# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

IJRCM


A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.

as well as in Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)]

Registered & Listed at: Index Copernicus Publishers Panel, Poland

Circulated all over the world & Google has verified that scholars of more than 1500 Cities in 141 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

www.ijrcm.org.in

# CONTENTS

# CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email address: **infoijrcm@gmail.com**.

# GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

**DATED: _____**

***THE EDITOR***
IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF .**

**(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)**

**DEAR SIR/MADAM**

Please find my submission of manuscript entitled '_____' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

**NAME OF CORRESPONDING AUTHOR**:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

**NOTES**:

a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:
**New Manuscript for Review in the area of** (**Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/ Engineering/Mathematics/other, please specify)**
c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
d) The total size of the file containing the manuscript is required to be below **500 KB**.
e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6. **MANUSCRIPT:** Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **FIGURES & TABLES:** These should be simple, crystal clear, centered, separately numbered &self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11. **EQUATIONS:**These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:**

**BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

**UNPUBLISHED DISSERTATIONS AND THESES**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

**ONLINE RESOURCES**

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

**WEBSITES**

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

# THE EFFECT OF MARKET ATTITUDE ON INNOVATIONAND NEW PRODUCT PERFORMANCE

*FAKHRADDINMAROOFI*
*ASST. PROFESSOR*
*DEPARTMENT OF MANAGEMENT*
*UNIVERSITY OF KURDISTAN*
*PASDARAN AVE*

**ABSTRACT**

*This research produces new perceptions ofthree main elementsmarket attitudes: informationrange, informationdispersion, andreactive affect innovation and new product performance, and about the arbitrating role of innovation.Data were collected from a sample of 247 firms of the manufacturing industries. The results indicate that informationrange has an indirect positive effect on innovation via informationdispersion andreactive. Information dispersioneffects innovation positively, both directly and indirectly through reactive. Findings report a curvilinear (J-shaped) relationship between reactive and innovation. Also indicates a positive relationship between reactive and new product performance.The findings show that informationrange and informationdispersioncontrol new product performance indirectlythrough reactive. Finally, a positive relationship was discovered between innovation and new product performance. As well asresult indicate that the effects of elements on innovation and new product performance are arbitrated by reactive to market information.*

**KEYWORDS**
Market attitude, Innovation, Product innovation, marketing information.

## 1. INTRODUCTION

In recent years, there is focus on the relationship between market attitude and new product performance. This research indicate that market attitude has a positive influenceon new product performance (Baker and Sinkula, 2005; Kircaet al., 2005). However, researchers have to decide howmarket attitudecontributes to superior new product performance.Few studies have examined the possible negotiators of the market attitude/new product performance relationship. Such research is essentialto understand the directions through which market attitude effects new product performance (Langeraket al., 2004).Explaining the negotiators of the marketattitude-performance relationship will produce managers with more comprehensiveperceptions into how marketattitude works and how it may be useful as a strategicfirm ability (Kircaet al., 2005). Thepresent study examines the effect of market attitudeon innovation and new product performance. Specifically, wesuggest that innovation isanarbitrator betweenmarket attitude and new product performance. Innovation isreflecting on a coreelement of an innovation strategy for three reasons.First, the increasing rate of competition, technological developments in the market and shorter product life cycles load companies to innovate faster (Lynn et al., 2000). Second, innovation can produce amaintainable competitive advantage. Innovation is valuable resource for the firm in that it makes possible firms to keeping close touch with customers and their needs (Tatikonda andMontoya-Weiss, 2001).Third, innovation results in new product performance. Carbonell and Rodriguez (2006) and Chen et al. (2005) have stated a positive relation between market and new product success. In terms of research on the influence of market attitude on innovation, it is disputed that innovation has been absent in the models of market attitude.Regardless of the popular idea that market-attitude firms havean advantage in the market (Day, 1994; Slater andNarver, 1995. At this time, the opportunity presents advance of understanding of the relationships among market attitude, innovation, and new product performance. In this study, market attitude is imagining as a set oforganizational behaviors and procedures related to (a) Market information range; (b) Market information dispersion; and (c) Reactive tosuch informationacross department (Kohli and Jaworski, 1990).

## 2. THEORETICAL MODEL AND RESEARCH HYPOTHESES

Regardless of the market attitudeconstruct, a review of the studiesshows that the firstemphasis on empirical research has been on the combined (versus individual) effects of the market attitudeelements. Yet, the study of market attitude as ahybrid construct might result in ignoring refinement due toits multidimensionality. Therefore, such practice might lead toincomplete or misleading conclusions about the usefulness to firms of specific market attitude's elements (Frambachet al., 2003). The present study, therefore, follows an element-level approach and examines direct effects ofeach of market attitude's elements – informationrange, informationdispersion and reactive –on innovation and new product performance (Figure 1). By distributing market attitude into elements, we are able to examine the relationships betweenmarket attitude and innovation, and marketattitude and new product performance. Specifically, wecan decide whether and how each element affects innovation and new product performance. The currentmodel also examines indirect effects of informationrange, informationdispersion and reactive onnew product performance via innovation. According tostudies that suggests a positive relationshipbetween market information procedure and innovation (Moorman, 1995; Ottum andMoore, 1997), and between innovation and new product performance (Carbonelland Rodriguez, 2006). Finally, according to the studies on information use (Homburg et al., 2004) and organization learning (Deeter-Schmelzand Ramsey, 2003), the model suggests causal links among the market attitudeelements. In this research, informationrange refers to the area to which a firm collects primary and secondary information from the organization stakeholders (i.e. competitors, suppliers, mediators) and market forces (i.e. social, cultural, regulatory and macroeconomic factors) (Matsunoet al., 2000). Informationdispersion refers to the degree to which information is delivering, shared and discussed among applicable users within an organization by formal and unofficialmeans (Moorman, 1995; Akgu¨n et al., 2002). Studies on new product development includes that informationrangecan lead to shorter new product development cycle times. Information conference gives new product development teams an opportunity to learn, and therefore an opportunity to act on that information more quickly (Lynn et al., 2003). Slater and Narver (1995) have stated that the ability to rally information from customers and competitors gives companies an advantage and efficiency of their responses to opportunities and threats. Informationdispersion is also critical to drive new products to begin more rapidly (Gupta et al., 1986; Cooper and Kleinschmidt, 1991). Effective informationdispersiondecreases development time by promoting communication, cooperation and increasing goal among theparties involved in the development procedure (Dougherty, 1992; Moorman, 1995). Open sharing of information across the parties involved in the development procedure leads to better understanding of the productclaimants, and the range of each party's capabilities and limitations. Procedure the preceding disputes, it has been stated that high levels of information entering and moving within an organization could also have negative effects on innovation (Barczakand Sultan, 2001; Blazevicet al., 2003; Park et al. 2009).

