

# GLOBAL JOURNAL

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## Marketing

Electronic Trading System

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Amman Stock Exchange

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Discovering Thoughts, Inventing Future

Volume 13

ISSUE 11

VERSION 1.0



# GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH : E MARKETING

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MARKETING

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VOLUME 13 ISSUE 11 (VER. 1.0)

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GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH  
ADMINISTRATION AND MANAGEMENT  
Volume 13 Issue 11 Version 1.0 Year 2013  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# The Impact of Adopting Electronic Trading System on the Performance of Amman Stock Exchange

By Nawaf Al-Ghusin, Najeb Masoud & Nabil Al nasser

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**Abstract-** This study aims to highlight the impact of adopting electronic trading System on performance of the Amman Stock Exchange (ASE) represented in the (value traded) and (market capitalisation) where, for the implementation of that, secondary data were collected from (taken from the monthly statistical bulletins of the Stock Exchange) related to the study variables, where an analysis of the difference between the middle two samples: the first study variables before the introduction of the system, and the other after you have inserted, to find out whether there is a significant difference between the size of the stock exchange in trading before and after the introduction of the electronic trading system, and whether there is a significant difference between the value between the market value of securities listed on the stock exchange before and after the introduction of the system.

**Keywords:** *jordan, electronic trading system, value traded, market capitalisation, amman stock exchange.*

**GJMBR-E Classification :** *JEL Code: G12*



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# The Impact of Adopting Electronic Trading System on the Performance of Amman Stock Exchange

Nawaf Al-Ghusin<sup>α</sup>, Najeb Masoud<sup>σ</sup> & Nabil Al nasser<sup>ρ</sup>

**Abstract-** This study aims to highlight the impact of adopting electronic trading System on performance of the Amman Stock Exchange (ASE) represented in the (value traded) and (market capitalisation) where, for the implementation of that, secondary data were collected from (taken from the monthly statistical bulletins of the Stock Exchange) related to the study variables, where an analysis of the difference between the middle two samples: the first study variables before the introduction of the system, and the other after you have inserted, to find out whether there is a significant difference between the size of the stock exchange in trading before and after the introduction of the electronic trading system, and whether there is a significant difference between the value between the market value of securities listed on the stock exchange before and after the introduction of the system.

The results of the study show that the use of the electronic trading system as an alternative to the manual trading system has contributed to raise the volume of trading and the market value of the ASE. We believes that the result of the increase in the degree of transparency and security for traders and investors in the stock market, and give great flexibility and different information to brokers facilitated an analysis of the situation of companies traded faster, which achieved more justice, speed and ease of execution of orders, on the other hand, the system has led to facilitate control over the trading operations and the dissemination of information in real time for both local or foreign investors which contributes to increase the depth and liquidity of the market.

**Keywords:** jordan, electronic trading system, value traded, market capitalisation, amman stock exchange.

## 1. INTRODUCTION

An information play in our present an important role in various areas of life, not surprisingly, it has become our so-called era of information and a lot of decisions become political, military or economic, administrative or other decisions depend heavily on information accuracy and speed obtained in a timely manner. ASE gained an additional step of promoting dependence on IT, like many of the world's stock exchanges, that enter the electronic trading system as an alternative to the manual trading system, according to the agreement signed between them and the Paris

Stock Exchange at the end of 1996, it is worth mentioning that the transfer of companies from manual trading system to the electronic system has been gradually, where they were to begin trading shares of ten companies, then the remaining companies were transferred in the form of straight sets, the last group was transferred (included 100 public joint stock company) to the electronic trading system in 15/06/2000, in addition to the transfer of bond trading and investment funds, thus, the ASE has completed the transfer of all shares of listed companies, bonds and mutual funds and non-listed companies from manual trading to electronic trading, and fully manual deal was cancelled dated 15/06/2000.

The financial market is described as efficient or inefficient depending on the availability of information and the speed of its impacts on the prices of listed securities, given the role played by modern technology in the provision of information by leaps and bounds, ASE has taken an important step to keep pace with technological renaissance taking place in the financial markets, introduced to electronic systems for the purpose of raising the efficiency of the market, from here this study came in an attempt to illustrate the impact that caused a manifestation of this evolution, and its contribution to increase the volume and trading prices through the study of the change in trading volume and market value before and after the introduction of this system.

This evolution in the way the market works, which necessarily commissioned ASE significant amounts worth looks to assess benefit that are supposed to touch results, here lies the importance of this study is to give indication about the impact of the introduction of this system on some important indicators for the ASE. This study aims to discuss the impact of the replacement of manual trading system based electronic trading on the ASE, through test the importance of the changes that have occurred in some stock indexes, it is particularly:

- Trading volume in the stock market in various sectors.
- The market value of securities listed on the stock exchange in various sectors.

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*This study is based on two assumptions pillars:*

First hypothesis: there is a significant difference between the average trading volume on the ASE in various sectors before the introduction of the electronic trading system and the average trading volume in the stock market after the introduction of the system, can be traced to enter the system.

Second hypothesis: there is a significant difference between the average market value of the ASE various sectors before the introduction of the electronic trading system and the average market value of the stock market after the introduction of the system, can be traced back to the introduction of that system.

## II. LITERATURE REVIEW

This study is classified under the efficient market studies, which includes demonstrate the impact of a particular event on the performance of the market, where that aside from these studies is known research study (event study), there are many studies in this area, including (Leigh, et al., 2003), has addressed the impact of the prospect of war in Iraq on the indicators most important oil prices following market index American Stock Market (S & P 500), where moved these prices in proportion to the movements the prospect of war, suggesting that the war has raised the price of a barrel of oil ten dollars and lowered the stock market index of America's (S & P 500), including approximately 15% of its value at the time, the study predicted that these effects disappear within a year and a half. Almtori (1996) aimed to measure the efficiency of the ASE at the level of sub-strong where the information was used for the distribution of profits in the form of bonus shares and the prosecution of the impact of this information on the non-normal returns, the researcher has conducted a studying at all public shareholding companies listed on the ASE, which has distributed bonus shares during the years 1987 to 1993 where he reached the 38 companies, including 19 companies belong to the industrial sector, 15 companies belonging to the sector, banks and financial companies, 9 companies belonging to the insurance sector, and 5 companies belong to the service sector. However, a sample of 9 companies excluded from the study due to mergers, or suspension or non-traded for the entire test period, the study was conducted using the following form: the rate of return on the company's shares = fixed share + beta (market return + unusual return). The study tested the value of extraordinary earnings per sample of the shares within a period of four weeks before the announcement of dividends, and four weeks after the announcement, and concluded that the price does not reflect the efficiency of the market at this level where the prices have not significantly affected by the information.

Qawasmi (1990) aimed to test the efficiency of the pricing of the stock in the ASE through statistical hypothesis testing low level of efficiency in the pricing of the shares of industrial companies to contribute to the

public during the period 1986 to 1987, the study was conducted during the test there is no relationship between revenue or stock prices historically, has been conducting the study by testing the regression equation between the temporal relationship of the weekly changes in the average yield is in each individual company on the one hand and between that relationship integrated investment market portfolio, have been estimated yield is normal for stocks under study through the capital asset pricing model (CAMP) have been estimating the expected earnings per share through this form, and then calculated the unusual yield. The researcher calculates the change in yield in unusual return over time for each share and then to the market portfolio, this study concluded inefficient pricing of the shares of the sample, and therefore inefficient pricing in the ASE. Vila and Sandman (1995) and Pirrong (1996) find that prices are less sensitive to volumes in automated than traditional markets. One of the reasons for this could be that the floor traders know when there are orders from clients and so they adjust their prices in response to demands. Cornell (2012) addressed the issue of political events and their impact on market indices, where researchers found in this study that the events of the first-order news (including political and military developments) explain a fraction of the movements of the stock market.

Other studies have examined the impact of various factors on the movement and volume of stock trading in sophisticated financial markets. While some studies have focused on the impact of information content on trading volume (e.g., Bamber, 1986), other studies have focused on the impact of the accounting revenue on trading volume (Atiase and Bamber, 1994). Astnpola (1997) tested the effect of the change in capital expenditures on prices and trading activity. On the subject of electronic trading and its impact on trading volume or the market value for a particular stock, the article published on the internet (World Bank, 2007) talked about the forecast for growth in the value of investment-mail in Western Europe at a compound rate of 10.5%, where this growth is due to matures in electronic market proliferation (e-investment), but that the most important problems that limit the growth process of these are: lack of safety in the operation of electronic trading, and the crisis of confidence among investors, in addition to sudden market fluctuations. Domowitz and Steil (2001) found that electronic systems incorporate information into the price faster than traditional systems.

