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Market Driven Intangibles: Critical Indicators for Firm Performance Superiority in Small Open Economies

ABSTRACT

Recent strategic management and marketing research declares the importance of market driven intangibles in explaining performance differentials and competitive superiority among rivals. Market driven intangibles have been discussed in conjunction with a host of other concepts, such as market orientation, marketing capabilities, organizational innovation, and performance. A review of the extant literature concludes that these intangibles are increasingly considered to be most critical firm-specific resources, but also finds a lack of clarity and elaboration of which types of market driven intangibles are most important and under what kinds of macro environmental conditions. In this paper, we incorporate these observations into a conceptual model and link it to the context of firms representing two small open economies – New Zealand and Finland – for the model evaluation and valuation of the market driven intangibles in assessing firm performance superiority within arenas characterised by an increased degree of competitive intensity and market uncertainty. We discuss the key results for practice and research.

Key words: market driven intangibles, performance superiority, small open economies

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1. INTRODUCTION

Firm intangibles or intangible assets and capabilities (Fahy and Smithee, 1999) are hard for rivals to imitate, which makes them a source of sustainable positional and performance advantages (Kaplan and Norton, 2004). The notion of market driven refers to learning, understanding, and responding to stakeholder perceptions and behaviours within a given market structure (Jaworski et al., 2000), and, therefore, firm intangibles are also partially determined by environmental forces, such as changing customer needs and competitive hostility (Johnson et al., 2003). Market driven intangibles are conceptualised as any attribute, intellectual or relational that can be deployed advantageously in the marketplace (Hooley et al., 2005). Performance superiority, in turn, is defined here as the achievement of overall profit levels, profit margins, and ROI, emphasising financial outcomes and internal efficiency relative to main rivals (Day and Wensley, 1988).

Following this conceptualisation, we distinguish between two key marketing intangibles: market orientation with a market driven emphasis (Jaworski et al., 2000) and market driven capabilities (Day, 1994). Market orientation has been systematically demonstrated to create superior performance (for an in-depth discussion see e.g. González-Benito and González-Benito, 2005). Market orientation is seen as a deeply embedded cultural character of firms that in itself forms a distinctive market driven intangible, but the impact of other market driven capabilities on firm performance remains largely untested (Hooley et al., 2005). We try to cover these important gaps since it has been argued that as part of enhancing our understanding of market driven intangibles and performance, the relationship among innovativeness, market orientation, and marketing capabilities should be examined in more depth (Weerawardena and O’Cass, 2004; Kirca et al., 2005).

This paper takes this argument and expands the framework supplied by Day (1994). Our conceptual model is grounded on the foundation of the resource based theory (RBT) of the firm. We adopt the relational view within the RBT and our study attempts to address the preceding research gaps by examining the causal links between marketing intangibles and firm performance outcomes in a sample of 799 businesses representing suppliers, manufacturers, intermediaries, and retailers in small open market economies (Finland and New Zealand).

We argue that the firm performance superiority is initiated by the degree of its market orientation and three types of market driven capabilities, namely, outside-in capabilities, inside-out capabilities, and spanning capabilities (Day, 1994; Fahy and Hooley, 2002).

2. CONCEPTUAL MODEL AND HYPOTHESES

Often traced back to the work of Penrose (1959), the RBT has become a centerpiece of discourse among scholars in organizational economics and strategic management. The central notion in

this field of research is firm heterogeneity, the idea that firms differ in their resource positions, and that such resource heterogeneity is a source of performance differences across firms (Barney, 1991).

As an extension of the RBT, the relational view (Dyer and Singh, 1998) maintains that competitive advantage and superior performance derive not solely from firm-level resources but also from difficult-to-imitate assets and capabilities embedded in business relationships (Srivastava et al., 2001). Marketing can be thought of as being the sum of intangible resources – assets and capabilities – that a firm can access or mobilize to leverage individual dyadic relationships or business networks for the exchange and acquisition of tacit and explicit knowledge and for mutual learning (Dyer and Singh, 1998). **Relational marketing assets take time to build through training and development, rely on tacit knowledge and skills, and are inherently difficult for competitors to copy or imitate (Day 1994). However, much strategy research fails to adequately address the challenges inherent in a world moving quickly toward competition among networks of firms.**

Market orientation research provides a framework focusing on creating a value proposition superior to those supplied by the rivals (Day 1994). However, the literature lacks an underlying theory that could provide an explanatory mechanism for the positive relationship between market orientation and firm performance (Stoelhorst and van Raaij 2004). Drawing parallel with Hunt and Morgan (1995), market orientation is a market driven firm intangible as such, spanning a set of functional activities (Menguc and Auh, 2006). Often market driven is considered a market oriented culture (Slater and Narver, 2000) of knowing and understanding customers and competitors (Jaworski et al., 2000).

