

The Factors Affecting the Usefulness of Information on the Purchase Intention with the Mediating Role of Up-to-Date Information on Instagram

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Abstract: Social media has completely revamped the way people communicate, interact and engage with each other. The most important is this platform plays a main role in facilitating greater influence. Most studies on social influencer marketing techniques have focused on identifying the features of social media influencers whereas little is known about the electronic Word-of-mouth promotion of products. The present experimental study investigated the factors affecting the usefulness of information on Instagram on the clothing purchase intention with the mediating role of up-to-date information on Instagram as a famous and practical social media in today's world. The study was conducted on 10 clothing stores that sell their products through Instagram. In simple random sampling method with the help of the NinjaGram robot has been used. The questionnaire was prepared electronically which are 384 people. SPSS and LISREL software was used to analyze the data. The results show that the attitude of using Instagram has a direct positive effect on the usefulness of information, the level of risk-taking, and the level of self-confidence on the intention to buy on Instagram. In addition, the usefulness of information affects the Up-to-date information on Instagram and up-to-date information has a direct positive effect on creating the intention to buy on Instagram.

Keywords: Purchase Intention, Useful Information, Up-to-Date Information, Instagram, Social Media

1. Introduction

Many people in the world, due to work and social conditions, tend to buy clothes through social networks. On the other hand, social networks have encouraged people to share different aspects of their lives, which in turn have created a favorable environment for the development of the garment industry. According to a survey conducted by Global Data in the UK, a third of women said that wearing a dress after three times is a repetition for them, as well as social networks such as Instagram, Facebook, and Twitter were very influential. They have a lot on their shopping habits, which affects customers' purchases. Also, 34% of clothing buyers in the UK in 2018 stated that they use social networks to buy clothing, which shows the importance of these networks in the clothing industry [1].

1.1. Problem Statement

Social networks connect consumers with online sales services, allowing them to identify, share, rate, and buy products. For this reason, social networks have transformed the marketing and media environment [2]. These networks enable companies to reach more potential buyers by producing and sharing content such as videos, photos, and personal information. With this feature, many companies in the world today use social networks to publish useful information about their products and their brand, to be aware of them, increase the impact of the product with the brand, recommend the brand to others and encourage people to buy the product, and in this way, they influence their decision to buy. Social networks, on the other hand, have raised consumer awareness by creating a platform for people to

transfer their social and emotional experiences to each other, and this is exactly what happens in face-to-face communication. Therefore, these conditions strengthen these networks and make them a suitable platform for social business [3]. Estimates of users of social networking sites around the world are about 2.3 billion people [4].

Therefore, in today's world, the importance of social networks in consumer decision-making is increasing rapidly [5], so that researchers estimate that 97% of consumers examine the opinions of others and subject them to Effects [6] Nelson's research (2011) found that 70% of people who use social media listen to each other's experiences, 65% learn about the company's goods and services, 53% Good experiences and 50% express their concerns about goods and services [7]. Consumers also trust 90% of other consumers' recommendations, while 56% trust the company's ads. The American Deloitte Institute recently conducted a study in this regard, which showed that 62% of American consumers follow other users' opinions about the product they want, and also 98% of them consider these opinions to be credible [5], a study conducted by Morris *et al.*, Shows that social networks are more popular than search engines in being aware of consumers' online opinions about various products [5]. Jings' research in 2011 found that audience interest was shifting to online networks. With 52% of Europeans regularly online at home, about 26% of Internet users in Europe spend less time watching TV than they do, and 28% have reduced newspaper and magazine reading. And 17% use radio less [8].

One of the social networking sites that have become very popular among Iranian users these days is the Instagram social network, which is a suitable place for the presence of brands and even small businesses to introduce and create shopping intentions among the users of this network.

According to statistics from the Data Repertoire website, published in January 2020, Iran has more than 58 million Internet users, of which more than 33 million are members of at least one social network, of which more than 22 million are Instagram users.

Among these, many effective factors can affect the

customer's purchase intention. Therefore, in this study, the factors affecting the usefulness of information on the intention to buy clothing with the mediating role of up-to-date information on Instagram have been investigated.

