‘Evaluation on Role of Electronic Word of Mouth (EWOM) Ads in Customers’ Emotions and Choices in E-Shops’
[Case study: Digi-Kala Company]

The subject titled evaluation on role of Electronic Word of Mouth (EWOM) in feelings and behavior of customers in E-shops was expressed in Digi-Kala Company. Then, research hypotheses and objectives were proposed and methodology, statistical population and needed sample of analysis technique were introduced to achieve goals and results of hypotheses. The findings suggest significant positive effect of (EWOM) on attitude of consumers and their positive emotions. Similarly, social positive and normal emotions may also have significant impact on attitude of consumers. At the same time, negative emotions of consumers have positively affected consumers’ attitudes as well. Finally social norms and attitudes of consumer may have significant positive effect on behavior of consumers.

Keywords: Electronic Word of Mouth (EWOM), Behavior of consumer, Social norms, Digi-Kala

Interpretation of Problem

As one of the foremost and oldest informal communication tools, Electronic Word of Mouth (EWOM) advertisements play an efficient role in marketing processes e.g. encouragement of individual to buy the products and using services. Many consumers mainly rely on EWOM they have obtained from their friends and relatives because such information is more reliable than commercial ads and remarks of marketers (Davari et al. 2015). Thus, EWOM ads may serve as a path to achieve competitive advantages within an environment where trusting in promotional organizations and advertises has been reduced. Having impact on ideas of other individuals may be followed with noticeable benefits for goods and services supplier companies (Jalilvand & Ibrahimi, 2011). EWOM refers to interpersonal communication between consumers regarding their assessments and experiences of a certain enterprise or product (Jason et al. 2010). The studies have shown that EWOM might act more effective than communication by other sources e.g. recommendations of important contents in newspapers or advertisements (Jalilvand & Samiei, 2012).

Marketing by EWOM is more credible than other marketing techniques since only fourteen percent of those persons who watch, read or hear commercial ads may trust in them. More interestingly, ninety percent of individuals trust in their families, friends or colleagues if they confirm a certain product or service because they know there is no benefit in approving for them (Jalilian et al. 2012).
Necessity and Importance of Research

EWOM is the communications about goods and services between individuals that seem not to be dependent on goods or service producer enterprise. Such communications may be bilateral dialogues that are done face-to-face or via phone, email, cellular or other communicational canals (Forati et al. 2014). Independence of EWOM from the company is one of the factors that empower EWOM. Another factor that seems to be more important that the first one is that EWOM conveys experiences of the individuals and provides indirect experiences for individuals about the product or service (Hassangholipour et al. 2013). EWOM may be in positive (praising of trade name and product) and or negative (gossip about trade name and product) form. Both types of such communications are spread very quickly and they may play major role in customer’s attitude about newly introduced product in the market or the products with riskability in their purchase (Martensen & Mouritsen, 2014).

The importance of EWOM has been addressed regarding making decision for purchase as well as reducing purchase decision related risks in several studies (Wangenheim et al. 2014). The significant role of EWOM is tangible in ideas of customers in the marketing literature and EWOM has been recognized as one of the most powerful forces existing in the market (Prendergast et al. 2010). The importance of EWOM is due to this fact that under such circumstances, customers preferably trust in informal sources in making decisions for their purchase instead of formal sources e.g. marketing journals (Abdalvand & Ghaffari Ashtiani, 2009). In fact, EWOM is important because it can provide very important and vital information about a certain organization for the consumers and in many cases it may help them to make decision to act as supporter and motivator for an organization and or not. As a result, the oral promotions contribute to organizations to attract new customers (Zhang et al. 2010).

Research objectives

The present research takes step by aiming to determine effect of EWOM on emotions and attitudes of customers and to specify their impact on behavior of consumers.

- Analysis on relationship between EWOM and positive emotions in consumers
- Analysis on relationship between EWOM and negative emotions in consumers
- Review on relationship between positive feelings of consumers and their attitude
- Review on relationship between negative feelings of consumers and their attitude
- Analysis on relationship among social norm and positive emotions of consumers
Electronic Word of Mouth (EWOM) advertisements: EWOM is a novel forum where the consumers are shared in their experiences and assessments about various brands and products via online communication canals (Pikas & Sorrentino, 2014). EWOM is defined as all informal communications between consumers by internet-based technology relating to application or features of certain goods or services and or their vendors (Stephen & Ronald, 2008). In order to evaluate this variable and by exploitation from paper of Martensen & Granhault (2016), 6 questions have been considered using Likert 5-scale spectrum.

Emotions: Emotions are the first part of a logical decision caused by neural communications that is conveyed from emotional unit of brain to rational part of it (Martensen & Granhault, 2016).

Positive emotions: The positive emotions are created relating to buying a product when this purchase is favorable for the individual. Using paper from Martensen and Granhault (2016) in this study, 6 questions have been considered to assess this variable by Likert 5-scale spectrum.

Negative emotions: Negative emotions emerge regarding purchase of a product if buying of the given product is unpleasant to the individual. In this study, 6 questions have been considered to assess this variable by Likert 5-scale spectrum by means of paper from Martensen and Granhault (2016).

Social norms: In terminology of sociology science, norm denotes a behavioral pattern that regulates relations of social reactions (Yousefi et al. 2012). To assess this factor in this survey, 2 questions have been designated by Likert 5-scale spectrum using paper from Martensen and Granhault (2016).

Attitude of consumer: Attitude expresses internal emotions that reflect someone’s favorable or unfavorable idea about certain subjects (Chakravarty et al. 2010). Attitude of customer has been addressed as a factor which
determines form and direction for his/ her behavior to buy a certain commodity (Chu & Kim, 2011). In order to evaluate this variable in this investigation, 4 questions have been considered using Likert 5-scale spectrum and by means of paper from Martensen and Granhault (2016).

