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SMS Promotion Effects on Consumer Behaviour: A Turkish Case

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Abstract

Mobile phones brought rapid, extensive, and personal communication to our lives. Parallel to Mobile phone development, Marketers started to consider mobile phone as a marketing tool to reach their consumers. SMS marketing is the most basic and widely used method of mobile marketing since the early days of mobile marketing. Beside of that, Smartphone development changed the Mobile Phone market characteristics and user habits, hence marketing communication methods changed and extended with many alternatives. The question is; after smartphone development, SMS marketing is still affecting consumer behaviour or not? So far, literature has been supporting that SMS marketing is an effective way to reach the consumer and it affects consumer behaviour. In our research, to examine effect of SMS marketing, we have made promotional sales campaign with SMS communication for a smartphone product in Turkey market. We have sent location base SMS through one of the biggest Telecom operator with addressing Operator shops and analysed the consumer behaviour result.

Keywords: SMS; Smartphone; Mobile phone; Sales; Marketing; Promotion; Mobile marketing; SMS marketing; Purchase behaviour; Nicosia model

Introduction

Smartphones are not being used only for their basic functions, which are text messaging and calling but also frequently for other functions such as photography, recording videos, social networking, alarms, agendas, e-mailing, internet applications, shopping, gaming, listening to music, watching TV, Radio etc. Therefore, we can define the current smartphone as an "all in one device." The smartphone has become so ubiquitous in our daily lives that it has essentially become a part of people's bodies that always stays with them [1].

The number of smartphone users worldwide is expected to surpass 2 billion in 2016; more than one-quarter of the global population use smartphones, and by 2018, eMarketer estimates, over one-third of consumers worldwide, or more than 2.56 billion people, will do so. That 2018 figure also represents over half-51.7%-of all mobile phone users, meaning that the feature mobile phone, capable of only calling and texting, will finally become a minority in the telecommunications sector [1]. Considering the trend of huge development in the mobile phone market; Smartphones became an even more important marketing tool thanks to their reach at anytime, anywhere, and anyway. Hence, mobile marketing is highlighted as one of the key marketing methods in literature.

The widespread adoption of mobile phones represents a huge marketing opportunity to reach and serve consumers anytime, anywhere. Paradoxically, while consumers adopt mobile phones to enhance their private and social lives, marketers see mobile phones as a marketing channel [2].

Mobile marketing is a way to reach the consumer with their personalized devices. It is getting more important due to its cheap, easy, and fast features. Nearly everyone in a marketer's target demographic has a mobile device, thus for the marketer it is very easy to reach all target group through mobile marketing applications. Even though mobile marketing seems to be a cheap and easy way to reach the consumer, it does not mean that all kinds of mobile marketing applications are effective ways to influence consumers and their purchasing decisions.

A consumer's personal data can be retrieved from a subscription

database, hence it is easier to reach a permission based focused target segment group with mobile marketing. The rise in mobile marketing means that inefficient mass marketing campaigns, which reached groups outside of the intended target demographic, are now a thing of the past. With mobile marketing, marketers can select and separate groups easily and make a marketing campaign based on the targeted segmentation more efficiently. So, it is possible to make personalized marketing with mobile marketing.

SMS is a wireless service available on digital mobile networks. It enables the transmission of text messages between mobile phones and other systems like electronic mail, paging, and voice mail. An SMS is up to 160 characters and it can be sent and received through the network operator's message system to the mobile phone. Among the mobile marketing applications, SMS is the most used method due to easy processing and low cost. It is also the oldest and most widely used tool for mobile marketing. The trend in Jupiter Research shows that SMS Marketing is quickly surpassing e-mail technology as a tool for marketers and for customer relationship management [3,4].

SMS marketing is the most common and widely used mobile marketing application. The main issue for SMS marketing is making sure that the consumer feels they are special Thus, the mobile marketing efficiency has become one of the most critical issues for the mobile marketer. The target group, the type of the mobile marketing, and the promotion offers can be counted as key indexes for mobile marketing efficiency.

