

Do market information procedures improve venture performance?

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ABSTRACT: Some researchers claim that entrepreneurs do not need official procedure to collect and use market information; others suggest that the use of official market information procedure is positively connected to firm performance. In this paper, we create a theory that new venture performance is an increasing work of (1) the firm's level of customer interaction and (2) the use of official procedure for collecting and utilizing market information. We also create a theory that this link will be stronger among new ventures serving emergent markets. We test these hypotheses using data collected from 112 new ventures located in the West of Iran. Our findings show that, in any case of market condition, official procedure for the accumulation of market information are positively connected with the use of official procedure for market information employment and this relationship is stronger among firms serving recognized markets. In addition, new venture performance is positively connected with the use of official procedure for utilizing market information and this relationship is also stronger in recognized markets. We also find that, in emergent markets, new venture performance is a positive work of the use of official procedure for collecting market information. As opposed to expectations, we find that, in any case of market condition, the level of customer interaction has a negative relationship with the use of official procedure for market information employment and no important relationship with performance.

Keywords: Innovation, Customer knowledge, Market information

INTRODUCTION

Entrepreneurship is important for economic development (Christensen and Bower, 1996), but the failure rate among new ventures is high (Shepherd et al., 2000). Song et al. (2008) in their finding showed that, after four years, only 36% of companies survived. After five years, the survival rate fell to 21.9%. One possible explanation for these failure rates arises from differences beyond ventures in their accumulation and use of market information (Gruber, 2007). Other researchers have found that both new product success and firm performance are increasing works of the degree to which firms collect and utilize market knowledge (Li and Calantone, 1998; Jaworski and Kohli, 1993; Matsuno et al., 2002). While most studies of market information procedure have focused on recognized firms, other studies suggest that, among start-up ventures, the accumulation of market information may not be firmly linked with performance. Sarasvathy (2001) claimed that official market information accumulation procedure are not the primary focus of entrepreneurs, because entrepreneurial opportunities are not found but created through repetitive interactions with possible stakeholders. Shane and Delmar (2004) found that new ventures completing business plans before collecting market information had a relatively lower conclusion rate. In this study we explore the impact on new venture performance of two dimensions of a firm's market information procedure. In particular, we distinguish between official procedure for collecting and using market information. Therefore first information should be collected, and official procedure for information accumulation can help that accumulation efforts are both extensive and opportune. On the other hand, the procedure of collecting information does not in and of itself ensure that the collected information will be used. Because collected information is often ignored by decision makers, official procedure for information employment can increase the number of decision alternatives measured, expand the set of information used to evaluate those alternatives, and encourage managers to develop a more extensive understanding of the indirect suggestion of that information. Our research is rare in several ways. First, different prior research on market information procedure in small and medium-size firms (Mohan-Neill, 1995; Keh et al., 2007), we focus clearly on new ventures. As a result, our analysis produces important feeling into the role within entrepreneurial start-ups of procedure for collecting and using market information. Second, these studies of market information procedure have not distinguished between official and unofficial market.

Third, recent research shows that regular interaction with customers has a positive impact on new product performance (Joshi and Sharma, 2004; De Luca and Atuahene-Gima, 2007) information procedure which in turn should impact new venture performance. In this paper we integrate this research flow with the market information procedure work by estimation whether customer interaction and the official use of market information procedure are different constructs that affect new venture success. Fourth, several authors (Jaworski and Kohli, 1993; Kirca et al., 2005) have create a theory that increases in market uncertainty increase the need for market information. In this paper we extend this procedure of conclusions by claiming that both customer interaction and official market information procedure have greater value for firms entering a market in which customer preferences are not well recognized but are still emergent . Our analysis is recognized on data collected from 112 West of Iran new ventures, and show that, in any case of whether a market is recognized or emergent, (1) official procedure for the accumulation of market information are positively connected with the use of official procedure for market information employment and (2) Official procedure for market information employment are positively connected with firm performance. Moreover, both of these relationships are stronger in recognized markets than in emergent markets. We also find that, in emergent markets, the use of official procedure for collecting market information is positively connected with firm performance. As opposed to expectations, we find that, in both recognized and emergent markets, the level of customer interaction has a negative relationship with the use of official procedure for market information employment and no important impact on performance. Moorman (1995) in her empirical work, she found that both forms of information employment directly affect new product performance. Similarly, Ottum and Moore (1997) found that new product success is most closely linked to information use. Keh et al. (2007) found that information use had a direct impact on the Performance of small- and medium-sized firms, while information obtained indirectly affected performance through its impact on information employment. Existing studies of market information procedure have not distinguished between official and information market information procedure. According to these studies of strategic planning in small firms we suggest that official market information procedure may have value for new ventures. Castrogiovanni (1996) claimed that official planning procedure motivate learning, increase venture efficiency, and improve coordination. In addition, official plans can help entrepreneurs clarify goals and objectives and improve their analysis of complex activities (Shane and Delmar, 2004). In a meta-analysis of planning procedure in small firms, Schwenk and Shrader (1993) found that official strategic planning has a positive impact on firm performance. Coviello et al. (2000) reported that managers in small firms believed their firms would benefit from the use of official planning procedure. However, they did not examine the relationship between official marketing procedure and performance. While the market orientation work has stressed the procedure a firm uses to collect market information, a connected flow of research has focused on procedure planned to collect information about customers (Campbell, 2003; Li and Calantone, 1998). Li and Calantone (1998) defined a firm's customer knowledge ability as procedure planned to create, structure, and organize knowledge about customers. Their work shows that the level of customer knowledge has a positive effect on new product advantage. Similarly, Joshi and Sharma (2004) found a positive relationship between customer knowledge development and new product performance. De Luca and Atuahene-Gima (2007) found that product innovation is a positive work of customer knowledge. These findings are consistent with findings in the entrepreneurship work regarding the value of customer interaction. Chrisman et al. (2005) found that the clear and tacit knowledge created through customer interaction has an important impact on new venture survival and growth. Baker and Sinkula,(2007) Hanvanich et al., (2006;) in their studies of organizational learning suggest that environmental factors can simplify the way in which market information Procedure affects firm performance . Effective firms distinguish and respond to such changes recognized on their knowledge of changing market conditions (Achrol et al., 1983). For these reasons, the significance of a firm's market information procedure capabilities should increase when market uncertainty increases.

