The Impact of Market Orientation and New Product Marketing Strategy on New Product Performance: The Moderating Effects of Competitive Intensity and Product Innovation

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Abstract

The purpose of this study is to explore the impact of market orientation and new product marketing strategy on new product performance, and the moderating effects of competitive intensity and product innovation. The samples are taken from Taiwan food industry, 224 member companies of the GMP Development Association of Taiwan are investigated, and census is used to collect primary data. A total of 224 questionnaires are distributed, 103 validity questionnaires are collected, and the validity response rate is 46%. Regression analysis and t-test are used to test the hypotheses. The major findings are: (1)The influence of proactive market orientation on emotional marketing strategy is more significance than responsive market orientation. (2) The rational and emotional marketing strategy have a significantly positive impact on achieve rate of sales. (3) The impact of rational and emotional new product marketing strategy on new product performance has not significantly difference. (4)The proactive and responsive market orientation have a significantly positive influence on achieve rate of sales. (5)The influence of proactive and responsive market orientation on new product performance has not significantly difference. (6) Competitive intensity has a significantly positive moderating effect in the impact of proactive market orientation on rational marketing strategy. (7)Product innovation has a significantly positive moderating effect in the influence of new product marketing strategy on new product performance.

Keywords: Market Orientation, New Product Marketing Strategy, New Product Performance, Competitive Intensity, Product Innovation

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Introduction

According to Ministry of Economic Affairs of Taiwan, that the food industry production value from 8.57% in 2007 rise to 12.77% in 2008 and the sales value increased from 7.78% in 2007 to 13.46% in 2008. It shows that the food industry is very important among livelihood industry some more is a very important industry in affecting the employment of domestic workers. As the liberalization growing of Taiwan's economic development after WTO accession and gradually opened up the market and lower tariffs have opening up plenty of food entering to domestic market so that domestic firms face significant competitive pressure. In the process of rapid economic development, Taiwan is facing the loss of rural population, labor shortage, economic restructuring and changes in social values. Economic liberalization, internationalization and a new challenge after another have resulting in many combat unfavorable situations. These external economic and non-economic resistances are undeniable but also the difficulties on the formation of the food business (Lin et al., 2003).

In recent years, research about market orientation and new product performance mostly related to industry products and technology products. The food industry-related research only in the agriculture and food sciences academic research, few of business management scholars have a systematic research and this is the first motivation for this study.

The new product performance is the mainstream in modern marketing research. Many scholars were based on the concepts of market orientation and marketing strategies to explore their impact on new product performances respectively. But so far little research has accounts this two variables and its' dimensions. While enterprises are facing ever-changing competitive environment and shorten of product life cycles, product innovation and competitive intensity of the business environment will be what the impact of new product performance. This is the second motivation of this study.

This study focus on explore the different market orientation facing enterprises, how to use different marketing strategies, improve their market share. And add the competitive intensity and product innovation as a moderating variable, try to explore their moderating effects in the impacts of market orientation and new product marketing strategy on new product performance respectively. The purposes of this study include: (1) Study the impact of market orientation on new product marketing strategy. (2) Explore the effects of new product marketing strategy on new product performance. (3) Examine the influence of market orientation on new product performance. (4) Research the moderating effects of competitive intensity in the influence of market orientation on new products marketing strategy. (5) Study the

moderating effects of product innovation in the impact of new product marketing strategy on new product performance.

Literature Review and Hypotheses Development Market Orientation

Kohli, Jaworski and Kumar (1993) defined market orientation as the right to organize for the current and future customer needs, intelligence gathering and information dissemination to the various departments, but by the whole organization to make an appropriate response to this information. Narver, Slater, and MacLachlan (2004) divided market orientation into two types which is responsive market orientation and proactive market orientation. The former refers to an enterprise trying to find, understand and meet customers' explicit needs; the latter refers to a company trying to find, understand and meet potential customers' needs. Atuchene-Gima, Slater and Olson (2005) proposed "responsive of market orientation" and "proactive of market orientation" as a measure of the classification problem items. A total of 18 questions and the seven points Likert scale was used to measure market orientation, from "very disagree" to "very agree" were used.