**Behavior of consumers:** Behavior of consumers denotes tendency of consumer to buy a specific products and or receive a certain service in the future (Wu et al. 2011). Using Likert 5-scale spectrum in this study, 3 questions were designated by using paper from Martensen and Granhault (2016).

### Research Literature and Background

The cyberspace has provided new tools for marketers to improve efficiency and effectiveness of marketing communications and new approaches toward acquisition and maintenance of customers. The online interpersonal effects are assumed as one dimension in cyberspace (Litivin et al. 2008). The interpersonal influence and impacts of individuals in online environments affect customers’ assessments and decisions in buying a certain product or brand. EWOM ads include variety of media forms and types of websites in which there is the maximum access to ideas and revisions of online consumers and statistics (Zhang et al. 2010).

Online revisions done by consumers of product have extensively drawn attention by the researchers. Study on EWOM is relatively new and it has been evolved during ten recent years. Some of researchers have combined the given theories in order to describe EWOM phenomenon. Given the cost consuming nature of TV ads in the field of E-services, one of the most original promotional media for these products is the mouth of word advertisement including EWOM (Fallah, 2017).

### Difference between E-business and E-commerce

E-business denotes a group of business related activities such as marketing, financial subjects, buying and sale, customers’ relationship, after sale services and cooperation with investors etc. via internet network while E-commerce only comprises of buying and sale related subjects via internet and it is assumed as a subordinate for internet business system per se. Overall, many benefits and advantages can be considered for E-business. The E-business cut the hands of dealers and brokers and at the same time causes reducing advertisement costs, increases marketing opportunity, improves knowledge about market and strategic planning and finally develops range of participation by customers in giving the services in new system. Accordingly, both producers and consumers will be benefitted from this system.

As one of the subsets of ICT groups, E-business has experienced high growth in the past decade so that the approach taken in this policy is efficient and effective in most of commercial institute in acceptance and employing E-
business to enter world markets and to attract new customers and in this regard.
Although using E-business in commercial activities needs to a series of
influential exogenous and endogenous factor so that if commercial enterprises
pay attention to these factors and planning for favorable utilization from
technology of E-business may prepare the ground for growth of user
enterprises rather than a guarantee for successful exploitation from this process
(Movahedi, 2015).

Definition of Traditional and Cyber Social Network

In traditional social network theory, a social network is defined as follows:
It is a group of social institutions including people and organizations which are
linked to each other by means of a group of significant social relations and they
interact together by sharing of their values (Arami, 2014). Generally, social
networks are assumed as social structures made of several groups in which
individuals or organizations are connected together by one or more specific
types of relation e.g. financial transactions, friendship, trade, emotions,
dogmas, entertainments and habits (Swamynathan et al. 2008). Social networks
date back to age of human life and are obviously linked to social symbiosis of
humans with each other. Traditional marketing moves toward extinction
because of rising tendency of customer to TV ads and direct letters and plans
(Domingos, 2005). What makes social network of current age as distinctive
from the past is a platform for emerging of social networks and mechanisms of
their internal relations. These potentials have enabled these networks to change
the traditional equations (Babaei, 2011). The cyber social networks are types of
social media similar to the human community at the highest level and enable
the individual to communicate with a great number of other persons. The
virtual social networks include a new generation of internet websites. Internet
users gather virtually around a common axis in these websites and form online
communities (Arami, 2014). Castells implies the major characteristics of
virtual social networks in flexibility (reconstruction and reactive potential
versus environmental changes), scalability (small and great size) and ability for
survival without dependency on the center of given unit. The important
capability of these networks is related to the possible login by new users and
presence of wide space for interaction with the others, free content-generation
and sharing of knowledge and information (Babaei, 2011).

Internet Ads Dimensions

Internet advertisements include various dimensions which are briefly
mentioned in the followings (Gao et al. 2002). Dimensions of internet ads are
shown in Fig (1-2).
Figure 2. Various dimensions of internet ads (Gao et al. 2002)

Table 1. Comparison of Different Forms of Internet Promotions (Gao et al. 2002: 18)

<table>
<thead>
<tr>
<th>Game-based ads</th>
<th>Commercial letter</th>
<th>Rich-media banners</th>
<th>Banners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ads as game</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay as you see-presentation</td>
<td>Pay as you see-payment based on number of letter</td>
<td>Click-based payment</td>
<td>Payment method</td>
</tr>
<tr>
<td>- Fixed banners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Animated banners</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Interactive banners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Payment based on ads</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- click based payment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Very low</td>
<td>High</td>
<td>Low</td>
<td>Ads design and sending costs</td>
</tr>
</tbody>
</table>

Payment methods:
- Targeting methods
- Presentation methods
- Sending methods
- Commerce methods (buying & sale)
- Tracking methods
- Measurement methods
- Payment methods
Since time of advent of information technologies and internet, EWOM has been renamed for several times: Viral marketing, marketing via email, internet EWOM, EWOM marketing and EWOM advertisement (Goyette et al. 2010). EWOM is defined as all informal communication between consumers via internet-based technology relating to uses or characteristics of certain goods or services and or their vendors (Stephen & Ronald, 2008). This type of advertisement has become as an important forum for consumers and it seems to be even more efficient than EWOM in offline world because of more access to it (Jalilvand & Samiei, 2012). EWOM ads may be considered as traditional interpersonal communication within new generation of cyberspace (Christy et al. 2008). Typology of EWOM advertisement media is given in Table (1).