One of the problems that mobile advertising has been encountered in recent years is invasion of consumer privacy. From user's point of view, invasion of privacy and general security concerns relating to

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Received November 08, 2016; Accepted January 04, 2017; Published January 09, 2017

Citation: Duzgun F, Yamamoto GT (2017) SMS Promotion Effects on Consumer Behaviour: A Turkish Case. Int J Econ Manag Sci 6: 397. doi: 10.4172/2162-6359.1000397

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wireless medium have been identified as one of the main obstacles to the success of wireless advertising, so that consumer concerns over privacy and invasiveness regarding wireless advertising could threaten the entire m-advertising market [5]. Thus, mobile marketing efficiency has become the most critical issue for mobile marketer and companies. SMS messaging is cheap and easy for the company promotions; on the other hand this type of messaging is too often perceived as spam or refused messages.

For smartphone sales factors; There are many factors related to brand awareness, brand quality, and brand association that can affect loyalty of customers such as brand name, logo, quality, good service, well warranty, innovation, price, design and so on [6].

In our research, we examined both the Global and Turkish smartphone market development. Then literature was reviewed for Mobile marketing, SMS marketing, and consumer behaviour. Finally, we try to show the SMS marketing promotion activity with a case study that was applied for one of the smartphone brands. Our case consists of a location based SMS promotion that was sent by large operator (one of the biggest operator in Turkey). SMSs sent to consumers with promotion content with an offer to the targeted marketing segments in a selected shopping area.

The main purposes of this study can be summarized as follows:

- Find out consumer response to SMS marketing applications.
- Evaluate consumer profiles who responded to SMS marketing promotion activity
- Search the SMS promotion effect to consumer purchase behavior

Developments in the Mobile Phone Market in the World and Turkey

Mobile phones have become excellent devices with many functions. The development of the smartphone now means that it is possible to use the smartphone in lieu of a computer everywhere, and this situation increases the usage rate of smartphone rapidly and instantly for the end consumer. This is also an opportunity for the users to reach the internet and use most of the abilities of computers in the palm of their hand all around the world.

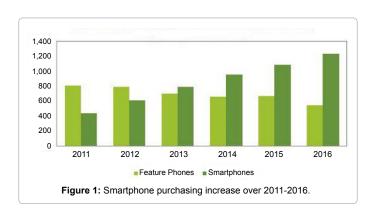
According to an ITU (International Telecommunication Union) report, globally the total number of mobile-broadband subscriptions is expected to reach 3.6 billion by end 2016, compared with 3.2 billion at end 2015. Penetration has reached over 100% in four of the six ITU world regions [7]:

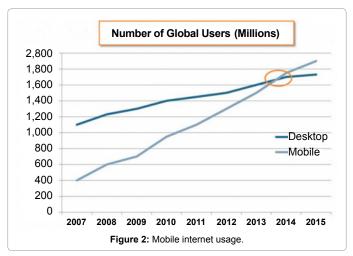
- Number of mobile-cellular subscriptions approaching 7 billion
- Mobile broadband is the most dynamic market, with 2.1 billion subscriptions globally

Parallel to an increase in mobile subscribers, smartphone sales revenue also increased almost 477% between 2009 and 2015. 2009 total revenue was 56.92 billion USD, and 2015 expected revenue was 272 billion USD.

The mobile phone market is increasingly seeing conversions from feature phone to smartphone, making the smartphone a most used mobile device (Figure 1) [8].

2015 Q3 Smartphone market increased 11.2% and forecasted continuous growth as 7.9% average every year during next 5 years [9].





Parallel to smartphone market development, mobile Internet usage increased dramatically. Mobile Internet usage surpassed desktop Internet usage as of 2014 and currently reached almost 2 billion users [10].

Figure 2 shows us how smartphones changed internet accessibility and digital dynamics in the world.

According to this development, digital advertisement moved rapidly to mobile.