## III. DATA AND VARIABLES MEASURE

### a) Data

The data were collected by monthly bulletins ASE, and its the monthly statistical bulletins issued by the stock exchange in the study period from January 1997 to December 2003, summarised the data needed to conduct the analysis required in Appendix (1). The

population of the study is all available data and indicators extracted from the ASE for that have been monitored during the period of the work of those stock market since its inception and until the date of preparation of this study, the sample of this study are two indicators of these two indicators and trading volume and market value, over a period of time stretching and eighty-four months, forty-two of them before the introduction of the electronic trading system of the Stock Exchange, and like them after, it is worth mentioning that the electronic trading system has been initiated entered on 26.03.2000 and after the completion of the process and put into practice fully with the end of the sixth month of the year 2000.

#### *b) Variables Measure*

This study follows the standard practice in the literature findings both theoretically and empirically. There are numerous studies which examine the significant of the impact of the introduction of electronic trading system in the performance of the ASE as follows. Electronic Trading System: all electronic components related to trading operations, that entered the Stock Exchange from 26/03/2000, this includes hardware, software and networking mechanisms liability in the processes of buying and selling securities listed on the ASE, and the announcement of those operations. For the purposes of implementation of this study, regression model was developed describing the relationship between trading volume and market value (dependent variables) on the one hand, and the presence of the electronic trading system (independent variable) on the other hand, where it was the expression of the independent variable in a quantitative manner so as to take this variable value (zero) when the existence of the order, and values (1) when its existence, (Appendix, 1).

Trading Volume: the value of securities traded on the ASE in various sectors in the relevant time period, the monthly trading volumes adopted for the purposes of implementing this study, so that was taken forty-two monthly value before the introduction of the electronic trading system from (January 1997 to June 2000), and forty-two monthly value after you have inserted from (July 2000 to December 2003) (Appendix, 1).

Market Value: the value of all securities listed on the ASE various sectors; the monthly market value of those securities has been adopted for the purpose of implementing this study, so that was taken forty-two monthly value before the introduction of the electronic trading system from (January 1997 to June 2000) and forty-two monthly value after you have inserted from (July 2000 to December 2003) (Appendix, 1).

## IV. EMPIRICAL RESULTS

#### *a) Descriptive Statistics*

For the implementation of this study we use: analysis of the difference between the average two samples, so was the use of data related to the study

variables (trading volume and market value) for a period of study, and then test whether there is a significant difference between the average trading volume before the introduction of the system and after you have inserted, as well as test whether there is a significant difference between the average market value of the stock exchange before the introduction of the system and after you have inserted, the test procedure described using the statistical program SPSS (Appendix, 2). Simple regression equation of the first class, to represent the relationship between each of the dependent variable (volume) and the independent variable (the presence of the electronic trading system) (Appendix, 3). While, simple regression equation of the first degree: to represent the relationship between each of the dependent variable (market value) and the independent variable (the presence of the electronic trading system) (Appendix, 4).

#### *b) Statistical Analysis*

When the results of the statistical analysis examine in the appendices (2, 3, 4) we can down the following finding:

1. The value of the difference (increase) between the average trading volume before the introduction of the system and average trading volume after you have inserted 89.6039 million JD, and tested by (T-test), this is a statistically significant difference at 100% degree confidence, (Appendix, 2).
2. The value of the difference (increase), between the average market value before the introduction of the system and the average market value of after inserted -1110.921 million JD, and tested by (T-test) this is a statistically significant difference at 100% degree confidence, (Appendix, 2).
3. To connect the moral difference quotient in trading volume (mentioned in item 1) introduction of electronic trading system, has been developed regression equation simple linear representation of the relationship between the values of trading volume as the dependent variable, and the values that represent the presence or absence of the electronic trading system, so that it considered the value zero to express their existence, and a value of 1 to express their existence, according to the results extracted from the computer (Appendix, 3), the regression equation is as follows:

$$Y = 32.3220 + 60.3421 X \quad (1)$$

Where the average trading volume for the period prior to the introduction of electronic trading system 32.3220 million JD, while the average trading volume for the period subsequent to the introduction of 89.6039 million JD (Appendix, 2). The average market value for the period prior to the introduction of the electronic trading system 3696.86 million JD, while the average market value for the period subsequent to the introduction of 4691.6614 million JD (Appendix, 2).



Where Y, volume on the ASE; X, the presence of the electronic trading system, and takes the values zero or 1. Testing the suitability of the regression model to represent the relationship between the two variables independent of Y and X, which tested by (F-Test), and show that this model is appropriate at 100% degree confidence.

The value of the coefficient of determination  $R^2$ , (the proportion is explained by the independent variable in changes in the dependent variable) **32.3** %, and this means that despite the presence of the impact of the introduction of the electronic trading system in the volume of trading on the ASE, but the changes in volume by 77% are caused by factors other than the presence of the electronic trading system.

4. To connect the difference moral quotient in the market value of the Stock Exchange (mentioned in item 2) the introduction of electronic trading, has been included regression equation simple linear representation of the relationship between the values of the market value as the dependent variable, and the values that represent the presence or absence of the electronic trading system, so that considered value (zero) to express a lack of, and value (1) to express their presence, according to the results extracted from the computer (Appendix, 4), the regression equation is as follows:

$$Y = 3706.7601 + 1110.92 \quad (2)$$

Where Y, the market value on the ASE. X, the presence of the electronic trading system takes the values zero or 1. Testing the suitability of the regression model to represent the relationship between the two variables independent of Y and X, which tested by (F-test) and found that the model adequately when 100% degree of confidence. The value of the coefficient of determination  $R^2$  29.4%, and this means that despite the presence of impact for the introduction of electronic trading system in the market value of the ASE, but the changes in this value by 75.6% caused by factors other than the presence of the electronic trading system.

## V. CONCLUSION AND FUTURE RESEARCH

The most important results that have been reached in this study:

1. Acceptance of the first hypothesis of this study notion that there significant difference between the average trading volume in the ASE various sectors before the introduction of the electronic trading system and the average trading volume in the stock after the introduction of the system, can be traced in part of (32.3%) to the system, has been relying on No. items (1) and (3) of the terms "compendium of statistical analysis".
2. Acceptance of the second hypothesis of this study notion that there significant difference between the average market value of the ASE securities various sectors before the introduction of the electronic

trading system, and the average market value of the stock after the introduction of the system, can be traced in part of (29.4%) to the system, has been depending on the items (2) and (4) of the terms "compendium of statistical analysis".

## REFERENCES RÉFÉRENCES REFERENCIAS

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Appendix (1) Table 1 : Monthly trading value and market capitalisation on a monthly basis

Time	Value Traded	Market Capitalisation	Existence of the System	Time	Value Traded	Market Capitalisation	Existence of the System	Time	Value Traded	Market Capitalisation	Existence of the System
Jan-97	15.06	3215.06	0	May-99	35.23	3830.67	0	Sep-01	81.54	4040.80	1
Feb-97	10.96	3285.83	0	Jun-99	37.01	3759.75	0	Oct-01	56.94	4303.21	1
Mar-97	13.74	3190.35	0	Jul-99	18.20	3655.26	0	Nov-01	92.39	4460.81	1
Apr-97	9.05	3157.35	0	Aug-99	29.48	3545.63	0	Dec-01	60.59	4476.75	1
May-97	24.35	3409.75	0	Sep-99	40.52	3545.65	0	Jan-02	56.70	4551.62	1
Jun-97	37.80	3342.40	0	Oct-99	16.26	3576.79	0	Feb-02	58.79	4491.21	1
Jul-97	24.59	3505.53	0	Nov-99	19.91	3617.30	0	Mar-02	54.09	4448.09	1
Aug-97	28.42	3476.35	0	Dec-99	17.83	3790.15	0	Apr-02	85.21	4280.40	1
Sep-97	43.46	3670.49	0	Jan-00	20.71	4082.49	0	May-02	58.02	4501.02	1
Oct-97	30.82	3595.72	0	Feb-00	40.21	3988.21	0	Jun-02	59.52	4780.71	1
Nov-97	22.57	3595.24	0	Mar-00	24.99	3853.16	0	Jul-02	56.08	4733.39	1
Dec-97	43.39	3602.47	0	Apr-00	27.98	3706.85	0	Aug-02	49.51	4627.59	1
Jan-98	16.64	3554.76	0	May-00	26.32	3723.35	0	Sep-02	44.79	4528.41	1
Feb-98	18.94	3730.03	0	Jun-00	27.24	3664.64	0	Oct-02	31.09	4404.30	1
Mar-98	41.93	3664.08	0	Jul-00	18.03	3570.55	0	Nov-02	54.72	5051.02	1
Apr-98	26.65	3753.70	0	Aug-00	22.89	3484.15	0	Dec-02	54.70	5029.01	1
May-98	27.65	3985.89	0	Sep-00	24.18	3457.22	0	Jan-03	73.92	5085.12	1
Jun-98	19.05	3984.99	0	Oct-00	23.57	3523.89	0	Feb-03	29.06	4846.81	1
Jul-98	45.46	4001.67	0	Nov-00	18.09	3501.16	0	Mar-03	46.13	5020.65	1