EWOM marketing is done in various forms including buzz marketing (using news and amusement), viral marketing (publishing messages especially via email), and community marketing (Creation and supporting from some communities such as followership associations and clubs and user groups), product seeding (to put suitable product at disposal of influential subjects at right time), influencer marketing (to find influential individuals and communities) and brand- blogging (creation and participation in weblog through valuable information (Goyette et al. 2010).
Table 2. Typology of EWOM Communication Canals (Radmehr et al. 2011)

<table>
<thead>
<tr>
<th>Type of canal</th>
<th>Interaction level</th>
<th>Communication domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic letters (emails)</td>
<td>Asynchronous</td>
<td>One by one &amp; one by multiple</td>
</tr>
<tr>
<td>Instant messages</td>
<td>Synchronous</td>
<td>One by one</td>
</tr>
<tr>
<td>Websites, visiting product and other</td>
<td>Asynchronous</td>
<td>One by multiple &amp; multiple by multiple</td>
</tr>
<tr>
<td>websites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking rooms</td>
<td>Synchronous</td>
<td>One by multiple</td>
</tr>
<tr>
<td>Weblogs and virtual communities</td>
<td>Asynchronous</td>
<td>One by multiple</td>
</tr>
<tr>
<td>News groups e.g. Google news group</td>
<td>Synchronous</td>
<td>One by multiple &amp; multiple by one</td>
</tr>
</tbody>
</table>

Domestic Researches Backgrounds

- In a study titled ‘Analysis of effects of EWOM marketing on buying intention’ Fallah (2017) has implied that EWOM is a novel forum in which consumers are shared in their experiences and assessments of different brands and products e.g. via laptop through online communication canals. In today world, an ordinary person may be exposed to a mass of marketing messages which are produced by traditional marketing methods such as commercial and promotional ads and consumer is destined to select among a mass of promotional offers. EWOM marketing includes informal communications about a certain product or services that could be utilized as a valid filter for the users because independence and lack of reliance of EWOM on producers may draw consumer’s trust. Alternately, controlling EWOM marketing by enterprises can create a competitive advantage in today market. The current research has been conducted in order to analyze effect of EWOM marketing on decision for purchase.

- In their investigation under title of ‘Interpretation of tendency of customers to use BMI banks of services in Guilan Province focusing on EWOM promotion’, Roohbakhsh and Fadaei (2017) have declared that entry of IT into various industries has exerted a lot of changes in their different processes. Banking industry is one of the foremost industries which have been subject to many changes by entry of IT. In this sense, the main objective of aforesaid study was to interpret tendency of customers to use BMI banks of services in Guilan Province focusing on EWOM promotion. This study is applied type based on objective and it is a type of descriptive researches in terms of data collection. The research statistical population was customers of Melli Bank (BMI) in Guilan Province. Given the studied population is unlimited thus Cochran’s formula for unlimited population was employed for selection of sample. The sampling technique that has been used for this study is of clustered and non-probabilistic available sampling type. The data collection method was used in this survey was field study and questionnaire was utilized as tool for
data collection. The content validity has been used for measurement of validity rate and also Cronbach alpha coefficient was employed to measure reliability for which reliability rate was derived higher than 0.7 for all variables in this model. All of collected data were analyzed by SPSS and PLS software. Confirmatory factor analysis was utilized to test research hypotheses and structured equation modeling was adapted by taking ordinary least square (OLS) approach. The result of research hypotheses suggested approval for all hypotheses in this study.

● In a study under title of ‘EWOM and its impacts on customer’s intention for purchase’, Nasiri Sarvi and Haffari (2017) have mentioned that after Industrial Revolution and automation of products and thus rising rate of supply, factory owners concluded that they should introduce and promote for their commodities if they intended to be able to sell their goods and after a short period of time marketing science was founded. Today, modern marketing techniques have been introduced to the world and they are more efficient, cheaper and effective than old methods out of which one can refer to types of one-by-one marketing, phone marketing, remote marketing, partisan marketing, viral marketing and word of mouth marketing etc. The librarian method has been utilized in aforesaid study. It has been tried in aforementioned study to introduce generally EWOM marketing, methods of use and the given effect on intention to purchase in customers.

● In an investigation with the title of ‘EWOM advertisements and its impact on behavior of consumer’, Beigi and Ibrahimi (2015) have implied that in today excessively competitive markets, directors of enterprises look for new techniques to inform the people about their products and to improve their trade names. They adapt various marketing techniques to attract more customers to achieve their goal. One of the most effective types of these methods that have formed according to relationship between individuals is Electronic Word of Mouth (EWOM) marketing. Following to rising number of internet users in Iran during recent years, a suitable opportunity has been provided for the enterprises to increase knowledge of customers about their products by benefitting from this modern method along with traditional marketing methods rather than increase in their market share and thereby to improve trade name for the company. In this regard, subject of EWOM marketing has been analyzed by the given reviews and studies in this paper. It has been focused on importance of EWOM marketing in the reviewing studies.

● Khalilzadeh and Asgari Sabzkoohi (2015) have explored relations among EWOM advertisement and making decision to buy Huawei mobile phones. They expressed in this investigation that EWOM advertisements are implemented in line with the same comments and positive and negative experiences of consumers versus other consumers or individuals who intended to buy a product such as mobile phone in order to reduce buying risk and to release from confusion in buying among similar products in internet environment. This survey aims to review relations among EWOM ads and decision for buying Huawei mobile phone. This study has been an applied-researching research in terms of goal and a survey in terms of data collection
method. Questionnaire was utilized as a tool to collect data and data analysis was done using some parameters e.g. mean and standard deviation and level of effect exerted by EWOM advertisement to intention of customers for purchase and related standard deviation have been measured 4.90 (of total 5 score) and 0.56 by means of the results from SPSS software application respectively and these rates indicated positive effect of EWOM advertisement on intention of purchase in consumers of Huawei mobile phones.

