Internet marketing capabilities and international market growth

Shane Mathews a,*, Constanza Bianchi a, Keith J. Perks b, Marilyn Healy a, Rumintha Wickramasekera a

a School of Business, Advertising, Marketing and Public Relations, Queensland University of Technology, 2 George Street, GPO Box 2434, Brisbane 4001, Queensland, Australia
b Brighton Business School, University/Institution: University of Brighton, Brighton, England, United Kingdom

ARTICLE INFO

Article history:
Received 23 August 2014
Received in revised form 5 October 2015
Accepted 16 October 2015
Available online xxx

Keywords:
Internet marketing capabilities
Information availability
Strategic orientation
Network capabilities
International market growth

ABSTRACT

The Internet has been shown to facilitate elements of internationalisation such as information accumulation and network opportunities. However, there is limited understanding of how the Internet combined with marketing capabilities drives international market growth. This study, based on a sample of 224 Australian firms, develops and tests, using structural equation modelling (SEM), a conceptual model of Internet marketing capabilities and international market growth. Results indicate that firms deploying Internet marketing capabilities will benefit due to the reduction of information uncertainty and increased capacity to develop international network capabilities. Moreover, Internet marketing capabilities indirectly lead to international market growth when the firm has a high level of international strategic orientation and international network capabilities. Overall, Internet marketing capabilities enhance the firm’s ability to generate other internal capabilities within the firm, which in turn have a positive impact on the international market growth of the firm.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

The Internet is an evolving technology which has facilitated the development of new business relationships and has opened up cross-border market opportunities for companies (Hinson & Adjasi, 2009; Petersen, Welch, & Liesch, 2002; Rayport & Sviokla, 1994). The investigation of the Internet’s impact on the international firm is part of a growing body of knowledge in the marketing and international business literature (Mathews & Healy, 2008; Moen, Endresen, & Gavlen, 2003; Moen, Madsen, & Aspelund, 2008). Despite strong interest in the impact of the Internet on internationalisation and potential to reach foreign customers, there is a lack of comprehension of and research related to the complex relationships between the digitalisation of internationalising firms and international marketing performance (Sinkovics, Sinkovics, & Jean, 2013; Yamin & Sinkovics, 2006).

While the potential link between the Internet and export outcomes has been identified (Morgan-Thomas, 2009), extant research has, in the main, ignored the specific role of the Internet on international marketing pathways (Sinkovics et al., 2013), and overlooked the assessment of the Internet as a driver of the international performance of firms (Lu & Julian, 2008; Pezderka, Sinkovics, & Jean, 2012). Hence, more explanation and understanding is needed in order to determine whether the Internet has an impact on international market growth, and a fruitful avenue for evaluating this would be through the theoretical lens of the resource based view and capabilities perspective. The extent to which Internet marketing resources and capabilities contribute to firm performance in international markets remains unclear (Celuch & Murphy, 2010; Wilden, Gudergan, Neilsen, & Lings, 2013). Further, as small to medium sized enterprises (SMEs) lack the resources, capabilities and knowledge of foreign markets (Arenius, Sasi, & Gabrielson, 2005; Lui & Beamish, 2001), the Internet may act as a catalyst to overcome these limitations and stimulate foreign market expansion. Thus, given the lack of knowledge of the influence of Internet marketing resources and capabilities on a firm’s international market growth and the contribution this can make to overcome barriers to foreign market entry and expansion for SMEs, the central aim of our study is to answer the research question; how and why the Internet framed as a resource and marketing capability can trigger and stimulate international market growth of SMEs. In order to address this question, we argue that a fruitful avenue for examining how Internet technology is impacting on international market
2. The resource based view, capability perspective and international marketing

The resource based view has similarities to the capability perspective (Conner & Prahalad, 1996; Makadok, 2001), with resources representing a collection of tangible and intangible assets such as management skills, organisational processes, information and knowledge (Barney, Wright, & Ketchen, 2001). Capabilities are bundles of path dependent assets resulting from deliberate investment actions intended to create new forms of competitive advantage (Ray, Muhanna, & Barney, 2005; Teece, Pisano, & Shuen, 1997). The Internet, as a resource within the organisation, provides the basis for conversion into specific Internet marketing capabilities (Liao, Kickul, & Ma, 2009; Yalcinkaya, Calantone, & Griffith, 2007) integrated into international marketing activities and business processes (Glavas & Mathews, 2014; Trainor, Rapp, Beeltspacher, & Schillewaert, 2011). When a firm is able to combine and absorb Internet technologies and other resources into their practices and processes, they can leverage this capability to achieve a superior performance (Li & Ye, 1999; Powell & Dent-Micallef, 1997; Tippins & Sohi, 2003). Internet technology resources, in combination with marketing processes, skills and information, can be framed as capability development (Knudsen & Madsen, 2002; Ray, Barney, & Muhanna, 2004; Ray et al., 2005). The Internet is a specific resource, and firms are integrating the technology into such marketing activities as sales force systems, channel management and support, sales force (Gabrielson & Gabrielson, 2011), competitive intelligence, operational efficiency (e.g. online customer support) and international market development (Li & Ye, 1999; Prasad, Ramamurthy, & Naidu, 2001).

