

Organizational Slack and the Marketing Performance of Information Technology Firms

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Abstract—Marketing constitutes a key success factor for firms. In order to exploit slack resources value for marketing, this paper studies the impact of organizational slack on the marketing performance of information technology firms in China for the first time. I develop a linear relationship model between organizational slack and firm marketing performance, and subsequently test this model using a sample of 34 Chinese firms. The result shows that organizational slack is positively related to the marketing performance of information technology firms. Overall, results highlight the importance of additional research into intervening factors impacting the slack–performance relationship.

Index Terms—Organizational slack, marketing performance, information technology industry, information technology firm management, linear curve, empirical analysis.

I. INTRODUCTION

It seems undisputed that marketing constitutes a key success factor for firms. Marketing can be defined in many ways [1,2]. It can be seen as a function or department within the organization or as defined according to specific types of expenditure, such as advertising, promotion, or market research, but this narrows “marketing” considerably, especially for firms that do not undertake those functions, e.g. business-to-business. For the purpose of this paper, we define “marketing” as “meeting needs profitably” [1], [2]. In other words “marketing” here refers to what the whole company does to satisfy customers and thereby create shareholder value [1]. Firms are continually challenged to foster growth and improve marketing performance while enduring strong exogenous pressures and endogenous constraints. Management scholars have offered strategic and behavioral explanations of factors that induce or impel firms to compete and excel in these evolving competitive landscapes. An emergent dialog within this paradigm is the role of organizational slack and their influence on managers’ aspirations [3].

Organizational slack is potentially utilizable resources that can be diverted or redeployed for the achievement of organizational goals [3]. Organizational slack acts as inducements to experiment, take risks, and make proactive strategic choices. Organizational slack is also deployed to build marketing capabilities that make firms competitive [3]. Given this critical role, the presence or absence of organizational slack and their impact on marketing

performance carries substantive implications for scholarship in organizational theory and the practice of management. Consequently, to study the impact of organizational slack on marketing performance has substantive theoretical and practical implications.

However, there are rare studies on organizational slack and marketing performance in current literatures. Based on the analysis all above, this paper will study further the relationship between organizational slack and marketing performance with reference to the management practice of Chinese firms in order to provide theoretical explanation for which development and use of organizational slack will fully enhance firms’ marketing performance. To provide insight into the relationship between organizational slack and marketing performance, this study employed a empirical analysis based on 34 samples from information technology firms in Henan Province to examine extant research results. Specifically, I focus on firms of a industry in China, based on survey data, to investigate whether organizational slack contributes toward or inhibits marketing performance.

II. THEORETICAL BACKGROUND AND HYPOTHESIS

Organizational slack has been defined in the literature in different ways. For example, Cyert and March defined organizational slack as “the disparity between the resources available to the organization and the payments required to maintain the coalition” [4]. Similarly, Bourgeois (1981) defined organizational slack as resources in excess of what is required for the efficient operation of a firm [5]. Also, Nohria and Gulati defined organizational slack as “the pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output” [6]. For the purposes of this study, organizational slack will be defined as the resources readily available to an organization that are in excess of the minimum necessary to produce a given level of organizational output as well as the resources that are recoverable from being embedded in the firm [7].

Organizational slack has a positive impact on marketing performance for several reasons [3]-[11]. Firstly, organizational slack acts as an inducement, which represents ‘payments to marketing members of the coalition in excess of what is required to maintain the organization’. Second, organizational slack can become a resource for marketing team conflict resolution. The upshot is that, with sufficient slack, there can be a solution for every problem. Third, organizational slack can be a facilitator of strategic behavior, which allows the firm to experiment with new strategies such as introducing new products and entering new markets [10].

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Especially in information technology industry of higher technique service need, organizational slack enables the firm effectively to deal with fluctuations in demand and better to satisfy customer needs. Accordingly, it can be argued that the more likely it is that organizational slack is used by managers to improve marketing performance in information technology firms. This leads to the first hypothesis.

Hypothesis1: Organizational slack is positively related to the marketing performance of information technology firms.

On the other hand, organizational slack has negative impacts on firm marketing performance. Organizational slack is argued to be synonymous with waste, and a sign of managerial self-interest, incompetence, and sloth. From an agency theory perspective, marketing managers and their members inherently have a set of goals, such as the pursuit of power, prestige, money, and job security, that are not always aligned with those of principals, managers and their members may use organizational slack to maximize their own private benefits [8], [12], [13]. As a result, for information technology firms, organizational slack may become a source of agency problems, which breed inefficiency. This leads to the second hypothesis.