Conceptual framework

In this section we develop clear hypotheses linking a firm's market information procedure to firm performance. Fig. 1 summarizes our theoretical model. We create a theory that (1) customer interaction procedure and official procedure for market information accumulation affect the use of official procedure for market information employment and (2) all three procedure affect new venture performance. We further create a theory that each of these relationships will be greater in markets with high uncertainty. To simplify our presentation, we first develop our hypotheses for new ventures serving recognized markets and then extend these hypotheses to ventures serving emergent markets.

According to prior discussions of customer knowledge (Li and Calantone, 1998), we define customer interaction procedure as a set of behavioral activities planned to continuously (1) collect information through direct interactions with customers and (2) procedure collected information. These activities allow the firm to collect, organize, and structure customer knowledge (Campbell, 2003; Morgan et al., 2005). This procedure may contain meeting with customers to learn about their current and possible needs for new products, analyzing customer information, and using customers to test and evaluate new products or services. Firms can

use the information created by these procedure to develop new products that convey benefits that are valued by target customers and unavailable from competitive product offerings (Day, 1994). In addition, this information can help the firm strategies planned to sustain customer relationships and increase customer loyalty (Kohli and Jaworski, 1990). This procedure of conclusions is supported by empirical studies showing that customer knowledge ability can increase relative product advantage (Day1994; De Luca and Atuahene-Gima, 2007) and kindly affect the new venture's probability of survival and growth (Chrisman et al., 2005). These considerations suggest the following hypothesis:

H1. In recognized markets, new venture performance is positively connected to the use of customer interaction procedure.

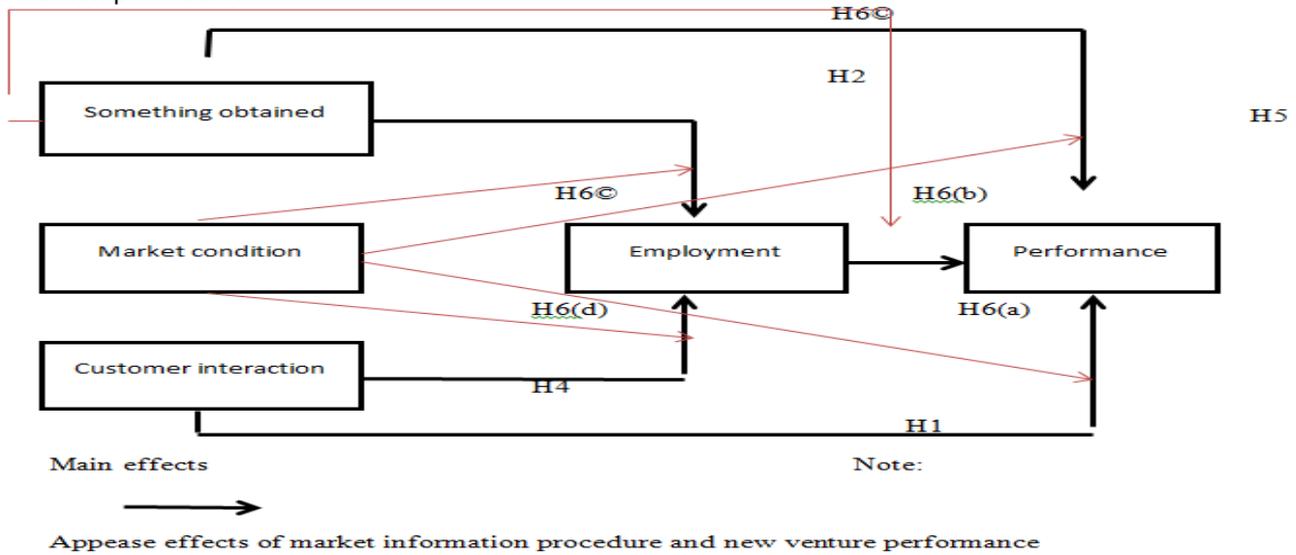


Figure 1. Conceptual framework of market information procedure and new venture performance

