

## Evaluating the Relationship of Rational Advertising Appeals, Cognitive Information Processing Styles of Consumers and Advertising Effectiveness

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**Abstract:** In the present meta-competitive era, all company communicators seek to put some information in their audience or customers' mind to influence their decision to purchase. Companies' efforts to create attention in their messages on the one hand and the increasing spread of advertising messages on the other hand have created a significant paradox in the field of advertising. In such circumstances, the advertiser may spend many costs without reaching the target without the necessary ensuring of their ads' effectiveness. Therefore, the importance of this research is what all have believed today. The purpose of this research is to evaluate and explain the relationship of the rational advertising appeals, cognitive information processing styles and advertising effectiveness. The present study is applied in terms of the purpose and descriptive and correlational in terms of data collection. The required data were collected using inventory and distributing it among 133 students. SPSS and LISREL Software are used to analyze the data. The results showed that advertising appeal has a direct and positive impact on the rational processing style and the effectiveness of advertising. The hypothesis of the effectiveness of rational processing style on advertising effectiveness is rejected. Thus, advertising companies should conduct their marketing research more accurately because these researches show the characteristics, needs and assessments of our target audience and finally, their behavior. This information can help designing the most effective advertising and implementing the most appropriate advertising appeal.

**Key words:** Advertising rational advertising appeal, cognitive information processing style, advertising effectiveness, messages, significant

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### INTRODUCTION

In the present meta-competitive era, all company communicators seek to put some information in their audience or customers' mind to influence their decision to purchase. Companies' efforts to create attention in their messages on the one hand and the increasing spread of advertising messages, on the other hand have created a significant paradox in the field of advertising. This point should be considered that efforts should be based on the consumers' needs and comprehensive understanding of the situation. Therefore, advertising is concerned as one of the most important commercial activities. Companies spend a large portion of their budget for the production and use of advertising to promote and to deliver information about their company and products. They hope that customers purchase their products according to advertising (Lin *et al.*, 2011). However, if the consumer makes a mistake in facing, considering, understanding or remembering the message, the investment in advertising will fail. That is why advertising effectiveness is a sensitive topic in the field of advertising due to the

development of media and advertising and thus, marketers emphasize on it. Hence, advertising is a complementary but relatively a little part of a marketing plan. Privileged advertising is not able to maintain a weak marketing plan or save a weak product (at least not for a long time). However, weak advertising can tarnish a great product or plan.

On the other hand, consumers' lives are saturated with advertising and marketing messages. They have to make a lot of decisions every day regarding products. This decision-making depends on their processing style. Cognition has been declared as the thought dimension of an individual and affection has been known as the emotional dimension and one of the effective factors on the effectiveness of advertising because consumers are every day bombarded with a series of advertising activities but they may not respond (Mishra, 2009). The reason is that they need something more tangible and more specific. This goal can be achieved by using the appropriate advertising appeal in advertising activities. If the advertising appeals are interesting for customers, they will attract their attention (Mishra, 2009).

**Importance and necessity of the research:** Today, it has been unfortunately seen that advertising activities have become a habit for many organizations. Sometimes, many organizations approve more funding for advertising in later years, regardless of the results in the last year. It is obvious that advertisers in such circumstances spend costs without ensuring the effectiveness of their advertising. Such an advertising is often unscientific and without sufficient knowledge (Golchin and Bakhtae, 2004). Therefore, the effectiveness of advertising is one of the most important issues in the realm of advertising. In other words, it specifies that how much the spent budget aimed us to achieve our targets.

**Research literature:** Advertising is a form of promotion and it is declared as one of the four pillars of marketing (along with the product, location and price). Promotion covers a wide variety of ways to connect with current and potential consumers that an advertiser uses. In the marketing and advertising activities, promotion often plays the most important role. Thus, advertising is a key issue (Lin *et al.*, 2011). Cutler stated that advertisers should put some powerful stimuli into their message for viewers. This powerful stimulus is the appeal (Yi *et al.*, 2011). The key question is that how to design a variety of advertising appeals to attract consumers more easily and more effectively?

