

The Impact of Organizational Improvisation on Market Orientation

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ABSTRACT

Organizational improvisation, the convergence of planning and execution, has emerged as an alternative approach to the limitations in strategic planning. Organizational improvisation has a significant impact not only on organizational performance, but also on market orientation, which has emerged as a key issue in the field of technology commercialization. This study investigates both the effect of organizational improvisation on market orientation, as well as the effect of environmental turbulence and time pressure on organizational improvisation. Results show that organizational improvisation has a positive influence on market orientation, with a stronger effect on the diffusion of market information. This is greatly impacted by environmental turbulence and time pressure. As a result, promoting competencies in organizational improvisation at the corporate level is suggested as a significant means to enhance market-oriented organizational innovation.

Keywords: Organizational Improvisation, Market Orientation, Environmental Turbulence, Time Pressure

1. INTRODUCTION

Regardless of tangible goods or intangible service, success of most new content depends largely on the market reaction. Today, a countless amount of content is launched into the market. Indeed, success of fresh and innovative products should meet various requirements and be based on recognition and fulfillment of demand in the market.

Since Jaworski and Kohil[1] introduced the concept of market orientation, multitudes of research have been conducted from the perspective of market entry, innovation, and diffusion of new products in regards to marketing and technology commercialization. Market orientation may be defined as an effort to create and diffuse information and adjust quickly with changing environment at the corporate level. An increasing importance of market-oriented R&D is closely bound up with market orientation. However, research on market orientation has mainly focused on the performance resulting from market orientation, rather than the methods for strengthening market orientation. As a result, managers recognize the importance of market orientation, but they question how to evaluate market orientation.

On the other hand, most organizations that establish mid or

long-term strategies, execute them on the basis of systematic strategy manuals. Despite many merits they have, such manuals reveal limitations in predicting various events that occur in our world. Conspicuous examples may be taken from the nuclear accidents caused by the earthquakes and nuclear and radiation accidents in Japan, in March, 2011. Japanese response to these disasters has been under severe criticism due to the inflexibility their strategy manuals have. Therefore, organizational improvisation has emerged as an alternative to the limitations in strategic planning competencies to cope with the changing environment.

This study intends to identify whether organizational improvisation can elevate market orientation and identify the relationship of environmental turbulence and time pressure. These are factors which can contribute to elevating market orientation. Finally, this study intends to draw implications regarding organizational improvisation from the perspective of market orientation as well as antecedent factors of organizational improvisation.

2. THEORETICAL BACKGROUND

2.1 Organizational Improvisation

Research focuses increasingly on improvisation as a key theoretical lens for studying emergence, innovation and adaptation such as new product development, firm renewal,

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technology implementation, city administration, information systems development, or entrepreneurial settings[2].

Organizational improvisation has been suggested as a means to overcome the limitations related to the inflexibility in environmental changes. It is a creative process where planning and execution are accomplished immediately, and at the same time[3]. An approach to organizational improvisation in the field of management comes from Moorman's study[4]. After examining organizational improvisation in various fields such as music, theaters, medicine, and education, she defined organizational improvisation as a convergence of planning and execution within a given time from the perspective of corporate organizations.

Thereafter, efforts have been made to define the concept of organizational improvisation from the management perspective. Cunha et al.[3] added behavioral concepts to include cognitive, emotional, and social resources. Vera and Crossan[5] suggested that organizational improvisation is a concept differentiated from innovation, adaption, learning, opportunism, or creativity. They suggested that adaption is adjusting to one's external environment not necessarily being considered improvisation. Learning is a process of discovering, retaining and searching for knowledge. Opportunism is distinguished an instrumental factor of planning. Creativity is discerned from improvisation, due to the attributes of spontaneity and real-time response which improvisation has.

Organizational improvisation has emerged as an alternative to the limitations in strategic planning. The limitations are due not only to the errors in prediction, deviation, and formalization in strategic planning, but also to the power relationship in the process of strategic planning. In this respect, Mintzberg[6] severely criticized strategic planning for being only strategic programming.

