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Process modelling for business management of online marketing campaigns through social media

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Abstract. The online environment is becoming more competitive each day, and the consumer's journey is becoming more complex, going through several marketing channels on their way to buying. Social media networks environments facilitate access to information and at the same time contribute to creating an image, a perception of reality. Building and strengthening social media reputation are essential for companies in 2018. To have credibility, a company must create and maintain a good image across all the social networks it finds. The more transparent and sincerer through their communication, the easier it will be for brands to maintain their reputation and gain consumer confidence, which can be achieved through social media. The article presents the main social networks used by companies to create digital marketing campaigns. The authors illustrate the steps needed to set up audiences on Facebook, Instagram and Twitter, organizing the information in tables in order to be easier to track. BPM Software is used to design process models for these online marketing campaigns.

1. Introduction

Social media marketing is the new form of communication. The main business benefit is to increase brand awareness and associate community building with minimal investment and a way to measure maximum results.

Social Media Marketing expresses the way to interact, to participate, to be at the heart of discussions, all of which have the goal of cultivating and developing trust relationships with existing or potential clients. The opinions of others, sometimes critical, help to outline and strengthen certain approaches. Thus, promoting through social media involves conversation, connection, community, clients, control, creativity, collaboration and content.

Presence in Social Media is an opportunity to reach the target audience, to involve and mobilize it. Facebook, Twitter, Instagram are social networks that enable brands to interact more frequently, closer and more humane with current customers and the potential ones. On the other hand, there is a virtual space for shoppers where personal content is very close to brand content.

There are many ways to advertise through online social networks by using a reach. These reaches do not provide a company with potential clients or real people interested in the business. The best type of reach remains organic (people who really distribute and react), and to have prolific campaigns in the international social networking environment, which means a company must make people want their product and to define their target audience.

The authors make a bibliographic research of the social networks used for the marketing campaigns of companies, regardless of their field of activity. An important part of these digital marketing campaigns is the use of social media channels in the online environment where consumers spend a lot of their time. The process of creating a marketing campaign on the main social networks, namely Facebook, Instagram and Twitter are analyzed. These campaigns have been modelled using the BPM Software, presenting all the related activities. The activities were organized in tables that include details about each of them. A process sheet was also drafted, presenting the fundamental notions underlying the elaboration of the process itself.

2. Methodology and current state

In his research, Carr (2017) presents through the data of a company the result of using Social Media and how it can be used to impose the company's performance.

Narayan (2018) presented solutions to win and maintain relationships with consumers by increasing their confidence in the online product purchase process. Digital marketing was also discussed in his work, which included Facebook and Instagram in a company's digital business growth plan through qualitative analysis.

Through his research, Ashley (2015) has determined how social media establish relationships with consumers and how they manage to stimulate them.

Content is a very important part of the Twitter marketing campaign, and Marwick (2011) has proposed a model to help improve the image of a brand.

Popp (2018) researched Facebook social network presenting the relationship between consumers and brand, as well as loyalty.

Lalicic(2018) noticed consumer reactions to improve the image of a company in the digital environment through a communication strategy using Facebook and Twitter as an example.

Hammick (2018) developed a quantitative study, resulting in the determination of three elements that lead to the development of a company's image and commitment to it.

Process modelling consists of the graphical representation or workflows of a company as a mean of identifying potential improvements. It is usually done by different graphical methods, such as flow scheme, data flow diagram, etc. BPM (Business Process Management) software has been used in this paper.

A process includes a series of steps and decisions involved in completing and achieving a goal. In a process, each event can trigger one or more activities, thus there is a one-to-many relationship.

Activities are the sum of actions, operations, and decisions that are made by several agents and do not need details. Each activity is written in the form of a substance that comes from a verb. A concise expression, omitting prepositions, articulations, to indicate the essence, is used.

Operators:

Each activity may have several successive activities, being linked by the use of operators: AND, OR, OR EXCLUSIVELY.

1. "AND" is a mandatory, parallel execution of successive activities. To eliminate ambiguity, if there are several AND operators in a process, they will be marked A1, A2, ..., Year. A comes from AND in English, meaning AND.
2. "OR EXCLUSIVE" indicates the exclusive execution of one of the successive actions. Also, to eliminate confusion, the notations X1, X2, ..., Xn will be used. X comes from OR in English, ie XOR.
3. "OR" consists of the execution of a minimum of one of the succeeding activities, or combinations thereof. The O1, O2, ..., He, O, O, OR.