New Product Marketing Strategy

Weits (1985) defined marketing strategy as in a given market area, the proper allocation of resources to support enterprises to win competitive advantage. Lin (1993) proposed that marketing strategy can be divided into four ways to research that: (1) Dual-oriented marketing strategy: using rational and emotional product name, easy to remember, and pricing to take into account the cost of service and quality orientation, psychological factors and competitors' prices. (2) Rational marketing strategy: the use of functional demands of a rational position, consider after-sales service, warranties, delivery and installation attached by the product factors. (3) Emotional marketing strategy: the emotional appeal to locate, emphasis on physical product shape, color design, the use of emotional product names, and so on memory, attention to product packaging and labeling. (4) Maintenance marketing strategy: consumers are more concerned about price and quality, it is not suitable to use a lot of marketing techniques, manufacturers can improve product packaging and labeling, give a simple name for remember, consider the quality position and competitor pricing during pricing. Lin (1993) divided marketing strategy into four parts, that is dual-oriented, rational, emotional and low involvement, different product types with different marketing strategy, so the manufacturer's marketing strategy can be divided into five parts which is the choice of target market, product strategy, pricing strategy, channel strategy and marketing strategy. He use a total of 29 questions to measure new product marketing strategy and seven points Likert scale is used to measure.

When the industry lack of competition, the business performance would be better even when companies are not entirely market-driven, the performance will have a more excellent performance (Kohli et al., 1993). By reference to the above literature, the hypothesis 1 of this study can be developed as follow:

H₁₋₁: Proactive market orientation has more significantly impact on rational marketing strategy than responsive market orientation.

H₁₋₂: Proactive market orientation has more significantly impact on emotional marketing strategy than responsive market orientation.

New Product Performance

New product performance was the degree of success of new products (Cooper and Kleinschmidt, 1987; Griffin and Page, 1992); or the financial levels and the results of the competition in the market which was usually reflected in the profit, on market share and return on investment (Li and Calatone, 1998). Atuahene-Gima (1996) advocated two dimensions of innovation performance as the market orientation, the first dimension is related to organization get into the market with a specific innovation activities in sales, profit and market share performance; second dimension is the project of impact performance used to measure the innovation results or benefits of a company, such as providing cost-effective or to strengthen the company's other products, services, sales and profitability.

Griffin and Page (1993) integrated the relevant literature and practical achievements of company's performance, identify the most commonly used indicators to measure new product performance that can be summarized into five dimensions: (1) the customer: such as market share and customer satisfaction; (2) financial: such as profit objectives and profit margins; (3) procedure: such as technical performance, the ability to timely completion of new products; (4) products: such as rate of product success and failure and the proportion of new product sales; (5) proposal: such as new product development plans to achieve the desired goals.

Lin (1993) pointed out that high rational/low emotional product, if company use higher rational marketing strategy, the better product innovation performance will be. In research the type of consumer, innovation and new product marketing strategy, Lin (1993) found that low rational/high emotional product, if company use higher emotional marketing strategy, the better performance of innovation product will be. Greenley (1986), Pearce et al. (1987) pointed out that there has a positive relation between marketing strategy and performance. By reference to the above literature, the hypothesis 2 of this study can be developed as follow:

H₂₋₁: Rational marketing strategy has a significantly positive impact on the achieve rate of sales.

H₂₋₂: Emotional marketing strategy has a significant positive impact on the

achieve rate of sales.

H₂₋₃: Rational marketing strategy has more significantly positive impact on the achieve rate of sales than emotional marketing strategy.

In their study of causes and consequences of market orientation, Jaworski et al. (1993) found that market orientation has positive related with business performance. In their empirical study of the influence of market orientation on new product performance, Atuathene-Gima (1995) found that market orientation has a significantly positive related on new product performance. In his studied of frozen food about the effect of market orientation on new product performance, Chang (2004) indicated that market orientation does affect new product performance. By reference to the above literature, the hypothesis 3 of this study can be developed as follow:

- H₃₋₁: Responsive market orientation has a significant positive impact on the achieve rate of sales.
- H₃₋₂: Proactive market orientation has a significant positive impact on the achieve rate of sales.
- H₃₋₃: Proactive market orientation has more significantly positive impact on the achieve rate of sales than responsive market orientation.