The need to introduce organizational improvisation is based on its usefulness in coping with turbulent environments. Organizational improvisation is very effective in a condition where the environment changes much faster than the cycle of regular planning. That is, organizational improvisation may be employed efficiently where front-line sales people can respond immediately to customers' needs. Organizational improvisation can also be utilized in new product development, as well as in problem solving via rapid decision making. Improvisation may occur at any place and anytime in turbulent, innovative, stable and even routine situations. Lawrence[7] divided improvisation into rapid improvisation related to emergency situations, and progressive improvisation, suggesting that improvisation may be applied throughout corporate routines.

2.2 Organizational Improvisation and Market Orientation

Efforts to apply organizational improvisation to marketing strategies have been made. Dennis and Macaulay[8] applied strategic marketing planning by analyzing jazz. They suggested the matrix of improvisation and market orientation as shown in Figure 1 and divided their types into four areas of levels.

Area 1, the combination of low improvisation and low market orientation, is one size level improvisation. This is typical of a bureaucratic organization which stays inflexible and defies creativity. In this case, marketing development hardly considers changes in the environment, which leads to

limited communication among departments and lack of creation of new ideas. Area 2 is the combination of high improvisation and low market orientation. This is the type of alternative improvisation where suggestions on customer needs in the field are made in the preplanned range. Customer needs are limited when they are in the range of strategic planning. On the operational level, a lot of improvisation is needed. This causes disorder and in turn leaves room for customer dissatisfaction because improvisation is not solved strategically. Area 3, the combination of low improvisation and high market orientation, is single level improvisation. It is in this place where mid-level managers may make decisions within the range of strategic planning, but employees in the field may be limited in autonomy and creativity. Lastly, Area 4 is a combination of high improvisation and high market orientation. Here we have multi-level improvisation where customer orientation is implemented in corporate strategies, tactics, and operating levels. Also, immediate responsiveness to customer needs is made possible.

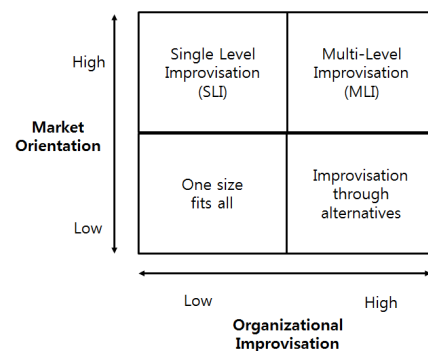


Fig. 1: Matrix of organizational improvisation - market orientation

From the perspective of the salespeople, the key marketing agents in the field, improvisation increases market orientation. That is, abilities in a salesperson's improvisation such as creative emotional control have direct impacts on market orientation and marketing performance[9].

Kyriakopoulos[2] found the moderating effects of market orientation, that is, the effects of internal and external market information on the relationship between organizational improvisation and new product development. His study shows that firms' capabilities in organizational improvisation to cope with changes in target market, market quality, and key competitors are closely related to market orientation. In other words, firms equipped with a greater capacity in organizational improvisation are in a better position to understand the priorities and to reduce the number of possible options. They in turn are able to reduce mistakes in strategic decision making and delays in its implementation via market orientation capabilities including the creation and diffusion market information[10]. In a pre-planned innovation, the integrating process of planning and implementation increases firms' market orientation through a greater capacity for adaptation to market change. Therefore, organizational improvisation is regarded as essential in firms' building market orientation in the turbulent market environment.

2.3 Turbulent Environment, Time Pressure and Organizational Improvisation

Organizational improvisation contributes to creating better corporate performance in times of uncertainty. It may become beneficial to marketing strategies in a market with an unsettled environment. It may be more effective when planned and implemented at the same time if challenged with a turbulent environment; which then requires a shorter time frame than a cycle of regular planning[12]. Organizations are in great need of innovative competencies in removing old plans, while planning and implementing new actions at the same time[13]. They also need to develop the capability to implement new actions quickly in order to attain sustainable growth in a competitive industrial environment[14]. Learning and adaption not planned are quickly implemented in a rapidly changing environment [15].

