



Paper Type: Research Paper



## Presenting a Process Model of Cross-Buying Behavior of Shahr Bank Customer Electronic Services

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Citation:



Haji Ali Beygi, R., Hashemi, S. M., & Naami, A. (2022). Presenting a process model of cross-buying behavior of shahr bank customer electronic services. *Journal of applied research on industrial engineering*, 9(2), 249-263.

Received: 04/07/2021

Reviewed: 30/07/2021

Revised: 25/11/2021

Accepted: 13/12/2021

### Abstract

The present study aims at presenting a model of cross-buying behavior of electronic service customers in Shahr Bank. This research is applied in terms of objective and survey-exploratory in terms of approach. The statistical population of this study consisted of a group of experts including senior managers of Shahr Bank, professors and marketing consultants familiar with the banking industry which in-depth interviews were conducted with them. The selection of experts and doing interviews with them continued until the theoretical saturation was reached and then stopped. Purposive sampling method was used in this study. Nine interviews were conducted in total. This research has been done in the period of October 2020 to May 2021. Due to using the data foundation theory in this research, the main data collection tool was unstructured in-depth interviews with experts. Finally, after three open, axial and selective kinds of coding, the conceptual model of the research was designed based on a paradigm model. In this research and according to the identified goals and categories, the category of motivating to use various electronic services of Shahr Bank was considered as the main and axial category. This means that the core of the conceptual model is the users' motivation and inner desire to use various electronic services of this bank.

**Keywords:** Cross-buying behavior, Electronic service, Data foundation theory.

## 1 | Introduction

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A common aspect between all of us human beings (regardless of our education, policies, or commitments) is that we are all consumers of goods and services. We use or consume food, clothing, housing, transportation, education, household items, vacations, services, and ideas based on a special order. As consumers, we play a key role in the health of the economy (national and transnational). The decisions we make about demand for raw materials, transportation, manufacturing, services, etc., affect the success of some industries and the failure of others. Therefore, consumer behavior is a comprehensive factor in the recession or boom of all commercial activities of society. One of the main missions of marketing science is to understand and even guide consumer behavior [1].



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<http://dx.doi.org/10.22105/jarie.2021.293551.1352>

One of the most important issues in examining and identifying consumer behavior is the buying decision process. Most organizations that study on consumer buying behavior try to obtain information about what consumers are buying, and also the reason, quantity, type, and location of their purchase. Contrary to the type, quantity and location of purchase, finding information about the reasons of consumer buying behavior is not easy, because the answer to this question is in the mind of the consumer or buyer [2].

Generally, buying is an activity that the consumer does with enthusiasm and is worth experiencing the decision-making process and its effect on the consumer. Buying is a way to obtain the goods or services you need. On the other hand, the decision-making process of consumers about buying is becoming a complex phenomenon. Most large manufacturers and sellers provide a wide range of goods for consumers [3]. People display certain behaviors while buying which identifying and examining these behaviors can be effective in attracting customers and selling products in the future [4].

A relatively new concept in the field of consumer behavior is the cross-buying intention or buying a product with other products. Cross-buying refers to the total number of product / service categories bought by a customer since the first purchase [5]. Cross-selling is the sale of services or products to customers who are currently using the company's services. Selling other products and services to customers reduces customer acquisition costs and offers a competitive advantage over competitors. Although cross-selling increase customer retention and value, previous studies have mentioned that persuading customers to cross-buy services and products from a supplier is not easy. The question of why customers decide to cross-buy products and services and strengthen their relationship with a provider has not been thoroughly studied in the previous studies [6].

Studies show that due to the increasing competition in the country's banking industry and the consecutive entry of new competitors, attracting customers to use the electronic services of the banking industry has become very difficult and expensive. Shahr Bank, which is one of the pioneers in providing new electronic banking services, is also facing this problem. Initial interviews with some senior marketing managers of Shahr Bank showed that if the bank can understand the process of its customers' cross-buying decision process and recognize its various dimensions, it can adopt appropriate and purposive policies and measures to benefit from the cross-buying behavior of the customers. But a very obvious theoretical gap in this regard is the lack of a domestic and comprehensive model for the cross-buying behavior of electronic service customers of Shahr Bank. Therefore, the present study intends to answer the following main question: "What is the process model of cross-buying behavior of electronic service customers in Shahr Bank?"

In the second section of the research, the literature and previous studies will be reviewed. In the third section, the research methodology will be stated. In the fourth section, the data will be analyzed and the results will be given. In the fifth section, conclusions and model design will be presented and in the sixth section, research suggestions will be provided.

## 2 | Literature Review

Consumer behavior includes the mental, emotional, and physical activities that individuals engage in when purchasing, using, and disposing of the products and services they use to satisfy their needs and desires. In other words, consumer behavior involves a set of psychological and physical processes that begin before purchase and continue after consumption [7]. Cummins et al. [8], also argued that consumer behavior with the aim of satisfying the needs and desires of different individuals and groups to examine the effective processes when selecting, purchasing and using products, services, ideas and deals with experiences. Consumer behavior is influenced by individual characteristics and decision-making process. Personal characteristics consist of four main cultural, social, personal and psychological factors.

Nowadays, the competitive environment is undergoing changes that it has not experienced before in its history. These changes have had a profound effect on both the structure of the industry and the nature of competition. Relationship marketing involves activities aimed at developing long-term and cost-effective communication between organizations and their customers, in order to create mutual benefits for both parties. On the other hand, maintaining and strengthening the customer relationship is the only one-way path that service organizations must take in using defensive strategies and increasing the retention of their current customers [9]. Academic research in this area has highlighted the importance of combined sales in various aspects of customer relationship for stores. Effective combination sales of different items or services increase the likelihood of customers returning, because with combined purchases, their replacement costs are reduced. Mukerjee and Shaikh stated that customers who buy different products from companies; they are more likely to make future purchases. Combined purchasing is also an important factor in the amount of repurchasing of customer and the variety of their purchases, which in turn leads to increased corporate revenue and increased stock value. Despite the importance of hybrid sales for stores, little research has been done to find effective factors in hybrid shopping. There are few resources available for companies to devote to various marketing activities such as combined sales. Therefore, companies should identify customers who are more willing to buy hybrids so that companies can get the most out of their investments in various marketing activities, especially hybrid sales. So identifying the customers who are most interested in combined shopping is the first and most important step in developing a complementary sales strategy [10].