Competitive Intensity

Competitive intensity or the degree of market competition usually refers to the price war, the frequency of promotions, levels of new competitive activity introduced by companies (Slater and Narver, 1994; Fein and Anderson, 1997; Jaworski et al. (1993). In study competitive intensity, Miller (1987) proposed three dimensions: (1) the predictability of company's key competitors' marketing activity; (2) the hostility of a company's key competitors; (3) the breadth of a company's key competitors' activities. Jaworski et al. (1993) suggested the environmental factors by three dimensions as market turbulence, competitive intensity and technological turbulence composed. The market turbulence is to measure the composition and preferences of the organizational customer. Competitive intensity is to measure the competitive strength of competitor behavior, resources and capabilities of differentiation. Technology turbulence is to measure the situation of technological change. Seven point of Liker scale was used to measure the variables and its' dimensions (1= very dissatisfied, 7= very satisfied).

In their empirical study, Kumar, Subramanian and Yauger (1998) pointed out that the higher the degree of change in market competition, market orientation and new product performance has a more significantly positive related. Jaworski et al. (1993) and Slater and Narver (1994) found that competitive intensity is one of the moderating factors that business deal with competitors and new product marketing strategy. By reference to the above literature, the hypothesis 4 of this study can be developed as

follow:

- H_{4-1} : Competitive intensity has a moderating effect in the impact of proactive marketing orientation on rational marketing strategy.
- H₄₋₂: Competitive intensity has a moderating effect in the impact of proactive marketing orientation on emotional marketing strategy.
- H₄₋₃: Competitive intensity has a moderating effect in the impact of responsive marketing orientation on rational marketing strategy.
- H₄₋₄: Competitive intensity has a moderating effect in the impact of responsive marketing orientation on emotional marketing strategy.

Product Innovation

Lai et al. (1997) defined product innovation as a concept that is relatively certain products, companies, industries or countries as long as different from its original state and can serve as product innovation. Youn and Lilien (1985) divided product innovation into two types which is original type of new products and modified new product. Original type of new products using new technologies to develop new products, it is only from the technology breakthroughs; modifies product is a part of the new product line extensions or product improvements are derived from new products. Song and Montoya-Weiss (1998) divided product innovation into two types of new products which are truly new product and modified product. Truly new product is the technology the industry has never been used, and will result in industry or industry changes impact on the market and this is a new product. The improved new product is the transformation of existing products, refining or strengthening. A total of seven questions to measure by Likert 10 point scales were used to measure the product innovation.

Lin et al. (2008) researched active and passive market orientation of new product development and performance. He investigated the moderating effect of the degree of product innovation, and found that degree of market orientation has a significantly moderating effect in the impact of market orientation on new product marketing strategy and new product performance. Narver et al. (2004) studied the influence of market orientation on new product performance base on different level of product innovation. By reference to the above literature, the hypothesis 5 of this study can be developed as follow:

- H₅₋₁: Product innovation has a moderating effect in the impact of rational marketing strategy on the achieve rate of sales.
- H₅₋₂: Product innovation has a moderating effect in the impact of emotional marketing strategy on the achieve rate of sales.

Research Methods

Conceptual Framework

Base on the research motivation and research purposes of this study and refer to the literature proposed by Kohli et al. (1993), Weitz (1985), Atuahene-Gima (1996), Slater and Narver (1994), Fein and Anderson (1997), Jaworski and Kohli (1993) and Lai et al. (1997), this study use five research variables which are market orientation, new product marketing strategy, new product performance, competitive intensity and product innovation. The market orientation in this study is divided into two dimensions of which are proactive and responsive market orientation. For new product marketing strategy, this study divided into two dimensions which are rational and emotional of marketing strategy. For new product performance, this study chose the achieve rate of sales as a measurement.

