Model of Informational Support for Social Network Administrators' Content Creation

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Abstract. The article analyzes models of informational support for the social network administrators in forming corporate pages. Using the proposed model allows to develop an effective corporate blog on the social media platform. The authors view the social network as an SMM marketing tool. It is a business development tool that creates additional convenient opportunities for promotion and does not require significant additional investment. The purpose of such a model is exploring the technological capabilities of content management informational support. These technological capabilities may relate to the development of a social network administrator's informational support. The article defines the functional and informational measures for providing a social network administrator and describes algorithms for content filling in a social network. The article also shows statistics of Instagram-users active pages according to a graphic and text page contents.

Keywords: social media, SMM, content plan, corporate blog, social networking service, scientific community

1   Introduction

Today most areas of our lives are relating to digitization. Consumers seek information, make purchases and spend a lot of time online. So it is extremely important for marketers and managers to find the right methods of communication with the public, since each of the Internet users can be a potential customer. The demeanor of such a user can change as well as the speed of innovation in the marketing industry, which largely covers the Internet.

Improving the information technology promotes the use of social networks. According to Worldometers analytics, as of 2019, the number of Internet users in the world is 4.3 billion [19]. Most of them are registered on social networks. Instead of just advertising comes the phenomenon of "word of mouth», which is extremely

popular on the Internet. Social networking is a platform for promotion and branding of products and services for businesses and users.

Social media marketing (SMM) is a relatively new field for new businesses. Regardless of the methods of activity and size of the enterprise quickly learn and explore it. There is no single and common interpretation of this concept, but analyzing publications can formulate it [18, 17].

Social Media Marketing (SMM) is an online marketing tool that provides through social networks the process of promoting a brand or company, service, product. During this process, content is created that is subsequently updated with the quality work of users and managers.

The main tools of SMM-manager in the social network include: content collection, monitoring of the social network, trend research, equipment, software. The lack of a well-defined method for evaluating the effectiveness of social network marketing is one of the most important problems that needs to be addressed.

2   Related Works

The lack of a well-defined method for evaluating the effectiveness of social network marketing is one of the most important problems that need to be addressed. To determine the effectiveness of this should apply certain criteria (indicators).

Such criterion can be *the level of reach* that is estimated by the total number of followers to refresh the page. The calculation of this metric determines the value of a page on the network at the level of social space. The higher the metric, the greater the potential for content promotion the reach's level [10].

The success of the distribution also depends on *the level of commenting* on the posts that users leave, so you should systematically review published comments.

Indicator of the attract users is critical to success in distributing content manager in the social network. Number of retweets, comments, mentions, "Shares" is a quantitative indicator of the level of interaction and users engagement.

Companies focus on publishing content, forgetting to communicate with their followers. Therefore, it is necessary to make real measurements of such an indicator as *the frequency of responses to user's comments and wishes.*

It's worth noting that social networks are a good targeting option. They have a large number of criteria for target audience setting, ranging from marital status and age (classic target audience analysis) to musical preferences and political views (psychographic analysis). This approach makes it possible to accurately select target audience [11].

The process by which target audience loyalty is formed not only to the seller but also to the employer is extremely important. By working with an audience that wants to receive information about a product, service, brand, their competitive advantages, and in a timely manner answering questions from consumers, managers receive a valuable resource – loyalty. Various special offers and promotions for consumers that are important to the establishment are based on loyalty. Thus, according to the Digest 2018, 29% of users of the social network, ie 9.3 million Ukrainians, searched for

information on the Internet about the product they wanted to buy, and 60% of users specified information about goods on the social network via mobile phone directly from the store profile page.

Therefore, incorrectly selected content may be critically affected by statistics as it will not be interesting and undesirable for its target audience. [4]

According to a study released by the marketing agency Razorfish, social media users are not afraid of advertising and the presence of companies on these social media channels. On the contrary, they buy products based on advertising and recommendations found on social networks. Almost 76% of respondents said that would not mind advertising on social networks to which they followed. 49% of respondents said they purchased the product according to the recommendations found on social networks, while 40% of respondents bought the product after seeing the advertisement there.

Razorfish experts say that users search for information, and companies need to provide this information to satisfy their need. [3] Summarizing the Internet audience in Ukraine, according to Digest Uanet 2018 and research by GFK Ukraine, is as follows:

- 39% – regular Internet users, population aged 16 years and over$
- 51.5% population aged 16-59 – half of the working-age population of Ukraine uses the Internet;
- 31.4% of users have above average income and 42.1% of users have average income;
- about 20 hours a week, Ukrainians spend online;
- 13 out of 14.9 million users - 87% of users use the Internet daily.