The increasing development of information and communication technologies has brought many achievements for humanity. This leads to ease of access to vast amounts of different information (Kotler, 2007a). The ways that individuals receive their surrounding world or judge it and solve problems are different. The process of receiving information and making decisions about them depend on processing styles used by individuals (Zinkhan and Braunsberger, 2004). Information processing by consumers means the process through which consumers have encountered with the information, pay attention to it, understand it, keep in mind and retrieve it for the future use.

**Advertising:** Advertising is the magic of the 20th century and marketing does not make sense without advertising. In fact, advertising is one of the basic tools of communication in the business unit with the outer world of change and it is often referred to as the most transient, the most glamorous and most valuable tree branch of marketing (Levinson and Lautenslager, 2009).

Different contents have been offered by researchers about the importance of advertising and its definition. Here, two definitions will be discussed:

- Advertising is a non-personal presentation and advertisement of ideas, goods or services by an advertiser which is required to pay (Kotler, 2007b)

- Advertising is a systematic effort to influence the opinions, attitudes or behavior of others using symbols such as words, gestures, signs, monuments, music, clothing, hair, signs, designs on coins, stamps and so on

**Advertising appeal:** Only conveying an idea is not the end of advertising, but convincing or persuading the audience in order to achieve the purpose is desired. Thus, the main base of advertising is communication. Advertising appeal is the main message in an advertising message (Haugtvedt *et al.*, 1988). In general, any message that is designed to motivate consumers for purchasing is an advertising message. In fact, the role of advertising appeal is in such a way that they attract the audience's attention and create reactions in them. Hence, has used advertising appeal to attract the attention of consumers in changing the product concept for consumers (Lin *et al.*, 2011). In the end, it can be concluded that the purpose of advertising appeal is influencing on consumers' attitudes and feelings about a product or service (Lin *et al.*, 2011). Therefore, advertisers use different persuasion tactics as the advertising appeal to attract the attention of the target audience.

**Types of advertising appeal:** Generally, different advertising appeals such as rational appeals, emotional appeals, comparison appeals, fear and laughter appeals, moral appeals, evoking appeals or even sexual appeals are applied to prepare any advertising message.

According to the title, rational appeal is described in the following. Cutler admits that the rational appeal is based on logic and it tries to sell its function and problem solving ability by highlighting its features. Rational appeals with informative nature are used in competitive advertising to keep customers loyal (Haugtvedt *et al.*, 1992).

**Rational appeal:** Cutler defines the rational appeal as the explanations which are given directly about the product benefits and create rational purchases (Lin *et al.*, 2011). Therefore, the purpose of the rational appeal is purchaseers' thought. This type of appeal is defined by Stafford and Day as providing factual information in a direct and clear way by depicting the reality (Mortimer, 2008). The rational appeal is fit for the goods that the purchaseer is interested to know its technical details and operation (Mohammadian, 1968).

Briefly, it can be stated that the product benefits and its features are expressed clearly and explicitly in the rational appeal and addressing the marginal issues is prevented.

**Advertising effectiveness and dimensions:** One of the success measures in any organization is the extent to

which the organization realizes its goals. In the management literature, this approach has been introduced as effectiveness. Accordingly, an advertiser should try to assess the effectiveness of advertising to find that how much advertising goals are achieved. This is an important responsibility in any advertising battle.

Advertising effectiveness criteria and indicators are very diverse and controversial in the literature. Ruiz and Sicilia (2004) have used attitude variables in advertising, brand attitudes and purchase intention as variables that are used to measure the effectiveness concept in their research. The researcher also used these dimensions to measure the effectiveness of their research. These three variables are explained later in this study.

**Attitude towards advertising:** It can be mentioned that one of the most influential theories in marketing research is “attitude towards advertising” (Abasi and Mohamadian, 2006). The comprehensive definition of attitudes toward advertising is the tendency to respond favorable or unfavorable which is given to an advertising stimulus during exposure to advertising opportunity (McKay-Nesbitt *et al.*, 2011).

**Attitude toward the brand:** Attitude toward the brand is defined as the brand evaluation in the absence of perceived capabilities (received) which usually creates the related incentives. This scale seems to be one of the most important structures which occur before planning to purchase as well as real purchaseing.

**Purchase intention:** According to Fishben and Ajsen intention refers to the mental possibility of individuals that causes behavior. This concept is considered in consumer purchase intention and desire to purchase in a wide space. Has states that purchase intentionis created by creating transactional behavior after evaluating a product by the consumer and the reflection of an emotional reaction that occurs according to their attitude towards the object. When consumers feel positive about a product or an ad, their purchase intention is strengthened (Lin *et al.*, 2011).

