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DEVELOPING A SCALE FOR UNDERSTANDING THE IRRATIONAL CORPORATE BUYING DECISIONS OF INDUSTRIAL BUYERS

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Abstract

Marketing activities are running through suppliers to producers as well as producers to end-users. Basically, industrial buying decision-makers seem like institutions, but they are all real people in practice, and they cannot be expected to be rational every time. Thus, this study aims to understand the motives of such irrational decisions and form a scale for evaluating industrial buyers' irrational buying decisions. For achieving this, qualitative data collected by applying semi-structured interviews based on the literature. Then a draft survey form has been established and sent to industrial buying professionals. Frequency, factor, and reliability analysis have been applied to the collected data, and the final form of the questionnaire has been achieved, consisting of 18 questions and five dimensions with 0,857 Cronbach's Alpha value and 64,714% total variance explained. It can also be said that most irrational buying decisions are made by a collective decision-making process in buying centers.

Keywords: Corporate Buying, Industrial Buyer, Irrational, Inconsistency, Behavior.

Introduction

Competition in industrial markets is as hard as in consumer markets. Even the consumer markets are quite heterogeneous; industrial markets are more homogeneous since every sector produces specific products based on their profession. Because of this situation, there are specialized suppliers and distribution channels for each sector, making industrial markets more homogeneous than consumer markets. These specialized professionals need to understand the decision-making dynamics and the source of the industrial buyers' inconsistency. That will help the suppliers determine the methods for reaching these people's minds to convince them about their products and companies.

Presumptively, industrial buyers are accepted as rational and reasonable decision-makers, but they are all humans; as Shoaf (1959) mentioned, they have personalities including humanistic contradictions. In other words, it is not possible to assume that industrial buyers are "homo economicus". In this situation, the

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buyers' personality, emotional mood, past experiences, and intellect can determine the buying decision.

In this research, both qualitative and quantitative methods have been applied to understand the reasons behind irrational industrial buying decisions. The qualitative data has been obtained to understand the reasons behind the irrational industrial buyer behavior and produce a questionnaire to refine as a quantitative scale.

1. Industrial Buying

Webster and Wind (1972a) define industrial buying as a decision-making process of defining the need, evaluating alternatives, and choosing a supplier to fulfill formal organizations' needs. Another definition says industrial buying is an action for satisfying the whole organization instead of an individual (Vani and Janani, 2016: 359).

The buying situations can be characterized as a new task, modified re-buy, and straight re-buy (Robinson et al., 1967). Each situation requires a separate process to fulfill the buying process successfully.

Since industrial buying is a deal between at least two different companies based on their different commercial expectations, it can not be defined as a simple process (Domaski and Guzek, 1992), so it needs a professional approach. Thus, industrial buying is usually a collective process for organizations where many people are involved (Weigand, 1968). This structure is known as buying center (Robinson, 1967).

After all, it can be said that industrial buying is a complex process that begins with determining the need, continuing with making the buying decision between the alternatives, and ends after evaluating the consumption of what has been bought.

1.1. Differences Between Industrial Buyers and Individual Consumers

Industrial buyers buy products for the production process instead of satisfying an individual need. So, it is quite normal to consider the functionality of the product for an industrial buyer. Based on this, it can be said that the motivation of the industrial buyer is less emotional than individual consumers, and this makes them more rational (Hague and Jackson, 1994: 8). On the other hand, an individual consumer is buying for being an end-user, but an industrial buyer buys for producing a final product. Because of this, an industrial buying process is far more complicated than an individual consumer buying process.

Marketing activities of industrial products are traditionally distinct from consumer products with three aspects. First, the decision-making processes of individual and industrial buyers are totally different. Second, the marketing methods for individual and industrial buyers are different. The third and last difference is the payment method. Industrial buyers are applying for financial credits, time loans, and long-term payment options, so that industrial buyers should do more market research than individual buyers (Sheth, 1977: 1-3).

