CHAPTER 4

ANTECEDENTS FOR RURAL ENTERPRISES TO IMPLEMENT MARKET ORIENTATION MANAGEMENT

The previous introduction in Chapter 3 shows the historical rural enterprises development in Henan province as well as the trend in whole P. R. China. The current stage is so called "specification and reorganization stage (1996-present)", which indicated that nowadays RE development is in a new and challenging period. In fact, one of the big problems existing in nowadays RE development is management, so the following will focus on the analysis of the focal point of this study, the market orientation management analysis of rural enterprises in Henan province. Firstly, the sample process and the characteristics of the sampled rural enterprises is explained as follows.

4.1 General Characteristics of the Sampled Enterprises and Informants

A total of 54 samples were drawn from Rural Enterprise Administration (REA) of Henan province to represent the REs of the whole province. An anonymous and confidential conduct was employed in the sampling process. First, the informal interviews were done with local academic experts, and relevant officers were visited to refine the questionnaire; and personal interviews were done with several managers to pretest the questionnaire; then, based on the responses to achieve a clearly identified, finally used questionnaire. In the process of interviewing, a total of 11 enterprises were interviewed individually by the researchers because of the inconvenience caused by far distance from each enterprise and the other. Second, a copy of the questionnaire, together with a personalized letter and a returned envelope, were committed to the students who were hired to help investigate the remaining enterprises. Table 4.1 shows the whole sampling process and the characteristics of

the sampled rural enterprises.

Table 4.1 General characteristics of sampled rural enterprises

RE Type	Number of RE	Fixed asset (10,000CNY)	Employee	Proportion in total samples
Agriculture related	*32*			*78.1%*
1. Agro-mechanical manufacturer	1		256	
2. Agri-product processing	2	7000	700 (600-800)	
3. Brewery	7	2338 (240-8000)	450 (54-1000)	
4. Winery	3	1602 (800-3000)	1517 (250-4000)	
5. Chemical refinery	2	62.5	110	
Xylose (main product)	1	45	53	
Alcohol (main product)	1	80	177	
6. Chicken Farm	3	1013 (780-1459)	263 (113-536)	
7. Food processing	8			
Deepfreezing food	1	37	74	
Beverage	1	172	240	
Snack food	1		980	
Grain food processing	1	2700	300	
Other	2	8250 (1500-15000)	775 (150-1400)	
8. Feed processing	2	2094 (1560-5364)	710 (135-1286)	
9. Fertilizer manufacturer	1	1000	520	
10. Flour Mill	1	4000	1500	
11. Milk processing	1	280	270	
12. Packaging-paper making	2	50	85 (67-102)	
13. Spinnery	1	700	158	

Natural resource related	*3*			*7.3%*
1. Pharmacy (Chinese Medicine)	1	2493	364	
2. Timber processing	2	805	192	
		(800-810)	(159-225)	
Urban industry related	*2*			*4.9%*
1. Printing	1	470	70	
2. Shoe making	1	16000	2032	
Service related	*4*			*9.7%*
1. Co-operative (commercial)	2	4335	743	
		(2670-6000)	(625-860)	
2. Furniture making	2	1545	197	
		(90-3000)	(35-360)	

Source: March-May, 1999 survey.

As shown in Table 4.1, RE type, proportion in each type, and size (in terms of both employee and fixed assets) are displayed in details. Forty-one samples are qualified for this study. Among the samples, 32 REs are *agriculture related* (accounts for 78.1% of total samples), including one agro-mechanical manufacture factory, two agro-product processing factories, seven breweries, three wineries, two chemical refineries, three chicken farms, eight food processing factories, two feed processing factories, one fertilizer manufacturer, one flour mill, one packaging-paper maker, and one spinnery. Three REs are *natural resource related* (accounts for 7.9 percent of total samples), including one pharmacy, and two timber processing factories. Two REs are *urban industry related* (accounts for 4.9 percent of total samples), including one printing factory and one shoe making factory. Four REs are *service related* (accounts for 9.7 percent of total samples), including two commercial cooperatives and two furniture making factories.

Table 4.2 lists the informants' personal characteristics, such as age, education, work experience, etc. The purpose of showing Tables 4.1 and 4.2 is to give a sky-view of the surveyed RE samples, and to verify the qualification of the surveyed

informants in order to testify the effectiveness of the returned questionnaire.

