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An exploration investigation on the role of industrial market information on the success of negotiations

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C H R O N I C L E

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A B S T R A C T

Information plays an important role on having crystal clear image about market. A good awareness about products, vendors, new rivals, etc. always helps us offer better prices and reach better agreements. This paper presents an investigation on the role of industrial market information on the success of negotiations. The proposed study designs a questionnaire in Likert scale consists of 22 questions, distributes it among 228 Iranian experts and analyzes it based on principal component analysis. During the survey, the numbers of questions are reduced to 17. Cronbach alpha is calculated as 0.86 and Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.773 and 745.8, respectively. Based on the results of our survey, we have derived six factors including human resource management, integrated strategy, organizational software packages, communication factors, penetration factors, past perception and assessment process.

1. Introduction

Growing globalization and environmental uncertainty have increased the challenges we face in offering goods or services. Integration of necessary information systems across partnering firms has become the backbone of supply chain management (SCM), since it facilitates the sharing of information needed to enhance organizational flexibility and responsiveness while minimizing unwelcome risk and inventory expenses. Rajaguru and Matanda (2012) studied the effect of inter-organizational information system (IOIS) integration on the association between inter-organizational compatibility and supply chain capabilities based on data collected from the Australian retailing sectors. They reported that inter-organizational compatibility of technical, strategic, and cultural inter-organizational dimensions could facilitate IOIS integration and supply chain capabilities. They also suggested that to reach maximum advantages for all chain members, IOIS integration requires to be embedded in the strategies and objectives of partnering organizations. Business-to-business and industrial marketing managers have to be informed that IOIS integration processes need support of top managers of the partnering firms and should be embedded in the organizations' strategic objectives.

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Beynon-Davies, P. (2009) provided a more detailed account of the concept of an information system (IS) (Besson & Rowe, 2012) and established the idea of an IS as a semi-formal 'language' necessary for the coordination and control of activity in different forms of human organization. Lin and Hong (2009) proposed a marketing IS for a Tea-beverage manufacturing business unit for supporting sales management. The marketing information system concentrates at providing assistance in performing efficient dissemination and management of necessary data and sales documents as well as improving marketing and promotion processes. They reported that their proposed model could provide better support for managers as a result of improved communication and monitoring. Strategic Information Systems Planning (SISP) plays an essential role for better management of different systems.

Teubner (2007) performed an investigation in a German financial services company (FSC) and studied the enterprise situation and the information system practices situation of FSC based on the SISP approach in place. They reported that practitioners largely ignore academic literature and did not implement it in support of their SISP efforts. Buhl et al. (2012) performed an investigation to find where the competitive advantage in strategic information systems research could be more detected by performing a survey on the German business and information systems engineering tradition.

Li et al. (2008) developed a research model of initial trust formation by considering different factors such as trusting bases, trusting beliefs, trusting attitude and subjective norm, and trusting intentions. They made an assessment on eight trusting base factors including personality, cognitive, calculative, and both technology and organizational factors of the institutional base. They reported that subjective norm and the cognitive–reputation, calculative, and organizational situational normality base factors substantially impact initial trusting beliefs and other downstream trust constructs.

Konchitchki and O'Leary (2011) investigated the use of event studies in information systems and accounting information systems research based on a three-pronged approach. First, they provided a comprehensive survey of the existing research about announcements of the adoption of enterprise resource planning systems and of the impact of security breaches in firms' information systems. Next, they summarized event study methodologies applied in prior research, along with some of the key parameters and concerns associated with their implementation and provided shed light on key event study modeling issues.

Järveläinen (2013) presented a framework for business continuity management, and extended it to the IS context. They also validated the method in a survey of IT managers and chief information officers in some organizations operating in Finland. They reported that social factors such as committed managers and employees were influential in decreasing negative business impacts.

2. The proposed study

This paper presents an investigation on the role of industrial market information on the success of negotiations. The proposed study designs a questionnaire in Likert scale consists of 22 questions, distributes it among 228 Iranian experts and analyzes it based on principal component analysis. During the survey, the numbers of questions are reduced to 17. Cronbach alpha is calculated as 0.86 and Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Approx. Chi-Square are 0.773 and 745.8, respectively. Fig. 1 demonstrates the results of Scree plot. As we can observe from the results of Fig. 1, there are two factors, which could be extracted for further studies. In addition, as we can observe from the results of communalities given in Table 1, most factors are well above the minimum acceptable level of 0.5. Table 2 demonstrates the results of factor analysis on these factors.

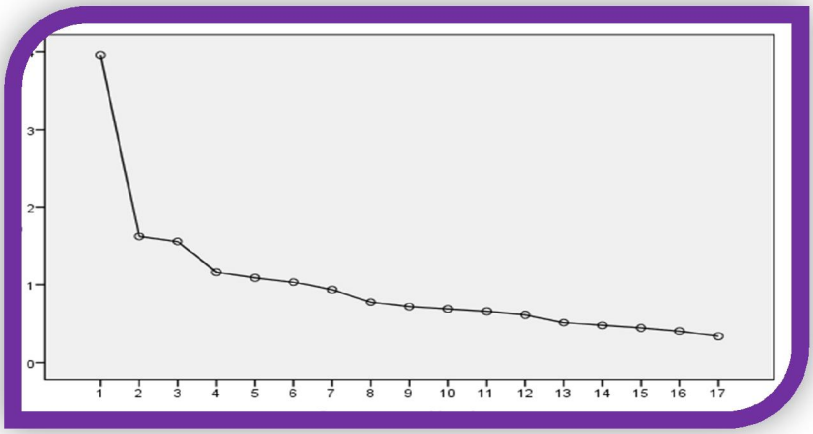

Fig. 1. The summary of Scree plot

Table 1
The summary of communalities

	Initial	Extraction
VAR00001	1.000	.694
VAR00002	1.000	.654
VAR00003	1.000	.563
VAR00004	1.000	.680
VAR00005	1.000	.603
VAR00007	1.000	.474
VAR00008	1.000	.684
VAR00009	1.000	.533
VAR00010	1.000	.709
VAR00011	1.000	.555
VAR00012	1.000	.573
VAR00013	1.000	.582
VAR00014	1.000	.560
VAR00015	1.000	.645
VAR00016	1.000	.738
VAR00017	1.000	.552
VAR00019	1.000	.632