On the other hand, in the end, an individual buyer is a person who can make his/her own decision alone. However, an industrial buying process usually consists; different people with different responsibilities, organizational goals, interaction, and organizational choosing criteria (Choffray and Lilien, 1978: 18). So, it can be said that; even though an organizational buyer is a person, organizational buying is a structure of complex interactions and processes between different people and organizations.

1.2. Industrial Buying Models

For the last half-century, many researchers have presented a wide range of industrial buying models. The prominent models are; Robinson's (1967) buy grid framework, Wind's (1970) industrial source loyalty, Webster and Wind's (1972b) organizational buying behavior, Sheth's (1973) industrial buyer behavior model, and Samli et al.'s (1988) international industrial buyer behavior model.

According to Robinson et al. (1967), there are eight stages for the industrial buying process, which is the commonly used and accepted industrial buying decision process in the literature:

1. Problem recognition: A unit in the production line determines a need for the production process.
2. General need description: After problem recognition, the buyer needs more information to define the best solution and interact with other departments.
3. Product specification: Specifications of the best solution are determining in this stage. Usually, specialized units are more dominant at this step.

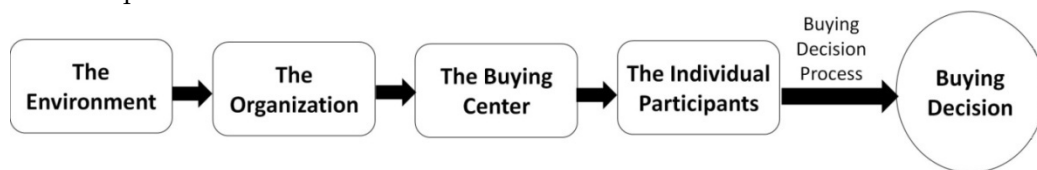


4. Information/supplier search: At this stage, the buyer makes market research for determining the best alternatives.
5. Proposal solicitation: Buyer asks for proposals from the chosen suppliers.
6. Supplier selection: In this stage, the buyer evaluates the proposals for finding the best option.
7. Order-routine specification: Buyer makes the order and informs the supplier of the following process.
8. Post-purchase performance: Buyer evaluates the performance of the supplier.

Industrial Source Model (Wind, 1970: 450) is another well-known model that contains four sets of variables:

1. Task variables (quantity, quality, price, delivery, and service);
2. Past experiences of the buyer;
3. Organizational variables that affect buyers decisions;
4. Perceived factors by the buyer for simplifying the buying process.

Webster and Wind's (1972b) model can be accepted as another theoretical ground for organizational buyer behavior. The simplified model can be seen below.



A Model of Organizational Buying Behavior, Resource: Modified from Webster and Wind, 1972b

Later Wind and Thomas (1980) added inter-organizational factors and buying class dimensions to Wind and Webster's (1972b) model of organizational buying behavior.

Sheth's (1973) model of the industrial buyer have four components:

1. Personnel expectations of the individuals in the process,
2. Organizational buying process,
3. Decision-making process,
4. Situational factors.

In 1988 Samli et al. presented the international industrial buyer behavior model. This model has six components as below:

1. Individual factors,
2. Organizational factors,
3. Environmental factors,
4. Social/Cultural factors,
5. Role of the state and legislative regulations,
6. Uncertainty factors.

Nydick and Hill (1992) have added supplier choice as another critical factor. They determined that industrial buyers have a set of criteria for choosing the supplier. These criteria are; price, product quality, delivery, and after-sales services.

There are many other models in the literature about industrial buying behavior, but the frame of this study has been drawn by these models mentioned above..

1.3. Buying Center

Three factors come to the forefront for industrial buying decisions: quality, price, and delivery. Additionally, reliability, robustness, long economic life, power, or engineering features can be desired by various sectors.

