



# The Effect of Risk Perception and Online Trust on Purchase Intention in E-Commerce

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## ABSTRACT

Research on the factors influencing online trust in e-commerce has been limited in recent years. Therefore, this study is a rigorous investigation that aims to first understand the main factors that affect online trust and, second, to find out the impact of online trust on risk perception, attitude, and purchase intention. The study applies a quantitative approach method and collects primary data by filling out questionnaires from 100 respondents who have experience shopping through e-commerce applications. The sampling technique uses the purposive sampling method, ensuring a representative sample. Data collection was carried out by distributing questionnaires, and then the data was processed using SmartPLS version 4.0 to test instruments and hypotheses. The findings of this study, based on a robust methodology, show that perceived size has a significant positive effect on online trust, perceived reputation has a significant positive effect on online trust, online trust has a significant positive effect on risk perception, online trust has a significant positive effect on attitude, Risk perception has a significant positive effect on attitude, risk perception does not affect purchase intention, attitude has a significant positive effect on purchase intention, and online trust does not affect purchase intention.

**Keywords:** Perceived Size, Perceived Reputation, Online Trust, Risk Perception, Attitude, Purchase Intention

**JEL Classifications:** M31, D12, D81, L81

## 1. INTRODUCTION

Rapid information technology advances in today's digital era have changed how humans live in various sectors. The presence of the internet now facilitates communication and the exchange of information between individuals around the world. The availability of the internet plays a vital role in making various aspects of human life more accessible, including the increasing practicality of lifestyles. Companies and service providers have responded to this need by providing easy access to information through the use of modern information technology, such as e-commerce platforms (Firmansyah, 2017).

E-commerce is one of the digital business platforms used to facilitate and protect transactions between consumers and sellers. In simple terms, e-commerce is the process of buying

and selling goods through devices connected to the internet, carried out by consumers from one company to another. The presence of e-commerce makes it easier for people to make product purchase transactions. Regarding benefits, sellers do not need a physical store to display their products or services. Information about a product can be quickly and widely disseminated, thus changing the way people make purchases (Uviyanti et al., 2022).

Based on data from the Indonesia Internet Service Providers Association (APJII), there has been a significant increase in the number of Internet users in Indonesia. Survey data shows that in 2023, the number of internet users in Indonesia will reach 215,626,156 out of a total population of around 275,773,901 people. The internet penetration rate in Indonesia increased by 1.17%. Meanwhile, internet users in the Riau Islands province

reached around 1.9 million active users. This number increased by more than 13% within 1 year (APJII, 2023).

The increase in internet users has changed people's behavior patterns, especially in trading activities. The rapid development of the Internet has become a significant shopping medium and an opportunity for marketers to expand the product market more practically and efficiently. This transformation is most prominent in switching from conventional commerce to online sales. Internet users are actively utilizing this technology to make buying and selling transactions, which encourages the development of e-commerce. In addition, the internet positively impacts various parties who need a platform for marketing purposes, becomes a great resource in the advancement of information technology, and provides convenience in the product purchase process (Putri and Sudiksa, 2018).

In line with the increase in internet users and the growth of e-commerce in Indonesia, consumers experience various conveniences when making online purchases. However, consumers still feel that there are risks. One of the common risks in online shopping is the non-conformity of product quality or even the possibility of receiving counterfeit products. This situation arises because consumers cannot judge the quality of goods directly. They can only rely on the information and images displayed on the screen. In addition, security risks can also arise, such as hacking personal data such as names, addresses, and credit or debit card information (Ariff et al., 2014).

This risk arises because many online sellers still commit fraud. The National Consumer Protection Agency (BPKN) recorded 1,136 complaints from the public related to online shopping fraud from 2017 to February 2023. This fraud incident has the potential to destroy consumer trust. With these many fraud cases, consumers can distrust online sellers. When deciding, consumers consider the risks and the extent to which the seller can be trusted (Bestari, 2023).

Trust is the main factor that affects consumers' desire to buy products through e-commerce platforms. Trust is an essential foundation in business; business transactions between two or more parties can be realized with trust. The higher consumer trust in online product sellers, the higher the consumer's intention to buy products through e-commerce (Megantara, 2016).

Another important aspect is the perception of risk in collecting consumer information. Consumers' motivation to seek information increases when they consider purchasing high-risk products. When the perceived level of risk reaches a significant level, consumers feel the need to avoid purchasing or mitigate risk by exploring and assessing alternatives before making a purchase (Ghassani, 2019).

Other research also considers organizational factors such as perceived size and perceived reputation. Online sales show a significant relationship between perceived size and online trust (Grazioli and Jarvenpaa, 2000). In addition, consumers' understanding of risk through the Internet is not significantly related to attitudes (Agag and El-Masry, 2017). However,

some studies argue that consumers' views of risk through the internet are a decisive factor in determining their intention to use e-commerce (Sullivan and Kim, 2018).