**Cognitive processing style and its measurement scale:** Research on cognitive style is a fascinating discussion in the field of cognitive psychology. Although, most researchers have different definitions but all definitions are focused on a method that individuals apply in exchanging their information andbehavior (Sook and Chan, 2005).

Recognizing refers to the activity of thinking, cognitive and information processing (Franco *et al.*, 2013). Recognizing item refers to the ways that understand the

benefits of information. Therefore, the cognitive method is a way that individuals organize their information and use them to make decisions. All port expressed that the term of cognitive style is used in a usual description in problem solving, thinking, perceiving and remembering a person.

In the end, it can be said that recognizing takes place on the basis of thought that assesses individuals’external stimuli (Lin *et al.*, 2011). A cognitive style is a form of information processing, in which a person tends to engage and enjoy thinking (Zinkhan and Braunsberger, 2004).

**The scale of need for cognition:** The scale that is used for measuring the cognitive processing style which is called the scale of need for cognition (Haugtvet *et al.*, 1992). Since, the need for cognition is different in individuals, it is considered as a personality trait (Hawkins *et al.*, 2009). In a general definition, need for cognition refers to the severity of the conflict in enjoying cognitively demanding activities. Researchers usually recognize two groups of individuals on a continuum as individuals with a high and low need for cognition (Ruiz and Sicilia, 2004). Need for cognitionwas developed by Casiopa and Petti. Need for cognition is primarily a motivational factor. Individuals with a high need for cognition enjoy thinking very much while individuals with a low need for cognition tend to avoid jobs that require a lot of cognition (Haugtvet *et al.*, 1992).

Haugtvet *et al.* (1992) showed that individuals with a high need for cognition are individuals who use their thinkingin the processing and evaluation of advertising information more than those with a low need for cognition (Ruiz and Sicilia, 2004). Individuals with a high need for cognition process information more effectively than individuals with a low need for cognition. They also offershorter answers at the time when the personal issues are considered (Blais *et al.*, 2005).

Researches showed that in general, individuals with a high need for cognition remember the information better (McKay-Nesbitt *et al.*, 2011). Petty showed that when individuals with a high need for cognition are faced with appeals in advertising, they showed more positive responses (Ruiz and Sicilia, 2004).

The indicator of need for cognition includes 18 items that respondents select them to describe their personality traits (Hawkins *et al.*, 2009). This indicator has been studied in more than a hundred experimental studies and it has been taken into consideration in various fields of medical treatment, education and consumer psychology.

According to what was said, it can be concluded that in comparison with others, individuals with a high need for cognition:

- Do more searches in information for decision-making
- Communicate more with others
- Are more open minded than others
- Enjoy deliberate intellectual activities
- Identify more deliberate causal links for others' behavior
- Pay more attention to the prices on their purchasing decisions
- Prefer written information to visual information
- Are rarely influenced by others' opinions (experts) (Hawkins *et al.*, 2009)

**Research history:** Prior to 1990, papers were examined as advertising effectiveness in a direct link between advertising and sales. However, many factors have been considered in research on advertising effectiveness, over time. For example, the interaction between individual differences in the intensity of emotion and conditions of advertising on ad effectiveness was evaluated in a research. The results showed that individual differences have an impact on advertising effectiveness. Ruiz and Sicilia (2004) showed that persuasive appeals of advertising are effective when these appeals are more similar to the two styles of processing. Therefore, this helps researchers to answer that why some individuals respond differently than others for advertising stimuli.

Some other revealed that the rational appeal has a greater impact on attitudes toward advertising while some found that the emotional appeal has a higher impact on attitudes toward advertising (Lin *et al.*, 2011). There is an agreement in investigations that the type of appeal must be consistent with the type of the product for maximum effectiveness so that the rational appeal is more effective for a useful product in practice and emotional appeals appropriate for experimental products or those confirms a value. Although, this theory of adaptation seems rational, but creating the effectiveness of these two strategies has shown ambiguous results in the general literature of advertising. Sharitt conducted a number of empirical studies on the advertising that supported this theory. He tested appeals that represent value and applied usefulness on two products. Results showed that in all cases, appeals that were consistent with the type of product had more effectiveness (Mortimer, 2008).