The collection of statistics and their processing allow for an immediate response to the requests and needs of the audience. It is also an opportunity to get the right information to solve the method of operation of the enterprise brand on social networks.

Reputation management is the processing of feedback information from the target audience and responses to comments, as well as influencing the customer's opinions and views by posting the desired content on social networks.

3   SMM-marketing characteristics' analysis

Important points in the work of the SMM-manager of social networks are periodic repetition research needs of the audience. People who distribute messages on their own will have more confidence in the potential consumers of the product or service [3].

There are a number of problems with the development and operation of SMM marketing, including:

- the risk of financial resources squandering;
- the risk of choosing the wrong target audience;

- the slow update information about the target audience;
- lack of strategy;
- the problem of quality audience;
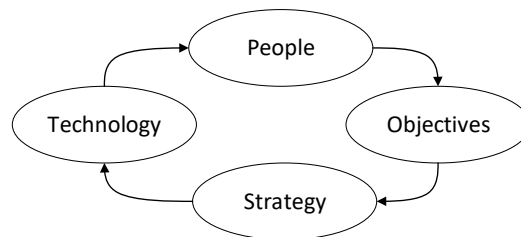- erroneous only focus on increasing the number of audience.

Fig. 1. POST-method block diagram

Josh Bernoff, Senior Vice President, Research Group, believes that using the POST method is a must when designing an SMM action set (fig. 1):

- P: People – target audience analysis. Developing an SMM strategy should begin with exploring existing or potential consumers and analyzing the social media platforms they use, then doing analytical research and identifying which online activity users prefer.
- O: definition of goals. The company must have goals for its future online activity.
- S: development of strategy of communication with subscribers.
- T: Technology – the choice of tools in social networks.

4   Features of creating a corporate blog on the social media platform

In recent years, social networks have acquired full-fledged mobile versions of their sites and have increasingly integrated mobile technologies. This allowed most of the users to stay in touch all the time. In the near future, mobile versions of the networks will not be inferior to the functionality of the regular version of sites. With the advent of the digital age and the development of Internet technologies, the structure and mechanisms of marketing communications are changing in the economy.

SMM does not have an instant effect, but produces long-term results if it is targeted and properly used, especially within the mobile version of social networks. Its main advantage is the low investment cost compared to the possible effect of the measures. This platform allows the company to quickly get feedback on their work and respond to them. By attracting loyal customers to their communities, companies arrange promotions, photo contests and special offers for their followers.

Some of the modern social networks work in the mode of visual exchange, so the main intention of each user of such a community is to share and find only the best photos and videos [12].

This sharing mode is one of the most popular social media platform Instagram, and every small business should consider using it. From collecting insights to selling products, Instagram continues to introduce tools to help business owners succeed on the social media sharing platform.

The boundary between personal and corporate blogs is often blurred for many entrepreneurs and small business owners. It is important to remember the purpose of each profile and make a clear delineation.

The most important component of Instagram promotion is concept development, but that many companies miss it. This requires a clear statement of purpose and the creation of a strategic plan, which must be prepared to answer the following questions: what communication channel will be used, who will be a potential target audience, how will the SMM campaign (alone or through a specialized department, agencies), etc. [10].

The concept of an Instagram manager is a game plan to raise awareness for business and increase the attention of the business owner on the social network. Creating a concept for running a page on Instagram involves setting marketing goals, choosing the right applications for using and measuring the results. The concept guarantees that social media has a positive impact on business.

Managers should publish industry-specific content on a corporate page on the network, create and manage campaigns, and optimize how businesses appear in search results, so that executives can generate more likes and dislikes that increase their audience. [19]

The Instagram manager plays a major role in promoting the product / brand, because all the functionality of the page is assigned to it. The main goals in managing a manager page on a social network are:

- the raising awareness of the page and its products;
- the promotion of shares;
- the increasing the number of "likes";
- the increasing the number of page's followers;
- the increasing saved posts on the page.

In addition to setting up an account on the social network, the primary task is to consistently and systematically create a popular brand, implement a branded approach in company policy, because branding is a big part of content creation.