The Internet, combined with market information, develops knowledge capabilities about foreign markets, which can reduce the liability of foreignness of unfamiliar cultural, political and economic environments (Kotha, Rindova, & Rothaermel, 2001; Zaheer, 1995). The Internet and market information resource and capability have the potential to enable a firm to overcome the lack of knowledge about foreign markets. This may then act as a trigger to initiate an organisation's international involvement, learning, and may alert managers to opportunities and subsequent foreign market expansion (Leonidou, 1998; Dichtl, Leibold, Koglmayr, & Muller, 1984; Morgan & Katsikeas, 1997).

3. Development of the hypotheses and conceptual model

3.1. International market growth

The market development and market penetration of a firm's products are considered to be important growth strategies for firms (Aaker, 2001; Ansoff, 1965; Ansoff & McDonnell, 1988), and international market growth has been frequently adopted as a dependent variable by international marketing researchers (Gronhaug & Kvitastein, 1992; Lim, Sharkey, & Kim, 1993). Andersen and Kheim (1998) used resource based theory to show that capabilities are good predictors of international market growth. Firms in the early stages of internationalisation place a stronger emphasis on international sales growth than other financial measures, such as profit, as it takes time to realise any investment or commitment to international growth (Auto, Sapienza, & Almeida, 2000). Our research focuses on international firms who transfer goods and services across borders directly or indirectly in the early rather than later stages of internationalisation. More specifically, the measure of international market growth is examined through different types of sales from international customers. We decided to use international sales growth rather than export intensity – proportion of sales – as a measure of international performance (Gemunden, 1991; Katsikeas, Leonidou, & Morgan, 2000), as it is more useful for developing managerial implications than export intensity which is more appropriate for macro-level export policy implications (Dhanaraj & Beamish, 2003).

Dimensions of market growth have previously been applied in an international market context (Daniel, Wilson, & Myers, 2002; Griffith & Krampf, 1998; Gronhaug & Kvitastein, 1992), and more recently has been used in Internet international marketing research (see for example Mathews, Healy, & Wickramasrekera, 2012; Morgan-Thomas & Bridgewater, 2004; Toften & Hammer-voll, 2011). However, studies evaluating the Internet's impact on international market growth remain limited (Mathews & Healy, 2008), which is surprising as the Internet can influence the international market growth of the firm through, for example, improved communication and access to market research (Aspelund & Moen, 2004). Further, most studies suggest that the Internet has a positive impact on international market growth but fail to empirically test this relationship (see for example Clarke, 2008; Gibbs & Kraemer, 2004).

3.2. Information availability and international strategic orientation

International markets are diverse, complex and uncertain (Welch & Luostarinen, 1988), and the Internet helps a firm identify new customers and distributors, generate information about market trends, and track research and technological developments. For example, the Internet gives access to databases from government agencies, universities and research centres (Cronin & Mckim, 1996), increasing information availability (Berry & Brock, 2004; Brock & Yu, 2005; Hamill & Gregory, 1997) and reducing the perceived risk associated with international market growth strategies (Mathews & Healy, 2007). Finally, the Internet dilutes the asymmetry of information experienced by firms (Samiee, 1998) supporting more informed decisions (Teo & Choo, 2001).

International strategic orientation refers to a manager's and firm's commitment to and allocation of financial and human resources to servicing international customers and markets (Bouquet, 2005), along with the recognition of the strategic importance and centrality of international experience, openness to and understanding of foreign cultures, and to the internationalisation process (Levy, Beechler, Taylor, & Boyacigiller, 2007; Nummela, Saarenketo, & Puulmalainen, 2004). International strategic orientation is an individual and organisational capability to scan the international environment, accumulating, absorbing, processing and responding to complex information, searching for unexpected trends that may constitute a threat or an opportunity to achieve organisational objectives (Rhinesmith, 1995). Online activities play a critical role in retrieving information and learning about foreign markets (Nguyen & Barrett, 2006; Yamin & Sinkovics, 2006). Through the Internet, firms may find various types of information about the environment and characteristics of foreign markets (Bennett, 1997; Weible & Wallace, 1998), as well as accessing information about potential inter-firm collaborations, competitors and customers (Nicovich & Cornell, 1988; Sharma & Sheth, 2004).

A deficiency in international market information availability leads to a higher perceived risk negatively impacting on the firm's international strategic orientation towards international opportunities (Cavusgil, 1980; Melin, 1992). Thus, the storage and digitalization of information on the Internet increases the firm's ability and capability to access higher levels of international business and market information (Palmer & Griffith, 1998) and reduce international market uncertainty. Based on this, we propose the following hypotheses:
Hypothesis 1. Internet marketing capabilities have a positive effect on information availability.

Hypothesis 2. Increased information availability has a positive relationship with the international strategic orientation of the firm.

3.3. Internet marketing capabilities, international strategic orientation, international network capabilities and international marketing growth

Our study examines the application of Internet technology to a specific set of marketing capabilities such as advertising and marketing, online sales, after sales service and market research (Aspelund & Moen, 2004; Gibbs & Kraemer, 2004). The Internet facilitates efficient communications and the development of internal and external relations with increasing frequency to generate opportunities (White & Daniel, 2004; Mathews & Healy, 2008) and has a positive cross-border impact on international performance through e-commerce and online sales (Gibbs & Kraemer, 2004).