Yaghoobi et al. [11], they have conducted research with the aim of providing an effective advertising model based on social networks in the educational jobs industry. This research is applied in terms of objective, and survey-exploratory in terms of approach. The statistical population of this study was a group of experts including senior managers of private sector educational institutions, university professors and marketing consultants familiar with the private educational services industry that in-depth interviews were conducted with them. The selection of experts and doing interview with them continued until the theoretical saturation was reached and then stopped. Finally, after three open, axial and selective kinds of coding, the conceptual model of the research was designed based on a paradigm model. Also in this study, using AHP decision method, research variables were prioritized according to experts.

Ebrahimpour et al. [12], conducted a study entitled "A survey of the effect of recommender factors on unplanned buying behavior (Case study: Iran Katan chain stores in Mazandaran province)". Results of this study showed that the use of recommender factor has a positive and significant effect on the effectiveness of product promotion and effectiveness of product search. The effectiveness of product promotion also has a positive and significant effect on the effectiveness of product search and customer satisfaction. The positive and significant effect of effectiveness of product search on unplanned buying behavior was also confirmed. Finally, it was shown that customer satisfaction has a positive and significant effect on unplanned buying behavior. Behzadnejad and Mansouri [13], conducted a study entitled "The impact of management, organizational, marketing and service quality capabilities on buying intention: the role of service innovation (Case study of Saipa Yadak Company)". The results of this study showed that of the dimensions of management capabilities, the dimensions of strategy and entrepreneurship affect the buying intention of the dimensions of organizational capabilities, the dimensions of focus, internal communication, external communication and organizational tasks affect the buying intention. Both dimensions of marketing capabilities, namely operational marketing and market orientation, affect the buying intention. Service quality capabilities also affect the buying intention. Service innovation also affects the relationship between management capabilities and marketing capabilities regarding buying intent. Service innovation does not affect the relationship between organizational capabilities and service quality capabilities regarding buying intent. Danaei and Dasar [3], conducted a study entitled "Measuring the behavioral response of food products customers of Etko chain stores to media advertisements considering the mediating role of the organization's reputation". The results confirmed all the hypotheses under study. According to the obtained results, it can be claimed that customers' behavioral response has the greatest impact on customer intention and advertising features have the least impact on customer behavioral response among the hypotheses of the study. Tehrani and Safdari [14], conducted a study entitled "Study

of the relationship between dimensions of relationship marketing and the impulsive buying behavior of customers of Etka chain stores in Golestan province". The results of this study indicated that there is a significant relationship between personalization and impulse buying, rewards and impulsive or unplanned buying behavior of customers, preferred behavior and impulse buying behavior of customers, communication and impulse buying behavior of customers. Mirzad Zare et al. [15], conducted a study entitled "Study of the role of ethical principles on the behavior of buyers of Refah chain stores in Rasht." Findings of this study indicated a significant relationship between customer perception of observing personal, social and utilitarian ethics by vendors and customer loyalty. Esfahani et al. [16], conducted a study entitled "Study of factors affecting impulse buying behavior in Mashhad chain stores (Case study of Proma chain stores)". The results of the analysis of the collected data showed that: The store environment (light, color, music, fragrance) has a positive effect on the impulse buying behavior of chain store customers. Physical layout (availability of goods, attendants, product layout, building appearance and staff uniform) and ancillary facilities and services (cafes and restaurants, amusement parks, childcare centers) do not affect customers' impulse buying behavior. Golrokh and Khanlari [17], conducted a study entitled "Identifying and investigating the factors affecting customers' intention to cross-buy bank insurance". The results of this study showed that the image of the bank and customers' trust in the bank are positively and significantly related to the intention to cross-buy bank insurance. Also, there is a positive and significant relationship between received value and satisfaction, and satisfaction and image and trust [6]. Bello et al. [6] examined the relationships and effects of perceived CSR, service quality, customer satisfaction, and Consumer Rights Awareness (CRA). This study had three objectives: first, to examine the effects of Corporate Social Responsibility (CSR) on service quality, satisfaction, and repurchase intention. Second, examining the mediating (unique) effects of quality and satisfaction from services, and third, to determine the moderating effects of CRA on the relationship between perceived CSR and consumer responses. Research findings showed that perceived CSR has direct and positive effects on service quality, satisfaction and repurchase intention. Also, service quality and satisfaction (uniquely and sequentially) mediate the effect of perceived CSR on repurchase intent. In addition, the CRA moderates the effect of CSR on perceiving service quality and repurchase intention. Tian et al. [18], tested the impact of CSR on consumers' purchasing behavior: the mediation role of trust. This study adopted a between subject lab experiment to investigate the effects of four different kinds of CSR practices on consumers' purchasing behavior and to understand their underlying mechanisms. The results indicated that CSR in the domain of environmental protection is most influential for a high tech company when it comes to attracting consumers and driving purchasing behavior. Additionally, the results indicated a mediating role of consumers' trust in the CSR purchasing relationship. This study suggested that high tech companies seeking to maximize sales should consider focusing their CSR practices on the environmental domain and should view consumers' trust as a critical end rather than a means to greater profits. Mukerjee and Shaikh [19], conducted a study entitled "Impact of customer orientation on word-of-mouth and cross-buying". The results of this study showed that in the population under study, customer perception of banking services has a significant effect on word-of-mouth and cross-buying behavior. Vyas et al. [20], a study entitled "Do the competitors affect cross-buying decisions?" Findings revealed that competitor's price influences the cross-buying intentions of customers more than the reputation and expertise of primary bank. Paulssen and Roulet [21], conducted a study entitled "Social bonding as a determinant of share of wallet and cross-buying behavior in B2B relationships". The results of this study showed that the social bonding between the companies involved in the supply chain of the light commercial vehicle industry has significant effects on the cross-buying behavior in B2B relationships. Krishnamurthy and Shainesh [22], conducted a study entitled "Snubbing the old to embrace the new: the impact of cross-buying on the usage of existing services". The results indicated that existing consumers' cross-buying of the new service results in a reduction of their future usage of existing services. Evanschitzky et al. [23], conducted a study entitled "Antecedents of peripheral services cross-buying behavior". The results of this study showed that payment equity, commitment, and building long-term relationships with customers can affect cross-buying behavior. Abidin et al. [24], conducted a study entitled "Investigating Antecedents of Cross Shopping Behavior among Consumers in Selangor". The results of this study showed that product assortment, convenience orientation, price consciousness, impulse buying tendency, and perceived time pressure can affect the cross-buying

