

The impact of Internet marketing capabilities on international network capability, a cross country study comparison between Australia, Chile and Taiwan internationalised SMEs

Link to publication record in USC Research Bank:

<http://research.usc.edu.au/vital/access/manager/Repository/usc:15199>

Document Version:

Author accepted manuscript (postprint)

Citation for published version:

Mathews, Shane, Bianchi, Constanza, Perks, Keith, Chen, Hsiu-Li, Glavas, Charmaine (2015) The impact of Internet marketing capabilities on international network capability, a cross country study comparison between Australia, Chile and Taiwan internationalised SMEs. Proceedings of the 2015 Australia and New Zealand International Business Academy, Melbourne, Australia, 11-13 February 2015, pp.1-21.

Copyright Statement:

Copyright © 2015 The Author. This is the accepted version of the paper. Reproduced here with permission of the copyright holder.

General Rights:

Copyright for the publications made accessible via the USC Research Bank is retained by the author(s) and / or the copyright owners and it is a condition of accessing these publications that users recognize and abide by the legal requirements associated with these rights.

Take down policy

The University of the Sunshine Coast has made every reasonable effort to ensure that USC Research Bank content complies with copyright legislation. If you believe that the public display of this file breaches copyright please contact research-repository@usc.edu.au providing details, and we will remove the work immediately and investigate your claim.

The impact of Internet marketing capabilities on international network capability, a cross country study comparison between Australia, Chile and Taiwan internationalised SMEs.

Dr Shane Mathews*

Queensland University of Technology, School of Business, International Marketing
E- mail: sw.mathews@qut.edu.au

Dr Constanza Bianchi

Universidad Adolfo Ibáñez, School of Business, Santiago, Chile
E- mail: constanza.bianchi@qut.edu.au

Dr Keith Perks

University of Brighton, Business School, Brighton, England
E- mail: K.J.Perks@brighton.ac.uk

Professor Hsiu-Li Chen

Dept. of International Business, Ming-Chuan University. Taipei, Taiwan, R.O.C.
E-mail: hlchen@mail.mcu.edu.tw

Dr. Charmaine Glavas

University of the Sunshine Coast, School of Business, International Business
Email: cglavas@usc.edu.au

**Lead and corresponding author*

The impact of Internet marketing capabilities on international network capability, a cross country study comparison between Australia, Chile and Taiwan internationalised SMEs.

Abstract

The Internet has been shown to positively enhance internationalisation for SMEs, but scant empirical testing limits our understanding of the explicit impact of the Internet on firm internationalisation. This paper highlights key areas where the integration of the Internet can be leveraged through Internet-related capabilities within the internationalisation of the firm. Specifically, this study investigates how Internet marketing capabilities play a role in altering international information availability, international strategic orientation, and international business network relationships. This study provides evidence, indicating that these key relationships may vary between countries. To examine these key relationships this study utilises data from small and medium sized enterprises (SMEs) in three export intensive markets; Australia (215 international SMEs), Chile (204 international SMEs) and Taiwan (130 international SMEs); and tests a conceptual model through structural equation modelling. Results from the data show the impact of Internet marketing capabilities in positively impacting traditional internationalisation elements, which varies between countries. That is, our findings highlight the international business network relationships in Australia and Taiwan are directly impacted by Internet marketing capabilities, but not in Chile. We offer some insight into why we see variance across comparative exporting countries in how they leverage new technological capabilities for internationalisation and firm performance.

Key words: Internet marketing capabilities, international business network relationships, SMEs

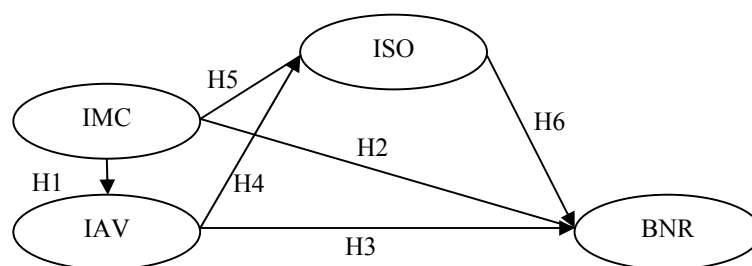
Introduction

There has been, and will continue to be a significant transformation in how SMEs internationalise as a consequence of the introduction of Internet technologies into firm internationalisation processes (Petersen, Welch, and Liesch, 2002). For example, studies highlight increased international information for decision-making, increased access to new markets, an increased ability to reach international audiences, and an accelerated rate of internationalisation due to the Internet (Petersen et al., 2002; Aspelund and Moen, 2004; Mathews, Healy and Wikramasekera, 2012). In many cases SMEs would not have international customers without the advent of the Internet (Mathews and Healy, 2008). An increasing number of studies emphasise the importance of the Internet for the firms' international activities (Petersen et al., 2002; Aspelund and Moen, 2004; Moen, Madsen, and Aspelund, 2008). Specifically, the Internet has been found to support international expansion of firms (Gabrielsson and Manek Kirpalani, 2004; Loane, 2005; Mathews and Healy, 2008), and also increased internationalisation through market growth (Lu and Julian, 2008).