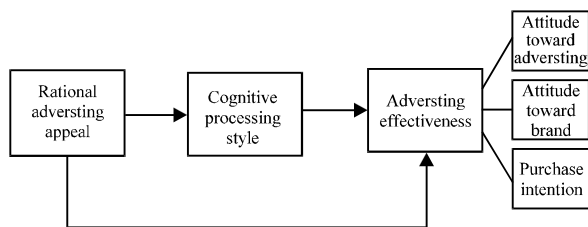


Fig. 1: Conceptual model

Some researchers state that emotions can affect the independent cognition manner. They emphasized on the more important role of emotion and feeling in determining the effectiveness of advertising (McKay-Nesbitt *et al.*, 2011). In addition, the study of attitudes toward advertising is considered particularly because the impact of attitude toward ads and before that toward the brand is very important. Advertisers usually use rational and emotional appeals in their advertising. They try to affect their customers' behavior (Lin *et al.*, 2011).

**Conceptual model:** According to the literature, a conceptual model is provided for the study. The model is shown in Fig. 1.

**Research hypotheses:** The rational advertising appeal has a significant impact on the cognitive processing style. The rational advertising appeal has a significant impact on the advertising effectiveness. The cognitive processing style has a significant impact on the advertising effectiveness.

## MATERIALS AND METHODS

The present study is applied in terms of purpose and descriptive surveying in terms of information collection method and it is a correlation and structural equation research in terms of information analysis.

The statistical population of this research is the students of the Faculty of Social Sciences at the University of Semnan. According to Morgan table, 135 people were intended as the statistical sample and 133 inventories were analyzed. The 3 inventories were used for data collection that only the rational advertising appeal inventory was researcher made. Developed scales were used in researches for cognitive processing style and advertising effectiveness.

Advertising effectiveness structure is composed of three concepts. The aspect of attitudes toward advertising has been measured by Coulter and Punj, Lafferty and Goldsmith, MacKenzie and Lutz. The aspect of attitudes toward the brand has been examined by Batra and Stayman, Krishnamurthy and Sujana, Pham, 1996. The aspect of purchase intention has been evaluated by Zhang and Buda. This scale is generally composed of nine questions.

The need for cognition scale is used for the cognitive information processing style which has been measured by

Table 1: Validity coefficient of variables and the whole questions of the inventory

Construct	Cronbach's alpha
Cognitive processing style	0.820
Advertising effectiveness	0.887
Advertising rational appeal	0.764
Whole questions of the inventory	0.854

Kaciopa and Petty. It has 18 questions and its reliability in research is ( $\alpha = 0.8$ ). In order to assess the reliability, a prototype contains 30 pre-test inventories was tested. Then, the trust coefficient was calculated by Cronbach's alpha by using the data, obtained from inventories. These numbers indicate that the inventory has the necessary reliability shown in Table 1.

The content and construct validity method is used to measure the validity. In this case, the experts examined the quantity and quality of questions. For this purpose, the inventories were given to university professors and the

proposed amendments were performed. In the process of checking the validity, the indicators that have a factor value  $< 0.4$  are the least important criteria for the multi-dimensional structure of the research. Thus, some questions were eliminated.

**RESULTS AND DISCUSSION**

To verify the hypotheses of the present study, causal relationships were used based on structural equation modeling. Figure 2 and 3 and Table 2 show the results of