The industrial buying process is quite complex. Because decision-makers should consider a set of information from various departments and people like the end-user might define the need, the production manager might choose the most proper alternatives from the supplier offers, and the finance manager may involve in the process of the payment options. The number of participants and the length of the process may differ from sector to sector and organization to organization. Also, the company's size is another determinant for the number of participants in the decision process (Hague and Jackson, 1994:7). Briefly, industrial buying is a process that consists of different actors from the organization.



According to Robinson et al. (1967), organizations have decision-making units. One of these units is buying center. They define buying center as *"The individuals who are related directly to the purchasing process, whether users, buying influences, decision-makers, or actual purchasers are members of what can be termed a 'buying center'"*. That decision-makers departments and people in the organizations participate in the buying decision process. These participants' power, personality, relations with other participants and suppliers, and past experiences about similar and familiar buying processes and products may play a vital role in the final decisions. Because of these all, it can be said that buying center is a dynamic decision-making unit.

According to Samaniego and Guterrez (2004), there are five parameters related to the organizational structure which effects on industrial buying process are:

1. Size: The size of the organization affects the buying processes,
2. Specialization: High level of specialization brings a high level of participation in the buying process.
3. Standardization: Defined organizational processes and procedures are named as standards.
4. Centralization: When the level of centralization decreases, more participants arise in the buying decision processes.
5. Formalization: Formalization defines the number of relied rules and methods accepted and followed by the organization's members.

Even though the buying center limits the industrial buyer's autonomy and makes the process more bureaucratic, it decreases the risk of making a wrong buying decision and makes the process more democratic since all the relevant participants are involved in the process.

1.4. Effects of Personal Factors on Industrial Buying Behavior

Industrial buyers tend to choose the best offer from the suppliers to rationalize their buying decisions. Because presumptively promoting and/or keeping their position in the organization depends on these decisions. Industrial buyers have a set of information about the leading suppliers they work with, but this never means that they are very competent on every possible alternative in the market. Through lack of information about all possible alternatives, it can be said that industrial buying decisions are never free from taint (Hague and Jackson, 1994: 8).

According to Wilson (1995), Raymond Bauer was the first researcher who defined the perceived risk for consumer behavior in 1960. The concept indicates that every buying activity contains a certain amount of risk. Indeed the source of this risk is uncertainty. Bauer also indicates that the buyer struggles with this uncertainty to decrease the perceived risk (Collins, 1998: 1).

Woodside and Vyas (1987) claim that when buyer experience increases, the amount of formal and complex decision processes increases.

Mello and Collins (1998) indicate that while the perceived psychological risk is higher, especially for the industrial buyers over 40 years old, the perceived economic risk is higher for the younger ones. Perceived risk also negatively correlates with education level (Mello and Collins, 1998: 7-8).

Industrial buyers experience and learn about the products in the supplier market. That is why some buyers trust certain products. This trust may cause industrial buyers to abstain from looking for new suppliers or products. Even though different suppliers offer better products under better conditions, industrial buyers are skeptical about this situation (Hague ve Jackson, 1994: 12).

According to Samaniego and Gutierrez (2004), two personality traits affect industrial buying decisions:

1. Personal effect: People who participate in the buying process reflect their motivations on the process.
2. Personal experience: Experiences of the people who participate in the buying process affect the buying decisions.

Sometimes industrial buyers have encountered different buying situations that they have never experienced before. In such cases, it may not be possible to make a proper risk evaluation. They may have to make a subjective risk evaluation instead of an objective evaluation (Collins, 1998: 1).

Belulaj and Celion (2011) define three main categories for industrial buying. These categories and industrial buyer decisions for each category can be seen in the table below.



Category	Buyer Behavior
New Task	The buyer may not have enough information, and comparing the alternatives is impossible. The buyer has to spend much time for gathering information.
Straight Re-buy	The buyer is quite aware of the product and alternative suppliers. The decision-making in this kind of situation is usually based on the criteria of the buyer.
Modified Re-buy	This kind of buying may occur because of many situations like changing the supplier, testing the replacement/modified products, etc. In such situations, the buyers should concentrate on the latest conditions carefully.