Acquisition refers to the accumulation of primary and secondary information from both internal and external resources (Rindfleisch and Moorman, 2001). It includes procedure for getting information about customers, competitors, and others who affect customers' decisions, as well as information about the technological, legal, and environment within which the firm activates. The use of this information helps firm managers recognize opportunities and threats and thus promotes effective strategy development (Kaish and Gilad, 1991; Ozgen and Baron, 2007). We define official market information obtained procedure to be documented policies and procedures for the accumulation of primary or secondary information from organizational stakeholders. Notice that this construct is conceptually different from customer interaction procedure, which focuses on actual behavior. In compare, the official market information obtained procedure construct focuses on policies and procedures that show the information obtained behaviors that should be performed by employees. Castrogiovanni (1996) and Shane and Delmar (2004) recognize several benefits of official business planning procedure that should extend to the use of official procedure for the obtained of market information. In particular official procedure can help clarify the goals and objectives of the venture's information obtained activities and improve the efficiency of those activities. Because these benefits should improve information exactness and decrease the probability of ignored important sources of information in favor of more easily available information sources (Day, 1994; Day and Nedungadi, 1994), we create a theory that:

H2. In recognized markets, new venture performance is positively connected to the use of official procedure for market information obtained.

Employment is defined as the direct or indirect use of market information in decision-making and problem-solving (Moorman, 1995; Menon and Varadarajan, 1992). Examples of employment procedure include using market information to solve specific problems, providing feedback to decision makers, and appraising project results (Moorman, 1995). This research shows that employment procedure have a positive impact on both new product development and firm performance (Moorman, 1995; Keh et al., 2007). We define official market information employment procedure to be documented policies and procedures that show how market information should be used to make decisions. For several reasons, we expect that official procedure for information employment will increase new venture performance. First, Castrogiovanni (1996) and Shane and Delmar (2004) claim that official employment procedure can increase the way managers think about problems and increase the amount and the variety of information used to make decisions. Also, official procedure helps managers prioritize information by serving as a form of organizational memory that incorporates learning from previous decision procedure and results (Day, 1994). Official procedure can also reduce the time needed to make strategic and tactical decisions. Finally, official employment procedure simplifies the tasks of recognizing

implementation issues and developing plans to address those issues (Castrogiovanni, 1996). Taken together, these considerations suggest the following hypothesis:

H3. In recognized markets, new venture performance is positively connected to the use of official procedure for market information employment.

For several reasons, firms that have continuous interactions with customers will seek to ensure that their strategic decisions reflect the information gathered from customers. This research shows that the probability of information use is an increasing work of the cost of that information (Sinkula, 1994). Furthermore, powerful interaction is more likely to produce information that is noticed as meaningful and valid, which also increases the probability of information use. As the noticed significance of information rises, firms are more likely to adopt strategies to ensure that the collected information is actually used. Studies of official planning in small firms (Coviello et al., 2000; Chrisman et al., 2005) suggest that one useful strategy for encouraging information employment is the development of official procedure for using market information. Thus we expect that official procedure for information employment will be an increasing work of the new venture's customer interaction procedure. In addition, firm that have official procedure for information accumulation are more likely to recognize the value of official procedure for information employment. Thus we create a theory that:

H4. In recognized markets, the use of official market information employment procedure is positively connected to the use of customer interaction procedure.

H5. In recognized markets, the use of official market information employment procedure is positively connected to the use of official procedure for market information obtained.

Market uncertainty refers to changes in the "composition of customers and their preferences" (Kohli and Jaworski, 1990). When customer sections and preferences are steady, new ventures can design marketing strategies recognized on their existing knowledge of customers. However, when market turbulence is high, the value of the firm's existing stock of knowledge declines. To adapt to changing customer preferences and the appearance of new customer sections, firms must interact powerfully with customers. Thus we expect that the impact of customer interaction on performance will be relatively higher in emergent markets. Similarly, we expect that the impact of official procedure for information obtained and employment on new venture performance will be relatively higher in emergent markets. Thus we create a theory that:

H6 (a)–(c). The positive relationships between new venture performance and (a) customer interaction, (b) obtained, and (c) employment are higher in emergent markets than in recognized markets.

When customer sections and preferences are steady, the value of official procedure for information employment declines, in part because the firm encounters less new information (relative to firms in emergent markets). In addition, as noted above, firms steady marketing mix over time. As a result, the incremental value of official information serve recognized markets. For this reason, change in the use of official procedure for information employment procedure is lower for firms that accumulation and customer interaction are relatively less likely to be connected with change in the use of official procedure for information employment. This procedure of conclusions suggests that:

H6 (d)–(e). The positive relationships between employment and (d) customer interaction and (e) obtained are higher in emergent markets than in recognized markets.

