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**A STUDY OF THE APPLICATION OF INFORMATION TECHNOLOGY IN  
RELATIONSHIP MARKETING**

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**ABSTRACT**

Today's world is full of changes and alterations. Changes in technology, alteration in demand, changes in consumers' demands and also alteration in world markets occurs every day but the main important created changes in business is alteration in supplied values to the purchases that can be recognized as the main important factor of success in known existing organizations. The present paper aims to find the factors that create the relationship marketing in science and what factors can change the future orientation of the relationship marketing. Professional and scientific understanding of marketing determines the importance of relationship marketing for the current firms. The strategies and techniques of marketing still are introduced as a specific field. Furthermore, without effective use of technology, the relationship marketing is not an effective strategy. The relationship marketing is based on the development of technology and it can be considered as a new pattern. Therefore, studying regarding the role of information technology in the relationship marketing is necessary and important. In this regard, a statistical population composed of 190 economists and the other experts in economic field have been examined. For this reason, a questionnaire based on the necessary information was distributed among them. After collection the necessary information, SPSS software was used for analyzing the data. Examining the obtained data determines that there is a meaningful and direct relationship between application of information technology and its effect on the relationship marketing.

**Keywords: Information Technology, Relationship Marketing**

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**INTRODUCTION**

The rapid changes in information and communication technology filed have caused expanded political, economical and social changes. Globalization is the result of surprising development in information technology. According to Michael porter, internet can change the role of strategy and competence. In this way, the firms which tend to success in electronic business, it is necessary to have marketing features in electronic environment. Increase of access to internet has caused that E-business have found a special place. E-business features such as globalization of business, removing the time and place limit, reduce of resources' price for purchase, increase of sale percent, and lack of time limit in the transactions, decrease of trading cost and many other advantages of E- business has cased its dramatic growth. The effective source of the relationship marketing is on the service and industrial marketing. In this regard, a group of researchers from northern Europe have started to extend a new approach for marketing in 1970s. Emphasis on creation, development and strengthening of customer relationship was important in new attitude. In addition, commercialization of profitable customer relationship and following of individual and organizational purposes and also long-term

communications with the costumer were emphasizing. Anderson in 1994 stated that relationship between a firm and the costumers includes the theories of market –orientated business for a long-term. Beside binary communication, attention of the researchers and management considerations is toward communication inside the business networks. Relationship marketing differs from traditional mass marketing. Although, it follows a temporary increase in sale, it tries to create a loyalty and involvement regarding the product in customers by making a permanent relationship with the costumer in order to facilitate the changed position of the product, obtains the customers of the competitors and assists for introducing the new products in the market. Relationship marketing can be considered as a philosophy that represents that all activities of a firm should be selected based on requirements of the customers in target markets. Marketers confront with a set of specific limitations that they should consider them. If a firm follows this philosophical base, its activities will be successfulness and profitable (**Takala, 1996**). Relationship marketing is not a complete transferred pattern. Without use of the technology, relationship marketing is not an effective strategy. Therefore, relationship

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marketing based on the technology development can be considered as a new pattern. It has shown that every activity performed by a firm for making customer loyalty is affected by technology. Traditional marketing, relationship marketing and technological ship marketing are fundamentally different. The technological ship marketing allows for different kinds of synergy effects, solutions, different customers and different types of interaction and relationships. The communications which are based on the information technology enable the organizations to address the requirements of the firm's activities and all customers' necessities. Furthermore, in the contributions, the long- term proposes and also the short-term requirements of participated organizations should be considered by creating a basis for investments and mutually rewarding. Communication based on the technology is a tool for providing regular communications and the common information among the partners (organizations or customers) therefore, it enables them to evaluate their progress, adopting the goals to their situations (Nasiri yar, 2005). The free flow of the information about the factors such as customer, product, service performance, and activities related to supply and distribution, competence comparison,

suppliers, cost and asset are determining in creation, development and improvement the long- term relationship in background of information technology. Information technology is a distinct factor in relationship marketing. The effective use of communication based on the information technology encourages the firms to create long term marketing with customers, suppliers, competitors and others in foreign environment of the organization. Here, marketers and managers can maintain their customers by meeting their changing demands. It is possible by effective use of information technology and any asset of other marketer. Technological ship marketing is marketing based on the technology tools that are used by the firms which tend to manage their relationship. The most activities of marketing should be based on the technology and a trend toward creating a relationship business. A technological interaction proposes a kind of relationship and an obvious connection between internal environment and interaction process since it emphasizes how information technology, customers and the organizations are a function of winner-winner interaction (Zineldin, 2000).