Market orientation is seen as a deeply embedded cultural facet (Deshpandé and Farley, 2004) that forms an intangible resource underpinning organizational processes (Hunt and Morgan, 1995). Market orientation with a market driven emphasis provides a framework focusing on creating a customer value proposition superior to those supplied by the rivals (Day, 1994). Although an accumulating body of research has explored the effect of market orientation on performance superiority, the results, however, have been equivocal (see e.g. Stoelhorst and van Raaij, 2004; González-Benito and González-Benito, 2005). Several studies found no significant relationship between superior performance and market orientation, indicating that some mediating factor may have a significant role in this interplay (Frambach et al., 2003; Matsuno et al., 2005). With very few exceptions (e.g. Hurley and Hult, 1998; Han et al., 1998; Sandvik and Sandvik, 2003; Kirca et al., 2005), critical mediating factors for converting market orientation into superior performance have not been widely addressed (Johnson et al., 2003). In line with Hult et al. (2004) and Kirca et al. (2005), we argue that organizational innovativeness is one of the most important mediating factors in this respect. Actually, firm innovativeness can be thought of being a market driven intangible asset as such (Han et al.,

1998; Menguc and Auh, 2006), representing organizational spanning processes that enable the business to add value to its products and services and meet competitive demands as postulated by Day (1994). Thus, we hypothesise that:

H1a, 1b: Market orientation is positively related to both organizational innovativeness (H_{1a}) and performance superiority (H_{1b}).

Among the market driven intangibles of any organization, the most valuable will be the outside-in or customer linking and channel bonding capabilities identified by Day (1994). As Weerawardena and O’Cass (2004) have put it, the purpose of these intangibles is to connect the processes that define the other organizational capabilities to the external environment and enable the business to compete by anticipating market requirements ahead of rivals and creating innovation and sustainable collaboration with customers, channel members, and suppliers relying on tacit knowledge and skills. Drawing on this description, it is hypothesised that:

H2: Outside-in capabilities are positively related to organizational innovativeness.

Inside-out capabilities, on the other hand, represent firm intangibles focused on internal managerial processes, such as financial management, operation management, and human resource management (Day 1994). These capabilities are deeply embedded and rely on tacit knowledge difficult for competitors to copy or imitate (Hooley et al., 2005). Similar to Day (1994), we argue that market driven firms are also paramount in inside-out capabilities by means of superior market intelligence and internal efficiency enabling all functional activities and organizational processes to be better directed toward anticipating and responding to changing market requirements. It is therefore hypothesised that:

H3a, 3b: Inside-out capabilities are positively related to both organizational innovativeness (H_{3a}) and performance superiority (H_{3b}).

As previously discussed, firm innovativeness represents organizational intangibles in terms of a spanning capability (Day, 1994). Innovativeness is defined here as the capacity to introduce some new process, product, or idea within the firm (Hurley and Hult, 1998), representing a means to deal with the given environmental setting (Im and Workman, 2004; Lev, 2004). Firms without the capacity to innovate may invest time and resources in studying markets but are unable to translate this intelligence into practice (Han et al., 1998). In that sense, the adoption of innovation is generally intended to contribute to superior performance (Damanpour, 1991), and the most important innovations are those that allow the firm to achieve some sort of positional advantage, thereby contributing to its performance superiority (Hult et al., 2004; Kirca et al., 2005). Following the preceding reasoning, we hypothesise that:

H4: Organizational innovativeness is positively related to performance superiority.

Figure 1 provides a graphical representation and summary of the hypotheses stated.