By refer to the study that Jaworski and Kohli (1990) proposed, about the impact of market orientation on new product marketing strategy. Refer to Lin (1993) about the influence of new product marketing strategy on new product performance. By refer to Jaworski and Kohli (1993) and Slater and Narver (1994), about the moderating effects of competitive intensity in the impact of market orientation on new products marketing strategy. And by refer to Lin et al. (2008), the moderating effects of product innovation in the new product marketing strategy on new product performance. A conceptual framework for this study is developed as shown in Figure 1.



Figure 1 Conceptual Framework

Variables definition and measurement

This study refers to the point of view of Kohli and Jaworski (1990), Rueskert (1992), Narver and Slater (1990), the market orientation is defined as organization collect competitors, customers and internal functional coordination of the various market intelligence and proper response in order to achieve company goals. By refers to the view of Atuchene-Gima et al. (2005) and Narver et al.(2004), market orientation is divided into responsive and proactive market orientation. Responsive market orientation is defined as an orientation of getting market intelligence from company's existing and potential customer, summarize and share with internal functions, then make some proper response in order to meet the customer needs.

Proactive market orientation is defined as an orientation that leading company to think, discover, understand and meet the future needs of potential customers in order to let the customer understand the strategic orientation of marketing activities. A seven points of Likert scale is used to measure market orientation.

This study refers to the point of view of Weitz (1985), Slater and Olson (2001), Varadarjan and Clar (1994), the new product marketing strategy is defined as the company use marketing skills to achieve the objectives of its new product sales in line with the value of customer demand. Refer to the point of view of Lin (1993), new product marketing strategy is divided into rational and emotional marketing strategy. Rational marketing strategy is defined as the functional demands of rational position by using rational and functional advertising. Emotional marketing strategy is defined as emotional appeal of the product positional and the use of emotional and psychological factors of advertising. A seven point of Likert scale is used to measure new product marketing strategy.

This study refer to the point of view of Cooper and Kleinschmidt (1987), Griffin and Page (1992), Li and Calantone (1998), Cooper et al. (1994) and Moorman and Miner (1997), new product performance is defined as the assessment results of new products competition in the market. New product performance indicators by refer to Griffin and Page (1993), Langerak, Hutlink and Robben (2004) and the companies themselves can master the new product performance evaluation indicators, this study chose achieve rate of sales to measure new product performance. A seven point of Likert scale is used to measure new product performance.

This study refers to the discussion of Slater and Narver (1994), Fein and Anderson (1997), Jaworski and Kohli (1993), Grewal and Tansuhaj (2001) and Gatignon (1984), competitive intensity is defined as company face competition on the market where the company of alternative similar products and caused the level of competition. Refer to Jaworski and Kohli (1993) a seven point of Likert scale is used to measure competitive intensity.

By refers to Xu (1983), Lai et al. (1997) and Seetoo (1985), the product innovation is defined as the use of new technology or innovation, a new concept invented to meet the extent of unmet needs. Refers to the study of Song and Montoya-Weiss (1998) and Kleinschmidt and Cooper (1991), a seven point of Likert scale is used to measure product innovation.

Data Collection and Analysis Methods

The census method is used in this study to collect primary data, and a total of 224 member companies of Taiwan Food GMP Development Association are investigated. The questionnaires are distributed by mail and E-Mail and 103 validity questionnaires are collected, the validity response rate is 46%.

This study use SPSS Statistical software for data analysis. The description statistic is used to understand the central tendency and distribution of the subject in the various dimensions. For reliability analysis, Conbanch's α value is used to analyze the internal consistency of the questionnaire. Factor analysis is used to test content validity and construct validity. Correlation analysis is used to explore whether the significant correlation between variables, and finally the regression analysis and t-test are used to test the hypothesis.