behavior. Tung and Carlson [5], conducted a study entitled "Examining determinants of cross-buying behavior in retail banking ". The results of this study proved the effect of some factors on the cross-buying behavior of customers in retail banking. Among them, the effect of customer retention can be mentioned which has a positive effect on cross-buying intention. The results also showed that customer convenience can have a positive effect on cross-buying intention. In addition, the positive effect of variables such as customer trust, satisfaction and commitment on cross-buying intention was also confirmed. It is worth mentioning that the results showed that image conflict has a negative effect on customers' cross-buying intention. Vyas and Raitani [25], conducted a study entitled "An examination of linkages between CSR and cross-buying". Results revealed that corporate reputation and relationship quality both play a mediating role in the linkages between CSR and cross-buying intentions. Lin [26], conducted a study entitled " Customer orientation and cross-buying: the mediating effects of relational selling behavior and relationship quality". The findings suggested that customer orientation positively influences cross-buying behavior of customers. But this effect does not happen without mediation. For the customer orientation to affect cross-buying behavior, two variables of relational selling behavior and the relationship quality play a mediation role. Hong and Lee [27], conducted a study entitled "Determinants of cross-buying intentions in banking services in collectivistic culture". The results of this study showed that the collectivistic culture can have positive effects on customer trust and satisfaction. And this trust and satisfaction, in the next step, will have a positive effect on the cross-buying intention. Hence, the collectivistic culture influences the cross-buying intention through the two mediating variables of satisfaction and trust.

Mäenpää [28], conducted a study entitled "Drivers of cross-sectoral cross-buying behavior among business customers". The study was conducted in Finland among small and medium-sized companies. The results of this study showed that loyalty, pricing, and customization programs can affect cross-buying. Dierkes et al. [29], conducted a study entitled "Estimating the effect of word of mouth on churn and cross-buying in the mobile phone market". The results of this study showed that in the mobile phone market, word-of-mouth advertising can have significant effects on cross-buying behavior. Reinartz et al. [30] conducted a study entitled "Investigating cross-buying and customer loyalty". The results of this study showed that customer loyalty can directly enhance cross-buying behavior, and accordingly, cross-selling strategy should be based on loyalty programs.

### 3 | Research Methodology

The present study is applied in terms of objective and applied-exploratory in terms of approach. The present study is a qualitative research. In the conceptual model design phase, a qualitative approach (data foundation theory) has been used. Also, this research is an applied-exploratory study. Because it has sought to provide a new model in the field of combined purchasing behavior of e-services customers of the country's banking industry, and this model can be used for banks and financial and credit institutions active in the industry.

#### 3.1 | Statistical Community of Research

The forthcoming research is important both theoretically and practically. Theoretically, this study can largely cover the study gap of the lack of hybrid purchasing behavior model in e-services customers of the country's banking industry in the Iranian marketing literature. In addition, it seems that the model presented by this research can provide significant assistance to the managers of the country's banking industry and specifically the managers of Shahr Bank to develop better and more effective strategies to strengthen the combined purchasing behavior of customers. In this study, a group of experts including senior managers of Shahr Bank, professors and marketing consultants familiar with the banking industry were considered as the statistical population. In this study, the characteristics of experts included the following: complete mastery of the field of marketing management in the electronic banking industry and familiarity with the buying behavior of customers in this industry.

### 3.2 | Statistical Sample of Research and Sampling Method

Purposive sampling method was used. In this method, the purposive interviews were conducted with individuals (experts) based on the pre-determined criteria. This process continued until the researcher reached theoretical saturation and a total of 9 interviews were conducted. This research has been done in the period of October 2020 to May 2021.

### 3.3 | Data Collection Tool

In this study, In order to design the process model of combined purchasing behavior of electronic services customers in Bank Shahr, the qualitative method of data foundation theory has been used. In grounded theory methodology, data must be arranged in chronological order. The coding process is used to analyze the data collected in the basic theory method. Data analysis in this process is not done separately from collection and sampling. At each stage, the analysis of previous data is a way to decide which data to consider next or which example to look for. During the coding process, the data are analyzed and conceptualized and finally put together in a new way. Yaghoobi divided the coding process into three stages: open (free), pivotal, and selective (selective) [11]. Since the grounded theory method was used, the main tool for data collection was unstructured in-depth interviews with experts in the marketing field. In these interviews, by starting the discussion gently and gaining the initial trust of the interviewees, the researcher tried to ask questions in a completely indirect way about the antecedents and contexts of the cross-buying behavior of electronic service customers in Shahr Bank, environmental factors, the consequences of this phenomenon and .... to obtain the basic concepts of designing the model. In this study, to ensure the validity of the interviews, prolonged engagement and persistent observation, including building trust with the research subjects, learning the culture of that environment and controlling misunderstandings caused by researcher or informant interventions were used. Also, to ensure the reliability of the interviews, after each interview, the extraction codes were shared with the interviewee to ensure that the codes that the researcher inferred from the interview were consistent with the interviewee's mental implications.

### 3.4 | Data Analysis Method

In order to analyze the interviews and achieve the conceptual model of the research, the grounded theory and three open, axial and selective kinds of coding were used in this research.

## 4 | Results of Data Analysis

### 4.1 | Open Coding

This stage of the analysis was dedicated to identifying and extracting basic concepts from the content of the interviews. So, after each interview, the researcher reviewed it several times and extracted the concepts in the text of the interview and coded them. In total 9 interviews were conducted and 109 initial concepts were extracted that after reviewing, putting them together and removing duplicate concepts, 42 final concepts were identified which can be seen in *Table 1*. It should be noted that the codes next to the concepts include a Latin letter and a number. The Latin letter (in alphabetical order) indicates the person being interviewed and the number next to this letter indicates the number of the extracted concept from that particular interview.