### **The Effect of Information Technology on Marketing Activities Aspects**

Internet has created a different environment for the marketing and it requires the novel attitudes. In order to determine the marketing in modern world, it is necessary to refer new viewpoints and paradigms. According to Novak and Hafman, one- to -Many relationships model has shifted to Many- To-Many relationships model. In One- To- Many relationships model, an organization tries to attract the attention of many customers by the social media such as television and newspaper. In many- To- Many relationships model, the information simply was not sent from transmitter to receiver and persons participate in creating the information. In other work, those customers participate for determining the contents of the organization's advertisement by making an interactive relationship. Osvicola and reporter believe that in modern world, each company competes in two worlds: physical world of resources (market environment) and virtual world of information (market space). In market space or virtual value chain of information, there is a source for creating the values for customers. The two researchers declare that today, the focus should be based on the demand. In addition, the strategies should be arranged based on the demand. Orban believe that internet has induced more power to the customers. The new situation has

caused to establish marketing paradigm by the customers to the trade companies. In marketing of customer to business (C2B), the customers demand the best product with the lowest price. Poeter declares that internet changed the past role of the strategy and competition. Undoubtedly, profitability has decreased in different industries by appearance of internet. Therefore, a stable competition is an important factor for the companies. Sustainable competitive advantage can be achieved in two ways; one of them is operational effectiveness. It means we do everything that the competitors perform better than them. The operational effectiveness is obtained by top technology, trained staffs and effective management structure. The other way to achieve sustainable competitive advantage is the strategic localization. It means the best services and a different behavior from the competitors should be presented to the customers. Internet makes problem for keeping the sustainable competitive advantage, however, it creates the new chances to strengthen the different strategic localization from the competitors. Bearing charm and Smith claimed that internet has created a complete market since the extensive information is available and the customers can compare the services of sellers with each

other. Internet seeks the relationship marketing and provides the long term relationship with the customers and services. In reality, marketing is an interactional process that establishes the relationship in the social environment. All these effects of information technology on marketing environment can be created on the environment beyond national and international marketing. However, in international marketing, the importance of changing market environment such as cultures, regulations, intellectual properties and foreign languages is more than national marketing environment (Nasiri yar, 2005).

### **The Factors of Relationship Marketing**

According to Gronroos (1991), acceptance of relationship marketing creates many changes in the structure of the firm and manner of its interactions. He declared eight factors of relationship marketing as follow:

- 1- Resources and marketing variables: in the relationship marketing, a firm can not to forecast a set of marketing variable factors but considering the nature of relationship that has with each customer, it should use its resources for creating a suitable marketing in such a way that results of its action can provide the customer satisfaction.
- 2- Product: in the relationship marketing, the firm should not rely on a precast product but it should develop its resources (such as its staffs, technology and etc). Furthermore, it should establish a system than can provide the customer satisfaction by using effective management of the resource.
- 3- Organizational structure: marketing should not be considered as a separate organizational unit in the relationship marketing. In addition, marketing knowledge should develop in all of the organization, although the experts of the marketing have to do some traditional duties such as advice to senior management (for decision making).
- 4- Outsourcing: conducting the relationship marketing in the firms should be outsourcing by experts of marketing. In this regard, the firm should ensure that the experts perform the duties of marketing corresponding to the customer oriented attitude.
- 5- Marketing planning: the planning should not be based on the traditional marketing planning, but also it should be done based for understanding the

customer orientations and creating customer relationship.

- 6- Attention to each customer: in relationship marketing, the decisions and activities of marketers should not be based on the traditional marketing techniques, but also customer's selections and providing the services should be based on the customer's data base and data mining.
- 7- Information sources: a firm in the relationship marketing should obtain its information by face to face relationship that sales staffs have with the customers.
- 8- Communication attitude: for performing the successful relationship marketing in the organization, it is necessary to change some terms of marketing with the other terms such as mutual client relationship management that is favored by the customers (Grönroos, 1994).

### **The relationship marketing components**

Many researchers expressed different ideas regarding the relationship marketing. **Teodore Levitt (1983)** declared that the sale is not completion of a transaction, but also having a good relationship is considered in a transaction. In order to remain a successful relationship, it is necessary to consider the

consumer and incite the customers' interest. For this reason, many of the firms have developed their products and have added the new services that the customer can evaluate the additional services of the firm. Furthermore, promotion and represented service quality to the customer are the most important components in relationship marketing. The mentioned factors create an attempt to return the customer to the firm (**Pressey, 2000**).

