Papers

Factors that impact on the perceived benefits of internet international marketing in Taiwanese SMEs

Received (in revised form): 18th August, 2008

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Keywords *internet international marketing (IIM), perceived benefit, global mindset, EC capability*

Abstract Effective management of small or medium-sized enterprises' (SMEs) internet international marketing (IIM) has become a topic of great interest and has been studied extensively by SME researchers. Yet, there is little research that attempts to explain the perceived benefits of IIM, which is considered a critical factor in encouraging SMEs to or blocking them from adopting and using IIM. To address this gap, this paper proposes a theoretical model to examine the SMEs' perceived benefits of IIM in terms of the extent of their global mindsets, electronic commerce (EC) capabilities, organisational marketing contexts and IT capabilities. Empirical testing of the model is based on a sample of 82 SMEs from the Taiwanese manufacturing industry. The results show that six of the eight hypothesised relationships are supported by empirical data. The implications of the findings for the management of SME IIM are discussed.

Journal of Targeting, Measurement and Analysis for Marketing (2008) **16**, 249–260. doi:10.1057/jt.2008.19

INTRODUCTION

The international marketing (IM) literature has grown exponentially in recent years to offer

sufficient support to corporate and public policy makers in confronting today's hostile global business conditions.¹ Firms see IM as a tool for boosting corporate growth, improving financial performance and augmenting competitive edge.² This is especially true for small or medium-sized enterprises (SMEs), since internationalisation is purported to be a necessary ingredient to ensure the survival and growth of small firms.³

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It may not be easy for SMEs to conduct IM because most SMEs lack the capabilities, market power and other resources of the traditional multinational enterprise.^{4,5} Recently, marketing practitioners and academics^{6,7} have devoted considerable efforts to the use of internet international marketing (IIM). Obviously, IIM is one of the electronic commerce (EC) business models. IIM allows SMEs to overcome the natural disadvantage of small size and geographic distance and thus allows them to access customers, suppliers and collaborators around the world.

Many studies show, however, that most SMEs are not making use of the internet-based commerce model because of information security problems and/or legislative uncertainty.⁷ Moreover, SMEs have sold very little on the internet⁸ and there is little evidence about SMEs benefiting from the internet.⁹ In this circumstance, the understanding of SME IIM-adopting behaviours and expected performances is of critical importance.

In studying the behaviour of small business use of the internet, Poon and Swatman¹⁰ suggest that the perceived benefits formed a key reason why participants adopted and continued to use the internet. Yet, there is little research that attempts to explain the factors that impact SMEs' perceived benefits in adopting IIM. Our argument is that since SMEs constitute almost 90 per cent of all business in many economies, perceived benefits is a critical issue that needs to be examined; it is the perceived benefits that may encourage SMEs to or block them from adopting IIM. Potentially, there are many factors that may impact SMEs' perceived benefits and need to be taken into account. The company size is a factor in determining the adoption of e-commerce, with smaller firms less likely to adopt the internet and e-commerce.¹¹ The experiences of internationalisation of SMEs⁵ are another factor. At least the experiences of internationalisation have diminished the barriers. Also, Madsen and Servais¹² suggest that the progress of globalising is mostly attributed to three interrelated factors: new market condition, technological development in various areas and the capabilities of people.

These previous studies did not provide a holistic framework for understanding SMEs'

perceived benefits of IIM and its impact factors. Our efforts are to consider two forces in encouraging SMEs to adopt IIM. The first force is the global mindset, which is one of the key parameters of international performance.⁵ The second force is the EC capability, which can be considered a key factor of using the internet to go abroad. In addition, this paper suggests that the organisational marketing context represents the antecedents of global mind, and IT capabilities represent the antecedents of EC capability, and in turn impact on the SMEs' perceived benefits of adopting IIM.