Aug-98	34.84	4031.92	0	Dec-00	14.16	3509.65	0	Apr-03	83.39	5379.59	1
Sep-98	16.49	3838.77	0	Jan-01	28.69	3574.18	1	May-03	133.36	5584.49	1
Oct-98	21.77	3648.56	0	Feb-01	24.12	3612.48	1	Jun-03	154.50	5889.22	1
Nov-98	93.03	3713.74	0	Mar-01	13.35	3623.69	1	Jul-03	234.27	6403.03	1
Dec-98	51.26	3835.03	0	Apr-01	28.65	3574.87	1	Aug-03	213.54	6740.81	1
Jan-99	44.80	3996.43	0	May-01	48.03	3718.43	1	Sep-03	233.57	6995.57	1
Feb-99	40.76	4078.45	0	Jun-01	52.72	3721.25	1	Oct-03	247.86	6839.11	1
Mar-99	20.37	4031.64	0	Jul-01	62.05	3817.81	1	Nov-03	130.02	7574.36	1
Apr-99	22.31	3887.38	0	Aug-01	60.90	3940.77	1	Dec-03	275.64	7773.72	1

Source: Monthly statistical data of ASE (Jan-1997 - Dec-2003).

*Appendix (2) Table 2* : Analysis of the difference between the average of the two samples (before and after the introduction of electronic trading system)

Value Traded Before				Value Traded After			
N	Mean	Std. Error	Std. D	N	Mean	Std. Error	Std. D
43	32.3220	2.29302	15.64540	43	89.6039	10.39648	63.67292
Market capitalisation Before				Market capitalisation After			
43	3706.7601	37.27363	239.50240	43	4691.6614	180.75828	1166.147

Value Traded Before and After						Market capitalisation Before and After					
df	Mean	Std. Error	Std. D	t	Sig	df	Mean	Std. Error	Std. D	t	Sig
42	-60.3421	11.503	74.239	-5.018	0.000	42	-1110.921	156.270	1178.553	-7.084	0.000

*Appendix (3) Table 3* : Regression analysis between the two variables trading volume and the existence of the electronic trading system**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Existence of the system <sup>a</sup>	.	Enter

- a. All requested variables entered.  
b. Dependent variables: Value Traded.

**Model Summary**

Model	R	R Square	Adjusted Square	Std. Error of the estimate
1	0.582 <sup>a</sup>	0.323	0.271	63.02067

- a. Predictors: (Constant), Existence of the system.

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	70073.507	1	70073.507	35.582	0.000 <sup>a</sup>
Residual	230509.01	90	3012.086		
Total	300582.517	91			

- c. Predictors: (Constant), Existence of the system.  
d. Dependent variable: Value Traded.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	32.3220	8.271		3.602	0.001
Existence of the system	60.342	11.550	0.520	4.817	0.000

- a. Dependent variable: Value Traded.

*Appendix (4) Table 4 :* Regression analysis between the market value of variables and the existence of the electronic trading system**Variables Entered/ Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Existence of the system <sup>a</sup>	.	Enter

- a. All requested variables entered.  
 b. Dependent variables: Market Capitalisation

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.499 <sup>a</sup>	0.294	0.301	751.43251

- a. Predictors: (Constant), Existence of the system.

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	21206354	1	21006224.16	31.257	0.000 <sup>a</sup>
Residual	44026856	86	697644.903		
Total	65233210	87			

- a. Predictors: (Constant), Existence of the system.  
 b. Dependent variable: Market Capitalisation.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3706.7601	130.794		24.500	0.000
Existence of the system	1110.92	128.602	0.551	6.401	0.000

- b. Dependent variable: market capitalisation.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH  
ADMINISTRATION AND MANAGEMENT  
Volume 13 Issue 11 Version 1.0 Year 2013  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## A Study on Consumer Behavior towards Eco-Friendly Paper

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**Abstract-** The purpose of this study is to understand the variables affecting the consumer behavior while purchasing green products. Eco-friendly paper i.e. paper which is manufactured from used paper and reduces the harm to environment compared to manufacturing of traditional paper (virgin paper). The dependent factor is purchase intention and the independent factors are environmental behavior, attitude, knowledge and norms. The structured questionnaire was used collect primary data and analyzed using software package. From this research it is found that attitude and personal norms are positively influencing consumer purchase intention towards eco-friendly paper. This study helps the marketers to design strategies for sustaining in the competitive paper industry. The paper industry will have its demand in spite of latest technologies. The paper is used for different purposes like printing, writing, documentation and packaging etc. Hence the understanding consumer behavior is very important for marketers in the paper industry.

**Keywords:** *green marketing, environment-friendly products, eco-friendly products, eco-paper, sustainability, consumer behavior, purchase intention.*

**GJMBR-E Classification :** *JEL Code: L67, M30*



*Strictly as per the compliance and regulations of:*



# A Study on Consumer Behavior towards Eco - Friendly Paper

P. Kishore Kumar<sup>α</sup> & Dr. Byram Anand<sup>σ</sup>

**Abstract-** The purpose of this study is to understand the variables affecting the consumer behavior while purchasing green products. Eco-friendly paper i.e. paper which is manufactured from used paper and reduces the harm to environment compared to manufacturing of traditional paper (virgin paper). The dependent factor is purchase intention and the independent factors are environmental behavior, attitude, knowledge and norms. The structured questionnaire was used collect primary data and analyzed using software package. From this research it is found that attitude and personal norms are positively influencing consumer purchase intention towards eco-friendly paper. This study helps the marketers to design strategies for sustaining in the competitive paper industry. The paper industry will have its demand in spite of latest technologies. The paper is used for different purposes like printing, writing, documentation and packaging etc. Hence the understanding consumer behavior is very important for marketers in the paper industry.

**Keywords:** green marketing, environment-friendly products, eco-friendly products, eco-paper, sustainability, consumer behavior, purchase intention.

## I. INTRODUCTION

Environment concern had become the most important issue for mankind in the present world. The businesses are no exception for this issue and they are responding through environment-friendly products. Throughout this paper the terms eco-friendly products, environment-friendly products, green products mean the same and are used interchangeably. The depletion of oil resources, raw materials and pollution are making organizations to rethink about their products and services. The eco-friendly products are being introduced by modern organizations to protect the environment. Eco-friendly paper is one of the solutions to save the environment and reduce the pollution in the present world. The present study is to understand the consumer behavior and adoption intention of consumers towards the eco-friendly paper. Many products like jute bags, CFL bulbs, hybrid cars, natural soaps, eco-friendly paper, paper cups, energy saving electronic products, organic food etc are available in the market which are environment-friendly products and

marketing of such products is known as "Green Marketing". The products which do not cause any kind of harm to the environment are called as green products. Eco-friendly paper is one of the green products which reduce pollution caused by consumption of paper. Paper is used for different purposes like writing, printing, packaging and newsprint etc (IPMA). Hence it is essential to think of eco-friendly paper which causes less harm to the environment. This study is aimed to understand consumer behavior with regard to eco-friendly paper. Eco-friendly products are not new to manufacturers and organizations like ITC, JK Paper Limited, Yash Papers Ltd have already started marketing eco-friendly paper.

## II. ABOUT ECO-FRIENDLY PAPER

The paper industry is one of the oldest industries in the world and paper is an essential product for mankind. The paper is manufactured from wood pulp from pulpwood trees. The paper manufactured from wood pulp for the first time is known as "virgin paper" or "paper" (Paper). If paper is manufactured by recycling the used paper which is collected through reverse logistics and consumes less resources while production is known as eco-friendly paper. The consumption of eco-friendly paper also eliminates deforestation because pulpwood trees are not used in the production process. Less quantity of chemicals are used in production of eco-paper compared to virgin paper which is made from pulp of trees.