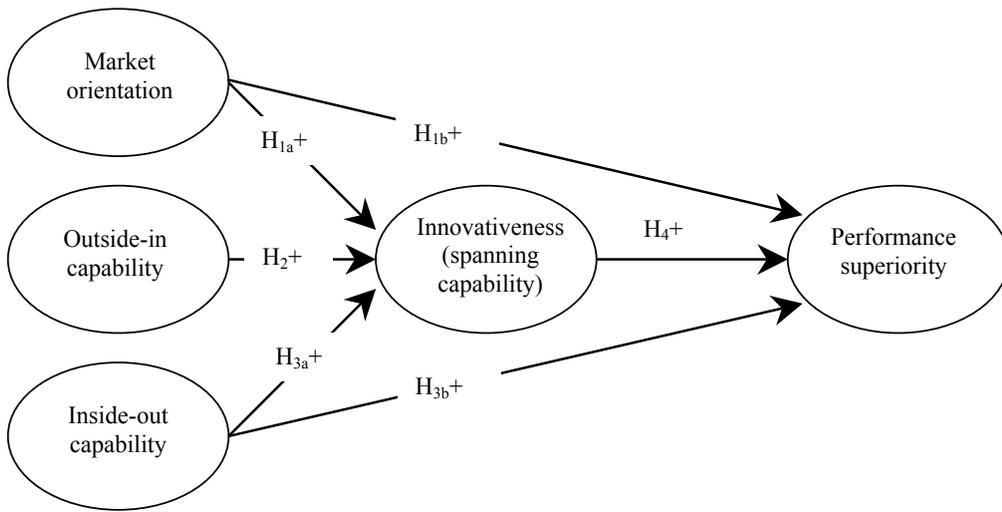


FIGURE 1. Performance superiority model of market driven intangibles.

In our path model, we forward the premise that market driven intangibles facilitate firm innovativeness and performance (Fahy and Hooley, 2002). We suggest that the link appears to be even stronger in small open economies, where the highly marketized environmental setting - regardless of its location in the globe – is determined by an increased degree of customer sophistication and technology proliferation, just, like in the case of Finland and New Zealand. Hence, we hypothesize the following:

H5: The profiles of the market driven intangibles and innovativeness do not differ among firms in diverse but economically equivalent environmental settings.

The rationale behind our argument is grounded on the rules of the game in different institutional settings (Davies and Walters, 2004). National prosperity is strongly affected by competitiveness, which is the productivity with which a nation uses its human, capital, and natural resources (Porter, 2003), but several scholars (e.g. Zou and Cavusgil, 2002) argue that local demand conditions are irrelevant in a global economy because nations have access to global market. However, the magnitude of the intangibles – performance relationship may be country specific because of differences in cultural values (Kirca et al., 2005). In the dynamic cluster-based view of economic development the local

market remains important, and we need data to confirm this view. We also need additional country data so that we can do a better job of benchmarking and comparing country performance.

3. METHODOLOGY

In order to test our path model, an empirical study was conducted deploying mailed questionnaires. The study involved three main phases. First, in-depth interviews were conducted with senior marketing executives in 24 organizations to identify the constructs concerned. The item pool was further refined through expert opinion of marketing scholars in a number of European countries (e.g. the UK, Ireland, and Austria). Thereafter, the questionnaire was developed and piloted. Finally, a representative mailed survey was undertaken.

3.1 Data collection

Our survey was carried out in 2001–2002 (coordinated by Aston Business School, UK). Given however that we are bedded in the etic tradition in our cross-national study, and to enable meaningful comparison to be made, we needed to take account of equivalence.

Following the *Standard Industrial Classification* – SIC – code (Dun and Bradstreet), our sample covered small (20–60 employees), medium size (61–299 employees) and large (300 or more employees) firms or business units operating in industries such as the ICT sector, technology industry, forest and paper industry, food processing industry, and wholesale and retail sector, and representing business products, consumer products, business services and consumer services in Finland and New Zealand. The sampling frame was supplied by national research institutes in both countries. Moreover, the original questionnaire was pre-tested following the instructions (construct, calibration, and translation equivalence) forwarded by Steenkamp and Baumgartner (1998).

It has been argued that Finland and New Zealand are similar economies: developed, open, and small. Several interviews with industry experts confirmed that the firms in both countries had experienced high levels of technology and market changes during the last decade. Operating from small and open economies ensured that there was enough variation between market orientation among the firms. Similarly the number of industries involved suggested that there would be considerable variation in the market driven intangibles concerned.

Informants (chief marketing executives) were mailed a copy of the questionnaire along with a personalized instruction letter and return envelope. In total, 799 usable responses were received: 472 in New Zealand and 327 in Finland, and a response rate over 20%.