Based on the literature, the constructs and hypotheses are developed. Scales for these constructs are empirically validated using data collected from a survey of 82 companies from the Taiwanese SMEs. Factor analysis and multivariate regression models are used to test the reliability and validity of constructs and hypothesised relationships. The implications of the findings for adopting IIM are also discussed.

THE PROPOSED RESEARCH MODEL

Although the importance of SMEs is well known, most research on IIM has still concentrated on large businesses, ignoring SMEs. This is understandable since IT issues have been the privilege of large businesses due to the huge investment required in the past. SMEs, however, potentially constitute the most dynamic firms in an emerging economy and are the life blood of modern economics.¹³ For example, 99 per cent of all UK businesses employ less than 500 employees, but they make up 62 per cent of the nation's employment;¹⁴ small manufacturing establishments make up over 98 per cent of all manufacturers in the United States.¹⁵ They are the ones most likely to move into areas of comparative advantage and have high value-added services, although they often face economic, institutional and legal obstacles.¹⁶

The internet creates an additional channel of distribution for SMEs' products/services that has the potential to increase profitability, bypassing intermediaries. Also, IIM enables SMEs to widen the market areas by increasing the company visibility, promoting the company image by

Figure 1: The research model of this study

showing its dynamism and innovative spirit, and improving the quality of customer service.⁷ As shown in Figure 1, this paper proposes a theoretical model employing a number of constructs. The model explores the relationships influencing SMEs' perceived benefits of adopting IIM. This paper suggests that global mindset and EC capability are two major factors that impact SMEs' perceived benefits of adopting IIM. The global mindset can be seen as a pull force of driving SMEs to adopt IIM. In contrast, EC experience is the push force to help SMEs in adopting IIM. Also, the factors of the organisational marketing context, including IM expertise, customer orientation and competitor orientation, are the antecedent factors of global mindset; the factors of organisational IT capabilities, including information acquisition, memory orientation and perceived barriers of using EC, are the antecedent factors of EC capability.

Table 1 summarises the selected constructs with the definitions from the respective studies. Following this, this study will present the

hypothesised relationships among these selected constructs.

Linking organisational marketing context and global mindset

Global mindset refers to a manager's openness to and awareness of cultural diversity and the ability to handle it.¹⁸ Nummela *et al.*⁵ suggest that managerial experience and market characteristics are important drivers of the global mindset, which in turn is one of the key parameters of international performance. Since internationalisation is the major research issue of this paper, marketing expertise in internationalisation should be drawn upon. Such marketing expertise refers to marketing expertise alongside a foreign firm's ability to customise, promote and distribute products in its home or international market.²⁰ This expertise also helps to improve marketing effectiveness in foreign markets. Therefore, we expect that organisational internationalisation marketing expertise will relate positively to the global mindset of IM.

Table 1: Major dimensions, constructs and their definitions of the study

Constructs	Definitions	Sources adapted
Perceived benefits	Perceived benefits refer to the extent of management recognition of the relative advantage that IIM can provide to the firms.	Lertwongstien and Wongpinunwatana ¹⁷
Global mindset	GM refers to a manager's openness to and awareness of cultural diversity and the ability to handle it.	Fletcher ¹⁸ and Nummela <i>et al.</i> ⁵
EC capability	The overall capabilities of applying EC in supporting operation in business.	Hamill ¹⁹
IM expertise	Marketing expertise and a foreign firm's ability to customise, promote and distribute products in its home or international market.	Luo ²⁰
Customer orientation	Customer orientation represents the sufficient understanding of one's target buyers to be able to create superior value for them continuously.	Narver and Slater ²¹
Competitor orientation	Competitor orientation means that a seller understands the short-term strengths and weaknesses and long-term capabilities and strategy of both the key current and the key potential competitors.	Narver and Slater ²¹
Acquisition capability	The information generated about the needs and preferences of the internal employees.	Huber, ²² Hult <i>et al.</i> , ²³ and Jaworski and Kohli ²⁴
Memory capability	The explicit, disembodied and persistent representation of knowledge and information in an organisation.	Hult <i>et al.</i> , ²³ Jaworski and Kohli, ²⁴ and Lee and Choi ²⁵
Perceived barriers of using EC	The barriers perceived by the organisation in using EC.	Hamill ¹⁹