New technology platforms, such as the Internet, expose managers and organisations to individuals in other countries which could encourage a willingness to learn and ability to adapt to other cultures which is a central attribute and characteristic of an international strategic orientation (see for example Bartlett & Ghoshal, 1989; Estienne, 1997). A manager's predisposition towards international opportunities and strategic orientation does not necessarily increase through foreign travel, and the experience may have little to no effect on their parochialism and ethnocentric view of the world (Kanter, 1995). Rather, a manager's international strategic orientation is a reflection of their proclivity towards openness, appreciation, understanding of the ‘other’ and other cultural values and practices (Levy et al., 2007; Perlmutter, 1969). Hence, managers with openness to other cultures who are and connected through the Internet to individuals and organisations in international markets are more likely to develop a strategic orientation towards international opportunities.

Organisations and managers with a strong commitment to international markets are more likely to have an international strategic orientation (Aaby & Slater, 1989; Beamish, Karavis, Goerzen, & Lane, 1999; Nummela et al., 2004). This then has a positive relationship with the firm’s propensity to expand into international markets (Perks & Hughes, 2008) and use of the Internet technology more extensively to support their international activities to drive international market growth (Kula & Tatoglu, 2003).

Through connectivity and information availability, the Internet can intensify and improve communications, commitment, satisfaction, trust among parties, and the quality of business networks (Bauer, Grether, & Leach, 2002; Sigala, 2007; White & Daniel, 2004). Business networks are a valuable resource for Internet enabled small firms in support of their international efforts (Loane & Bell, 2006), with the Internet contributing to the building of international business networks which in turn leads to the identification and exploitation of international market opportunities (Petersen et al., 2002). Furthermore, Internet marketing enables firms to reach customers and suppliers regardless of the country’s remoteness (Lituchy & Rail, 2000; Roccaproie, 2000). The Internet’s ease of use, wide availability, low cost and common standards facilitates the integration and coordination of marketing activities, information sharing, and improved communications with customers (Afuah, 2003; Hameri & Nihitla, 1997). The connectivity and the interactivity of the Internet and ease of availability of information improves communications, commitment, satisfaction and trust among the parties and enhances the quality of business network relationships between SME suppliers and MNCs (Bauer et al., 2002; Sigala, 2007) through cross-border inter-organisational capabilities and processes (Jean, 2007; Jean, Sinkovics, & Cavusgil, 2010). Thus, the Internet is important for maintaining international business network relationships with the firm’s existing customer base and for establishing and maintaining international networks with new customers.

Managers with an international strategic orientation value cultural diversity, seek openness, and are empathetic with others, are capable of establishing and developing international business network relationships (Rhinesmith, 1995), driving 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 diverse stakeholders, including host governments, strategic partners, customers and suppliers (Filatotchev, Liu, Buck, & Wright, 2009; Rosenzweig & Singh, 1991). Further, having an international market orientation enhances international managers’ abilities to deal with international distribution and international customer relationships (Racela, Chalkittisilpa, & Thoumruengroje, 2007).

International business relationships and networks are important for the international market growth of the firm (Freeman, Edwards, & Schroder, 2006; Holm et al., 1996). Business network relationships are a resource, and social exchanges through interpersonal contacts between individuals that impact on firm’s performance (Evangelista, 1996). Networks are based on exchange relationships which evolve via mutual knowledge, trust, cooperation and social interaction, leading to improved international market action and growth (Turnbull & Valla, 1986; Wu, Mahajan, & Balasubramanian, 2003; Young, Dimitratos, & Dana, 2003).

Relational capabilities play a critical role in building and maintaining customer and business network relationships (Jayachandran, Sharma, Kaufman, & Raman, 2005) global networks, and international knowledge transfer, which are associated with international market performance (Morgan-Thomas, 2009; Musteen, Francis, & Datta, 2010). Further, the resource-based perspective suggests that network linkages are important to small firms as they provide access to information which is not available internally (Davidsson & Honig, 2003).

Thus we propose the following hypotheses:

Hypothesis 3. Internet marketing capabilities have a positive relationship with an international strategic orientation of the firm.

Hypothesis 4. An international strategic orientation has a positive relationship with international network growth.

Hypothesis 5. Internet marketing capabilities have a positive relationship with developing international network capabilities.

Hypothesis 6. An international strategic orientation has a positive relationship with developing international network capabilities.

Hypothesis 7. International network capabilities have a positive relationship with international market growth.

Fig. 1 illustrates the conceptual model, integrating the hypotheses and the dependent variable.

4. Methodology

4.1. Research context

The empirical context for the study sets a population parameter of Australian firms that are outwardly international. The most comprehensive and current database available in
Australiana – the Austrade (Australian Trade Commission) website database www.austrade.com.au – managed by the Australian Government for the Australian Trade and Investment Development Agency, was used to identify the sample for this study. The Austrade database was used for our study as it is a credible, comprehensive and current source of Australian companies with international customers.

4.2. Sample and data collection

The study included firms from agribusiness, business and financial services, consumer goods and information communication technology (ICT) industries. These industries were selected as they represent four out of the top nine industries of Australian exporters, accounting for A$93.2 billion in export for 2006–2007 (Australian Bureau of Statistics, 2008). Further, these industries account for 20,393 of the possible 44,310 total Australian export firms in 2006–2007 (Australian Bureau of Statistics, 2008). For example, the agriculture industry generates A$30 billion in value for the Australian economy and employs 385,000 people. In 2005–2006 the industry accounted for a quarter of the merchandise exports, with A$26 billion, as 60% of what is produced on Australian farms being exported (Australian Trade Commission – Austrade, 2008). The value of the export of services is estimated to be A$46 billion (Australian Bureau of Statistics, 2008), with business services valued at A$9 billion, and financial/insurance accounting for A$3.8 billion in 2006–2007 (Australian Bureau of Statistics, 2008). Exports of information communications technology in 2005 accounted for A$5.2 billion. Finally, the manufacturing industry with A$51 billion and retail trade with A$2 billion (Australian Bureau of Statistics, 2008) form the majority of what would be considered consumer goods. Collectively, apart from the mining industry, these four industries represent the majority of outward internationalisation for Australia.