## 2. THEORETICAL AND LITERATURE STUDIES

### 2.1. Theory of Reasoned Action (TRA)

The theory of reasoned action (TRA) model explains the reasons behind a person's decision to do or not to do an activity. The theory of reasoned action (TRA) describes the relationship between a person's behavioral intentions and the subjective attitudes and norms the individual believes. This theory emphasizes the importance of individual intentions in determining whether a behavior will be carried out. According to the TRA model, humans make rational decisions based on the available information and the determinants of a person's behavior. Therefore, the quality of the information the e-commerce website provides dramatically influences one's decision to purchase. If the information presented by the e-commerce platform is accurate, it can increase online consumer satisfaction and trust, ultimately encouraging customers to make decisions to make transactions (Fishbein and Ajzen, 1975).

### 2.2. Perceived Size

Size perception is shoppers' view of how big a company is beyond what can be seen from its physical store or office. Consumers tend to perceive large companies as more trustworthy than small ones. The significant size signals that the company can overcome the failure of the product or service and compensate the customer in case of a problem. Many successful companies capitalize on this perception by building a brand that looks established and solid (Grandgirard et al., 2002).

### 2.3. Perceived Reputation

According to Jarvenpaa et al. (2000), the definition of reputation includes the extent to which consumers trust the honesty and concern of the company for customers. Five factors affect a company's reputation: Presence, action, communicating, listening, and seeing. Consumers will be familiar with what is generally known to the public. A reputable company is considered not to want to damage the positive image that has been built. The perception of reputation will increase along with the natural growth of the company's size.

### 2.4. Online Trust

Trust is an essential element that influences a person's decision to choose a product. Trust in e-commerce is the willingness to put oneself in a vulnerable position to the actions of trusted parties based on a sense of confidence and certainty. Consumers who trust e-commerce depend entirely on their self-confidence in the party (Gefen, 2002).

### 2.5. Risk Perception

Perception is an individual's steps and actions in interpreting information to create an understanding of their environment. Risk perception is a form of assessment of risk situations, which can be influenced by experience or confidence. It includes an assessment

of the likelihood of a particular event or events occurring and the level of concern we have about its impact. Risk perception also reflects the level of uncertainty consumers feel when they cannot predict the consequences of their purchasing decisions (Melani and Hamid, 2023).

## 2.6. Attitude

Attitude is a person's assessment of the extent to which he likes or dislikes a behavior. Attitudes towards certain behaviors can be observed by assessing and evaluating individuals against those behaviors, which measure the good or bad aspects, likes or dislikes. In other words, attitudes result from an individual's assessment of a particular behavior. Attitudes toward behavior are often formed when individuals feel confident and assess the benefits or advantages obtained from carrying out those behaviors (Ajzen, 1991).

## 2.7. Purchase Intention

Purchase intention is the tendency that arises in customers to consider buying a product. Buying intention can be interpreted as a collection of attitudes, responses, feelings, instincts, and desires to act. In general, online purchase intent is assumed to be the result of various motivations experienced by consumers. Motivational factors in emerging markets may differ from those in developed markets because they often undergo continuous changes, which directly affect consumer behavior (Utami et al., 2020).

## 2.8. E-Commerce (Electronic Commerce)

Electronic Commerce (E-Commerce) is the process of buying and selling transactions and exchanging goods, services, and information through computer networks. Part of the broader concept of e-business is e-commerce. E-business involves business activities, customer service, cooperation with business partners, job postings, etc. To operate e-commerce, www network technology, databases or data collection, electronic mail (e-mail), as well as non-computer technologies such as freight forwarding systems and payment methods are also used (Arifin et al., 2019).

## 2.9. Hypothesis

Size perception is a buyer's response to the scale or dimensions of the company, including the size of the existing store or office (be it in sales volume or others). The perception of a large company's size can influence other consumers' trust. A large size is considered an indicator that the company can solve the problem of the product or service, as well as being able to compensate its consumers (Jarvenpaa et al., 2000). Perceived size significantly affects Online Trust for consumers in Morocco. This significant influence suggests that consumers in Morocco tend to prioritize a holistic view of scale e-merchant when shopping Online. In other words, when a retailer online carries out activities on a large scale, consumers in Morocco are more likely to trust them and, therefore, are more likely to rely on the platform of its retail site (Jadil et al., 2022). This is similar to the research conducted by De et al. (2023), which found that perceived size affects the online trust of Viet Nam consumers. Based on the results of the study, the hypothesis of this study is:

H1: Perceived Size has a significant positive effect on online trust.