In terms of market characteristics, without a thorough understanding of the market, customers, order fulfillment requirements and possible pitfalls, many small firms that attempt to move from a local marketplace to a global one will fail at the endeavour and will possibly fail completely.²⁶ Two constructs, customer orientation and competitor orientation, are considered. Customer and competitor orientations are two of the most important factors of organisations' market orientation and have been observed by marketing academicians and practitioners as the most important concept impacts on the business performance.²¹ Customer orientation represents the sufficient understanding of one's target buyers to be able to create superior value for them continuously; competitor orientation means that a seller understands the short-term strengths and weaknesses and long-term capabilities and strategy of both the key current and the key potential competitors.²¹

Jeffcoate *et al.*⁸ suggest that an SME needs to analyse its own strengths and weaknesses on a

continuing basis and to compare them with those of its competitors. Since internationalisation is purported to be a necessary ingredient to ensure the survival and growth of small firms,³ we expect that the greater the competitor orientation, the greater the extent of managers' openness to cultural diversity and thus the enhancement of their abilities to handle it. Meanwhile, by using the internet, customers are able to search for alternative suppliers. Accordingly, we expect that SMEs with a higher extent of customer orientation will lead to a higher degree of global mindset, in order to increase their customers from abroad. In summary, the following hypotheses are proposed.

H₁: The extent of the organisation's IM expertise will positively relate to the global mindset of SMEs.

H₂: The extent of the organisation's customer orientation will positively relate to the global mindset of SMEs.

- H₃:** The extent of the organisation's competitor orientation will positively relate to the global mindset of SMEs.

Linking an organisation's IT capabilities and EC capability

SMEs can achieve global competitiveness by building virtual assets such as information skills, digital resources and competencies.⁹ IT is an organisational capability, and effective and efficient use of IT is a key factor differentiating successful firms from their less successful counterparts.²⁷

As suggested by Lertwongstien and Wongpinunwatana,¹⁷ firms that have IT capabilities readily in place should be in a better position to adopt and implement e-commerce than firms that need to start building technology and infrastructure required for e-commerce adoption. Indeed, adopting and implementing EC innovation requires organisations to acquire IT-related skills and knowledge.²⁸ For example, they need IT skills and knowledge to control and monitor the operation of EC. Many SMEs do not have the resources and capabilities required to transform their businesses in response to the digital economy's rapid evolution.¹⁵ In this circumstance, SMEs with a lower IT capability would have a negative influence on EC and IIM adoption.

Three capabilities, information acquisition, memory orientation and perceived barriers of using EC, are used in representing organisational IT capabilities. Information acquisition and memory orientation are two factors of organisation information processing (OIP) capabilities, which are defined as the capabilities of an organisation to generate knowledge and to use it strategically to adapt to its environment.²⁹ These OIP capabilities are the key determinants of organisational performance.²¹ Information acquisition refers to the processes by which information is obtained, the various sources used in its collection and the flow of information generated from provider to user.³⁰ Scholars have indicated that organisational learning occurs when units (individuals or groups) in an organisation acquire information and/or knowledge.²² This is important because many SMEs fail to exploit the

internet because there is little information, tailored to their circumstance, to help them do so.⁸ We expect that the extent of information acquisition capability will facilitate an organisation's EC capability.

Memory orientation is defined as an explicit, disembodied, persistent representation of knowledge and information in an organisation.³⁰ Together with the development and widespread availability of advanced information technologies, the main issues of IT-related organisational memory studies include databases, knowledge bases and intranet. These IT techniques can be applied in EC development. In fact, a corporation's EC website is a type of new information system and has emerged as one of the most effective ways of distributing and sharing business information, reusing knowledge and helping employees spend more time innovating and less time locating information. Thus, we expect that memory capability will have a positive effect on EC capability.