Data was collected in 2007, and the sample pool originated from the Austrade, the publically available international supplier database, of which, in these four industries, there were 1826 Australian firm’s data available. From this sampling frame, we identified 442 firms that were acceptable as they had sold to international customers in the last 12 months. The data was collected using an online questionnaire, resulting in 224 valid responses and a response rate of 50.6%. This response rate is adequate for e-mail self-administered questionnaires, where response rates generally vary between 25 and 50% (Lliewa, Baron, & Healey, 2002).

4.3. Measures

The development of the scales followed a systematic approach outlined by Churchill (1979), adopting them where possible and adapted when appropriate from established internationalisation and international marketing research. The Internet marketing capabilities construct in our research refers to the active use of the Internet in combination with and leveraging of specific marketing activities of marketing and advertising, online sales, after sales service and support, market research, and the management of international markets in the pursuit of international marketing goals, which in this study is international sales growth to customers. We captured the use of the Internet in relation to firm resources using five-items with a seven point Likert-type scale “No use = 1 and extensive use = 7”, from Berry and Brock (2004) the dichotomy of simply having a 1 = use and 2 = non-use limits our statistical analytical ability on the topic. The first three items were developed from Gibbs and Kraemer (2004) who found a strong collective measure for Internet marketing related to firm resources in e-commerce across ten different countries. As our study focuses on the marketing and sales activities of the firm we excluded the procurement and data exchange e-commerce questions as a measure of Internet marketing resources and capabilities. Hence the items we adopted for the research were: (1) “The firm uses the Internet for marketing and advertising”; (2) “The firm uses the Internet for online sales” and; (3) “The firm uses the Internet for after sales service and support”. Moreover as the intensity of Internet marketing usage has been found to have a statistical relationship with the presence of an international strategic intent of the firm (Aspelund and Moen, 2004) we adopted their items related to Internet marketing capabilities namely (4) “The firm uses the Internet for market research,” and; (5) “The firm uses the Internet for international marketing management.” The factor loadings for the scale items are .58, .56, .69, .91 and .85, respectively with and alpha coefficient of .79. These results indicate that the scale accurately captures the latent construct.

The potential impact of the Internet on increasing the accessibility to information on international markets, customers, competitors and resources has received considerable research attention (Hamill & Gregory, 1997; Petersen et al., 2002). Accordingly we conceptualised the construct of information availability as the firm’s capacity to access information related to their international endeavours. We operationalised the construct through a seven point likely scale 1 = “strongly disagree” and 7 = “strongly agree,” with a four item construct which
includes; “information related to _____ is available” (1) “international markets,” (2) “international competitors,” (3) “international customers” (4) “international resources”. The factor loadings for the scale items are .82, .88, .85 and .82, respectively and the average variance extracted (AVE) is .79. These results indicate that the scale accurately captures the latent construct.

For our international business relationships construct as personal relationships and networks underpin the growth SMEs (Wu et al., 2003) and international ventures overcoming resource constraints (Young et al., 2003), we postulate that developing, maintaining and strengthening of relationships is an appropriate means of measuring business relationships in an international context. These international business relationships are proposed to have a positive effect on the firm’s ability to generate international growth. We adapted the scale items from Wu et al. (2003) by emphasising in the question items the respondents approach to international customers and their relationships with them and in so doing captured the international business relationship network construct with a seven point Likert scale “in your international business the firm uses business networks to_____ with a 1 = “no use” and 7 = “extensive use,” which includes four items; (1) “maintain international customer relationships,” (2) “strengthen the existing international relationships,” (3) “develop long lasting international relationships,” and; (4) “acquire new international customers.” The factor loadings for the scale items are .82, .91, .87 and .73, respectively and the average variance extracted (AVE) is .95. These results indicate that the scale accurately captures the latent construct.

Next we conceptualised international strategic orientation as the degree to which firms are orientated towards the pursuit of internationalisation (Nunnema et al., 2004; Levy et al., 2007) and the extent and intensity to which this orientation becomes a central strategic objective for the firm (Aspelund and Moen, 2004; Nunnema et al., 2004; Rhinesmith, 1995). Aspelund and Moen (2004) used a broad set of dimensions of international orientation scales originally developed by Knight (1997), however they found that international vision, a focus on international customers and a strategic focus were the most relevant and statistically reliable in an Internet related internationalisation environment. Hence the international strategic orientation construct was captured using three of their items with a Likert-type scale with 1 = “strongly disagree,” and 7 = “strongly agree” in the following way; (1) “the firm is committed to servicing their international customers,” (Aspelund & Moen, 2004); (2) “the firm is committed to both financial and human resources to international markets,” (Aspelund & Moen, 2004); and; (3) “the firm emphasises the importance of international growth to the employees,” (Aspelund & Moen, 2004). The final scale-item (4) “the firm views managerial international experience as important for entering international markets” was adopted from Nunneman et al. (2004) based on the argument that international experience may matter when developing Internet related strategies in internationalisation (Gabrielson and Gabrielson, 2011). The factor loadings for the four items scale are .87, .85, .90 and .80, respectively and the average variance extracted (AVE) is .83. These results indicate that the scale accurately captures the latent construct.