● In a study that was conducted by Boroomand and Aberoomandi (2015) with title of ‘Analysis of effect of EWOM ads on intention for repurchase by online customers’, they mentioned that today extensive competition has been increased within various commercial fields especially E-commerce throughout the world compared to the past and maintenance of customers and rising their loyalty became more difficult and providing for their requirements could contribute to improving loyalty of customers. The main objective designated for this study was to find the foremost factors for continuous use of Digi-Kala website by internet buyers and also effective factors on EWOM ads among customers of Digi-Kala Company that is today assumed as the leader of this market in sale of electronic commodities in the country based on the published statistics. In order to collect data in this study and for analysis on 9 major hypotheses, 385 questionnaire forms were collected after distribution of them among respondents. The results of data analysis were derived using SPSS and LISREL software that indicated approval for all research hypotheses.

● In their paper titled ‘Review of the impact of relational marketing on intention for buying among customers mediated by oral advertisement’, Shekari et al. (2015) have implied that today maintenance and training of customers might be deemed as a very important factor in achievement of leading companies in present competitive environment. Customers enjoy a lot of advantages; they could use goods and services given by the enterprises and if that commodity and services becomes proportional to their taste and viewpoint they may recommend it to their friends to use the same good or service of companies as a positive promotional tool. The current research intends to determine effect of relational marketing on making decision for purchase by customers with mediation of oral advertisement. The statistical population of this study was considered as the customers who might use products of agencies for sale of cosmetic and sanitary products in Bushehr Province and questionnaire was employed as a tool for data collection. The available sampling method has been utilized for selection of statistical sample in which 284 customers provided data for this investigation. SPSS and LISREL software has been used for data analysis. Initially, utility level was tested for the variables and their parameters using single t-test and also positive relationship was confirmed between variables using correlation coefficient and t-test path coefficient. Then this model was tested by means of LISREL software and confirmatory factor analysis and structured equation modeling. Finally, values of fitness parameters indicated that the model was well fitted and eventually a modified and complementary model was proposed by LISREL software.
In a study under title of ‘Effect of oral advertisements on tendency to use from insurance services among customers of insurance companies in Rasht city’, Davari et al. (2015) have expressed that the oral advertisements might play efficient role as one of the paramount and oldest informal tools for communications in marketing processes such as encouragement of persons to buy products and to use services. Many consumers mainly rely on EWOM information they received from their friends and relatives because they considered such information as more reliable than commercial ads and statements by marketers. Therefore, in an environment where the consumer trusts lesser in organizations and their advertisements, the oral ads may provide a way to acquire competitive advantage and enable the commercial organizations and enterprises thereby to affect customers’ intention for purchase. With respect to importance of the subject, the present research has tried to analyze effect of oral advertisements on using services between customers of insurance industry. This study is one of descriptive–correlational researchers in terms of method and nature and it is of applied type in terms of objective. The statistical population of current study includes active insurance companies in Rasht city and 300 questionnaire forms were distributed among them to select sample using simple randomized sampling technique. The structured equation modeling has been utilized for data analysis and testing research hypotheses. The findings resulted from this study suggest that dimensions of oral advertisements i.e. intensity, positive potential, negative potential, content of oral advertisements as well as image of company may affect tendency of customers to use insurance services.

In his paper with title of ‘review on effect of customers’ emotions on intention to repurchase by mediation role of oral advertisement (case study: Alborz insurance in Shiraz city’, Lotfi (2015) has stated that the individual might have more easily interacted using perceived emotions. The emotions facilitate in interactions and relations between parties. On the other hand, today positive oral advertisements are called as a very strong tool in advancement for sale of products so that it may quickly lead unknown and anonymous products into path of unbridled commercial fame and repute. In this regard, this study has been carried out to determine impact of customers’ emotions for intention to repurchase mediated by the role of oral advertisements in insurance industry. This investigation is assumed as applied type in terms of goal and classified as one of descriptive and surveying researches in terms of method. Customers of Alborz Insurance Company in Shiraz city were statistical population of the current study. Cochran’s formula was used for determination of sample size and with respect to the unlimited numbers of this population the necessary sample size for this study comprise of 196 respondents. The non-probabilistic available sampling technique has been adapted for selection of sample. Questionnaire was employed as data collection tool in this survey and reliability of questionnaire was determined 0.836 using Cronbach alpha coefficient. Smart-PLS software was utilized for structured equation modeling to analyze collected data. The results of study indicated that emotions of customer might significantly affect intention for purchase. Likewise, results of
study showed that oral advertisements might play mediatory role in impact of
customer’s emotion for intention to purchase.

- In their survey, Golshahi and Sadeghi (2014) explored impact of EWOM
  advertisements on consumer’s buying behavior in the case study for consumers
  of tablets and smartphones. This study was conducted under title of analysis on
  effect of EWOM advertisements on buying behavior of consumer (case study:
  consumers of tablets and smartphones). The statistical population of this study
  included MA students from a faculty in University of Firdausi and simple
  sampling method was employed for selection of sample. This survey was of
  applied type in terms of objective and also of descriptive- correlational type.
  The standardized questionnaire has been employed as a tool for data collection
  in this study and it has been built based on literature and researching bases. The
  results of this study show that the research conceptual model enjoys goodness
  of fit. The results of fitness parameters were near to unit and error parameter
  approached to zero. Thus, it can be implied that EWOM advertisements have
  positive and efficient impact on buying behavior of consumer. Similarly, the
  findings show that there is direct and significant relationship among variables
  of awareness of product, awareness of product price, awareness of promotional
  aspects, awareness of distribution canals and awareness of after-sale services
  with buying behavior of consumer.