Commitment and trust are two main elements of the relationship marketing that most of the models have mentioned them. Commitment generally is created by the activities according what has been promised in the past. Trust means that firm (A) believes firm (B) should fulfill its promises that can provide the positive result for the firm (A). Furthermore, the firm (B) should perform its unforeseen actions that company (A) does not sustain a loss (**Fontenot, 2004**).

Skansovi regarding the industrial marketing has introduced some resources in a two-way relationship. The main stage is commitment that each organization tries to strength their relationship. Furthermore, there is a high degree of trust between two organizations. It is concluded that without attention to the nature of industry, trust, commitment and

information flow is so necessary (Pressey, 2000).

## METHODOLOGY

The literature data and analytical data of present paper have been collected by using library method and field method (a questionnaire and interview), respectively. In this regard, a statistical population composed of 190 economists and the other experts in economic field have been examined. . After collection the necessary information, SPSS software was used for analyzing the data. In the following, the present study represents the hypotheses and statistical tests.

### Research hypotheses

#### Primary hypothesis

There is a meaningful relationship between application of information technology and relationship marketing.

#### Secondary hypotheses

- There is a meaningful relationship between organizational structure and relationship marketing.
- There is a meaningful relationship between organizational planning and relationship marketing.
- There is a meaningful relationship between customer- oriented attitudes and relationship marketing.

- There is a meaningful relationship between information resources and relationship marketing.

It is necessary to note that results of the study were classified into descriptive and analytic sections. In descriptive result sections, one-dimensional tables are represented.

### Descriptive Results of the Study

#### Frequency distribution of the respondents based on the gender

Based on the findings of **Table 1**, it is seen that 66.8 % and 33.3 % of respondents consist of men and women, respectively.

#### Frequency distribution of the respondents based on the marital status

As the **Figure 2** represents the marital status of respondents have been evaluated in nominal measurement scale. Most of the respondents were married with 77.4 % and rest of the persons (22.6 %) were single.

#### Frequency distribution of the respondents based on the age

Based on the findings of table3, it is seen that the most respondents had 30- 40 years old (54.2 %) and the lowest respondents had less than 30 years old (8.9 %).

#### Frequency distribution of the respondents based on the educational level

Based on the findings of **Table 4**, it is sown that the most respondents with 44.2 % had master's degree and the lowest

number with 22. 6% were belonging to the persons who had PH.D degree.

### **Frequency distribution of the respondents based on the service record**

Based on the findings of **Table 3**, it is seen that the most respondents had 10- 15 years of service record and the lowest respondents had 5- 10 years of service record.

### **Analytical results of the study**

#### **Testing the hypotheses**

**Primary hypothesis:** There is a meaningful relationship between application of information technology and relationship marketing.

H0: information technology has no effect on relationship marketing

H1: information technology has an effect on relationship marketing

#### **Table Interpretation**

In **Table 6**, the relationship between application of information technology and relationship marketing has been evaluated considering the ideas of 190 persons. Considering the Spearman statistic value (0.681) and error level lower than 0.01 (p-value <0.01), it can be stated that the relationship between two variables is meaningful in the level of confidence of 99%. In other word, the null hypothesis is rejected and the researcher's hypothesis is confirmed. Therefore, there is a meaningful relationship

between application of information technology and the relationship marketing. Furthermore, spearman correlation coefficient between two variables represents that relationship between two variables is directly and positively.

Testing the secondary hypotheses:

**Hypothesis (1):** There is a meaningful relationship between organizational structure and relationship marketing.

H0: organizational structure has no effect on relationship marketing

H1: organizational structure has an effect on relationship marketing

#### **Table Interpretation**

In **Table 7**, the relationship between the organizational structure and relationship marketing has been evaluated considering the ideas of 190 persons. Considering the Spearman statistic value (0.450) and error level lower than 0.01 (p-value <0.01), it can be stated that the relationship between two variables is meaningful in the level of confidence of 99%. In other word, the null hypothesis is rejected and the researcher's hypothesis is confirmed. Therefore, there is a meaningful relationship between the organizational structure and the relationship marketing. Furthermore, spearman correlation coefficient between two variables represents

that relationship between two variables is directly and positively.

Hypothesis (2): There is a meaningful relationship between the organizational planning and relationship marketing.

H0: organizational planning has no effect on relationship marketing

H1: organizational planning has an effect on relationship marketing

### **Table Interpretation**

In **Table 8**, the relationship between the organizational planning and relationship marketing has been evaluated considering the ideas of 190 persons. Considering the Spearman statistic value (0.732) and error level lower than 0.01 (p-value <0.01), it can be stated that the relationship between two variables is meaningful in the level of confidence of 99%. In other word, the null hypothesis is rejected and the researcher's hypothesis is confirmed. Therefore, there is a meaningful relationship between the organizational planning and the relationship marketing. Furthermore, spearman correlation coefficient between two variables represents that relationship between two variables is directly and positively.