The reputation of a company that sells products or services is a crucial factor in shaping consumer trust. Reputation is how consumers trust a company's honesty and concern for customers. Consumers tend to know what is generally known by the public. Companies with a good reputation are believed to be reluctant to damage their reputations (Jarvenpaa et al., 2000). The perception of a store's reputation has a positive relationship with trust among consumers Online. Moroccan consumers trust sellers in e-commerce, which is reputable because the seller's reputation is a fragile factor that requires effort, investment, and business involvement from the online seller. Therefore, the better the website's reputation, the more trust Morocco users have in the site (Jadil et al., 2022). Martiah et al. (2023) and Meskaran et al. (2021) conducted similar research, namely, Perceived reputation has a positive and significant influence on Online Trust among consumers. Based on the findings of the study, the hypotheses in this study are:

H2: Perceived reputation has a significant positive effect on online trust.

Trust in e-commerce refers to the desire to put oneself in a position vulnerable to decisions trusted entities make based on conviction and confidence. Trusted consumers rely entirely on the party they trust based on their beliefs about e-commerce (Gefen, 2002). Research findings show that consumer confidence in online purchasing negatively affects the risks consumers perceive in stores Online (Jadil et al., 2022). This is in line with research conducted by Amaro and Duarte (2016), which found that online trust (Online Trust) customers show a negative and significant impact on risk perception (risk perception). Based on the findings of the study, the hypotheses in this study are:

H3: Online trust has a significant negative effect on risk perception.

Deep Theory Planned Behavior, an attitude refers to the actions of individuals in a specific behavior determined by the individual's intention to do so. This intention is influenced by attitudes towards behaviors, subjective norms that influence behavior, and perceptions of control over those behaviors. Attitudes toward behavior reflect a person's assessment of a particular behavior's good or bad (Ajzen, 1991). Consumer perception of trust Online affects consumer attitudes in Morocco (Jadil et al., 2022). These results are similar to the research conducted by Susanto and Sugiyanto (2021) and Yuwono and Wiwi (2021), which found that trust online positively affects attitude purchase online. Based on the findings of the study, the hypotheses in this study are:

H4: Online trust has a significant positive effect on attitude.

Risk perception of sellers Online is how confident consumers are of the possible loss when they purchase a product or service from an E-commerce platform. Possibilities that arise when shopping online. This includes the risk of losing money, product delivery issues, product non-conformities, and unauthorized dissemination of personal information (Zendehdel et al., 2015). The results indicate a significant negative correlation between risk perception and attitudes towards e-commerce (Jadil et al., 2022). These results

are similar to the research conducted by Prayogo et al. (2021) and Ansyah (2019), which found that risk perception significantly and negatively influences consumers' attitudes. Based on the findings of the study, the hypotheses in this study are:

H5: Risk Perception has a significant negative effect on attitude.

Consumers consider risk in most purchasing decisions, especially when dealing with online transactions. Buying over the Internet is considered to have a higher level of risk, given that it is a new technology in the world of marketing related to current information. This method is seen as a form of direct marketing and is often considered a higher-risk purchase option by consumers. Consumers who want to reduce risk tend to be reluctant to make online purchases (Mitchell, 1999). The study's findings show that risk perception positively and significantly impacts purchase intent, signaling that the risk perceived by customers can influence the desire to buy. Customers consider such risks seriously before purchasing (Irvania et al., 2022). This aligns with research conducted by Yonaldi et al. (2019) that risk perception positively and significantly affects purchase intention. Based on the findings of the study, the hypotheses in this study are:

H6: Risk perception has a significant positive effect on purchase intention.

Shopping intent online can be interpreted as the extent to which consumers are likely to be interested in purchasing products or services through an E-commerce platform. Before a purchase decision, consumers often desire to buy a product, which is usually reflected in their purchase plans with specific brands. This desire arises after consumers feel interested and intend to buy the product they have seen (Dodds et al., 1991). Attitude in e-commerce has a positive effect on purchase intention. In the study, high shopping intentions in e-commerce increase when consumers in Morocco have a positive assessment of transactions Online. The more positive the attitude of consumers when accessing the content of the site website, the more likely they are to use the website. Conversely, if few users give a positive rating to a website, consumers are less likely to buy from that website (Jadil et al., 2022). This is similar to the research conducted by Johari and Keni (2022) and Purnamaningrum and Alversia (2021), indicating that customers' attitudes significantly positively affect purchase intention. Based on the findings of the study, the hypotheses in this study are:

H7: Attitude has a significant positive effect on purchase intention.

Trust is a crucial consideration for consumers when they decide to shop online. Consumer confidence is that by trusting online sellers, they will be more motivated and more likely to make online transactions. The more vital consumer trust in product sellers on platforms online, the greater their tendency to make purchases through e-commerce (Rachmawati et al., 2016). There is a significant and positive impact on trust Online In determining purchase intent, when consumers consider the store Online Trustworthy, their purchase intent will increase. In contrast, consumer purchase intent decreases when consumers are confident that e-commerce is untrustworthy (Jadil et al., 2022). This aligns with research conducted by Mulyati and Gesitera (2020) and Dessy Aprianty and Basuki (2021); there is a positive and significant influence between the variables of online trust towards purchase intention at e-commerce. Based on the findings of the study, the hypotheses in this study are:

H8: Online trust has a significant positive effect on purchase intention.