A common finding from these studies is that the Internet has a positive effect on firm information availability and the development of business networks in international markets, which in turn leads to potential improvements in firm performance (Morgan-Thomas, 2009; Samiee, 1998; Teo and Choo, 2001). Nevertheless, these studies are generally exploratory and examine the potential impact not the actual impact of the Internet from a conceptual viewpoint, without formally testing the research relationships (Smaiee, 1998; Loane, McNaughton, and Bell, 2004; Mathews and Healy, 2008). As a consequence, there has been limited empirical research conducted on the Internet's impact on internationalisation and firm performance (Sinkovics, Sinkovics, and Jean, 2013).

Further, research on the use of the Internet for business purposes conducted in developed countries may not necessarily be as relevant for emerging countries such as Latin America due to differing cultural dimensions and levels of economic development (Nasco, Grandon, and Mykytn, 2008; Bianchi and Andrews, 2012). Emerging market contexts are characterised by lower levels of economic development compared to developed nations (Welsh, Alon, and Falbe, 2006). Therefore, the internationalisation process of emerging market firms may require different resources and capabilities to facilitate the internationalisation process. Therefore, the Internet has been shown to have a transformational impact on the internationalisation of firms, especially small and medium sized enterprises (SMEs). In general, there is an assumption that for the most part this profound internationalisation impact of the Internet is homogenous or consistent across comparative countries. However, as with traditional internationalisation country context varies, it can therefore also be assumed that the impact of Internet capabilities may also vary across countries. As such, this study investigates the potential variance in how Internet marketing capabilities impact traditional internationalisation elements such as international information availability, international strategic orientation and international business network relationships, as illustrated in Figure 1.

Figure 1. Proposed conceptual model



Note. IMC= Internet Marketing Capabilities; IAV=International Information Availability; ISO= International Strategic Orientation; BNR=Business Network Relationships; H - hypothesis.

Theoretical background

The Internet can be considered as a resource within the firms, providing the basis for resource conversion into specific capabilities (Liao, Kickul and Ma, 2009). This includes, for example, Internet marketing capabilities which can be integrated into international marketing activities and international business processes of the firm (Glavas and Mathews, 2014). This study examines the application of Internet technology to a specific set of marketing capabilities for international countries (Aspelund and Moen, 2004). More specifically, the Internet has been seen to provide fast access to high quality market information which in-turn can be used to support improved decision making (Teo and Choo, 2001); in developing marketing capabilities (Prasad, Ramamurthy and Naidu, 2001) and also be having a positive cross-border impact on international performance through e-commerce and online sales (Gibbs and Kraemer, 2004). This international market growth is due to the Internet enhancing firm capabilities in three key ways (Mathews and Healy, 2008). That is, the Internet gives SMEs similar access to markets as much larger firms, access to international market-related information, and also in providing firms the opportunity for more frequent interaction with international customers and business networks.

The Internet can also assist the firm in identifying new customers and distributors, generating information about market trends, tracking research and technological developments and hence allowing firms to make more informed decisions (Teo and Choo, 2001). For example, the Internet provides access to databases from government agencies, universities, and research institutions (Cronin and McKim, 1996). Further, the Internet has potential positive effects on international information availability (Berry and Brock, 2004; Brock and Yu, 2005) and in

reducing the perceived risk associated with international market growth strategies (Mathews and Healy, 2007). Samiee (1998) suggested that the Internet dilutes the once asymmetry of information experienced by firms through access to a range of information sources to support decision making. Based on this finding, hypothesis one has been identified;

Hypothesis 1: *Internet marketing capabilities have a positive relationship on international information availability.*

The Internet has been shown to improve communications and trust among parties, and also improving the quality of business-related networks (White and Daniel, 2004; Sigala, 2007). Business networks are a valuable resource for Internet-enabled SMEs in support of their international efforts (Loane and Bell, 2006) with the Internet contributing to the development of international business networks, which in-turn leads to the identification and exploitation of international market opportunities (Petersen et al., 2002; Wu, Mahajin and Balasubramanian, 2003). Furthermore, Internet marketing enables firms to reach suppliers, regardless of the country's remoteness (Lituchy and Rail, 2000). Thus, the Internet is important for international business networks, especially for firms making efforts to establish and maintain international network relationships with new customers. Based on these key findings, the following hypothesis can be proposed;

Hypothesis 2: *Internet marketing capabilities have a positive impact on international business relationship networks*

The ease and connectivity of the Internet and availability of international-related information enhances the firms ability to internationalise; but the Internet also increases the quality of business network relationships between SME suppliers and multinational corporations (Bauer, Grether and

Leach, 2002) by facilitating cross-border, inter-organisational capabilities and processes (Jean, 2007; Jean, Sinkovics and Cavusgil, 2010). Piercy Kaleka and Katsikeas (1998) found that acquiring relevant international information is a capability that generates greater customer and market contact and partnerships with others. The authors argued that acquiring relevant information improves the learning processes which support international activity and partnership development with other firms, from whom important lessons can be learned. Hence the following hypothesis is proposed;

Hypothesis 3. *International information availability is positively related to international business relationship networks.*