1.2. Conceptual Model of Research

Al-Haydari *et al.*, In a 2015 article entitled "Personal Overtaking of Word of Mouth Advertising and the Intention to Purchase the Three Variables of Riskiness on Social Media, Social Media Presence and Confidence on Word of Mouth Advertising on Social Media" And has examined word-of-mouth advertising on social media about the purchase intention [9]. Also in this research, the level of risk-taking in social networks and self-confidence on the intention to buy has been investigated.

The two variables of confidence and risk-taking in social networks are taken from this model. In this article, the hypothesis of risk-taking in social networks is directly related to the customer's intention to buy is confirmed and the hypothesis of confidence is directly related to the customer's purchase intention [10].

Ismail Arkan and Chris Evans in a 2016 article entitled Social media or shopping websites? The influence of eWOM on consumers' online purchase intentions, four variables of information quality in social media, The validity of information on social media, the need for information on social media and the attitude of using the information on social media on the usefulness of word of mouth advertising information on social media, the presence of word of mouth information on social media Has studied the up-to-dateness of word-of-mouth advertising information on social media and the up-to-dateness of word-of-mouth advertising information on social media on the intention to buy [11]. All the hypotheses of this study have been confirmed. The variables of information quality, information validity, usage attitude, usefulness of information and up-to-date information have been used.

From the combination of the above research models, the theoretical model is obtained as follows:

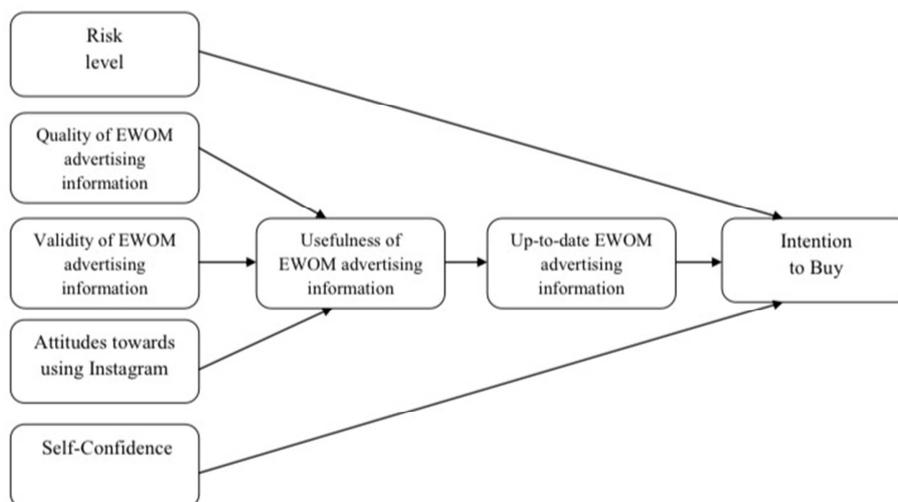


Figure 1. Conceptual model of research.

1.3. Hypotheses

- 1) Hypothesis 1: The quality of word-of-mouth information has a direct positive effect on the usefulness of electronic word-of-mouth advertising information on Instagram.
- 2) Hypothesis 2: The validity of word-of-mouth information has a direct positive effect on the usefulness of electronic word-of-mouth advertising information on Instagram.
- 3) Hypothesis 3: The attitude of using Instagram has a direct positive effect on the usefulness of electronic word-of-mouth advertising information on Instagram.
- 4) Hypothesis 4: The risk level has a direct effect on the purchase intention on Instagram.
- 5) Hypothesis 5: The level of self-confidence has a direct positive effect on the purchase intention on Instagram.
- 6) Hypothesis 6: The usefulness of word-of-mouth advertising information has a direct positive effect on the up-to-dateness of electronic word-of-mouth advertising information on Instagram.
- 7) Hypothesis 7: Up-to-date word-of-mouth advertising information has a direct positive effect on purchase intention on Instagram.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)} = 384$$

2.3. Data Collection Method

Data in the research using LISREL and SPSS software, different methods of descriptive and inferential statistics have been used to analyze the data and test the hypotheses. In descriptive statistics, the researcher describes the characteristics of the sample by collecting and summarizing the quantitative information obtained from the samples. In inferential statistics, the researcher deduces the parameters and characteristics of the whole society from the study and study of one or more samples and using statistical methods and models, from the sample indicators or sample characteristics, respectively. In other words, using inferential statistics, the sample results are generalized to the whole statistical population [13].