3.2 Measures

Market orientation was captured deploying 14 items from the scale first reported by Narver and

Slater (1990). The market driven intangibles and performance superiority measures were developed for the research questions at hand. In this respect, the proxies comprised new items and were initially developed by identifying and creating questions on the basis of the literature review, expert opinions, and field-based interviews. Following the analysis of the pilot data, the seminal questionnaire was further refined. Subsequently, the final questionnaire was developed deploying 20 capability items generated through the above, hypothesised as three separate factors following the three proposed by Day (1994). Besides, the questionnaire consisted of 19 advantages items, hypothesised as two separate factors based on the taxonomy of Day and Wensley (1988): one set for positional advantages, the other for performance advantages (performance superiority) which we deployed in this study. It has been argued that there is a high correlation between objective and subjective performance measures as formerly reported in leading academic journals (González-Benito and González-Benito, 2005; Kirca et al., 2005).

Market orientation items were measured with a 7-point Likert-type scale, while all the other items deployed a five point advantage scale, relative to major rivals. For a complete list of items in each scale are presented in Table 1.

No significant differences in means were found between early and late respondents on the scales studied (*t*-tests at .05 level), indicating that non-response bias is unlikely to be a problem (Armstrong and Overton, 1977). Similar studies are underway in other countries (e.g. Australia, Austria, Brazil, China, Germany, Greece, Hong Kong, Hungary, Ireland, the Netherlands, Poland, Slovenia, and the UK) and at various stages of completion to allow the international robustness of the scales to be gauged.

4. ANALYSIS AND RESULTS

For scale construction and validation confirmatory factor analysis (CFA) was used. Several items were excluded from the scales to achieve appropriate levels of unidimensionality. The fit indexes for the measurement model were acceptable as represented in Table 2.

Overall, the CFA fit indexes for the measurement model indicate that the scale structures fit the data acceptably and the developed proxies perform well in the context concerned. Composite reliability values (ρ_c) and values of average variance extracted (ρ_v) were calculated following the general instructions (e.g. Diamantopoulos and Siguaw, 2000), and all exceed the recommended levels, respectively of: 0.60 or greater for the former, while 0.50 or higher for the latter (Bagozzi and Yi, 1988), providing, thus, a set of reliable and valid metrics for the constructs involved. The final measurement results for the scales together with a correlation matrix are shown in Table 3.

The hypotheses were tested simultaneously with LISREL 8.53 (Jöreskog and Sörbom, 1996). Modelling was undertaken deploying covariance matrix and the maximum likelihood estimation

TABLE 1. Survey items used to measure constructs and scaling.

Market orientation ^a	<ol style="list-style-type: none"> 1. Our commitment to serving customers is closely monitored 2. Objectives and strategies are driven by creation of customer satisfaction 3. Competitive strategies are based on understanding customer needs 4. Functions are integrated to serve market needs 5. Strategies are driven by increasing value for customers
Outside-in capability ^b	<ol style="list-style-type: none"> 1. Access to strategic partners' managerial know-how and expertise 2. Good at pooling expertise with strategic partners 3. Good at sharing mutual trust with strategic partners 4. Good at sharing mutual commitment and goals with strategic partners
Inside-out capability ^b	<ol style="list-style-type: none"> 1. Strong financial management 2. Effective human resource management 3. Good operations management expertise
Innovativeness (spanning capability) ^c	<ol style="list-style-type: none"> 1. We are more innovative than our competitors in deciding what methods to use in achieving our targets and objectives 2. We are more innovative than our competitors in initiating new procedures and systems 3. We are more innovative than our competitors in developing new ways of achieving our targets and objectives 4. We are more innovative than our competitors in initiating changes in the job contents and work methods of our staff
Performance superiority ^d	<ol style="list-style-type: none"> 1. Overall profit levels achieved compared to competitors 2. Profit margins compared to competitors 3. Return on investment compared to competitors

^a The response options ranged from 1, "not at all," to 7, "to an extreme extent."

^b The response options ranged from 1, "strong competitors' advantage," to 5, "our strong advantage."

^c The response options ranged from 1, "strongly disagree," to 5, "strongly agree."

^d The response options ranged from 1, "much worse," to 5, "much better."

TABLE 2. Fit indexes for measurement model and structural model.

Model	χ^2 (df)	RMSEA	GFI	NNFI	CFI
Measurement model (CFA)	725.33 (142) Significance = 0.000	0.072	0.94	0.93	0.94
Structural model	0.14 (1) Significance 0.708	0.000	1.00	1.022	1.00

RMSEA: root mean square error of approximation, GFI: goodness of fit index, NNFI: non-normed fit index, CFI: comparative fit index.

procedure. The structural model fit indexes shown in Table 2 indicate that the model fit is very good.