The average employee number of sampled RE is *531*; the average fixed asset original value is *2.6 million CNY.* As of the personal characteristics of the informants, except *3 workers,* all the others are at the key positions, and *80%* (32/40) of them have high education degree (above vocational college), their average working experience in RE is *5.5 years,* and their average age is *34.1 year-old.* Above numbers proved that the samples used in this study are valid.

Table 4.2 Reliability of the survey information

RE by Industry Unit	Found time (A.D.)	Employee (Person)	F.A.(Org) (10,000 CNY)	Position	Expe-rience (Year)	Edu-cation	Age (Year)
Total Sample size	37	41	35	40	40	40	40
--Data Missing	4	0	6	1	1	1	1
RE Key Statistics	1986	531	2.6 mln CNY				
Informant personal information	F&A Dept. Mnger 7 F&A Dept. Clerk 3 Office Director 3 Prod. Dept. Mnger 5		Gen. (V.) Manger 7 Mkt. Dept. Mnger 10 Mkt. Dept. Clerk 2 Worker only 3		5.5	>VC:32 <HS:8	34.1

Note:

F.A.(org) Fixed asset original value

>VC Education degree higher than Vocational School, including Bachelor degree

<HS Education degree lower than High School, including Middle School.

Source: March-May, 1999 Survey

4.2 Description of Sampled Rural Enterprises

4.2.1 The Organizational Structure of Rural Enterprises

In order to ensure that the readers understand the precondition analyses in the next part, the author explains some basic situation of present RE's organizational development in this section.

By ownership rural enterprises in Henan province can be marked off two kinds: first, *village and town ownership enterprises*; second, private ownership including *individual farmer enterprises, farmer group enterprises, and farmer co-operative enterprises.*

The first kind of rural enterprises, village and town ownership enterprises are usually larger enterprises, mostly with formal organizational structure. The larger the business, the more complex the organizational structure. However, due to the restriction of the RE development, the organizational structures of most rural enterprises are (1) *line organization,* and (2) *line and staff organization, a few of the former are functional organization.*

While most of the second kind of rural enterprises, private enterprises are smaller enterprises, with informal or semi-formal organizational structure. Theoretically, *line organization* is ideal for smaller business. In fact, the organizational structures of most private enterprises are *line organization,* of course some exceptions exist, a few of the private enterprises have developed into the larger ones and have more complex organizational structure.

4.2.2 Management system of rural enterprises

Since the sample includes 19 different industries. The business performance of each is very different. There must be many factors, either external or internal, which influence the operation of these industries. In this study, internal factors are focused because they are easier to be controlled compared with the overall external business environment.

Then the problem is how to distinguish those key factors, which may have strong effect on the business performance of the industries, from those internal factors. These factors will affect the business performance. Only after we find the key factors, we can know how to improve the business performance of different industries.

Of course, among these factors some are difficult to be changed in a short period, such as the out-of-date machinery, lack of investment and poor infrastructure. But what can be changed and improved is the managerial method, the administrative philosophy of the managers.

The commercial economy developed in China's vast rural areas and agriculture began to shift from small-scale production to large-scale commercial production and from traditional to modern farming methods. These all imply to the REs that facing to the market and satisfy the market is the most important thing in their administration. Evidences prove that the one who can change his managerial method and become more market oriented might have more chance to be success. This study will find the relationship between market orientation and business performance and also what decide the formation of market orientation.

In order to understand what kinds of factors are important and why they are

not all the same important in every industry. We need to understand the organizational structures of the sampled REs.

In this study, the size of each RE is very different, from very small to quite large. In order to make it easy to understand, we divide the sample into two groups, as mentioned in last section, the smaller and the bigger groups. Normally, most of the bigger REs are village and town ownership enterprises and most of the smaller REs are private ownership.

The following charts show the organizational structures of both groups:

