# Chapter 31 Calculation of Facebook Marketing Effectiveness in Terms of ROI

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## ABSTRACT

This chapter demonstrates how to assess the performance of organic and sponsored activities on Facebook using the data available in Facebook Ads Manager, Facebook Page Insights, and Google Analytics. The main aim of the proposed ROI calculation model is to connect common social media marketing objectives with the analytical information available. The main emphasis is put on the technical aspect of ad performance assessment. The authors explain how the Facebook attribution system and post-impression algorithm work, describe the relation between advertising goals and metrics displayed as achieved campaign results, and demonstrate how to derive ROI indexes from different Facebook conversions. The chapter also includes a practical example how to calculate current and future value of ongoing ads.

## INTRODUCTION

The digital advertising has become a key instrument for reaching marketing and business goals of many companies. This sector is rapidly growing reaching 281.407 billion USD in 2018. Even though the Search advertising still represents the largest segment with a market volume of 127.546 billion USD, Social media advertising is not far behind. With the annual growth of 10.5% this segment is expected to reach a market volume of 76.561 billion USD in 2022 (Statista, 2018a). Ad revenues of Facebook, the leading company on the field of social media advertising, stood at more than 39.9 billion USD in 2017 which is almost a 22 billion increase in comparison to 2015. In addition, the current statistics imply another

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potential for expansion for mobile advertising. According to Statista (2018b), mobile advertising seems to be the most promising form of revenue generation for the company. It is expected that Facebook mobile advertising revenues will reach 60.68 billion USD in 2021.

The growing importance of social advertising in terms of online marketing activities is undoubtable. Big brands such as Samsung, Proter&Gambler, Coca Cola or Oreo embraced Facebook advertising as a key part of their marketing strategies. Samsung, who is one the Facebook biggest clients, spent 10 million USD in three weeks on Facebook just to launch its Galaxy S III phone. Also, Procter & Gamble, the world's largest advertiser, has a massive presence on Facebook and spends yearly about 60 million USD on sponsored posts. Brand's Facebook influence does not have to be expressed only by the amount spent on online advertising. For instance, Coca-Cola has 76 million fans on Facebook, making it the most-liked brand on the planet, while Starbucks with 37 million fans occupies the fourth rank (Business Insider, 2018).

It can thus be assumed that greater effectiveness of online advertising contributes to improving business activities of companies that use it. Current studies show that online advertising, by making use of proper expertise and technologies, may help to change customer buying behavior (Abayi & Khoshtinat, 2016). Results of the previous surveys and studies supported the assumption that Facebook seems to be an effective medium for customer relationship management and the promotion of new products. Businesses are very keen to harvest all the benefits offered by this network. Facebook activities help to build awareness, inform, promote the brand and its product consistently with the business goals. However, understanding the targeted group of customers and the technical and contextual characteristics of the online media in use represent a crucial prerequisite for achieving all the online marketing objectives. Companies need to understand what are the correlations between their social media activities, online advertising and the benefits gained from such efforts (Ertugan, 2017).

One of the biggest issues in terms of assessing the effectiveness of Facebook marketing efforts is the quantification of the achieved results. Only some of the advertising efforts may be directly expressed as revenues. The remaining processes such as raising awareness and community building, contribute to the generation of profit indirectly. However, companies invest significant amounts of money in order to expand their fan bases, promote their company culture or engage in communication with their current customers. All of these partial steps contribute to creating the brand's image and finally selling the promoted products. These activities, in particular, are causing considerable problems when it comes to calculating their contribution to the final revenues. Nevertheless, knowing the performance of all the marketing efforts on Facebook helps to effectively allocate the marketing ressources.

In this chapter, the researchers are going to focus on the calculation of return on Facebook marketing investments, hereinafter referred to as ROI-FM, including the proposition of Facebook advertising effectiveness evaluation models for individual goals reachable via this network. Thanks to the sophisticated tracking systems offered by Facebook and their connection to website analytical applications such as Google Analytics, the companies have numerous possibilities how to monitor the impact of their Facebook (and other) advertisements. It is important to understand the advertising system and the metrics related to it. Choosing the right metrics and interpreting them correctly with regards to the marketing goals is the only way how to assess the effectiveness of Facebook activities and optimize the settlement of online advertisements.

The following paragraphs are going to explain how Facebook attribution system and post impression algorithm work, describe the relation between advertising goals and metrics displayed as achieved campaign results, and demonstrate how to derive ROI-FM indexes from different Facebook conversions. Aim of

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