Hypothesis2: Organizational slack is negatively related to the marketing performance of information technology firms.

From an economic efficiency standpoint, it seems obvious that the argument ‘the more organizational slack, the better marketing performance’ contained in Hypothesis 1 needs to be qualified. There seemingly is little reason to believe that slack’s marketing performance-enhancing effect is linear. In other words, there may be a limit beyond which further ‘hoarding’ of organizational slack may backfire. The relationship may well be an inverse parabola. Researchers have speculated that ‘there is an optimal level of organizational slack for any given firm. If the firm exceeds that level, performance will go down’ [8]. This speculation has been supported by empirical studies of Tan & Peng (2003) [13]. They find that the impact of organizational slack on performance is curvilinear, which resembles inverse U-shaped curves. Therefore, according to Tan & Peng (2003), for information technology firms, it can be argued that organizational slack beyond a certain level may reduce firm marketing performance, that is to say, the relationship between organizational slack and marketing performance is curvilinear, generally positive but falling off beyond a certain level. This leads to the third hypothesis.

Hypothesis3: The relationship between organizational slack and the marketing performance of information technology firms is inverse U-shaped.

III. METHODOLOGY

A. Samples

The sample was drawn from information technology firms in Henan province by questionnaire. I randomly selected 34 firms. The questionnaire was accomplished by middle and senior managers. Descriptors of the respondents are summarized in Table I to Table II.

TABLE I: THE DISTRIBUTING OF RESPONDENTS’ JOB

Respondent post	Number	Percentage (%)
Middle manager	15	44.1
Senior manager	7	20.6
General manager	2	5.9
President	0	0
Other	10	29.4

TABLE II: THE DISTRIBUTING OF RESPONDENTS’ EDUCATIONAL BACKGROUND

Education	Number	Percentage (%)
Senior high school	3	8.8
Junior college	16	47.1
Undergraduate	12	35.3
Postgraduate	3	8.8

From Table I and Table II, the respondents have a good understanding of their firms’ management activity, and their responses to the questionnaire could actually demonstrate their firms’ condition.

B. Variables Measure

Marketing performance: Marketing objectives (both long and short-term) are primarily aimed at increasing firm revenue. According to Ambler & Roberts’ studies, the ultimate purpose of marketing is to improve shareholder value and that marketing performance should therefore be judged by some single financial indicator [1]. Because the statistical data is distempered or not willing to publish in many firms, it is hard to measure in quantity. But in their practical activities, managers collect and hold some useful information about their opponents in their industry, so they are clear about the comparative level of marketing performance of their firm. Thereby, I use for reference measure index of prior studies[1], [14], use the method of perception to measure comparative level of firm marketing performance compared with its main opponents. So this paper chooses three items to measure firm marketing performance: (1) sales growth, (2) increase of market share, (3) sales profit margin. In the questionnaires the answers were measured on 5-point Likert scale, using the scale from 1, strongly draggle, to 5, strongly keep ahead.

Organizational slack: The measure of slack resources borrow from the studies of Fang & Wang (2008) [15]. According to their definition and characteristics of the slack resources, this paper measure slack resources from the two aspects of the shared level of resources(reflecting the use range of resources as well as the conversion efficiency among differnet uses of the resources) and the multi-purpose in nature(reflecting the use range of resources), mainly choose three items to measure the level of slack resources[15], [16]: (1) The resource sharing level of various

departments within the firm is very high; (2) New uses of existing resources in a firm are often found; (3) Some new resources or new mix of existing resources in a firm are often found. In the questionnaires the answers were measured on 5-point Likert scale, using the scale from 1, strongly disagree, to 5, strongly agree.

Control variable: Like prior studies, this study takes firm size as a control variable, which is divided into 4 grades. The competition pressure that a firm faces is bigger, the resources of the firm are more needed more effective exploitation. Since the competition condition among firms in different industry, this study also take the competition condition in a industry as a control variable, which is measured on 5-point Likert scale, using the scale from 1-5, which means respectively few competition, not severe competition, general, severe competition and very severe competition.