Resource: Modifed from Belulaj and Celion, 2011:12

1.5. Effects of the Relation Between Industrial Buyer and Supplier on Industrial Buying Behavior

The relation between industrial buyers and suppliers continues since the beginning of commerce. If the trust has been built, this relation becomes a kind of friendship by the time. Nowadays, these relations acquire a strategic dimension (Wilson, 1995: 2).

It has to be said that even the good relations between the supplier and the buyer can make things easier for the process; industrial buyers always keep evaluating the practical side of this relation. Chao et al. (1993) suggest that industrial buyers evaluate their suppliers periodically based on the criteria they specify for establishing a sustainable relation. They offer six criteria for the evaluation of the suppliers:

1. Reliable deliveries,
2. Product quality,
3. Price,
4. The professionalism of the salesperson,
5. Service and responsiveness to customers' needs, and
6. The buyer-seller relationship.

Mohanty and Gahan (2012) indicate that relationship marketing has an essential role since long-term relationships may bring a competitive advantage for both supplier and buyer. Since it is a matter of gaining a competitive advantage, both buyer and seller prefer to keep their relations balanced and sustainable. Surely this intention needs empathy and mutual understanding for both sides.

After all, the industrial buyer is a human, and these people cannot get affected emotionally. Although the buyers evaluate the suppliers after every buying process, it cannot be said that these evaluations are totally objective. Because of this, their industrial buying decisions are possibly affected by these emotional states since they may not always be able to keep their feelings outside the workplace. Industrial sellers are undoubtedly aware of this issue, and they try to make the industrial buyers feel essential. The suppliers' sales force keeps calling and visiting the buyers (sometimes with reasonable gifts) to build or keep the relation. No matter what the industrial buyers say, they get affected by the sellers' presentations, attitudes, and manners (Hague ve Jackson, 1994).

1.6. Effects of the Brands on Industrial Buying Behavior

Even though industrial products are not selling on supermarket shelves, industrial buyers have to spend a tremendous amount of time investigating, testing, and understanding the products they are interested in. At this point, good brand perception can make things easier for industrial buyers. If the industrial buyer believes in a brand's reputation or is previously used and satisfied with the brand, the decision-making process becomes less complicated for him or her. Hague and Jackson indicate that the level of brand effect on industrial buyers is above 5% (Hague and Jackson, 1994: 5-11).

According to Chandpralart (2002), industrial buyers are also affected by the country of origin effect in addition to the supplier selection criteria. That means the countries' brand values are also crucial for the decision-making processes for industrial buyers.

2. The Purpose and the Importance of the Research

Industrial buying occupies an important place for the presale phase since the final product gains the characteristic features from the raw materials and semifinished goods that industrial buyers provide from suppliers. Because of this, one of the vital points for producing the best product relies on making the right industrial buying decisions.

This exploratory research aims to determine the reasons behind industrial buyers' irrational buying decisions and provide a groundwork for further research and practices.



Even there are researches in the literature about industrial marketing and industrial buyer behavior, and these researches do not dwell on the irrational industrial buyer behavior that drifts apart from the ideal and expected industrial buyer behavior.

3. Method

Both qualitative and quantitative methods have been applied for this research to obtain information as much as possible. For both methods, the participants' identities are kept anonymous while the quantitative phase participants were not asked for any identity information; the qualitative phase participants were recorded with given codes instead of their identities. All of the participants have been informed that they could withdraw from the research any time they want.

First, a semi-structured interview has been created for the qualitative data collection. Questions and the frame of the interview have been formed on the concepts and definitions from the literature. In this phase, 40 industrial buying professionals from the city of Ankara have participated in data collection.

After coding and interpreting the qualitative data, a questionnaire with 20 questions has been established to understand the concept and its dimensions. The data collection has been made by using a five-point Likert scale. The options were aligned as 1: Totally disagree to 5: Totally agree. An online data collection questionnaire has been formed and distributed to the participants. The participants have been chosen from Turkish LinkedIn users who defined themselves as actively working industrial buyers on their profile. 1500 invitation message for the survey has been sent randomly to the potential participants, and finally, 226 valid forms have been obtained at the end of this phase.