First, an information rich environment reduces the speed of sense-making, as analysts must form through and allocatemeaning to data that often lack direct comparability (Jaworskiet al., 2002). Second, procedure too much information during the developmentprocedure can also overwhelm the decision-makers' cognitive capacities, thus in response they may conduct limited searches and make satisfying decisions (Cyert and March, 1963; Zirger and Hartley, 1994).

Furthermore, because of the much of time spent in analyzing productive information, the information may be out of date by the time the data are synthesized. Without correct information at critical period in the procedure, product development is extended as product and proceduredesigns are modified, reworked or re-created (Zirger and Hartley, 1994). On the basis of the preceding discussion, we suggest that informationrange and information dispersion will have a positive influence on innovation. However, there is an upper limit to the amount of collected and shared information helpful to the procedure, beyond which new product development may actually beslowed. Thus:

**H1.** There is areversed U-shaped relationship between informationrange and innovation.

**H2**. There is areversed U-shaped relationship between information dispersion and innovation.

Reactive is action taken in response to informationin other wordcreated and dispersed (Jaworski and Kohli, 1993). It has been disputed that responding to market informationis likely to claim time to happen and therefore, can increase the timecollaborated with new product development activities. The reasoning for this is that managers will claim time to think about the information, question key hypothesis about the markets, theorize about the efficiency of option turn to, and challenge one and another's ideas (Rich, 1981). In addition, consequential time is demand for managers to acquire an esteem for market information (Barabba andZaltman, 1991), and its producers (Moorman et al., 1992).Acquires this viewpoint, it might be disputed that, although firstlyreactive to market information can have little or no positive influence on innovation, as the frequencywith which a firm responds to market informationincreases, reactive has greater influence on innovation. Studies on organization learning produces support for this dispute. Thus, studies on organizational learning indicate that organizations learn through experience (Huber, 1991).Learning collected from experience helps create more effective organizational paths (Cohen and Levinthal, 1990). Sarin and McDermott (2003) state that with experience, organizations become more expertat incorporate and using market information. In particular, as organizations apply experiential-based knowledge to decisionmaking, they make less mistakes and quicker decisions (Eisenhardt, 1989; Jaworski et al., 2002), leading to faster time to market (Meyer, 2001; Sarinand McDermott, 2003). On the basis of the above discussion, wedispute that low levels of reactive to market information are forecast to have little or no positive influence on innovation. However, reactive to market information will have greater effects on innovation. Therefore:

**H3**. There is a curvilinear (J-shaped) relationship between reactive and innovation.

Informationrange is forecast to have a positive control on new product performance. Moorman (1995) stresses that information acquisition will lead to improved performance as it make possible decision makers to better recognize marketing opportunities and threats for better positioning in the marketplace. Cooper and Kleinschmidt (1986) discoveredthat the developers of successful new products had a deep understanding of user's needs and wants, did a thorough market and competitive analysis, and used regular and indepthcustomers' infractions. Ottum and Moore (1997), Lynn et al. (2000) and Brockman and Morgan (2003) discovered apositive relation between information acquisition and new product performance. Therefore:

**H4**. Information has a positive effect on new product performance.

It is disputed that informationdispersion can increase newproductperformance. Informationdispersion is likely to increase the degree to which organizational members share a vision of marketing strategy design and performing (Sinkula, 1994). In studying the organizationalsignificant to new product success, Ayers et al.(1997) discovered a direct correlation between high interaction and information exchange between R&D and marketingpersonnel and new product success rates.

**H5.**Informationdispersion has a positive effect on new product performance.

Reactive to market information is forecast to have apositive effect on new product performance. Studiesdispute that high level of information employment increases efficiency of decision-making and performingwhich, in turn, will result in greater new product performance (Ottum and Moore, 1997; Moorman, 1995). Empirical evidence supports a positive relationship between market informationemployment and new product performance (Gotteland and Boule´, 2006).

**H6**. Reactive to market information has a positiveeffect on new product performance.

Research suggests innovation uses a real positiveinfluence on new product performance results. Cooper and Kleinschmidt (1994) showed that getting products to market schedule has a positive connection with financial performance of a new product project. Ali et al. (1995) reported that faster product development leads to shorter break-even time. Gupta and Souder's (1998) find that short cycle-time companies show greater sales, profit and return on equity than longer cycle-time companies. According to Pearce (2002), the excellent revenues enjoyed by Hewlett-Packard in the laser printing technology, digital photography, wireless information distribution, and e-commerce imaginingfields can be attributed to the company's emphasis on. Thus, wesuggest that:

**H7**. Innovation has a positive effect on new product performance.

Informationrange is forecast to use a positive effect on informationdispersion and reactive (Akgu¨n et al., 2006).Zaltman (1986) argued that if a firm has a tendency toconference information, it is more likely that the information will be shared and used (Zaltman, 1986). Homburg et al.(2004) dispute that since information range is costly, managers who decide to collect information on customer and competitors could be under load to not hold back this information but rather distribute and use it in the organization.

**H8/H9.**Informationrange has a positive effect on information dispersion and reactive.

Informationdispersion is forecast to have a positive influence on reactive (Akgu¨n et al., 2006).Menon and Varadarajan (1992), stated that as the amount of communication flows within an organization increases, information is viewed with less caution and hostility. A different dispute is that once the information is distributed across different departments and employees, there will be load to respond to the knowledge (Homburg et al., 2004).