The data collection tool required in this research is a questionnaire. The questionnaire has 8 sections. That includes the quality of information on Instagram, the credibility of information on Instagram, the level of participation in Instagram, the level of risk-taking on Instagram, self-confidence, the intention to buy, to be useful and up-to-date.

2. Methods

The purpose of this research is practical and since in this research information from the sample population is obtained through a questionnaire at the present stage and the results are generalized to the statistical community, the nature of the research is descriptive of the survey type.

2.1. Statistical Society

The statistical population of this research is the users of ten Instagram pages related to clothing in Arak¹ who sell their products online.

Bart Boutique, Istanbul Boutique, OnePlus Boutique, Austin Boutique, Circulation Bags and Shoes, Adrienne Clotting, Rose Store, Exxon Wear, Boutique Art and Tiam Boutique.

2.2. Sample Size

In general, size formulas are related to the scale of the data that have been divided quantitatively and qualitatively. Cochran's formula is used to estimate the sample size [12].

In this study, a simple random sampling method using a Ninjagram robot was used and a questionnaire was sent electronically. Considering that the statistical population of this research is 190,433 people and according to Cochran's formula, the sample size of this research is equal to 384 people.

3. Result

In this study, descriptive statistics were used for descriptive analysis, and inferential statistics were used to measure the relationships in the proposed hypotheses.

3.1. Descriptive Statistics

In the present study, about 53% of the respondents were female and 47% were male. Also, 40% were in the age group of 20-30 years, 46% were 40-40 years old and 14% were over 40 years old. While 13% of the respondents had a diploma, 54% a bachelor's degree, and 33% a master's degree or higher.

3.2. Inferential Statistics

Basic steps of implementing SEM analysis

The basic approach to performing SEM analysis can be summarized in Figure 2:

The intention is that the researcher first defines a model based on theory to perform the preliminary SEM analysis. It then determines how structures measure, collect data and enter it into a computer. The input of this analysis is usually the covariance matrix of the measured variables. Estimation of the research model gives estimates of the parameters of that model (path coefficients and error sentences) and several dimensions to fit it with the sample data. Figure 3 shows the standard model obtained using LISREL software.

1. Arak is the largest industrial city and also one of the metropolises of Iran which is also located in western Iran and has a population of about 520,000.

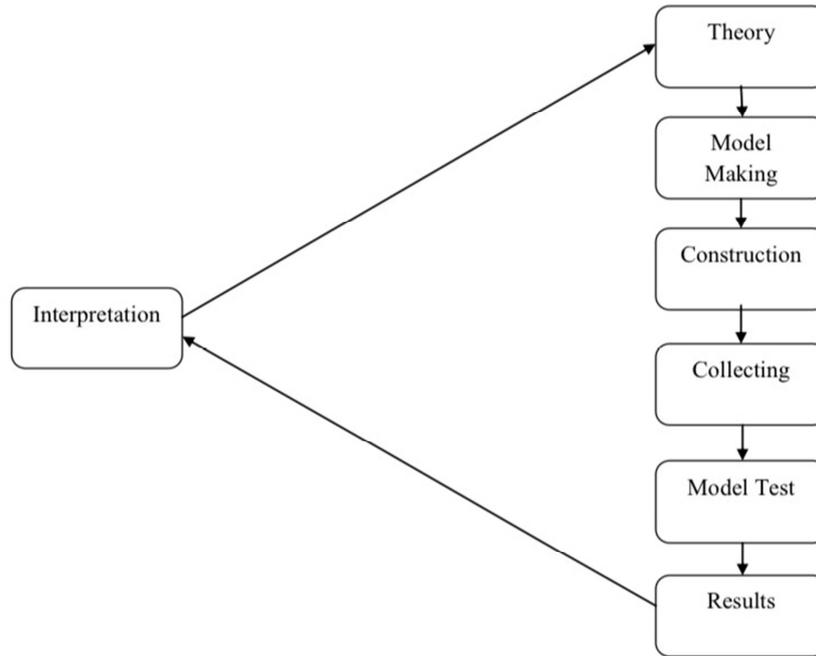


Figure 2. Shows the basic steps of SEM implementation.