**Table 1. Finalized concepts after analyzing the interviews and removing duplicate items in the open coding stage.**

A <sub>1</sub> , B <sub>4</sub> , E <sub>6</sub> A <sub>2</sub> , B <sub>9</sub> , G <sub>5</sub>	Today's busy world leads to the use of electronic banking services. External and environmental incentives can motivate people to satisfy their banking needs from a particular bank.
A <sub>3</sub> , B <sub>1</sub> , F <sub>8</sub> , I <sub>7</sub>	Shahr Bank should not neglect the power of online social networks.
A <sub>4</sub> , F <sub>2</sub>	Shahr Bank should pursue the policy of continuous improvement in the field of electronic banking.
A <sub>5</sub> , E <sub>4</sub>	Shahr Bank brand can convince the customers to show a cross-buying behavior through building trust.
G <sub>10</sub>	The vast types of services that a person buys from a particular bank during a month or a year is a very important indicator.
A <sub>6</sub> , C <sub>10</sub> , I <sub>4</sub>	Factors affecting service quality can affect customer loyalty to Shahr Bank's electronic services.
B <sub>2</sub> , D <sub>8</sub>	Impatience of some people (such as older people) towards the Internet is an obstacle for them to use electronic banking services.
C <sub>1</sub> , F <sub>9</sub> , G <sub>4</sub> , H <sub>4</sub>	Customers' opinions should also be used to design electronic banking tools.
A <sub>7</sub> , D <sub>7</sub> , G <sub>3</sub>	The use of various electronic services of Shahr Bank by the customers is a sign of their loyalty to this bank.
A <sub>8</sub> , C <sub>8</sub>	If some people like a bank, they will no longer be interested in using the services of other banks.
B <sub>3</sub>	The perception of customers towards your services greatly influences their buying decisions.
A <sub>9</sub> , C <sub>11</sub> , E <sub>10</sub>	Some people in the family have learned that they should always buy from the same good store.
A <sub>10</sub> , G <sub>2</sub> , H <sub>9</sub>	Senior managers of Shahr Bank must show their practical commitment and serious determination in the field of promotion and expansion of electronic services.
B <sub>5</sub> , F <sub>4</sub> , I <sub>6</sub>	The antecedent of cross-buying behavior is the existence of a wide range of electronic banking services.
A <sub>11</sub> , B <sub>6</sub> , F <sub>6</sub>	Studying and analyzing the electronic services buying behavior and examining the variety of services received by the customers can further reveal the cross-buying behaviors.
A <sub>13</sub> , C <sub>6</sub> , E <sub>3</sub>	Shahr Bank should try to improve customers' attitude towards its services.
D <sub>11</sub> , E <sub>2</sub>	Shahr Bank should constantly monitor the innovations of the world's leading banks and imitate their positive points.
B <sub>7</sub> , E <sub>13</sub>	Some customers are accustomed to receiving all of their required banking services from only one bank.
D <sub>1</sub> , F <sub>3</sub> , H <sub>7</sub>	Shahr Bank should be able to motivate their customers to use various electronic services of the bank and not just one type of service.
C <sub>3</sub> , F <sub>10</sub> , G <sub>8</sub> , H <sub>1</sub>	Some customers believe that they are prone to less risk if they receive services only from one particular bank.
A <sub>14</sub> , D <sub>4</sub>	Using electronic services reduces the cost of urban transportation for customers.
B <sub>11</sub> , D <sub>6</sub>	Shahr Bank should diversify its electronic services as much as possible.
F <sub>1</sub>	Customer loyalty to electronic banking services is formed in the process of receiving service.
E <sub>1</sub> , G <sub>9</sub>	If Shahr Bank does not upgrade its electronic services periodically, it will certainly not be successful in cross-selling.
A <sub>12</sub> , C <sub>9</sub> , H <sub>3</sub>	Young generations with a great interest in internet are very inclined to electronic banking.
B <sub>8</sub> , C <sub>2</sub> , G <sub>7</sub>	Parents' behavior regarding the use of banking services affects their children's buying behaviour.
B <sub>10</sub> , F <sub>11</sub> F <sub>12</sub> , H <sub>8</sub>	Shahr Bank brand can create loyalty in customers There are customers who receive each of their banking services from one particular bank.
C <sub>5</sub> , D <sub>9</sub> , I <sub>5</sub>	Some customers like to know the characteristics and conditions of other banks.

**Table 1. Continued.**

C <sub>4</sub> , H <sub>6</sub>	Some people are naturally interested in surfing the web and being constantly present in internet.
A <sub>15</sub> , C <sub>14</sub> , E <sub>9</sub>	Website design of banks is very effective in attracting electronic customers.
E <sub>8</sub> , G <sub>11</sub> , H <sub>2</sub>	We are dealing with customers who are variety seekers in choosing the bank.
D <sub>2</sub>	To be superior and stay superior, the leaders of the industry must be followed.
A <sub>16</sub> , C <sub>15</sub> , G <sub>1</sub> , I <sub>2</sub>	The security of electronic banking tools should be as high as possible.
B <sub>12</sub> , D <sub>5</sub> , F <sub>7</sub> , H <sub>5</sub>	Some families are opposed to extensive purchases from one particular place.
B <sub>13</sub> , E <sub>7</sub>	Banking applications should be comprehensive as well as simple.
C <sub>7</sub> , D <sub>10</sub> , G <sub>12</sub>	Shahr Bank can use its brand strength to counter competitors' strategies.
C <sub>12</sub> , E <sub>11</sub> , F <sub>13</sub>	Using electronic services reduces the cost of time for customers.
C <sub>13</sub> , E <sub>12</sub> , I <sub>3</sub>	Some people do not really have the time to visit the bank in person.
I <sub>1</sub>	The commitment of senior managers is always the basis for positive events in organizations.
D <sub>3</sub> , E <sub>5</sub> , F <sub>5</sub> , G <sub>6</sub>	Out-of-home advertising is one of the factors affecting customers' buying behaviour.

## 4.2 | Axial Coding

An attempt was made at this stage to create more general classifications called "categories" by paying close attention to the identified concepts and determining their similarities and differences, and then the concepts of same type were put in these more general classifications.

The result of this process was the identification of 17 main categories that can be seen in *Table 2* along with the relevant concepts:

**Table 2. The identified categories with relevant concepts.**

Row	Category (Axial Coding)	Concept (Open Coding)
1	Customer interest in Internet surfing	Some people are naturally interested in surfing the web and being constantly present in internet. Impatience of some people (such as older people) towards the Internet is an obstacle for them to use electronic banking services. Young generations with a great interest in internet are very inclined to electronic banking.
2	Imitating the world's leading banks	Shahr Bank should constantly monitor the innovations of the world's leading banks and imitate their positive points. To be superior and stay superior, the leaders of the industry must be followed.
3	Proper design of electronic banking tools	Website design of banks is very effective in attracting electronic customers. Banking applications should be comprehensive as well as simple. Customers' opinions should also be used to design electronic banking tools. The security of electronic banking tools should be as high as possible.

