

# THE STUDY OF INNOVATIVE BEHAVIOR THROUGH THE INTEGRATING MECHANISM AND INFORMATION SHARING BETWEEN MARKETING AND R&D

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## ABSTRACT

The organizational design to integrate the marketing and R&D departments has been a major concern for enterprises to improve their innovative behavior. There are seven constructs included in the integrating mechanism that may enhance quality communication and cooperation for marketing and R&D personnel. This study examines why the integration mechanism affects the information sharing and how the two factors influence the innovative behavior. The model is empirically tested by an industrial survey. We collected 134 valid questionnaires that are answered by the department heads of marketing and R&D in Taiwanese electronic companies.

**Keywords:** Integrating mechanism, Information Sharing, Innovative behavior, Survey

## INTRODUCTION

The importance of good relationship between Marketing and R&D and how to reach the integration are studied by various scholars [1] [2]. The idea of integration is basically to incorporate the consumers' view points into the new products. The former literatures [1] [2] mention that integration mechanism facilitates corporation. The cooperation is built on the mutual understanding that is the result of information exchange and sharing. In this research, it is assumed that the information sharing is the intermediating variable that is a dependent variable of integration mechanism and an independent variable to the innovative behavior. This is a survey research to empirically test the following three hypotheses:

**H1: The integration mechanism has positive effect to the innovative behavior.**

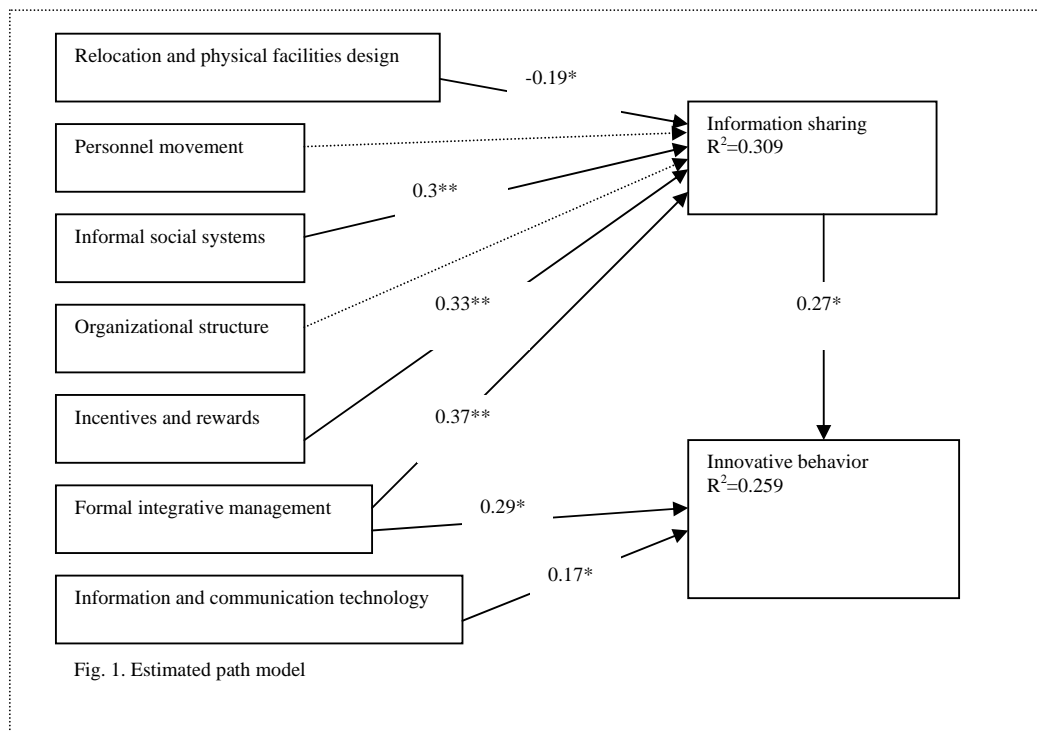
**H2: The information sharing has positive effect to the innovative behavior.**

**H3: The integration mechanism has positive effect to the information sharing**

The research target is on the electronic industry of Taiwan. A random sample of 500 electronic firms was drawn from the companies in Taiwanese stock market. Senior managers of marketing and/or R&D are requested to answer the questionnaire. There are one hundred and thirty four responding questionnaires. The response rate is 28%. The constructs and variables are shown in Figure 1.

## DATA ANALYSES

We use the software LISREL to test the structural equation model. The result is shown in Figure 1. Some of the integration mechanisms have positive effects to the information sharing and innovative behaviors. The information sharing is a significant intervening construct between the integration mechanisms and the innovative behaviors. The model has a good fit, indicated by Chi-square=116.15, df=70, p=0.00044, RMSEA=0.07, GFI=0.9, CFI=0.93.



## CONCLUSION

Our findings show that some of integrating mechanisms have positive effects on information sharing. Among those integrating mechanisms, formal integrative management processes has the greatest association with information sharing. For another variable of integrating mechanisms, ICT has a direct effect to innovative behaviors but no effect on the information sharing. The physical distance between marketing and R&D remains an important factor that negatively affects information sharing. Incentives and rewards are likely to be important factors when companies try to stimulate certain behaviors and attitudes and increase performance. Previous research has not paid much attention to this issue in the area of the marketing—R&D interface. Our study shows that having equal remuneration and career opportunities (questionnaire items of incentives and rewards) for marketing and R&D is positively associated with information sharing and subsequently innovative behavior.

For personnel movement the beta is positive but also not significant. So, if more marketing and R&D employees are involved in job rotation, we do not find a significantly higher level of information sharing. As a possible explanation for the weak relationship, we argue that our operation does not take into account how long the interval is between jobs. [3] shows that information received from people who moved into another position too quickly was perceived as less credible. Another possible explanation has to do with the low average use of this mechanism, which may prevent a significant relationship from emerging in the regression.

The informal social systems positively affect on the information sharing when the use of ICT and cross-functional teams is low. In other words, informal social systems may compensate for the use of ICT and cross-functional teams may provide a setting where informal social meetings are really

necessary. ICT is the only mechanism that has significant positive effects on innovative behavior, because of the creation of better information and new knowledge between two different departments. Electronic companies have a long tradition of investing in ICT. In addition, supply chain management tools are widely used. The role of this mechanism may indicate that ICT not only helps to transfer knowledge between marketing and R&D, but also that it supports the creation of new knowledge within a particular functional area. Our study offers valuable insights with respect to the question of how to organize the Marketing-R&D interface in a way that both functions contribute to their full ability to the success of innovation.

## REFERENCE

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