Table 2 presents the model fit measured using the chi-square statistic (χ^2), root mean square error of approximation (RMSEA), goodness of fit index (GFI), non-normed fit index (NNFI), and

TABLE 3. The scale means, standard deviations, reliability and correlation matrix.

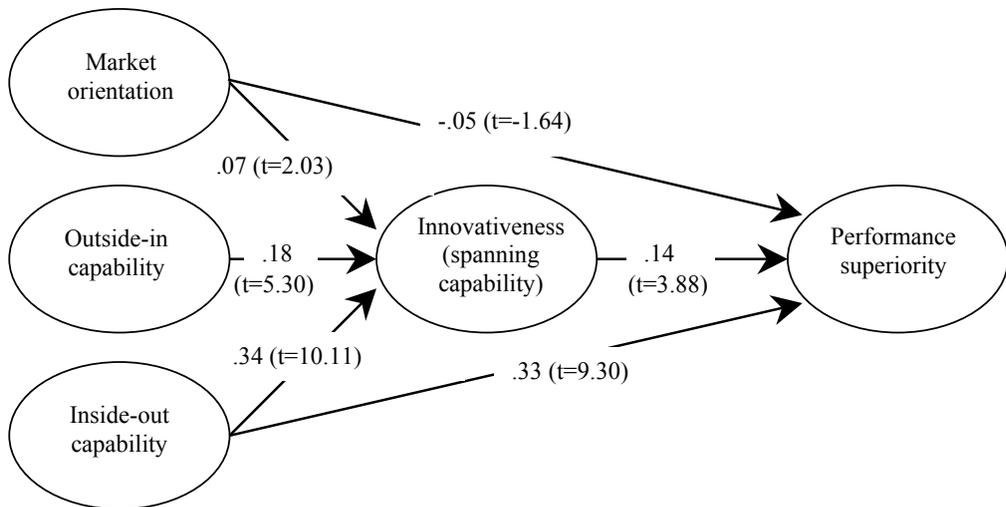
Constructs	Mean	S.D.	ρ_c	ρ_v	1.	2.	3.	4.	5.
1. Market orientation	5.34	.98	.88	.60	1.00				
2. Outside-in capability	3.37	.64	.89	.67	.18	1.00			
3. Inside-out capability	3.48	.67	.76	.52	.58	.31	1.00		
4. Innovativeness	3.60	.80	.91	.71	.12	.29	.39	1.00	
5. Performance superiority	3.52	.93	.94	.85	-.02	.12	.38	.26	1.00

S.D.: standard deviation, ρ_c : composite reliability, ρ_v : average variance extracted.

comparative fit index (CFI). Since the chi-square statistic is sensitive to departures from multivariate normality and sample size, and also assumes that the model fits perfectly in the population, caution needs to be used in its application (Diamantopoulos and Siguaw, 2000). The root mean square error of approximation (RMSEA) is usually regarded as the most informative fit indices, and values less than .05 are indicative of good fit, and between .05 and .08 of reasonable fit (Sharma et al., 2005). Thus, as seen in Table 2, the model fit is very good, as RMSEA is .00.

The goodness of fit index (GFI) is an absolute fit index, which means that it assesses how well the covariances predicted from the parameter estimates reproduce the sample covariances. Here values greater than .90 reflect acceptable fits, and the GFI value in Table 2 shows an acceptable fit. The last two of the fit measures are relative fit indices, which show how much better the model fits compared to a baseline model, usually the independence model. Values of the non-normed fit index (NNFI), and the comparative fit index (CFI) range from 0 to 1 (with the exception that NNFI can have values greater than 1), and values close to 1 indicate a good fit (Steenkamp and van Trijp, 1991; Sharma et al., 2005). The fit indexes shown in Table 2 suggest that the model fits well with our data, and, thus, all fit indexes concerned indicate that the model fit is good.