Fig. 2. Brand management components

Another responsibility of the manager is to create a social media schedule. This is a set of calendar content ideas that will help consistently deliver quality content to the social network, which is key to achieving goals and increasing engagement. Initially it is necessary to create a list of all the different types of content that will be constantly distributed. The most common practice is to follow the rule "80/20": 80% of the content is useful and 20% is marketing. As 67% of consumers now use social media as a customer service channel, they need to make sure that they communicate with their audience in a timely manner. Having made a systematic presentation of the content, the manager must carry out an analysis, which will result in statistics on the following indicators:

- followers / preferences – the size of the audience on social networks;
- impressions – the number of users who actually see posts on social networks;
- reach – the number of likes, comments the page content receives;
- clicks – the number of clicks on posts.

5   Development of informational support model for the social network administrator to form a corporate page

A formal model for distributing publications on a social network (etc. Instagram) is a description of functional and informational measures by means of diagrams for modeling and description of processes for data processing in the system.
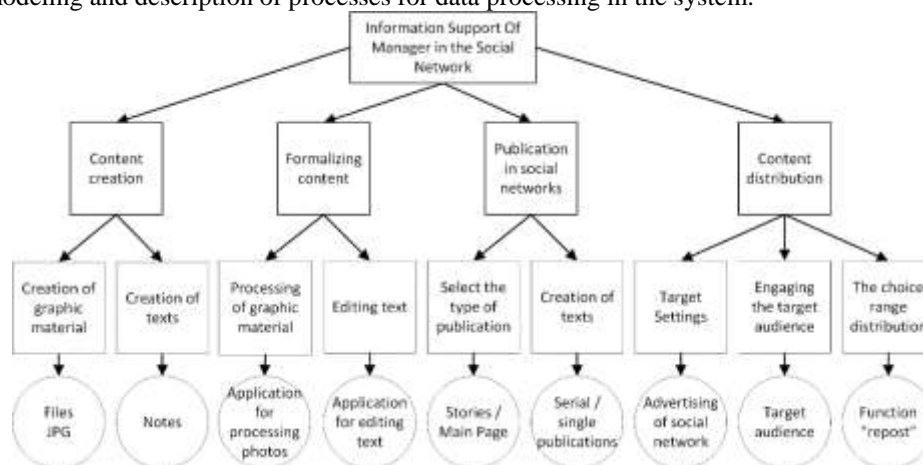

Fig. 3. Decision tree

The formal task model, the Decision tree, demonstrates as a series of goals and their sub-goals with the help of specific means ensures the fulfillment of the main goal - information support of the social network manager [6].
An information model displays a set of information that characterizes the properties and state of an object, processes, phenomena, and shows environmental links.
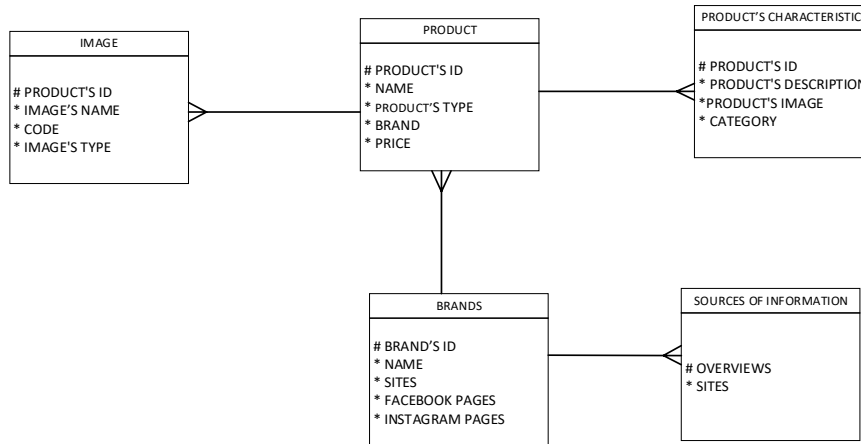
IMAGE