Organizational improvisation is closely related to time. Its concept contains simultaneous planning and implementation in time[16]. It is considered a phenomenon based on time, in that it focuses on timing in planning and implementation. Tumer[17] suggested that prior plans can no longer be applied in an emergency. Organizations quickly make decisions and implement them in an emergency situation[18]. With the case of strategic decision making under time pressure, the quantity and concentration of mobilized resources increase accordingly as the level of organizational improvisation increases.

3. METHODOLOGY

3.1 Research Model and Hypothesis

This study aims to investigate empirically how to elevate market orientation through organizational improvisation. It also proposes to identify how environmental turbulence and time pressure are related. As shown in Figure 2, environmental turbulence and time pressure will affect organizational improvisation. In turn, organizational improvisation will affect market orientation. To be precise, the higher time pressure is, the higher organizational market orientation is.

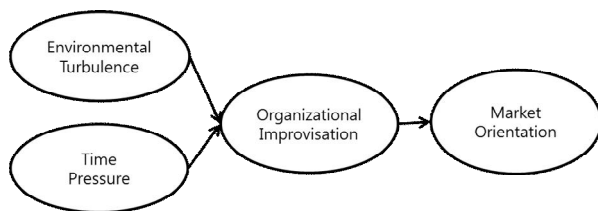


Fig. 2: Research model

As the proportion of change increases in an environment, organizations strengthen improvisational actions. This is responsible for integrating the process of planning and execution[18]. Moorman and Miner[12] suggested that as the environment becomes more turbulent, organizations' improvisational actions related to new product development become more elevated.

Decisions are swiftly made, and at the same time action is taken immediately on issues under more time pressure[16].

Scanlon[16] pointed out that organizations under the same environment show a different degree of improvisation, according to the extent and urgency of problems. Eisenhardt and Tabrizi[17] implied that as a way to cope with time pressure under an urgent situation, organizational improvisation needs to be implemented by establishing time intervals in the midst of milestones.

Prior research on organizational improvisation has mainly focused on the direct effects of organizational improvisation in regards to organizational performance. Hutt et al.[19], however, suggested that as an organizational improvisation action like unplanned and innovative product development occurs, such competencies in market orientation become stronger. Dennis and Macaulay[8] found in the matrix of organizational improvisation and market orientation that market orientation differs according to the extent of organizational improvisation that is used. They showed the results in market orientation according to the extent of organizational improvisation in not only single level improvisation, but multi-level improvisation as well. This means that although Jaworski and Kohli's[1] idea on market orientation may be included in the single level improvisation; an authentic customer orientation may be practiced in multi-level orientation. That is to say, as an organization is great in organizational improvisation and market orientation, it becomes a true market oriented organization. This then meets real demand in the market. On the other hand, Moorman[4], centered on the effects of organizational improvisation on information processes such as organizational memory. This showed how market orientation changes according to organizational adaptation. Eisenhardt[18] suggested that the integration of decision making based on real time information accelerates the cognitive process inside an organization. This event then elevates the processes of both information collection as well as diffusion.

Based on the aforementioned, this study presents the following three hypotheses based on the relationships between environmental turbulence and organizational improvisation, time pressure and organizational improvisation, and organizational improvisation in regards to market orientation.

H1: The more turbulent the environment becomes, the higher the organizational improvisation.

H2: The higher an organization under the time pressure, the higher the organizational improvisation.

H3: The higher an organizational improvisation, the higher market orientation.

3.2 Operational Definitions and Measurements of Variables

Environmental turbulence is defined as the extent of changes in a technology environment, the extent of changes in a market environment, and the extent of changes in customer demand[12]. It was measured by using six items that include changes and opportunities in products and technology, creation of new ideas, and changes in preference for products and customer tendency.

Time pressure is defined as room and pressure for time related to task performance and completion. It was measured by using three items: decision making, time pressure in task completion, and time pressure in task performance.

Organization improvisation is defined as the amount of time

implemented into planning as a concurrence of planning and execution. It was measured by using eight items such as the following: execution after changes in planning, execution after new planning, coping with an unexpected emergency, trial of a new method for problem solving, etc.