International strategic orientation refers to a firm's commitment to servicing international customers and markets (Bouquet, 2005), with the recognition of the strategic importance to the internationalisation process (Levy, Beechler and Boyacigiller, 2007). Further, international strategic orientation is an organisational capability which enhances the ability of the firm to scan the international environment, and respond to a threat or an opportunity to achieve organisational objectives (Rhinesmith, 1995). A deficiency in international market information availability leads to a higher perceived risk, which negatively impacts the firm's international strategic orientation toward international opportunities (Cavusgil, 1980; Melin, 1992). Thus, the ability to increase the amount of information can reduce international market uncertainty and have a positive impact on the firm's view of internationalisation process. Thus, the following hypothesis is proposed;

Hypothesis 4: *Increased information availability has a positive relationship with the international strategic orientation of the firm.*

New technology platforms such as the Internet may actually expose managers and organisations to individuals in other countries which could encourage a willingness to learn and ability to adapt

to other cultures; a central attribute and characteristic of an international strategic orientation. The Internet intensity of the firm has been shown to positively influence the international decision-maker in relation to the number of international markets in which a firm operates (Moen, 2002). For example, Aspelund and Moen (2004) report a positive relationship between Internet marketing intensity and the strategic international mindset of the firm. These researchers suggest that the Internet intensity of the firm influences international vision, niche strategy and technology advantage. Further, Loane and Bell (2006), and Loane (2005) draw the link between Internet integration and the predisposition toward internationalisation with international decision makers. Based on this finding, the following hypothesis can be posed;

Hypothesis 5: *Internet marketing capabilities have a positive relationship with an international strategic orientation of the firm.*

Managers with an international strategic orientation, value cultural diversity and seek to establish and develop international business network relationships (Rhinesmith, 1995); which drives international performance (Holm Eriksson, Johanson, 1996). When top managers attention is focused on international strategic growth they are more likely to develop and maintain effective international business network relationships with a diverse range of stakeholders, such as, host governments, strategic partners, customers, and suppliers (Filatotchev, Liu, Buck and Wright, 2009). As such, having an international market orientation enhances international managers' abilities to deal with international distribution and international customer relationships (Racela, Chaikittisilpa and Thoumrungroje, 2007). Therefore, the following hypothesis is proposed;

Hypothesis 6: *An international strategic orientation has a positive relationship with international business relationships networks*

Methodology

This study employed a survey instrument with a structured questionnaire, drawing from existing literature. Respondents were asked to rate on a seven-point Likert scale their perceptions of *Internet marketing capabilities, international information availability, international strategic orientation and international business network relationships*. For example, a four-item scale, derived from Hamill and Gregory (1997), Petersen et al., (2002), and Torre and Moxon (2001), was utilised to measure *international information availability*. The scale asked respondents to rate on a seven-point scale the amount of available information their firm had on international markets, international competitors, international customers, and international suppliers. The questionnaire was developed in English, then translated into traditional Chinese and Spanish by one of the research team members, and was then back-translated by other colleagues in Taiwan and Chile (as recommended by Brislin, 1970). To reduce common method bias semantic differential scales and seven-point Likert-type scales were used (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003).

Prior to the study, firms were asked if they were currently involved in international markets (defined as selling to international customers in the last 12 months). At this point in the study informants were identified and chosen because of their particular knowledge of international markets and Internet usage in the international operations of the firm. The most senior strategic decision makers who are knowledgeable about their firms international and Internet operations were selected as eligible to be a key informant (Huber and Power, 1985). Further, honesty in their responses was stressed through, for example, the statement: “*the accuracy and honesty in your answers would help to build a better understanding of how the Internet has impacted firms*

with international customers". The questionnaire was pretested (Presser and Blair, 1994). These processes were utilised to ensure the selection of the most appropriate informant and accurate responses.

Results

The data shows mixed Internet usage with high levels of e-mail and websites in all countries. Chile had a number of low scores related to sales transactions, customer support online and the use of intermediary sites for transactions. Taiwanese SMEs conversely recorded higher levels of usage in website, intranets and intermediary website transaction usage, as seen in Table 1. The data also shows Australian firms exploit marketing and advertising online, management, research online sales and online procurement above that of the other two countries Taiwan and Chile. These Chilean firms are lagging behind both Australia and Taiwan on Internet technology usage and Internet marketing capabilities integration.

Table 1 Australian, Chilean and Taiwanese SMEs descriptive data (frequencies)

