

## **Management Development, Innovation and Performance of Small Exporting Firms in New Zealand**

### **Abstract**

*The study investigates the impact of engagement in management development (MD) activities by the owner-managers of small exporting firms on firm-level innovation and the latter's impact on the firms' overall performance. Guided by the resource-based view of the firm, the study argues that MD can endow firms with valuable resources that fuel organisational innovation which enables firms to reap positive rates of return from their export operations. The study addresses a lacuna in the literature on the role of MD in the internationalisation of small firms. The study is a survey of 263 small exporting firms in New Zealand's service and manufacturing industries. Logistic regression technique was used to examine the hypotheses on the MD – innovation – export performance nexus.*

**Keywords:** entrepreneurship, small business, small and medium enterprises and family enterprise

## **Introduction**

Management development (MD) in small and medium enterprises (SMEs) has attracted considerable research interest in recent years. Previous studies have examined scarcity and shortage of managerial skills and knowledge amongst small firms. The scarcity of skills suggests that SMEs need to engage in some form of MD (Kyriakidou & Maroudas 2010; Walker et al 2007; Gray, C. & Mabey, C. 2005). Those who have examined and compared MD in both small and large firms maintained that MD activities are traditionally found in large firms with established human resource management systems. Applying MD activities, theories and models to small firms may not be effective nor beneficial.

The underlying theme of previous research is that engagement in various forms of MD activities is good for the owner-managers, the employees, and therefore, has cumulative positive effects on the firm. However, attribution of organisational-level effects of MD is rather presumptuous due to the paucity of empirical studies examining the organisational-level benefits of human resource management practices in general, and of engagement in MD in particular (Aguinis & Kraiger 2009; Chen & Huang 2009). This gap in the literature could be attributed to the complications involved in ascribing an aspect of firm performance to a specific type of MD activity (Ruth 2007).

Nonetheless, previous studies tend to converge on the argument that the generic goals of engagement in MD include the development or improvement of managerial knowledge, skills, or capabilities (Cecil & Rothwell 2007; Cullen & Turnbull 2005). Under the resource-based-view of the firm (RBV), knowledge and skills form part of the firm's overall stock of resources (Barney 1991; Wernerfelt 1984). These knowledge-based resources are useful in creating, developing, modifying, or marketing product-offerings in order to exploit newly-discovered opportunities. Hence, there is a sound theoretical basis to the proposition on the strong link between engagement in MD activities and innovation (Darroch 2005; Damanpour 1991; Hage 1999). Consequently, innovative firms are deemed more likely to be successful in their export ventures as well as in generating above-average returns in their overall performance.

This study attempts to contribute to filling the gap in the literature by empirically testing the relationships between the intensity of engagement in MD activities by the owner-managers of small firms and the firms' innovation performance. Likewise, the study also examines the impact of innovation performance on export performance and on the overall organisational performance of firms. The current study rests on the primary argument that the knowledge-based resources gained by owner-managers from engagement in MD activities fuel the innovation performance of their firms. The more innovative the firms become, the more that they are able to exploit export opportunities which ultimately results in better overall organisational performance.

The paper begins with a discussion of MD and how it is practised in the SME context. Next is a discussion of innovation in the SME context. This is followed by a brief discussion of the theoretical basis of the study as well as the hypotheses that will be tested using the empirical data from a survey. The paper then proceeds to a discussion of the results of the study. The paper concludes by identifying specific directions for future research.

### **Management Development**

Management skills are hailed as a critical component of a firm's resource base and are essential for long-term productivity and organisational success (Mabey 2008; McDonal et al 2007; Story 2004). The literature suggests that improvement of managerial knowledge and skills contributes to survival and growth of firms (Fuller-Love 2006). In the New Zealand context, extant literature on MD suggests that there is considerable scope for further improvement in management knowledge and skills, especially in the small and medium enterprise (SME) sector (Jayne 2007; Massey et al., 2005). Management knowledge and skills are generally considered to be a key factor in NZ's national economic growth and there has been specific interest in the notion of 'management capability' and how to improve it (Massey et al. 2005). As a result, the NZ government has placed at the top of its policy agenda for business sector development, the improvement of management-focused business capability programmes and building of partnerships with the private sector to address key management challenges for New Zealand firms (MED 2009).

Although there is no consensus in the definition of MD in the extant literature, most definitions tend to consider MD as a learning process (Mabey 2008; Mumford 1997); management education (Thomson et al 1997); development of managerial resources (Molander 1986); and a dynamic capability for learning (Espedal 2005). The common theme amongst the definitions is the involvement of a manager in a specific type of or approach to learning designed to improve managerial effectiveness to meet organisational needs.