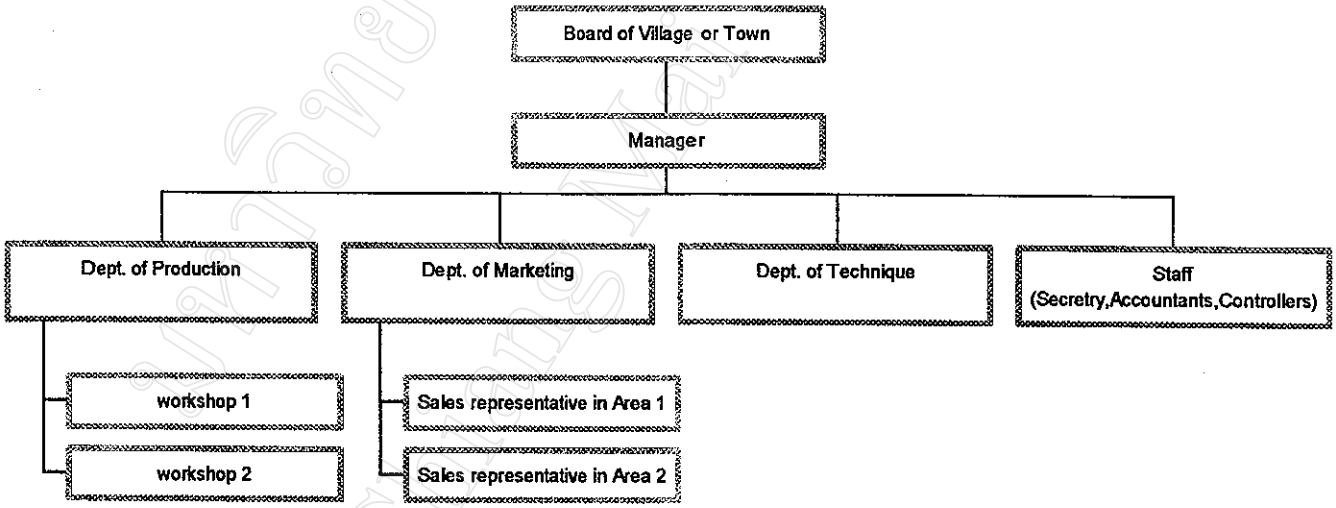

Figure 4.1 Common organizational structure of bigger sized REs

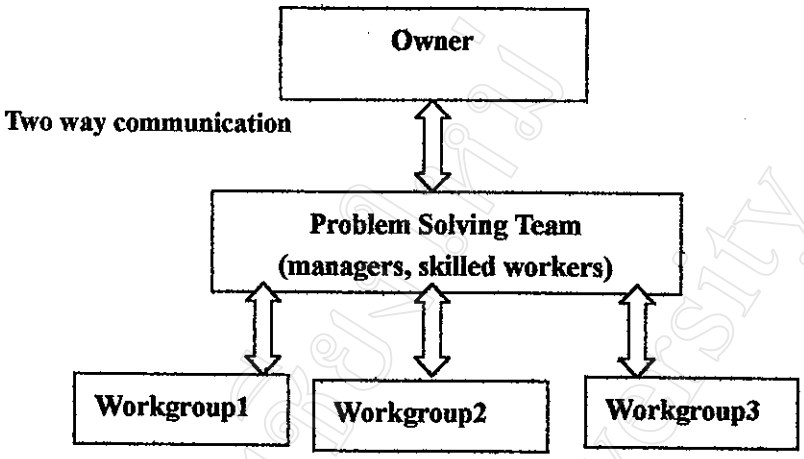

Figure 4.2 Organizational structure of the smaller REs

4.2.2.1 Management system in the bigger REs

In the bigger industries, the structure is quite complex, thus make the whole management system very complex too. As we already know, most of the bigger industries are owned by the village or the town. It functions as an attachment to some superior units, and the managers are supervised by the leaders from the village or from other upper management levels, such as: villager leaders, the head of counties, etc.

Getting used to the planned economy, these managers are used to follow the assigned tasks by the superior management. Doing something against the government will threaten their positions. Under such situation, the decision made by the general managers is normally very conservative.

Further more, most of the bigger REs follow the organizational structure of the state-owned enterprises which normally have formal structure. But these REs just imitate the structure, their managerial methods are still the old ones.

With such a huge body, the managers who are normally named by the superior leader, can not get the updated information due to the poor communication among the departments. Lacking of communication among the departments will definitely cause internal conflicts. The central control needs everybody to report to the general manager, thus cause the decision making very slow. One can not always make good decision, any wrong decision will cause the conflicts among different work units more serious.

The interdepartmental conflicts often occur, although the managers know they should be market-oriented, they could not become real market oriented due to the unbalanced internal management.

Due to the problems from the enterprises themselves, they like to steer away from risk and do not encourage the employee to make much innovation. What they need is doing things in the safest way. Although they have the most advanced technology, and very formal structure, the business can not be run very effectively.

Since most of the employees do not understand their business goal and task, they would not understand why should they do these now and what should they do next, operational efficiency can be very low.