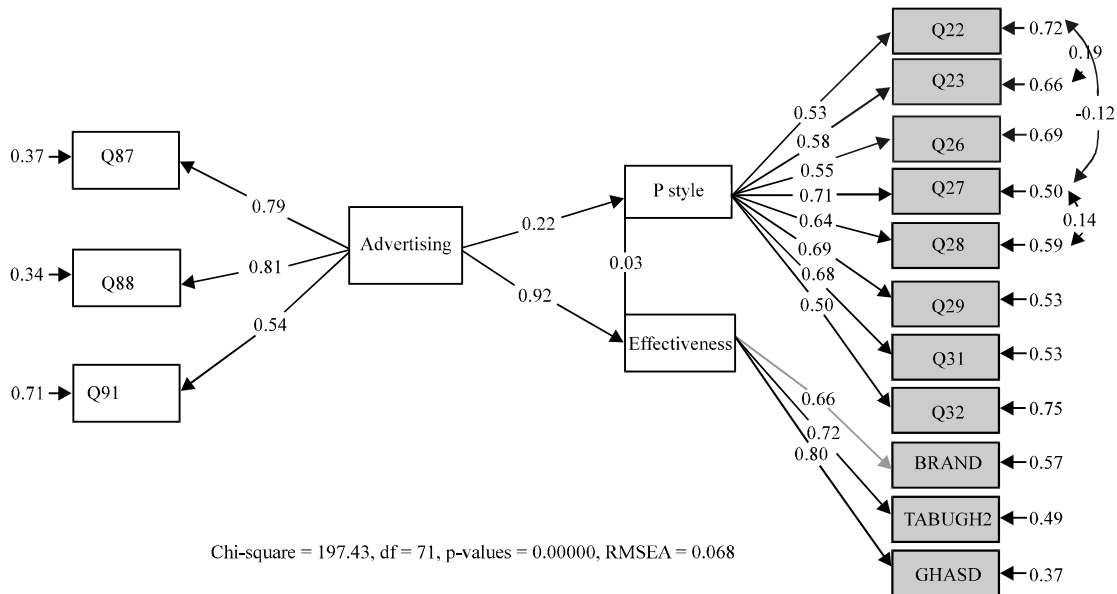


Fig. 2: Model in the standard mode

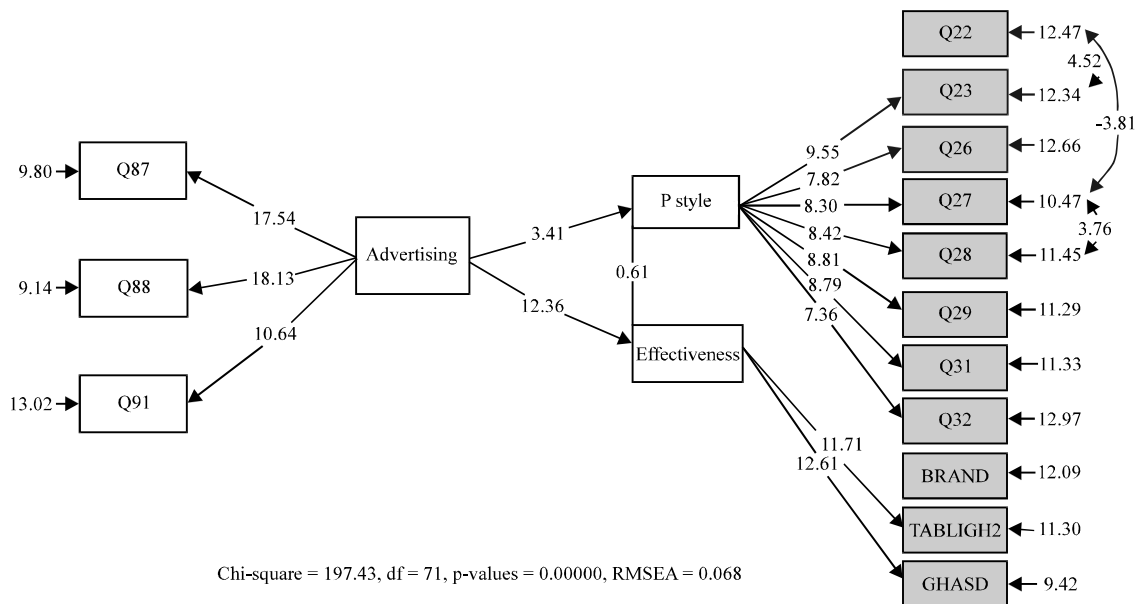


Fig. 3: Model in the significant mode

Table 2: Model fitness

Index	Obtained value	Allowed value
Kai two on degrees of freedom	2.760	<3.00
RMSA	0.068	<0.08
CFI	0.970	>0.90
GFI	0.940	>0.90
AGFI	0.910	>0.90
NFI	0.930	>0.90
NNFI	0.940	>0.90