Convenience sampling has been applied for both qualitative and quantitative data collection phases. All the participants of the qualitative data collection phase have participated in the research on the condition that keeping their personal identifying information confidential. A quantitative data collection questionnaire was applied online where participants have filled the form anonymously.

In the qualitative data collection phase, many potential participants have been refused to participate in the research because of personal and corporate privacy concerns. That was the main limitation of this research. Other limitations were geographical limitations since it was impossible to leave the city of Ankara for the qualitative data collection phase and financial limitations since there were no financiers for the research.

The qualitative data has been coded and analyzed for the frequencies by using the QDA Miner program. Frequency, reliability, and factor analysis for the quantitative data have been made by using the SPSS program.

4. Results and Findings

4.1. Results and Findings from Qualitative Data

Based on the interviews, it can not be said that the industrial buyers have total control and autonomy over the corporate buying decision process. Especially the end-users of these products are quite dominant on the final decision. On the other hand, the end users seem to have brand obsessions, which drive the decision processes on an irrational ground. Participant 1/a says:

"We can not make these decisions alone in this sector. From boss to blue-collar workers, everyone is a part of it. Moreover, I have to admit that anyone in this process can change the final decision."

Participant 1/d says:

"I guess everyone but me is a part of this. I just have the final word but silently.."

Participant 2/b says:

"Usually top management and the end-users are quite into this process. We make the final decisions together. If we are going to keep doing the same thing, we prepare a procedure for it."

According to the participants' statements, the only free decision-making zone is the offers that have similar delivery, price, and quality features if the end users have no brand obsession for any of the offers. Participants also indicated that their opinions about the products are not considered enough in their organizations since many of them have never been end-user for the products they are buying. Another critical point for this result is the low-level risk in such decisions since there are no differences between the alternatives. On the other hand, when there are procedures for the buying processes, this condition decreases the personal effects on the industrial buying decisions.



Participant 3/a says:

"We have procedures which have been specified beforehand. We have also prepared an approved supplier list with a large group from all departments to draw a frame for whom we work. We also have an approved product list that includes definitions for the brand, model, type, etc. So, I am making my decisions as free as I can in all these procedures and lists."

Participants 5/c says:

"The procedures and rules for buying process have been determined long ago before I started to work here. My job title here is Purchasing Manager, but I believe my job is more like a Supplier Relations Manager. Well, whoever determined the rules have already get involved in the buying process, right?"

Participants complained that they could not find proper suppliers that match the critical criteria of price, delivery, and quality at the same time. So, they said they choose the supplier alternatives which met the criteria the most.

Participant 5/b says:

"If there is a supplier who can handle all these price, delivery and quality trio in an acceptable level and if I don't know this company that means I am doing something wrong on my job, but I don't. There is no such a supplier, and it never existed"

Participant 4/a says:

"I have never ignored the criteria, but sadly the suppliers do that. These issues are happening out of our control, and we can not interfere until the delivery has reached us because they always expect us to believe that everything is all right. Do you think it is?"

Participant 2/d says:

"There is no best supplier here. I just try to choose the lesser worst. They usually ignore the delivery on time terms. That sometimes makes us late on production too. As a precaution, we have to keep extra stock, and sure this has a cost for us."

Participant 1/e says:

"Supplier market is like that. We have to admit it. Qualified or not, these are the supplier alternatives we have. Everyone is trying to do some business as possible as they can under these market conditions. You know, it is not that easy for companies staying alive in the business."

On the other hand, industrial buyers seem to have social relations with the supplier and/or their agents, and this may affect their industrial buying decisions. Participants stated that if more than one supplier provides the same conditions, they prefer the one they feel closer to based on their relationship. Almost 80% of the participants from the qualitative data collection phase indicated that they have a relationship with the supplier and/or the supplier agent in their social lives. Also, this might be considered an essential clue for the power of relationship marketing in Ankara.