Some decades back when the organizations have started manufacturing eco-friendly paper the quality is low and the color of paper used to turn yellow as the paper grows old but with the latest technologies in paper industry it is hard to find any difference between virgin paper and eco-friendly paper. The organization marketing eco-friendly paper gets it certified by Forest Stewardship council (FSC). The FSC is international non-governmental organization which certifies eco-friendly paper products and also the organizations which manufacture eco-friendly paper (FSC). Every 1 ton of recyclable paper saves 17 trees, 225 kilowatts of power, 275 pounds of sulphur and 60,000 gallons of water (Khanna). The manufacturing of eco-friendly paper had become competitive advantage for organizations. The brands of eco-friendly paper from top organizations in the paper industry are JK Copier, Image Copier,

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Double A, Bilt Copy Power, Bilt Royal Executive Paper, Andhra Millennium Copier, JK Copier Plus etc.

### III. OBJECTIVE OF THE RESEARCH

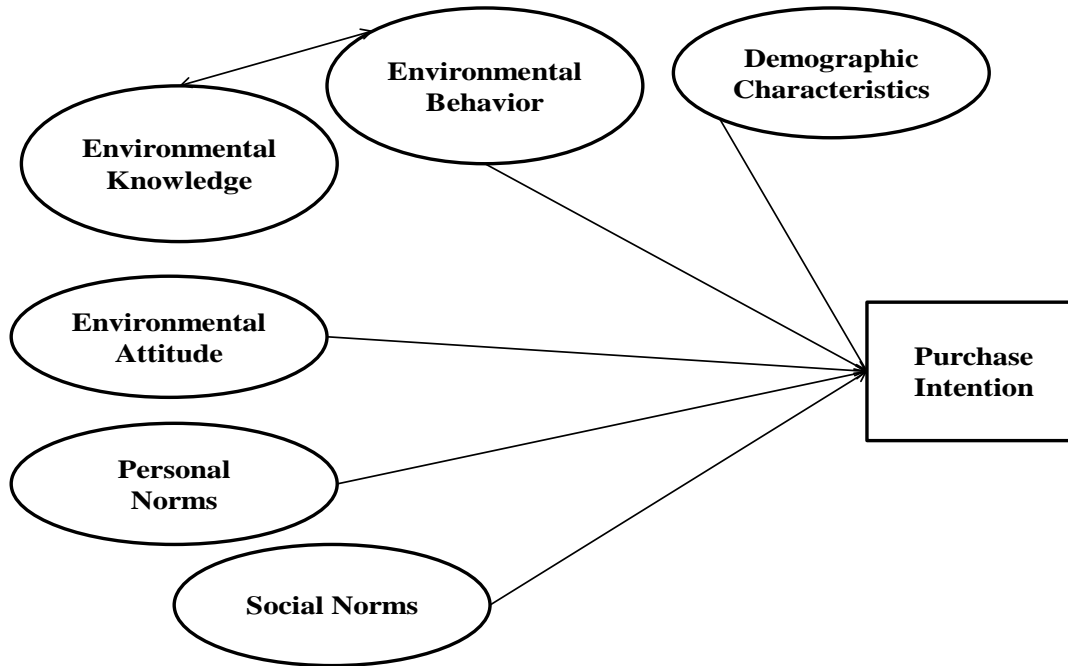
The current study is designed to understand the factors influencing purchase intention behavior of consumers while purchasing green products with special reference to eco-friendly paper. This study investigates whether consumers with environmental knowledge are having awareness on eco-friendly paper. The study also finds the influence of demographic and psychographic variables on green purchase intention of consumers. The study will also provide insights for organizations in the paper industry so that they can formulate marketing strategies to enhance the sales of eco-friendly paper.

### IV. LITERATURE REVIEW

The lack of awareness about green products, negative perceptions of green products, can be resolved by educating customers and building better products respectively (Bonini & Oppenheim, 2008). The responsibility of educating consumers is not sole responsibility of businesses but the government should play a prominent role in encouraging the consumers to adopt for eco-friendly products. Wang & Tung (2012) had conducted a study to know how life style of consumers influence their behavior towards environment-friendly products and confirmed that plan oriented consumers are having positive attitude towards green products. Chen & Chang (2012) have developed a model for understanding green purchase intentions among consumers by using four factors – green perceived value, green perceived risk, green trust and green purchase intention and stated that consumers who perceive green products are better for environment will have positive purchase intention towards green products. Murphy et.al (2010) found that consumers positive attitude towards green products is not influenced by recession. The factors for understanding consumer behavior in this research study are demographic, responsibility, information and purchasing. Paco & Raposo (2009) had conducted a survey to identify the characteristics of green consumers. The factors considered are environmentally friendly products, environmental activism, environmental knowledge, environmental concern, recycling, perception, resource saving, economic factor and skepticism towards environmental standards. Cheah & Phau (2011) had investigated the about the influence of ecoliteracy, interpersonal influence and value orientation on consumers attitude towards environmentally friendly products and stated that these factors have strong correlation with attitudes of consumers. Manaktola & Jauhari (2007) had conducted a survey to know about the consumers' attitude towards green practices of hotels and found that consumers are impressed with

green practices of hotels but they are not willing to pay more for the same. The green marketing tools like eco-label, eco-brand and environmental advertisements also influence the purchase behavior of consumers and stated that trust in eco-brand and eco-label positively influence the behavior of consumers towards eco-friendly products (Rahbar & Wahid, 2011). According to Chen (2010) green brand image, green satisfaction, and green trust are important factors for building green brand equity.

The ecologically conscious consumer behavior can be briefly explained by psychographic variables like perceived consumer effectiveness rather than demographic variables. The green purchase intention may not lead to green purchase behavior (Akehurst, Afonso, & Goncalves, 2012). Raksha & Shaw (2012) had examined whether brand commitment of consumers influences the attitude of consumers towards environmental-friendly initiatives of organizations and stated that companies should do more activities to catch the attention of consumers. The consumers are more willing to pay more for green products after perceiving functional risk as important determinant (Essoussi & Linton, 2010). The advantages for adopting green products are energy reduction, material reduction, less packaging material, low emissions, and recyclable (Stevens, 2001). D'Souza et.al. (2006) had made an empirical investigation to under the green purchase intention of consumers and found that marketing mix elements like green products, product labels, packaging and product ingredients does not influence the consumer behavior but past experience with green products positively influences the green purchase intention. Jansson et.al. (2010) had conducted research on green consumer behavior and found that willingness to curtail and eco-innovation adoption are determined by values, norms, and beliefs of consumers. The personal norms of consumers have more positive influence on green consumer behavior. According to Straughan & Roberts (1999) the demographical and psychological variables can be used to understand the environment conscious consumer behavior and further stated that psychographic variables are much comfortable for explain the green consumer behavior than demographic variables. The factors which affect the green consumer behavior are altruism, environmental concern and perceived consumer effectiveness.

**Figure I: Research Model for Consumer Behavior towards Eco-friendly Paper**

## V. HYPOTHESES

*H1:* There is no relationship between environmental behavior (EB) and environmental knowledge (EK) of consumers.

*H2:* The personal norms of consumers influence the purchase intention of eco-friendly paper

*H3:* The social norms of consumers influence the purchase intention of eco-friendly paper

*H4:* The environment-friendly attitude of consumers influences the purchase intention of eco-friendly paper.

*H5:* The demographic characteristics cannot be used to explain purchase intention of consumers about green products.

## VI. RESEARCH METHODOLOGY

The structured questionnaire was designed to collect data. The questionnaire consists of two parts. The first part collects the demographic profile of respondents (age, gender, occupation). The second part of the questionnaire consists of six constructs with a total of 17 items. All the constructs were adopted and modified from earlier studies with regard to green consumer behavior. The content validity of the constructs is checked by personal discussions with the experts. A likert type 5-point scale with values ranging 1 for strongly disagree to 5 for strongly agree was used to measure the behavior of respondents regarding eco-friendly paper. Environmental Behavior (EB) construct consists was adopted from (Pickett-Baker & Ozaki, 2008) and one item is deleted out of four items in the

construct upon the experts' suggestion. Environmental Knowledge (EK) construct was adopted from (Ha & Janda, 2012), Environmental Attitude (EA), Purchase Intention (PI) was adopted from (Soyez, 2012). The Social Norms (SN) and Personal Norms (PN) constructs were adopted from (Park & Ha, 2011). The PI is dependent variable and EC, EK, SN, PN, EA are independent variables.