The organisation's perceived barriers of using EC represent a negative perspective of IT capabilities. It is evident that the combination of insufficient resources and inadequate management skills puts SMEs at a disadvantage compared with larger firms in the EC world. Thus, if SMEs constantly think about the difficulties of adopting EC, then this perceived barrier will block SMEs from adopting EC. Therefore, unlike information acquisition and memory orientation, we expect that the perceived barriers of using EC will have negative effects on EC capability.

- H₄:** The extent of the organisation's information acquisition capabilities will positively relate to the organisation's EC capability.
- H₅:** The extent of the organisation's information memory capabilities will positively relate to the organisation's EC capability.
- H₆:** The extent of the organisation's perceived barriers of using EC will negatively relate to the organisation's EC capability.

Global mindset, EC capability and perceived usefulness of EC towards IIM

As mentioned, the global mindset, which can also be described as global thinking or global perspective, is an essential global management competency and allows a manager to scan the global environment from a very broad perspective.³¹ Before conducting IIM, SMEs need to develop a global mindset to operate successfully in the global workplace.³¹ That is why Nummela *et al.*⁵ suggest that a global mindset is a prerequisite for successful internationalisation. Accordingly, the positive attitude of the manager is a significant factor towards internationalisation and IIM. We expect that a global mindset will have a positive effect on the perceived benefits of adopting IIM.

The ability to be an exporter may not be solely related to business size because the human capital of an entrepreneur may influence the competitive strategies pursued by firms, as well as their performance.³ EC capability and experience can help SMEs to identify the advantages, such as reduced transaction costs, lower barriers to market entry and improved access to information, and to reduce the economically optimal size of firms. Accordingly, EC capability will encourage smaller firms to develop global markets;³² and thus, we expect that the extent of EC capability will facilitate the perceived benefits of adopting IIM.

- H₇:** The extent of the organisation's global mindset towards IM will positively relate to the organisation's perceived benefits of adopting IIM.
- H₈:** The extent of the organisation's EC capability will positively relate to the organisation's perceived benefits of adopting IIM.

RESEARCH DESIGN

SMEs are believed to account for some 35 per cent of exports from Asia.⁴ To test the proposed hypothesis empirically, we selected a particular group of innovative firms, the winners of the SME Innovative Research Award (SMEIRA),

from Taiwan as our target population. The SMEIRA has been held annually by the Small and Medium Enterprise Administration, Ministry of Economic Affairs, ROC, since 1993. This particular audience was chosen because these firms are essentially innovative and are pioneers of general SMEs. The variables of selected constructs were operationalised in the form of a questionnaire. This study used a seven-point Likert scale to ensure statistical variability among survey responses for all constructs. Pre-tests were conducted before actual questionnaire delivery to ensure the reliability of the research instrument. The pre-tests greatly helped the fine-tuning of the questionnaire so that the questions were easy to answer and the logic was easy to follow. The survey instrument was pre-tested by three researchers working at a Taiwanese university. We made some minor modifications based on the suggestions received.

A list with 391 winning corporations' full names, addresses and corresponding managers was collected. Of the 391 surveys mailed, we received 82 usable responses, which represent a 21 per cent response rate. Evidently, the sample size is small and we realise that any interpretation of the generalisation of findings from the study is subject to the limitations caused by the sample size. If a larger sample had been obtained, the findings for the present study would be more convincing. The results from the study can mainly be applied to Taiwanese SME firms that show similar characteristics to the response firms in the study. Our findings are also useful for those SMEs in developing countries, since they are always constrained by their limited resources and expertise.