**H10.**Informationdispersion has a positive effect on reactive.

## 3. METHODOLOGY

3.1 Sample and data collection

The target population for the study was from the industrial organization listing of Iranian manufacturing firms. We focused on the following manufacturing sectors: food, chemicals, plastics, and transportation. From each industry, only firms with 25 or more employees were chosen, a total of 825 firms made up the target population. A questionnaire was distributed to the person in charge of new product development activities at each company. Of the 825 surveys originally distributed, 494 completed questionnaires were returned, compliant a response rate of 53.3 percent. To test fornon-response bias we compared early with late respondents as suggested by Armstrong and Overton (1977). No consequential differences were discovered in the mean responses for any of the buildsof this study. Chi-square analyses showed no consequential differences between our sample and the population it was attracted from in terms of industry distribution, employee number and, company sales. Table I shows the sample and population distribution by industry, employee number, and company sales. Almost 70 percent of the responding firms were in the business-to-business sector. The respondents were 25 percent general managers, 17 percent marketing directors, and 58 percent technical Orr&D directors. Results from analysis of variance and multiple comparison tests showed no statistically consequential differences on the mean responses on any of the builds included in this study across respondent'swith different functional backgrounds and across firms from different industries. Innovation and new product performance are tested at the project level. Specifically, respondents were asked to base their answers on a new product projectof the firm. The new product must have been on the market for more than 6 months to ensure that the firm had sufficient data on the resulting performance. The core measurements of market attitude were calculated at the firm level. New product performance was calculated using four indicators from Lynn et al. (2000): (1) in general performance; (2) profits; (3) sales; and (4) market share.These variables were calculated relative to the objectives set for the project. Innovation was calculated through three items taken from previous studies. The fact that relative measures were used enabled us to compare different product development projects.Informationrange was calculated throughfive items: products, customer satisfaction, supplier and mediators, the activity of competitors and, changes in the market Four items draw oninformationdispersion: the information collected is shared among all thedepartments, takenfrom documents, transmitted to all departments, and discussed among all departments. Finally, four items belong to reactive: the information collected is used to respond to changes in our consumers 'needs, review our product development attempt, respond to competitors' actions, and deal with customers' protest. We include relative firm size, market possibleand competitive strength as control variables because of the possible to control new product performance (Henard andSzymanski, 2001). Relative firm size was calculated as the size of the business relative to that of its largest competitor (Slaterand Narver, 1994). Competitive strength and market possible were calculated through multi-item scales taken from Ali (2000).Two types of measures were used in this survey: (1)useful multi-item; and (2) reflective multi-item.Following the recent work of Coltman et al. (2008), the scales for the measurement of market attitude were reflecting on areuseful. The reflective multi-item measures used were newproduct performance, innovation market and competitive strength. To obtain unidimensionality for reflective multi-item variables, the item-to-total correlations were calculated for each item, taking one scale at a time. Items for which these correlations were lower than 0.32 were removed (Saxe andWeitz, 1982). Calculating reliability coefficients examinedthe reliability of each sanitized, unidimensional scale. Alpha coefficients values were equal or greater than 0.65, which indicates good reliability. Internal material coherenceand convergent validity were examined by

performing a corroborativefactor analysis using AMOS. The results showed that the measurement model fit the data well ($x^2$= 52:75, df= 34,p< 0:02; normed fit index (NFI)= 0:89; comparative fit index(CFI)= 0:93; root mean square error of approach(RMSEA)= 0:03). Hybrids reliabilities calculatewere equal to or passed the standard of 0.6 suggested by Bagozziand Yi (1988). Values of average variance removealso produced satisfactory results. Standardized item loadings for allstructures were greater than 0.5 and consequential (p< 0:05), which evidences good convergent validity (Bagozzi et al., 1991). Together the results of the tests suggest that the reflective measures included in this study control sufficientunidimensionality, reliability and validity. Diamantopoulos and Winklhofer (2001) suggested that the quality of the index construction for a usefulscale should be estimated in terms of indicator co-linearity. To estimate indicator co -linearity for each measure, we ran regression analysis of all items (as independent variables) on each single item (dependent variable). For the information range scale, variancesinflations factor (max VIF =1:5) and condition numbers (max CN =17:5) show thatco-linearity did not seem to pose a problem. In relation tothe information dispersion and reactivemeasures, results offered no indication that co-linearity was aninterested (max VIF = 2:1; max CN = 12:2; max VIF = 1:2; maxCN = 11:5, respectively). Typically, VIFs over 8 and CNsover 25shows critical multico-linearity problems. Hence, all items were retained. The discriminant validity of the market attitudesub measurement can be questioned. To check the discriminant validity of these scales, we used Anderson and Gerbing's (1988) procedure andchecked whether the confidence intervals for the estimatedcorrelation coefficients included the value of 1. Results shows that the confidence intervals for the correlation coefficients for informationrange-information dispersion (0.44, 0.65), informationrange reactive (0.52, 0.66), and informationdispersion reactive (0.38, 0.57) did not include the value of 1, providing evidence for discriminant validity of the scales. A similar procedure was used for new product performance, innovation, market possible and competitive strength with similar results. For hypotheses testing analysis, scale items were averagedto create a single measure of each construct. Before testing the hypotheses, we examined the correlation matrix for the hybrid scales of the structures. The signs of the bivariatecorrelations seem to be coherent with the hypothesized relationships (Table II).

## 4. ANALYSIS AND RESULTS

We used analysis with maximum estimation to produce parameter calculate roughly for the structuralequationsystem (Figure 1). The hypothesis of multivariate normality was tested using Mardia's (1970) multivariate kurtosis statistic. The large value of Mardia'sstatistic signals the attendance of non-normality. In this case, bootstrap simulation was performed for purposes of estimating confidence interval around the parameter calculate roughly (Stine, 1989). Quadratic terms of information range, informationdispersion and reactive were included in the model to test for curvilinear relationships. Informationrange, information dispersion and reactive were mean-centered prior to the creation of the squared terms. A series of post hoc power analyses were completed using theG*POWER 3 computer software (Faul et al., 2007) to decide the p-values for the statistical analysesin this study. We calculated power values for each dependent variable in the model. In all occasion, power values for amedium effect size and Type **I** error (a) of 0.05 exceed Cohen's (1988) recommended criterion of 0.75. Hence, avalue of 0.05 seems to be appropriate to judge the statisticalsignificance of the parameter calculate roughly in theanalysis (TableIII). The first model was a fully saturated model, a typical case of a path analysis. However, since several paths seemednon-consequential, we re-estimated the model by dropping theinconsequential paths one at a time in order to reach a more economical model. The revised model produced a good fitto the data ($x^2$/df= 22.38/14, NFI= 0:89, CFI= 0:94, RMSEA= 0.04). The model explained 33 percent, 40percent, 11 percent and 14 percent, respectively, of thevariance in informationdispersion, reactive, innovation, and new product performance. Theamount of variance explained implies that firms have several other avenues to improve innovation and new productperformance. To consider the role of innovation as an incomplete arbitrator of the relationships between market attitude's three main elements and new product performance, an optional model which did not include the innovation new product performance path was tested. Results from the $x^2$ difference test showed that the hypothesized model fit the data consequentially better than the optional model ($\Delta x^2$ = 21.14, $\Delta$df = 1, p < 0.00). Further insight is produced by using the Akaike Information Criterion (AIC) and the coherent version of AIC (CAIC) (Byrne, 2001). The model with the smallest AIC and CAIC values is the best approaches for the information in the data, relative to other models reflect on. The AIC and CAIC values for the hypothesized model (AIC = 69.7, CAIC = 156.7) are smaller than for the competitor model (AIC = 95.9, CAIC = 175.9). In general, these results produce support for the role of innovation as an incomplete arbitrator in the market attitude-new product performance relationship. A similar procedure was used to test for the indirect effects of information range and information dispersion on innovation and new product performance via information dispersion and reactive. Results from the $X^2$ difference test show that the hypothesized model fits the data consequentially better than the optional model ($\Delta x^2$ = 238.91, $\Delta$df = 3, p < 0.00).H1, recommended a reversed U-shaped relationship between informationrange and innovation. To support thereversed U-shaped curvilinear relationship the quadratic term of informationrange must be negative and consequential. As shown in Table III, both the linear and the quadratic terms of informationrange are not consequential, failing to support H1. Regarding H2, results show that the linear term of informationdispersion is positive and consequential (b = 0.16, p < 0.01), but the quadratic term is not. Hypothesis H2 is, thus, rejected. H3forecast that reactive would have a J-shaped relationship with innovation. J-curves are convex because their graphs bend upward, away from the origin. Convex curves are recognized by a positive second derivative (Bers and Karal, 1976). A J-curve also has an endpoint that is higher than its beginning. As shown in Figure 2, H3 is supported. The second incompletederivative of innovation with respect to reactive is positive ($\theta^2$ innovation /$\theta$reactive= 0.9), and the effect of reactive on innovation is greater for firms with higher levels of reactive than for firms with lower levels.No support was discovered for hypotheses H4and H5, which forecast a positive effect of informationrange and informationdispersion on new product performance, respectively. H6 assumeda positive relationship between reactive and new product performance. The results support this hypothesis ($\beta$= 0.15, p < 0.05). Coherent with H7, innovation is related positively to new product performance ($\beta$= 0.27, p < 0.01). Support was discovered for H8 and H9, which forecast a positive effect of informationrange on information dispersion and reactive ($\beta$= 0:54, p < 0.01; $\beta$= 0.46, p < 0:01, respectively). As forecast in H10, there was a positive relationship between informationdispersionand reactive ($\beta$= 0.16, p < 0:01).