Table 4.3 shows the scores of RE business operational factors, market orientation management and business performance:

Table 4.3 The scores of internal management factors, market orientation, and subjective business performance of sampled rural enterprises.

	RE Unit	SBP	MO	TME on MO	TMR A	Int. Conf.	Int. Conn.	Form.	Cent.	RSO
1.	Brewery A	3. 00	3. 49	4. 00	2. 33	3. 43	3. 33	3. 83	3. 00	3. 33
2.	Brewery	3. 50	3. 21	3. 25	2. 50	3. 29	2. 50	2. 50	3. 80	3. 00
3.	Brewery	4. 33	3. 68	4. 75	2. 17	3. 71	3. 50	3. 50	3. 80	3. 83
4.	Brewery	3. 00	3. 72	5. 00	3. 00	3. 29	3. 33	4. 00	2. 20	4. 00
5.	Brewery	4. 33	3. 68	4. 75	2. 50	3. 14	4. 17	3. 00	3. 80	3. 33
6.	Brewery	3. 00	3. 43	3. 75	2. 17	3. 43	3. 33	3. 83	3. 00	3. 33
7.	Brewery G	4. 17	4. 08	4. 75	3. 17	3. 86	3. 50	3. 83	3. 40	3. 67
8.	Food processing	4. 17	3. 40	4. 50	1. 83	2. 57	3. 00	3. 50	3. 40	4. 00
9.	Food processing	3. 17	3. 42	3. 25	1. 33	2. 86	3. 83	3. 67	3. 20	3. 17
10.	Chicken Farm A	4. 33	3. 27	4. 00	2. 83	3. 43	2. 83	2. 83	3. 60	3. 67
11.	Chicken Farm B	4. 33	3. 73	4. 25	2. 33	3. 71	3. 17	2. 67	2. 80	4. 50
12.	Chicken Farm C	3. 00	3. 01	3. 50	2. 67	2. 86	3. 00	3. 00	3. 20	3. 67
13.	Winery	3. 67	4. 03	3. 50	1. 83	3. 14	3. 00	3. 17	4. 40	3. 17
14.	Winery	4. 00	4. 04	4. 50	2. 00	3. 57	3. 33	3. 33	3. 20	3. 67
15.	Winery	3. 00	3. 50	3. 25	1. 67	2. 71	3. 33	2. 67	3. 20	3. 83
16.	Agri-product processing	4. 50	3. 79	4. 25	1. 50	3. 29	3. 50	4. 17	3. 80	3. 33
17.	Agri-product processing	4. 33	3. 47	4. 00	2. 50	3. 57	3. 50	3. 50	2. 80	3. 67
18.	Feed processing	4. 00	3. 75	3. 25	2. 33	2. 71	3. 17	3. 17	3. 60	4. 00
19.	Feed processing	3. 33	3. 31	3. 25	2. 00	3. 29	3. 33	3. 17	3. 60	3. 17
20.	Crossbanding making	3. 83	3. 23	3. 25	2. 00	2. 71	4. 00	3. 67	3. 80	3. 67
21.	Crossbanding making	3. 67	3. 51	4. 50	1. 67	3. 29	4. 17	4. 33	4. 40	4. 00

(Table 4.3 continuing)

22. Co-operative	3. 67	3. 75	4. 75	2. 33	3. 86	3. 50	3. 33	2. 60	3. 17
23. Co-operative	4. 00	3. 50	4. 25	3. 33	3. 71	3. 33	3. 50	2. 20	4. 00
24. Furniture making	2. 83	3. 75	3. 50	2. 83	3. 00	3. 83	4. 33	5. 00	2. 33
25. Furniture making	2. 00	2. 76	4. 00	2. 50	3. 71	3. 83	3. 67	3. 20	3. 50
26. Packaging-paper making	4. 17	3. 67	3. 75	2. 33	3. 57	3. 33	3. 00	2. 00	3. 33
27. Packaging-paper making	3. 33	3. 81	4. 25	2. 67	3. 43	3. 50	3. 50	3. 60	4. 33
28. Agri-mechanical manufacture	4. 67	3. 56	4. 25	2. 17	3. 29	3. 50	3. 50	3. 80	3. 33
29. Printing	4. 67	3. 40	4. 75	3. 83	4. 00	3. 50	3. 33	3. 40	3. 33
30. Grain, Food processing	4. 33	3. 82	4. 25	2. 00	3. 29	3. 50	3. 50	3. 80	3. 67
31. Shoe making	4. 50	3. 33	4. 00	1. 33	3. 57	3. 00	3. 17	3. 60	3. 17
32. Chemistry industry	3. 83	3. 76	4. 25	2. 67	3. 57	3. 17	3. 83	3. 20	3. 50
33. Fertilizer manufacturing	5. 00	3. 59	4. 00	1. 83	3. 29	3. 67	3. 83	3. 00	3. 50
34. Flour Mill	2. 50	2. 36	3. 50	2. 33	3. 43	3. 33	2. 83	2. 60	3. 00
35. Alcohol	3. 83	3. 18	4. 00	2. 33	3. 86	3. 00	2. 50	2. 00	3. 50
36. Spinnery	3. 00	3. 62	4. 25	2. 17	3. 86	3. 50	3. 17	2. 60	3. 83
37. Beverage, Food	2. 50	3. 43	3. 00	1. 17	2. 57	2. 50	3. 17	3. 00	4. 17
38. Deepfreezing Food	4. 67	4. 50	4. 75	3. 83	4. 00	4. 50	3. 83	2. 40	4. 33
39. Chinese Medicine pharmacy	4. 67	4. 51	4. 75	2. 00	4. 86	4. 33	4. 50	3. 20	4. 67