\# PRODUCT'S ID
* IMAGE'S NAME
* CODE
* IMAGE'S TYPE

PRODUCT

\# PRODUCT'S ID
* NAME
* PRODUCT'S TYPE
* BRAND
* PRICE

PRODUCT'S CHARACTERISTICS

\# PRODUCT'S ID
* PRODUCT'S DESCRIPTION
*PRODUCT'S IMAGE
* CATEGORY

BRANDS

\# BRAND'S ID
* NAME
* SITES
* FACEBOOK PAGES
* INSTAGRAM PAGES

SOURCES OF INFORMATION

\# OVERVIEWS
* SITES

Fig. 4. Informational model

Five entities are defined to construct an information model. The essence "Product" contains information about the product that will be advertised on the page. This essence is linked by a one-to-many relationship with "Product's Characterisic" and "Image", which contain information for posting on an Instagram page. The essence "Brands" determines the affiliation of the advertised product to a specific brand and contains information about the official resources of that brand. The essence "Sources of Information" contains information about the placement of text content from a review of a specific brand product to fill the page on social network, etc. Instagram.
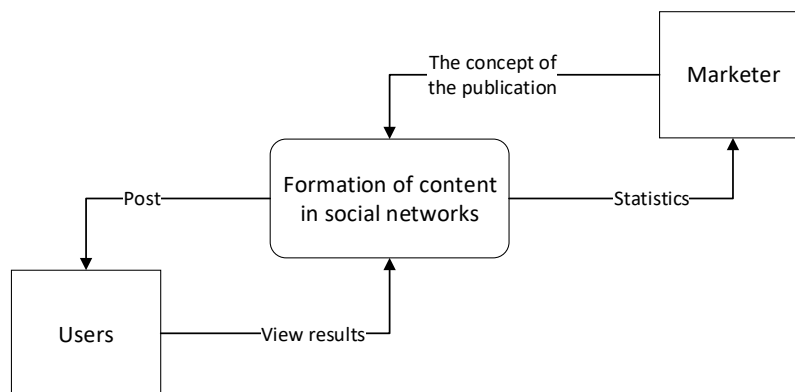

Fig. 5. Functional model

The Data Flow Chart is the first in the DFD notation chart hierarchy. Figure 5 depicts the operation of the admin information system as a whole. The main process is the creation of content on the social network. When building a page on a social network and filling it with relevant content, it is advisable to take into account the statistics obtained from the analysis of user activity.
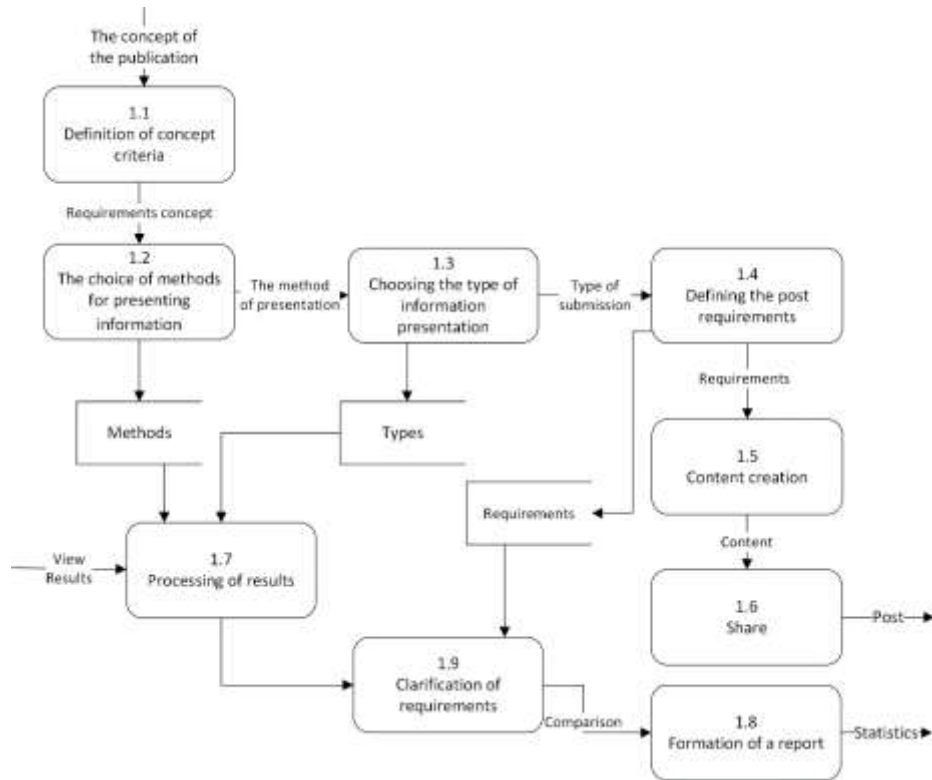
Fig. 6. Data flow diagram in detail

The diagram in Figure 6 shows the details of the main process "Content Formation". The concept of creating a content posting post on a social network goes through nine processes: defining the concept criteria; choice of methods of presentation of information; choice of type of information presentation; determining the requirements of the post; content creation; sheares; processing of results; clarification of requirements; report generation.

An important element in improving the work of the manager is to create and maintain a content planner.