Finally, we adopted the measure of increase/decrease in sales to new or existing international customers as our measure for international market growth (Gemunden, 1991; Katsikeas et al., 2000), used in other international marketing studies (see for example Gronhaug & Kvåstein, 1992; Lim et al., 1993) as it is more suitable for developing managerial implications (Dhanaraj & Beamish, 2003). Hence we used three items to measure international market growth with a seven point Likert scale 1 = “significantly increased sales” and 7 “significantly decreased sales.” These items were; (1) “new customers in new international markets;” (2) “new customers in existing international markets;” and; (3) “increases from existing international customers.” The factor loadings for the three items scale are .76, .94, and .83 respectively and the average variance extracted (AVE) is .70. These results indicate that the scale accurately captures the latent construct.

Cronbach’s Alpha coefficient for each scale and the recommendations of Churchill (1979) for testing the multi-item scales for internal consistency/reliability was applied in the analysis, based on a seven point Likert-type scale used in the questionnaire (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). The scales retained for subsequent analysis had an Alpha value of >.60 (using SPSS) indicating reliability. KMO (Kaiser–Meyer–Olkin) is an index that indicates sample adequacy with values preferably above .8, and the results in the study show (see Table 2) values of .72 which are still regarded as acceptable (Kline, 2005). Reliability composite scores all fell within the acceptable parameter of above .5 (Hair, Black, Anderson, & Tatham, 2006). In the study, the composite reliability scores ranged from .86 to .94. Further, all variance-extracted scores also fell within the above parameters of .5 (Hair et al., 2006), and were based on latent model-convergent validity evaluations with measurement error (Fornell & Larcker, 1981). All variables had variance-extracted scores ranging from .78 to .95, falling within acceptable levels and highlighting convergent validity.

Finally, a chi-squared comparison discriminant validity test was performed to assess differentiation of factors of the final modified model (Bagozzi, Yi, & Phillips, 1991). In chi-squared comparisons there should be a large change in the chi-squared score to indicate discrimination between factors (Hair et al., 2006). A series of confirmatory factor analysis (CFA) tests are then used to identify whether a one-factor or two-factor solution fits better (Bagozzi et al., 1991). Through a CFA process, discriminant validity was assessed by un-constraining and constraining a two-model solution in order to identify whether the two factors were indeed different or discriminated (Bagozzi et al., 1991). Analysis indicated a large change in the chi-squared score highlighting adequate discrimination between factors. Thus, discriminant validity was established.

4.4. Non-response bias

First non-response bias was reduced by a high response rate which created a more representative set of respondents (Armstrong & Overton, 1977). Secondly, an independent data source, the Australian Bureau of Statistics, was used to identify the respondent characteristics, such as geographical locations (postcodes) and size of firm (Wickramasekera & Oczkowski, 2006), with both characteristics indicating the sample as representative of the broader business population. Thirdly, the postcode, firm size and industry characteristics of all the sample of firms sent the questionnaire e-mail matched those who responded. A more rigorous process of using a two-tail T test extrapolation method ensured that the data set was similar with respect to those respondents who submitted early and those few who submitted late with prompting (Armstrong & Overton, 1977). That is, firms were e-mailed with the survey link, and after one week, if the firm did not complete the survey, a single e-mail reminder was sent. Early respondents were those who replied within a week, with late firms responding between one week and two weeks after the survey link was sent out. A comparison of early and late respondents showed no statistically significant difference between the two groups across key items in the questionnaire with a two-tail test at the .05 level. For example, items related to online sales (factor IMC) (question 2 (2).55 non-sig.), information related to competitors (factor IAV) (question 4 (2).86 non sig.), commitment to internationalise.
uses response enough, different variables ally, the marketing consistency screened new questionnaire can was respondents IBR-1262; G International International International Business Review (2015), http://dx.doi.org/10.1016/j.ibusrev.2015.10.007

4.5. Key informant quality

Prior to the study, firms were contacted by telephone and screened to assess 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 to be eligible as key informants (Huber & 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 & Blair, 1994), and, within 48 h of the telephone screen conversation, an e-mail was sent through to the selected informant. These processes were used to ensure the selection of the most appropriate informant and accurate responses.

4.6. Common method variance

Common method variance (CMV) has become a growing concern in international business research (Chang, Van Wijterloostijn, & Eden, 2010) where there is a chance of a false internal consistency when both dependent and focal explanatory variables are perceptual measures derived from the same respondent or common source (Podsakoff & Organ, 1986). Considering the study uses a single informant, and the independent and dependent variables are measured at a single point in time, it is prudent to investigate the potential for common method variance, as this could impact on the relationship between the predictor and criterion variables as suggested by Podsakoff et al. (2003). This bias can lead to a distortion or inflation of correlations, and, if large enough, a potential misinterpretation of the results. Therefore, prior to the data collection, a panel of seven international marketing academics was asked to assess the questionnaire. Further, a seven point Likert-type scale was employed using different anchor labels and types of questions reduced the likelihood of common method bias by integrating variety into the questionnaire (Podsakoff et al., 2003) (see Table 2). Additionally, respondents were asked to answer the questions as honestly as possible, and, if needed, the respondent could clarify their response with another company employee for accuracy of, for example, performance indicators, so as to diminish the possibility of common method bias (Chang et al., 2010; Podsakoff et al., 2003).