An activity may have more predecessors associated with an operator named confluence operator (J1, J2, ..., Jn). J comes from JOIN and indicates that several successor activities are followed by the same activity. When a process diagram is performed, the input points are linked to the operator called START and the output points by the STOP operator.

3. Modelling marketing campaigns through social media

Table 1 represents a template named process sheet. This includes the underlying concepts behind the process.

3.1. Facebook

Table 1. General information regarding the process (Facebook)

Deliverable approver	The person who is authorized to approve the marketing campaign
Process Necessity	The process is necessary to conduct the marketing campaign through the social network
The necessity of the procedure	The procedure is necessary to ensure the transparency of the marketing process as well as the steps to be taken in conducting an advertising campaign on this social network
Deliverable	Marketing campaign
Beneficiary	Companies
Summary of the procedure	The flow describes step-by-step activities in marketing campaigning on the social network, launching it and tracking results statistically
Objective (Efficacy)	Making a marketing campaign, tracking your campaign activity
Objective (Efficiency)	Time to create an ad
KPIs	The reduction rate of time for a marketing campaign
Type of process	Specific
Application domain	Marketing

The modelling process of the Facebook marketing campaign is illustrated in Figure 1.

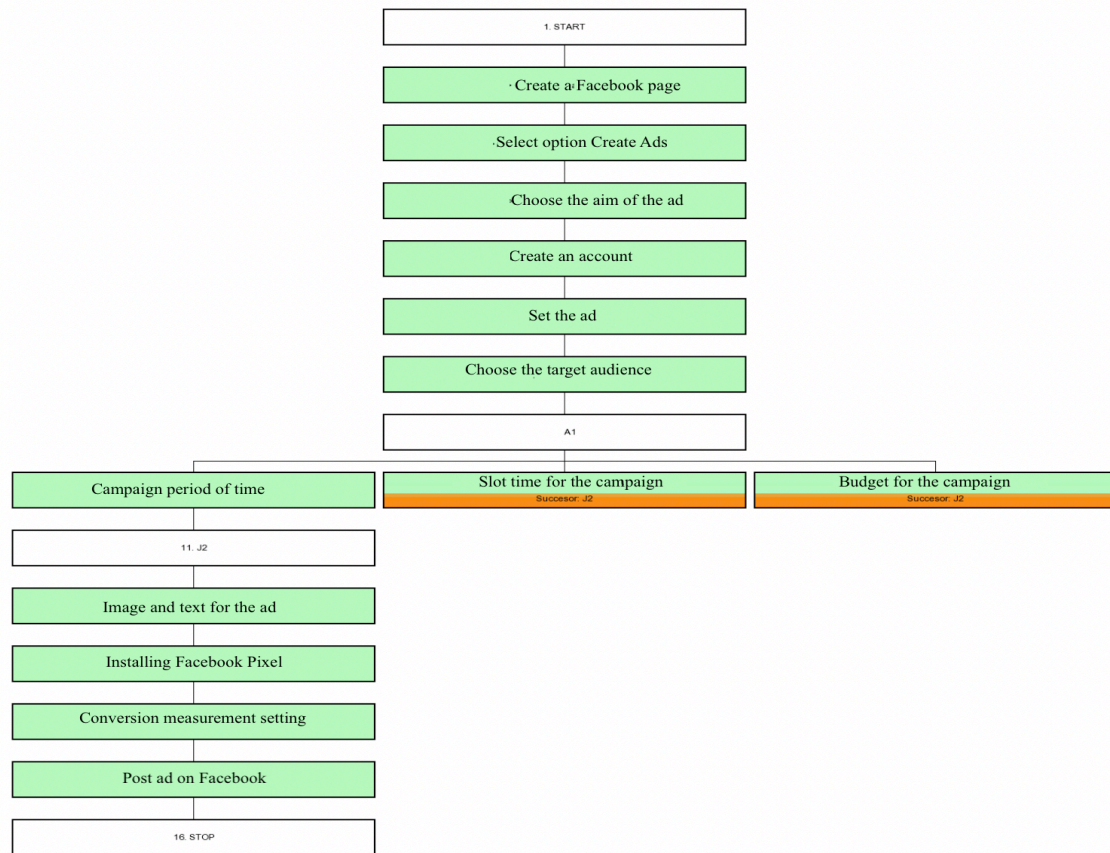


Fig 1. The Process Diagram of Facebook Marketing Campaign

Once a user profile has been created, there is section Create Ads which leads to the section where the management of the campaign can be done. Next, the purpose of the ad is decided, with several listed items. Facebook displays the different advertising to the target audience, depending on the goal chosen. The next step is to assign a name to your account, the next step being represented by Create an account. After making these settings, it can be customized the language, country of account, currency of payment, time zone. Start the targeting process very specifically so that the ad reaches the desired person. Continue by setting a budget and a timeframe in which the creative runs. Total budget is the amount that is allocated over the entire campaign, divided by the number of days for the creative. When choosing a daily budget, the amount will be entered per day, as will the total number of days. Follows the selection of the image for the ad and the text to play it. Install Facebook Pixel to measure conversions. Conversions are given by purchasing products and placing this activity under a category within Facebook, as well as their name, possibly a value. Conversion measures are set, then the ad is published.