Research Result

Sample Descriptions

Based on the sample data analysis showed that the companies did not set up factories at mainland China (71.8%) are the most. Companies that have exported their products to overseas accounted for 77.7%. Company's capital less than NT\$80 million (30.1%) are the most and the total number of employees of the companies are mostly from 101 to 300 people (30.1%) for the total number of major companies.

The Reliability and Validity Analysis

In this study, the result of variables and their dimensions of reliability analysis of Cronbachs' α values are shown in Table 1. Except the Cronbachs' α value of competitive intensity is 0.670, the others are larger than 0.7, the reliability of the questionnaire used in this study is acceptable. It means there have a high level of confidence that the questionnaire used in this study has internal consistency.

Variables Dimensions Ouestion No. α for Dimensions α for Variables Market orientation Responsive 0.945 1~10 0.945 Proactive 11~18 0.893 New 0.926 product Rational 19~25 0.868 marketing strategy **Emotional** 26~32 0.904 New product performance 33~36 0.958 Competitive Intensity 37~42 0.670 Product Innovation 43~47 0.913

Table 1 Reliability Analysis

Factor analysis is used to examine the validity of the questionnaire, the factor loading of each question are greater than 0.5, and the eigenvalues are larger than 1. Each dimensions explained variance are greater than 40% except proactive market orientation and competitive intensity, indicating that the questionnaire used in this study meet the requirement of content validity and also have good construct validity.

The Correlation Analysis

In this study, Pearson correlation analysis is used to identify the variables associated with the dimensions. The result of correlation analysis is showed in Table 2.

From the data showed in Table 2, we can see two dimensions of the most relevant are the market orientation and new product marketing strategy (correlation coefficient is 0.740). The correlation coefficient matrix shows in addition to the competitive intensity and new product performance, both two dimensions market orientation and new product performance showed a weak correlation. Both the two dimensions are all significantly positive correlation and the correlation between the independent variables showing no negative effects.

Table 2 Pearson Correlation Analysis of Variables

Dependent Variables	1	2	3	4	5
1. Market Orientation	1				
2. New Product Marketing Strategy	0.740**	1			
3. New Product Performance	0.059	0.129	1		
4. Competitive Intensity	0.302**	0.283**	0.059	1	
5. Product Innovation	0.393**	0.364**	0.187	0.305**	1

Note:*: p < 0.05; **: p < 0.01; ***: p < 0.001

Hypothesis Testing

The impact of market orientation on new product marketing strategy

The result of regression analysis of the impact of market orientation on new product marketing strategy is summarized as Table 3 to Table 5. Tables 3 and 4 based on two dimensions of market orientation (responsive and proactive) as independent variables, two dimensions of new product marketing strategy (rational and emotional) as dependent variable, then multiple regression analysis is used to test the impact of market orientation on new product marketing strategy respectively. Table 5 and Table 6 are used to compare the difference of their impact. From the results of test data shows that the hypothesis 1-1 is not supported but hypothesis 1-2 is supported.

Table 3 Regression analysis of the impact of market orientation on rational marketing strategy

Dependent Variable	Independent Variables (Market Orientation)	β	t	р		
Rational	Responsive	0.336	3.596	0.001***		
Marketing Strategy	Proactive	0.460	5.238	0.000***		
R^2 =0.543; $\triangle R^2$ =0.534;N=103;F=59.333;D-W=1.906;VIF=1.810;P=0.000***						

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

Table 4 Regression analysis of the impact of market orientation on emotional marketing strategy

Dependent Variable	Independent Variables (Market Orientation)	β	t	p	
Emotional Marketing	Responsive	0.181	1.748	0.083*	
Strategy	Proactive	0.564	5.791	0.000**	
R^2 =0.476; $\triangle R^2$ =0.465; N=103; F=45.376; D-W=1.979; VIF=1.810; P=0.000***					

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

Table 5 Comparison of the impact of market orientation on rational marketing strategy

Dependent Variable	Independent variable (Rational Marketing Strategies)
Proactive Market Orientation	0.755
Responsive Market Orientation	0.755

Table 6 Comparison of the impact of market orientation on emotional marketing strategy