Foreign Researches Background

- In a paper titled ‘the antecedents of purchase and re-purchase intentions of
  online auction consumers’, Jengchung et al. (2016) implied that they have
  used two PChome and eBay Auction Sites for data collection. In this paper,
  120 veteran customers have participated from both of these sites so that to
  measure effect of past experiences on intention for repurchase. The results of
  study have indicated that all designated variables were confirmed by the
  researchers and effect of perceived trust and risk has been expressed by the
  customers at different level. These findings have clearly specified complexity
  of decision-making process in online auctions. Likewise, this investigation has
  indicated that there was the attitude of interest and enjoyment among buyers
  and sellers in online purchase process.

- In a study under title of ‘a research on effectiveness of Facebook advertising
  on enhancing purchase intention of consumers’, Dehghani and Tumer (2015)
  explored effect of FaceBook as a social network on rising purchase between
  consumers in 2013. The findings signified that FaceBook ads might
  remarkably affect image and special value of the brand and both of these
  variables might contribute to noticeable change in intention for purchase in
  consumers.

- In their survey under title of ‘effective marketing communication via social
  networking site: The moderating role of the social tie’, Shen et al. (2015)
  expressed the FaceBook has provided a path for communication with online
  friends that could increase effect of internet ads. In this investigation,
researchers have utilized conceptual framework based on social capital and theory of communications including dependence intensity, type of message and promotional literacy level. The findings resulted from analysis on 346 collected questionnaires have indicated that the interactive promotion might give wider attitude to the consumers about advertisement and sharing of messages compared to non-interactive promotion. The social dependence is an important factor for moderating effects of message type and promotional literacy level on efficient communications.

- In their study titled ‘viral effects of social network and media on consumers’ purchase intention’, Gunawan, D. D and Huarng, K. H. (2015) analyzed importance of viral marketing in social networks. The results showed that social integration has no effect on subjective norms among consumers in social networks. Similarly, their findings indicated that social influence along with perceived risk in social networks might affect purchase intention in consumers.
- In a study, Hudson et al. (2015) explored effects of social media on emotions, quality of brand relations and EWOM marketing by conducting experimental survey on participants in music festival and concluded that on the one hand, interaction of social media might noticeably affect emotion and at the same time in EWOM marketing and also perceived emotions with quality of brand relations might influence in EWOM marketing that has led to the given findings.
- In a survey, Amonrat (2014) examined impact of social media on EWOM marketing. In this investigation in which he has analyzed users of various types of social media, he indicates that EWOM has positive and significant impact on consumers as well as intensity of utilization from social networks by the users. Thus, social media may create efficient tools for attraction of demand for various goods and services and he shows innovative marketing tools enable the enterprises to prepare their own for adaptation to new virtual lifestyle by investment in advanced communication technologies.

**Research Conceptual Model**

*Figure 3. Research conceptual model excerpted from study of Martensen and Granhult (2016)*
Methodology and Research Implementation Processes

This study is a deceptive-analytical research in terms of type and nature because researcher looks for analysis and description of relationship among behavior of consumers, EWOM, customer’s emotions and social norms. Alternately, whereas method and level of effects of variables and their correlation are studied it is typically assumed as a correlational research as well. A statistical population includes a group of individuals or units with one common attribute at least. The studied population in survey is usually the statistical population for which researcher intends to study about variable attribute (attributes) of the given units (Sarmad et al. 2011). In this study, statistical population comprises of all customers of Digi-Kala Company in Tehran city and their quantity is indefinite. The Simple Random Sampling (SRS) method has been employed for this study. With respect to Cochran’s sampling formula and given this rule that statistical population of this study (all customers of Digi-Kala website) is the unlimited number thus the minimum quantity necessary sample size is 384 samples for this investigation.

Whereas some of collected questionnaires may probably include heterogeneous and unreliable data and some of respondents may avoid from completion of questionnaire, the questionnaire forms were distributed among 420 respondents among them 395 questionnaires were collected but there were some questionnaires with many heterogeneous and lost data in 395 questionnaire form but finally 385 proper questionnaire forms were analyzed.

Structure of Questionnaire

The questionnaire has been utilized for data collection in major part of this study and for measurement of research variables. The given questionnaire was standardized and it has been extracted from paper of Martensen and Granhult (2016). Nonetheless, before their measurement in this questionnaire, the measured parameters in this study were subject to judgment by several experts and finally the agreed questionnaire was employed as a tool for data collection. This questionnaire comprises of two sections. The first section is concerned with demographic traits and the second part analyzes research variables and includes 24 questions with Likert five-scale spectrum. The aforesaid questionnaire is visible in Appendix 1. Orders and quantity of questions can be seen in the following table:
Table 3. Number of Questions in Questionnaire

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of questions</th>
<th>Order</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social norms</td>
<td>3</td>
<td>1-3 Qs</td>
<td>Martensen and Granhult (2016)</td>
</tr>
<tr>
<td>Behavior of consumers</td>
<td>3</td>
<td>4-6 Qs</td>
<td></td>
</tr>
<tr>
<td>Attitude of consumers</td>
<td>4</td>
<td>7-10 Qs</td>
<td></td>
</tr>
<tr>
<td>EWOM marketing</td>
<td>4</td>
<td>11-14 Qs</td>
<td></td>
</tr>
<tr>
<td>Positive emotions</td>
<td>5</td>
<td>15-19 Qs</td>
<td></td>
</tr>
<tr>
<td>Negative emotions</td>
<td>5</td>
<td>20-24 Qs</td>
<td></td>
</tr>
</tbody>
</table>

Content validity: The comments of experts and relevant masters are used in content validity method. For this purpose, the questionnaire has been initially extracted, translated and designed using similar papers and then put at disposal of several experts and scholars to examine transparency and relevance of questions with the research content.