This process comprises events that generate actions, which are illustrated in Table 2.

Table 2. Activities that make part of the Facebook marketing campaign modelling process

A1. Create a Facebook page
A2. Select option Create ads
A3. Choosing the purpose of the ad
<ul style="list-style-type: none"> • Clicks that lead to a website • Conversions made on the website • Promote posts within the Facebook page

<ul style="list-style-type: none"> • Facebook Page Like • Installations of the promoted app • Using the application promoted by users • Offers for users • Local business visibility • Posting events • Promoting products offered by the company • Attract new customers • Publishing video content
A4. Create your account and choose your settings
<ul style="list-style-type: none"> • Language • The country • Currency • Time zone
A5. Target audience choice
<ul style="list-style-type: none"> • Personalized audiences • Locations • Age • Sex • Known languages • Detailed targeting
A6. Allocated budget, timeframe, campaign duration
<ul style="list-style-type: none"> • Total budget • Programming: Beginning / Final • Optimize for creative delivery • Bid • Programming ads: All the time, according to a program
A7. Choosing the image and text of the ad
A8. Install Facebook Pixel
A9. Conversion measurement setting
A10. Advertise on Facebook

3.2. Instagram

The marketing campaign modelling process on Instagram is illustrated in Fig 2.

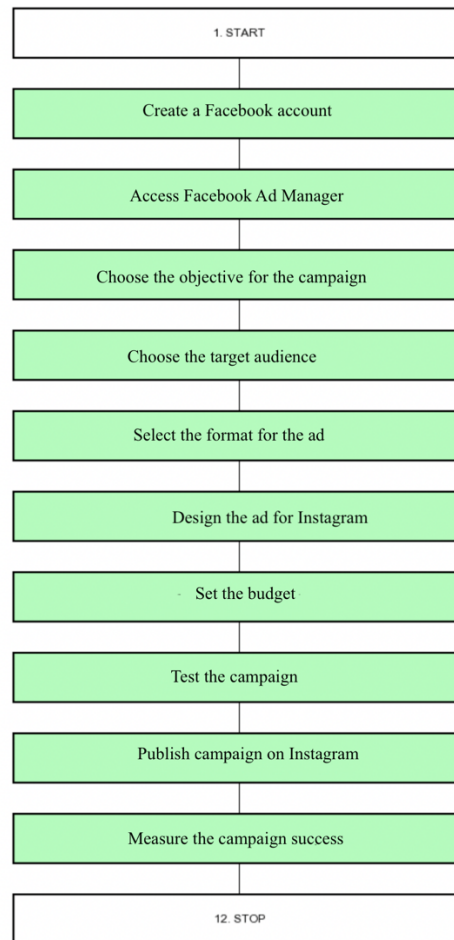


Fig 2. Process diagram of marketing campaign on Instagram

Instagram uses the Facebook advertising platform to run all the advertising campaigns. Therefore, any ad, goal, budget, and creation settings are done through Facebook Ad Manager. When the campaign creation process begins, a goal is set for it. Instagram Analytics is used to select the target audience. This tool provides information about a company audience and can be used to discover niche audiences. It is time to set campaign parameters through Facebook Ad Manager. The next step is choosing a format for the ad.

Ad campaign format:

- Photo and video ads: This represent a traditional photo or video, a feed-style post that comes with a small "sponsored" label, where the location of a post is usually labeled. The benefit of this type of Instagram ad is that it flows into the audience feed of a target company.
- Carousel ads: Carousel ads are an excellent way to tell a story about the company and display all the best pictures about it. Carousels also allow users to navigate through images at their own pace.
- Story ads: In ads of this type, there can be posted three consecutive ads, each of fifteen seconds each, to build an ad that looks and feels like a true story on Instagram.