The sample size is 140 and the random sampling method is implemented for collecting responses. All the respondents belong to Hyderabad, Andhra Pradesh, India. The participation by the respondents is voluntary and they are allowed to exit from the survey at any point of time. The personal data like name, contact number, email are not collected to avoid issues related to privacy of the respondents.

The SPSS Version 20 is used for analyzing the data. The statistical tools like multiple regression, correlation, and descriptive statistics were applied to test the hypothesis. The dependent variable is purchase intention (PI) and all other variables are independent variables.

## VII. DATA ANALYSIS

### a) Demographic Profile

Majority of the respondents belong to age group (25-34 years) i.e. 42%, followed by 25% (18-24 years), 24 % (35-50 years) and the remaining 8 % of the respondents are above 50 years. Out of 140 respondents 78 (56 %) are male and 62 (44%) are female. The respondents belong to different categories

of occupation (student – 24%, private employee - 58%, Govt. employee – 8%, self-employed – 2%, others – 8%).

#### b) Reliability

The Cronbach's alpha value for six constructs i.e. for EB, EK, EA, SN, PN, and PI are 0.69, 0.75, 0.79, 0.95, 0.76, and 0.65 respectively. All the values of

Cronbach's alpha which are above 0.60 are reliable for further analysis of data (Hair, Black, Babin, Anderson, & Tatham, 2011).

#### c) Hypotheses Testing and Results

H1: There is no relationship between environmental behavior (EB) and environmental knowledge (EK) of consumers.

**Table 1 :** Correlation between Environmental behavior and environmental knowledge

		EB	EK
EB	Pearson Correlation	1	.449**
	Sig. (2-tailed)		.000
	N	140	140
EK	Pearson Correlation	.449**	1
	Sig. (2-tailed)	.000	
	N	140	140

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Result:** There is a significant relationship between environmental behavior and environmental knowledge of consumers therefore the null hypothesis H1 is rejected.

**Table 2 :** Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.108	.321		.336	.738
	EA	.545	.089	.415	6.122	.000
	SN	.045	.058	.057	.778	.438
	PN	.383	.075	.402	5.078	.000

#### a. Dependent Variable: PI

H2: The personal norms of consumers influence the purchase intention of eco-friendly paper

**Result:** There is a significant relationship between personal norms and purchase intention of consumers towards eco-friendly paper (beta value = 0.402, p value = 0.000 which is less than 0.05). The multiple regression analysis results are shown in Table 2. Hence the H2 is accepted.

H3: The social norms of consumers influence the purchase intention of eco-friendly paper

**Result:** There is no significant relationship between social norms and purchase intention of

consumers (the beta value for social norms (SN) is 0.057 and p value = 0.438 which is above accepted level i.e. 0.05) see Table 2. Hence H3 is rejected.

H4: The environment-friendly attitude of consumers influences the purchase intention of eco-friendly paper.

**Result:** There is significant relationship between environment-friendly attitude of consumers and their purchase intention regarding eco-friendly paper (beta value for EA is 0.415 and p value = 0.000 which is less than 0.05) see Table 2. Hence H4 is accepted.

**Table 3 :** Regression Analysis receptively

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.890	.321		12.120	.000
	Gender	.243	.151	.136	1.610	.110
	Age	-.087	.089	-.087	-.976	.331
	Occupation	-.077	.075	-.090	-1.019	.310

#### a. Dependent Variable: PI

H5: The demographic characteristics cannot be used to explain purchase intention of consumers about green products.

**Result:** The p values of gender, age and occupation are 0.110, 0.331, 0.310 which are above acceptable value i.e. 0.05. The beta values of age and occupation are negative see Table 3. Hence H5 is accepted. Therefore demographic variables do not help in understanding the purchase intention of consumers with reference to green products.

## VIII. CONCLUSIONS

The purchase intention of consumers is influenced by psychographic variables. The consumers who have positive ecological behavior also possess knowledge about various green products like eco-friendly paper. The consumers are influenced by personal norms than social norms while adopting environment-friendly products like eco-paper. The consumers with positive attitude about eco-friendly paper are strong purchase intention towards the product. The consumers purchase intention towards green products cannot be identified by demographic variables. This result is consistent with earlier studies (Straughan & Roberts, 1999). The consumers are independent in decision making and not influenced by others while adopting green products.

## IX. MANAGERIAL IMPLICATIONS

The marketers in the paper industry should formulate strategies for enhancing environmental knowledge of consumers especially eco-friendly paper. The businesses manufacturing eco-friendly paper should identify the target market by psychographic segmentation. There will be potential demand for eco-friendly paper in future because consumers are having positive attitude towards green products. The positive environmental attitude is influence in the purchase intention of consumers. Since computerization, digitalization is reducing demand for paper, the organizations in the paper industry are going to experience severe competition. The manufacturing of eco-friendly paper can be become a differentiation strategy for today's organizations in the paper industry. Hence effective psychographic segmentation of consumers can help the organization to sustain in the highly competitive paper industry.

## X. FUTURE RESEARCH

The consumer purchase intention will also be influenced by other factors like price, branding etc. Hence such factors can be included to know the impact of pricing strategies, branding strategies on purchase behavior of consumers. The future studies can also be conducted to understand how other factors like values, beliefs, past experiences of consumers with regard to green products influence the consumer behavior.

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GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH  
ADMINISTRATION AND MANAGEMENT  
Volume 13 Issue 11 Version 1.0 Year 2013  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Effect of Knowledge Management on Success of Customer Relationship Management in Eghtesad Novin Bank of Tehran

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**Keywords:** *knowledge management. customer relationship management. capabilities of knowledge management. organizational variables. technology of customer relationship management. customer flow. experience of customer relationship management.*

**GJMBR-E Classification :** *JEL Code: M00, M19*



*Strictly as per the compliance and regulations of:*





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Mehrdad Hasanzadeh <sup>α</sup> & Seyedeh Faezeh Sadati Seyed mahaleh <sup>ο</sup>

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## 1. INTRODUCTION

The emergence of information technology not only caused interesting to the manner for achieving to data and its recording and extraction, but also was effective about knowledge and its management (Asllani & Iuthans, 2003). In post-industrial society, knowledge is important source of economy. Increasing of customers' demanding for improving quality and innovation in production put pressure on factories, so incidence of threats from global competitors leads to lower prices for products and services. These related challenges to improve the quality, innovation and pressure for reducing the products' price forced the companies to redesign their business processes (Dous and et al, 2005). The only reliable source of stability in competition is knowledge in economy that unreliability is more clear (Nokada, 1998).

In fact, knowledge is the most important strategic resource and ability for its acquisition and development causes its sharing and it causes creation of advantages for maintaining the competitiveness

(Grant, 1996), because valuable knowledge strengthens the traditional resources and assets as new and differentiated form and because of that will be valuable for customers. Ability to create knowledge and continuity of its learning can be has competitive profit, because modern creatively knowledge will form the core of future knowledge (Zack, 1999).

In recent years, organizational efforts have been focused on knowledge management. This management is as one the important managements. This management included focusing on employers' knowledge about customers, competitors, products and services in an organization (Gibbert and et al, 2002). Actually; knowledge management is about encouraging people for sharing of information, knowledge and ideas to produce the products and services with higher value. So, perspective of knowledge management was within an organization and an advantage of knowledge management is to create customers' satisfaction through better service. Davenport 1998, believes that knowledge management is trying to discovery hidden asset in individual mind and convert it to organizational assets, so that wide range of people who are involved organization's decision making access to this asset and be able to use it.

But as the companies expressed the competence of internal knowledge management and using it in order to achieve to organizational goals and have been focused on new sources of knowledge which these resources necessarily do not find within their company (Paquette, 2006). With considering knowledge as a key factor of competitiveness in the global economy, it possible that companies follow the main element which is called customer knowledge.

In addition, customer knowledge processing is combining with relationship management with customer that its aim is retain the customers in business process.