Podsakoff et al. (2003) also propose a Harman’s one-factor test in a confirmatory factor analysis where a poor model fit, in this case: $\chi^2 = 3506.249$; d.f. = 435; RMSEA = 0.178; GFI = 0.429; TLI = 0.356; CFI = 0.397 shows that no single factor accounts for most of the variance in the measures, suggesting that CMV is not an issue. Although some argue that CMV may be overestimated (Lindell & Whitney, 2001), or even possibly an “urban legend” (Spector, 2006), Lindell and Whitney (2001) propose that when researchers are assessing correlations that have been identified as highly vulnerable such as self-reporting performance, a marker variable analysis should be conducted. The marker variable used in the study was “product characteristics”. Our study evaluates the impact of internal firm level resources and capabilities on outward international firm performances similar to others (for example Wernerfelt, 1984) who distinguish between firm analysis from a resource point of view and a product focused side analysis. Therefore, product characteristics should not play any significant role in the study of the evaluation of capabilities. Results showed non-significant relationship correlations ranging from 0.01 to 0.12. Finally, our model includes multiple interrelationships, therefore CMV bias is less likely, as respondents would find it difficult to form mental models of the relationships being investigated (Chang et al., 2010; Podsakoff et al., 2003). These pre-data collection processes and post hoc test indicate no evidence of any common method bias or variance.

5. Data analysis and findings

The model was tested using structural equation modelling (SEM) and AMOS 21, evaluating interrelationships between information availability, international strategic orientation and international network capability components of the firm’s international marketing activities, firms’ Internet marketing capabilities and international market growth.

From the descriptive statistics, 96% of the firms fell within the classification of small and medium-sized enterprises (SME), with 1–200 employees (Australian Bureau of Statistics, 2008). This is not surprising, as SMEs account for 97% of the business population in Australia (Australian Bureau of Statistics, 2008). The bulk of respondents were managing directors (30.6%), international and marketing/sales managers (20%), general managers, and other managers responsible for international decisions (29.7%). Some respondents were owners (8.4%) and chief executive officers, vice presidents, chief organisational officers, and chief marketing officers (10.2%). The average number of international markets serviced by the sample firms was 15, with the main countries being the United States of America, New Zealand, the United Kingdom, Singapore, Hong Kong, Papua New Guinea and Japan. The Asian countries and markets accounted for most of the international markets served (39%). The average annual turnover derived from international markets of the sample companies was 38%, with most of the firms recording international revenues accounting for the majority of their total turnover (65.6%).

Further, a number of control tests were conducted to assess confounding influence including firm size, industry and firm age

### Table 1: Non-response bias ad hoc comparison test.

<table>
<thead>
<tr>
<th>Factor name</th>
<th>Factor code</th>
<th>Item code</th>
<th>Question</th>
<th>Sig two tail</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information availability</td>
<td>IAV</td>
<td>COMINF</td>
<td>4 (2)</td>
<td>.86</td>
<td>Not sig.</td>
</tr>
<tr>
<td>International strategic orientation</td>
<td>ISO</td>
<td>COMMIT</td>
<td>9 (2)</td>
<td>.46</td>
<td>Not sig.</td>
</tr>
<tr>
<td>International network capability</td>
<td>INC</td>
<td>STEREL</td>
<td>10 (2)</td>
<td>.38</td>
<td>Not sig.</td>
</tr>
<tr>
<td>Internet marketing capability</td>
<td>IMC</td>
<td>ONSAL</td>
<td>2 (2)</td>
<td>.55</td>
<td>Not sig.</td>
</tr>
<tr>
<td>International market growth</td>
<td>IMG</td>
<td>NEWSCUS</td>
<td>7 (2)</td>
<td>.76</td>
<td>Not sig.</td>
</tr>
</tbody>
</table>

Note: Non-significant indicates there is no significant difference between the two groups (early and late responses), and the sample can therefore be treated as the same. Each second item related to each key construct was tested.
Table 2
Construct measures and CFA results.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Sources</th>
<th>Indicators</th>
<th>Std estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet marketing capabilities (IMC) (α = .79, KMO = .72, CR = .87)</td>
<td>Measure adapted from Aspelund and Moen (2004), and Gibbs and Kraemer (2004)</td>
<td>The firm uses the Internet for . . . ; 1 = no use, 7 = extensive use</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advertising and marketing; Online sales; After sales service and support</td>
<td>.69</td>
</tr>
<tr>
<td>Information availability (IAV) (α = .85, KMO = .81, CR = .92,AVE = .78)</td>
<td>Measure adapted from Hamill and Gregory (1997), Torre and Moon (2001), Petersen et al. (2002)</td>
<td>Information about . . . is available; 1 = no information, 7 = extensive information</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International marketing management</td>
<td>.85</td>
</tr>
<tr>
<td>International strategic orientation (ISO) (α = .88, KMO = .82, CR = .94,AVE = .83)</td>
<td>Measure adapted from Aspelund and Moen (2004) and Nunnema et al. (2004)</td>
<td>The firm . . . I strongly disagree, 7 = strongly agree is committed to servicing their international customers</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International competitors (s)</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International resources (s)</td>
<td>.80</td>
</tr>
<tr>
<td>International network capabilities (INC) (α = .93, KMO = .84, CR = .92, AVE = .95)</td>
<td>Measure adapted from Wu et al. (2003)</td>
<td>We use business networks to . . . 1 = no use, 7 = extensive use</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintaining international customer relationship</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthening the existing relationships</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Developing longer lasting relationships</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acquiring new international customers</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New customers in new international markets</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increases from existing international customers</td>
<td>.84</td>
</tr>
</tbody>
</table>

Note: α = Cronbach alpha, KMO = Kaiser–Meyer–Olkin measure of sampling adequacy, CR = composite reliability score, AVE = average variance extracted. IMC = internet marketing capability; IAV = information availability; ISO = international strategic orientation; INC = international network capabilities; IMG = international market growth.