## 5. DISCUSSION

The current study adds new evidence about the interdependences among informationrange, information dispersion and reactive.In relation to the effect of the market attitude's elements on new product performance, our finding shows a positive relationship between reactive to market information and new product performance. This finding is coherent with the studies of Moorman (1995) and Akgu¨n et al. (2006), which suggest that utilizing market-related information during the new product development procedure is a key determinant of the new product's marketplace success. The parameter calculates roughly for the direct paths linking information range and information dispersion with new product performance were discovered not consequential. Instead, our findings show that information range and information dispersion control new product performance indirectly through the arbitrating role of reactive. Therefore according to previous research claiming that information gathered and/or shared is of no consequence, if it is not used to make decisions (Homburg et al., 2004; Akgu¨n et al., 2006). It is also coherent with Hult et al.'s (2005) stated that information range and information dispersion do not directly control performance. Instead, the activities collaborated with information range and dispersion allows the firm to enact better actions, which in turn increase performance. Hence, unless an organization responds to information, neither the acquisition nor the dispersion of information will result in externally directed actions that will lead to greater new product performance (Pentland, 1995; Homburg et al., 2004). Therefore this study claims that innovation somewhat arbitrates the relationship between market attitude and new product performance. In other words, market attitude firms achieve superior new product performance; because of their advantage which new products are developed and brought to the market. Our results show informationrangehas a positive influenceon informationdispersion and reactive. Informationdispersion is, in turn, positively correlated with reactive.Opposed to our expectations, the current findings do not support reversed U-shaped relationships between information range and innovation, and information dispersion and innovation. Optionally, the results show that informationdispersion directly, and informationrange indirectly (via dispersion and reactive), have a positive effect on innovation.The finding suggesting that informationrangeeffects innovation indirectly rather than directly is coherentwith existingstudies that disputes that the take fact of information availability does not lead to quicker innovation. If market information is collected but not distributed or used, then the act of information rangehas little, if any, effect on cycle time or other measures of performance (Barczak and Sultan, 2001). According to our results, high levels of information range and information dispersionseemnot to have negative effects on innovation. The explanation may lie in the organization's own strategies to cope with information excessive load. Therefore, it shows that reactive to market information improves innovation. Low levels of reactiveseem to have little or no influence on innovation. However, as the frequency with

which a firm responds to market information increases, reactive has greater influence on innovation. This supports the dispute that it takes some time, experience and knowledge to be able to get to the point where market employmentprocedures result in time savings for the firm. Expert decision makers, guided by their more detailed and comprehensive scheme, are more likely to make faster decisions. This is also coherentwith the dispute that operating in the firm's experience field leads to new combinations and re-combinations of information and knowledge that increase product development efficiency (Atuahene-Gima et al., 2005).

A managerial implications follow from these results are: First, from a managerial viewpoint, the explanation of the directions through which market attitude effects performance is vital. Our findings suggest that time-to market measures may be useful from tracking the influence of marketing attitude on new product performance for managers who implement strategic procedure-measurement frame works, such as the Balanced Scorecard (Kaplan and Norton, 1992). Second, the correlations between informationrange, informationdispersion and reactive were reasonably high. From a managerial viewpoint, this suggests that companies should focus on their informationrangeand dispersionprocedures to increase reactive to market information. Regarding information range activities, an important idea is that market informationpertains, not just, to current needs, but to future needs as well. Also, the range of market information relies on a hostof completing mechanisms including unofficialdiscussions with customers and trade partners, analysis of sales reports and customer databases and formal market research (Kohliand Jaworski, 1990). In relation to informationdispersion, studiesstresses that formal information dispersion mechanisms should be complete with unofficial mechanisms. Unofficialdispersion mechanisms produce greater openness and clarification opportunities, where formal communications tend to be more credible and verifiably, therefore encouraging the use of informationspecifically if it iscontradictory to receiver's prior beliefs. This is particularsuitable for managers interested in ensuring that market information is acted on by its receivers (Maltz and Kohli, 1996).Third, our findings show that reactive to market information improves innovation, but only after acertain level of reactive has been arrived. That is, ittakes some time, experience and knowledge for a firm to beable to get to the point where it can quickly evaluateinformation, understand it and relate to it (Weitzet al., 1986).Fourth, our finding shows that, among the three elements of market attitude, reactive to market information has the greatest influence on innovation and new product performance. Therefore, it is specifically important that firms encourage the use of market information in their organizations. Existing research produces several suggestions about the factors that encourage reactive to market information in organizations. In general, elder managers must themselves be certain of the value of reactive to market information and communicate their obligation to younger employees. Also, market attitude is almost certain to lead to a few projects or programs that do not succeed. To this respect, supportive reaction to lack of success is critical for promoting reactive to market information. Finally, elder managers can help encourage reactive by changing reward systems from being completely finance based to being at the lowest partly market based (Kohli and Jaworski, 1990).According to the academic point of view, this research makes twoimportant contributions to the marketing strategy and newproduct development studies. First, by distributingmarket attitude into the elements of informationrange, informationdispersion and reactive, the study produces a closer examination into whether and how each ofthe elements of market attitude affects innovation and new product performance. To this respect, clearly different effects were discovered for each of the three elementsof market attitude. Second, the results show that the effects of informationrange and information dispersion on innovation and new product performance are arbitrated by reactive to market information. Our limitations of the present study is: First, Grinstein (2008) discovered market attitude to be more positively collaborated with new product performance in countries that are high rather than low on power distance. To ensure the generalizability of our findings beyond the Iran context, additional research is needed in countries with different levels of power distance.Second, our respondents estimated new product development projects after their completion, which raises concerns about retrospective justification bias. Since our informants produced their estimate of the firm's level of market attitude in the context of other measures, it is less likely that they paid attention to their estimate with their knowledge of the new product results (Moorman and Miner, 1997). Third, a single key informantproduced the data in each company for independent and dependent variables. While it is not our plan to minimize the possible effect of response bias, it is believed that this bias was not a major problem in our sample. Thus, the study produced evidence of discriminant validity between the builds. Moreover, results from the Harman's one-factor test (Podsakoff et al., 2003) showed that there were five factors with an eigenvalue greater than 1 and that the first factor only accounted for 27.8percent of the total varianceexplained. Nevertheless, it is important that futures studies validate these findings using multiples data sources. Finally,in this study, we based our analysis on perceptual data. Objective values can only be explained within the framework of a particular type of industry or product. Kirca et al. (2005), discovered that subjective measures of performance produce higher market attitude-performance correlations than those obtained when objective calculated are used. Future research introducing objective measures is suggested. Apart from the necessary improvements in the measurement procedure, some other lines of further research can be suggested. First, this study does not examine the issue of variations in the quality of market attitude (Jaworski and Kohli, 1996). Firms may have a market attitude, but the quality of their market directed behaviors may be weak relative to other firms (Day, 1994). Resources that control the quality of market directed behaviors are arguably as necessary as a market attitude itself (Baker and Sinkula, 1999); which leaves an interesting topic for future research. Second, empirical evidence suggests that firm-specific factors such as managerial procedures, and organizational structures and capabilities can affect the organization's employment of the market information (Menon and Varadarajan, 1992).Finally, it could be interesting to investigate the arbitrating effect of other variables such as product quality, customer satisfaction or new product creativity (Kirca et al., 2005).

