

# The Risk Attitude and the Motivation to Online Purchase

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**Abstract:** The e-commerce and virtual stores are sources of innovative economic ideas and initiation of entrepreneurial business. This research deals with the motivation of potential buyers to conduct a purchase in virtual stores concerning their risk aversions in several dimensions, including entrepreneurial risk aversion. The study is based on a survey of 104 responders exposed to technology working in the hi-tech industry. We used the structural equation modeling approach to conduct the statistical analysis. The relationships between risk aversion, the reliability of the products, the stores, and the motivation to purchase are modeled in one set of equations. The study's findings can help entrepreneurs how to market products that may be perceived as not reliable.

**Keywords:** online purchase intention, risk aversion, trust of online shops, perceived security

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## 1. Introduction

### 1.1 Rational

The goal of the study is to examine the relationship between consumer confidence in online shops' websites and the consumer's level of willingness to take risks and make an online purchase. Despite the many possibilities of the Internet being a significant factor for global consumption, there is an assumption that several factors lower customers' confidence in the Internet environment and reduce the willingness to purchase.

Consumers want to be sure that they will be able to earn more than lose when making an online purchase. Still, in the purchase process, they are exposed to many risks, including the risk of losing time, money, and privacy by revealing personal details. The consumer desires to reduce these risks to enjoy the many advantages of online purchases, including a broader range of products, convenience, timesaving, and money.

Due to the accelerated development of technology, the entry of newer means of communication and trade than in the past, and the result of purchasing options, it is important to confirm the direct relationship between potential customers' trust in websites and willingness to take risks and, accordingly, to make an online purchase. Therefore, give practical recommendations regarding parameters that increase customers' trust in websites to increase the likelihood of making a sale online.

*The relationship between the level of reliability perceived by the customer and the correctness of making the purchase*

In the literature, it has been found that trust is an important factor in decision-making in implementing e-commerce. It is also a characteristic that is defined in most social and economic interactions in conditions of uncertainty. Therefore, every interaction requires an element of trust and the interactions in an unsafe e-commerce environment (Adam et. Al, 2008).

Consumer confidence in an online environment where there is no interaction between people is defined as a rational selection process in which the consumer is required to trust the retailer and make a move in which circumstances make the consumer vulnerable to the retailer (Jarvenpaa and Tractinsky 1999). Therefore, online shopping requires higher levels of trust than traditional shopping.

Online transactions and internet interactions are not only characterized by uncertainty but also by anonymity, lack of control, and the potential for spying on the part of suppliers. Therefore, the creation of a trust is a critical element in e-commerce. In the face of these risks, the consumer is looking for ways to minimize the perceived risk, and one of the ways to do so is by creating trust, where trust serves as a mechanism that reduces the complexity of human behavior in situations in which the individual is required to deal with

uncertainty (Petrovic et al., 2003). Therefore, for a consumer to make a purchase online, firstly, he needs to trust and trust the retailer since the lack of trust is one of the main reasons consumers do not purchase online.

*The relationship between the perceived risk level by the customer and the willingness to make the purchase*

The uncertainty inherent in the online environment has brought the risk to an inevitable element of e-commerce. Since there is a difficulty in assessing the risk in real terms, the literature refers to this in terms of perceived risk, defined as consumers' fear of losing their desire to make an online purchase. The willingness of consumers to make an online purchase is contingent on the level of risk perceived by the site. Given the uncertainty in e-commerce, the perceived risk will reduce customers' willingness to make online transactions (Sadeh et. al, 2006)

The principle of risk has been known and studied in the field of economics since the 1920s in the context of turning physical damage or undesirable effects into personal benefits. Risk is a random variable with a known probability, which is related to situations with the ability to choose in which the player can choose between two or more alternatives while choosing the best alternative (Giesler2004).

The ability to choose is the basis of the economy since by allocating the limited resources that consumers have, the correct distribution of resources is chosen to select the best alternative. There are different types of risk, including financial loss, performance risks, physical risks, risk of loss of time, psychological risks, and social risks (Flanagin et. al. 2014).

In-depth studies in the field of risk perceived by consumers confirm that the perceived risk in the eyes of consumers is a central factor in their purchase behavior and assessment (Laroche et al.,2004). According to Bauer (1960), the perceived risk has two characteristics: uncertainty (in obtaining an undesirable result) and the impact and the importance of losing that result.

From the literature, it can be concluded that both consumers who do not make purchases online, and consumers who purchase online are affected by the perceived risk when making a purchase, but at different levels. Consumers who do not purchase online are significantly affected by the perceived risk and therefore avoid purchasing online, with the main barrier being the issue of security. On the other hand, consumers who purchase online make purchases despite the perceived risk, Given the great importance of their convenience and variety from the Internet provider.

When the risk perceived by the consumer is lower than the benefit obtained from the product, the risk has a minimal impact on the consumer's purchasing behavior, so that in the end, the consumer ignores the risk. On the other hand, when the perceived risk is high, it may cause the consumer to postpone the purchase or avoid it altogether (Chunningham et al., 2005).