Hypothesis (3): There is a meaningful relationship between customer- oriented attitudes and relationship marketing.

H0: customer- oriented attitudes has no effect on relationship marketing

H1: customer- oriented attitudes has an effect on relationship marketing

### **Table Interpretation**

In **Table 9**, the relationship between the customer- oriented attitudes and relationship marketing has been evaluated considering the ideas of 190 persons. Considering the Spearman statistic value (0.544) and error level lower than 0.01 (p-value <0.01), it can be stated that the relationship between two variables is meaningful in the level of confidence of 99%. In other word, the null hypothesis is rejected and the researcher's hypothesis is confirmed. Therefore, there is a meaningful relationship between the customer- oriented attitudes and the relationship marketing. Furthermore, spearman correlation coefficient between two variables represents that relationship between two variables is directly and positively.

Hypothesis (4): There is a meaningful relationship between the information resources and relationship marketing.

H0: information resources has no effect on relationship marketing

H1: information resources has an effect on relationship marketing

### **Table Interpretation**

In **Table 10**, the relationship between the information resources and relationship marketing has been evaluated considering the ideas of 190 persons. Considering the Spearman statistic value (0.612) and error level lower than 0.01 (p-value <0.01), it can be stated that the relationship between two variables is meaningful in the level of confidence of 99%. In other word, the null

hypothesis is rejected and the researcher's hypothesis is confirmed. Therefore, there is a meaningful relationship between the information resources and the relationship marketing. Furthermore, spearman correlation coefficient between two variables represents that relationship between two variables is directly and positively.

**Table 1: The frequency distribution based on the gender**

gender	frequency	percentage
man	127	66.8
woman	63	32.2
total	190	100

**Table 2: The frequency distribution based on the marital status**

Marital status	frequency	percentage
married	147	77/4
single	43	22/6
total	190	100

**Table 3: The frequency distribution based on the age**

age	frequency	percentage
Below than 30 years old	17	8/9
Between 30 and 40 years old	103	54/2
Between 40 and 50 years old	35	18/4
More than 50 years old	35	18/4
total	190	100

**Table 4: The frequency distribution based on the educational level**

Educational level	frequency	percentage
Bachelor's degree	63	33/2
Master's degree	84	44/2
PHD	43	22/6
total	190	100

**Table 5: The frequency distribution based on the service record**

Service record	frequency	percentage
5-10 years	54	28/4

1- 15 years	60	31/6
15-20 years	33	17/4
More than 20 years	43	22/6
total	193	100

Table 6: Spearman correlation of primary hypothesis

variable	Spearman statistic value	p-value	total
The application of information technology on relationship marketing	0.681	0.000	190

Table 7: spearman correlation of secondary hypothesis (1)

variable	Spearman statistic value	p-value	total
The effect of organizational structure on relationship marketing	0.450	0.000	190

Table 8: spearman correlation of secondary hypothesis (2)

variable	Spearman statistic value	p-value	total
The effect of organizational planning on relationship marketing	0.732	0.000	190

Table 9: spearman correlation of secondary hypothesis (3)

variable	Spearman statistic value	p-value	total
The effect of customer- oriented attitudes on relationship marketing	0.544	0.000	190

Table 10: spearman correlation of secondary hypothesis (4)

variable	Spearman statistic value	p-value	total
The effect of customer- oriented attitudes on relationship marketing	0.612	0.000	190