## 6. REFERENCES


1. Akgu¨ n, A., Lynn, G.S. and Yilmaz, C. (2006), "Learningprocess in new product development teams and effects onproduct success: a socio-cognitive perspective", IndustrialMarketing Management, Vol. 35 No. 2, pp. 210-24.
2. Akgu¨ n, A.E., Lynn, G.S. and Reilly, R. (2002), "Multidimensionalityof learning in new product developmentteams", European Journal of Innovation Management, Vol. 5No. 2, pp. 57-72.
3. Ali, A. (2000), "The impact of innovativeness anddevelopment time on new product performance for smallfirms", Marketing Letters, Vol. 11 No. 2, pp. 151-63.
4. Ali, A., Krapfel, R. and Labahn, D. (1995), "Productinnovativeness and entry strategy: impact on cycle time andbreak-even time", Journal of Product ManagementInnovation, Vol. 12, pp. 54-69.
5. Anderson, E.W. and Gerbing, D.W. (1988), "Structuralequation modeling in practice: a review and recommendedtwo-step approach", Psychological Bulletin, Vol. 103 No. 3,pp. 411-33.
6. Armstrong, J.S. and Overton, T.S. (1977), "Estimating noresponse bias in mail surveys", Journal of MarketingResearch, Vol. 14, pp. 396-402.
7. Atuahene-Gima, K., Slater, S. and Olson, E.M. (2005),"The contingent value of responsive and proactive marketorientations for new product program performance",Journal of Product Innovation Management, Vol. 22 No. 6,pp. 464-82.
8. August, pp. 318-35.
9. Ayers, D., Dahlstrom, R. and Skinner, S.J. (1997),"An exploratory investigation of organizationalantecedents to new product success", Journal of MarketingResearch, Vol. 34 No. 1, pp. 107-17.
10. Bagozzi, R.P., Yi, Y. and Phillips, L.W. (1991), "Assessingconstruct validity in organizational research", AdministrativeScience Quarterly, Vol. 36, pp. 421-58.
11. Baker, W.D. and Sinkula, J.M. (1999), "Learning orientation, market orientation, and innovation: integrating andextending models of organizational performance", Journalof Market-Focused Management, Vol. 3 No. 4, pp. 295-308.
12. Baker, W.D. and Sinkula, J.M. (2005), "Market orientationand the new product paradox", Journal of Product InnovationManagement, Vol. 22, pp. 483-502.
13. Barabba, V. and Zaltman, G. (1991), Hearing the Voice of theMarket, Harvard Business School Press, Boston, MA.
14. Barczak, G. and Sultan, F. (2001), "How marketing researchaffects cycle time: a case of the telecommunicationsindustry", Journal of Business & Industrial Marketing, Vol. 16 No. 4, pp. 258-73.
15. Bers, L. and Karal, F. (1976), Calculus, 2nd ed., Holt, Rinehart & Winston, New York, NY.
16. Blazevic, V., Lievens, A. and Klein, E. (2003), "Antecedentsof project learning and time-to-market during new mobileservice development", International Journal of ServiceIndustry Management, Vol. 14 No. 1, pp. 120-47.