### 3. RESEARCH METHODS

This study uses a quantitative method. The research instruments used are Google Forms, which are shared via social media. The location of this research is Batam City, and the research time is 2023-2024. The questionnaire is adapted from Teo and Liu (2007) and Hsu et al. (2014). Table 1 explains the variables used in this study and the indicators for each variable. Later, each variable and indicator will be simplified using codes.

Sample determination is carried out using purposive sampling with the criteria of those who have had experience shopping through the website Web E-Commerce such as Shopee, Tokopedia, Lazada, Blibli, and platform shop Online Other. 100 respondents were selected based on calculating the number of active students from the Batam State Polytechnic Business Management department, which amounted to 3268 students by applying the Slovin formula and an error rate of 10%. Data processing in this study uses Smart PLS version 4.0.

The method used in this study to analyze the data is partial least squares-structural equation modeling (PLS-SEM). The use of the PLS-SEM application is because the method allows the use of relatively small samples, with several samples below 100, making the analysis more accessible. PLS-SEM analyzes theories that are not strong or weak by making predictions; PLS-SEM is used to explain all the different size variations. PLS-SEM consists of two stages of model evaluation: The evaluation of the measurement model (outer model) and the structural model (inner model). The evaluation of the outer model involves a test of the model's validity and reliability. In the inner model analysis, an R-squared and a significance test were carried out to test the proposed hypothesis.

### 4. RESULTS AND DISCUSSION

#### 4.1. Results of Respondent Characteristics

Table 2 presents the complete demographic data of the sample. This research involved a total of 100 active students of the Batam State Polytechnic majoring in Business Management as the subject. Regarding gender diversity, the sample is unbalanced, consisting of 20.2% men (23) and 79.8% women (77). Most online shoppers are 95.6% between the ages of 21 and 25. When viewed based on how often they shop using e-commerce websites, most respondents shop through e-commerce platforms more than 10 times (53.5%). Meanwhile, the most commonly used platform for online shopping is Shopee at 88.6%.

#### 4.2. Outer Model Test Results

In the outer model test, there is an evaluation of the validity of the data, which includes outer loadings and average variance extracted (AVE):

According to Ghozali and Latan (2015), a value of outer loading between 0.5 and 0.6 is sufficient to meet the convergent validity

**Table 1: Variable operational definition**

Variable	Indicators	Code
Perceived size (X1) (Teo and Liu, 2007)	E-commerce has a large scope of companies.	PS1
	E-commerce has the largest industrial suppliers on the internet.	PS2
	E-commerce companies are found everywhere.	PS3
Perceived reputation (X2) (Teo and Liu, 2007)	E-commerce has a good reputation.	PR1
	E-commerce has an honest reputation.	PR2
	E-commerce has a fair reputation	PR3
	E-commerce has a reputation for paying attention to customers.	PR4
Online Trust (X3) (Teo and Liu, 2007)	Trusted e-commerce.	OT1
	E-commerce where information can be trusted.	OT2
	E-commerce that keeps promises and commitments.	OT3
	E-commerce that meets customer expectations	OT4
Risk perception (X4) (Teo and Liu, 2007)	Guaranteed.	RP1
	No risk of loss.	RP2
	Safe.	RP3
Attitude (X5) (Teo and Liu, 2007)	Satisfying.	A1
	Pull.	A2
	The right decision.	A3
Purchase intention (Y1) (Hsu et al., 2014)	Transactional interest.	PI1
	Referential interest.	PI2
	Preferential interest.	PI3

Source: Processed by researchers

**Table 2: Characteristics of respondents**

Characteristic	Information	Sum	Percentage
Gender	Man	23	20.2
	Woman	77	79.8
Age	<20 years/20 years	5	4.4
	21–25 years	95	95.6
How often do you shop using e-commerce websites	1 time	1	0.9
	2–4 times	30	26.3
	5–7 times	18	15.8
Frequently used e-commerce platforms	8–10 times	4	3.5
	>10 times	47	53.5
	Shopee	87	88.6
Other e-commerce platforms	Tokopedia	5	4.4
	Lazada	1	0.9
	Other e-commerce platforms	7	6.1

Source: Processed by researchers

**Table 3: Convergence validity test**

Correlation of indicators with variables	Outer loading	Information
A1 <- Attitude	0.850	Valid
A2 <- Attitude	0.920	Valid
A3 <- Attitude	0.880	Valid
OT1 <- Online trust	0.869	Valid
OT2 <- Online trust	0.914	Valid
OT3 <- Online trust	0.859	Valid
OT4 <- Online trust	0.840	Valid
PI1 <- Purchase intention	0.862	Valid
PI2 <- Purchase intention	0.861	Valid
PI3 <- Purchase intention	0.901	Valid
PR1 <- Perceived reputation	0.815	Valid
PR2 <- Perceived reputation	0.883	Valid
PR3 <- Perceived reputation	0.909	Valid
PR4 <- Perceived reputation	0.864	Valid
PS1 <- Perceived size	0.781	Valid
PS2 <- Perceived size	0.811	Valid
PS3 <- Perceived size	0.858	Valid
RP1 <- Risk perception	0.824	Valid
RP2 <- Risk perception	0.809	Valid
RP3 <- Risk perception	0.873	Valid