Australia N= 215 SMEs with international customers ; Chile N= 204 SMEs with international customers Taiwan N= 130 SMEs with international customers											
Internet usage											
		1 No usage	2	3	4	5	6	7 extensive usage	Mean	SD	Missing
E mail	AUS	0	0	2	4	6	11	181	6.79	.680	11
	CHL	4	3	4	12	14	65	102	6.10	1.30	0
	TWN	3	0	0	4	2	7	114	6.68	1.06	0
Website	AUS	9	10	12	24	22	31	102	5.58	1.79	5
	CHL	26	14	27	51	34	28	24	4.14	1.82	0
	TWN	19	6	2	13	9	15	66	6.68	2.24	0
personal web space	AUS	93	30	20	13	16	12	27	2.87	2.19	4
	CHL	70	18	41	37	18	14	6	2.91	1.75	0
	TWN	34	8	11	27	14	7	29	3.89	2.24	0
Online consumer support system	AUS	70	35	24	19	16	14	35	3.27	2.24	2
	CHL	94	22	37	20	16	8	7	2.48	1.73	0
	TWN	32	13	9	23	13	13	27	3.92	2.25	0
Intranet system	AUS	73	15	4	21	14	19	65	3.97	2.57	4
	CHL	64	9	13	30	28	20	40	3.83	2.31	0
	TWN	12	1	0	13	11	13	79	5.83	1.88	1
Online transaction	AUS	93	20	12	21	24	14	30	3.12	2.28	1
	CHL	64	19	25	26	29	22	19	3.39	2.09	0
	TWN	43	19	7	20	7	7	26	3.42	2.33	1
Intermediary directory	AUS	25	19	24	36	27	33	49	4.48	2.03	2
	CHL	36	24	43	39	28	21	13	3.56	1.79	0
	TWN	18	7	1	22	13	19	50	5.02	2.14	0
Intermediary transactional website	AUS	75	28	24	26	17	16	27	3.18	2.16	2
	CHL	65	27	39	41	12	11	9	2.89	1.74	0
	TWN	28	12	9	18	15	10	37	4.22	2.32	1
Internet marketing capabilities											
marketing and advertising	AUS	6	15	15	27	37	34	80	5.32	1.74	1
	CHL	37	35	28	48	24	20	12	3.47	1.79	0
	TWN	23	10	7	31	11	17	31	4.32	2.15	0
online sales to customers	AUS	80	24	16	15	19	13	48	3.47	2.43	0
	CHL	100	25	27	20	12	8	12	2.47	1.85	0
	TWN	57	8	11	20	6	12	16	3.08	2.23	0
after sales service and support	AUS	39	24	24	27	28	23	49	4.15	2.19	1
	CHL	54	28	34	30	23	18	17	3.30	1.96	0
	TWN	26	13	4	22	17	13	34	4.29	2.26	1
market research	AUS	23	26	17	26	34	39	50	4.58	2.04	0
	CHL	25	22	34	42	31	35	15	3.97	1.79	0
	TWN	26	9	6	37	14	12	26	4.11	2.10	0
management of international market	AUS	27	24	26	29	36	32	40	4.30	2.02	1
	CHL	36	34	23	35	30	25	21	3.73	1.96	0
	TWN	25	8	7	35	10	16	25	4.15	2.11	4
online purchasing/ procurement	AUS	30	32	29	30	40	21	33	3.99	1.99	0
	CHL	39	37	35	46	22	21	4	3.26	1.66	0
	TWN	31	21	9	28	13	8	20	3.58	2.10	0
Country	Physical office in country	Number of country markets		International % total sales in 12 months		\$ turnover per annum		Resp. Age	Employees	Age of firm	
AUS	30% have 70 % do not	14 markets		International at 38%		\$US 11.5 million		45 yrs	27	10 years	
CHL	20% have 80% do not	12 markets		International at 65%		US\$ 10.1 million		45 yrs	151	23 years	
TWN	55% have 45% do not	34 markets		International at 45%		N/A		38 yrs	62	13 years	

Note: mean scores used

Table 2 highlights the statistical relationship between the proposed factors Internet marketing capabilities (IMC), international information availability (IAV), international strategic orientation (ISO) and international business network relationships (BNR) from three countries. Overall the proposed relationships were found to be statistically significant at a .05 level or better with few exceptions. Correlation ranged from .02 to .54 for Australian SMEs, .06 to .48 for Chilean SMEs and from .11 to .52 for Taiwanese SMEs.

Table 2. Correlations matrix

Australia	IMC	IAV	ISO	BNR
<i>IMC</i>	1.0	.54 ^a	.37 ^a	.24^a
<i>IAV</i>	.54 ^a	1.0	.19 ^{ns}	.02^{ns}
<i>ISO</i>	.37 ^a	.19 ^{ns}	1.0	.35^a
<i>BNR</i>	.24 ^a	.02 ^{ns}	.35 ^a	1.0
Chile	IMC	IAV	ISO	BNR
<i>IMC</i>	1.0	.35 ^a	.16 ^b	.06^{ns}
<i>IAV</i>	.35 ^a	1.0	.48 ^a	.28^a
<i>ISO</i>	.16 ^b	.48 ^a	1.0	.34^a
<i>BNR</i>	.06 ^{ns}	.28 ^a	.34 ^a	1.0
Taiwan	IMC	IAV	ISO	BNR
<i>IMC</i>	1.0	.51 ^a	.49 ^a	.31^a
<i>IAV</i>	.51 ^a	1.0	.37 ^a	.11^{ns}
<i>ISO</i>	.49 ^a	.37 ^a	1.0	.52^a
<i>BNR</i>	.31^a	.11^{ns}	.52^a	1.0

Note. *IMC*, Internet Marketing Capabilities; *IAV*, International Information Availability; *ISO*, International Strategic Orientation; *BNR*, Business Network Relationships

^a correlation is significant at the 0.01 level, ^b correlation is significant at the 0.05 level, ns non-significant

A structural equation model (AMOS 21.0) was used to statistically analyse the data and test the proposed conceptual model and hypothesised paths. Construct reliabilities, items, and standard estimates are presented in Table 3. Construct correlation are presented in Table 2.