METHOD

In this research we tested the survey and focused on interviews which comprise of three parts. The First interviews were asked for their opinions regarding the usefulness of market information in their new ventures. We wanted to examine the nature of market information accumulation and the best way to measure market information activities. Second, the founders were asked to evaluate whether our study hypotheses describe their own experiences sufficiently. The third part of the interviews addressed founders' feelings of the connectedness and completeness of scale items drawn from the work. The pre-test participants had no problems responding to the 7-point scales used in the questionnaires. Several questionnaire items were modified recognized on suggestions from these participants. Our sampling comprise of (1) venture-backed firms listed between 2000 and 2009 in the Venture One database and (2) new venture firms that were members of the 2000–2005 Inc 250. Venture One, which is the most extensive database of its kind in the West of Iran, includes information about venture-backed firm employment, business position, and ownership position (Cochrane, 2005; Gompers et al., 2005). From 2000–2009 time periods, this database included complete information on 2573 venture-backed firms. The Inc 250 database includes the fastest-growing private companies in the West of Iran, as selected by Inc magazine. Due to budgetary restriction, we randomly selected 350 venture-backed new ventures from the Venture One database and the 250 fastest-growing new ventures from the Inc 250. In 2010, we mailed each firm a questionnaires from that 134 were incomplete therefore reducing the sample size to 433. After four follow-up letters, we received a total of 74 completed questionnaires, representing a response rate of 17% by 2009. To increase our response rate, we resent our survey to the 359 non-responding firms. After one follow-up mailing, we received an additional 56 completed

surveys from this second data accumulation, which increased the total number of usable surveys to 130 (a total response rate of 29.9%). In 2010 we contacted all 130 firms that responded to our original survey and requested information regarding their profit margin (profit divided by revenue). Of the original 130 respondents, 112 provided this information, representing 86% of the respondents to the first survey and 26% of the original sample. The age of respondent firms ranged from 0 to 5 years, and the number of employees ranged from 9 to 225. We used several variables to test for the presence of non-response bias. We found no important difference in the segment of firms representing the following industries: textile and clothes ($F=0.02$, $p>0.10$), pharmaceutical and medicines ($F=0.03$, $p>0.10$), consumer electronics and electrical equipment ($F=0.02$, $p>0.10$), semiconductors and computer connected products ($F=0.00$, $p>0.10$), and home appliances ($F=0.05$, $p>0.10$) recognized on these results, non-response bias does not appear to be a problem in our data. The end points for each scale item ranged from 1 (Strongly Disagree) to 5 (Strongly Agree) for all activities involved with market information. Customer Interaction is recognized on a four-item scale developed by Li and Calantone (1998). In this case our corroborative factor analyses led us to drop two problematic items that measured whether the firm had official procedure for collecting information about (1) competitor activities and (2) relevant publics other than customers and competitors. The remaining items address the use of official procedure for collecting information from customers, reexamining the value of information collected in previous studies, and collecting information from external experts. Employment is adapted from five-item scale developed by Moorman (1995). These items address whether the firm has official procedure for utilizing market information recognized on our corroborative factor analyses we dropped four items from this scale. One of the deleted items dealt with project evaluation and dependence on market information. One additional deleted item addressed the distribution of market information to works and the role of market information providers in strategy formation. The remaining items measure the use of official procedure that use market information for solving problems, for providing feedback to decision makers, and as an aid for project decision-making. Our performance measure, Profit Margin, is measured as the ratio of firm profit to firm revenue in the firm's most recent of public funds year. We also included two control variables in our analysis Firm age is measured as the number of years was founded and the time of our first survey. We also asked respondents to classify their primary market as either a recognized market or an emergent one. Market condition is an absolute variable that takes the value 1 if customer needs are well-defined and steady (recognized market), and 2 if customer needs are not well-defined and are changing (emergent market). In order to examine the validity of this classification, we also asked respondents to show the strength of their agreement or disagreement with the following items: (1) Market needs are well-defined in this industry; (2) we are witnessing demand for our products and services from customers who never bought them before. The correlation between the mean of these two items and Market Condition was 0.52 ($p<0.01$), showing that the absolute variable is a reliable measure of the stability of customer preferences and market segment composition.

Table 1. Measurement model

constructs	item	Standardized factor loading	Goodness of fit statistics	Composite reliability	Discriminant validity			
ACQI	ACQU1	0.50***	$X^2 = 26.96$ $df = 17$	0.66	ACQU	0.63	INTE	UTIL
	ACQU4	0.63***						
	ACQU5	0.74***						
INTE	INTE1	0.91***	$X^2/df=1.56$ $GFI= 0.95$	0.72	INTE	0.10	0.75	
	INTE4	0.55***						
UTIL	UTIL2	0.86***	$CFI=0.95$ $IFI=0.95$ $RMSEA=0.05$	0.70	UTIL	0.61***	-017*	0.67
	UTIL4	0.66***						
	UTIL6	0.42***						

The smallest factor loading t-statistic is 2.67 for INTE1.