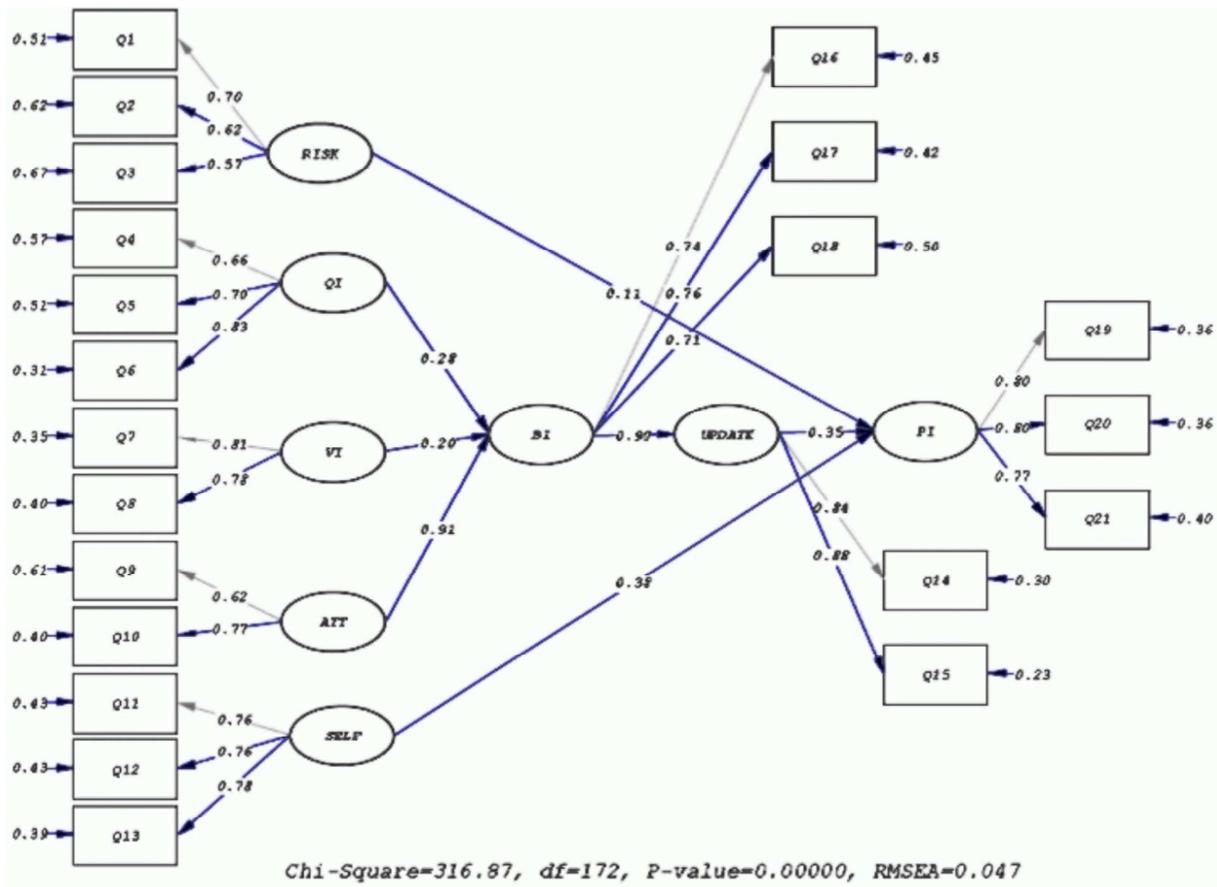


Figure 3. Model of standardized research coefficients using LISREL software.

As shown in Figure 3, in this model 8 latent variables are Information Quality (QI), Information Validity (VI), Usage Attitude (ATT), Risk Level (RISK), Confidence (SELF),

Information Usefulness (BI), up-to-date information (UPDATE) and purchase intention (PI) and their measurement indicators are indicated.

Fit measurements for a model are obtained by comparing the estimated covariance matrix for the population (based on the model, as determined by the researcher) with the sample covariance matrix calculated from the data [13]. The most important indicator of fitness is the chi-square test model (χ^2/df). Of course, this test involves observing a series of assumptions that in some cases there is a possibility of failure of these assumptions. When the sample size is 75 to 200, the chi-square is a reasonable measure of fit. But for models with larger sample sizes, the chi-square is almost always statistically significant. In addition, the chi-square is also affected by the number of correlations in the model; the higher these correlations, the weaker the fit. For this reason, other dimensions have been developed to fit the models [13].