* Items that have been excluded in the final competing model.

which are normally used in international business research. Size and age of firm are generally used as control variables in international business research (see Pla-Barber & Puig, 2009). No statistically significant relationships (at a .001 level) was found between size and IMC (p = .21), IAV (p = .55), ISO (p = .40), INC (p = .70), or IMC (p = .18); industry and IMC (p = .30), IAV (p = .70), ISO (p = .05), INC (p = .73) or IMC (p = .04); firm age and IAV (p = .29), ISO (p = .88), INC (p = .77) or IMG (p = .47). Table 3 reports the bi-variate Pearson correlations of the constructs. The CFA analysis also resulted in the removal of five indicators from the five constructs for the purpose of purification.

The confirmatory factor analysis shows a reasonable model fit (CMIN/DF = 1.811; p = .000; RMSEA = .060; CI 90% (0.071; 0.089); GFI = .922; CFI = .964; TLI = .952; SRMR = .055). The proposed model (with a small number of items excluded for parsimony, see Table 2) was found to have a better model fit that helps to explain the data (CMIN/DF = 1.258; p > .05; RMSEA = .034; CI 90% (0.000; 0.056); GFI = .954; CFI = .990; TLI = .986; SRMR=.048). The results from the SEM analysis shown in Table 4 indicate that the

Internet marketing capabilities of the firm have a positive impact on information availability and the development of international network capabilities. Further, Internet marketing capabilities are partially mediated by the strength of international strategic orientation, which will be explained next.

From the model the findings support Hypothesis 1; the results show a significant relationship between Internet marketing capabilities and information availability (β = .64, p < .01). The findings provide support for Hypothesis 2; the results show a significant relationship between Internet marketing capabilities and an international strategic orientation (β = .23, p < .05). The findings provide support for Hypothesis 3; the results indicate a positive relationship between Internet marketing capabilities and an international strategic orientation (β = .39, p < .01). The findings also provide support for Hypothesis 4; the results indicate a significant positive relationship between an international strategic orientation and international market growth (β = .40, p < .01). The findings provide support for Hypothesis 5; the results indicate that Internet marketing capabilities have a significant positive

Table 3
Correlations matrix.

<table>
<thead>
<tr>
<th></th>
<th>1. IMC</th>
<th>2. IAV</th>
<th>3. ISO</th>
<th>4. INC</th>
<th>5. IMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IMC: internet marketing capabilities</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. IAV: information availability</td>
<td>.51a</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ISO: international strategic orientation</td>
<td>.34b</td>
<td>.31b</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. INC: international network capability</td>
<td>.35c</td>
<td>.21c</td>
<td>.40c</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. IMG: international market growth</td>
<td>.28d</td>
<td>.23c</td>
<td>.68d</td>
<td>.45e</td>
<td>1.00</td>
</tr>
</tbody>
</table>

IMC = Internet marketing capability; IAV = information availability; ISO = international strategic orientation; INC = international network capabilities; IMG = international market growth.

a Correlation is significant at the 0.01 level.
b Correlation is significant at the 0.05 level.
c Correlation is non-significant.

d please cite this article in press as: Mathews, S., et al. Internet marketing capabilities and international market growth. International Business Review (2015), http://dx.doi.org/10.1016/j.ibusrev.2015.10.007
relationship with international network capabilities ($\beta = .33$, $p < .01$). The findings provide support for Hypothesis 6; results show a significant and positive relationship between an international strategic orientation and international network capabilities ($\beta = .28$, $p < .01$). The findings provide support for Hypothesis 7; the results indicate a significant positive relationship between international network capabilities and international market growth ($\beta = .16$, $p < .01$). We also tested direct effects between Internet marketing capabilities and international network capabilities with international market growth. The results indicate that Internet marketing capabilities do not have a direct significant relationship with international market growth ($\beta = .03$, $p > .05$). Further, results indicate information availability does not have a direct relationship with international market growth ($\beta = .02$, $p > .05$). Overall, seven hypotheses are supported as illustrated in Table 5.

To test these indirect effects, a bootstrap approach (Amos 21) was used to assess mediation effects in the model (Kline, 2005). The overall model mediation test indicated that Internet marketing capabilities are fully mediated by other elements of international business including: information availability, international strategic orientation, and international network capabilities with respect to international market growth. Moreover, each proposed indirect mediation effect was also tested independently. Specifically, Internet marketing capabilities are mediated by international strategic orientation (.001) and international network capabilities (.001) with respect to international market growth. Further, Internet marketing capabilities are mediated by information availability in relation to international strategic orientation (.034). Lastly, there was also evidence that information availability is mediated by international strategic orientation (.000), and international strategic orientation is mediated by international network capabilities (.003) with respect to international market growth. Therefore, all proposed indirect mediation has been shown to be statistically significant.