ACQU = Acquisition, INTE = Customer Interaction, UTIL = Utilization.

* $p<0.10$.

** $p<0.05$.

*** $p<0.01$

As shown in last column of Table 1, for each construct, the relevant \sqrt{AVE} is larger than the correlation between any pair of the two constructs in this study, showing that the constructs have discriminant validity (Fornell and Larcker, 1981). In particular, our analysis clearly showed that consumer interaction procedure and official procedure for market information obtained were different constructs. According on the previous analyses, we concluded that create a theory measurement model sufficiently fit the data and that testing of the structure model was suitable. Table 2 includes descriptive statistics for the purified measurement model, including variable means, standard errors, and correlations.

Analyses

To test our research hypotheses, we followed the two-step approach for structural equation modeling recommended by Anderson and Gerbing (1988). In the first step, we estimated and confirmed the psychometric

properties of the measurement model and purified measures. In the second step we estimated the structural equation model described in Fig. 1. We began with a series of corroborative factor analyses planned to recognize problematic items. We evaluated the final measurement model on four criteria: convergent validity, discriminant validity, and unidimensionality and reliability. The results, which are summarized in Table 1, show that the overall fit index all exceed the critical level of 0.90 (GFI=0.95, CFI=0.95, IFI=0.95). In addition, RMSEA =0.05 and the ratio $\chi^2/d.f. = 1.56$ (Bentler, 1990). The standardized loadings of all measurement items are highly important (the smallest t-value is 2.67), demonstrating suitable convergent validity. Tests of the adjustment indices, residuals, and overall fit indices show no substantial departures from unidimensionality. The construct reliabilities are reported in Table 1. The composite reliabilities range from 0.66 to 0.72, showing that the measures are highly reliable. Test of the sample of standardized residuals further shows that there is no deviation from the external consistency criteria of Anderson and Gerbing (1982). The largest standardized-residual variance is 1.91 and less than 2.56, which is also consistent with unidimensionality. To assess discriminant validity, we first computed the square root of the average variance explained (\sqrt{AVE}) for each construct.

Table 2. Descriptive statistics: mean, standard deviation, correlation matrix

	Mean	SD	ACQU1	ACQU4	ACQU5	INTE1	INTE4	UTLI2	UTLI4	UTLI6	PER F	Age
ACQU 1	4.70	1.55	1.00									
ACQU 4	3.78	1.69	0.35***	1.00								
ACQU 5	4.78	1.68	0.32***	0.44***	1.00							
INTE1	4.73	1.64	0.05	0.02	0.7	1.00						
INTE4	3.95	1.64	0.7	-0.04	0.00	0.50***	1.00					
UTLI2	4.89	1.69	0.18***	0.32***	0.40***	-11**	-0.12**	1.00				
UTLI4	4.80	1.64	0.14***	0.27***	0.33***	-0.04	-0.6	0.55***	1.00			
UTLI6	3.98	2.26	0.04	0.8*	0.10**	-0.19***	-0.02	0.34***	0.27***	1.00		
PERF	15.67	18.6	0.31***	0.34***	0.45***	-0.01	0.02	0.54**	0.38***	0.22**	1.00	
Age	2.88	1.79	-0.01	-0.02	0.04	-0.05	-0.8	0.04	-0.02	-0.04	-	1.00

N= 112

ACQU = Acquisition, INTE = Customer Interaction, UTIL = Utilization, PERF = Profit Margin in 2010.

Please see Appendix A for the question items.

* p<0.10.

** p<0.05.

*** p<0.01

RESULTS

To test and create a theory model, we divided the sample into two groups: one consisting of new ventures facing a recognized primary market (54 firms) and the second consisting of new ventures facing an emergent primary market (58 firms). We then estimated a two-group structural equation model (Anderson and Gerbing, 1988). The results of the analysis are summarized in Fig. 2. The goodness-of-fit statistics suggest that the two-group full structural model fits the data well ($\chi^2=94.21$, d.f.=66, $\chi^2/d.f.=1.39$, GFI=0.91, CFI=0.92, IFI=0.92, RMSEA=0.04). We then compared the unrestricted models with a series of single- restriction models, each of which forced one model coefficient to be equal beyond groups. If we found that the unrestricted model had a importantly better overall fit than the restricted model, we concluded that the focal path coefficient was importantly different for recognized and emergent markets. Fig. 2 reports the parameter estimates and significance levels for each path in the two-group structural equation model. Within recognized markets, we found that official procedure for market information employment ($\beta=11.59$, $p>0.01$) positively affect performance. In addition, we found that official procedure for market information obtained ($\beta=0.90$, $p>0.01$) positively affect the use of official procedure for market information employment. These results support hypotheses H3 and H5. In compare, customer interaction has a negative and important impact ($\beta=-0.34$, $p>0.01$) on the use of official procedure for market information employment. Neither official procedure for market information obtained nor customer interaction has an important effect on performance. These results fail to support hypotheses, H1, H2, and H4. Within emergent markets, we found that official procedure for market information obtained positively affect performance ($\beta=5.81$, $p>0.01$) and that official procedure for market information employment also increase performance ($\beta=5.59$, $p>0.01$). In addition, we found that official procedure for market information obtained ($\beta=0.39$, $p>0.01$) positively affect the use of official procedure for market information employment. However, the coefficient linking performance to the level of customer interaction is not important, while the coefficient linking the level of customer interaction with official procedure