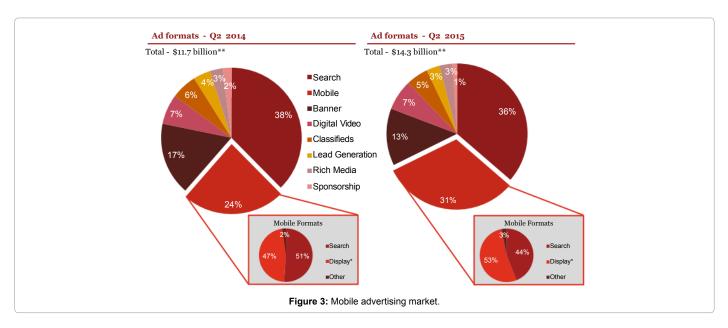
Mobile advertising market increased to 11.7 Billion USD in Q2 2014 and still continues to increase, parallel to mobile internet usage. 2015 data show us it has increased to 14.3 Billion USD (Figure 3).

Smartphone's share of mobile transactions grew by more than 15% year over year, now accounting for 60% of all mobile transactions in the U.S. The combination of better transaction channels, ubiquity, more phone models with big bright screens and fast wireless broadband is giving retailers better options for displaying their goods on mobile devices – ultimately leading to more transactions [11].

Market development status is similar with Global in Turkey, despite economic and political uncertainty in 2015-2016, Monthly smartphone sales around 1 Million units in Turkey [12].

Turkey is ranked as 15th big market among global smartphone market [13]. It also shows us importance of Turkish market for mobile phone manufacturers and vendors.

According to TUIK (Turkish Statistical Institution) 2015 August report 96.8% of households, have mobile phone (incl. smartphones) in April 2015 and 29.6% of households have fixed line telephone. Mobile



phone penetration also reached 96% in all over the world and mobile phone penetration almost 100% (exclude 0-9 year's age) in Turkey [14].

For 2016, the number of smartphone users in Turkey is estimated to reach 35.2 million and its estimating to reach 48 Million by 2019, with the number of smartphone users worldwide forecast to exceed 2 billion users by that time [15].

Literature Review

Mobile phones and their basic facilities and features were addressed by several researches. Telli Yamamoto examined and explained mobile marketing fundamentals and practices; she also conducted a large amount of research into the importance of mobile marketing for companies and the relationship between consumer behaviour and mobile marketing. According to her, mobile marketing is a concept that spread in our lives very quickly.

Mobile marketing can be defined in many different ways; Mobile marketing is a way of communication with the consumer or the potential consumer through a mobile phone, mobile computer, or other wireless device to promote a marketing campaign about a corporation, product, idea, activity, and persons [16].

Mobile marketing also can be defined as "Using interactive wireless media to provide customers with time and location sensitive, personalized information that promotes goods, services and ideas, thereby generating value for all stakeholders" [17].

MMA Global describes the mobile marketing as; any content sent by or on behalf of advertisers and marketers to a wireless mobile device. MMA UK define mobile marketing as; any form of marketing, advertising or sales promotion activity aimed at consumers and conducted over a mobile channel mobile marketing in many studies seems to refer to a more restricted action than the concept marketing does. For example Kalakota and Robinson define mobile marketing as "the distribution of any kind of message or promotion that adds value to the customer while enhancing revenue for the firm". From a traditional marketing management perspective, this is a description of only one of the 4P's in marketing; namely marketing communication and not of all of them [18].

Mobile marketing is a promotional activity designed for delivery to mobile phones, smartphones and other handheld devices, usually as a component of a multi-channel campaign. Some articles say mobile marketing approach is similar to advertising delivered over other electronic channels such as text, graphic and voice messages. SMS messaging is currently the most common delivery channel for mobile marketing. Search engine marketing (SEM) is the second-most common channel, followed by display-based campaigns. The expanding capabilities of mobile devices also enable new types of interactive marketing.

The main properties of mobile marketing include advantages brought by the devices, the created channels, and from the point of the individual or corporation, the personality, directness, immediate closeness, reliability, measurability, etc. These characteristics are mostly related with evaluations from the customer's perspective. In the current competitive market, it is very important to reach consumer with quick and inexpensive way. Hence, mobile marketing is getting more popular for the companies due to responding the mentioned need.