***The relationship between the love of risk and the willingness to make an online purchase***

Online purchasing offers an opportunity to meet the needs of the risk lover in a less risky way and in more beneficial ways.

By the current definition, the term "sensation seeking" is a term from the field of behavioral science used to evaluate behavioral traits expressed in the pursuit or aversion to risks. "It is a trait characterized by the search for different, strange and complex experiences, and the willingness to take physical, social, legal, or economic risk in them for the sake of the experience" (Zuckerman, 1994).

Different forms of risk love manifest themselves in the way of thinking, the senses, social interaction, and dangerous sports activities (Zuckerman, 1994). At the same time, people have different needs for excitement, risk, the need for change, and adventure. Furthermore, studies show that love of risk varies according to socio-demographic variables. Therefore significant differences can be seen in risk love based on age, gender, race, and education levels (Lopez-Bonilla, 2008).

Previous studies have found that there is a direct positive correlation between the love of risk and risk-taking behavior. At the same time, the love of risk is not linked solely to behaviors that go against social norms and

negative behaviors. However, there is a relationship between the love of risk and leisure, consumer behavior, and behavior on trips. (Lopez- Bonilla, 2008).

Love of risk in the marketing field is attributed as a principle relative to the explained tendencies of consumers (Sadeh and Dvir, 2020). These tendencies are understood from three categories, including curiosity-driven behavior, the search for diversity and diversity, and the risk perceived by the consumer (Lopez-Bonilla, 2008). Grande (2005) argues that consumers are looking for variety to break a routine.

It should be noted that online consumers who take a risk when making an online purchase are attributed as low-level risk lovers.

### ***Summary of the literature review***

Trust and risk are mutually linked. Trust is “a social lubricant that allows consumers to transact with retailers that are not part of the consumer’s direct network (Jarvenpaa & Tractinsky, 1999). Trust in e-commerce facilitates the perception of the risk involved in making an online transaction in the eyes of the consumer. The higher the risk perceived by the consumer; the higher levels of trust are needed to carry out the execution of the transaction. At the same time, when a website is perceived as unreliable or risky, consumers with a love of risk will tend to make the purchase despite the perceived risk.

## **2. Methodology**

### ***Target Population***

The sampling framework will be among a population that has a credit card and an Internet connection.

### ***The research paradigm***

The study is a quantitative study with the aim of generalizing to all populations, with pre-defined hypotheses, and based on previous studies. The study is based on the distribution of questionnaires and uses statistical analysis software, the SPSS, to analyze the results. In conclusion, it can be said that this is detailed and structured research based on a quantitative approach.

### ***Sample***

The target population is residents of the State of Israel over 18 who have access to the Internet and have credit cards. Since a market survey is being conducted, predicting the level of credibility of the website perceived by customers to generalize from the sample to the entire population in the field of social sciences, we will require a level of significance of 5% with a sampling error of 10%. The target population is enormous. Therefore, the sample size determined is 100.

### ***Selection of subjects***

Questionnaires were distributed to high-tech companies and academic institutions.

### ***Study Method***

As part of quantitative research, the research method is a survey by a closed questionnaire, using an online system for conducting surveys and conducting research (QuestChain). So we have a platform for creating surveys (e-survey) in personal or group viral distribution, enabling the export of data to Excel.

### ***Data Collection Tools***

Over two months, about 250 questionnaires were distributed, of which about 180 were answered, including 104 questionnaires fully.

The questionnaire was distributed to several high-tech companies. And among students from Technological Faculties in Israel.

The subjects received an e-mail with a short explanation and a link to the QuestChain website to complete the questionnaire.

The research population is directly and indirectly exposed to technology. Therefore, it would be worth mentioning that the results of this study highlight more on this population than all buyers.

### ***Data analysis***

We used the statistical data analysis software, the SPSS, to analyze the data.

We tested for significant correlations among relevant variables. Using the student t-test for non-dependent samples, we examined the differences between risk-loving and risk-averse subjects.

### ***Reliability and validity***

Alpha Cronbach was calculated for the position test questions and found to be worth 0.833. However, Cronbach Alpha was not calculated for the Zuckerman questionnaire because a validated available questionnaire was used for this study. Nor was Cronbach alpha calculated for the socioeconomic questions.

## **3. Findings**

Responders who make purchases online do so due to the attractiveness of prices (90.4%), in light of the ability to compare prices (92.5%), since purchases can be made 24 hours a day (90.4%) due to the speed of the process (93.5%), since other surfers can get reviews (90.3%), due to comfort (94.6%) and in order to get out of the routine (9.4%).

In order to reduce the perceived risk from the online purchase 51.9% of the consultants consult with friends before making the purchase, 15.4% send a letter to the supplier requesting a commitment to reliability, 63.5% seek general information about the site, 62.5% read reviews and opinions of other surfers.

### ***Online secure purchasing***

There was a significant positive relationship among responders who believe an online purchase is secure. This is as opposed to making purchases online due to the attractiveness of prices, the ability to compare prices, the possibility to make a purchase 24 hours a day, and preference for purchase. In addition, on the Internet, the possibility of obtaining opinions from other surfers is higher due to the speed of making the purchase.