C. Results

I test my model with the statistical software SPSS 13.0 and use exploratory factor analysis to test every index. In order to test the hypothesis all above, the paper draws on methods from Nohria & Gulati (1996), Zhong et al(2008,2010)[6,16,17], uses once, twice regression equation model including independent variable to process hypothesis testing. The regression equation model is as follow:

$$performance = \beta_0 + \beta_1 size + \beta_2 comp + \beta_3 var + \beta_4 var^2 + \varepsilon$$

I use the method of stepwise regression, if twice regression equation model is better than model including once regression equation, the U-shaped or inverted U-shaped relationship would be existed [16], [17]. Otherwise, the there is linear relationship between organizational slack and the marketing performance of information technology firms. The result of hypothesis testing show as Table III to Table V.

TABLE III: MODEL FACTOR LOADING OF THE ELEMENTS AND CRONBACH'S A

Elements describing indicators (N=34)	Factor loading
Marketing performance (Cronbach's $\alpha = 0.726$)	
V1 Sales growth	0.890
V2 Increase of market share	0.836
V3 Sales profit margin	0.680
Organizational Slack (Cronbach's $\alpha = 0.648$)	
V4 The resource sharing level of various departments within the firm is very high	0.772
V5 New uses of existing resources in a firm are often found	0.906
V6 Some new resources or new mix of existing resources in a firm are often found	0.632

The result of exploratory factor analysis from Table III indicate that factor loading and Cronbach's alpha are more than 0.60, every index is in accordance with requirement of hypothesis testing. Goodness-of-Fit test and significance test from Table V indicate that model 2 is better than model 3.

Meanwhile, collinearity and heteroscedasticity test indicate that there is no multicollinearity problems and heteroscedasticity issues (relevant test data are ignored). Therefore, hypothesis 1 is supported by these testing. Regression curve as Fig. 1 (control variable is ignored).

TABLE IV: MEANS, STANDARD DEVIATIONS AND CORRELATIONS

variables	mean	s.d.	1	2	3
1 Firm size	3.0	0.8528			
2 Competition	3.735	1.2138	-0.059		
3 Organizational Slack	4.133	0.8185	0.197	0.058	
	6	0			
4 Marketing Performance	4.140	0.7737	-0.134	-0.304 ⁺	0.340 ⁺
	4	7			

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$ + $p < 0.10$

TABLE V: REGRESSION MODEL OF ORGANIZATIONAL SLACK AND MARKETING PERFORMANCE

variables	Model 1	Model 2	Model 3
Constant	5.287**	3.901***	3.092
	*		
Firm size	-0.131	-0.194	-0.203
Competition	-0.199 ⁺	-0.198 ⁺	-0.182
		(p=0.076)	
Organizational Slack		0.379*	0.778
		(p=0.036)	
Organizational Slack ²			-0.049
F	1.855	2.992*	2.193 ⁺
R ²	0.113	0.250	0.252
Adjusted R ²	0.052	0.166	0.137

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$ + $p < 0.10$

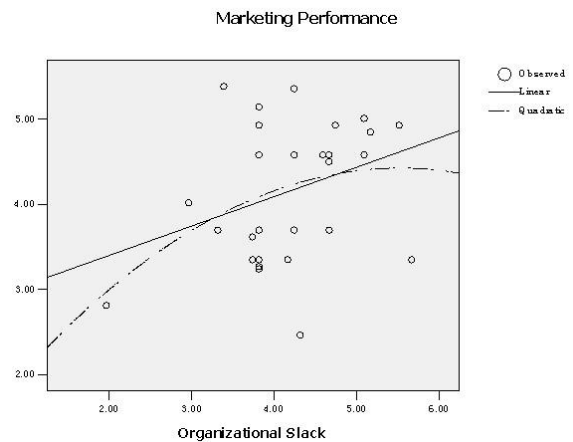


Fig. 1. Regression curve.

IV. CONCLUSION

This paper examines the relationship between the organizational slack and the marketing performance of

information technology firms in China for the first time and put forward a linear relationship model. The result shows that organizational slack is positively related to the marketing performance of information technology firms. That is to say, keeping ample organizational slack is propitious to improve a firm's marketing performance and promote firm development. Obviously, it is not effective solution for some firms to reduce slack such as making layoff blindly, especially making layoff rigidly.

Because of data limitations, this paper only studies firms in Henan Province, the universality of its conclusions shall be tested by the firms of other regions in future. Of course, other environment variables, such as industry, firm age and ownership structure, and so on, may have an impact on the relationship between organizational slack and the marketing performance of information technology firms, which provides opportunity for future research efforts.

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