The response rate is close to the minimum recommended level of 20 per cent for organisational surveys. Nonresponse errors may occur when the views of nonrespondents are distinct from those of respondents, and when the number of nonrespondents is large enough to outweigh the common view drawn from respondents. Face-to-face interviews or contact by telephone with a sub-sample of the people who did not return their questionnaires can be used to investigate the reasons for nonresponse. An effort

was made to contact participants in the sub-sample (eight cases); however, only five out of the eight cases were available. Several reasons for nonresponse were given: two indicated that the topic was too confidential, and three cases indicated that no such EC and IIM activities could be provided. As the study achieved a 21 per cent response rate, the nonresponse error was minimised. At the same time, special caution has to be taken when trying to generalise research findings.

DATA ANALYSIS AND RESULTS

This section presents the analysis results. First, the nature of the data is explored. Secondly, factor analysis is employed to confirm the dimensionality of proposal constructs. Thirdly, the hypotheses are tested using SPSS10.1. Table 2 presents the result and shows that the respondents' capital represents SME organisational size. The exchange rate in the survey period was approximately 1 US\$ = 33 NTD (New Taiwan Dollars). SMEs can be defined as enterprises with less than 250 employees and a yearly turnover of less than £40m.³³ The results in Table 2 also show the number of employees of respondents and their experiences towards internationalised EC. Overall, the sample of respondents seems to represent Taiwanese SMEs' organisational size and around 60 per cent of these SMEs have experiences in conducting IM.

In this study, factor analysis and a multivariate regression model are used to test the reliability and validity of constructs and hypothesised relationships. Factor analysis is a multivariate statistical technique that is concerned with defining new factor variates as linear transformations of original correlated variables. This study conducted a principal components factor analysis with varimax rotation to assess convergence within and divergence between scales. Items composing the various power scales are factor analysed to assess their convergent and discriminant validity. Table 3 presents the means, standard deviations and correlations of the proposed constructs. According to Hair *et al.*,³⁴ a commonly used threshold value for acceptable reliability is 0.70. Cronbach's α values for all of

Table 2: Sample characteristics

	Number of firms	Percentage
<i>Corporate registered capital (NTD)</i>		
Under 12m	18	21.95
12–29m	22	26.82
30–46m	4	4.88
47–63m	7	8.54
64–80m	3	3.65
Over 80m	28	34.14
<i>The number of employees</i>		
Under 20	15	17.64
21–80	43	52.43
81–140	12	14.63
141–200	8	7.43
201–250	4	4.87
<i>Respondents' experience to internationalisation</i>		
Yes	49	59.75
No	33	40.25

the constructs, which have three or more indicators ranging from 0.71 to 0.96, suggest that the instrument is reliable.

Regression analysis of hypothesis testing

After establishing items loaded appropriately on their expected constructs, the hypotheses were tested using linear regressions. Accordingly, based on the proposed theoretical model, this step involves building the following three regression equations:

$$\begin{aligned} \text{Model 1: Global mindset} = & \beta_0 + \beta_1(\text{IM expertise}) \\ & + \beta_2(\text{Competitive orientation}) \\ & + \beta_3(\text{Customer orientation}) + \mu \end{aligned}$$

$$\begin{aligned} \text{Model 2: EC capability} = & \beta_0 + \beta_1(\text{Information acquisition}) \\ & + \beta_2(\text{Memory orientation}) \\ & + \beta_3(\text{Barriers of using EC}) + \mu \end{aligned}$$

$$\begin{aligned} \text{Model 3: Perceived benefit} = & \beta_0 + \beta_1(\text{Global mindset}) \\ & + \beta_2(\text{EC capability}) + \mu \end{aligned}$$

The *F*-statistics of model 1 ($F = 4.360$, significance of $F = 0.007$), model 2 ($F = 49.754$, significance of $F = 0.000$) and model 3 ($F = 44.119$, significance of $F = 0.000$) suggest that these three regression models are statistically significant. Table 4 also exhibits the path coefficient and *t*-value of each hypothesised path. Path estimations that have