Source: SmartPLS processing results version 4

**Table 4: Average variance extracted (AVE)**

	AVE	Information
Attitude	0.781	Valid
Online trust	0.759	Valid
Perceived reputation	0.766	Valid
Perceived size	0.754	Valid
Purchase intention	0.668	Valid
Risk perception	0.699	Valid

Source: SmartPLS processing results version 4

standard. Based on Table 3, no variable indicator has a value of outer loading below 0.5, so all indicators are considered valid.

Hamid and Anwar (2019) state that the average variance extracted (AVE) value must be >0.5. The data in Table 4 show that each variable indicator has an AVE value that exceeds 0.50, which indicates that each variable indicator has met the validity standards well.

The results of the outer model test have a data discrimination validity test consisting of cross-loadings, namely:

According to Hair et al. (2019), the basis for assessing the validity of discrimination is that the value of cross-loading each indicator in a construct must be higher than the value of the cross-loading indicator on other constructs. Based on the data in Table 5, the research can be considered valid because it met the criteria.

In the results of the outer model test, there is an evaluation of data reliability that includes Cronbach’s alpha and composite reliability, namely:

Composite reliability has a scale between 0 and 1, where a higher value indicates a higher level of reliability. In general, the interpretation is similar to the Cronbach Alpha coefficient. Especially in exploratory research, the composite reliability value between 0.60 and 0.70 is considered acceptable, but in further

**Table 5: Discrimination validity test**

Indicators	Attitude	Online trust	Perceived reputation	Perceived Size	Purchase intention	Risk perception
A1	0.850	0.534	0.531	0.537	0.507	0.408
A2	0.920	0.557	0.444	0.497	0.694	0.445
A3	0.880	0.613	0.560	0.489	0.673	0.612
OT1	0.575	0.869	0.738	0.560	0.498	0.417
OT2	0.574	0.914	0.744	0.588	0.487	0.511
OT3	0.567	0.859	0.762	0.544	0.519	0.538
OT4	0.532	0.840	0.676	0.500	0.530	0.435
PI1	0.620	0.494	0.418	0.478	0.862	0.445
PI2	0.629	0.453	0.437	0.474	0.861	0.351
PI3	0.630	0.579	0.565	0.497	0.901	0.475
PR1	0.526	0.703	0.815	0.610	0.448	0.401
PR2	0.447	0.716	0.883	0.427	0.448	0.454
PR3	0.514	0.744	0.909	0.463	0.440	0.578
PR4	0.519	0.751	0.864	0.469	0.547	0.604
PS1	0.454	0.496	0.411	0.781	0.399	0.298
PS2	0.464	0.521	0.444	0.811	0.423	0.355
PS3	0.482	0.527	0.529	0.858	0.530	0.311
RP1	0.351	0.416	0.454	0.231	0.240	0.824
RP2	0.404	0.355	0.423	0.228	0.244	0.809
RP3	0.583	0.549	0.565	0.451	0.605	0.873

Source: SmartPLS processing results version 4

**Table 6: Reliability test**

Variables	Cronbach's alpha	Composite reliability
Attitude	0.860	0.914
Online trust	0.894	0.926
Perceived reputation	0.891	0.924
Perceived size	0.751	0.858
Purchase intention	0.847	0.907
Risk perception	0.797	0.874

Source: SmartPLS processing results version 4

**Table 7: R-square**

Variables	R square	R square adjusted
Attitude	0.478	0.467
Purchase intention	0.540	0.526

Source: SmartPLS version 4 processing results

research, a value between 0.70 and 0.90 is considered satisfactory (Hair et al., 2019). Based on Table 6, the composite reliability value was above 0.70, and Cronbach's Alpha also exceeded 0.70. This indicates that all indicators are considered valid.

### 4.3. Inner Model Test Results

In evaluating the structural model (inner model), several criteria include the R-square value and the significance level. The R-squared value measures the extent to which variations in independent variables affect dependent variables (Hamid and Anwar, 2019). From Table 7, it can be concluded that the value of R-Square for the relationship perceived size, perceived reputation, online trust, and Risk Perception towards purchase intention is 0.526. This indicates that the variability of the construct perceived size, perceived reputation, and online trust and Risk Perception accounts for 52.6%. In contrast, the remaining variability is explained by other factors not studied in this study. Likewise, the influence of perceived size, reputation, online trust, and risk perception toward attitude has an R-squared value of 0.467. This illustrates that the variability of the construct accounts for 46.7%, while the rest of the variability is explained by other factors that are not included in this study.