### Table 4

<table>
<thead>
<tr>
<th>Model</th>
<th>Overall fit</th>
<th>P-value $&gt; .05$</th>
<th>DF</th>
<th>RMSEA $&lt; .10$</th>
<th>GFI $&gt; .92$</th>
<th>CFI $&gt; .92$</th>
<th>TLI $&gt; .92$</th>
<th>SRMR $&lt; .10$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA</td>
<td>188.861/80</td>
<td>.060</td>
<td>.922</td>
<td></td>
<td>.964</td>
<td>.952</td>
<td>.0550</td>
<td></td>
</tr>
<tr>
<td>Final model</td>
<td>72.949/58</td>
<td>.034</td>
<td>.954</td>
<td></td>
<td>.990</td>
<td>.986</td>
<td>.0487</td>
<td></td>
</tr>
</tbody>
</table>

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

### 6. Conclusions, implications, limitations and future research

The study provides new insights into international Internet marketing capabilities and the relationship between international strategic orientation and international network capabilities and how they drive the international market growth of the firm. The study contributes to our understanding of the aggregate nature of capabilities related to Internet marketing capabilities beyond a singular perspective of simple Internet use. The idea that Internet marketing capabilities are a group of distinct marketing activities that can be leveraged for international performance outcomes extends our knowledge of international business digital capabilities. The bundling of more traditional capabilities with these evolving Internet marketing capabilities will benefit the firm when strategically orientated towards internationalisation. Moreover, Internet marketing capabilities also enhance the international strategic orientation of the firm. Our study sheds additional light on the relationship between capabilities and firm performance. It examines the links between capabilities, functional competences and performance outcomes. Although the literature on Internet related capabilities asserts a positive impact on firm performance, these claims have not been empirically tested. Our study provides this empirical evidence based on data pertaining to a sample of Australian firms with international customers.

The results suggest that the impact of capabilities on performance is mediated by an international strategic orientation and international networks. Specifically, the study shows how Internet marketing and established international business capabilities fit or match as an aggregate or bundle of capabilities that are used to achieve international market growth. Internet marketing capabilities are shown to enhance capabilities such as information availability capacity and international networks, which lead to international sales growth for the firm. By confirming the mediating role of international strategic orientation, results indicate that there is an indirect link between Internet capabilities and international performance. That is, Internet marketing capabilities enhance other firm capabilities which in turn also have a reinforcing effect to improve international market performance of the firm.

### 6.1. Theoretical and empirical contributions

This research makes two main theoretical contributions. Firstly, our study uses the resource based view and capabilities perspective, applying it to the Internet as a capability, and contributing to the extant literature where a gap in the knowledge of Internet and international market growth has been identified. We address this gap by finding that the Internet’s pervasiveness is impacting on multiple international firm capabilities which in turn positively influences international market growth. This more complex understanding from the study makes an empirical contribution to the research in highlighting the importance of acquiring and deploying Internet marketing capabilities in combination with more established international capabilities. The finding that Internet
marketing capabilities are influencing the development of other complementary firm international business capabilities is an additional empirical contribution of the study. Secondly, and related to our first contribution, we have addressed the call for more parsimonious models with a strong theoretical foundation and explanation of international performance (Dhanaraj & Beamish, 2003; Gemunden, 1991). This we have achieved by identifying literature based on key antecedents and relationships which have strong explanatory power. Thirdly, our research contributes to the relative lack of empirical studies which test the connection between international marketing strategy and international performance (Cavusgil & Zou, 1994; Leonidou, Katsikeas, & Samiee, 2002) through the use of multiple measures of international market growth of year on sales in (1) existing international customers, (2) new international customers in existing countries and (3) new international customers in new international markets, rather than using a single international sales growth measure as in several previous studies (Leonidou et al., 2002).

6.2. Managerial implications

The first implication from our findings is that Internet resource and capability helps reduce the liability of foreignness experienced by marketing managers through easier and fast access to international market information and knowledge. Fast and easy access to international market information and knowledge about the foreign market macro and micro-environmental conditions on, for example, political and economic risks, culture, competition and sales channels, reduces the uncertainty of in particular geographic and psychologically distant markets. The second implication for international marketing managers is that they should focus their attention on the use of and embedding the Internet resource and capability into the management culture and thinking to foster and support an international strategic orientation and mindset. Exposing top managers to increased knowledge about foreign markets may encourage and foster an international mind set open to the opportunities offered by international markets for growth. A final implication of our research of the Internet marketing resource and capability for international marketing managers is the enabling of the development of an international network capability through faster access to identify potential new sales channels and other partnerships offering opportunities for international market growth. The Internet reduces the initial time and cost of, for example, identifying international network opportunities through international market visits to trade fairs or home country government export support offices in foreign locations.

Therefore, capabilities should not be isolated from each other but evolve organically with the changing set of digital and international business circumstances. Finally, international marketing managers leveraging these Internet marketing capabilities may alter the need to own assets located in foreign countries and can use alternative mechanisms via international Internet networks to achieve international market growth.

6.3. Limitations and future research

Our research is not without some limitations as we used cross-sectional data with a single source, thus replication and/or cross-validation is needed for strict statistical confirmation of the model (Byrne, 2001). The study is set in a single country, and additional country research would extend the generalizability of the work. Future research should verify the interrelationships identified and the multi-item constructs developed. Finally, a longitudinal study may give further insights into our understanding of Internet marketing capabilities and how they could change as international marketing evolves into later stages of internationalisation.

References


Please cite this article in press as: Mathews, S., et al. Internet marketing capabilities and international market growth. International Business Review (2015), http://dx.doi.org/10.1016/j.ibusrev.2015.10.007