Table 3: Mean, SD and intercorrelations among constructs

	Mean	SD	Items	α	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Global mindset	6.30	0.926	4	0.9125								
2. Competitor orientation	5.85	0.840	5	0.8728	0.275							
3. EC capability	5.48	1.331	9	0.9624	0.234	0.534						
4. Information acquisition	5.44	1.229	4	0.9456	0.141	0.562	0.790					
5. Usefulness of using EC	5.66	1.182	6	0.9614	0.501	0.311	0.576	0.379				
6. Customer orientation	5.80	0.791	4	0.7130	0.378	0.628	0.486	0.497	0.275			
7. Memory orientation	4.68	1.398	4	0.9351	0.188	0.440	0.618	0.652	0.359	0.476		
8. Barriers of using EC	4.00	1.457	3	0.8728	-0.218	-0.374	-0.525	-0.500	-0.160	-0.193	-0.274	
9. IM expertise	5.38	1.234	6	0.9238	0.265	0.391	0.577	0.607	0.451	0.418	0.462	-0.261

t -value greater than 1.96 can be considered to be significant, based on the level of $\alpha=0.05$. As shown in model 1, the results did not support the relationships between global mindset, which were predicted as positively related to IM expertise ($b=0.084$, $t=0.665$, $p>0.05$) and competitive orientation ($b=0.047$, $t=0.331$, $p>0.05$). H_1 and H_2 are not supported. As was expected, global mindset was positively related to customer orientation ($b=0.307$, $t=2.136$, $p<0.05$). Therefore, H_3 is supported.

As shown in model 2, consistent with expectations, EC capability was positively related to information acquisition ($b=0.571$, $t=5.838$, $p<0.01$) and memory orientation ($b=0.197$, $t=2.237$, $p<0.05$), and negatively related to barriers of using EC ($b=-0.180$, $t=-2.300$, $p<0.05$); thus H_4 , H_5 and H_6 are supported. It was predicted that global mindset and EC capability would have positive effects on the perceived benefits of IIM (H_7 and H_8). The effects of global mindset ($b=0.429$, $t=5.329$, $p<0.01$) and EC capability ($b=0.505$, $t=6.275$, $p<0.01$) on the perceived benefits of IIM were significant. H_7 and H_8 are supported.

DISCUSSION

The purpose of this research is to explicate the nature of SMEs' global mindset and EC capability and their relationship to the perceived benefits of IIM. This study contributes to the growing body of literature providing a holistic model for understanding the perceived benefits of adopting IIM. We recognise that our findings are subject to the limitations of survey research. The present results are, however, quite instructive in exploring the roles of global mindset and EC capability. Table 5 summarises our findings.

The effect of IM expertise on global mindset is not significant (H_1 not supported); in other words, SMEs' global mindset would not be influenced by their IM expertise and experiences. A likely explanation for this result is that managers in these SMEs do want to go abroad, and they only have limited experiences with internationalisation. For example, Horng and Chen³⁵ indicate that there is a lack of professional

Table 4: Results of linear regressions

	Global mindset (model 1)	EC capability (model 2)	Perceived benefits of IIM (model 3)
IM expertise	0.084/0.665(0.508)		
Competitive orientation	0.047/0.331(0.742)		
Customer orientation	0.307/2.136(0.036)*		
Information acquisition		0.571/5.838(0.000)**	
Memory orientation		0.197/2.237(0.028)*	
Barriers of using EC		-0.180/-2.300(0.024)*	
Global mindset			0.429/5.329(0.000)**
EC capability			0.505/6.275(0.000)**
R ² (adjusted R ²)	0.150 (0.116)	0.672(0.658)	0.541(0.528)
F (significance of F)	4.360 (0.007)	49.754(0.000)	44.119(0.000)
d.f.	3, 74	3, 74	2, 75

* $t > 1.96$, $p < 0.05$; ** $t > 2.58$, $p < 0.01$.