Table 3. Construct measures and CFA results

Constructs	Measure Sources	Indicators	Std. Est		
			AUS	CHL	TWN
Internet Marketing Capabilities (IMC)	<i>Adapted from:</i> Aspelund & Moen (2004) Gibbs & Kraemer (2004)	Online marketing and advertising	.53	.62	.70
		Online sales	†	.67	.66
		Online after sales service and support	.51	.80	.70
		Market research	.71	.61	.84
		Management of international market	.91	†	†
AUS ($\alpha = .76$)		Purchasing	†	.60#	†
CHL ($\alpha = .79$)					
TWN ($\alpha = .84$)					
International Information Availability (IAV)	<i>Adapted from :</i> Hamill & Gregory (1997) Torre & Moxon (2001) Petersen et al., (2002)	Available information in our firm about:			
		Information about international markets	.76	.88	.84#
		Information about international competitors	.85	.76	.79#
		Information about international customers	†	.86	.91
		Information about international resources	.80	.77	.91
AUS ($\alpha = .86$)		Information about international suppliers	.72	†	.90
CHL ($\alpha = .89$)					
TWN ($\alpha = .94$)					
International Strategic Orientation (ISO)	<i>Adapted from:</i> Aspelund & Moen (2004) Moen (2002) Nummela et al. (2004)	The firm ... 1=strongly agree, 7=strongly disagree			
		committed to servicing their international customers	.85	.69	.92
		Commits both financial and human resources	.79	.81	.94
		Emphasises importance growth to employees	.86	.82	.97
		International experience is viewed as important	.73	.79	†
AUS ($\alpha = .87$)					
CHL ($\alpha = .85$)					
TWN ($\alpha = .96$)					
Business Network Relationships (BNR)	<i>Adapted from:</i> Wu et al. (2003)	Maintain international business relationships	.87	.92	.84#
		Strengthen existing business relationships	.96	.97	.95
		Develop longer-lasting business relationships	.92	.95	.96
		Acquire new international customer relationships	.78	.81	.84
AUS ($\alpha = .93$)					
CHL ($\alpha = .95$)					
TWN ($\alpha = .94$)					

Note. α = Cronbach Alpha ^a Standardized Estimate, IMC=Internet Marketing Capability; IAV= Information Availability; ISO= International Strategic Orientation; BNR= Business Network Relationships; # = items that have been exclude in the final competing model, † = excluded in CFA evaluation.

The proposed model shows good model fit indices (AUS: CMIN/DF = 1.92; CFI = .956; TLI = .947; GFI = 0.90; RMSEA =.066), (CHL: CMIN/DF = 1.85; CFI = .976; TLI = .970; GFI = 0.92; RMSEA =.054) and (TWN: CMIN/DF = 1.66; CFI = .975; TLI = .968; GFI = 0.897;

RMSEA =.072), as seen in Table 4. The results from hypotheses testing are shown in Table 5. Results for Hypothesis 1 indicate that Internet marketing capabilities have a significant relationship with information availability in all countries ($\beta=.35, .41$ and $.50, p<.001$). Thus, Hypothesis 1 is supported. Results for Hypothesis 2 indicate that Internet marketing capabilities have a positive and significant relationship with international business network relationships in Australia ($\beta=.19, p<.001$) and Taiwan ($\beta=.31, p<.01$), but not in Chile ($\beta=.08, p=.423$). Thus, Hypothesis 2 is supported for Australia and Taiwan but not Chile.

Table 4. Model fit

Model fit indices	CMIN/DF	CMIN	DF	GFI	CFI	TLI	RMSEA	SRMR
Australia CFA	2.22	220.07	99	.889	.942	.930	.076	.060
<i>Australia model fit</i>	1.92	192.05	100	.902	.956	.947	.066	.063
Chile CFA	1.85	209.36	113	.897	.958	.949	.065	.063
<i>Chile model fit</i>	1.58	132.91	84	.924	.976	.970	.054	.062
Taiwan CFA	2.22	220.60	99	.830	.941	.929	.098	.058
<i>Taiwan model fit</i>	1.66	101.53	61	.897	.975	.968	.072	.047

Model	Overall fit					P- value>.05
	Model fit indices					
	χ^2/DF	RMSEA	CFI	TLI	SRMR	
AUS Proposed Model	1.92/ 100	.066	.956	.947	.063	.000 significant
CHL Proposed Model	1.58/ 84	.054	.976	.970	.062	.001 significant
TWN Proposed Model	1.66/ 61	.064	.975	.968	.047	.000 significant

Note. CMIN χ^2/df = the ratio between the Chi-squared and the degrees of freedom (DF) or Chi-square Normed, GFI, Goodness of Fit Index, CFI = Comparative Fit Index, TLI = Tucker-Lewis Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardised Root Mean Residual.