Participant 2/e says:

"Price of some products are same all over the market. If I have to make a decision for such a product, I would definitely choose the one which I feel emotionally closer to the seller."

Participant 1/a says:

"I am working with the agents of the supplier, and I have to admit that they affect my decisions. Sometimes the agents resign from the supplier, or the supplier decides to change and send a different agent. If I don't like the new agent, I call the supplier and ask for someone else. If they don't, then their sales amount in my company would surely decrease dramatically, luckily they know that" (Note that this participant was also the owner of the company.)

Opposite to the examples above, some of the participants indicated that they prefer to keep their relationship with the supplier and/or the supplier agent at a minimum level.

Participant 5/c says:

"I prefer not to keep my relation personal with the sales representative. So, I can't say they have any effect on my buying decisions."

Participant 4/d says:

"I usually keep our relation a bit tense. Probably they wouldn't like to hang with me because of this."

Some participants indicated that they are keeping the number of suppliers limited because they believe it is almost impossible to evaluate every alternative. They also mentioned that they choose the suppliers based on their past experiences and/or the organization's procedures and criteria. On the other hand, it can be said that every supplier has its own brand value for the buyers.



Buyers evaluate the suppliers' brand value based on their performance on the price, quality, and delivery. That can be interpreted that buyers also have a brand obsession, but this obsession is based on supplier company instead of a product, and the reason under that obsession is risk aversion.

Participant 2/a says:

"We usually evaluate the alternatives before our buying decisions. I mean, we already have a pool of approved suppliers. We pick the best offer from this pool."

Participant 4/b says:

"We already got limited our suppliers, so if the offer is out of our supplier list, we do not consider it."

Participant 3/a says:

"We usually prefer the brands which we are accustomed to and happy with. We are not lean to do business with others since it's very, very risky in those days."

Participant 1/e says:

"I partially consider the different brands and products. We already got quite a limited amount of suppliers, and we don't do business with everyone in the market. We work with the ones we trust. Otherwise, it takes so much time to evaluate the alternatives, and the value of the wrong decision is so high. We also like to see our suppliers as our shareholders, and this kind of relationship needs some time."

Some buyers indicated that they have brand obsessions, which affects their buying decisions.

Participant 2/d says:

"These brands have consistent performance, and this never changes by the time. Their standards are high and sustainable. Others are more amateurs. Even your first evaluations are impressive; this is unsustainable because they can not keep supplying the same quality. In fact, that's why some brands are in the market from the beginning of the time, and some can't keep doing business even a year-long."

Participant 2/a says:

"We prefer popular brands. Because this is a matter of prestige for us."

In addition to all, the brand obsession of the end-users have a considerable effect on the industrial buying decisions of the buyers:

Participant 3/a says:

"The end-user of the product are craftsmen. Some of the craftsmen are obsessed with some products. Even though I supply better products for them, they reject these products. So I am not the one who has subjective tendencies on some products, but these people push me to buy certain goods, you know. Whenever I buy the product, they don't want the final product they produce is troubled. I sometimes feel that they are doing that to prove to me that I was wrong on my decision."

Participant 1/b says:

"Employees, especially the end-users in the production department, are causing distress really."

Participant 4/c says:

"Our production staffs are obsessed with some brands, and we are not able to overcome that."

Participant 2/b says:

"It is not always like that, but our staff cannot say no to some well-known brands. That is a reality."

Participant 5/c says:

"There are popular brands in the market that's true. In fact, we also have to take into account our workers who have a brand obsession. I am very objective for all the brands, but sometimes I feel the obsessed employees' pressure."

65% of the participants state that they have made unethical buying decisions in the past, but they have avoided giving the details. On the other hand, they stated that they do not feel regret about their unethical decisions. It is understood that such decisions are not being made under the control of the industrial buying professionals. In fact, such decisions seem to require participation from the organization to share the responsibility of the risk.