### **Management development and SMEs**

MD development in SMEs is an issue of high importance in many countries. In NZ, SMEs account for 99% of the 471,101 firms registered in 2009 (MED 2009). They provide more than 30% of total employment and account for 41% of the economy's total output (MED 2009). Most recent reports indicate that there are high entrepreneurial start-up rates in NZ but comparatively low proportionate numbers of high growth firms (NZ Treasury 2008; MED 2009). Resource constraints such as lack of management development capability were identified as potential causes of this issue (NZ Treasury 2008). A general finding in many studies in Australia/New Zealand, Europe and North America on MD in the context of SMEs is the low level of engagement in MD activities by the owner/managers relative to managers in large firms (Battisti et al 2010; Hoque & Bacon 2008; Gray & Mabey 2005; Morrison 2003). As a result, small firms tend to have poor managerial competence which leads to higher rates of business failure (Walker et al 2007).

Hence, studies on MD in the SME context have focused on determining the nature, approach or delivery of MD activities as well as extrinsic and intrinsic barriers to participation in MD activities (Gray & Mabey 2005; Gray 2004). There is a scarcity of empirical studies, however, examining the effects or impact of participation in MD activities (Aguinis & Kraiger 2009; Cheng & Huang 2009). Very few studies have examined what benefits accrue to the firm when its owner-manager participates in MD activities.

### **Innovation Performance of SMEs**

Innovation performance broadly refers to the overall creative conduct of a firm pertaining to the use of new and existing ideas to solve existing or future problems as well as to exploit entrepreneurial opportunities. Innovation has been traditionally viewed as a creative process involving the application of existing ideas to create a unique solution to a problem (Duncan 1972). However, it also entails creation of new ideas for new purposes. Hence, innovation performance may refer to the process of generating and using any idea, practice, or object that the adopting organization regards as new (Zaltman, Duncan and Holbek 1973; Damanpour and Evans 1984; Damanpour 1991; Hage 1999). In this study, the innovation performance of SMEs is characterised along a multi-dimensional model such that innovation is manifested in four fundamental ways: innovation in terms of products or services, operational processes, managerial or organisational processes, and sales & marketing activities (OECD 2005). This approach takes into account that firms may pursue different types of innovation depending on organizational structure, size, nature of industry and other contextual, environmental or strategic factors (Damanpour 1991).

### **MD and Exporting Firms**

The preponderance of empirical evidence on the importance of human capital in firm competitiveness lends support to the argument posited in this paper that engagement in MD can equip owner-managers with knowledge and skills which form part of the firm's intangible human capital. This generic or specific knowledge constitutes the firm's intellectual capital that affords the firm intangible resources that are resistant to duplication efforts by competitors because of their inherent complexity, specificity of accumulation process, as well as inseparability from the owner-managers (Rialp & Rialp 2007). On other hand, the literature on export performance highlights the role of knowledge-based resources in the success of export ventures and the overall internationalisation strategy of firms. The managerial dimension of export performance has been shown to have a critical role to play in the overall innovative, proactive and risk-seeking strategies in line with the internationalisation activities of firms (Andersson & Floren 2008).

### **Theoretical foundation**

The resource-based view (RBV) of the firm offers a theoretical basis for the importance of MD to small firms. RBV posits that firms can achieve and sustain their competitive advantage if they possess tangible or intangible resources that are valuable, rare, imperfectly imitable and non-substitutable (Barney 1991; Wernerfelt 1984). These resources may be further classified as property-based or knowledge-based resources that are tied semi-permanently to the firm (Miller & Shamsie 1996).

RBV suggests that MD provides the opportunity for owner-managers of small firms to acquire or develop knowledge-based resources which are critical for the firm's value-creating processes such as innovation. Specific forms of managerial, administrative or technical knowledge and skills may serve to fuel innovation at the firm level and pave the way for the small firm to achieve sustained competitive advantage. The intangible nature of knowledge-based resources possessed by the owner-manager has the potential to endow the small firm with imperfectly imitable and non-substitutable resources.

### **MD and Innovation**

Innovation is a resource-hungry endeavour. The multiplicity of resource requirements necessary for innovative activities to take place within a firm exerts immense pressure on small firms. Engagement in MD is considered an effective way to equip a small firm with valuable human capital in the form of knowledge and skills of the firms' owner-managers. Chen & Huang (2009) suggest that human capital in the form of knowledge and skills enables firms to enhance their distinctive competencies and discover opportunities for innovation. When firms develop new products and improve management processes, they require human capital to produce creative ideas, develop innovative approaches, and pursue new opportunities (Chen & Huang 2009). MD offers the opportunity to fortify knowledge-based resources and align them towards the achievement of the firm's strategic imperatives to constantly innovate to become and remain competitive. Hence, it is hypothesised in this study that:

H<sub>1</sub> – The intensity of engagement in MD is positively associated with the innovation performance of small firms.