(Table 4.3 continuing)

40. Confectionery, Beverage	3. 67	3. 78	3. 75	2. 17	4. 00	3. 50	3. 67	3. 80	3. 83
41. Milk processing	3. 67	3. 16	3. 00	2. 17	3. 43	3. 00	2. 83	4. 00	2. 67

Source: March-May, 1999 survey.

Note:

SBP: Subjective business performance

MO: Overall market orientation

TME on MO: Top management emphasis on market orientation

TMRA: Top management risk aversion

Int. Conf. : Interdepartmental conflict

Int. Conn. : Interdepartmental connectedness

Form. : Formalization

Cent. : Centralization

RSO: Reward system orientation

For some of the bigger REs which have the similar structure but can get rid of those problems and carry on more reasonable management system, their business performance will be much better. The difference of business performance of the similar REs is caused mostly by the managing philosophy, either more or less market oriented, which is also affected by some other factors. This leads to the second objective of the study, the importance of the market orientation management in REs.

In illustration, Brewery A (No.1, SBP 3.00) and Brewery G (No. 7, SBP 4.17) are both two bigger REs, with large factory and thousands of employees. But their business performances are very different. Brewery A 's worker can not get their salary paid for long time, while brewery G's employee can get rewards in addition to higher salaries everybody.

The causes of the difference are as following:

They both have many employees. Brewery A put more workers in the production lines while Brewery G put more employees in the marketing department.

The marketing employees are divided into many groups, each of which is responsible for selling bear in a certain area. In addition, the group also has the responsibility to gather the information from the consumer, including some questions, such as: Do they still like the taste of the bear? How do they think their own bear when comparing with the other brands? What is the drinking behavior of consumers? When and why do they drink? Then they have to estimate the amount of consumption of this area of next quarter.

The collected information will be sent to the administrative office. After analysis, different department will responsible for different part of the new plan.

Each department works as a team and cooperates to the others. Response of problems can be sent to the administrative office as soon as possible. They said that brewery G is a golden dragon, the marketing department is the head and the administrative team is only the feet.

As for brewery A, things are just opposite, production department is most important part of the factory, every other department is working for it. They make the production plan of each year and decided what kind of product they will produce with the production development department. Marketing department is only responsible for selling and advertising. That is why some year, they are very busy because of the over produce but some year they have nothing to do.

4.2.2.2 Management system in the smaller REs

As for the smaller business, most of them are owned privately. They know clearly what the top priority of their organization is and will work hard to achieve it. The owner will use the best way to solve the problems occurring in the business in order to optimize its business performance. With a simple management structure, the managers can get response of their decisions more quickly. Working as a team will decrease the conflicts among the employees but increase the connection among the work groups. Monetary motivation seems more important in the smaller businesses. The managers who can use if effectively will definitely lead the business to success.

When the external environment changes such as market demand changes, with an agile structure, private REs are able to adapt themselves more easily. While, the bigger REs' managers will feel the organization of work is not effective and jobs and lines of authorities are not flexible. And the employees will feel the job specialization is not effective. Further more, since most bigger REs are following other bigger industries' structure style, it is very often that bigger REs ignore, or fail to cultivate a suitable enterprise culture in their units.