Figure 2 provides an overview of the estimated effects within the structural model. As can be seen, market orientation is positively related to organizational innovativeness ($\beta = .07$), providing support for Hypothesis H1a. Surprisingly, market orientation has a significant, but negative path with performance superiority ($\beta = -.05$), and, thus, do not provide support for our Hypothesis H1b. This finding warrants, however, further investigation. As predicted in Hypothesis H2, the outside-in capability is positively related to organizational innovativeness ($\beta = .18$), supporting our hypothesis and the claim that the outside-in or customer linking and channel bonding capability is one of the most valuable intangibles of a market driven firm. Nevertheless, our results indicate that the inside-out capability has a very strong positive relation to both organizational innovativeness ($\beta = .34$) and performance superiority ($\beta = .33$), providing support for Hypotheses H3a and



Significance of the path estimates are shown in parentheses (*t*-value).

Model fit: $\chi^2 = 0.14$; $df = 1$; $p = 0.708$; RMSEA = 0.000; GFI = 1.00; NNFI = 1.022; CFI = 1.00.

FIGURE 2. Structural equation model: standardised path estimates.

H3b. In our Hypothesis H4, we claimed that organizational innovativeness is positively related to firm performance superiority ($\beta = .14$). In this respect, the findings verify the claim and confirm our argument that the adoption of innovation contributes to firm performance superiority.

The explanatory power of the structural model for each depended construct was examined by using R^2 (squared multiple correlations). Together, market orientation, outside-in capability, and inside-out capability were able to explain 19 percent of the variances observed in innovativeness, while innovativeness explained 16 percent of the variance observed in performance superiority.

Finally, in order to test our Hypothesis H5, a Chi-square difference test was used to assess whether the path estimates of the structural model are invariant across the two countries discovered. The results are not providing any empirical support for our claim, indicating that the profiles and effects of market driven intangibles significantly differ between the firm groups representing the two diverse economies examined (test result: $\chi^2 = 23.27$; $df = 10$; $p = 0.009$). This fundamental finding implies that we have a contingency dependent phenomenon at hand, which, again, warrants further research.

In summary, we found good empirical support for the hypotheses stated, and all the relationships between the key constructs were significant, even though one was negative.

5. DISCUSSION AND CONCLUSIONS

The structural model demonstrates the importance of market driven intangibles in contributing to the explanation of superiority in firm competitive performance. We provide some empirical evidence for prior demonstrations (Day, 1994; Hunt and Morgan, 1995; Fahy and Hooley, 2002) and our key findings are parallel with the results of recent research in this field (e.g. Hooley et al., 2005; Hult et al., 2004; Weerawardena and O’Cass, 2004; Kirca et al., 2005). Following the relational view of the RBT, we can anticipate that performance advantages created through deployment of intellectual and relational capital in marketing and innovation are more likely to be superior. In essence they constitute the integration of organizational intangibles both in cognitive and behavioural level to create an idiosyncratic combination for each firm.

Overall, the empirical results verified our conceptual model. The established relationships between the key constructs of the model provided fruitful insights into the issues concerned. We believe that this work may have some important practical implications as well. One obvious advice is the need for senior business executives to become more explicitly aware of the need to allocate their intangible resources. **This work helps us to understand better which market driven intangibles are most critical for the firm performance superiority, and it also helps business executives clarify what kinds of competitive activities the firm is actually engaged in.** Our finding of different ‘pathways’ to performance superiority via market driven intangibles also implies that discovering these resource endowments as composite scales might result in ignoring subtleties due to multidimensionality of the constructs involved. Depending on the balance of the resource strategy adopted, a firm may place greater emphasis on, say, relational developments, before integrating and executing business processes with business partners, such as a new product development. The implication for practice is that it would be wrong to exhort firms to be ‘market oriented’ as such rather than more relationally minded.

Some limitations and directions for future work are suggested by this inquiry. **The current study relies on self-reporting by key respondents, senior marketing executives.** While these respondents are likely to be in best position to inform about firm performance superiority through market driven intangibles, other business executives may have different, equally valid opinions. Therefore, further research into the nature and metrics of the key constructs would be a fruitful area of discovery. **Finally, the unexpected results discussed above, warrant further research.** Our research has been conducted in two small open economies, and, thus, replication both in developed and emerging markets would further test the model and measurement proxies involved. Moreover, the role of market orientation in a spanning process, influencing other functional areas and activities involves more work. This would take market orientation research into new domains as exploration into the more conventional market orientation – business performance conduct matures.

Despite these limitations and calls for further research we believe that there is an increasing academic interest in pursuing the integration of the RBT into valuation of intangible marketing resources and development of a managerially oriented theory of the firm. It is that process we hope to stimulate with this paper. ■

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