Market orientation is defined as an activity of creation and diffusion of market information and its resulting response activity. It was measured by using 15 items including: five items in collection such as identification of, and response to customer needs, regular customer satisfaction and information creation, five items in information diffusion, and five items in response to information.

3.3 Data Collection and Sample Characteristics

The questionnaires were given to 500 firms in Korea from March, 2011 through May, 2011. These were both online and offline, and sent mainly to managers in marketing. 187 questionnaires were retrieved (37.4%) and 170 valid questionnaires were used in the empirical analysis.

4. RESULTS

4.1 Profiles of Respondents

In profiles of respondent firms, average years of operation was 20.6(SD. 12.04), the average number of employees was 127.3(SD. 243.02), and the average capital was 0.467 billion Won(SD. 1.602 billion Won). In profiles of respondents, the majority of respondents were male(72.9%) and married(87.1%). The average age of the respondents was 44.4 years(SD. 7.63) and most of the respondents were college graduates(81.2%). Respondents' average period of employment was 12.9(SD: 4.93 years) and respondents' positions were above department head(30.5%), as well as CEOs or executives (8.2%).

4.2 Construct Reliability and Validity

This study attempted to elevate the validity of paradigms after conducting a focus group interview, as well as a pilot test for people in academic, research, and managerial circles. After conducting an exploratory factory analysis in order to obtain internal consistency of the items, a confirmatory factor analysis was conducted around items which obtained validity. Table 1 shows the construct reliability and validity of each latent variable. Cronbach's alpha was computed to assess the internal consistency of the constructs and shows higher than 0.80 in each construct, demonstrating the reliability of the constructs.

Table 1: Results of reliability and validity analysis

Variables	Items	Estimates	s.d.	t value	Cronbach's alpha
Environmental Turbulence	turbulence1	0.914	0.084	10.904	0.900
	turbulence2	0.818	0.075	10.872	
	turbulence3	1			
	turbulence4	0.909	0.086	10.611	
	turbulence5	0.700	0.071	9.889	
	turbulence6	0.850	0.082	10.3	
Time Pressure	pressure3	0.984	0.079	12.530	0.814
	pressure2	1			

Organizational Improvisation	pressure1	0.882	0.083	10.582	0.926
	Improvisation1	0.829	0.071	11.716	
	Improvisation2	0.836	0.066	12.709	
	Improvisation3	0.689	0.071	9.681	
	Improvisation4	0.961	0.066	14.513	
	Improvisation5	0.866	0.061	14.303	
	Improvisation6	1			
	Improvisation7	0.810	0.069	11.825	
Creation of Market Information	I_Creation1	0.844	0.084	10.000	0.890
	I_Creation2	0.993	0.092	10.807	
	I_Creation3	0.996	0.088	11.337	
	I_Creation4	0.993	0.075	13.311	
	I_Creation5	1			
Diffusion of Market Information	I_Diffusion1	0.898	0.081	11.069	0.899
	I_Diffusion2	0.902	0.074	12.270	
	I_Diffusion3	0.988	0.081	12.165	
	I_Diffusion4	1			
	I_Diffusion5	0.918	0.076	12.146	
Response of Market Information	I_Response1	1			0.877
	I_Response2	0.861	0.071	12.194	
	I_Response3	0.784	0.077	10.188	
	I_Response4	0.755	0.079	9.524	
	I_Response5	0.797	0.079	10.057	
Model fit: $\chi^2=1119.307$ df=413(2.710), GFI=.956, AGFI=.931, RMR=.048, NFI=.981					

As seen in Table 1, overall, the proposed scale of the organizational improvisation model is reliable and valid. Also, the goodness-of-fit indices for each dimension using the one factor solution showed that the indices suggested a satisfactory degree of unidimensionality. Results showed that the structural equation model showed a good fit ($\chi^2=1119.307$ DF=413(2.710), GFI=.956, AGFI=.931, RMR=.048, NFI=.981). Likewise, as the estimates in each item show higher than 0.70, discriminant validity and convergent validity between the factors are demonstrated.