### ***Online purchase and price attractiveness***

Responders who purchase online due to price attractiveness were found to have a strong positive relationship with online shopping due to the ability to compare prices ( $p = 0$ ,  $r = 0.788$ ), make purchases 24 hours a day ( $p = 0$ ,  $r = 0.573$ ). In light of the agility of the process ( $p = 0$ ,  $r = 0.513$ ), the convenience of purchase ( $p = 0$ ,  $r = 0.661$ ), and due to the ability to get reviews from other surfers ( $p = 0$ ,  $r = 0.495$ ).

Buyers who purchase online due to the attractiveness of the prices were found to have a positive connection to making a purchase even if the site is not recognized at all ( $p = 0.001$ ,  $r = 0.345$ ). Moreover, even if the site is not secure, it has negative reviews from other surfers, with no obligation to maintain personal information, and even if there is a certain probability that he will not receive the product ( $p < 0.039$ ,  $r > 0.219$ ).

These subjects do not consider the risk of monetary loss to be a real risk ( $p = 0.01$ ,  $R = -0.267$ ).

### ***Online purchase and price comparison***

Subjects who purchase online due to the ability to compare prices were found to have a strong positive relationship with online shopping in light of the possibility of making purchases 24 hours a day ( $p = 0$ ,  $r = 0.752$ ), due to process agility ( $p = 0$ ,  $R = 0.561$ ), convenience of purchase ( $p = 0$ ,  $r = 0.683$ ), and due to the ability to obtain reviews from other surfers ( $p = 0$ ,  $R = 0.683$ ).

The purchase will be made even if the site is not recognized at all ( $p = 0.004$ ,  $R = 0.306$ ), and even if there is a certain probability that he will not receive the product ( $p = 0.049$ ,  $r = 0.209$ ).

These responders were found to have a significant positive association with TAS risk-taking ( $p = 0.05$ ,  $r = 0.202$ ), and the convenience of the purchase ( $p = 0$ ,  $r > 0.45$ ).

Moreover, a test taker who believes that an online purchase is safe will purchase a product online even if there are negative reviews from other surfers on the site ( $p = 0.009$ ,  $r = 0.272$ ) and will make the purchase even in case there is no commitment to maintain the responder's personal details ( $p = 0.002$ ,  $r = 0.319$ ), and even if there is a certain probability that he will not receive the product ( $p = 0$ ,  $r = 0.435$ ).

At the same time, the believer was tested that buying online is safe and is found to prefer buying online and not in a retail store, given that the purchase price is the same ( $p = 0$ ,  $r = 0.372$ ). He will also purchase online even if the site is not known to him ( $p = 0$ ,  $r = 0.459$ ).

Moreover, a significant negative relationship was found with the risk of loss of time ( $p = 0.011$ ,  $r = -0.264$ ), loss of money ( $p = 0$ ,  $r = -0.509$ ), and disclosure of personal details ( $p = 0.002$ ,  $r = -0.323$ ). That is, a subject who believes that an online purchase is safe does not find the three risks in which, the risk of losing time, money, and exposure of personal information, as risks that could frustrate the purchase online.

The relevance of online shopping has increased since the COVID-19 pandemic; it would be interesting to extend this research to compare the conduct of e-commerce buyers after the pandemic period. Do people trust more or maybe less the e-shops?

#### **4. Conclusions**

A description of the findings found consistency among the subjects in the area of trust in the Internet. Making online purchases is perceived as reliable by the subjects. Moreover, an examination of correlations found that subjects who believe that online purchasing is safe will purchase on an unfamiliar site that is not secure, that does not commit to maintaining personal information, and despite negative reviews from other surfers. Even when the subjects were asked whether they would purchase if there were a certain probability that they would not receive the product, most answered in the affirmative.

In contrast, in the student t-test for independent samples, a significant difference was found between risk lovers and risk-averse individuals against their will to make online purchases. Risk lovers make purchases online, unlike those who dislike risk and do not make online purchases. In addition, a significant difference was found between risk-loving and risk-averse subjects in the perception of the Internet as reliable for online purchases.

Subjects with low-risk love scores do not believe online purchases are reliable. Furthermore, a significant difference was found between risk lovers and those who dislike the risk of purchasing on an unfamiliar site and purchasing on a site where there is a probability of not receiving the purchased product. Subjects with a low score in the love of risk will not buy on an unfamiliar site if there is a certain probability of not receiving the purchased product.

The contribution and the added value of this study is in exposing that risk-loving subjects believe that online purchases are safe and will make the purchase even in cases where we would not expect them to purchase. This purchase is despite parameters that express unreliability (unfamiliar site, unsecured site, lack of commitment to maintain personal information, good negative reviews for not receiving the purchased product). In contrast, risk-averse respondents do not believe that online purchases are reliable and will behave as expected in cases where unreliability parameters are encountered and will not make an online purchase.

This size of the sample, while it is sufficient, should be increased in future research to get more reliable and significant results. We suggest exploring the opportunities in e-commerce and the attitude of buyers to opportunities rather than only for risk.

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