4.2. Results and Findings from Quantitative Data

The frequency analysis of the demographic variables for the quantitative data can be seen below.



Age	
23-27	30
28-32	53
33-37	71
38-42	42
43-47	6
48+	24

Sectoral Experience	
1-3 years	93
4-6 years	36
7-9 years	13
10 years or more	84

Education Level	
Bachelor's	12
	5
Master's	61
Doctorate	26
Associate	14

Sector	
Health	53
Other	49
Construction	21
Defence	19
Telecommunication	15
Education	14
Technology	13
Public Services	12
Tourism	9
Real Estate	7
Logistics	6
Retail	6
Energy	2

Gender	
Male	133
Female	93

It can be said that the participants are young, well educated, experienced, and mostly males from 12 identified sectors. Most of the participants are from the health sector.

Factor and reliability analysis has been applied to the quantitative data set, and the results are given in the table below. Varimax rotation method has been applied for the factor analysis.

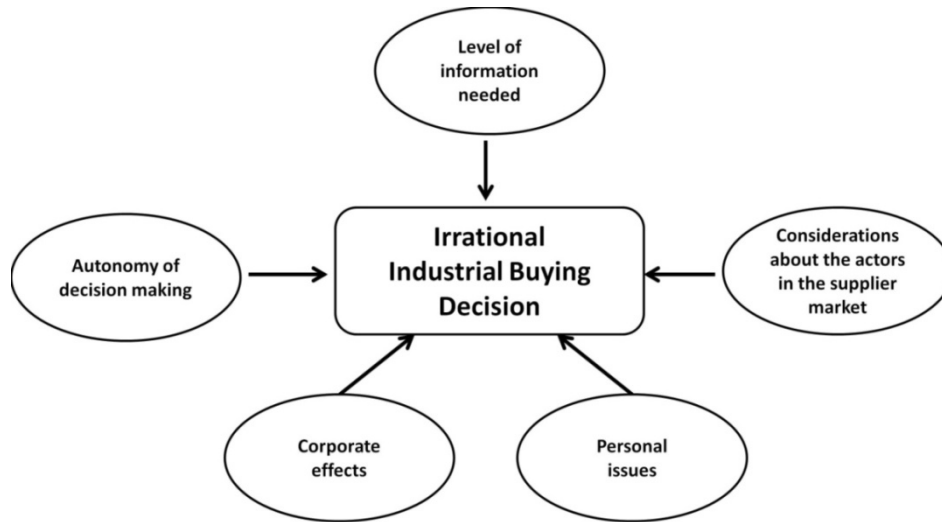
Dimensions	Statement	Factor Load	Explained Variance
Dimension-1 (Personal issues)	I may behave subjectively on my corporate buying duties	0,549	29,425
	I do not hesitate to use my corporate buying authority in an unethical way	0,850	
	I may ignore the criteria about the price in my corporate buying duties	0,727	
	I may ignore the problems about the delivery processes on my corporate buying duties	0,821	
	I may ignore the quality problems of the supplier on my corporate buying duties	0,832	
	I may ignore the problems encountered because of the structural issues of the supplier market	0,735	
	My personal relations with the supplier and/or the agent of the supplier may affect my corporate buying decisions	0,700	
	I have a relation with the supplier or the agent of the supplier in my personal life	0,767	
	I do not hesitate to buy risky products when I make a corporate buying decision	0,585	
Dimension-2 (Autonomy of decision-making)	I can make corporate buying decisions by my own in my organization	0,659	9,938
	I can freely choose any alternative since they have the same features	0,771	
Dimension-3 (Level of information needed)	I evaluate every alternative before making a corporate buying decision	0,774	9,874
	I prefer to work with maximal supplier alternatives	0,765	
Dimension-4 (Considerations about the actors in the supplier market)	My positive thoughts about some brands may affect my corporate buying decisions	0,657	7,840
	The structure of the supplier market is troubled, and this affects the corporate buying process in a negative way	0,743	
Dimension-5 (Corporate effects)	Top management interferes the corporate buying decisions in the organization	0,559	7,637
	Corporate buying procedures are defined, and these procedures are applied strictly	0,562	
	I believe the end-users in the organization have a brand obsession	0,623	
Total Variance Explained			64,714
Cronbach's Alpha Value			0,857