Generally, two main steps are identified in the customer relationship management until finally occurs what was expected. One of these is changing of focusing on transactions toward relationships with customers, merchants and their developing and another one is focusing on customer retention instead of retail. Totally, marketing relationship can be consider as efforts for identifying, maintaining and building a communication network with private customers and

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strengthen this network in order to be valuable for both. Also relationship management with customer is advanced step for collecting information about customers order to understanding and influencing on customers' behavior. Even though many researchers remind us that 80% of the measures have failed in customer relationship management, but totally customer relationship management is probably one of the most well-known views of management in a past decade (Rollins and et al, 2005).

In recent years, companies integrated customer relationship management and its knowledge management because they have learned that knowledge management has major role in success of customer relationship management. Identifying a valuable customer is a complex task of knowledge because determines features range among current customers. Technology can be effective but knowledge management provides power of technology information processing for effective usage. Prediction of new customers' needs can be transfer with using of statistical methods with technology completely but it happen when conceptual knowledge exchange and allocation are used.

So the processes of customer relationship management are based on high volume of knowledge. Customer Relationship Management has close relationship with principles of knowledge management. Thus existence of to-date and sufficient customer knowledge is important for effective customer relationship management system. With that knowledge management systems have an important role about current customer-centered trade, there is lacking of a simple and general principle for integrating the traditional customer relationship management functions with management and application of customer Knowledge.

In addition, according to (Zabala and et al, 2004), knowledge management is as main micro process of customer relationship management because for effective management about customer relationship management companies should develop related abilities about processes of customer knowledge management. Because these capacities are difficult imitating that can be an advantage source of competitive. From the sources, valuable customer knowledge which is capital rare for trading that responds quickly to customer's needs and regulated by market's changing. While the current strategic management is main factor for competitive advantage, we should point out that collecting information about customers about relationships and customers' offer about valuation matter is as main advantage which is difficult to imitate.

The goals of present research include, determination of impact of knowledge management on success of customer relationship management, determination of impact of knowledge management

capabilities on success of customer relationship management, determination of impact of organizational variables on success of customer relationship management, determination of impact of customer relationship management technology on success of customer relationship management, determination of impact of customer flow on success of customer relationship management and determination of impact of customer relationship management experience on success of customer relationship management in Eghtesad Novin Bank branches in Tehran Province.

## II. RESEARCH BACKGROUND

### a) *Knowledge management*

Knowledge management is about ability of an organization in using of intellectual capital means experience and knowledge of the individual and collective knowledge in order to achieve its goals through the process of knowledge production ,knowledge sharing and using it with technology. Principles of knowledge management include development, implementation and maintaining the technical and organizational infrastructures as obligation to publish and select the specific technologies (Noroziyan, 2005).

### b) *Customer relationship management*

Customer relationship management is a business process which base on all customer specifications identifies the pattern of customer behavior and leads to customer knowledge. Customer Relationship Management forms the relationships with customer and will be effective about products or services. From a view the customer relationship management is defined by four elements of a simple framework such as knowledge, purpose, sale and service (Rygielsk, 2002).

### c) *Knowledge management capabilities*

Knowledge management capabilities is about organization ability to get management, customers' information transmission in real time, products and services for improving to response to customer and faster decision making based on reliable information.

### d) *Organizational variables*

Organizational variables are as concepts for implementation with human resources management, organizational structure and resource allocation. Considering that implementation of knowledge management requires changing in manner of organizing the company and its business processes, model needs to measurement of variable, importance and impact of these organizational factors on success of knowledge management. In fact, for the successful implementation of knowledge management the companies need to redesign their organizational items and guidance of their valuable chain for demanding. Therefore, strategy, organizational structure and trade processes all are

necessary for implementation of knowledge management. Because success in initiative is depend on proper cooperation between technological systems, processes and people.

*e) Technology of customer relationship management*

Technological systems of knowledge management should be considered as main component in implementation of this strategy. As Sin and et al, 2005 refer software systems of knowledge management enables companies to provide advanced services with higher quality but lower cost. So many customer oriented activities could be done without appropriate technology.

*f) Customer flow*

According to Narver and Slater, 1990 we assume that applied customer flow helps on the adequate understanding of customers for offering more add value to their. Also, customer flow involved the customer for long-term relationships in all activities of the company. So this variable is as fundamental component for organization for success of customer relationship management. An organization which leads itself toward customer is able to design its better processes, because organizational culture leads to improvement of employees' understanding about customers. As a result, customer flow is as essential prerequisite for successful implementation of customer relationship management.

*g) Experience of Customer Relationship Management*

Implementation of knowledge management includes fundamental changing both in business processes and in organization. Thus, for implementation of management, appropriate organizational changing is necessary. So it is clear that in application of new technology in organization both in management and structure processes, culture and organizational routines programs experienced profound changing that affect on whole organization. Thus learning and organizational experience in developing and implementing of strategies can determine its effectiveness.

In the following we will mention domestic and foreign experimental studies about knowledge management and customer relationship management.

Darroch 2003, studied on activities of knowledge management and performance of manufacturing enterprises with more than 50 workers with using of questionnaire. This questionnaire include activities of knowledge management in third areas of knowledge with 37 questions, knowledge distribution with 29 questions and answering to knowledge with 30 questions also is about its relationship with organization performance and innovation. The results indicate there is significant and positive relationship between activities of knowledge management and organization's performance and innovation. Cavusqil, et al 2003, believed that capability of knowledge management is as

major element of innovation in the organization in sharing of implicit knowledge. This paper indicates that accessing to implicit knowledge about customers and suppliers is as valuable resource and entrance of innovation process in organization.

Lin & Tseng 2005, studied on the effect of gap in the knowledge management system on the organizational performance with identifying of 5gapin system in the 681 large organizations in Taiwan. In this paper, performance indicators were degree of productivity, reducing the costs, competitiveness, share of market, growing of sale profitability and innovation in comparison with competitors. In this paper, studied organizations divided into two categories: The first category has many gap in the knowledge management and the second category has lower gap. The results of this research showed organizations with fewer gaps had higher performance. Tseng 2008, evaluated knowledge management systems in the 57 large companies in Taiwan. In this paper, activities of knowledge management divided into three categories: strategies, programs and measures for knowledge management and a questionnaire were designed. Then, index of knowledge management performance calculated and correlation of this index was tested with financial and non-financial performance of above companies. The results of this research showed there is significant correlation between these performances and activities of organization's knowledge management. Tin change and Shu chuang 2011, in their paper about implementation of knowledge management found that ability and strategy have positive relationship with process of knowledge management.

Gholamian and et al, 2006 in a research with this title 'Knowledge Management about customer relationship', concluded that customers' knowledge management which makes it possible for organizations that with higher probability could identify opportunities in market and increase its competitive advantage. Knowledge management focused on common benefit between customers and organization. Akhavan and Heydari 2007, in their research about 'Customer Relationship Management with Knowledge Management Approach', found that knowledge management system manages organizational knowledge through establishment, structuring, distribution and using of knowledge for improving organizational performance and creation of value. According to important role of knowledge management systems in current business environment, this seems to be more important when occurs about customer orientation. Therefore, correct process of customer relationship management only when is possible that be integrated with process of knowledge management till creates the processes of empowered customer relationship management with knowledge which provides this possibility that organization could evaluate important criteria of

business such as customer satisfaction, usefulness of customer, customer loyalty for supporting of commercial decision.

Hasanpour 2010, in a research about 'Customer Relationship Management' expressed that in order to growth and survival in the global competition the role of customer should be important for companies and improve their relationship with purchasers of goods and services. For this purpose can use of strategy about customer relationship management which is a strategy and tool in order to respond to demands and customer satisfaction also achieving to organization's goals.

Hossein Raja 2011, in his research about 'Knowledge Management in Customer Relationship Management', believed that knowledge is an important factor in the economy, but also should attention to another important factor for success in the business market which is called customer. In new business processes, customer satisfaction has important status on about organizations' goals and managers know that their success in achieving the goals of the organization depends on customer satisfaction. Customer knowledge management by focusing on customer and their satisfaction causes more benefit to the organization also increasing of competitive advantage.

Mehdi Parvizi 2011, in a research studied about 'Relationship of Knowledge management with Electronic Customer Relationship Management in branches of Bank Mellat'. He according to Ferika's model 2000, evaluated knowledge management in organization and with using of Galbraith and Rogers Model 1999, he studied on possible relationship between customer relationship management in branches of Bank Mellat in Kermanshah province. The results of hypotheses showed that Spearman correlation coefficient was about 0.226 between knowledge management and customer relationship management and their relationship was confirmed in five percent level.