Note. CMIN/DF <3; RMSEA <.10; GFI >.90; CFI >.92; TLI >.92; SRMR <.10; p >.05

Results for Hypothesis 3 indicate that international information availability has a positive significant relationship with international business network relationships only in Chile ($\beta=.32, p<.001$), but not Australia ($\beta=.02, p=.788$) or Taiwan ($\beta=.12, p=.190$). Thus, Hypothesis 3 is partially supported. Results for Hypothesis 4 indicate that international information availability

has a positive and significant relationship with international strategic orientation in Chile ($\beta=.36$ $p<.001$) and Taiwan ($\beta=.37$ $p<.001$), but not Australia ($\beta=.19$ $p=.06$). Thus, Hypothesis 4 is mostly supported. Results for Hypothesis 5 indicate that Internet marketing capabilities has a significant relationship with international strategic orientation in all countries, Australia ($\beta=.27$, $p<.001$), Chile ($\beta=.14$, $p<.05$) and Taiwan ($\beta=.49$, $p<.001$). Thus, Hypothesis 5 is supported. Finally, results for Hypothesis 6 indicate that international strategic orientation has a positive and significant relationship with international business network relationships, Australia ($\beta=.37$, $p<.001$), Chile ($\beta=.50$, $p<.001$) and Taiwan ($\beta=.52$, $p<.001$). Thus, Hypothesis 6 is supported.

Table 5. Model fit and hypothesis testing

Hypotheses	Path directions	Estimate	CR	P	Result
H ₁ AUS	IMC → IAV	.35	4.82	***	Supported
H ₁ CHL	IMC → IAV	.41	3.96	***	Supported
H ₁ TWN	IMC → IAV	.50	5.27	***	Supported
H ₂ AUS	IMC → BNR	.19	3.30	***	Supported
H ₂ CHL	IMC → BNR	.08	0.80	.423	Not Supported
H ₂ TWN	IMC → BNR	.31	2.96	**	Supported
H ₃ AUS	IAV → BNR	.02	0.26	.788	Not Supported
H ₃ CHL	IAV → BNR	.32	3.52	***	Supported
H ₃ TWN	IAV → BNR	.12	1.31	.190	Not Supported
H ₄ AUS	IAV → ISO	.19	1.84	.06	Not Supported
H ₄ CHL	IAV → ISO	.36	5.65	***	Supported
H ₄ TWN	IAV → ISO	.37	3.94	***	Supported
H ₅ AUS	IMC → ISO	.27	4.82	***	Supported
H ₅ CHL	IMC → ISO	.14	1.95	*	Supported
H ₅ TWN	IMC → ISO	.49	4.67	***	Supported
H ₆ AUS	ISO → BNR	.37	4.72	***	Supported
H ₆ CHL	ISO → BNR	.50	4.00	***	Supported
H ₆ TWN	ISO → BNR	.52	5.87	***	Supported

Note. IMC= Internet Marketing Capabilities; IAV=International Information Availability; ISO=International Strategic Orientation; BNR=Business Network Relationships; *** Results significant a $p<.001$ ** Results significant a $p<.01$ * Results significant a $p<.05$

Discussion

This study extends previous research and identifies specific ways as to how Internet marketing capabilities affect internationalisation through enhancing international information availability, the international strategic orientation of the firm and establishing and maintaining international business network relationships. In particular, Internet marketing capabilities positively impact international information availability and international business network relationships, while contributing to the overall international strategic orientation of the firm. The findings show that the application of Internet technology on international marketing activities such as online advertising, sales, and market research have a significant direct effect on multiple internationalisation elements. This is consistent with those who argue that some firm capabilities, such as Internet related capabilities, are important for exploiting international marketing opportunities (Reuber & Fischer, 2011).

The findings of this study show a strong significant effect of Internet marketing capabilities on international information availability. This result is consistent with previous studies which support the positive impact of Internet marketing activities on information availability in international settings (Mathews et al., 2012; Petersen et al., 2002). Information capacity in the firm enriches the firm's capability to generate an understanding of international markets and customers. We find that Internet marketing capabilities play a positive role in enhancing information availability related to international markets.

Further, this study also highlights that Internet marketing capabilities have an impact on international business network relationships directly and indirectly. That is, Internet marketing capabilities also have the capacity to indirectly impact international business network relationships by positively influencing other internationalisation elements such as international information availability and also through enhancing international strategic orientation. The

findings show for the most part a significant effect between Internet marketing capabilities and international business relationships. It is acknowledged that the Internet provides international firms new networks for conducting their international business (Bell & Loane, 2010; Petersen et al., 2002). However, this has not been tested until now. Conversely, the Chile results show that Internet marketing capabilities alone do not lead to the development of international business network relationships. These may be mediated by the capability of international information. That is, Internet marketing capabilities increase available of information relating to international markets, which in turn may lead to a greater acquisition, development, strengthening, and maintenance of international business network relationships. So for Chile there needs to be a complimentary of capabilities for Internet marketing capabilities to lead to greater international business network relationships. For example, Bianchi (2014) found that developing domestic and foreign business networks allowed firms to combine resources and capabilities to internationalise successfully.

The findings may suggest that in a Latin American context more traditional face-to-face interactions are vital in establishing and maintaining business network relationships due to the collectivistic and risk-averse characteristics of international managers from these countries (Grandón et al., 2011; Hofstede, 2001). Interestingly, this should also then apply similarly to Taiwan. However, results show a direct relationship between Internet marketing capabilities and international business network relationships. Taiwan a supposed collectivist culture. One may argue that because Taiwan has high levels of firm level technology adoption that Internet marketing capabilities may in fact be diluting the cultural norm effect related to establishing and maintaining international business network relationships.