According to the above, to evaluate the fit of the model of this research, indicators such as chi-square on the degree of

freedom (χ^2/df), root mean square error index (RMSEA), P-Value, CFI index have been used. In the present study, the calculated value for the RMSEA index has been used. It is equal to 0.047 and for the indices of 0.97, NFI = 0.98 IFI =, SRMR = 0.040 and CFI = 0.97 and 1.842 which indicates the acceptability of the research model.

3.3. Hypotheses Test Results

In the following model (Figure 4), the numbers obtained for the t-test are significant and can be examined for causal relationships (measurement indices with latent variables) and effects (latent variables together) according to the items mentioned in the tables and graphs above, the model in terms of Fitness indicators are in good condition.

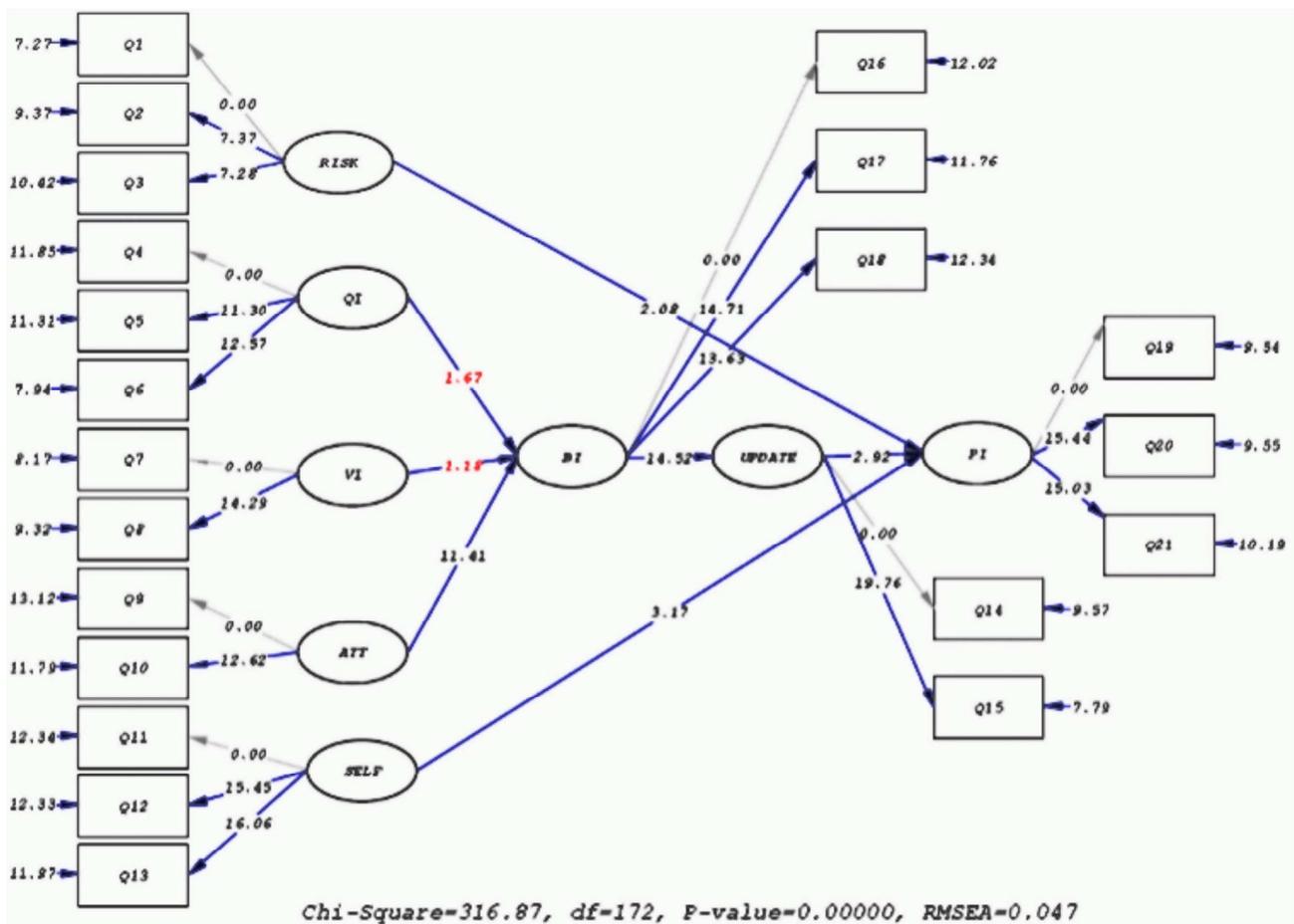


Figure 4. Model insignificant mode with t-value.