17. Brockman, B. and Morgan, R. (2003), "The role of existing knowledge in new product innovativeness and performance", Decision Sciences, Vol. 34 No. 2, pp. 385-419.
18. Byrne, B.M. (2001), Structural Equation Modeling with AMOS. Basic Concepts, Applications, and Programming, Lawrence Erlbaum Associates, London.it
19. Carbonell, P. and Rodriguez, A.I. (2006), "The impact ofmarket characteristics and innovation speed on perceptionsof positional advantage and new product performance",International Journal of Research in Marketing, Vol. 23 No. 1,
20. Chen, J., Reilly, R.R. and Lynn, G.S. (2005), "The impacts ofspeed to market on new product success: the moderatingeffects of uncertainty", IEEE Transactions on EngineeringManagement, Vol. 52 No. 2, pp. 199-212.
21. Cohen, J. (1988), Statistical Power Analysis for the BehavioralSciences, 2nd ed., Lawrence Erlbaum Associates, Hillsdale,NJ.
22. Cohen, W. and Levinthal, D. (1990), "Absorptive capacity:a new perspective on learning and innovation",Administrative Science Quarterly, Vol. 35, March, pp. 128-52.
23. Coltman, T., Devinney, T.M., Midgley, D.F. and Venaik, S.(2008), "Formative versus reflective measurement models:two applications of formative measurement", Journal ofBusiness Research, Vol. 61 No. 12, pp. 1250-62.
24. Cooper, R. and Kleinschmidt, E.J. (1986), "An investigationinto the new product process: steps, deficiencies andimpact", Journal of Product Innovation Management, Vol. 3,pp. 71-85.
25. Cooper, R. and Kleinschmidt, E.J. (1991), "New productprocesses at leading industrial firms", Industrial MarketingManagement, Vol. 20 No. 2, pp. 137-47.
26. Cooper, R.G. and Kleinschmidt, E.J. (1994), "Determinantsof timeliness in new product development", Journal ofProduct Innovation Management, Vol. 11 No. 5, pp. 381-96.
27. Cyert, R.M. and March, J.G. (1963), A Behavioral Theory ofthe Firm, Prentice-Hall, Englewood Cliffs, NJ.
28. Day, G.S. (1994), "The capabilities of market-drivenorganizations", Journal of Marketing, Vol. 58, October,pp. 37-52.
29. Deeter-Schmelz, D. and Ramsey, R. (2003), "An investigationof team information processing in service teams: exploringthe link between teams and customers", Journal of theAcademy of Marketing Science, Vol. 31 No. 4, pp. 409-24.
30. Diamantopoulos, A. and Winklhofer, H.M. (2001), "Indexconstruction with formative indicators: an alternative toscale development", Journal of Marketing Research, Vol. 38,May, pp. 269-77.
31. Dougherty, D. (1992), "Interpretive barriers to successfulproduct innovation in large firms", Organization Science, Vol. 3 No. 2, pp. 179-201.
32. Eisenhardt, K.M. (1989), "Making fast strategic decisions inhigh-velocity environments", Academy of ManagementJournal, Vol. 32, pp. 543-76.
33. Faul, F., Erdfelder, E., Lang, A.G. and Buchner, A. (2007),"G*Power 3: a flexible statistical power analysis programfor the social, behavioral and biomedical science",Behavioral Research Methods, Vol. 39 No. 2, pp. 175-91.
34. Frambach, R.T., Prabhu, J. and Verhallen, T.M.M. (2003),"The influence of business strategy on new product activity:the role of market orientation", International Journal ofResearch in Marketing, Vol. 20, pp. 377-97.
35. Gotteland, D. and Boule´, J.M. (2006), "The marketorientation-new product performance relationship: redefining the moderating role of environmental conditions", International Journal of Research in Marketing, Vol. 23, pp. 171-85.
36. Grinstein, A. (2008), "The effect of marketing orientationand its components on innovation consequences: a metaanalysis", Journal of the Academy of Marketing Science, Vol. 36, pp. 166-73.
37. Gupta, A.K. and Souder, W.E. (1998), "Key drivers ofreduced cycle time", Research Technology Management, Vol. 41 No. 4, pp. 38-43.
38. Gupta, A.K., Raj, S.P. and Wilemon, D. (1986), "A model forstudying R&D-marketing interface in the productinnovation process", Journal of Marketing, Vol. 50, April,pp. 7-17.
39. Henard, D.H. and Szymanski, D.M. (2001), "Why some newproducts are more successful than others", Journal ofMarketing Research, Vol. 38, pp. 362-75.
40. Homburg, C., Krohmer, H. and Workman, J.P. (2004),"A strategy implementation perspective of marketorientation", Journal of Business Research, Vol. 57, pp. 1331-40.
41. Huber, G.P. (1991), "Organizational learning: the contributing processes and the literatures",Organizational Science, Vol. 2, February, pp. 88-115.
42. Hult, G.T., Ketchen, D. and Slater, S. (2005), "Marketorientation and performance: an integration of disparateapproaches", Strategic Management Journal, Vol. 26,pp. 1173-81.
43. Jaworski, B.J. and Kohli, A.K. (1993), "Market orientation: antecedents and consequences", Journal of Marketing,Vol. 57, July, pp. 53-70.
44. Jaworski, B.J. and Kohli, A.K. (1996), "Market orientation: review, refinement and road-map", Journal of Market-Focused Management, Vol. 1 No. 2, pp. 119-35.
45. Jaworski, B.J., MacInnis, D.J. and Kohli, A.K. (2002),"Generating competitive intelligence in organizations",Journal of Market-Focused Management, Vol. 5 No. 4,pp. 279-307.
46. Kaplan, R.S. and Norton, D.P. (1992), "The BalancedScorecard – measures that drive performance", HarvardBusiness Review, Vol. 70, January/February, pp. 71-90.
47. Kessler, E.H. and Chakrabarti, A.K. (1999), "Speeding upthe pace of new product development", Journal of ProductInnovation Management, Vol. 16, pp. 231-47.
48. Kirca, A., Jayachandran, S. and Bearden, W. (2005), "Marketorientation: a meta-analytic review and assessment of itsantecedents and impact on performance", Journal ofMarketing, Vol. 69, April, pp. 24-41.
49. Kohli, A.K. and Jaworski, B.J. (1990), "Market orientation:the construct, research propositions, and managerialimplications", Journal of Marketing, Vol. 54 No. 2, pp. 1-18.
50. Langerak, F., Hultink, E. and Robben, H. (2004), "The impact of market orientation, product advantageand launch proficiency on new product performance andorganizational performance", Journal of Product Innovation Management, Vol. 21, pp. 79-94.
51. Lynn, G.S., Akgu¨ n, A.E. and Keskin, H. (2003),"Accelerated learning in new product developmentteams", European Journal of Innovation Management, Vol. 6No. 4, pp. 201-12.
52. Lynn, G.S., Reilly, R.R. and Akgu¨ n, A.E. (2000),"Knowledge management in new product teams: practicesand outcomes", IEEE Transactions on Engineering
53. Maltz, E. and Kohli, A. (1996), "Market intelligencedissemination across functional boundaries", Journal ofMarketing Research, Vol. 33, pp. 47-61.
54. Management, Vol. 47 No. 2, pp. 221-31.
55. Mardia, K.V. (1970), "Measures of multivariate skewness andkurtosis with applications", Biometrika, Vol. 57, pp. 519-30.
56. Matsuno, K., Mentzer, J.T. and Rentz, J.O. (2000),"A refinement and validation of the MARKOR scale",Journal of Academy of Marketing Science, Vol. 28 No. 4,
57. Menon, A. and Varadarajan, P.R. (1992), "A model ofmarketing knowledge use within firms", Journal ofMarketing, Vol. 56, pp. 53-71.
58. Meyer, C. (2001), "The second generation of speed",Harvard Business Review, Vol. 79 No. 4, pp. 24-5.
59. Moorman, C. (1995), "Organizational market informationprocesses: cultural antecedents and new productoutcomes", Journal of Marketing Research, Vol. 32,
60. Moorman, C. and Miner, A. (1997), "The impact oforganizational memory on new product performance andcreativity", Journal of Marketing Research, Vol. 34, February,pp. 91-106.
61. Moorman, C., Zaltman, G. and Deshpande´, R. (1992),"Relationships between providers and users of marketing research: the dynamics of trust within and between organizations", Journal of Marketing Research, Vol. 24, August, pp. 314-28.
62. Ottum, B.D. and Moore, W.L. (1997), "The role of marketinformation in new product success/failure", Journal ofProduct Innovation Management, Vol. 14, pp. 258-73.