Table 3: Summary of hypothesis testing results

Research hypotheses	Acceptance or rejection
The rational advertising appeal has a significant impact on the cognitive processing style	Acceptance
The rational advertising appeal has a significant impact on the advertising effectiveness	Acceptance
The cognitive processing style has a significant impact on the advertising effectiveness	Rejection

hypotheses testing by using the structural equation modeling. Figure 2 shows the standardized coefficient (R) and Fig. 3 shows the observed causal relationship among the research variables in the significant mode. In this study, we have used the path analysis method to test the hypotheses. Path diagram can be considered as a means to know which variable can make changes in other variables. If the model which is created in the form of a graph is confirmed by the model's fitness indicator that path diagram can be used for hypotheses testing. Therefore, the first step is to determine the fitness. According to Table 3, fitness indicators show the fitness of the research model.

**Summary of results:** According to the results of path coefficient and t statistic, the rational advertising appeal variable has a significant impact on the cognitive processing style variable at the confidence level of 99% (t-statistic is outside the range of -2.56 to +2.56). Given the positive coefficient of this path, it can be said that the nature of this relationship is direct. Thus, the first hypothesis is confirmed. In addition, the rational advertising appeal variable has a significant impact on the advertising effectiveness at the confidence level of 99% (t-statistic is outside the range of -2.56 to +2.56). Given the positive coefficient of this path, it can be said that the nature of this relationship is direct. Therefore, the second hypothesis is confirmed. However, according to the results of the path analysis, it has been indicated that the cognitive processing style variable has no significant impact on the advertising effectiveness (t-statistic is outside the range of -1.96 to +1.96). Thus, the third hypothesis is rejected.

### CONCLUSION

Previous researches revealed that the rational appeal has more impact on the attitudes toward advertising while some found that the emotional appeal has a more

substantial impact on the attitudes toward advertising (Lin *et al.*, 2011). Some researchers have argued that the information features of a message have more impact on creating positive attitudes than emotional messages. Other researchers state that emotions can affect the independent behavior of recognition and accordingly, the importance of the affect and emotion role is specified in determining advertising effectiveness (McKay-Nesbitt *et al.*, 2011).

In another study, Petty evaluated the character and effectiveness of advertising in which the need for recognition (a permanent measure for people to enjoy thinking) has been known useful in understanding that how advertising affects attitudes toward the product (Haugtvet *et al.*, 1988). Researches have shown that both thought and emotion affect the advertising effectiveness, although the conditions under which thoughts and feelings are formed for advertising effectiveness are important and they are not fully understood (McKay-Nesbitt *et al.*, 2011).

### RECOMMENDATIONS

In this study, recommendations are offered to improve the effectiveness of advertising based on the results.

Sometimes the quality of ads is so low that the audience prefers to do something else. This means escaping from ads. Thus, the advertising quality should be considered. This purpose is not achieved except by using advertising companies' teams and having advertising objectives, interesting and innovative design of appeals in advertising messages.

The first step to assess the effectiveness of advertising is specifying the advertising goals. Since, the basis of expectations goes back to advertising goals, this important issue should be considered by marketing and advertising managers.

Other factors should be considered in selecting the message and the type of advertising appeal. For example, the type of advertising appeal is different in terms of advertising purposes and different audience groups with regard to criteria such as age, gender, education and social class.

Advertising managers must consider the audience assessments in designing advertising appeals for advertising effectiveness. Assessments are usually done in two rational and emotional forms. For example, if the target group is generally rational people, the message type (text and image) and its presentation should be chosen rationally.

Advertising companies should pay more attention to marketing research because these researches show our target audience's characteristics, needs, assessments and

behavior. The most appropriate advertising appeal can design and the most effective advertising can be implemented only by having this information.

Advertising specialists should move toward more professional and more effective advertising. In this case, employers will inject more funds into this industry. This will provide the opportunity for the flourishing of creative ideas and progress.

In addition, considering the viewers' comments about consumption, income, savings, luxury-orientation, or values, such as the treatment of elderly, children and adolescents and parents' relationship with each other and with their children and the relationship between young and old is very important in advertising.

Another issue that advertising executives should consider is continuous advertising. Companies which have good sales, reduce their advertising volume and they start to advertise as soon as the decline in sales unaware that advertising requires an appropriate time and substrate. For this reason, advertising should have a comprehensive and consistent strategy.

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