Different mobile marketing tools can be summarized as; SMS, sales promotions and discounts, mobile Internet, LBS (Location Based Services), mobile applications, advergame, IVR (Interactive Voice Response), mobile viral marketing, mobile AR (Augmented Reality), Tone and Win, and permission marketing. In addition, mobile is a very effective channel as it enables to communicate with consumers instantly in an interactive way [19].

Mobile marketing can be used to obtain the following;

- To create brand awareness
- To change brand image
- To promote sales
- To bring in brand loyalty
- To create customer database
- To spread word from mouth to mouth

In addition to them, it also contributes to the creation of other elements such as social environment, entertainment, and reliability.

Technically, mobile marketing can help organizations reach mass audiences. Such campaigns may be expensive if they are organized with unclear audiences and may fail to provide a sufficient benefit. Contacting the entire mass without determining a target or dividing the market means neglecting personal communication channels. Instead, mobile campaigns require the presentation of personally convincing messages rather than those addressing to a wide mass of audience.

As stated in Shankara and Balasubramanian [20], mass marketing addresses a broad range of existing and potential customers. Mobile marketing, in contrast, is restricted to owners of mobile devices, and in many cases, to a subset of those owners who opt-in to receive communications from marketers. Furthermore, with mobile marketing, the seller can more precisely target customers at a specific location and at a particular time, better measure, track consumer response, and have lower unit costs of communication with the target audience than those associated with mass marketing.

The organizations that understand the importance of mobile marketing take advantage of personality in mobility and initiate effective marketing. This, in turn, provides precedence to companies in competition. It is even possible to show customers some aggressive campaigns to prevent shifting of customers to competitors as beneficial for them, and to continuously attracting customers to their own products and services. Briefly, owing to mobile marketing, the applications that mean hitting the bull's eye can be made.

Balasubramanian tried to find out drivers of mobile device/service adoption, the influence of mobile marketing on customer decision-making, formulation of a mobile marketing. Varnalı focused on mainly mobile marketing effect on consumer behavior and mobile marketing fundamentals and strategy [21]. Akın tried to find out potential future application of mobile marketing and Aksu has studied about how mobile marketing affects to different sectors.

SMS has grown into a mainstream communication tool for consumers, reaching them via SMS marketing has become increasingly important strategy for businesses. Whether between two people planning to meet up or a broadcast message to thousands of users, more and more customers are becoming converts every day, and savvy marketers realize text messaging is a great way to quickly communicate with their audience. For this reason, text messaging is increasing at an enormous rate. One of the primary reasons behind this growth is that text messaging has become increasingly used as a business tool.

SMS advertising has the potential to cause all three types of intrusion. First, users often cannot ignore a message delivered to their mobile devices; second, since sole individuals often use mobile devices, network carriers can collect various types of personal information about their subscribers (i.e. demographics, invoice amounts, usage patterns, interests and dislikes, device capabilities, and real-time locations). Finally, mobile spamming, although is discouraged by industry self-regulations and is illegal in some countries, still exists and causes the most annoying type of media clutter.

It is very important to understand the SMS Marketing system and to manage the system after sending messages to the customers even their target is advertising or relationship. Companies have to find out the most valuable customers by detecting the performance with so many analysis and then to decide and apply what are the following actions whether the companies want to succeed their functionality continuously for their success in marketing.

Xu, Teo, Wang identified three consistent success indicators

for SMS messaging. The first factor is the cost effectiveness and interoperability of the wireless infrastructure, the second is the high penetration of mobile phones (ubiquitous penetration levels of over 80% in some countries), and the third is the relatively low cost of the SMS messaging service [22].

Zabadi, Shura and Elsayed made research about Consumer attitudes toward SMS advertising among Jordanian users and their main finding is "Consumer's perceptions of the entertainment value, In formativeness and credibility of SMS ads are positively correlated to consumer's overall attitudes towards SMS ads; consumer's perceptions of the irritation aspect of SMS advertisements is negatively correlated with consumers' attitudes towards SMS advertisements".