63. Park, M.H., Lim, J.W. and Birnbaum-More, P.H. (2009),"The effect of multiknowledge individuals on performancein cross-functional new product development teams",Journal of Product Innovation Management, Vol. 26 No. 1, pp. 86-96.
64. Pearce, J.A. II (2002), "Speed merchants", OrganizationalDynamics, Vol. 30 No. 3, pp. 191-205.
65. Pentland, B. (1995), "Information systems and organizationallearning: the social epistemology of organizationalknowledge systems", Accounting, Management andInformation Technologies, Vol. 5 No. 1, pp. 1-21.
66. Podsakoff, P.M., Mackenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method bias in behavioral research:a critical review of the literature and recommendedremedies", Journal of Applied Psychology, Vol. 88 No. 5, pp. 879-903.
67. pp. 1-12.
68. pp. 527-39.
69. Rich, R. (1981), Social Science Information and Public PolicyMaking, Jossey-Bass, San Francisco, CA.
70. Sarin, S. and McDermott, C. (2003), "The effect of teamleader characteristics on learning, knowledge application, and performance of cross-functional new productdevelopment teams", Decision Sciences, Vol. 34 No. 4, pp. 707-39.
71. Saxe, R. and Weitz, B.A. (1982), "The socio scales: a measureof the customer orientation of salespeople", Journal ofMarketing Research, Vol. 19 No. 3, pp. 343-51.
72. Sinkula, J.M. (1994), "Market information processing andorganizational learning", Journal of Marketing, Vol. 58, January, pp. 35-45.
73. Slater, S.F. and Narver, J.C. (1994), "Does competitiveenvironment moderate the market orientation-performancerelationship?", Journal of Marketing, Vol. 58 No. 1,pp. 46-55.
74. Slater, S.F. and Narver, J.C. (1995), "Market orientation andthe learning organization", Journal of Marketing, Vol. 59,July, pp. 63-74.
75. Stine, R. (1989), "An introduction to bootstrap methods: examples and ideas", Sociological Methods and Research, Vol. 8, pp. 243-91.
76. Tatikonda, M.V. and Montoya-Weiss, M. (2001), "Integrating operations and marketing perspectives ofproduct innovations: the influence of organizations'process factor and capabilities on developmentperformance", Management Science, Vol. 47 No. 1, pp. 151-72.
77. Weitz, B.A., Sujan, H. and Sujan, M. (1986), "Knowledge, motivation, and adaptive behaviour: a framework forimproving selling effectiveness", Journal of Marketing, Vol. 50 No. 4, pp. 174-93.
78. Zaltman, G. (1986), "Knowledge utilization as planned socialchange", in Beal, G., Dissanayake, W. and Konoshima, S.(Eds), Knowledge Generation, Exchange and Utilization,Westview Press, Boulder, CO, pp. 433-62.
79. Zirger, B.J. and Hartley, J.L. (1994), "A conceptual model ofproduct development cycle time", Journal of EngineeringTechnology Management, Vol. 11, pp. 229-51.


## FIGURES

**FIGURE 1: THEORETICAL FRAMEWORK**

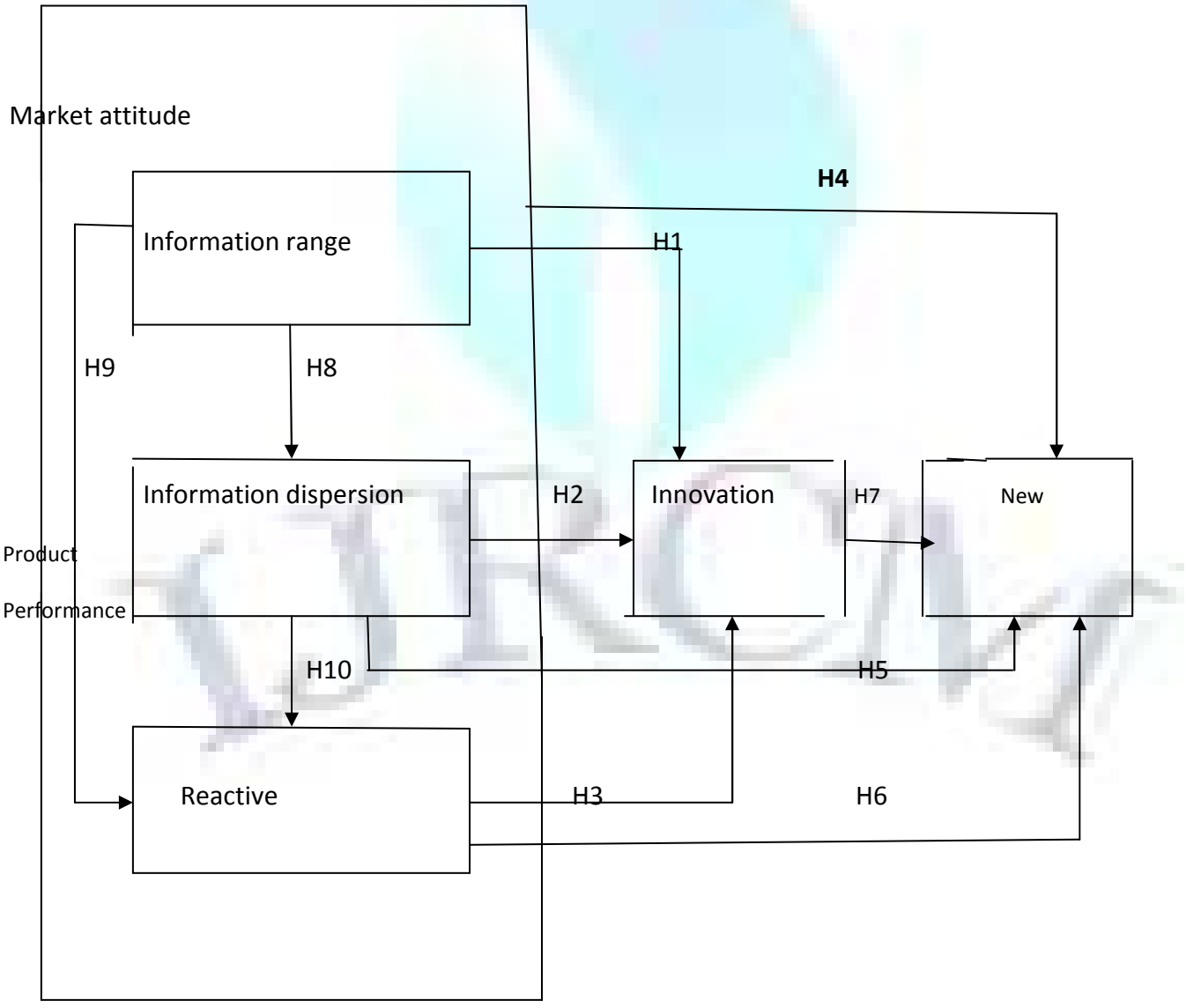
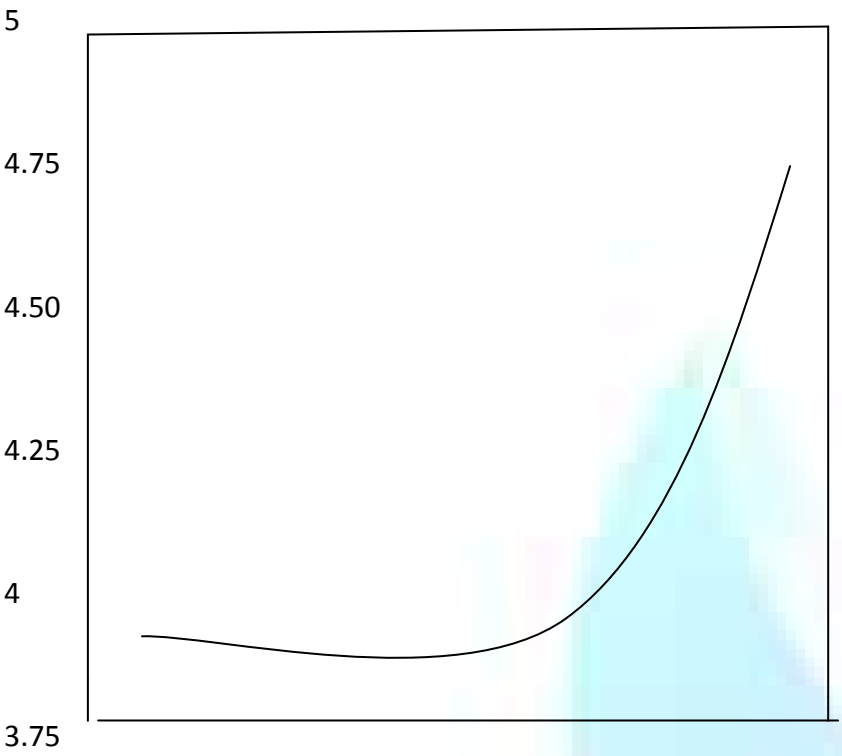