Adel Salavati and et al 2011, studied about 'Effects of Knowledge Management on Customer Relationship Management in Refah bank'. The findings indicated knowledge management through knowledge sources has significant and positive effect on different aspects of customer relationship management means customer satisfaction, customer loyalty, to attract customers and interaction with customers. Based on the findings most effectiveness of knowledge management was on customer satisfaction and variables such as loyalty, attraction and interaction with customers take place in other ranks.

Mohammad Karami and Hasan Esmaeilpour 2011 studied about 'Effects of Implementation of Customer Relationship Management on their satisfaction through Relationship marketing'. This research did in a company in Karaj which called Avand Pelast. Their research's objectives include: 1. Attracting the customer satisfaction in any purchase more than before. 2. Increasing the amount of new customers. 3.

Attraction of competitor customers based on their decision. 4. Promotion of this company's popularity and offering the scientific suggestions for improving the daily activities. The results showed that relationship marketing had impact on satisfaction.

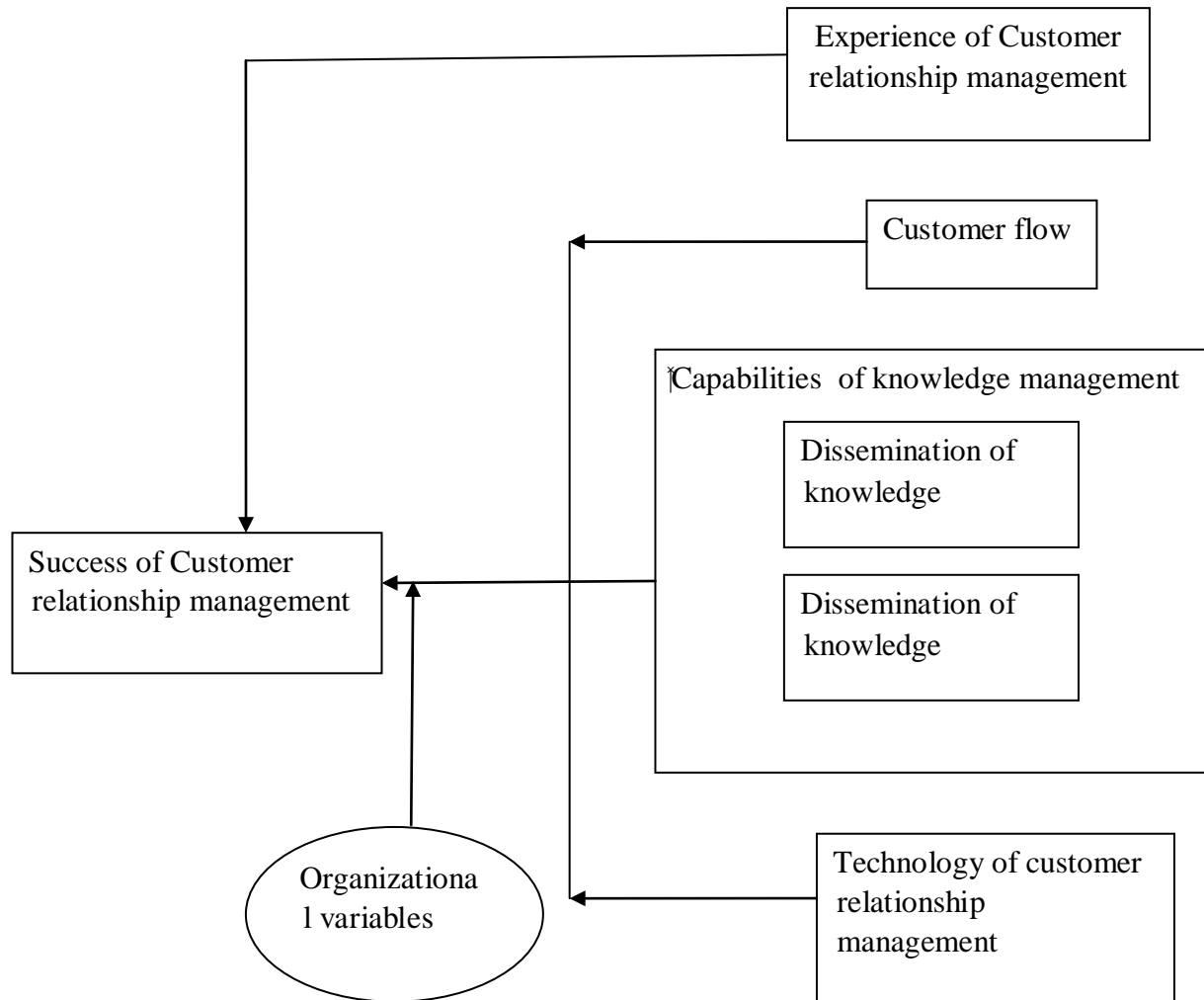
Shamsoldin Nazemi and et al 2011, studied on a research with this title 'Effects of organizational characteristics on the process of adoption the Customer Relationship Management'. So processing of data with using of analysis method suggested that firstly the role of benefits of customer relationship management is confirmed about influence of organizational characteristics on adoption of customer relationship management. Secondly, the findings emphasized that organizational characteristics had determining effect on understanding the advantages also adoption of customer relationship management technology.

Abesi and et al 2011, studied about 'Identification and prioritization the favorable factors and evaluation of existing conditions about implementation of customer relationship management'. The results showed that technology component had most effect about successful implementation of customer relationship system and then appropriate organization's components and knowledge management were effective and component of focusing on customers was in last priority which all of them were effective on implementation of customer relationship system.

Najaf Reza Beygi 2010, in his MA thesis about 'Presenting a model about important factors in successfully of Knowledge management', he considered 7 critical factors in successfully of knowledge management as independent variables then considered organizational creativity and learning as dependent variables then studied on relationship between the independent and dependent variables. Statistical results indicated that among seven key factors in successfully of knowledge management, strategies factors and policies based on knowledge and human resources management caused increasing of organizational creativity and learning simultaneously.



### III. CONCEPTUAL MODEL



#### a) The question of the research

Is the knowledge management as main factor for determining the successful implementation of customer relationship management?

#### b) The hypotheses of Research

1. The capabilities of knowledge management have a positive effect on success of Customer Relationship Management.
2. Organizational variables have positive effect on success of Customer Relationship Management.
3. Customer relationship management technology has positive impact on success of Customer Relationship Management.
4. Customer flow has positive impact on success of Customer Relationship Management.
5. Customer management experience has positive effect on success of Customer Relationship Management.

### IV. METHODOLOGY

The present papers is in applied research category from aspect of its goals and from data take place in Library and Field category and from aspect of implementation is in correlation research category. The method of collecting data is through field and instrument for collecting is questionnaire. The statistical population of this paper consists of employees about 320 persons from the west branches of Eghtesad Novin Bank of Tehran that were selected 130 persons through simple random sampling as statistical sample.

The method of data analyzing is Pearson correlation test and one-sample t test. In this paper were used of opinions of faculties also experts and questionnaire's respondents for ensuring the validity of tools for collecting data. Also reliability of questionnaire was measured by Cronbach's reliability test. Cronbach's alpha obtained about 0.97 and above 0.7. So the present questionnaire has sufficient reliability.

## V. DATA ANALYZING

### a) Descriptive Statistics

47.7% of respondents are male and 52.3% are female. Also 33.1% of respondents are between 22 to 28 years old, 57.7% are between 29 to 35 years old, 4.6% are between 36 to 46 and 4.6% are over 46 years old. Thus, as it is clear most of the population is between 29 to 35 years old. According to information from questionnaire we realize that among 130 persons who their questionnaire analyzed, 2.3% were in Diploma degree and with lower degree, 7.7% associate's degree, 83.1% were in Bachelor rank and 6.9% were in master degree and above. Higher percentage is related to Bachelor. Also 11.5% were managers and 88.5% were employs. Also 60.8% of persons have 1 to 5 years experience in their job, 36.2% have 5 to 10 years and 3.1% have over 10 years experience in their job. Most people have experience between 1 to 5 years.

### b) Inferential Statistics

In this paper was used of one sample t-test and Pearson correlation test to investigate the hypotheses and data analyzing.

### c) Pearson Correlation Test

In present research was used of Pearson's correlation test for studying on the relationship between variables.

*The first hypothesis:* The capabilities of knowledge management have a positive effect on success of Customer Relationship Management.