Limitations and Future research

The study should be replicated so as to confirm items, factors and relationships found in this study. The paper statistically evaluates the impact of internet marketing capabilities on international business relationship networks, a conceptual model. However, the statistical analysis does not examine a between country relationship. That is, is there a statistically significant difference between countries? To do this an invariance test should be conducted between country groups. Further, the model should be tested in non-export intensive markets where differences might be found.

Reference list

- Aspelund, A. and Moen, O. (2004), "Internationalization of small High-Tech Firms: The role of information technology", *Journal of Euro-Marketing*, Vol. 13, No. 2/3, pp. 85-105.
- Bauer, H. H., Grether, M., & Leach, M. (2002). Building customer relations over the Internet. *Industrial Marketing Management*, Vol, 31, No. 2, pp. 155.
- Berry, M. and Brock, J. (2004), "Marketspace and internationalisation process of the small firm", *Journal of International Entrepreneurship*, Vol. 2, No. 3, pp. 187-216.
- Bianchi, C., & Andrews, L. (2012). Risk, trust, and consumer online purchasing behaviour: A Chilean perspective. *International Marketing Review*, Vol. 29, No. 3, pp. 253-275.
- Bouquet, C.A. (2005), *Building Global Mindsets: An Attention-Based Perspective*, Palgrave MacMillan, New York.
- Brislin, R. (1970). Back translation for cross-cultural research. *Journal of Applied Psychology*, 1, 185-216.
- Brock, J. and Yu, Z. (2005), "Organizational use of the Internet, scale development and validation", *Internet Research*, Vol. 15, No. 1, pp. 67-87.
- Cavusgil, S. T. (1980), "On the internationalization process of the firms". *European Research*, Vol. 8, No. 6, pp. 273-281.
- Cronin, B. and McKim, G. (1996), "Markets, Competition and intelligence of the World Wide Web". *Competitive Intelligence Review*, Vol. 7, No. 1, pp. 45-51.
- Filatotchev, I., Liu, X., Buck, T. and Wright, M. (2009), "The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs", *Journal of International Business Studies*, Vol. 40, No. 6, pp. 1005-1021.

- Gabrielsson, M., & Manek Kirpalani, V. H. (2004). Born globals: How to reach new business space rapidly. *International Business Review*, Vol. 13, No. 5, pp. 555-571.
- Gibbs, J. and Kraemer, K. (2004), "A cross country investigation of the Determinants of scope of e-commerce use: an institutional approach". *Electronic Markets*, Vol. 14, No. 2, pp. 124-137.
- Glavas, C. and Mathews, S. (2014), "How international entrepreneurship characteristics influence Internet capabilities for the international business processes of the firm", *International Business Review*, Vol. 23 No.1, pp. 228-245.
- Grandón, E., Nasco, S., & Mykytn, P. (2011). Comparing theories to explain e-commerce adoption. *Journal of Business Research*, 64(3), 292-298.
- Hamill, J. and Gregory, K. (1997), "Internet marketing in the internationalisation of U.K. SME's", *Journal of Marketing Management*, Vol. 13, No.1/3, pp. 9-28.
- Huber, G. P. and Power D. J. (1985), "Retrospective Reports of Strategic Level Managers: Guidelines for Increasing Their Accuracy", *Strategic Management Journal*, Vol. 6, No. 2, pp.171-80.
- Hofstede, G. (2001). *Cultures consequences: Comparing values, behaviours, institutions and organisations*. CA: Sage Publications.
- Holm, D. B., Eriksson, K. and Johanson, J. (1996), "Business networks and cooperation in international business relationships", *Journal of International Business Studies*, Vol. 27, No. 5, pp. 1033-1053.
- Jean, R. J. (2007), "The ambiguous relationship of ICT and organizational performance: a literature review", *Critical Perspectives on International Business*, Vol. 3, No. 4, pp. 306-321.
- Jean, R.J.B., Sinkovics, R.R. and Cavusgil, T. (2010), "Enhancing international customer-supplier relationships through IT resources: A study of Taiwanese electronics suppliers", *Journal of International Business Studies*, Vol. 41, No. 7, pp. 1218-1239.
- Levy, O., Beechler, S., Taylor, S. and Boyacigiller, N.A. (2007), "What we talk about when we talk about 'global mindset': Managerial cognition in multinational corporations", *Journal of International Business Studies*, Vol. 38, No. 2, pp. 231-258.
- Liao, J., Kickul, J.R. and Ma, H. (2009), "Organizational Dynamic Capability and Innovation: An Empirical Examination of Internet Firms", *Journal of Small Business Management*, Vol. 47, No. 5, pp. 263-286.
- Lituchy, T. R. and Rail, A. (2000), "Bed and breakfast, small inns, and the Internet. The impact of technology on the globalization of small businesses", *Journal of International Marketing*, Vol. 8, No. 2, pp. 86-97.
- Loane, S. (2005). The role of the internet in the internationalisation of small and medium sized companies. *Journal of International Entrepreneurship*, Vol. 3, No. 4, pp. 263-277.
- Loane, S. and Bell, J. (2006), "Rapid internationalisation among entrepreneurial firms in Australia, Canada, Ireland and New Zealand", *International Marketing Review*, Vol. 23, No. 5, pp. 467-485.
- Loane, S., McNaughton, R. B. and Bell, J. (2004), "The internationalization of Internet-enabled entrepreneurial firms: Evidence from Europe and North America", *Canadian Journal of Administrative Sciences*, Vol. 21, No. 1, pp. 79-96.
- Lu, V. and Julian, C. (2008), "The Internet, Strategy and Performance: A Study of Australian Export Market Ventures", *Journal of Global Marketing*, Vol. 21, No. 3, pp.231-240.