4.3 Test of Research Model and Hypothesis

First of all, the proposed research model showed a worthy fit ($\chi^2=1,327.080$ DF=423(3.137), GFI=.935, AGFI=.908, RMR=.049, NFI=.940). The path coefficients indicate that turbulent environment and time pressure have significantly positive effects on organizational improvisation and in turn, organizational improvisation has significantly positive effects on the sub-constructs of market orientation.

Table 2: Results of hypotheses test

Hypotheses	Path	Estimates	s.d.	t value
Hypothesis 1	Environmental Turbulence → Organizational Improvisation	0.742**	0.082	9.011
	Time Pressure → Organizational Improvisation	0.232**	0.062	3.721
Hypothesis 3	Organizational Improvisation → Creation of Market Information	0.760**	0.088	8.676
	Organizational Improvisation → Response of Market Information	0.803**	0.083	9.654

Improvisation→ Diffusion of Market Information			
Organizational Improvisation→ Response of Market Information	0.735**	0.090	8.128

As shown in Table 2, the path coefficient between environmental turbulence and organizational improvisation(H1) showed 0.742($t=9.011$). It was confirmed that the higher environmental turbulence, the higher organizational improvisation. The path coefficient between time pressure and organizational improvisation(H2) showed 0.232($t=3.741$), and it was confirmed that the higher time pressure, the higher organizational improvisation. The path coefficient between organizational improvisation and market orientation(H3) showed 0.760($t=8.676$) in organizational improvisation and information creation, 0.803($t=9.654$) between organizational improvisation and information diffusion, and 0.735($t=8.128$) between organizational improvisation and information response. This confirms that the higher organizational improvisation, the higher market orientation.

5. CONCLUSION

Traditional strategic planning has positioned itself as creating a sustainable competitive advantage from the perspective of mid and long term periods, but it has limitations in regards to coping with turbulent environments. Organizational improvisation, suggested as an alternative to strategic planning, has a direct positive effect on organizational performance and has a significant effect on market orientation, a key concept in new technology commercialization.

This study aimed to identify the effects of organizational improvisation on market orientation. It also tried to test the effects of environmental turbulence and time pressure, and external environmental factors on organizational improvisation.

The findings show that organizational improvisation has a significantly positive effect on market orientation. That is, the higher organizational improvisation, the higher market orientation, which includes such factors as the creation of, diffusion of and response to market information. Especially, organizational improvisation is found to have the greatest effect on the diffusion of market information. This result lends a greater support to the multi-level improvisation rather than to single level improvisation in the matrix model of organizational improvisation and market orientation suggested by Dennis and Macaulay[8].

On the other hand, it counters the suggestion of Jaworski and Kohli [1] that market orientation may be met at the single level improvisation. That is, it shows that substantial market orientation may be elevated at the multi-level organization, where organizational improvisation is established at the corporate level. In addition, the result that organizational improvisation has the greatest effect on the diffusion of market information implies that as organizational improvisation

strengthens in firms, communication and integration among departments get enhanced. As a result, collaboration between marketing departments and other departments becomes stronger and firms are in a better position to recognize demands and changes in the market.

Also, environmental turbulence and time pressure are found to have significantly positive effects on organizational improvisation. Such a result implies that as environments in the market get more turbulent and firms are under a great deal of time pressure in solving imminent issues due to the changes in the environment, organizational improvisation gets stronger. In particular, environmental turbulence is found to have relatively greater effects on organizational improvisation than time pressure. This implies that organizational improvisation gets stronger as the environment gets more turbulent. Such a result confirms the importance of innovative competencies to immediately plan and execute a new direction of actions through organizational improvisation, a process of creative destruction, in times of turbulent environments, as suggested by Tushman and Anderson[13].

The present study has certain limitations which need to be taken into account. The subjects of this study are limited mainly to personnel in marketing departments. This study does not represent overall perception among all other personnel of organizational improvisation, environmental turbulence, and time pressure at the corporate level. It is likely that overall perception at the corporate level would contribute to the better understanding of the above mentioned constructs. Therefore, an extension of this research via an enterprise approach should be explored to validate the findings. Nevertheless, within the limitations of this study, the findings provide important information that could be used to examine the nature of organizational improvisation.

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