

# Chapter 5

## Selection of Digital Marketing Tools Using Fuzzy AHP–Fuzzy TOPSIS

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### ABSTRACT

*Technological developments resulted in creative, faster, target-oriented and knowledge-based marketing strategies more prone to interactions. Digital marketing is an example of marketing types arisen by technological developments. Digital marketing tools are rapidly growing since they can be performed through internet; they are faster and thus have an ascending trend. The amount of investment to be made to each digital marketing tool has become a significant decision making problems for the businesses. In this chapter, Fuzzy AHP and Fuzzy TOPSIS techniques were employed for the selection of digital marketing tools. Multi-criteria analysis revealed the Remarketing advertising as the most suitable digital marketing tool. Additionally, the social media advertising, advertising-per-impression, advertising-per-click, affiliate advertising, banner marketing and email-advertising were respectively found to be as the other significant marketing tools.*

### INTRODUCTION

Nowadays with ever-changing consumer culture and widespread digital technologies, there exists a change in which knowledge can freely roam worldwide, geographical borders in competition are widely disappeared and consumers are aware of renovations in far end of the world in the blink of an eye. From now on, adaptation to such a change and competitiveness are imperative issues for entire organizations. *Customer value creation* intrinsically lies behind the marketing concept. He stated, “a pioneer in elaboration of the concept, stated the sole valid objective of a business as to *create satisfied customers*”

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(Drucker, 1954). He stated, “marketing deals with identifying and meeting human and social needs. One of the shortest definitions of marketing is *meeting the needs profitably*” (Kotler, 2002).

Marketing concept was first mentioned around mid-1950s. During that time, world economy turned into *consumer economy* together with disappearance of war-time constraints and thus producer firms and brands increased. Since then, main focus of the marketing became *production* and the objective became *sales*. New families were founded through marriage of youth and the famous *Baby Boomers* (*Baby Boomers*: The name given to those born between the years 1945-1964. This generation of the world’s most populous and active population, the 20th century has left its mark) generation consumption started. During those years with low production and high demands, the powerful side was the producers. Producers of the period did not quite think about considering the customer expectations. During 1960s, increased competition required new solution seeks. In that period, business world acquainted with *mainframe* computers. Production, planning, distribution and advertisements of the companies were significantly influenced by computers. Increased productivity levels also increased productions and marketing needs of the businesses. Important studies forming the scientific basis of marketing were carried out. The concept of *marketing mix*, mentioned for the first time in 1949 at *American Marketing Association Conference*, modified at the beginning of 1960s when the Canadian Jerome McCzCarthy (1960) verbalized the 4Ps (Product, Price, Place, Promotion). With the proper management of marketing mix, it was put forth that the businesses might improve their profits (Karahasan, 2012).

Electronic chips paving the ways of personal computers were developed in 1968. In 1969, internet emerged within the ARPANET (Advanced Research Projects Agency Network). In 1970s, number of products increased with mass production and demands started to decrease in this way. Therefore, advertisement activities were designed as *Emotional Selling-Point (ESP)*. ESP was constructed over the necessity to meet the emotional needs of consumers. At the beginning of 1980s, advertising became a tool finding a place in entire mass communication tools, influencing values, lives and behaviors of societies. In 1982, rather than awarding to a single person, the *Time* magazine presented the award to Person of The Year to personal computers, in a sense declared the power of computers to the world. In 1990s, the concept of *brand* emerged. Again at the beginning of these years, the cyber structure emerged by information technologies grew up without stopping at nothing and removed the borders between the countries. Today, the concepts of communication, time and accurate information are the strategic issues, thus internet and relevant technologies became the most favorite tools (Gedik, 2009). During the second half of 1990s, a radical bounce was observed through widespread of communication technologies like mobile phones and internet. Such progresses in technology ensured that businesses started to allocate resources to *Customer Relationship Management (CRM)*. In this period, *direct marketing* became popular. Also, foundations of *permission-based marketing* were set up through the progress of mass marketing toward individual communication.

The *www*, brought to service of humanity in 1994, started to be used in every area of the life in a few years. Business world then started to invest in computers, software and connection infrastructure to keep up with these rapid changes. In this way, number of organizational web sites and Portals rapidly increased. The first online magazine, HotWired, was the organization publishing the first *clickable internet advertisement* in 1994. With this first banner, the very first step of digital marketing was taken (Karahasan, 2012).

According to the Digital Marketing Institute (DMI) refers to “digital marketing as the use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them” (Wymbs, 2011). According to

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