Phumisak Smutkupt mention on his research; As text message ads have a strong impact on brand awareness, marketers should focus on using text messages as reminders or updates rather than for complete marketing campaigns. They should also focus on offering permission, based customers personalized information [23]. According to Anil Kumar's Research about response for SMS advertisement; 20.7% of the respondents strongly agreed to receive SMS advertisements on their mobiles; 43.6% of the respondents agreed to the statement; around 20% of the respondents were undecided; 10.1% of the respondents disagreed to receiving SMS advertisements and 5.7% strongly disagreed to receiving SMS advertisements. Furthermore, around 50% believed that SMS ads are misleading, 22.7% of the respondents were neutral and 27.3% of the respondents did not agree to the statement. It also reveals that around 60% of the respondents thought that SMS ads focus basically on premium products, while 22.2% were neutral and about 18% did not agree to the statement. It addition it shows that 42.1% of the respondents always read the SMS, 31.2% read occasionally around 18.7% read rarely, 2.3% often read SMS advertisements and 5.7% of the respondents never read SMS advertisements [24]. The advantages of SMS include its intrusiveness, ubiquity, low cost, computer generation, and ease of personalization. However, in content terms SMS is currently extremely limited. On most phones, messages are text-only and cannot be more than 160 characters. Recipients can usually only store a few messages, and cannot file them for reference. On the other hand, unlike most marketing communication, they cannot simply be ignored [25].

Short message service (SMS) advertising is the most primitive and widely used version of mobile marketing, yet the relevant literature still lacks consensus on how SMS ads influence consumer attitudes, and how this influence is generated.

Many companies carrying out mobile marketing are lack of experience, and the mandatory SMS marketing generally carrying out has been the resentment of many consumers. How to carry out the mobile marketing, which is more efficient, more recognized by consumers and more appealing to consumers to participate in [26]. Advertising value of mobile marketing from the consumers' point of view can be increased if the consumers believe that advertising provides them certain utility. Many authors claim that consumers will only accept mobile marketing if they perceive a benefit in receiving advertising messages on their mobile phone [27].

One significant factor in today's increasingly mobile world is the general attitude toward mobile marketing activities. Attitude of customers toward mobile marketing affect their purchasing behaviour in addition to other simple commercial interactions.

Since most online transactions are now carried out via mobile phones (smart phones), the driving forces behind consumer behaviour in this area need further investigation. In the context of financial services firms Internet banking and use of apps and social media sites is becoming extremely important. As youngsters are moving on to college and becoming users of financial services the study of their online behaviour becomes more important for marketing managers of these firms and others in different sectors such as FMCG and services [28].

According survey by DMA (2008) of 800 U.S. teenage and young adult users of mobile phone services revealed that responders to mobile marketing offers were more likely to be males, teens and young adults, individuals with higher incomes, and individuals with heavier usage of mobile phones and data features. The study further showed that the use of mobile marketing was highest in the entertainment, music and video product category (44%), followed by food/beverage (21%), and beauty/personal care (15%). According to the study, the automotive/ transportation, business services, consumer electronics, financial services, and vacation/travel categories each accounted for 12% of the mobile offers. The study also showed that text messages for products or services elicited the highest response rates (70%), The challenge was to utilize interactive mobile technologies to disseminate marketing messages in a sophisticated manner that customizes the offering(s) to target customers. stages in the customer decision-making process; need, recognition, information search, alternative evaluation, purchase and post-purchase.

Location based services (LBS) is a class of computing services that uses the consumer's location data in order to personalize and enable features and services. Services include those for mapping and tracking, emergency response and disaster management and location based advertising. Of these services, location based advertising, also known as hyper local marketing, accounts for the largest market share. Pundits argue that the business area of LBS is still growing and has tremendous potential. "The LBS market [is set] to grow from 8.12 billion in 2014 to 39.87 billion in 2019" [29].

One such area that is yet to realize this potential is the area of Telematics. "Telematics is an interdisciplinary field encompassing telecommunications, vehicular technologies, road transportation, road safety, electrical engineering (sensors, instrumentation, wireless communications, etc.) and computer science (multimedia, Internet, etc.)" [30].