Figure 1 depicts a structural equation model (SEM) that explores the reciprocal relationships between several latent variables and their respective observable indicators. Key latent constructs such as Perceived Size, Perceived Reputation, Perceived Risk, Online Trust, Attitude, and Purchase Intention are measured through their related indicators. The model shows the causal paths between these constructs, as evidenced by the directional arrows and corresponding regression coefficients. For example, Perceived Size and Perceived Reputation positively influence Risk Perception and Online Trust, influencing Attitude and ultimately leading to Purchase Intention. The values along the arrows indicate the strength of these relationships, highlighting the significant impact of consumer perceptions and trust on purchase behaviour.

The inner model (measurement model) aims to estimate the cause-and-effect relationship between variables or test hypotheses by showing the significance level. To test the hypothesis, a positive correlation is assumed when the value of the path coefficient is  $>0.1$  and significant at a  $P < 0.05$  or a  $T$  value  $>1.96$  (t-table) (Ghozali, 2016).

### 4.4. Discussion

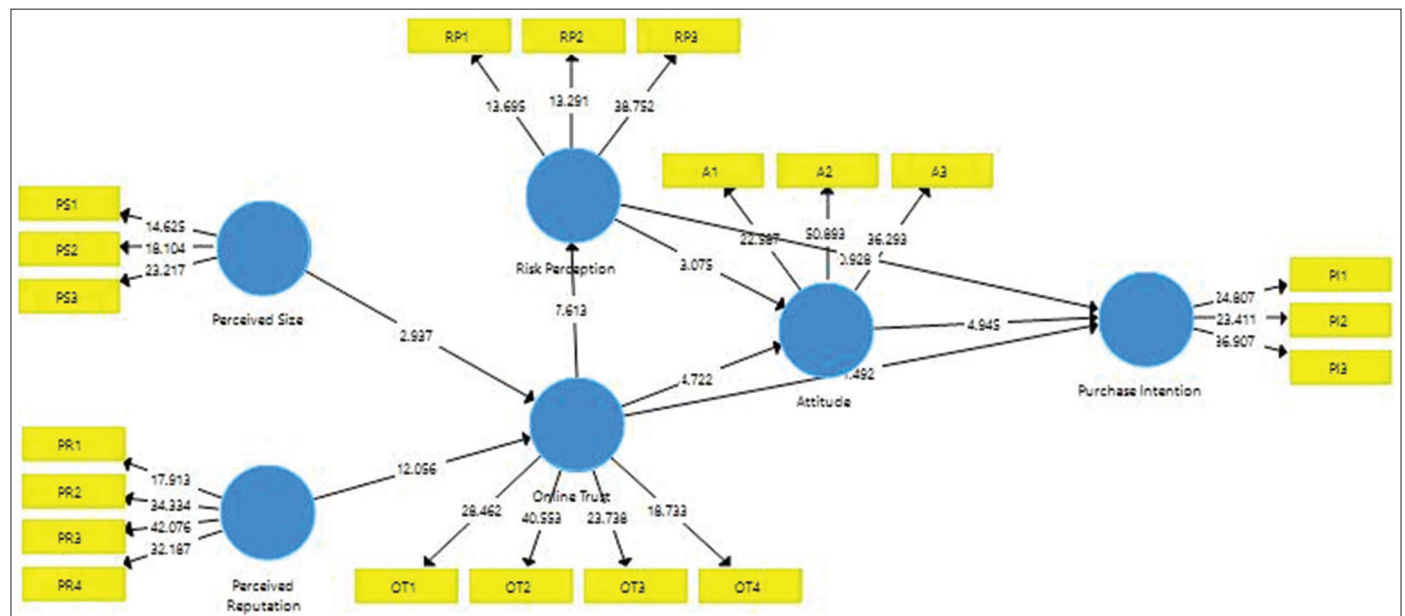
The perceived measure is a general belief that large online sellers have the necessary competencies and financial resources to fulfill consumer trust and promises (Grazioli and Jarvenpaa, 2000). First, the findings from Table 8 show that perceived size has a significant positive influence on Online Trust, which is seen in the value of path coefficient of 0.228 with a t-statistical value of  $2.937 > 1.96$  and p-value obtained  $0.000 < 0.05$ . This indicates that large companies are more reliable, increasing consumer trust and interest in online e-commerce transactions. This study supports the previously carried out by (Jadil et al., 2022; and De et al., 2023), which state that perceived size significantly affects online trust.