for market information employment is negative and important ($\beta=-0.18, p>0.10$). Which between group differences, we create a theory that the positive effects of customer interaction and official procedure for market information obtained and employment would be greater in emergent markets than in recognized markets. In general, this hypothesis was not supported (Table 3). Our analysis does show that the relationship between official procedure for market information obtained and performance is importantly higher in emergent markets relative to recognized markets ($\Delta \chi^2_{(1)} = 5.03, p>0.05$) which supports Hypothesis H6(b). However, we also found that the positive relationship between official procedure for market information employment and performance is importantly higher in recognized markets relative to emergent markets ($\Delta \chi^2_{(1)} = 2.71, p>0.10$), which opposed hypothesis H6(c). In addition, the positive relationship between official procedure for market information obtained and employment is importantly higher in recognized market compared to emergent market ($\Delta \chi^2_{(1)} = 4.25, p>0.05$), which opposed hypothesis H6(e). Finally, the coefficients linking customer interaction with performance H6 (a) and customer interaction with employment H6 (d) do not vary importantly depending on market condition. Table 4 summarizes the results of our hypotheses tests.

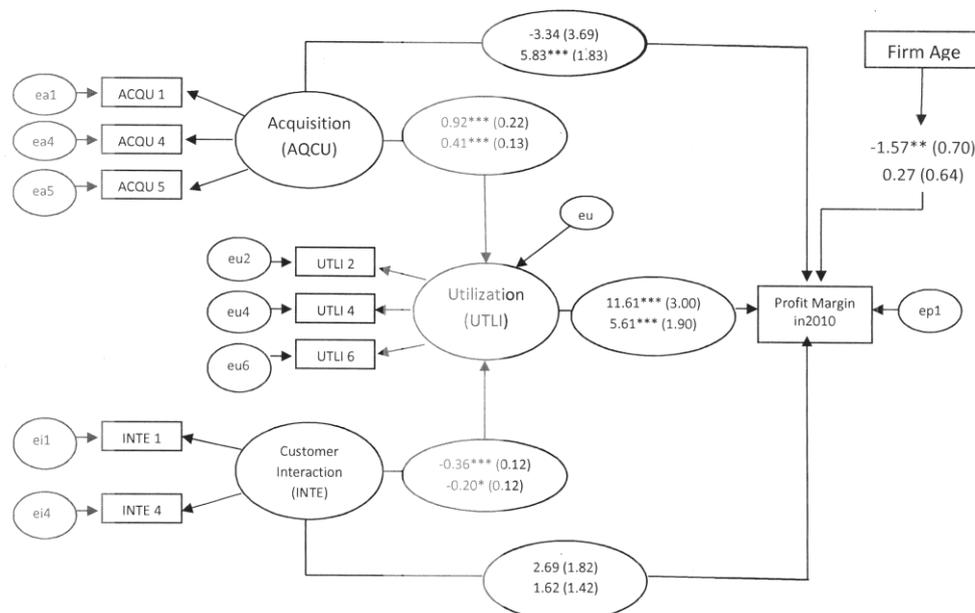


Figure2. Results of two group analysis by full information structural equation model

Executive summary

In this study we explore the impact on new venture performance of two dimensions of a firm's market information procedure. We create a theory that new venture performance is an increasing work of (1) the use of procedure planned to create constant interaction with customers and (2) the use of official procedures for collecting and utilizing market information. We also create a theory that this link will be stronger among new ventures serving emergent markets. Our research is show several ways. First, different prior research on market information procedure in small and medium-size firms, we focus clearly on new ventures. As a result, our analysis produces important feeling into the role within entrepreneurial start-ups of procedure for collecting and using market information. Second, existing studies of market information procedure have not distinguished between official and unofficial market information procedure. Our research is planned to address the clear impact of official procedure. Third, recent research shows that regular interaction with customers has a positive impact on new venture performance. In this paper we integrate this research flow with the market information procedure work by estimation whether customer interaction and the official use of market information procedure are different constructs that affect new venture success. Fourth, several authors have create a theory that increases in market uncertainty increase the need for market information. In this paper we extend this conclusions by claiming that both customer interaction and official market information procedure have greater value for firms entering a market in which customer preferences are not well recognized but are still emergent. Therefor to test the model, we analyzed data from 112 new Ventures. Our findings show that, official procedure for the collection of market information are positively connected with the use of official procedure for market information employment and this relationship is stronger among firms serving recognized markets. In addition, new venture performance is positively connected with the use of official procedure for utilizing market information and this relationship is also stronger in recognized markets. We also find that, in emergent markets, new venture performance is a positive function of the use of official procedure for collecting market

information. As opposed to expectations, we find that, without taking into account, of market condition, the level of customer interaction has a negative relationship with the use of official procedure for market information employment and no important relationship with performance. Our research has several important implications for entrepreneurs. Anyway of whether new ventures serve recognized or emergent markets, our findings show that new ventures can increase their performance by adopting official procedure that recognize possible sources of market information with which and show the frequency information should be collected. In additional, new ventures can benefit from official procedure that encourage entrepreneurs to make wider arrange of decision alternatives measured, expand the kinds of information used to evaluate those alternatives, and develop a fuller understanding of the various implications arising from this information. To ensure that the firm's official procedure do not delay effective decision-making, the unconditional judgments and prioritizations included in these procedure should be made clear and the firm should have a procedure for revising these judgments recognized on new information.