- Mathews, S. and Healy, M. (2008), "From garage to global': the Internet and international market growth, an SME perspective", *International Journal of Internet Marketing and Advertising*, Vol. 4, No. 2/3, pp. 179-196.
- Mathews, S., Healy, M. and Wickramasekera, R. (2012), "The Internetisation of information, knowledge, and interaction components of the firm's internationalisation process", *Journal of Marketing Management*, Vol. 28, No.5/6, pp. 733-754.
- Cavusgil, S. T. (1980), "On the internationalization process of the firms". *European Research*, Vol. 8, No. 6, pp. 273-281.
- Moen, O. (2002), "The Internet and international marketing: An empirical analysis of small and medium sized Norwegian firms", *Quarterly Journal of Electronic Commerce*, Vol. 3, No. 1, pp. 31-41.
- Moen, Ø., Madsen, T. K. and Aspelund, A. (2008), "The importance of the internet in international business-to-business markets", *International Marketing Review*, Vol. 25, No. 5, pp. 487-503.
- Morgan-Thomas, A. (2009), "Online Activities and Export Performance of the Smaller Firm: A Capability Perspective", *European Journal of International Management*, Vol. 3, No.3, 266-285.
- Nasco, S., Grandon, E. E., & Mykytn, P. P. (2008). Predicting electronic commerce adoption in Chilean SMEs. *Journal of Business Research*, Vol. 61, No. 6, pp. 697-705.
- Prasad, V. K., Ramamurthy, K., & Naidu, G. M. (2001). The influence of Internet-marketing integration on marketing competencies and export performance. *Journal of International Marketing*, Vol. 9, No. 4, pp. 82.
- Petersen, B., Welch, L. S. and Liesch, P. W. (2002), "The Internet and foreign market expansion by firms", *Management International Review*, Vol. 42, No. 2, pp. 207-221.
- Piercy, N., Kaleka, A. & Katsikeas, C.S. (1998). Sources of competitive advantage in high performing exporting companies. *Journal of World Business*, Vol. 33, No. 4, pp. 378-393.
- Podsakoff, P. M., Mackenzie, S. B., Lee, J.-Y. and Podsakoff, N. P. (2003), "Common method biases in behavioral research: A critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.
- Presser, S. and Blair, J. (1994), "Survey Pretesting: Do Different Methods Produce Different Results", *Sociological Methodology*, Vol. 24, pp. 73-104.
- Racela, O. C., Chaikittisilpa, C. and Thoumrunroje, A. (2007), "Market orientation, international business relationships and perceived export performance", *International Marketing Review*, Vol. 24, No.2, pp. 144-163.
- Rhinesmith, S.H. (1995), "Open the door to a global mindset", *Training & Development*, Vol.49, No. 5, pp. 35-43.
- Samiee, S. (1998). Exporting and the Internet: A conceptual perspective. *International Marketing Review*, Vol. 15, No. 5, pp. 413-426.
- Sigala, M. (2007), "Investigating the internet's impact on interfirm relations: Evidence from the business travel management distribution chain", *Journal of Enterprise Information Management*, Vol. 20, No.3, pp. 335- 355.
- Sinkovics, N., Sinkovics, R.R. and Jean, R.J.B. (2013), "The internet as an alternative path to internationalization?", *International Marketing Review*, Vol. 30 No. 2, pp.130 – 155.
- Teo, T. S. H. and Choo, W. Y. (2001), "Assessing the impact of using the Internet for competitive intelligence", *Information & Management*, Vol. 39, No. 1, pp. 67-83.

- Torre, J. D. L. and Moxon, R. W. (2001), "Introduction to the symposium e-commerce and global business: The impact of the information and communication technology revolution on the conduct of international business", *Journal of International Business Studies*, Vol. 32, No. 4, pp.617-640.
- Welsh, D., H.B., Alon, I., & Falbe, C. M. (2006). An examination of international retail franchising in emerging markets. *Journal of Small Business Management*, Vol.44, No, 1, pp. 130-149.
- White, A. and Daniel, E.M. (2004), "The impact of e-marketplaces on dyadic buyer-supplier relationships: evidence from the healthcare sector", *Journal of Enterprise Information Management*, Vol. 17, No. 6, pp. 441- 453.
- Wu, F., Mahajin, V. and Balasubramanian, S. (2003), "An analysis of e-business adoption and its impact of business performance", *Journal of the Academy of Marketing Science*, Vol. 31, No. 4, pp. 425-447.