**FIGURE 2: RELATIONSHIP BETWEENREACTIVE TO MARKET INFORMATION AND INNOVATION**




## TABLES

**TABLE I: SAMPLE AND POPULATION DISTRIBUTION**

| | Percentage of firms in the sample | Percentage of firms in the population |
|---|---|---|
| Food | 19.2 | 20.8 |
| Chemical | 16.2 | 20.6 |
| Plastic | 13.6 | 12.5 |
| Electrical equipment | 19.2 | 13.7 |
| Transportation | 13.3 | 13.8 |
| Number of employees | | |
| 25-40 | 14.6 | 18.7 |
| 41-70 | 11.5 | 16.2 |
| 71-100 | 15.3 | 16.6 |
| 101-150 | 11.4 | 13.3 |
| 151-200 | 14.1 | 14.3 |
| >200 | 22.4 | 15.2 |
| Sales, | | |
| < 10.5 | 12.4 | 12.3 |
| 10.5-25.0 | 22.3 | 31.2 |
| 25.1-35.5 | 18.9 | 13.6 |
| 35.6-45.0 | 7.8 | 8.9 |
| 45.1-65.0 | 13.2 | 10.6 |
| >120 | 13.4 | 11.0 |

**TABLE II: DESCRIPTIVE AND PEARSON CORRELATIONS**

| | Mean | SD | Range | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| NP performance | 4.8 | 1.12 | 1.0-7.0 | | | | | | |
| Innovation | 3.76 | 1.07 | 1.2-3.0 | 0.32** | | | | | |
| Intelligence generation | 4.87 | 0.80 | 2.2-1.0 | 0.15** | 0.20** | | | | |
| Intelligence dissemination | 3.90 | 1.12 | 1.2-4.0 | 0.16 * * | 0.25** | 0.55** | | | |
| Responsiveness | 4.97 | 0.90 | 3.1-1.0 | 0.24** | 0.23** | 0.60** | 0.48** | | |
| Firm size | 3.90 | 1.20 | 1.0-1.0 | 0.02 | 0.04 | 0.17** | 0.11* | 0.10* | |
| Competitive strength | 3.18 | 1.29 | 1.0-2.0 | -0.02 | -.011* | 0.01 | 0.01 | 0.01 | 0.05 |

Notes: Significance levels: *p, 0:05; * *p, 0:01

**TABLE III: PATH ANALYSIS RESULTS: STANDARDIZED PARAMETER ESTIMATES**

| | Hypothesized model | | Revised model | |
|---|---|---|---|---|
| Hypothesized relationships | | | | |
| information range →Information dispersion | 0.52 | 0.46, 0.61 * * | 0.53 | 0.43, 0.61 * * |
| information range →reactive | 0.55 | 0.36, 0.53 * * | 0.55 | 0.36, 0.53 * * |
| Information dispersion →reactive | 0.16 | 0.10, 0.25 * * | 0.16 | 0.10, 0.25 * * |
| information range → Innovation | -0.04 | -0.13, 0.09 | | |
| information range → Innovation | 0.00 | -0.10, 0.9 | | |
| Information dispersion → Innovation | 0.14 | 0.04, 0.25 * * | 0.16 | 0.06, 0.26 * * |
| Information dispersion→ Innovation | -0.05 | - 0.15, 0.04 | | |
| reactive → Innovation | 0.13 | 0.04, 0.27 * | 0.13 | 0.04, 0.23 * |
| reactive $^2$→ Innovation | 0.11 | 0.04, 0.20* | 0.10 | 0.04, 0.16 * |
| information range → NP performance | -0.04 | -0.16, 0.07 | | |
| Information dispersion →NP performance | 0.05 | -0.8, 0.15 | | |
| reactive → NP performance | 0.13 | 0.03, 0.26 * | 0.13 | 0.07, 0.23 * |
| Innovation→NP performance | 0.23 | 0.13, 0.33 * * | 0.26 | 0.16, 035 * * |
| Control relationships | | | | |
| Firm size→Information dispersion | 0.06 | -0.03, 0.13 | | |
| Competitive strength→Information dispersion | -0.03 | -0.9, 0.05 | | |
| Firm size→ reactive | 0.01 | -0.04, 0.06 | | |
| Competitive strength→reactive | 0.05 | -0.02, 0.10 | | |
| Firm size→Innovation | -0.02 | -0.10, 0.07 | | |
| Competitive strength→ Innovation | -0.10 | -0.20, 15.04 * | -0.14 | -0.24, 20.03 * |
| Firm size→ NP performance | 0.04 | -0.05, 0.10 | | |
| Competitivestrength→NP performance | -0.03 | -0.10, 0.04 | | |
| $R^2$ of Information dispersion | 0.33 | | 0.32 | |
| $R^2$ of reactive | 0.40 | | 0.39 | |
| $R^2$ of innovation | 0.10 | | 0.9 | |
| $R^2$ of new product performance | 0.13 | | 0.12 | |

Significance levels: *p, 0:05; * *p, 0:01

# REQUEST FOR FEEDBACK

**Dear Readers**

At the very outset, International Journal of Research in Commerce and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail i.e. **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

# ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

## *Our Other Journals*