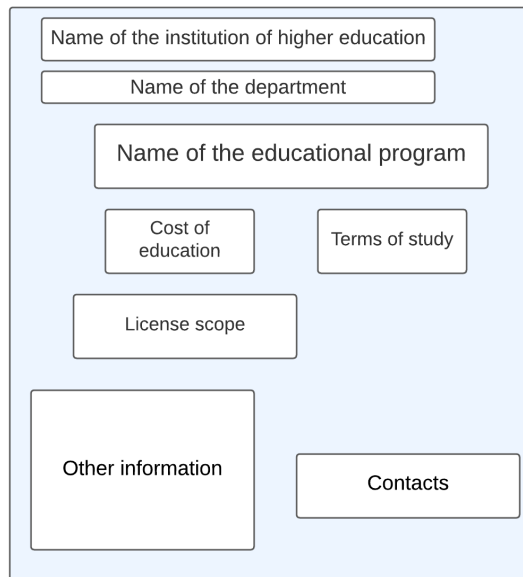


Figure 5: Post creation template.



Figure 6: A post on the Instagram social network

4. Results

The tools and methods of information activity of departments of higher education institutions presented in the work were implemented at the Department of Social Communications and Information Activity of Lviv Polytechnic National University for three years.

To demonstrate the results of informational and advertising activities, career guidance posts in social media on the Internet were selected. Selected posts for the admission campaign for 3 years (2020-2022). Informational and advertising activities of the Department of Social Communications and Information Activities take place in two social networks, namely: Facebook (<https://www.facebook.com/SCIADepartment/>) and Instagram (@skid_lpnu).

The general terms of the admission campaign each year are the same, one month for the department of documents, only the periods differ. However, 3 months (June-August) are chosen every year for active career guidance activities in social networks, which include the active phases of the admission campaign (registration in offices, uploading documents, submitting applications, recommendations for enrollment). Career guidance posts were used the same in both social networks. Other posts and stories differ, taking into account the specifics and target audience of social networks.

In the *Facebook* social network, the main statistics are represented by such indicators as: view post, post coverage, interaction.

Post impressions is the number of times the post was on the screen.

The post reach is the number of people who have seen the post at least once.

Post engagement is the number of times people interacted with your post through reactions, comments, shares, views, and clicks.

Three posts from each year are selected for graphical presentation of the results in the table and graphs (Table 1 and Figure 7).

Table 1

Indicators of posts in the Facebook social network

	2022			2021			2020		
Post date	8.07. 22	26.07. 22	11.08. 22	15.06. 21	16.07. 21	31.07. 21	30.06. 20	21.07. 20	20.08. 20
Post impressions	26634	56798	25792	8474	13832	8539	547	733	748
Post reach	24754	43426	18648	7302	12918	7970	428	591	527
Post engagement	905	1646	703	293	301	311	103	125	80

It is worth noting that every year different methods of promoting posts were used to increase the presentation of indicators. For example, in 2020 it was an organic increase in reach, administrators and moderators of the page did not conceive of additional tools and methods to promote the page in social networks. In 2021, the staff of the department was involved in the promotion of posts, whose task was to distribute posts in the groups of our target audience. In 2022, a paid advertisement of a post on the social network was added (advertisement with a duration of 2 days and a budget of no more than 10 dollars).