Dependent Variable	Independent Variable (Emotional Marketing Strategy)
Proactive Market Orientation	1.749
Responsive Market Orientation	

The impact of new product marketing strategy on new product performance

The result of regression analysis of the impact of new product marketing strategy on new product performance is shown in Table 7 and Table 8. Table 7 take 2 dimensions (rational and emotional) of new product marketing strategy as independent variable and the achieve rate of sales as dependent variable, then multiple regression analysis is used to test the impact of new product marketing strategy on the achieve rate of sales. Table 8 is used to compare the difference of the impact of rational marketing strategy and emotional marketing strategy on the achieve rate of sales. The result of test show the hypothesis 2-1 and hypothesis 2-2 are supported, but hypothesis 2-3 is not supported.

Table 7 Regression analysis of the impact of new product marketing strategy on the achieve rate of sales

Dependent Variable	Independent Variable (New product marketing strategy)	β	t	p
Achieve rate of sales	Rational marketing strategy	0.403	2.174	0.032**
	Emotional marketing strategy	0.387	2.158	0.033**

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R^2 = 0.052; \triangle R^2 = 0.033; N = 103; F = 2.727; D - W = 1.767; P = 0.070*
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Note: * : p < 0.1 ; ** p < 0.05 ; *** : p < 0.01

Table 8 Comparison of the impact of rational and emotional marketing strategy on the achieve rate of sales

Dependent Variable	Achieve Rate of Sales (Independent Variable)
Rational Marketing Strategy	0.022
Emotional Marketing Strategy	0.033

The Influence of market orientation on new product performance

The result of regression analysis of the impact of market orientation on new product performance is shown in Table 9 and Table 10. Table 9 take 2 dimensions (responsive and proactive) of market orientation as independent variable and the achieve rate of sales as dependent variable, then multiple regression analysis is used to test the impact of market orientation on the achieve rate of sales. Table 10 is used to compare the difference of responsive market orientation and proactive market orientation on the achieve rate of sales. The result of test show the hypothesis 3-1 and hypothesis 3-2 are supported, but hypothesis 3-3 is not supported.

Table 9 Regression analysis of the impact of market orientation on the achieve rate of sales

Dependent Variable	Independent Variable (Market Orientation)	β	t	p	
Achieve Rate of Sales	,	0.414	4.567	0.000***	
	Responsive Market Orientation	0.248	2.577	0.011**	
$R^2 = 0.173$; $\overline{R}^2 = 0.156$; $N = 103$; $F = 10.431$; $D - W = 1.769$; $VIF = 1.810$; $P = 0.000***$					

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

Table 10 Comparison of the impact of proactive and responsive market orientation on the achieve rate of sales

Dependent Variable	Independent Variable (Achieve Rate of Sales)
Proactive Market Orientation	0.112
Responsive Market Orientation	0.112

The moderating effect of competitive intensity in the impact of market orientation on new product marketing strategy

The result of regression analysis of moderating effects of competitive intensity in the impact of market orientation on new product marketing strategy is summarized as shown in Table 11 and Table 14. The interaction of the dimensions of market orientation (responsive and proactive) and competitive intensity is independent variables, the dimensions of the new product marketing strategy (rational and emotional) is dependent variable. The results show the hypothesis 4-1 is supported, but hypothesis 4-2, hypothesis 4-3 and hypothesis 4-4 is not supported.

Table 11 Regression analysis of moderating effects of competitive intensity in the impact of proactive market orientation on rational marketing strategy

Dependent Variable	Independent Variable	β	t	p		
	Proactive Market Orientation	0.502	3.953	0.000***		
Marketing Strategy	Proactive Market Orientation × Competitive Intensity	0.233	1.836	0.069*		
R^2 =0.500; $\triangle R^2$ = 0.490; N=103; F=50.077; D—W=1.908; VIF=3.225; P=0.000***						

Note: * : p < 0.1; **: p < 0.05; ***: p < 0.01

Table 12 Regression analysis of moderating effects of competitive intensity in the impact of proactive market orientation on emotional marketing strategy