Therefore, according to the model in the case of significant numbers (Figure 4) and the standard estimation model (Figure 3), the research hypotheses have been examined.

1) Hypothesis test 1

The quality of information has a direct positive effect on the usefulness of information on Instagram.

H₀: The quality of information does not have a direct positive effect on the usefulness of information on Instagram.

H₁: The quality of information has a direct positive effect on the usefulness of information on Instagram.

The test result of Hypothesis 1 is examined according to the information in Figures 3 and 4. The coefficient of the Independent variable of information quality on the Dependent variable of the usefulness of the information is 0.28, with a value of t equal to 1.67 at the error level of 0.10 with a confidence of 0.90 of the desired statistic. The

existence of the corresponding coefficient is rejected and the hypothesis H1 is accepted (rejection of the first hypothesis).

Table 1. Summary of the result of Hypothesis 1.

Independent variable	Dependent variable	endogenous variable	T value	Result
the information quality	the usefulness of the information	0.28	1.67	Approve H ₀

2) Hypothesis test 2

Information credibility has a direct positive effect on the usefulness of information on Instagram.

H₀: Information validity does not have a direct positive effect on the usefulness of information on Instagram.

H₁: The validity of information has a direct positive effect on the usefulness of information on Instagram.

The test result of Hypothesis 2 is examined according to

the information in Figures 3 and 4. The coefficient of the Independent variable of the information validity on the Dependent variable of the usefulness of the information is 0.20, with a value of t equal to 1.18 at the error level of 0.05 with a confidence of 0.95. The statistic is not significant. The existence of the corresponding coefficient is accepted and the hypothesis H1 is rejected (rejection of the second hypothesis).

Table 2. Summary of the result of Hypothesis 2.

Independent variable	Dependent variable	endogenous variable	T value	Result
the information validity	the usefulness of the information	0.20	1.18	Approve H ₀

3) Hypothesis test 3

The attitude of using information has a direct positive effect on the usefulness of information on Instagram.

H₀: The attitude of using the information does not have a direct positive effect on the usefulness of information on Instagram.

H₁: The attitude of using information has a direct positive effect on the usefulness of information on Instagram.

The test result of Hypothesis 3 is examined according to

the information in Figures 3 and 4. The coefficient of the Independent variable of the attitude towards the Dependent variable within the usefulness of the information is 0.91, with a value of t equal to 11.41 at the error level of 0.05 with a certainty of 0.95, the desired statistic is significant as a result of the null hypothesis The corresponding coefficient is rejected and the hypothesis H1 is accepted (confirmation of the third hypothesis).

Table 3. Summary of the result of Hypothesis 3.

Independent variable	Dependent variable	endogenous variable	T value	Result
the attitude towards	the usefulness of the information	0.91	11.41	Reject H ₀

4) Hypothesis test 4

The amount of risk has a direct effect on the purchase intention on Instagram.

H₀: Risk-taking does not have a direct positive effect on the purchase intention on Instagram.

H₁: Risk-taking has a direct positive effect on the purchase intention on Instagram.

The test result of Hypothesis 4 is examined according to

the information in Figures 3 and 4. The path coefficient of the Independent latent variable is the risk level on the Dependent variable of the purchase intention 0.11, with a value of t equal to 2.08 at the error level of 0.05 with a confidence of 0.95, the desired statistic is significant, so the null hypothesis that The existence of the corresponding coefficient is rejected and the hypothesis H1 is accepted (confirmation of the fourth hypothesis).

Table 4. Summary of the result of Hypothesis 4.

Independent variable	Dependent variable	endogenous variable	T value	Result
risk level	purchase intention	0.11	2.08	Reject H ₀

5) Hypothesis test 5

Self-confidence has a direct positive effect on the purchase intention on Instagram.