Combined Reliability

Since Cronbach alpha coefficient is a traditional criterion for determining reliability of constructs, PLS technique is employed as more modern criterion than alpha coefficient under title of combined reliability. This criterion was introduced by Werts (1974) and it is prior to Cronbach alpha in that the reliability of constructs is not computed absolutely but with respect to correlation between their parameters with each other. If the value of Combined Reliability (CR) becomes higher than 0.7 for any construct (Houshangi et al. 2017) it reflects suitable internal consistency for the measurement models while value of reliability less than 0.6 shows lack of reliability. It necessitates noting this point that CR is assumed as a better criterion than Cronbach alpha in structured equation modeling (Vinzi, 2010). Whereas all parameters are calculated with the same importance for each of constructs in computation of Cronbach alpha, the parameters with higher factorial loadings are more important for CR calculation. This causes CR values of constructs to be more real and accurate criteria than Cronbach alpha (Houshangi et al. 2016). Both criteria of Cronbach alpha and combined reliability have been utilized in this study to ensure from reliability of questionnaire and the given measurement.
Table 4. Reliability and Average Variance Extracted from Research Variable

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach alpha</th>
<th>Combined Reliability (CR) coefficient</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude of consumer</td>
<td>0.792952</td>
<td>0.864449</td>
<td>0.614722</td>
</tr>
<tr>
<td>Behavior of consumer</td>
<td>0.853648</td>
<td>0.911000</td>
<td>0.773357</td>
</tr>
<tr>
<td>EWOM advertisement</td>
<td>0.829238</td>
<td>0.897798</td>
<td>0.745445</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>0.907438</td>
<td>0.930837</td>
<td>0.729466</td>
</tr>
<tr>
<td>Positive emotions</td>
<td>0.802977</td>
<td>0.865869</td>
<td>0.567828</td>
</tr>
<tr>
<td>Social norms</td>
<td>0.878805</td>
<td>0.925237</td>
<td>0.804889</td>
</tr>
</tbody>
</table>

Measurement Model Test

Initially, measurement models of research variables were analyzed. This test includes two main processes and several parameters:

- **Reliability test:** Test reliability is related to measurement accuracy and stability. Reliability has two different meanings: one meaning of term ‘reliability’ is the stability and persistence of scores over the time; namely, if a test is administered for a single respondent for several times, the score will be the same in all cases. The second meaning of reliability refers to parity of items and this means how much testing questions are correlated. For this purpose, three parameters are used for analysis of reliability using software application:
  - Reliability for each of tangible variables (reliability of referents)
  - Combined reliability or Delvin- Goldstein- p
  - Cronbach alpha coefficient

Both of Cronbach alpha and CR coefficients have been utilized to verify reliability of variables in this study. If Cronbach alpha and CR coefficient are higher than 0.7, the variables have reliability at favorable level. As it characterized in Table 5, the values of Cronbach alpha coefficients range from 0.792 to 0.907. Likewise, values of CR coefficients are between 0.864 and 0.930 that indicates suitable reliability for the constructs.
Table 5. Reliability and Average Variance Extracted from Research Variable

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach alpha</th>
<th>Combined Reliability (CR) coefficient</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude of consumer</td>
<td>0.792952</td>
<td>0.864449</td>
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</tr>
<tr>
<td>EWOM advertisement</td>
<td>0.829238</td>
<td>0.897798</td>
<td>0.745445</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>0.907438</td>
<td>0.930837</td>
<td>0.729466</td>
</tr>
<tr>
<td>Positive emotions</td>
<td>0.802977</td>
<td>0.865869</td>
<td>0.567828</td>
</tr>
<tr>
<td>Social norms</td>
<td>0.878805</td>
<td>0.925237</td>
<td>0.804889</td>
</tr>
</tbody>
</table>

In order to determine reliability of referents in partial least square technique, factorial loadings test is employed. The values of referents should be higher than 0.6 in factorial loading test. The coefficients of factorial loadings can be observed for questions of research questionnaire in Fig 5.

As it visible in Fig 5, majority of variables has factorial loadings higher than minimum value 0.6 and only one of referents includes factorial loading less than 0.6 and with respect to Baidu’s rule¹ and the given average variance extracted (AVE) (>0.5) this referent can be maintained (It should be noted these factorial loadings can be also seen in Table 6 (transverse loadings)).

- **Validity test**: The validity of variables and referents should be determined to analyze validity of model. Parameter of Average Variance Extracted (AVE) is used for determining validity of variables for which the values higher than 0.5 indicate favorable validity. As you observe in Table 5, AVE values range between 0.567 and 0.804 for constructs in this study so these values are greater than the minimum level which indicates favorable validity of constructs.

Transversal loadings test is utilized to determine validity of referents in which factorial loadings of each of referents should be higher that factorial loadings the given referent for other constructs. The results of this analysis are given in Table 6. The results of this investigation denote high validity of referents because all referents have factorial loadings higher in their constructs than their factorial loadings for the constructs.

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¹ - Baidu’s rule expresses that if a construct includes a referent with factorial loading less than 0.6 but the given average extracted variance is higher than 0.5, the referent could be kept. For more information see also the related book, Dr. Adel Azar et al. (2012).
### Table 6: Transversal Loadings for Research Referents