**Table 2. Continued.**

Row	Category (Axial Coding)	Concept (Open Coding)
4	Customers' attitude towards Shahr Bank electronic services	The perception of customers towards your services greatly influences their buying decisions. Shahr Bank should try to improve customers' attitude towards its services.
5	Customer loyalty	Customer loyalty to electronic banking services is formed in the process of receiving service. Factors affecting service quality can affect customer loyalty to Shahr Bank's electronic services. The use of various electronic services of Shahr Bank by the customers is a sign of their loyalty to this bank.
6	Customer busyness	Some people do not really have the opportunity to visit the bank in person. Today's busy world leads to the use of electronic banking services.
7	Customer habits in buying banking services	Some customers are accustomed to receiving all of their required banking services from only one bank. There are customers who receive each of their banking services from one particular bank. If some people like a bank, they will no longer be interested in using the services of other banks.
8	Motivating to use various electronic services of Shahr Bank	Shahr Bank should be able to motivate their customers to use various electronic services of the bank and not just one type of service. External and environmental incentives can motivate people to satisfy their banking needs from a particular bank.
9	Cross-buying behavior of electronic banking services	The vast types of services that a person buys from a particular bank during a month or a year is a very important indicator. Studying and analyzing the electronic services buying behavior and examining the variety of services received by the customers can further reveal the cross-buying behaviors.
10	The customers not being diversity seekers in choosing a bank	We are dealing with customers who are variety seekers in choosing the bank.  Some customers like to know the characteristics and conditions of other banks. Some customers believe that they are prone to less risk if they receive services only from one particular bank.
11	Diversification of electronic services	Shahr Bank should diversify its electronic services as much as possible. The antecedent of cross-buying behavior is the existence of a wide range of electronic banking services.
12	Advertising (online and out-of-home) of Shahr Bank	Out-of-home advertising is one of the factors affecting customers' buying behavior. Shahr Bank should not neglect the power of online social networks.
13	The culture of buying banking services in the family	Parents' behavior regarding the use of banking services affects their children's buying behavior. Some families are opposed to extensive purchases from one particular place. Some people in the family have learned that they should always buy from the same good store.
14	Low cost of buying electronic banking services	Using electronic services reduces the cost of time for customers. Using electronic services reduces the cost of urban transportation for customers.
15	Continuous improvement of electronic banking system	Shahr Bank should pursue the policy of continuous improvement in the field of electronic banking. If Shahr Bank does not upgrade its electronic services periodically, it will certainly not be successful in cross-selling.

Table 2. Continued.

Row	Category (Axial Coding)	Concept (Open Coding)
16	Commitment of senior managers of Shahr Bank to electronic banking	Senior managers of Shahr Bank must show their practical commitment and serious determination in the field of promotion and expansion of electronic services. The commitment of senior managers is always the basis for positive events in organizations.
17	The Shahr Bank brand strength	Shahr Bank brand can create loyalty in customers.  Shahr Bank brand can convince the customers to show a cross-buying behavior through building trust. Shahr Bank can use its brand strength to counter competitors' strategies.

At this stage of the analysis the identified categories were placed on the paradigm model. The paradigm model helps the researcher to know how categories should be placed. The general structure of the paradigm model can be seen in Fig. 1.

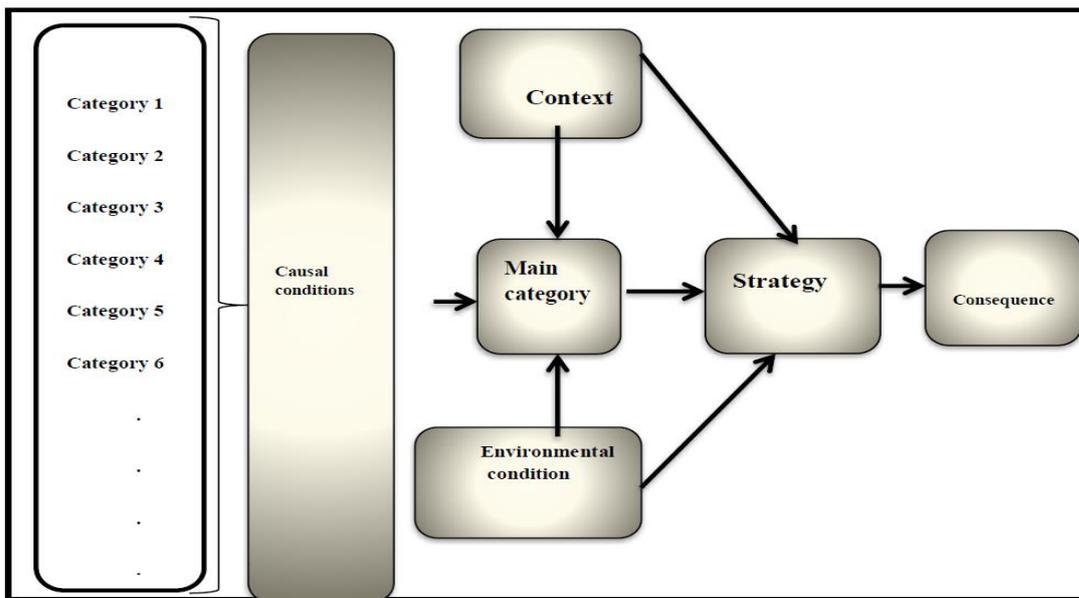


Fig. 1. Paradigm model.

In the next section (conclusion), it was tried that the output of the selective coding process be presented as the final result of the research and finally the obtained model from this research will be introduced.

## 5 | Conclusion and Final Design of the Conceptual Model

Based on the identified categories and the structure of the paradigm model, the following categories were placed in the model:

**Main (axial) category:** It is the core of the conceptual model based on which concepts and categories are created. In this research and according to the identified goals and categories, the category of "Motivating to use various electronic services of Shahr Bank" was considered as the main and axial category. This means that the core of the conceptual model is the users' motivation and inner desire to use various electronic services of this bank.

**Causal condition.** It is a set of conditions that cause or affect the phenomenon. The categories related to this dimension were determined as follows:

- *Customers' attitude towards Shahr Bank electronic services: this category refers to customers' perception towards Shahr Bank electronic services.*
- *Customer interest in Internet surfing: this category refers to the amount of people's interest in Internet surfing and spending time for it.*
- *Customer busyness: this category refers to the level of busyness and family and occupational conflicts of bank customers.*
- *The customers not being diversity seekers in choosing a bank: this category refers to the customers not being diversity seekers and their unwillingness to use the services of different banks.*
- *Advertising (online and out-of-home) of Shahr Bank: this category refers to the quantity and quality of Shahr Bank advertising.*
- *Low cost of buying electronic banking services: this category refers to the reduction of various costs for customers when using electronic banking services (compared to traditional banking).*
- *The Shahr Bank brand strength: this category refers to the strength and position of Shahr Bank brand in the Iranian banking industry.*
- *Customer habits in buying banking services: this category refers to the habits and behaviors of buying services by Shahr Bank customers.*

**Context.** Indicates the special conditions in which the phenomenon (main category) exists. In this research and according to the identified goals and categories, the categories of "The culture of buying banking services in the family" and "Commitment of senior managers of Shahr Bank to electronic banking " were considered as the contextual categories. The culture of buying banking services in the family refers to what the people in the family have learned from their parents about how to buy services and products (in general) and especially banking services. Also, Commitment of senior managers of Shahr Bank to electronic banking refers to the verbal and practical commitment of the senior managers of this bank and also their serious determination to improve and enhance the quality and quantity of electronic banking services.