Table 5: The estimates of relationships and t -test of hypothesised path

Hypothesis	Hypothesised path	Standard β	t -values (significance of t)	Hypothesis support
H ₁	International marketing expertise→global mindset	0.084	0.665 (0.508)	No
H ₂	Competitive orientation→global mindset	0.047	0.331 (0.742)	No
H ₃	Customer orientation→global mindset	0.307	2.136 (0.036)*	Yes
H ₄	Information acquisition→EC capability	0.571	5.838 (0.000)**	Yes
H ₅	Memory orientation→EC capability	0.197	2.237 (0.028)*	Yes
H ₆	Barrier of using EC→EC capability	-0.180	-2.300 (0.024)*	Yes
H ₇	Global mindset→perceived benefits of IIM	0.429	5.329 (0.000)**	Yes
H ₈	EC capability→perceived benefits of IIM	0.505	6.275 (0.000)**	Yes

* $t > 1.96$, $p < 0.05$; ** $t > 2.58$, $p < 0.01$.

and talented marketing managers for Taiwanese SMEs. In small firms, resources for market intelligence generation are scarce and there is no room for marketing specialists.³⁶ In this case, it is nonprofessional marketing managers setting up their international visions and commitments towards international markets. Without skilled IM expertise, SMEs should be aware that the mixtures of economic significance, enthusiasm, technical and technological inexperience, and growing global awareness is potentially very dangerous.²⁶

The effect of competitive orientation on the global mindset is also not significant (H₂ not supported); in other words, SMEs' global mindset would not be influenced by their competition orientation. Even SMEs' sellers understand the threats from their potential competitors; it is still not relevant to their openness to and awareness of cultural diversity. International competition from the global market has increased dramatically in recent years, due to low labour cost countries such as China and Thailand. The majority of SMEs have only recently adopted an international

perspective in their strategies.³⁷ In particular, increasing competition has reduced the ability of SMEs to control their own development paths,³⁸ including the development of internationalisation. Even our hypothesised path is not foolproof; SME managers still need to screen their competitive orientation because an SME needs to analyse its own strengths and weaknesses on a continuing basis and to compare them with those of its competitors.⁸

As shown in model 1 of Table 4, only customer orientation was found to have a positive influence on global mindset (H₃ supported). This finding emphasises customer orientation as a key factor of global mindset. That is, because SMEs are likely to seek more understanding of the target market's buyers, SMEs are more open to and aware of cultural diversity. This find is supported by Marjorie *et al.*,³⁹ who call for the study of customer relationship management in small businesses. Indeed much earlier, Drucker⁴⁰ had asserted that creating a satisfied customer is the only justifiable definition of business purpose. Hence, it is not surprising that the significance of

'closeness to the customer' became a key factor for SMEs towards openness to and awareness of cultural diversity.

As shown in model 2, information acquisition, memory orientation and perceived barriers of using EC have significant effects on the EC capability of SMEs. Overall, the EC capability can be addressed by these three factors. Despite the negative effect of perceived barriers of using EC, information acquisition and memory orientation show positive effects on EC capability. This implies that, in spite of other possible influences on EC capability, SMEs with a higher degree of information processing capabilities are likely to be more engaged in EC activities.

Most SMEs had limited knowledge about how various computer technologies could contribute to an overall e-commerce strategy and were frustrated by their dependence on external service providers.⁸ This finding also emphasises acquisition capability as the gatekeeper mechanism of organisations' absorptive capacity,⁴¹ which focuses on the recognition of the value of new external information. The process of acquisition includes the search information, to meet customers' needs. The result also supports Lee and Choi's²¹ argument that organisational memory is the way knowledge is actually organised and utilised, and this knowledge utilisation is a continuous process whereby individuals or groups within a company share knowledge. From this perspective, in pursuing a better EC capability, information acquisition capability needs to be taken into consideration.

As shown in model 3, the results of the present study elucidate the crucial role that global mindset and EC capability can play in SMEs' perceived benefits of IIM. The study provides empirical evidence that perceived benefits of IIM are significantly influenced by both the push force of EC experiences and the pull force of global mindset. SMEs are encouraged to take note of these findings.