When the internal environment changes such as problems encountered by the workers during the process, smaller business managers are able to know the situation quicker than bigger RE's managers are, because the communication channel of smaller REs is more practical. In this survey, there are some smaller private firms have quite effective management and outstanding business performance.

In illustration, chicken farm B (No. 11), deep-freezing food (No. 38) are both very small but very dynamic. Chicken farm B does not have very formal organizational (see table 4.3, formalization 2.67) and has very low centralization (see

table 4.3, cent: 2.8), but with a very good reward system (see table 4.3 RSO :4.5) and a high score on TME on Mo (4.25) .It can get a very good business performance (SBP 4.33).

As for deep freezing food (No.38), it also got poor score on centralization (see table 4.3, Cent :2.4) and a normal score on formalization (see table 4.3, Form:3.83),but with a higher score on reward system (RSO 4.33) and strong emphasis on market orientation (4.75). Its business performance is also very good (SBP 4.67)

Of course there are some bigger REs are running well, such as brewery G (No. 7), Chinese Medicine pharmacy (No. 39), but most of them are facing many problems. These make the managerial methods of these REs very critical.

After analysis the structure of the REs, we might have an overall picture of the management system in the REs in China and might also understand why the manager's thinking philosophy, so called the market orientation is so important.

From the illustration we can observe that the interdepartmental connection, formalization, centralization and inter departmental conflicts and reward system all have some effects on the formation of market information.

Since different factor have different levels of effects on business, and many of them directly affect the formation of the market orientation, to find the most important factors for most of the RE businesses becomes one of the study objectives of this study.

We will find the answer after running the regression equations and analysis the sampling data in the following sections.

4.3 Preconditions Analyses of Market Orientation Management

Recall objective one (see 1.2 Objective of the Study): To identify some preconditions that may affect the implementation of market orientation management in rural enterprises of Henan province.

The following analysis focuses on the objective one. The preconditions are related to the organizational structure and interior management of individual rural enterprises.

There are eight hypotheses (See 1.4 Hypothesis of the Study in Chapter 1) in testing objective one, and these eight hypotheses (H1 through H8) related to the antecedents or preconditions of implementing market orientation management. Accordingly, a set of linear regression equations are constructed as follows:

$$Y_1=\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8+\varepsilon_1$$

$$Y_2=\beta_1X_1+\beta_2X_2+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8+\varepsilon_2$$

$$Y_3=\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8+\varepsilon_3$$

$$Y_4=\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8+\varepsilon_4$$

In which,

ε_i --- Error term

<u>Dependent Variables:</u>

Y_1------Overall market orientation

Y_2------Market intelligence generation

Y_3------Market intelligence dissemination

Y_4------Market intelligence responsiveness

Independent Variables:

X_1------Top management emphasis on market orientation

X_2------Top management risk aversion

X_3------Interdepartmental conflicts

X_4------Interdepartmental connectedness

X_5------Formalization

X_6------Centralization

X_7------Departmentalization

X_8------Reward system orientation

Because interdepartmental conflict and connectedness were hypothesized to affect intelligence dissemination and responsiveness, but not intelligence generation (H_3, H_4), conflict and connectedness were not included as Independent variables of intelligence generation in the second equation above.

As for how to quantify the data in the data analysis, please refer to "2.5.1 How to quantify the data?" in chapter 2. The results obtained from estimating the four regression equations using SPSS program are provided respectively in Tables 4.4, 4.5, 4.6 and 4.7 as follows.

Table 4.4 Preconditions analysis of market orientation management 4-1

(Dependent variable: Y_1 — Overall market orientation)

Independent variables	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	4.295	21.421		.200	.842
Top management emphasis on MO	.802	.981	.148	.818	.419
Top management risk aversion	.305	.520	.088	.586	.562
Interdepartmental conflict	.735	.602	.192	1.222	.231
Interdepartmental connectedness	-.144	.795	-.030	-.181	.857
Organizational Formalization	.744	.692	.181	1.076	.290
Organizational Centralization	1.287	.563	**.346****	2.284	**.029**
Organizational departmentalization	1.068	.565	**.277***	1.890	**.068**
Reward system orientation	1.552	.607	**.362****	2.557	**.016**
$R^2 = .722$	F = 4.365			N = 41	
Adjusted $R^2 = .402$	Sig. .001				

** P<.05

* P<.10

Table 4.4 shows the regression result of the first equation, in which the the independent variables are X_1 to X_8, the dependent variable is *overall market*

orientation. The model's R square value is .722, adjusted R square value is .402, F value is 4.365, significant at 0.001 level.