**Environmental variables.** They are extensive structural context and external factors that can affect the main category and even strategies. In this study and according to the identified goals and categories, the category of "Imitating the world's leading banks" was considered as the environmental category. Imitating the world's leading banks refers to the fact that the Shahr Bank should always consider and explore the measures and innovations of the world's leading banks in the field of electronic banking and imitate them very intelligently.

**Strategies.** In a context and with specific mediating conditions, a specific set of strategies or actions is possible. In fact, strategies are actions that can turn the main category into consequences. In this study and according to the identified goals and categories, the categories of "Diversification of electronic services", "Proper design of electronic banking tools" and "Continuous improvement of electronic banking system" were considered as strategic categories. Diversification of electronic services refers to the need for Shahr Bank to broaden the scope of its electronic services. In addition, the proper design of electronic banking tools states that Shahr Bank should carefully consider important indicators such as comprehensiveness, simplicity, attractiveness, security, etc. in designing and using various electronic banking tools. Finally, the continuous improvement of the electronic banking system states that Shahr Bank must constantly and continuously improve the quality of its electronic banking system.

**Consequences.** Refers to the consequences of realizing the main category in the context of causal, environmental and contextual conditions through specific strategies. In this study and according to the identified goals and categories, the categories of "Cross-buying behavior of electronic banking services" and "customer loyalty" were considered as the consequence categories. This means that if the causal conditions, contexts, main categories, environmental conditions and strategies happen well, it can be hoped that Shahr Bank customers will show the cross-buying behavior in the field of electronic services and their loyalty to this bank will be improved.

The next step was to place the categories in a paradigm model which determined the conceptual model of the research. The main structure of this model can be seen in Fig. 2.

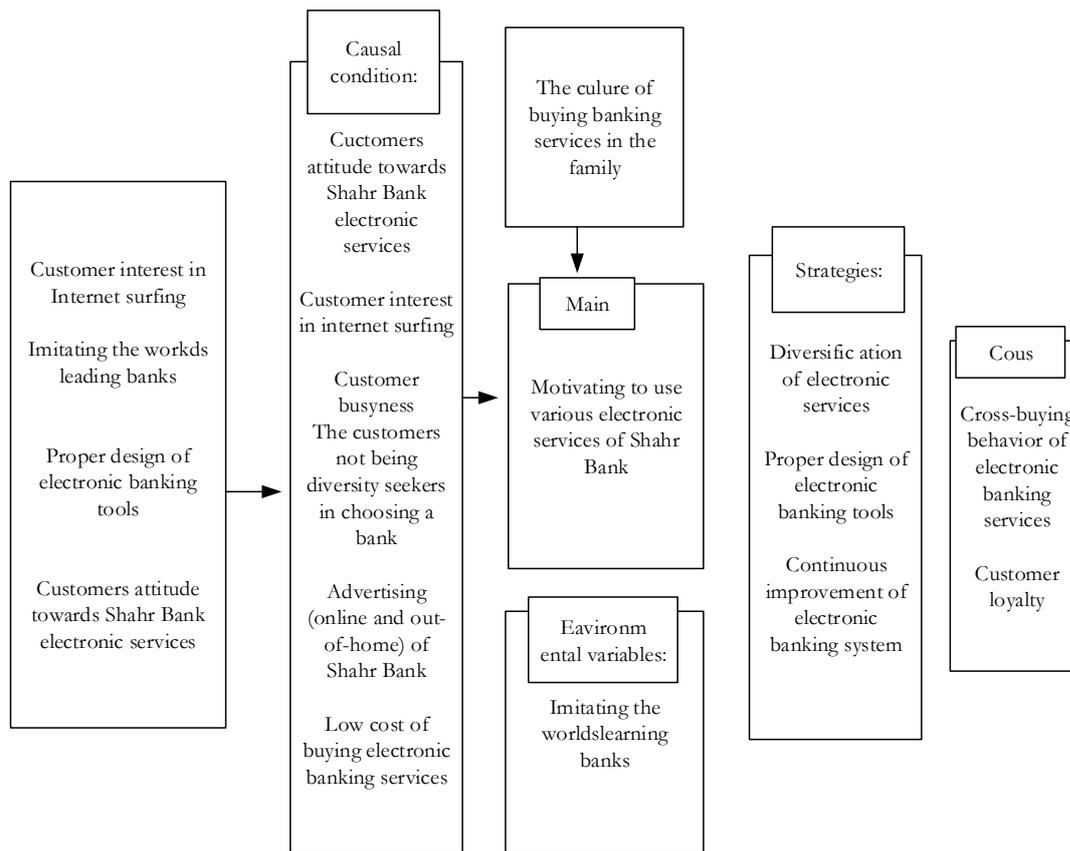


Fig. 2. Placement of categories in the structure of the paradigm model.

Accordingly, the conceptual model of the research can be presented in Fig. 3.

Based on the results of the research, and in order to improve the combined purchasing behavior of e-services customers in Bank Shahr, the following suggestions can be provided:

- Bank Shahr electronic services should be designed and offered in a completely comprehensive manner.
- The electronic services of Shahr Bank should be designed and offered to the public in a simple and understandable way.
- Bank Shahr electronic services should be designed and offered in a completely up-to-date and modern way.
- Shahr Bank to move towards excellence in the country in terms of electronic services.
- Bank Shahr environmental advertisements should be designed and executed quite intelligently.
- Bankshahr advertisements on social networks should be designed and executed quite intelligently.
- Bank Shahr measures and pathologizes the brand equity at specific time periods.
- Bank Shahr to make appropriate investments to strengthen the value of its brand with customers.
- Bank Shahr to do careful planning to strengthen the value of its brand with customers.
- Support the top and middle managers of Bank Shahr, e-banking in word and deed.
- Top managers of Bank Shahr always try to be the leading bank in Iran in the field of electronic banking.
- The top managers of Bank Shahr should make extensive and, of course, smart investments in electronic banking.
- The diversity of Bank Shahr electronic services should be brought closer to international standards.
- Try to bring the quality of Bank Shahr electronic services closer to international standards.
- Bank Shahr should use the tools to provide its electronic services that are used by the world's leading banks.

– Shahr Bank should try to grow to such an extent that it never disappoints customers to receive a special service.