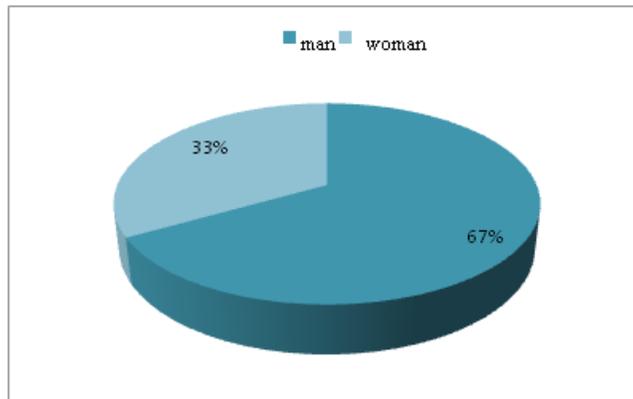


Figure 1: The frequency distribution of the respondents based on the gender

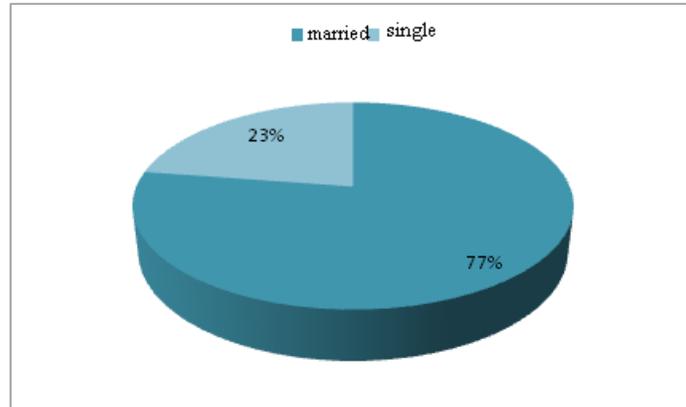


Figure 2: The frequency distribution of the respondents based on the marital status

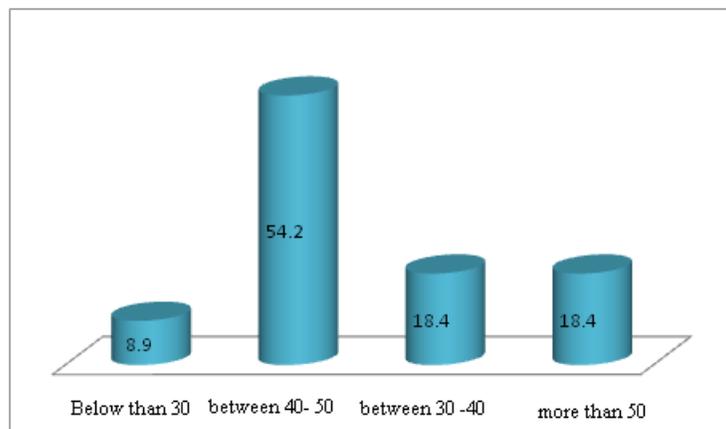


Figure 3: The frequency distribution of the respondents based on the age

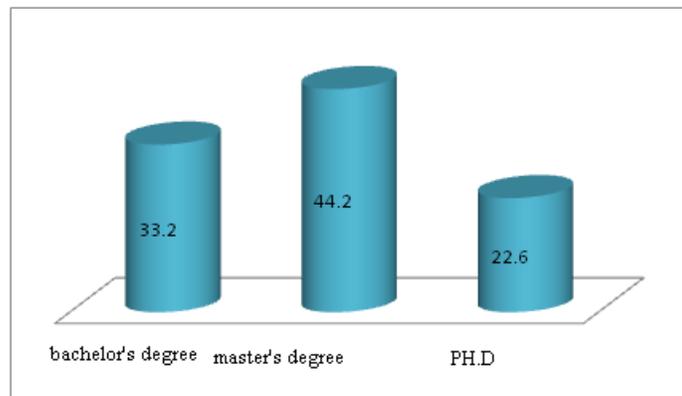
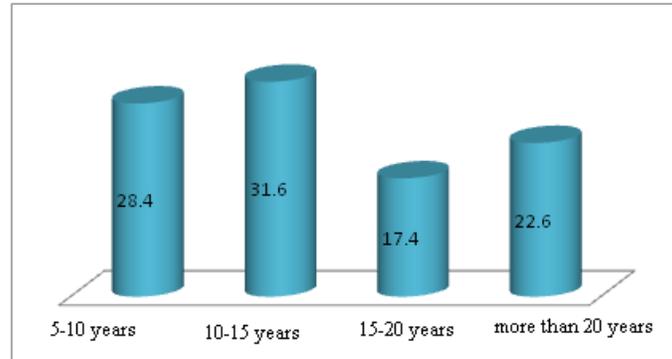


Figure 4: The frequency distribution of the respondents based on the educational level



**Figure 5: The frequency distribution of the respondents based on the service record**

## DISCUSSION AND CONCLUSION

The present paper represented its experiences and analyses in a framework for using and managing the information technologies as the main important factor for the relationship marketing. The study showed that the relationship marketing should be mixed everything of process regarding the marketing. Managers and marketers should aware about the new developments in technology and their effects since the technology can affect the marketing activities by different methods. For understanding the demand and observation of the process that can be obtained by experimental work, it is necessary to describe the actions of the marketing. Considering the ethics subject, the present paper had a definition of the relationship marketing based on the ethics term.

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