Table of Factor and Reliability Analysis



Cronbach's Alpha value for the questionnaire has been found 0,857. Carvalho et al. (2018) cited from Field (2009) and Hair et al. (2010); that the critical value for the Cronbach's Alpha value is 0,7 (Carvalho et al., 2018: 36). Therefore the questionnaire form can be accepted as a very reliable measuring tool.

According to Hair et al. (2010), the factor loads should be higher than 0,5 to be accepted as significant, and Cronbach's Alpha value is desired to be above 0,60. On the other hand, no parameters have factor load over 0,5 on more than one factor. Hair et al. (2012) indicate that the acceptable value for the total variance explained should be over 60%. Finally, the questionnaire's analysis defines five dimensions with 64,714% explained total variance based on 18 questions. The summary of the model can be seen below.



Model of Irrational Industrial Buying Decision

5. Conclusion

It is impossible to say that the 40 participants of the qualitative phase make their industrial buying decisions 100% objective and rational. Personal factors, organizational structure, and other departments (especially the end-users of the industrial goods and services) have an essential effect. Participants indicated that they are aware of their irrational decisions, but they will keep going on like that without regret. This attitude has been observed in almost all of the participants.

The quantitative phase results bring a reliable questionnaire with 0,857 Cronbach's Alpha value for 18 questions and five dimensions. This structure explains 67,714% percent of the total variance.

The parameters of the first dimension are defining the industrial buying decisions for the opposite side of the Chao et al.'s (1993) supplier performance evaluation criteria. The second and fifth dimension parameters are intersecting with Samaniego and Gutierrez's (2004) resolutions for the organizational structure. Based on the findings, even though the organizational structure pushes the industrial buyers to make a rational decision, the result is not always in this way.

As Collins (1998) indicates, industrial buyers tend to decrease the perceived risk by reaching every information they can; so they try to evaluate as many alternatives as possible, but the markets' size does not let them do that Hague and Jackson (1994) says. Another tool for industrial buyers to decrease the perceived risk is the power of the brand. This tool's negative side is it may prevent buyers from trying and searching for other alternatives. That would bring a lack of up-to-date knowledge for the goods and services in the market. Based on this, it can be said that the third and fourth dimensions are about the perceived risk of the industrial buyer. Even though the industrial buying system looks like a mechanical structure, the components are humans, and they communicate. By the time this communication may go one step further as friendship (Wilson, 1995). Supplier effect may lead to an irrational buying decision for the industrial buyer as time goes by.

Finally, it can be said that industrial buyers may make irrational buying decisions under different circumstances. These irrational decisions are not always under their control because of the other members of the decision center.



For avoiding such decisions, the industrial buyers should;

- Be autonomous but well inspected,
- Have a strong belief in ethical codes of the organization and community,
- Have a strong knowledge of the supplier market.

As a result, industrial buyers may make irrational buying decisions on their corporate buying duties but rarely have total control over such decisions since various departments, end-users, and the organization's management involves in the corporate buying decision processes.

Recommendations for researchers: Researchers may use the scale for various research subjects. It is believed that personality, organizational commitment, organizational justice, motivation, expectations, organizational culture, quality, and many other concepts can be researched together with this scale.

Recommendations for practitioners: The final product is a combination of the employees' labor and the quality of the physical components bought by industrial buyers. Even though organizations can not manipulate the external business environment; they surely can change their internal environment. Under these circumstances, organizations can apply a 360-degree evaluation system, approved supplier lists, or measuring end-user and customer satisfaction levels to evaluate the efficiency of the industrial buyers of their systems.

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