Dependent Variable	Independent Variable	β	t	р	
Emotional	Proactive Market Orientation	0.582	4.425	0.000***	
Marketing Strategy	Proactive Market Orientation ×	0.116	0.882	0.380	
	Competitive Intensity				
R^2 =0.464; $\triangle R^2$ = 0.453; N=103; F=41.058; D-W=2.003; VIF=3.225; P=0.000***					

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

Table 13 Regression analysis of moderating effects of competitive intensity in the impact of responsive market orientation on rational marketing strategy

Dependent Variable	Independent Variable	β	t	p
	Responsive Market Orientation	0.486	3.760	0.000***
Rational Marketing Strategy	Responsive Market Orientation × Competitive Intensity	0.197	1.525	0.130

 R^2 =0.430; $\triangle R^2$ = 0.419; N=103; F=37.793; D-W=1.877; VIF=2.933; P=0.000***

Note: * : p < 0.1; **: p < 0.05; ***: p < 0.01

Table 14 Regression analysis of moderating effects of competitive intensity in the impact of responsive market orientation on emotional marketing strategy

Dependent Variable	Independent Variable	β	t	p			
Emotional	Responsive Market Orientation	0.463	3.239	0.002***			
	Responsive Market Orientation × Competitive Intensity	0.104	0.731	0.466			
R^2 =0.304; $\triangle R^2$ = 0.290; N=103; F=21.804; D-W=1.932; VIF=2.933; P=0.000***							

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

The moderating effect of product innovation in the impact of new product marketing strategy on new product performance

The result of regression analysis of moderating effects of product innovation in the impact of new product marketing strategy on the achieve rate of sales is summarized as shown in Table 15 and Table 16. The interaction of the dimensions of new product marketing strategy (rational and emotional) and product innovation is independent variable, the achieve rate of sales is dependent variable. The results show the hypothesis 5-1 and hypothesis 5-2 is supported.

Table 15 Regression analysis of moderating effects of product innovation in the impact of rational marketing strategy on the achieve rate of sales

Dependent Variable	Independent Variable	β	t	p			
Achieve Rate of Sales	Rational Marketing Strategy	-0.002	- 0.012	0.990			
	Product Innovation × Rational	0.345	2.712	0.019**			
	Marketing Strategy						
R^2 =0.096; $\triangle R^2$ = 0.078; N=103; F=5.318; D—W=1.885; VIF=1.718; P=0.006***							

Note: * : p < 0.1; ** : p < 0.05; *** : p < 0.01

Table 16 Regression analysis of moderating effects of product innovation in the impact of emotional marketing strategy on the achieve rate of sales

Dependent Variable	Independent Variable	β	t	p
Achieve Rate of Sales	Emotional Marketing Strategy	0.014	0.111	0.912
	Product Innovation × Emotional	0.303	2.436	0.017**
	Marketing Strategy			

 R^2 =0.098; $\triangle R^2$ =0.080; N=103; F=5.410; D-W=1.863; VIF=1.718; P=0.006***

Note: * : p < 0.1; ** : p < 0.05; *** : p < $\overline{0.01}$

Conclusions and Suggestions

Conclusions

The major finding of this study are list as follow: (1)The influence of proactive market orientation on emotional marketing strategy is more significance than responsive market orientation. (2)The rational and emotional marketing strategy have a significantly positive impact on achieve rate of sales. (3) The impact of rational and emotional new product marketing strategy on new product performance has not significantly difference. (4)The proactive and responsive market orientation have a significantly positive influence on achieve rate of sales. (5)The influence of proactive and responsive market orientation on new product performance has not significantly difference. (6) Competitive intensity has a significantly positive moderating effect in the impact of proactive market orientation on rational marketing strategy. (7)Product innovation has a significantly positive moderating effect in the influence of new product marketing strategy on new product performance.