Managerial implications

To sum up, SMEs may need to increase the extent of their global mindset to understand the cultural diversities before they can realise the true

value of employing IIM. Also, the enhancing of SMEs' EC capabilities is very critical. In addition to the theoretical contributions described, this study has provided new insights for practical business management. It must be stressed that management should be aware that to ignore the hypothesised relationships among these selected constructs means that a poor outcome in seeking IIM is likely.

Many SMEs start to expand their business model to the internet with the intention of giving the company better market coverage and increased global market share and profitability. Based on our research findings, the development of IIM depends on both IT and the customer. On the one hand, firms that have IT capabilities readily in place should be in a better position to adopt and implement EC. In particular, in pursuing a better EC capability, the understanding of OIP capabilities (including acquisition capability and memory capability) is an important viewpoint because it facilitates the organisation's EC capability, and in turn impacts the perceived benefits of IIM.

On the other hand, practitioners should realise that the internet can only provide IT value for connecting people and sharing information. How to efficiently target their online customers and enable the EC model by identifying the features of online customers becomes a challenge to all SMEs. In particular, online marketers are often receiving poor marks in terms of customer satisfaction, and it seems difficult for us to find a direct relationship between e-satisfaction and customer loyalty.⁴²

'Think globally, act locally' is frequently used to describe the managerial challenge faced by global marketers. Now, one more component, the internet, is added to the challenge. Therefore, in conducting IIM strategy, SMEs still have to employ conventional marketing through the segmentation, targeting and positioning approach, so that the EC model can be tuned to fit with the online customers' features. Also, SMEs should integrate internet channels with conventional channels to activate and enhance their customer ties. Accordingly, the IIM strategy from IT-centric to customer-centric needs to be re-examined carefully.

CONCLUSION

The initial motivation of this study was to clearly depict the potential impacts on SMEs' perceived benefits of IIM in order to understand the adoption behaviour of IIM activities. This is important because it focuses on key issues in effective management of SMEs' IIM. To address this gap, a theoretical model was proposed and empirical testing of the model was based on a sample of 82 SMEs from the Taiwanese manufacturing industry. This study shows that customer orientation has significant effects on global mindset and in turn a strong influence on the perceived benefits of IIM; information acquisition, memory orientation and perceived barriers have significant effects on EC capability and in turn a strong influence on the perceived benefits of IIM. The identification of these main variables should help the SME manager to become aware of his/her organisation in pursuing IIM.

To sum up, most previous studies focused on the content of IIM and therefore systematic research is still scarce.⁶ The internet promises much for companies interested in internationalising their business: with the internet, borders between countries are becoming less relevant and more direct interaction between business entities is made possible. Also, the internet eliminates SMEs' disadvantages by opening up global markets with an effective strategy for conducting business.³² The internet not only helps SMEs to begin to internationalise, but also helps to maintain a strong position in foreign markets through such activities as marketing intelligence, global sales promotion and inter-firm RD.¹⁹

From a theoretical standpoint, the implication of the findings is that managers need to pay special attention to the proposed factors and should especially focus on the holistic view to integrate global mindset with EC capability in order to enhance the understanding of SMEs' IIM. This study has unveiled interesting findings in relation to the attributes and process of IIM. This study is far from complete, however: much still remains to be discovered. It should be emphasised that the conclusion is based on the

subjects' self-reported perception rather than on actual benefits from IIM, which are often difficult to measure. A research agenda is thus proposed for extending the findings from this research. The findings uncovered by this study are based on observations of the experiences of 82 enterprises from the Taiwanese manufacturing industry. A cross-population investigation of this issue could produce fruitful insights into the management of SMEs' IIM. The research would be improved and more convincing results would be provided. In addition, theoretically, a larger-scale longitudinal study, using the present research framework, could provide better insights into SMEs' IIM.

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