Once this action has been completed, it is time to design advertising, which should take into account factors such as: logo inclusion, concise and direct content, competitions and prizes, and audience targeting. Follow the campaign budget setting part. To test the success of a campaign, Split Testing with

Facebook Ad Manager is used. Separate tests help understand how different aspects of ads - such as content, images, or action calls - affect the overall performance of the campaign.

Statistical Significance Calculator: allows a company to see if results are meaningful enough to be worn in the next campaign. Through it there can be checked the confidence level of the results. If the test results show a confidence level of 95% or greater, it is usually a good sign that the winning variation of the X test can be transferred to the following campaigns.

Instagram Insights: Used to see statistics on engagement level and reach.

Website Analytics: Used to track the number of visitors coming to your company website.

The actions underlying this process are outlined in the Table 3.

Table 3. Description of activities that make part of the marketing campaign modelling process on Instagram

A1. Creating a Facebook account
A2. Access Facebook Ad Manager
A3. Choosing a campaign goal
<ul style="list-style-type: none"> • Brand awareness • Getting the ad to the target audience • Traffic (generated by clicks) • Installing applications • Commitment • Video views • Conversions
A4. Choosing the Target Audience
<ul style="list-style-type: none"> • Age • Gender • Location • Language • People connected to Facebook
A5. Select ad format
<ul style="list-style-type: none"> • Photo and video ads • Carousel ads • Story ads
A6. Designing the Instagram creative
<ul style="list-style-type: none"> • Concise content • Including the logo • Competitions / Simple Awards • Target audience to the desired location
A7. Setting the budget
<ul style="list-style-type: none"> • Budget • Time schedule • Convert • Auction amount • Delivery type
A8. Testing the campaign
<ul style="list-style-type: none"> • Using the Statistical Significance Calculator
A9. Posting the campaign
A10. Measuring campaign success
<ul style="list-style-type: none"> • Facebook Ad Manager • Instagram Insights • Analytics Websites

3.3. Twitter

The process of modelling the marketing campaign through the Twitter social network is illustrated in Fig 3.



Fig 3. The Twitter marketing campaign process chart

Tweet Engagement campaigns allow to expand a company's content to a relevant audience on Twitter. Tweets can be promoted which are published organically or are only promoted to the target audience. A payment is made only when the data subjects are involved in the published content Impressions that do not generate a commitment are free of charge.

A "Tweet" engagement means all clicks on Tweet, including Retweets, answers, ratings, polls, and hashtag clicks.

Automatic bidding: The bid will automatically be optimized to get the best results at the lowest price (within the company's budget). Automatic bidding is the easiest way to get real-time campaigns and display platforms.

Maximum bid: This type allows greater control over the amount a company pays for each billed action. In this type of auction you can choose exactly the amount for a tweet (maximum bid) and the

results will not be charged for this price. This type of bid is useful for experienced advertisers who know exactly how much they plan to pay for each tweet on a scale scale.

The actions underlying this process are outlined in Table 4.

Table 4. Description of the activities that make part of the marketing campaign modelling process on Twitter

A1. Create Twitter Ads Accounts
A2. Access Ads Manager
A3. Select create campaign
A4. Selecting the desired engagement
A5. Selecting campaign details
<ul style="list-style-type: none"> • Campaign name • Source of funding • Budget setting: Daily, Total • Campaign data: Start / end date or campaign start when it is created
A6. Adding audience groups
A7. Setting the auction type
<ul style="list-style-type: none"> • Automatic bidding • Maximum bidding
A8. Selecting audience
<ul style="list-style-type: none"> • Demographic: age, gender, location, language, technology • Audiences saved
A9. Choosing Tweet for Campaign
A10. Review the campaign configuration
A11. Launching the campaign

4. Conclusions

Nowadays, social networks are an enormous potential to promote a company's products and services to the right audience and at the same time to attract attention to the brand. Social networks are a powerful communication tool, allowing companies to communicate with potential customers wherever they are. At the same time, they adapt the brand and increase its number of customers. If done properly, social media advertising can increase the efficiency of other marketing methods such as SEO and SEM by building links, bringing traffic to the website, and increasing brand popularity.

Social media integration is the process a brand assumes when launching or opening a channel of this type for the first time, then exploiting the full potential by meeting the campaign's goals in the online environment.

Publishing content at the right time and linking it to the right target market means efficient synchronization and positioning.

The authors have realised a bibliographic research to present the current stage regarding the usage of social media networks in online marketing campaigns. They have presented the steps that are necessary to accomplish a campaign on Facebook, Twitter and Instagram. These steps were modelled through BPM software resulting in processes diagrams.

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