Table 2
The summary of principal component analysis after rotation

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.960	23.291	23.291	3.960	23.291	23.291	2.593	15.250	15.250
2	1.625	9.559	32.850	1.625	9.559	32.850	1.942	11.425	26.676
3	1.558	9.166	42.016	1.558	9.166	42.016	1.549	9.110	35.785
4	1.164	6.846	48.862	1.164	6.846	48.862	1.510	8.884	44.670
5	1.092	6.422	55.284	1.092	6.422	55.284	1.453	8.545	53.214
6	1.034	6.084	61.368	1.034	6.084	61.368	1.386	8.154	61.368
7	.935	5.503	66.871						
8	.776	4.567	71.438						
9	.718	4.222	75.660						
10	.688	4.047	79.708						
11	.658	3.868	83.576						
12	.614	3.612	87.187						
13	.514	3.025	90.213						
14	.478	2.813	93.026						
15	.444	2.613	95.639						
16	.402	2.367	98.007						
17	.339	1.993	100.000						

Based on the results of our survey, we have derived six factors including human resource management, integrated strategy, organizational software packages, communication factors, penetration factors, past perception and assessment process.

3. The results

In this section, we present details of our findings on six influencing factors.

3.1. The first factor: Human resource management

The first factor is associated with human resource management. Table 3 demonstrates details of our study. As we can observe from the results of Table 3, "Organizational change" is the most important factor, followed by "Good quality input data", "Taking advantage of information technology", and "Using electronic business".

Table 3
The summary of factors associated with human resource management

Option	Factor	Eigenvalues	% of variance	Accumulated
Good quality input data	0.652			
Organizational change	0.727	2.489	62.223	62.223
Using electronic business	0.577			
Taking advantage of information technology	0.578			

Cronbach alpha =0.80

3.2. The second factor: Integrated software packages

Integrated software packages are the second important issues and they include two factors, which are summarized in Table 4 as follows,

Table 4
The summary of factors associated with integrated software packages

Option	Factor	Eigenvalues	% of variance	Accumulated
Resource management program	0.502			
Automation	0.806	2.031	50.767	50.767

Cronbach alpha =0.87

According to the results of Table 4, "Automation" is number one priority followed by "Resource management program".

3.3. The third factor: Communication factors

Communication factors are the third important issues and they include three factors, which are summarized in Table 5 as follows,

Table 5
The summary of factors associated with communication factors

Option	Factor	Eigenvalues	% of variance	Accumulated
Firm expenses	0.863			
Information	0.863	2.093	69.782	69.782
Management of information	0.778			

Cronbach alpha =0.88

According to the results of Table 5, "Information" is number one priority followed by "firm expenses" and "Management of information".

3.4. The fourth factor: Penetration factors

Penetration factors are the fourth important issues and they include three factors, presented in Table 5 as follows,

Table 6
The summary of factors associated with penetration factors

Option	Factor	Eigenvalues	% of variance	Accumulated
Dangers of hackers	0.863			
Information lost	0.863	1.530	38.238	38.238
Internet usage	0.778			

Cronbach alpha =0.40

According to the results of Table 6, "Information lost" is number one priority followed by "Danger of hackers" and "Internet usage".

3.5. The fifth factor: Past perception

Past perception is another factor with two sub-components, presented in Table 7 as follows,

Table 7
The summary of factors associated with past perception

Option	Factor	Eigenvalues	% of variance	Accumulated
Mutual trust between two parties	0.750			
Firm reputation	0.866	1.729	57.625	57.625

Cronbach alpha =0.63

According to the results of Table 7, "Firm reputation" is number one priority followed by "Mutual trust between two parties".

3.6. The sixth factor: Process based approach

Process based approach is the last factor with two sub-components, presented in Table 8 as follows,

Table 8
The summary of factors associated with past perception

Option	Factor	Eigenvalues	% of variance	Accumulated
Inter-department communication	0.857	1.424	47.476	47.476
Competitive advantage	0.824			

Cronbach alpha =0.49

According to the results of Table 8, "Inter-department communication" is number one priority followed by "Competitive advantage".

3. Conclusion

This paper has presented an investigation on the role of industrial market information on the success of negotiations. The proposed study of this paper has extracted six factors by applying principal component analysis. The first factor, human resources management, includes four sub-components

where “Organizational change” is the most important factor, followed by “Good quality input data”, “Taking advantage of information technology”, and “Using electronic business”. The second factor, integrated software packages, maintains two factors where “Automation” is number one priority followed by “Resource management program”. The third factor is associated with communication issues where “Information” is number one priority followed by “firm expenses” and “Management of information”. The next factor is related to past perception where “Firm reputation” is number one priority followed by “Mutual trust between two parties”. Finally, process based approach is the last item where “Inter-department communication” is number one priority followed by “Competitive advantage”.

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