Theoretical Implications

Verfified the importance of proactive market orientation. The results of this empirical study verified that the food industry manufacturer adopts proactive market orientation will have more significantly impact on emotional marketing strategy than responsive market orientation. This study verified once again that new product marketing strategy is an antecedent variable of new product performance. We confirmed that both rational and emotional marketing strategies for new products have a significantly positive impact on new product performance. This study also verified the market orientation is an antecedent variable of new product performance. We explore some factors that past scholars have ignores, competitive intensity faced by company is used as a starting point to explore different moderating effect level of market orientation on new product marketing strategy.

Examined the importance of the moderating effect of competitive intensity. This study found that competitive intensity has a moderating effect in the influence of proactive market orientation on rational marketing strategy. This important finding would fill some blanks for previous study. Product innovation will do have a moderating effect in the impact of new product marketing strategy on new product performance. For product innovation, most of the past research emphasize in the technology industry, in this empirical research in food industry, product innovation placed as a moderating variable, that provides valuable theory reference for future study.

Pratical Implications

Proven the importance of proactive market orientation. This study demonstrated the impact of proactive market orientation on new product marketing strategy more significantly than responsive market orientation. Hence, in order to avoid providing two products that have no significant, company should strengthen themselves for the care of the sensitivity of the potential demand and focused their development on the new idea on identification of customers demand and become the first mover advantage in the market.

Identified the importance of the moderating effects of product innovation. Research regarding new product innovation in the past mostly emphasis on the technology industry. Food industry is a very important livelihood industry in Taiwan, the important and it's influence in the market should not be underestimated. This study using product innovation as a moderating variable and verified it's moderating effect, this is the main difference and contribution of this study from previous study. For businesses, products not only should meet the needs of existing customers but also continue to emphasize new product development, process innovation in order to maintain the market performance of old and new products. As Drucker (1985) pointed out that innovation is a necessary way for business, only innovation can make profit.

Limitations

The limitations of this study are list as follow: (1) The explaination power of some models are relative low, that make some limitations of the appropriateness of the conclusions. (2) The limitations for data collection. Mail and E-mail are used to collect primary data, due to there is no personal assisted in answering the questionnaire so it will inevitably lead to incomplete status of the questionnaires. (3) The limitations for new product performance measurement. This study use achieve rate of sales which firms are more able to control as a measurement, but there are a lot of indicators to measure new product performance, so there may be far from embracing restrictions. (4) External validaity limitations, this study focus on examined the member companies of Taiwan Food GMP Developement Association, although it obtain definitely conclusions but results will lack of external validaity and can not be inferred to other non-certified products.

Suggestions

Suggestions for Food Industry

More emphasis on proactive market orientation and emotional appeal: This study demonstrated that the impact of proactive market orientation on emotional marketing strategy has a more significantly than responsive market orientation. This finding displays two key messages for food industry, first is to strengthen the potential customer needs, develop more in line with customer needs, to lead the future trend of innovative consumer products. Second is to market the innovative product in the way of emotional appeal, through the easy way to remember of advertisement performing, closer to the consumer's lifestyle and let the customers interested in the product and

increase purchase attention. More emphasis on product innovation: This study demontstrated that product innovation has a significantly positive moderating effect in the impact of new product marketing strategy on new product performance. Comusmer behavior is developed through quite a long time. Once the formation of a behavior, it is not easy to change. Therefore, the food industry developing innovative products for customers unmet needs would quickly win the market. The companies wish to be the first in the market have to seek and develop innovative products to meet consumer needs.

Suggestions for future study

Strengthen the external validity: This study takes the member companies of Taiwan Food GMP Development Association as a research object, it is not on behalf of other food certification or other member companies of food industry associations, different food certification or different products in the food industry associations should have their different characteristics, therefore we recommended that researchers can increase the certification and other food products or other food industry associations. Research other variable dimension or adding other variables: Different research purposes, each of the scope of variables and their dimensions are not the same, future researchers can target different dimensions or by adding other variables make the study more complete. Increase the impact of the effect between variables: Product innovation in this study had been confirmed has a positive moderating effect, but whether a direct impact on the same technology industry effects are not available, it is suggested the future researchers that product innovation can be explored in depth the performance of new products to make a direct impact on research results more comprehensive.

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