H₀: The level of confidence does not have a direct positive effect on the purchase intention on Instagram.

H₁: The level of self-confidence has a direct positive effect on the purchase intention on Instagram.

The test result of Hypothesis 5 is examined according to the

information in Figures 3 and 4. The coefficient of the Independent latent variable of self-confidence on the Dependent variable of the purchase intention is 0.38, with a value of t equal to 3.17 at the error level of 0.05 with a confidence of 0.95, the desired statistic is significant. The existence of the corresponding coefficient is rejected and the hypothesis H1 is accepted (confirmation of the fifth hypothesis).

Table 5. Summary of the result of Hypothesis 5.

Independent variable	Dependent variable	endogenous variable	T value	Result
self-confidence	purchase intention	0.38	3.17	Reject H ₀

6) Hypothesis test 6

The usefulness of the information has a direct positive effect on the up-to-dateness of Instagram information.

H_0 : The usefulness of information does not have a direct positive effect on the up-to-dateness of information on Instagram.

H_1 : The usefulness of information has a direct positive effect on the up-to-dateness of information on Instagram.

The test result of Hypothesis 6 is examined according to

the information in Figures 3 and 4. The coefficient of the Independent variable of the usefulness of the information on the Dependent variable of the up-to-dateness of the information is 0.90, with a value of t equal to 14.52 at the error level of 0.05 with a confidence of 0.95. As a result, the null hypothesis that there is no corresponding coefficient is rejected and the H_1 hypothesis is accepted (confirmation of the sixth hypothesis).

Table 6. Summary of the result of Hypothesis 6.

Independent variable	Dependent variable	endogenous variable	T value	Result
useful information	up-to-date information	0.9	14.52	Reject H_0

7) Hypothesis test 7

Up-to-date information has a direct positive effect on the purchase intention on Instagram.

H_0 : Up-to-date information does not have a direct positive effect on the purchase intention on Instagram.

H_1 : Up-to-date information has a direct positive effect on the purchase intention on Instagram.

The test result of Hypothesis 7 is examined according to

the information in Figures 3 and 4. The coefficient of the Independent variable of the information being up-to-date on the Dependent variable of the purchase intention is 0.35, with a value of t equal to 2.92 at the error level of 0.05 with a confidence of 0.95 of the desired statistic. The absence of the corresponding coefficient is rejected and hypothesis H_1 is accepted (confirmation of the seventh hypothesis).

Table 7. Summary of the result of Hypothesis 7.

Independent variable	Dependent variable	endogenous variable	T value	Result
up-to-date information	purchase intention	0.35	2.92	Reject H_0

4. Discussion

The results of this test are consistent with the researches of Zenozi and Milani (2018), Ferguson (2008); Jeong and Jang (2011) and Al-Heydari et al. (2015).

In recent years, marketers have spent a lot of money and time to take advantage of social networking sites. The use of social networks by marketers, business owners and experts is increasing dramatically. Specialists and companies can use social media sites to introduce and develop products, marketing communications, updating specialized information, creating social links and more. The number of these sites is increasing every day, so the credibility of the source, perception of usefulness, message content, participation rate and risk-taking lead to the intention to buy and word-of-mouth electronic advertising among users of these sites [14].

The other finding studies examples of emerging marketing trends like word-of-mouth and viral marketing, and attempt to determine their measurability in terms of return on investment (ROI). The paper finds that word-of-mouth or viral marketing efforts are not always a sure bet. But a well-placed, calculated and provocative campaign can spark a firestorm of buzz that sometimes can be effective for years in non-terminal new mediums like the internet. While the jury is still out on finding hard quantitative ROI measurements for these campaigns, they can produce hefty returns for brand awareness [15].

In addition, according to another research which investigated that restaurant experiences trigger customers to

engage in positive electronic word-of-mouth (eWOM), where the quality of restaurant service (food quality, service quality, atmosphere, and price fairness) is the antecedent of eWOM communication, the result shows that restaurants' food quality, satisfactory restaurant experiences with service employees and a superior atmosphere in restaurants positively influences customers to spread positive eWOM. However, price fairness in restaurants does not drive restaurant customers toward eWOM [16].

As it can be seen, in all these researches, some of the results of the current paper are approved. As it can be seen in social media various factors according to the type of industry could be effective on purchase intention.