CONCLUSIONS

In this research we have developed a conceptual model linking two kinds of information procedure to new venture success. We create a theory that new venture performance is an increasing work of (1) the use of procedure planned to create constant interaction with customers and (2) the use of official procedures for collecting and utilizing market information. We also create a theory that this link will be stronger among new ventures serving emergent markets. We tested these hypotheses using data collected from 112 new ventures located in the West of Iran. Our findings show that, in any case of market conditions, official procedure for the accumulation of market information are positively connected with the use of official procedure for market information employment, and this relationship is stronger in recognized markets. In addition, new venture performance is an increasing work of the use of official procedure for utilizing market information, and the impact is again stronger in recognized markets. We also found that, in emergent markets, the use of official procedure for collecting market information has a direct, positive and important relationship with new venture performance.

Table 3. Two-group analysis: hypotheses testing.

Structural model	Goodness-of-fit	Test of hypotheses
Model 1: hypothesized	$\chi^2(66) = 96.19$, $\chi^2/d.f. = 1.39$, GFI = 0.91, CFI = 0.92, IFI = 0.92, RMSEA = 0.04	Test for hypotheses 1, 2, 3, 4, and 5.
Model 2: Set path coefficient from customer interaction to performance to be equal across two group	$\chi^2(67) = 96.33$, $\chi^2/d.f. = 1.38$, GFI = 0.91, CFI = 0.92, IFI = 0.93, RMSEA = 0.04	Test for hypothesis 6(a) Model 2-model 1: $\Delta \chi^2(1) = 0.12$, Not significant at $p = 0.10$
Model 3: Set path coefficient from Acquisition to performance to be equal across two group	$\chi^2(67) = 101.24$, $\chi^2/d.f. = 1.38$, GFI=0.90, CFI = 0.91, IFI = 0.92, RMSEA = 0.05	Test for hypothesis 6(b) Model 3-model 1 : $\Delta \chi^2(1) = 5.03$, Significant at $p = 0.05$
Model 4: Set path coefficient from Utilization to performance to be equal across two group	$\chi^2(67) = 98.92$, $\chi^2/d.f. = 1.41$, GFI = 0.90, CFI = 0.91, IFI = 0.92, RMSEA = 0.04	Test for hypothesis 6(c) Model 4-model 1 : $\Delta \chi^2(1) = 2.72$, Significant at $p = 0.10$
Model 5: Set path coefficient from customer interaction to Utilization to be equal across two group	$\chi^2(67) = 96.72$, $\chi^2/d.f. = 1.38$, GFI = 0.91, CFI = 0.92, IFI = 0.92, RMSEA = 0.04	Test for hypothesis 6(d) Model 5-model 1 : $\Delta \chi^2(1) = 0.51$, Not significant at $p = 0.10$
Model 3: Set path coefficient from Acquisition to Utilization to be equal across two group	$\chi^2(67) = 100.46$, $\chi^2/d.f. = 1.44$, GFI=0.90, CFI = 0.91, IFI = 0.92, RMSEA = 0.05	Test for hypothesis 6(e) Model 6-model 1 : $\Delta \chi^2(1) = 4.25$, Significant at $p = 0.05$

We also found two surprising results as opposed to our hypotheses; our findings suggest that official procedure is more valuable in recognized markets. We also found a negative relationship between the level of customer interaction and the level of official procedure for information employment. Our research has several important implications for entrepreneurs. In any case of whether new ventures serve recognized or emergent markets, our findings show that new ventures can increase their performance by adopting official procedure for market information obtained From a practical perspective, an official procedure should (1) recognize possible sources of market information and the kinds of information possible available from each source and (2) show the frequency with which information should be collected from these sources. The procedure should also recognize who is responsible for collecting information from each source. In addition, because important information may surface outside of planned accumulation activities, there should be a procedure to ensure that this “un planned” information is stored, and made available to decision makers. For this reason, the venture should make the reasons for its prioritization decisions clear and have a procedure for revising its prioritization of information sources in response to new information about market tendency. We also find that new ventures can benefit from the use of official procedure for market information employment. The goals of an official

information employment procedure include expanding the arrange of decision alternatives measured, expanding the kinds of information used to evaluate those alternatives, and developing a fuller understanding of the various indirect suggestion, arising from the information collected by the firm. Thus the firm may find it helpful to officially require the identification of decision alternatives and a review of available information and its implications. In addition, it may be useful to show the people that are responsible for various steps in the information employment procedure. One possible danger of an official information procedure is a lengthening of the time required to make a decision. A second danger is that official procedure for information employment may contain unconditional judgments about attractive against unattractive decision alternatives, as well as useful against non-useful information. Often these judgments are recognized on the firm's existing understanding of the markets it serves and its competitive environment. To ensure that the firm's official procedure do not delay effective decision-making, these unconditional judgments should be made clear and the firm should have a procedure for revising these judgments recognized on new information. Our conclusions must be

Table 4. Summary of results of hypothesis testing.