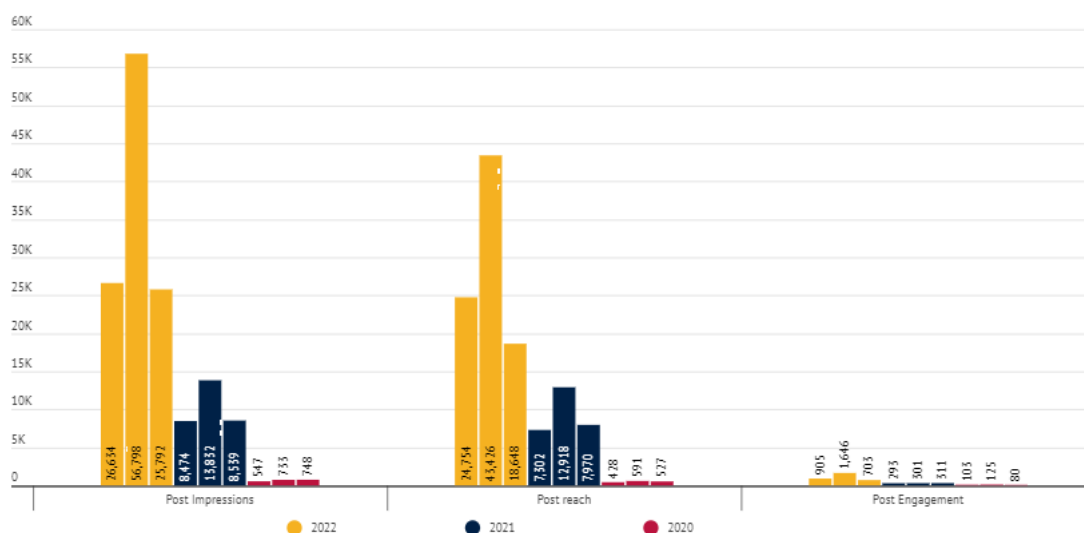


Figure 7: Statistics of posts in the social network Facebook

In the Instagram social network, the main statistics are represented by such indicators as: audience reach and interaction with content.

Post reach is the total number of views of a post by users of a social network.

Post engagement is profile actions related to a post, including reactions, comments, shares, and saves.

Promotion of posts on the social network Instagram has been carried out organically and with the help of advertising for all years.

Three posts from each year are selected for graphical presentation of the results in the table and graphs (Table 2 and Figure 8).

Table 2
Indicators of posts in the Instagram social network

	2022	2021	2020
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Post date	8.07.22	26.07.22	11.08.22	15.06.21	16.07.21	31.07.21	30.06.20	21.07.20	20.08.20
Post reach	8403	226	2563	306	6310	259	98	95	94
Post engagement	80	26	29	46	54	30	84	49	27