5. Conclusion

Therefore, in the one hand, according to the research findings, it can be said that if people have the attitude of using Instagram so that using Instagram is a part of their daily life, it will affect the usefulness of information on Instagram. Because, the more the users have positive attitudes of using it the more the administrations try to provide useful datas. So, users found information on social media like Instagram as one of the most beneficial ones in recent decades. And also, the usefulness of information affects the up-to-dateness of information on Instagram. This means that helpful information encourages to being up-to-date.

In addition, as a consequence, it can be concluded that if the information on Instagram is up to date, and people also

have more risk and confidence lead to the intention to buy on Instagram.

On the other hand, the quality and credibility of information does not have direct impact on usefulness of information.

6. Recommendations

- 1) Examine the role of other variables such as job, customer shopping experience online, type of products, and income.
- 2) Investigate the role of sending new product photos in person.
- 3) Survey of Internet users who have not yet used social networks to make decisions and make purchases.
- 4) Check purchases on other social networks such as Telegram and Facebook The effect of other variables that were not examined in this study.

References

- [1] DEHDASHTI SHAHROKH, Z., et al., *The Role of Social and Cultural Factors in Consumer Purchasing Behavior in Social Networks*. JOURNAL OF BUSINESS INTELLIGENCE MANAGEMENT STUDIES, 2019. 7 (28 #100861): p. 135-166.
- [2] Swani, K., et al., *What messages to post? Evaluating the popularity of social media communications in business versus consumer markets*. Industrial Marketing Management, 2017. 62: p. 77-87.
- [3] Huang, Z. and M. Benyoucef, *From e-commerce to social commerce: A close look at design features*. Electronic Commerce Research and Applications, 2013. 12 (4): p. 246-259.
- [4] *Google Takes Home Half of Worldwide Mobile Internet Ad Revenues (Facebook to earn more than one in 10 mobile ad dollars this year)*. 2013 [cited 2013, June 13; Available from: <http://www.emarketer.com/Article/GoogleTakesHome-Half-of-Worldwide-Mobile-Internet-Ad-Revenues/1009966>.
- [5] Wang, T., *Social identity dimensions and consumer behavior in social media*. Asia Pacific Management Review, 2017. 22 (1): p. 45-51.
- [6] Truong, Y., et al., *Consumer Response to Product Form in Technology-Based Industries*. Journal of Product Innovation Management, 2013. 31.
- [7] Chun, J. W. and M. J. Lee, *Increasing individuals' involvement and WOM intention on Social Networking Sites: Content matters!* Computers in Human Behavior, 2016. 60: p. 223-232.
- [8] Chi, H.-H., *Interactive Digital Advertising vs. Virtual Brand Community*. Journal of Interactive Advertising, 2011. 12 (1): p. 44-61.
- [9] Alhidari, A., P. Iyer, and A. Paswan, *Personal level antecedents of eWOM and purchase intention, on social networking sites*. Journal of Customer Behaviour, 2015. 14 (2): p. 107-125.
- [10] Teo, L. X., H. K. Leng, and Y. X. P. Phua, *Marketing on Instagram*. International Journal of Sports Marketing and Sponsorship, 2019. 20 (2): p. 321-332.
- [11] Erkan, I. and C. Evans, *Social media or shopping websites? The influence of eWOM on consumers' online purchase intentions*. Journal of Marketing Communications, 2018. 24 (6): p. 617-632.
- [12] Azar, A. and M. Momeni, *Statistics and its application in management*. Samt publication, second volume, the tenth publication, 2006.
- [13] Hooman, H. A., *Structural Equation Modeling With LISREL Application*. 2018, Tehran: Organization for the Study and Compilation of University Humanities Books (SAMT). 352.
- [14] Zanozi, S. J. and F. Milani, 2018, A Study of Factors Affecting Purchasing Intention on Social Networking Sites (Case Study: Instagram), 2nd International Conference on Management and Business, Tabriz, <https://civilica.com/doc/828363>.
- [15] Ferguson, R., *Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing*. Journal of Consumer Marketing, 2008. 25 (3): p. 179-182.
- [16] Jeong, E. and S. Jang, *Restaurant experiences triggering positive electronic word-of-mouth (eWOM) motivations*. International Journal of Hospitality Management, 2011. 30 (2): p. 356-366.