It appears that the *reward system orientation (b=.362, p<.05), organizational centralization (b=.346, p<.05),* and *organizational departmentalization (b=.277, p<.10)* are the three factors affecting the implementation of market orientation management in a RE business; and all the others are not significantly effective to the overall market orientation.

It is easy to understand that *reward system orientation* becomes the first key factor that affects the *overall market orientation.* Recall the definition of *reward system orientation,* which *refers to the instruments or measures used in shaping the working behavior of employees.*

Firstly, in current rural enterprises, most of the employees, the workers who are generally low educated, are dependent on the earnings which are usually the most effective incentive to make them work hard. The effectiveness of the reward system is therefore the most important factor that affects the work performance of workers and therefore affects the implementation of market orientation management.

Secondly, the salespersons who are the direct sellers of the business in a RE, the work performance is directly related to the reward that they can earn after selling out one batch of goods. And the selling process, a key step of marketing operation, is just one of the critical parts in the whole market orientation management.

The second affecting factor is *organizational centralization,* recall its definition, which *refers to the inverse of the amount of delegation of decision-making authority throughout an organization and the extent of participation by organization*

members in decision-making. The most important step in market orientation management is the last one, response implementation, however a centralized organization usually has strong power to implement the final decision successfully. So, it is not difficult to understand why the *organizational centralization* become the second important factor affecting the implementation of market orientation management.

The third affecting factor is *organizational departmentalization*, recall its definition, which *refers to the number of department into which organizational activities are segregated and compartmentalized*. This can be explained by the similar reason with last factor. The more formal a RE organization, the more effective its business operation. So, a well departmentalized RE can enhance the implementation of market orientation management.

The following are three tables, Tables 4.5, 4.6, and 4.7, which show the results of the second, third and fourth regression equation. After these tables, the eight hypotheses were tested and analyzed respectively.

Table 4.5 Preconditions analysis of market orientation management 4-2

(Dependent variable: Y_2 --- Market intelligence generation)

Independent variables	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	4.627	8.410		.550	.586
Top management emphasis on MO	.601	.398	**.285**[a]	1.510	**.140**
Top management risk aversion	2.149E-02	.217	.016	.099	.922
Organizational Formalization	.220	.256	.138	.861	.395
Organizational Centralization	.268	.238	.185	1.125	.269
Organizational departmentalization	.307	.238	.205	1.294	.204
Reward system orientation	.465	.261	**.279**[*]	1.783	**.084**

R^2 = .611	F = 3.380	N = 41
Adjusted R^2 = .263	Sig. .01	

* P<.10

[a] P<.15

Table 4.6 Preconditions analysis of market orientation management 4-3

(Dependent variable: Y_3 — Market intelligence dissemination)

Independent variables	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	4.217	9.297		.454	.653
Top management emphasis on MO	-.274	.426	-.144	-.643	.525
Top management risk aversion	.137	.226	.113	.608	.547
Interdepartmental conflict	.162	.261	.121	.621	.539
Interdepartmental connectedness	-.113	.345	-.068	-.329	.744
Organizational Formalization	.531	.300	**.368***	1.769	**.086**
Organizational Centralization	.178	.245	.136	.727	.473
Organizational departmentalization	.171	.245	.126	.696	.492
Reward system orientation	.496	.263	**.330***	1.882	**.069**
R^2 = .517	F = 1.458		N = 41		
Adjusted R^2 = .084	Sig. 2.11				

* P<.10

Table 4.7 Preconditions analysis of market orientation management 4-4

(Dependent variable: Y_4 --- Market intelligence responsiveness)

Independent variables	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-4.282	9.032		-.474	.639
Top management emphasis on MO	.482	.414	.196	1.165	.253
Top management risk aversion	.152	.219	.097	.693	.493
Interdepartmental conflict	.571	.254	**.328****	2.250	**.031**
Interdepartmental connectedness	-7.923E-02	.335	-.037	-.236	.815
Organizational Formalization	1.454E-02	.292	.008	.050	.961
Organizational Centralization	.845	.238	**.500*****	3.555	**.001**
Organizational departmentalization	.598	.238	**.341****	2.507	**.017**
Reward system orientation	.593	.256	**.305****	2.317	**.027**

R^2 = .767 F = 5.701 N = 41

Adjusted R^2 = .485 Sig. .000

*** P<.01

** P<.05

4.3.1 Test for hypothesis 1

Recall Hypothesis 1: *The greater the top management emphasis on a market orientation (MO), the greater the (1) market intelligence generation, (2) intelligence dissemination, and (3) responsiveness of the organization.*

From Tables 4.5, 4.6, and 4.7 it can be seen that only on *market intelligence generation,* the factor of "*top management emphasis on MO" (see table 4.4, b= .285, p< .15) has* some effects; but on the factors of *intelligence dissemination* and *responsiveness* of the RE, it seems not significant.