<table>
<thead>
<tr>
<th></th>
<th>SN</th>
<th>PE</th>
<th>NE</th>
<th>EWOM</th>
<th>CB</th>
<th>CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.312549</td>
<td>0.430001</td>
<td>-0.102541</td>
<td>0.396090</td>
<td>0.436402</td>
<td>0.801604</td>
</tr>
<tr>
<td>2</td>
<td>0.299375</td>
<td>0.218798</td>
<td>-0.074881</td>
<td>0.248888</td>
<td>0.314842</td>
<td>0.751141</td>
</tr>
<tr>
<td>3</td>
<td>0.346861</td>
<td>0.307889</td>
<td>-0.213530</td>
<td>0.340032</td>
<td>0.428440</td>
<td>0.804577</td>
</tr>
<tr>
<td>4</td>
<td>0.296199</td>
<td>0.231492</td>
<td>-0.213972</td>
<td>0.349950</td>
<td>0.388783</td>
<td>0.777663</td>
</tr>
<tr>
<td>5</td>
<td>0.500700</td>
<td>0.511816</td>
<td>-0.135112</td>
<td>0.622616</td>
<td>0.883247</td>
<td>0.412986</td>
</tr>
<tr>
<td>6</td>
<td>0.538211</td>
<td>0.526627</td>
<td>-0.115886</td>
<td>0.522820</td>
<td>0.869080</td>
<td>0.469208</td>
</tr>
<tr>
<td>7</td>
<td>0.575859</td>
<td>0.591068</td>
<td>-0.172249</td>
<td>0.649265</td>
<td>0.885803</td>
<td>0.453114</td>
</tr>
<tr>
<td>8</td>
<td>0.563921</td>
<td>0.597744</td>
<td>-0.178211</td>
<td>0.874178</td>
<td>0.599200</td>
<td>0.332658</td>
</tr>
<tr>
<td>9</td>
<td>0.553269</td>
<td>0.535970</td>
<td>-0.183507</td>
<td>0.857651</td>
<td>0.586920</td>
<td>0.368346</td>
</tr>
<tr>
<td>10</td>
<td>0.557675</td>
<td>0.509405</td>
<td>-0.215453</td>
<td>0.858244</td>
<td>0.574922</td>
<td>0.418027</td>
</tr>
</tbody>
</table>

**Structured Model Quality Test and Assessment**

There are three main criteria for testing structured models in analysis of structured models by the aid of partial least square approach: 1) AVE parameter (R^2); Q^2 index; and Goodness of Fit (GOF) as overall fitness.  

**R^2 criterion**  
Average Variance Extracted is the main criterion for evaluation of endogenous hidden variables of path in model. This index indicates how many percent of variance of endogenous variable is exerted by exogenous variable. Values of 0.67, 0.33 and 0.19 have been described respectively as noticeable, medium and low for the endogenous hidden variables (dependent) in structured path model (internal), but if endogenous hidden variable is affected by some of (one or two) exogenous variables, the lower values of AVE could be accepted as well (Mohsenin & Esfidani, 2014). The results of this test are visible in Table 8.  

**Q^2 criterion**
Q^2 criterion is calculated only for endogenous constructs of the model in which indices are of reflexive type and if this value sets zero or less than zero for an endogenous construct, it indicates the relationships have not been well defined between other constructs of the model and the given endogenous construct and consequently, the model needs to correction. Henseler et al. (2009) have determined three values (0.02, 0.15 and 0.35) for intensity of potential of prediction in endogenous constructs of the model in which these values indicate the prediction potential at low, medium and high levels in a construct versus indices of the given construct. The following table shows Q^2 values for each of endogenous variables in the model.

**Table 7. Q^2 values**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Q^2 criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude of consumer</td>
<td>0.134729</td>
</tr>
<tr>
<td>Behavior of consumer</td>
<td>0.341898</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>0.044159</td>
</tr>
<tr>
<td>Positive emotions</td>
<td>0.238684</td>
</tr>
</tbody>
</table>

**Analysis on Goodness of Fit (GOF) of section**

Unlike (CB-SEM) covariance-based method, there is no index for general measurement of the model in structured equation modeling but an index, called Goodness of Fit (GOF) was offered by Tenenhaus et al. (2005) for this purpose. This index considers both measurement and structured models and is used as a criterion for measurement of general performance of the model. This index ranges within limit between zero and one. Weltz et al. (2009) introduced three values of 0.01, 0.25 and 0.36 respectively as low, medium and high quantities for GOF.

\[
\text{GOF} = \sqrt{\text{communalities} \times R^2}
\]

**Table 8. GOF**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Commonality</th>
<th>R-Square</th>
<th>GOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude of consumer</td>
<td>0.614722</td>
<td>0.228964</td>
<td></td>
</tr>
<tr>
<td>Behavior of consumer</td>
<td>0.773357</td>
<td>0.464965</td>
<td></td>
</tr>
<tr>
<td>EWOM advertisement</td>
<td>0.745445</td>
<td>-</td>
<td>0.458</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>0.729466</td>
<td>0.067659</td>
<td></td>
</tr>
<tr>
<td>Positive emotions</td>
<td>0.567828</td>
<td>0.434306</td>
<td></td>
</tr>
<tr>
<td>Social norms</td>
<td>0.804889</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>0.705</strong></td>
<td><strong>0.298</strong></td>
<td></td>
</tr>
</tbody>
</table>

With respect to three values i.e. 0.01, 0.25 and 0.36 that have been introduced as low, medium and high values for GOF (Wetz et al. 2009) 0.458 is verified as high quantity for GOF.
Testing Hypotheses

T-significance Coefficient

Using significant coefficient algorithm in this section we calculate T-statistic. If value of T-statistic is greater than 1.96, it indicates precision of relationship between constructs and as a result confirms research hypotheses at confidence level 95% (Significance numbers at significance levels 99% and 99.9% are 2.58 and 3.27 respectively). The results of this algorithm are shown in Fig 4.

Path Coefficients

PLS algorithm should be used for calculation of standard path coefficients between constructs. The standardized coefficients between independent and dependent variables indicate that the independent variable interprets variance of dependent variable at this percentage. Fig 5 displays standardized coefficients of paths relating to each of hypotheses.

Figure 4. T-statistic Between Research Main Variables
Given the results derived from analysis on the collected data, the results of research hypotheses are generally presented in Table 9. It should be noted that those relations in which value of T-statistic is higher than 1.96 will be confirmed while relations with t-statistic less than 1.96 are rejected.