Content-plan is a social networking technique that helps you organize the information that will be directed target audience. A content-plan will help to share what and when a manager should post to the page. Previously, the manager produces graphic and textual content, which is distributed by heading, according to the type and method of its subsequent publication. The main criterion for creating a content-plan is statistical information. It is based on what information message should be included in the post.

The manager of social network Instagram works not only with content but also with users who usually provide feedback. Basically, social networks are a public platform. Negative comments that are left by the fans always attract a lot of people. Good reviews or comments work as a catalyst for decision making. Customers who read these reviews will evaluate the manager's performance by the following criteria: speed

of response, response, and response to these complaints. Competitors are always looking for a chance to capture the customer base. They can contact those angry customers and lure them. It is extremely important for the manager to resolve such a conflict as soon as possible, by promptly responding to the client in the comments under the post, and then writing in personal messages. The purpose of this response is to provide the client with an understanding that the manager is bad and the manager is ready to help. The comment will demonstrate to other users the indifference to the current situation and stop the process of spreading the negativity to other potential customers. Also, you should not remove any negative posts from the pages, if customers see only positive comments on the page, they will think that you are removing all negative ones.

For compensation, the customer can be offered a discount system or special offers that will cheer up and mitigate the unpleasant effect of the situation he has with the store. Another point of conflict may be the replacement of staff in this position. This will cause the system to crash, already worked by a previous specialist.

In order to avoid such a situation, it is necessary to act responsibly to the delegation of powers and to follow the already established algorithm of creation, publication and distribution of the publication.

6 Results

Creating posts, the manager for the further work should monitor the statistics of each post, and in general for all time, because they are exactly what they should pay attention to, which should be changed in the concept of maintaining a page on Instagram. Based on the suggested methods and tools, posts have been created on the Instagram social network to test the impact of graphic and textual information on the popularity of these posts. For example, a branded clothing store Instagram page was selected and comparisons were made based on the quality of the graphic and textual material.

Fig. 7. Post № 1

Fig. 8. Post № 2

Post in Fig. 7, which used graphic content from the brand's official site, collected 54 likes, 2 comments, 34 profile visits after a photo was viewed, and 5 clicks to the website. Account reach is 1466, where 10% are not page subscribers. In total, the post has been viewed 2,278 times. Of these, 1979 appeared on the Home tab once, accounting for 87% of the total, 12 in profiles – 0%, once with hashtags – 0%, and 286 – another source – 13%.
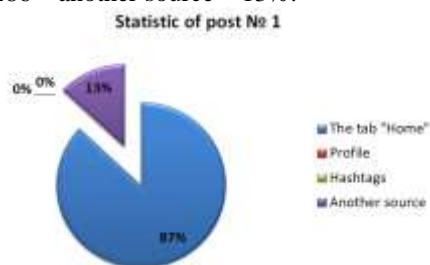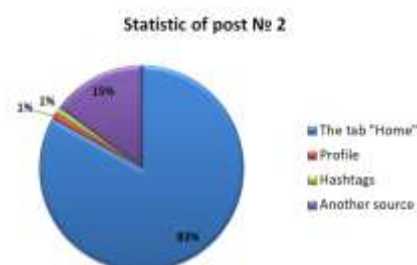

Fig. 9. Post № 1 display statistics   **Fig. 10.** Post № 2 display statistics

The post in Figure 8, which was created from its own graphic content, gathered 23 people, 2 comments, 1 content and 4 posts added, 16 post-light visitors and 5 clicks on the website. Account reach is 1269, where 12% are not page subscribers. Overall, the post has been featured on the Home tab 1835 times. Of these, 1513 times appeared on the tab "Home", accounting for 83% of the total, 19 in profiles – 1%, 23 times by placement – 1%, and 280 – another source – 15%.

7   Conclusions

Effective work of SMM manager on Instagram is an important criterion for promotion of goods, brand, companies, aimed at increasing the number of subscribers, target audience, development, improvement and reputation of the company through the methods of forming consumer loyalty to the goods, company, brand. The theoretical aspects of effective and high-quality management of such SMM activity allow progressively oriented companies to successfully promote their product, company, brand in the foreign and internal market. This is facilitated by the purposeful use of social networks, including Instagram, and the analysis of information about users and consumers of goods and services, recommendations and preferences, monitoring competitors and partners, when developing, producing and marketing a new product or brand. The prospects for future research in this area are to develop different methods and indicators for calculating the effectiveness of the SMM industry, to develop and improve strategies for implementing this activity and to increase the scientific and methodological knowledge base in this field of marketing.

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