Hypothesis	Result	Comments
Main effects		
H1 : in recognized markets, new venture performance is positively connected to the use of customer interaction procedures.	Not supported	
H2 : in recognized markets, new venture performance is positively connected to the use of formal procedure for market information acquisition.	Not supported	
H3 : in recognized markets, new venture performance is positively connected to the use of formal procedure for market information utilization.	supported	
H4 : in recognized markets, the use of formal market information utilization procedure is positively connected to the use of customer interaction procedure.	Not supported	A firm with higher levels of customer interaction relies less on formal procedure for information utilization.
H5 : in recognized markets, the use of formal market information utilization procedure is positively connected to the use of formal procedure for market information acquisition.	supported	
Moderating effects		
H6(a) : The positive relationships between new venture performance and customer interaction are higher in emergent markets than in recognized markets.	Not supported	
H6(b) : The positive relationships between new venture performance and acquisition are higher in emergent markets than in recognized markets.	supported	
H6(c) : The positive relationships between new venture performance and utilization are higher in emergent markets than in recognized markets.	Not supported	Formal procedure for market information utilization have greater impact on new venture performance in recognized markets than in emergent markets.
H6(d) : The positive relationships between utilization and customer interaction are higher in emergent markets than in recognized markets.	Not supported	
H6(e) : The positive relationships between utilization and acquisition are higher in emergent markets than in recognized markets.	Not supported	Formal procedure for market information acquisition is more strongly associated with formal procedure for utilization in recognized markets than in emergent markets.

certified in several ways. First, because our sampling frame comprise of venture-backed firms and firms listed in the Inc 250, our respondents represent rapidly-growing firms. Moreover, we surveyed existing new ventures, so our results may be affected by survivor bias. Second, we relied on single informants to provide perception into the information procedure of respondent firms. Because these firms are start-up ventures, there are good reasons to believe that most of our respondents were well- familiar with this procedure, and that the incremental value of multiple informants would has been small. Nevertheless, it is possible that in some of the larger firms in our sample, respondents may have had incomplete information about the data accumulation procedure within their firms. Finally, because our data was collected from start-up ventures in the West of Iran establishing the results is an important topic for future research. However, our findings suggest that official procedure is more valuable in recognized markets. One possible explanation for this result is that, among the new ventures in our sample, official obtained and employment procedure were not extensive. Given the human and financial resource restriction faced by start-up firms (Mohan-Neill, 1995), it is possible that the official procedure developed by new ventures tend to focus on general guidelines that lack detail. As the firm age and its resources expand, the employees responsible for market information obtained and employment change. To ensure that knowledge is conserved and forwarded within the organization, these guidelines develop into more detailed procedure that reflects the firm's accumulated experience within its served markets (Abernathy and Utterback, 1978). To test this explanation, future research should clearly

measure the extensiveness of official procedure for information accumulation /use and assess the relationship between extensiveness and performance. Official procedure may also lack extensiveness because they are recognized on existing knowledge about customers and markets (Day, 1994). As a result, when customer state is changing or new sections are emergent, prioritizations recognized on existing knowledge may lead to delays in detecting emergent market tendency. Similarly, official employment procedure that prioritize information recognized on existing knowledge may lead firms to undervalue information about changing customer tastes or emergent sections when making product design or communication decisions. Thus future research should explore the degree to which the official information procedure used by new ventures force the ways in which market information is collected and used within the firm. A second surprising result involves the negative relationship between the level of customer interaction and the level of official procedure for information employment. One possible explanation for the negative relationship between customer interaction and the use of official information employment procedure is that firms with high level of customer interaction use less market information in their decision-making procedure. If this explanation is correct, then firms with high levels of customer interaction should report less in official use of market information. To test this possibility, future research should collect separate measures of official and in official procedure for information employment. Another possible explanation for this result is that, as a result of close interactions with customers, firms feel confident about customer reactions to product and communication enterprises. As a result, the noticed benefits of official information procedure may be lower than the noticed cost of establishing such procedures. This explanation could be tested by measuring the noticed benefits that entrepreneurs attribute to official procedure for market information employment and examining the correlation between noticed benefits and the level of customer interaction. Other research opportunities arise from extensions of the theoretical model examined in this paper. The research described here focused on the direct impact of market information procedure on firm performance. We believe that this focus is appropriate in start-up ventures, which lack recognized product lines that create important revenue for the firm.

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