Mobile promotions are becoming increasingly relevant for marketers. These coupons offer marketers unprecedented opportunities to connect with consumers by leveraging the powerful data that location and consumer behaviour's uniquely generate [31].

Mobile technology is expanding the scope of promotions by increasing access to consumers for supply-side stakeholders in the mobile promotion ecosystem. This has resulted in important implications for several dimensions of promotions from the supply side perspective. The use of mobile technology has also lead to significant changes in how consumers view and use promotions. Promotions are featuring more prominently in shopper behaviour and the greater access to consumers by stakeholders, strategic interactions amongst the stakeholders, and greater consumer adoption of the mobile promotion platform have produced a rich set of research issues.

So far, literature has been supporting that SMS marketing is effective for purchase behaviour. Actually, it should consider and should measure again after smartphone development, as smartphones allow new communication ways for reaching the customer. Hence, SMS marketing may lose efficiency after smartphone development.

Research Methodology

Recently most of the companies use SMS marketing in the Turkish consumer market. The aim of this research is try to find out if SMS marketing promotions affect consumer purchase behaviour for a certain smartphone product in Turkey.

This research will also show SMS marketing efficiency for a new smartphone in matured market and will help literature for estimating the future of SMS campaigns in mobile marketing literature. This research will also help companies to evaluate efficiency of SMS marketing after smartphone development and the result of this research will guide companies in choosing a mobile marketing method, especially considering SMS marketing.

Beside the mobile phone market development and mobile marketing, consumer purchase behaviour is important to analyse the mobile marketing result.

In an early study of the buyer decision process literature, Frank Nicosia (Nicosia, F. 1966; pp 9–21) identified three types of buyer decision-making models. They are the univariate model (He called it the "simple scheme".) in which only one behavioural determinant was allowed in a stimulus-response type of relationship; the multi-variate model (He called it a "reduced form scheme".) in which numerous independent variables were assumed to determine buyer behaviour; and finally the "system of equations" model (He called it a "structural scheme" or "process scheme") [32].

In this study, we used the Nicosia model explaining the buyer behaviour. Nicosia model attempts to explain buying behaviour by establishing a link between the organization and its prospective customer. It analyses the human being as a system with stimuli as the input to the system and the human behaviour as an output of the system. The model suggests that message from the first influences the predisposition of the consumer towards the product or services. Based on the situation, the consumer will have a certain attitude towards the product. This may result in a search for the product or an evaluation of the product attributes by the consumer.

The Nicosia Model explains in 4 basic areas (Figure 4):

Field 1: The consumer attributes and the firm's attributes. The advertisement message sent from the company will reach the consumer attributes.

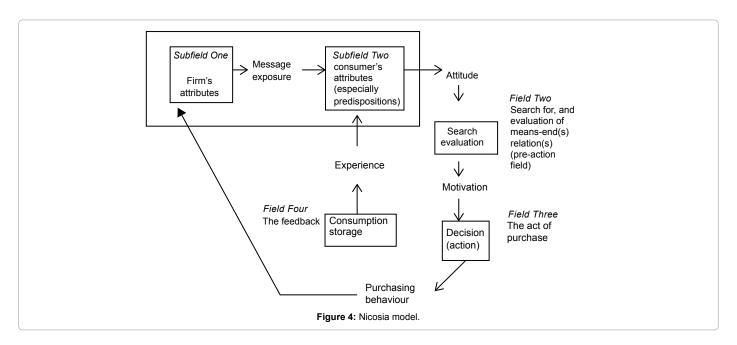
Field 2: It is related to the search and evaluation, undertaken by the consumer, of the advertised product and to verify if other alternatives are variable.