In attracting consumer buying interest as a seller, a good reputation is critical for sellers to gain buyers' trust. When customers perceive that a company has a reputation for being fair and honest in the

**Table 8: Path coefficient**

Hypothesis	Original sample	T-values	P-values	Impact	Result
PS -> OT	0.228	2.937	0.003	Significant positive	Accepted
PR -> OT	0.710	12.056	0.000	Significant positive	Accepted
OT -> RP	0.547	7.613	0.000	Significant positive	Rejected
OT -> A	0.484	4.722	0.000	Significant positive	Accepted
RP -> A	0.296	3.075	0.002	Significant positive	Rejected
RP -> PI	0.073	0.928	0.354	No effect	Rejected
A -> PI	0.554	4.945	0.000	Significant positive	Accepted
OT -> PI	0.185	1.492	0.136	No effect	Rejected

Source: SmartPLS version 4 processing results

**Figure 1: Bootstrapping results**

Source: SmartPLS version 3 processing results

eyes of others, they will feel safer buying and using the company's products (Tjahyadi, 2006). Second, findings from Table 8 show that perceived reputation has a significant positive effect on online trust, shown in the path coefficient value of 0.710 with a t-statistical value of 12.056 > 1.96 and a p-value obtained of 0.000 < 0.05. This means that a good reputation increases consumer trust and encourages them to prefer to make transactions on the site e-commerce aforementioned. This research is in line with the research of (Jadil et al., 2022; Martiah et al., 2023; and Meskaran et al., 2021), which states that perceived reputation has a positive and significant influence on online trust.

Online trust is the belief and intention to trust the extent to which consumers are willing to accept vulnerabilities, dependencies, and risks by relying on the seller's credibility, integrity, and competence online to fulfill his promise in the future (Lotz and Eastlick, 2011). Third, the findings from Table 8 show that online trust has a significant positive effect on risk perception, indicated in the value path coefficient of 0.547 with a t-statistical value of 7.613 > 1.96 and a p-value obtained 0.000 < 0.05. This indicates that solid trust in e-commerce makes consumers feel safer and more comfortable in transactions, reducing their concerns about potential risks. This study does not align with previous research conducted by Jadil et al. (2022) and Amaro and Duarte (2016), which state that online

trust shows the impact of negative and significant influences on risk perception. However, this study is consistent with studies conducted by Permatasari and Kartikowati (2018), which state that online trust significantly affects risk perception.

Attitude directly assesses a person's liking or disliking of a specific behavior. Consumer attitudes towards shopping online, i.e., positive or negative assessment of the application of e-commerce (Al-Debei et al., 2015). Fourth, the findings from Table 8 show that online trust has a significant positive effect on attitude, indicated in the value path coefficient of 0.484 with a t-statistical value of 4.722 > 1.96 and a p-value obtained of 0.000 < 0.05. This means that solid trust makes consumers more confident and comfortable in making transactions, increasing their positive attitude toward using an E-commerce platform. These results are in line with research by (Jadil et al., 2022; Susanto and Sugiyanto, 2021; and Yuwono and Wiwi, 2021), that online trust positively has a significant effect on attitude purchasing Online.

Risks perceived by sellers online, i.e., the extent to which a person believes there is a potential loss when purchasing a product or service from the site of e-commerce, are essential because they can significantly influence consumer attitudes in purchasing products (Bhukya and Singh, 2015). Fifth, the findings from Table 8 show

that Risk Perception has a significant positive effect on attitude, which is indicated by the value of path coefficient 0.296 with a t-statistical value of  $3.075 > 1.96$  and a p-value of  $0.002 < 0.05$ . This indicates that the higher a person's perception of risk, the more likely the individual is to develop a more positive attitude in dealing with it, such as the example of a customer giving an honest and helpful review of the product purchased, thus helping the seller to improve the quality of products and services and helping other customers in making purchase decisions, the customer shows patience and understanding in case of delays delivery, especially during peak periods such as holidays or massive promotions, as well as customers recognize and appreciate the seller's efforts in providing quality products and good customer service, for example by sending thank you messages or giving high ratings as a sign of appreciation. This study is not in line with previous research conducted by (Jadil et al., 2022; Prayogo et al., 2021; and Ansyah, 2019), which states that Risk Perception has a significant and negative influence on attitude users. However, this study is consistent with Niazi and Oktaviani (2023), who state that risk perception positively influences consumer attitudes when shopping online.

Consumers consider risk in most purchasing decisions, especially when dealing with online transactions. Buying through the Internet is considered to have a higher level of risk; consumers who want to reduce risk tend to be reluctant to make purchases online (Mitchell, 1999). Sixth, the findings from Table 8 show that Risk Perception does not affect purchase intention, indicated in the value path coefficient of 0.073 with a t-statistical value of  $0.928 < 1.96$  and p-value obtained of  $0.354 > 0.05$ . If consumers' perceived risk increases, their desire to use e-commerce will be reduced. However, this study found no influence between risk perception and purchase intent. This is because consumers today are already familiar and comfortable with the use of technology and have a better understanding of measures to mitigate risks, such as using secure payment methods and knowledge of return policies. This study does not align with previous research conducted by (Irvania et al., 2022; and Yonaldi et al., 2019), which found that risk perception significantly positively affects purchase intention. However, this research aligns with the research of Septianie (2021), which states that Risk Perception does not affect purchase intention.