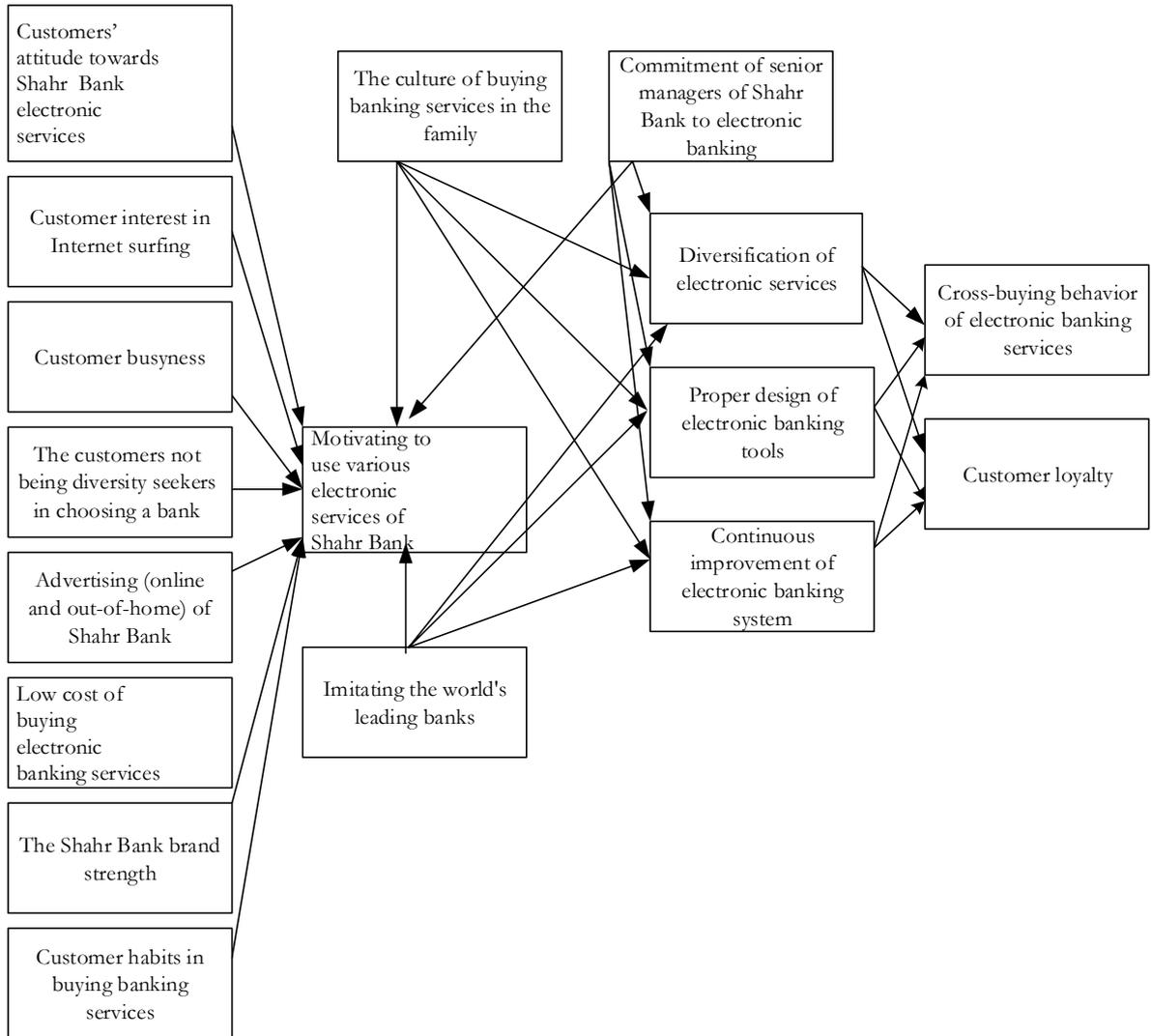


Fig. 3. Conceptual model of research.

### 5.1 | Suggestions for Future Studies

According to gained experiences in this research, future researchers are suggested to test the obtained model of this research in a large population using quantitative approaches such as structural equation modeling. Also, future researchers are suggested to use other methods such as Delphi method, content analysis, etc. for the modeling phase, so that one of the main constraints of this research, which was its long time, be removed. In addition, future researchers are suggested to use this banking industry research in other service areas of the country to gradually witness the design and replacement of local and Iranian models instead of western general models in the field of electronic service cross-buying behavior. This is entirely in line with the macro-policy of the "Iranian-Islamic model of progress" which has been repeatedly emphasized by the Supreme Leader.