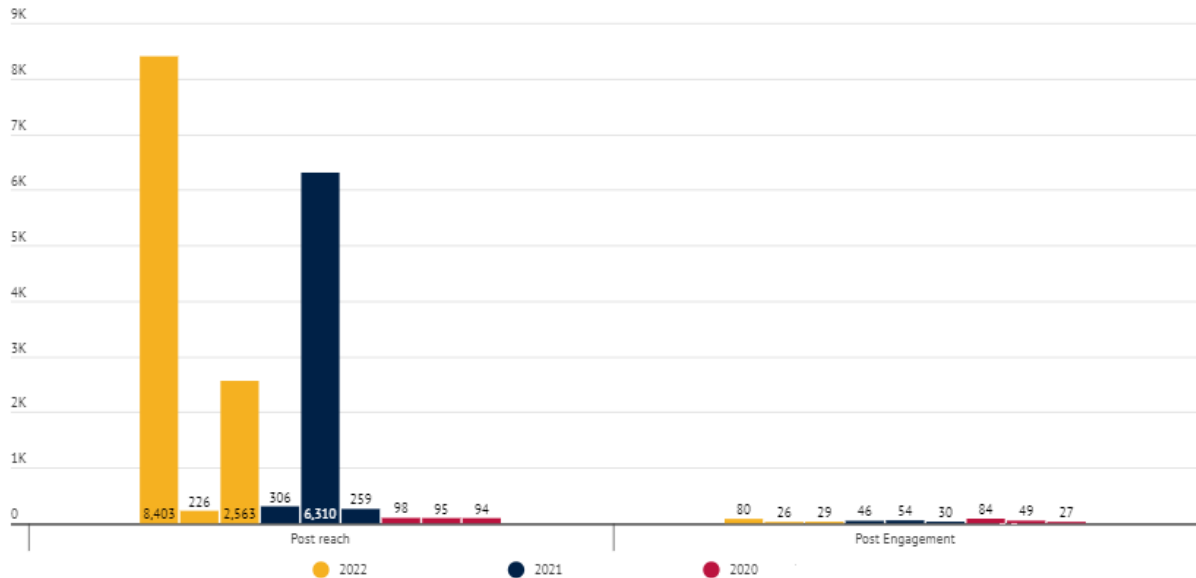


Figure 8: Statistics of posts in the social network Instagram

In fig 9. statistics of the last career guidance post for 2022 in two social networks are presented. To promote which, paid advertising was used in both social networks. For comparison, let's take such an indicator as: audience reach and interaction with content.

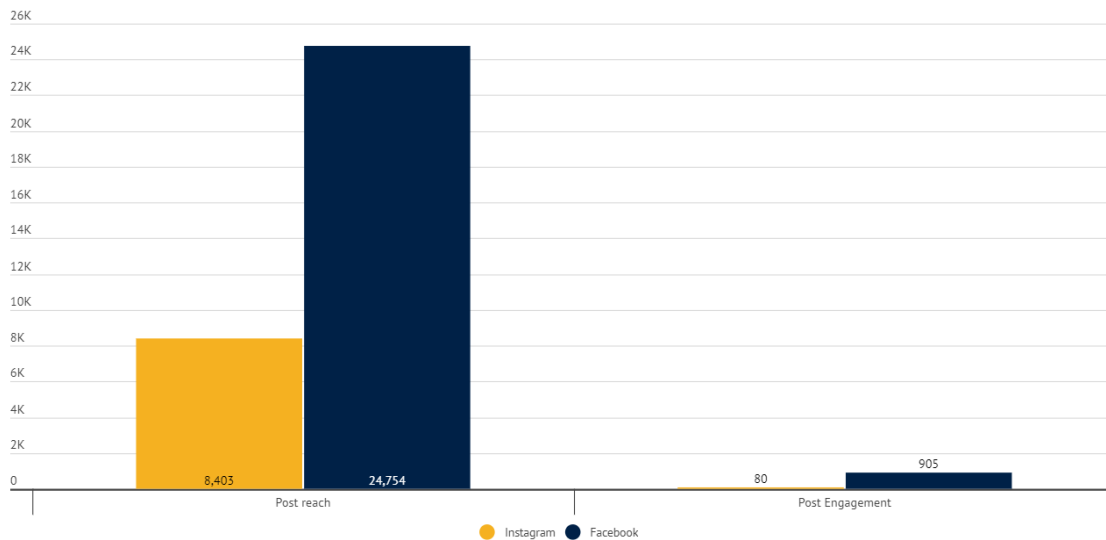


Figure 9: Statistics of post in the social network Facebook and Instagram

From the obtained results, we can conclude that paid advertising gives better results in reaching posts. Also, the Facebook social network receives better feedback from advertising, mostly parents of applicants.

5. Conclusion

In the article analyzes the social networks that are the most popular for forming the branding of a higher education institution. A formal model of the informational image of a higher education institution has been developed. Requirements have been developed for the formation of official pages of divisions of the institution of higher education, which will correspond to the target audience and do not contradict the principles of the institution. An algorithm for creating the official page of the subdivisions of the higher education institution has been developed, which will enable the creation of a higher-quality informational image of the subdivision in accordance with the requirements and save time for creation. Stages using the official page of the unit during career guidance activities have been developed. Developed algorithms have been implemented in the management of the official pages of the Department of Social Communications and Information Activity of Lviv Polytechnic National University in social networks Facebook and Instagram. Three years (2020-2022) were chosen to demonstrate the results of the career guidance activity of the department during the admissions campaign. The statistics of the last career guidance post for 2022 in two social networks, which were promoted using paid advertising, are presented.

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