Table 9. Approval or Rejection of Hypotheses

<table>
<thead>
<tr>
<th>Approval or rejection of hypotheses</th>
<th>Path coefficient</th>
<th>Significance</th>
<th>Approval/rejection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: EWOM advertisement has positive and significant effect on positive emotions of consumers.</td>
<td>0.485</td>
<td>9.410</td>
<td>Approved</td>
</tr>
<tr>
<td>H1b: EWOM advertisement has reverse and significant effect on negative emotions of consumers.</td>
<td>-0.109</td>
<td>1.495</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2a: EWOM advertisement has positive and significant effect on attitudes of consumers.</td>
<td>0.179</td>
<td>2.758</td>
<td>Approved</td>
</tr>
<tr>
<td>H2b: EWOM advertisement has reverse and significant effect on negative emotions of consumers.</td>
<td>-0.105</td>
<td>2.041</td>
<td>Approved</td>
</tr>
<tr>
<td>H3a: Social norm has positive and significant effect on positive emotions of consumers.</td>
<td>0.232</td>
<td>3.963</td>
<td>Approved</td>
</tr>
</tbody>
</table>
H3b: Social norm has negative and significant effect on positive emotions of consumers.  
-0.178  2.158  Approved

H3c: Social norm has positive and significant effect on attitudes of consumers.  
0.111  1.502  Rejected

H3d: Social norm has positive and significant effect on behavior of consumers.  
0.492  12.712  Approved

H4: EWOM advertisement has positive and significant effect on attitudes of consumers.  
0.222  3.478  Approved

H5: Attitude of consumers has positive and significant effect on behavior of consumers.  
0.321  8.030  Approved

Conclusion and Suggestions

Suggestions Relating to Research Hypotheses

According to the statistical results derived from statistical analysis in the current research, the relationship was obviously revealed among EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers. Therefore, it is obvious that Digi-Kala Company in Tehran city should make effort to enhance EWOM ads, positive and negative emotions, attitudes of consumers, social norms and behavior of the consumers in their organization so that to improve in the performance. Some strategies and solutions are given for improvement of each of influential factors on research variables in the followings.

By focusing on relationship among EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers, organizational directors and officials in Digi-Kala Company in Tehran should identify needs and requirements of customers so that their personnel to take step toward improving variables of EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers. It seems necessary to formulate a suitable operational framework for appropriate planning in order to improve EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers. The access to information is facilitated for personnel about EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers to improve their relationship with consumers. Thus, codification of training programs and improving conditions for EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers based on organizational marketing and promotion and employment of experts in the fields of internet and content generation marketing may be...
implemented to enable them to enhance EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers in the organization.

Research Uses

It is discussed about some of uses of research for researchers in this field as well as directors of organizations with respect to the results of hypotheses after review on research hypotheses and findings and comparison of the given results with the previous studies in this regard. Some examples of them are mentioned in the following.

1. Review on different relationships which have been designated in this study will give extensive percept to the readers about quality of effect of these variables on each other especially about way of impact by EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers. Given the final objective for many organizations in market is to acquire profit and more market share as well as competitive advantage and eventually improved performance of organization and variables of EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers may increase organizational performance so that the results of the current study will help the directors to take step toward improvement of their organizational performance and EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers and thereby to acquire competitive advantage versus rivals and satisfaction for the customer.

2. Based on the conducted studies, modern directors should properly perceive effective factors in organizational performance. Findings of this study will lead to better perception in directors of effective factors on their marketing and promotional performance and EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers and help them to make better and more comprehensive decisions.

3. With respect to current business environment, directors should look for finding of solutions for improving their organizational performance. Findings of this study indicate directors what variables should be addressed for improving their organizational performance regarding EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers.

4. Given that the rate of influence has been determined for each of variables, by considering the sources at their disposal, directors can allocate the resources for improving performance in EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers and avoid from allocation of resources to the subjects with less effect.

5. This is one of the few studies conducted in Iran that has analyzed effect of EWOM advertisement and positive and negative emotions and attitudes of
consumers, social norms and behavior of consumers. Therefore, the given results could be assumed as a moderating path and shortcut to be continued in other investigations.

Research Limitations

The presence of many problems and constraints always makes this path difficult and uneven for conducting study. Presence of these limitations certainly has high effect on research trend and the given results with derived interpretations and requires researcher to observe more care and precision in this regard. There were also many limitations in this study some of which will be implied in the followings.

1. Given this study has been carried out within a limited time interval; thus, the effect of research variables on each other has been evaluated in the same time range, but for better assessment of quality of effect of these variables on each other, it would be better to conduct this assessment for several periods and within longer time interval in order to consider further different environmental impacts and conditions. Although lack of additional time for this study and restriction in receiving information caused this objective not to be realized.
2. The limited access to English information references, particularly theses of leading universities in the world and latest information sources caused writing of theoretical literature to encounter some problems.
3. Absence of domestic related studies and investigations with which findings of current study to be compared is one of the limitations to which researcher was exposed.
4. Poor cooperation of statistical population with researcher and lack of adequate care and paying attention to questions in the questionnaire caused some problem in data analysis process.

Suggestions for Future Studies

In the last part of this study, some suggestions are proposed to the interested researchers for conducting studies in the future in this regard so that to clarify path of studies about EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers.

It is suggested for considering time period of conducting study for several years thereby to examine better the effect of research variables on each other and to be followed with more stable findings. Surely, researcher could not identify all effective factors on EWOM advertisement and positive and negative emotions and attitudes of consumers, social norms and behavior of consumers and there were some factors which have been overlooked by the researcher. Conducting studies about the unidentified factors may be favorable for improvement of organizational performance. At the same time, the effect of
more numbers of variables e.g. ease of use can be measured in the forthcoming studies thereby we could achieve a more comprehensive model in this regard. One can test these relations in other organizations and even in other production industries as well to ensure from precision of the derived results.

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