## References

- [1] Kamalian, A. R., Yami, A. R., & Sani, M. A. D. (2014). A survey electronic advertisement on consumer behavior based on CAB model (a study on Mahan institution). *Asian journal of research in marketing*, 3(5), 29-44.
- [2] Salar, J., & Rahmani, Z. (2015). *A study of consumer behavior*. Payam Noor University Publications. (In Persian). <https://www.gisoom.com>
- [3] Danaei, A., & Dasar, S. (2016). Measuring the behavioral response of food products customers of Etko chain stores to media advertisements considering the mediating role of the organization's reputation. *4th international conference on applied research in management and accounting*. Tehran. (In Persian). <https://civilica.com/doc/568008/>
- [4] Shafizadeh, H., Seyedi, S., Ghasemi Dalarsetaghi, I. (2013). Presentation of integrated model of consumer behavior in electronic shopping. *Journal of marketing management*, 8(19), 13-28. (In Persian). [https://jommm.srbiau.ac.ir/article\\_1002.html?lang=en](https://jommm.srbiau.ac.ir/article_1002.html?lang=en)
- [5] Tung, B., & Carlson, J. (2015). Examining determinants of cross buying behaviour in retail banking. *International journal of quality & reliability management*, 32(8), 863-880. <https://doi.org/10.1108/IJQRM-11-2012-0148>
- [6] Bello, K. B., Jusoh, A., & Nor, K. M. (2020). Relationships and impacts of perceived CSR, service quality, customer satisfaction and consumer rights awareness. *Social responsibility journal*, 17(8), 1116-1130. <https://doi.org/10.1108/SRJ-01-2020-0010>
- [7] Saleh, H., Shafiee, M., & Sanji, M. (2020). Modifying the interconnecting activities through an adjusted dynamic DEA model: a slacks-based measure approach. *Journal of applied research on industrial engineering*, 7(3), 287-300. [http://www.journal-aprie.com/article\\_119243.html](http://www.journal-aprie.com/article_119243.html)
- [8] Cummins, S., Peltier, J. W., Schibrowsky, J. A., & Nill, A. (2014). Consumer behavior in the online context. *Journal of research in interactive marketing*, 8(3), 169-202. <https://doi.org/10.1108/JRIM-04-2013-0019>
- [9] Esmaili Dooki, A., Bolhasani, P., & Fallah, M. (2017). An integrated fuzzy AHP and fuzzy TOPSIS approach for ranking and selecting the chief inspectors of bank: a case study. *Journal of applied research on industrial engineering*, 4(1), 8-23. [http://www.journal-aprie.com/article\\_48258.html](http://www.journal-aprie.com/article_48258.html)
- [10] Mukerjee, K., & Shaikh, A. (2018). Impact of customer orientation on word-of-mouth and cross-buying. *Marketing intelligence & planning*, 37(1), 97-110. <https://doi.org/10.1108/MIP-01-2018-0030>
- [11] Yaghoobi, D., Hashemi, S. M., & Naami, A. (2021). Providing an effective advertising pattern based on social networks in educational businesses industry. *Journal of applied research on industrial engineering*, 8(Special Issue), 1-15. [http://www.journal-aprie.com/article\\_136398.html](http://www.journal-aprie.com/article_136398.html)
- [12] Ebrahimpour, H., Kolaei, M., Soraiyai, A., & Bagheri, M. (2017). A survey of the effect of recommender factors on unplanned buying behavior (case study: Iran katan chain stores in mazandaran province). *International conference on management, economics and marketing*. Tehran. (In Persian). <https://civilica.com/doc/680436/>
- [13] Behzadnejad, K., & Mansouri, M. (2017). The impact of management, organizational, marketing and service quality capabilities on buying intention: the role of service innovation (case study of saipa Yadak Company). *2nd international conference on industrial management*. Babolsar. (In Persian). <https://civilica.com/doc/633407/>
- [14] Tehrani, H., & Safdari, M. (2016). Study of the relationship between dimensions of relationship marketing and the impulsive buying behavior of customers of Etko chain stores in Golestan province. *Fourth scientific conference on findings of modern management science, entrepreneurship and education in Iran*. Tehran. (In Persian). <https://civilica.com/doc/615022/>
- [15] Mirzad Zare, M., Garkaz, M., Jahangiri Tolaroud, Z. (2015). Study of the role of ethical principles on the behavior of buyers of Refah chain stores in Rasht. *International conference on management, economics and humanities*. Istanbul, Turkey. (In Persian). <https://civilica.com/doc/625461/>
- [16] Esfahani, M., Hadadian, A., Rahimizadeh, H. (2014). Evaluating effective factors on impulse buying at chain store in Mashhad :( case study: poruma chain store). *New marketing research journal*, 4(4), 71-84. (In Persian). [https://nmrj.ui.ac.ir/article\\_17755.html?lang=en](https://nmrj.ui.ac.ir/article_17755.html?lang=en)

- [17] Golrokh, A., Khanlari, A. (2014). Identification and examination of the factors affecting customer intentions for cross buying bancassurance. *Journal of Business management*, 6(2), 381-400. (In Persian). DOI: [10.22059/jibm.2014.52010](https://doi.org/10.22059/jibm.2014.52010)
- [18] Tian, Y., Hung, C., & Frumkin, P. (2020). An experimental test of the impact of corporate social responsibility on consumers' purchasing behavior: the mediation role of trust. *Corporate social responsibility and environmental management*, 27(6), 2972-2982. <https://doi.org/10.1002/csr.2015>
- [19] Mukerjee, K., & Shaikh, A. (2018). Impact of customer orientation on word-of-mouth and cross-buying. *Marketing intelligence & planning*, 37(1), 97-110. <https://doi.org/10.1108/MIP-01-2018-0030>
- [20] Vyas, V., Roy, A., & Raitani, S. (2018). Do the competitors affect cross-buying decisions? *International journal of bank marketing*, 36(1), 2-18. <https://doi.org/10.1108/IJBM-06-2016-0085>
- [21] Paulssen, M., & Roulet, R. (2017). Social bonding as a determinant of share of wallet and cross-buying behaviour in B2B relationships. *European journal of marketing*, 51(5/6), 1011-1028. <https://doi.org/10.1108/EJM-07-2014-0433>
- [22] Krishnamurthy, A., & Shainesh, G. (2017). Snubbing the old to embrace the new: the impact of cross-buying on the usage of existing services. *Journal of services marketing*, 31(6), 662-675. <https://doi.org/10.1108/JSM-05-2015-0174>
- [23] Evanschitzky, H., Malhotra, N., Wangenheim, F. V., & Lemon, K. N. (2017). Antecedents of peripheral services cross-buying behavior. *Journal of retailing and consumer services*, 36, 218-224. <https://doi.org/10.1016/j.jretconser.2017.02.006>
- [24] Abidin, I. H. Z., Piah, Z. H. M., & Usman, S. B. (2016). Investigating antecedents of cross shopping behavior among consumers in selangor. *Procedia economics and finance*, 37, 397-404. [https://doi.org/10.1016/S2212-5671\(16\)30143-5](https://doi.org/10.1016/S2212-5671(16)30143-5)
- [25] Vyas, V., & Raitani, S. (2015). An examination of linkages between CSR and cross-buying. *Social responsibility journal*, 11(3), 622-640. <https://doi.org/10.1108/SRJ-08-2014-0118>
- [26] Lin, S. Y. (2012). Customer orientation and cross-buying: the mediating effects of relational selling behavior and relationship quality. *Journal of management research*, 4(4), 334-358. DOI: [10.5296/jmr.v4i4.2350](https://doi.org/10.5296/jmr.v4i4.2350)
- [27] Hong, J. K., & Lee, Y. I. (2012). Determinants of cross-buying intentions in banking services in collectivistic culture. *International journal of bank marketing*, 30(5), 328-358. <https://doi.org/10.1108/02652321211247408>
- [28] Mäenpää, I. (2012). Drivers of cross-sectoral cross-buying behaviour among business customers. *International journal of bank marketing*, 30(3), 193-217. <https://doi.org/10.1108/02652321211222559>
- [29] Dierkes, T., Bichler, M., & Krishnan, R. (2011). Estimating the effect of word of mouth on churn and cross-buying in the mobile phone market with Markov logic networks. *Decision support systems*, 51(3), 361-371. <https://doi.org/10.1016/j.dss.2011.01.002>
- [30] Reinartz, W., Thomas, J. S., & Basoul, G. (2008). Investigating cross-buying and customer loyalty. *Journal of interactive marketing*, 22(1), 5-20. <https://doi.org/10.1002/dir.20103>