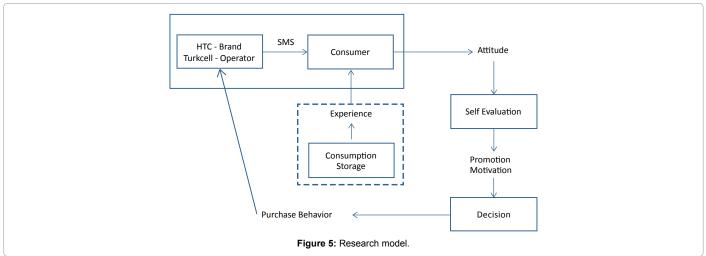
Field 3: It explains how the consumer actually buys the product.

Field 4:- It is related to the uses of the purchased items. It can also be related to an output to receive feedback on sales results by organization.

Limitations of the Nicosia model [33];

- The flow has not been completed and does not mention the various factors internal to the consumer.
- The assumption about the consumer being involved in the decision process with no predisposition about the various brands is restricting.
- Overlapping between firm's attributes and consumers attributes





According to our conditions for this research, we have adopted Nicosia model to our research model as below (Figure 5).

We excluded "experience" part in Nicosia model as we are not able to measure experience of consumer and ask questions about their experience, our assumption that consumer checked their experience about product that offered with promotion.

We have made this research with large operator, which is the biggest operator in Turkey. Large operator has 4 Flagship stores in Istanbul. We have sent location based promotion SMS to those Flagship stores during the day with three time slots; morning (09.00-12:00), noon (12:00-14:00) and afternoon (14:00-17:00) [34,35].

In our research, Location based mobile marketing tool has been used while reaching the consumers. Promotion content is; "If you buy HTC Desire 820 from selected shop in a week; you will get smart case free of charge." HTC Desire 820 is one of the mid-range smartphone models with high specifications and a competitive price. Octa core, 13MP main and 8 MP front Camera, 5,5 Inch. Price is 1399 TL. Smart

case is original Desire 820 model case with smart feature as you can make some applications with touching from the top of case without opening cover. This smart case's competitors are Samsung and LG smart cases for mid and high end models which has screen gap on case and you can control the device from this gap without opening the cover.

Sales persons in the flagship stores surveyed the consumers. The surveys included demographic and consumer behaviour questions. Survey data and selected shop's sales results will be using for analysis.

Our research type is causal research due to its matching causal research definition as try to explain the cause and effect relationship between variables.

Our limitations were; some of the consumer may block their SIM card for SMS advertisement and some of the sales person may fill out fraudulent surveys. Only one SMS promotion content that stated above was sent by the operator. Our assumption is there is no fraud in survey and all SMS sent were received properly. Selected stores are located in highly educated and high-income residential areas.

Promotion SMS sent to 92,500 people during a week with location base to the six large operator shops. As a result, only 2 customers came to the shop and one of them bought the product. Hence, we can say promotion SMS has no effect for consumer behaviour anymore.

Conclusion

The Global and Turkey Smartphone markets are growing and mobile marketing is becoming more important in customers' lives. It is important to check SMS promotion efficiency for the present time as smartphone availability and usage rate is high. Smartphones are changing the type of digital media that the consumer can access. Beside the classical marketing methods, in literature, SMS marketing was accepted as one of the ways that companies may use during the promotion campaign and any kind of advertisement with low budget. SMS marketing has known as one of the cheap and easy methods for communicating the consumer to promote the products. Therefore, we want to understand if SMS promotions affect the sales ratios of a certain product.

The result of our research shows that, despite SMS marketing is the cheapest mobile marketing approach, it has no visible effect on the consumers in this context. We count the reasons of this result as;

- People access and focus on different digital media channels with their smartphones.
- SMS advertisement and communication way is not attractive from the point of view of the consumer.

We have applied SMS marketing for a certain product to 92,500 people but only two people have responded. This result shows that SMS marketing has no effect for buying and/or changing consumer behaviour (go to the nearest shop) which sent by the biggest operator for a known brand reached masses. Which means most of the consumers ignore SMS marketing and advertisement messages despite their promotional advantages. According to this result we assume that most of consumers do not believe SMS that sent by company for advertisement or campaign.

Further research could be done for other mobile marketing methods efficiency done through smartphones. Further research may also find the answer for which mobile marketing application for smartphones is more efficient with reasonable budget.

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