*The Null hypothesis:* There is no significant relationship between capabilities of Knowledge management and success of Customer Relationship Management.

*The Alternative hypothesis:* There is significant relationship between capabilities of Knowledge management and success of Customer Relationship Management.

**Table 1 :** Correlation between capabilities of knowledge management with success of Customer Relationship Management

		Success of Customer Relationship Management	capabilities of knowledge management
Capabilities of knowledge management	Pearson Correlation	0.522**	1
	Sig. (2-tailed)	0.000	
	N	126	129
Success of Customer Relationship Management	Pearson Correlation	1	0.522**
	Sig. (2-tailed)		0.000
	N	126	126

Source: Research findings

As shown in the table Sig is zero and is less than 0.05, it indicates that there is significant relationship between this item with success of customer relationship management and correlation coefficient is 0.52 which shows positive relationship between these two variables and this relationship is moderate.

*The second hypothesis:* Organizational variables have positive effect on success of Customer Relationship Management.

*The Null hypothesis:* There is no significant relationship between organizational variables and success of Customer Relationship Management.

*The Alternative hypothesis:* There is significant relationship between organizational variables and success of Customer Relationship Management.

**Table 2 :** Correlation between organizational variables with success of Customer Relationship Management

		Success of Customer Relationship	Organizational variables
Organizational variables	Pearson Correlation	0.427**	1
	Sig. (2-tailed)	0.000	
	N	126	129
Success of Customer Relationship Management	Pearson Correlation	1	0.427**
	Sig. (2-tailed)		0.000
	N	126	126

Source: Research findings



As shown in the table there is significant relationship between this item with success of customer relationship management and correlation coefficient is 0.47 which shows positive relationship between these two variables and this relationship is moderate.

*The third hypothesis:* Customer relationship management technology has positive impact on success of Customer Relationship Management.

The Null hypothesis: There is no significant relationship between Customer relationship management technology and success of Customer Relationship Management.

*The Alternative hypothesis:* There is significant relationship between Customer relationship management technology and success of Customer Relationship Management.

**Table 3 :** Correlation between Customer relationship management technology and success of Customer Relationship Management.

		Success of Customer Relationship Management	Customer relationship management technology
Success of Customer Relationship Management	Pearson Correlation	1	0.472**
	Sig. (2-tailed)		0.000
	N	126	119
Customer relationship management technology	Pearson Correlation	0.472**	1
	Sig. (2-tailed)	0.000	
	N	119	119

Source: Research findings

As shown in the table there is significant relationship between this item with success of customer relationship management correlation coefficient is 0.47 which shows positive relationship between these two variables and this relationship is moderate.

*The fourth hypothesis:* Customer flow has positive impact on success of Customer Relationship Management.

*The Null hypothesis:* There is no significant relationship between customer flow and success of customer relationship management.

*The Alternative hypothesis:* There is significant relationship between customer flow and success of customer relationship management.

**Table 4 :** Correlation between customer flow and success of customer relationship management

		Success of Customer Relationship Management	Customer flow
Success of Customer Relationship Management	Pearson Correlation	1	0.672**
	Sig. (2-tailed)		0.000
	N	126	126
Customer flow	Pearson Correlation	0.672**	1
	Sig. (2-tailed)	0.000	
	N	126	126

Source: Research findings

As shown in the table there is significant relationship between this item with success of customer relationship management correlation coefficient is 0.67 which shows positive relationship between these two variables and this relationship is strong.

*The fifth hypothesis:* Customer Management Experience has positive effect on success of Customer Relationship Management.

*The Null hypothesis:* There is no significant relationship between Customer Management Experience and success of Customer Relationship Management.

*The Alternative hypothesis:* There is significant relationship between Customer Management Experience and success of Customer Relationship Management.

**Table 5 :** Correlation between Customer Management Experience and success of Customer Relationship Management

		success of Customer Relationship Management	Customer Management Experience
Success of Customer Relationship Management	Pearson Correlation	0.510**	1
	Sig. (2-tailed)	0.000	
	N	123	124
Customer Management Experience	Pearson Correlation	1	0.510**
	Sig. (2-tailed)		0.000
	N	126	123

Source: Research findings

As shown in the table there is significant relationship between this item with success of customer relationship management correlation coefficient is 0.51 which shows positive relationship between these two variables and this relationship is moderate.

d) *One Sample t-test the Question of the Research:*

Is the knowledge management as main factor for determining the successful implementation of

Customer Relationship Management?

*Statistical assumptions:*

$H_0: \mu \geq 5$

$H_1: \mu < 5$

*Note:* Hypothesis is placed in  $H_0$

**Table 6 :** One-Sample Statistics

TEST VALUE=5				
	N	Mean	Std. Deviation	Std. Error Mean
Knowledge Management and Success of Customer Relationship Management	120	5.7039	1.40360	0.12813

Source: Research findings

From comparison between mean of main hypothesis's index with Test Value we concluded that does not reject, or in other words, this claim is verified in 95% insurance level.

$H_0: \mu \geq 5$

$5.70 \geq 5$

## VI. CONCLUSION

Present paper is about effect of knowledge management on success of customer relationship management in Eghtesad Novin Bank. Also was used of inferential statistics for answering to the questions and research's hypotheses and all hypotheses were confirmed. So can be concluded that capabilities of knowledge management, organizational variables, technology of customer relationship management, customer flow and experience of customer relationship management have positive relationship with success of customer relationship management and knowledge management is as main factor for determining the successful implementation of customer relationship management. As a result, in order to successful customer relationship management can do many effective measures in order to improve the above dimensions.

But monitoring and evaluation in the country's administrative system influenced by relationships

between devices and executive managers and hence do not any efforts in reflection of actual results of evaluation. It seems that it is an absolute necessity till during the creation of the necessary theoretical background to perform evaluations, the results of evaluation be published actually till researchers could do their research based on information which are more real. Thus the results of the researches could be effective in increasing of efficiency of executive and administrative system of the country. Lacking of managers' knowledge about major items for management and planning appropriate programs to devote the necessary time to main activity cause a considerable part of managers' time allocated to daily issues and for planning necessary programs in order to predict the environmental matters and adoption of necessary measures for organization in order to dealing with unwanted and harmful changes then they do not have any time or they have little time for monitoring these issues.

Customers want desirable and better services by the banks. The system of customer relationship management can be helpful for responding to customer expectations. There are different and reliable perspectives about knowledge management which using of each of approaches will have different results. It is suggested that these approaches be considered in future papers.

*The suggestions for future research are as follows:*

1. The value of knowledge is as one of the main topics in knowledge management system. It is recommend that this issue be investigated in future studies.
2. The present paper is done in office, service and governmental environment. Repetition of this matter suggest be done in manufacturing and private industries.
3. There are other variables as affecting factors on establishment of knowledge management system beside the surveyed variables in present research. It is recommended these variables be investigated in other studies.

## VII. SOME LIMITATIONS OF PRESENT PAPER ARE AS FOLLOWS

1. This paper did by managers and employees' ideas from Eghtesad Novin Bank of Tehran. Existence of secondary and published information about each of these components can be made better results and estimations. In this paper, has been used of questionnaires and surveys according to lacking of this information.
2. One of the limitations of research can be inherent limitation of questionnaire. Generally respondents express their perceptions and mentalities as desired response and according to this matter that whatever that perceived from external realities do not adapt with whatever that are real, it is possible that presented responses create some biases. Actually through questionnaire perception or reality will be measured and it is possible that responses which are based on audience perception do not coincide with realities and this matter can affect on the results of research.
3. Also mentalities, perceptions, interests, characteristics, knowledge of researcher and other personal characteristics such as ability to interact with others and so on affect on making hypothesis, designing the questions, questionnaire, communication with others and analysis also because of interests and tendencies are effective on research. It should be mentioned that these factors also affected on this paper that these effects should be considered as limitations of the research.

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# GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2013

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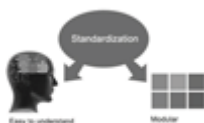






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#### TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

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**3. Think Like Evaluators:** If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

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### Key points to remember:

- Submit all work in its final form.
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### Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

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- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

## Approach:

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## Approach:

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- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.





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- If use of a definite type of tools.
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- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

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## Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
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- Present a background, such as by describing the question that was addressed by creation an exacting study.
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### Approach

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- Give details all of your remarks as much as possible, focus on mechanisms.
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- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

### Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



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<b>Methods and Procedures</b>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
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<b>References</b>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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ISSN 9755853



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