A person's attitude towards an object is influenced by the beliefs and evaluations they make of the object. Interest in making a purchase is influenced by various factors such as the reputation of the store Online, reviews from previous users, personal experience in transacting Online, as well as the availability of clear and accurate information regarding the product or service to be purchased (Adinata and Yasa, 2018). Seventh, the findings from Table 8 show that attitude has a significant positive effect on purchase intention, indicated in the value path coefficient 0.554 with a t-statistical value of  $4.945 > 1.96$  and a p-value of  $0.000 < 0.05$ . Consumers consider many things when they have information about a product, such as its benefits, relationships, or needs. If consumers feel that the product does not influence or benefit them, their interest in buying the product will decrease. On the other hand, if consumers believe that the product is useful and

provides added value, their interest in purchasing will increase. These results are in line with research by (Jadil et al., 2022; Johari and Keni, 2022; and Purnamaningrum and Alversia, 2021) that the attitude of customers has a positive and significant influence on purchase intention.

Trust is an essential element in online transactions that mediates the interaction between sellers and buyers. Trust can involve a person's willingness to act based on the belief that the company will deliver the expected value as well as the generally held expectation that the words, promises, or statements of others can be accounted for in relationships that require trust (Gefen and Straub, 2004). Eighth, the findings from Table 8 show that Online Trust does not affect purchase intention indicated in the value path coefficient by 0.185 with a t-statistical value of  $1.492 < 1.96$  and a value obtained of  $0.136 > 0.05$ . This can be interpreted as online trust not significantly influencing purchase intent. Other factors, such as product price, brand reputation, customer reviews, and previous shopping experiences, may significantly influence consumer purchase intent through e-commerce. This research is not in line with previous research conducted by (Jadil et al., 2022; Mulyati and Gesitera, 2020; and Dessy Aprianty and Basuki, 2021), consumer trust has a positive and significant impact on their intention to purchase an e-commerce platform. However, this research is in line with the research of Dzakil and Zuliestiana (2022), which stated that trust does not affect consumers' purchase intentions in e-commerce JD.Id.

## 5. CONCLUSION

The results of the research that has been conducted show that perceived size has a significant favorable influence on online trust, which indicates that large companies tend to be considered to increase consumer trust and interest in transacting on e-commerce. Perceived reputation has a significant positive effect on online trust, showing that a good reputation makes consumers more confident and more likely to make purchases in e-commerce. Online trust significantly affects risk perception, indicating that solid trust in e-commerce makes consumers feel safer and more comfortable in transactions. Online trust has a significant positive effect on attitude, showing that solid trust makes consumers more confident in making transactions, thereby increasing their attitude towards using the e-commerce platform. Risk perception has a significant positive effect on attitude, indicating that the higher a person's perception of risk, the more likely the individual is to develop a positive attitude, such as providing honest reviews that help sellers and other customers, showing patience for delivery delays, and rewarding the seller's efforts by giving high ratings. Risk perception does not affect purchase intention, indicating that if the risk perceived by consumers increases, their desire to use e-commerce is usually reduced. However, this study found that risk perception does not affect purchase intention because consumers are now more familiar and comfortable with technology and understand how to reduce risk. Attitude significantly influences purchase intention, indicating that consumers consider various factors, such as benefits and needs, when evaluating a product. If the product does not provide benefits, buying interest will decrease. On the other hand, buying interest will increase if the



product is considered proper and valuable. As for online trust, it does not affect purchase intention, indicating that online trust is not the main factor in influencing purchase intention; other factors such as price, brand reputation, customer reviews, and previous shopping experience may be more influential in consumer purchase decisions through e-commerce.

From the findings of this study, the researcher identified several limitations that may affect the findings, which are expected to be improved in future studies. The limitation of this study is that the population used is only active students of the Batam State Polytechnic majoring in Business Management. The sample used only consists of 100 respondents, so the study results should be able to provide a better influence. This study is limited to focusing only on the size and reputation that is perceived as the main factor of the company in strengthening consumer trust without considering other variables that can also affect trust and the intention to buy online in e-commerce in Indonesia.

The implications and contributions of the study's results show that perceived reputation and perceived measure significantly increase online trust, which affects consumers' positive attitudes toward online transactions. Although online trust does not directly affect purchase intent, the positive attitudes resulting from that trust significantly impact purchase intent. Therefore, e-commerce companies should focus on managing their reputation and highlighting the scale of their operations to build consumer trust. Thus, they can increase consumers' positive attitudes, ultimately encouraging purchase intent.

Based on the findings of this study, the researcher suggests being able to consider additional variables that may affect online purchase intent, such as price, product quality, customer service, and user experience, using a more extensive and more diverse sample from various demographics and geographic regions, in addition to the size and perceived reputation, the study can consider other factors such as transaction security, information transparency, and customer support, which can contribute to increased online trust.

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