The reason is apparent. "*Top management emphasis on market orientation" generally* affects *market intelligence generation* through the periodical promotion and supervision in their business organization. For example, the top management may summon employees to have formal meetings to discuss about the market intelligence. In the current development of the RE business organization, it becomes the main approach to generate the market intelligence. However, *top management emphasis on market orientation* does not affect the process of *intelligence dissemination* and *responsiveness design and implementation.* For the factor of *responsiveness,* the critical factors are no more the *top management emphasis on market orientation,* but the other factors of inter-department dynamics and organizational system, such as *centralization, departmentalization, and reward system.*

4.3.2 Test for hypothesis 2

Recall Hypothesis 2: *The greater the risk aversion of top management, the lower the (1) market intelligence generation, (2) intelligence dissemination, and (3) responsiveness of the organization.*

From Tables 4.5, 4.6, and 4.7 it can be seen that this hypothesis is not supported by the regression results. That can be explained from two aspects. First, the differences of *the risk aversion of top management* among REs are not significant enough to affect the whole decision-making process; second, the whole sample could not measure this difference significantly because of the existence of some random errors that could not be detected.

4.3.3 Test for hypotheses 3 and 4

Recall Hypothesis 3: *The greater the interdepartmental conflict, the lower the (1) market intelligence dissemination, and (2) responsiveness of the organization.*

Recall Hypothesis 4: *The greater the interdepartmental connectedness, the greater the (1) market intelligence dissemination, and (2) responsiveness of the organization.*

From Table 4.6 and 4.7 it can be seen that the regression results failed to support these two hypotheses. The reasons are the same as the testing failure of hypothesis 2.

4.3.4 Test for hypothesis 5

Recall Hypothesis 5: *The greater the organizational formalization, (1) the lower the intelligence generation, dissemination, and response design and (2) the greater the response implementation.*

From Table 4.6 it can be seen that *organizational formalization (b= .368, p< .10)* does affect the *market intelligence dissemination,* but the coefficient sign is positive, just reverse to the hypothesized one, which is negative.

Why is it reverse? Nowadays in REs, the transformation of information is usually done through formal periodical meeting in their organization. Accordingly, the more formal the RE organization, the more efficient and effective the market intelligence dissemination.

However, *organizational formalization* is not significant in affecting the factors of *intelligence generation* and *responsiveness*.

4.3.5 Tests for hypothesis 6 and 7

Recall Hypothesis 6: *The greater the centralization, (1) the lower the intelligence generation, dissemination, and response design and (2) the greater the response implementation.*

Recall Hypothesis 7: *The greater the departmentalization, (1) the lower the intelligence generation, dissemination, and response design and (2) the greater the response implementation.*

From table 4.7, it can be seen that *organizational centralization (b= .500, p< .01)* and *organizational departmentalization (b= .341, p< .05)* affect the *market intelligence responsiveness* positively as the hypothesized, but they affect neither *market intelligence generation* nor *intelligence dissemination.*

4.3.6 Test for hypothesis 8

Recall Hypothesis 8: *The greater the reliance on market-based factors for evaluating and rewarding managers, the greater the (1) market intelligence generation, (2) intelligence dissemination, and (3) responsiveness of the organization.*

From all four tables it can be seen that *reward system orientation* is the key factor, which affect the implementation of market orientation management, in terms of *market intelligence generation, market intelligence dissemination,* and *responsiveness of the organization.* The reasons are as the same as that this paper has mentioned already as follows:

Firstly, in current rural enterprises, the most of the employees, the workers who are normally low-educated are dependent on the earnings which are usually the most effective incentive to make them work hard. The effectiveness of the reward system is therefore the most important factor that affects the implementation of market orientation management.

Secondly, the salespersons are the direct sellers of the business in a RE, the work performance are usually directly related to the reward that they can earn after selling out one batch of goods. And the selling process, a key step of marketing operation, is just one of the critical parts in the whole market orientation management.