### **Innovation and Export Performance**

The innovation-based theory of internationalisation (Cavusgil 1980) posits that innovation propels the internationalisation of firms. This theory suggests that firms go through distinct phases of internationalisation such as exporting. Innovation plays a key role in each phase and serves as the underlying value-creating activity that fuels the process of internationalisation (Guan & Ma 2003; Hessels 2007). Previous studies offered support for the positive relationships between product innovation and export performance (Lages et al 2009), between innovative activities and share of exports on total sales (Sterlacchini 1999), and between the extent of innovation and overall export performance (Roper & Love 2002). Innovation as an activity within the firm is a manifestation of the firm's ability to create and re-create product offerings that respond to customer needs either in domestic or overseas markets. Hence, the hypotheses that:

H<sub>2</sub> – Innovation is positively associated with export intensity.

H<sub>3</sub> – Innovation is positively associated with perceived export performance.

### **Innovation and Overall Firm Performance**

It is clear in the literature that innovation is an effective strategic activity that oftentimes leads to development of competitive advantage which is normally associated with above average returns (Craighead et al 2009; Thornhill 2006). The introduction of innovative products, services, processes, or business models tailored to attractive niches is an additional opportunity for SMEs to stand out from the competition (Rosenbusch et al 2010). By offering highly innovative products, small firms can avoid price competition and can create new demand and, thus, facilitate firm growth. If the innovating firm manages to set high barriers preventing competitors from market entry, the company's position in the industry is strengthened and the innovation can lead to persistent above-average returns (Rosenbusch et al 2010). Hence, consistent with previous studies (e.g. Darroch 2005; Craighead et al 2009), this study posits that:

H<sub>4</sub> – Innovation is positively associated with overall firm performance.

## **Methodology**

### *Sample and Study Setting*

The current study is part of the 2009 'BusinessSMEasure' survey of SMEs in New Zealand conducted by the New Zealand Centre for SME Research. BusinessSMEasure is an annual survey of SMEs in New Zealand which started in 2007. The 2009 survey involved 4,165 firms (including 694 firms who responded in the 2007 and 743 firms who responded in 2008 surveys). The sample for this study was purchased from APN Infomedia, a commercial provider of business-to-business information in New Zealand. The current study defines SMEs as follows: micro firms with up to five employees; small firms with 6 to 49 employees; and medium-size firms with 50 to 99 employees (Cameron & Massey 1999).

The study followed Dillman's (2007) Total Design Method (TDM) in choosing the sample as well as in developing, designing, pilot testing and administering the postal, self-administered questionnaire. The survey retrieved 1,447 usable responses after excluding 297 ineligible and unreachable firms. A total of 263 firms were identified as exporters which formed the basis of the present study. The overall response rate was 35 percent, which is well above an acceptable rate for this type of mail survey (Bartholomew & Smith, 2006).

The majority of the 263 owner-manager respondents are from small firms (n=143), followed by micro firms (n=107) and medium-size firms (n=13). In terms of number of employees, the sample firms range from zero to 81 employees with a mean of 13 employees. The sample firms are relatively young, having an average of 24 months of business operation. The age of the sample firms range from zero to 125 months or 10.4 years. Firms are evenly distributed between the manufacturing (n=121) and service (n=123) sectors (totals may vary due to missing values). On the other hand, the owner-managers of these firms are relatively mature: an average age of 55 years at the time of the survey, with the youngest being 36 and the most senior owner-manager respondent 79 years of age. The



majority of the owner-managers are male (n=214), whilst female owner-managers comprise only a quarter (n=44) of the total sample size. In terms of educational qualifications, 33% have completed a university degree or higher (n=88), whilst 23% and 14% have completed secondary school qualification (n=61) and diploma/advanced trade certificate or equivalent (n=38) respectively. Others have completed national certificate-levels 1 to 3 (n=10) and trade certificate (n=34). A few of the respondents have no formal qualifications whatsoever (n=17).

### *Measurement*

Dependent variables. *Innovation* was measured by following the recommendation of the Oslo Manual (OECD 2005). Four items asked the respondents to indicate, given a yes or no response format, whether they have developed or introduced new or significantly improved products or services, operational processes, organisational or managerial processes, and sales or marketing methods. *Export intensity* was measured by the reported percentage of turnover from the last 12 months that came from exporting. *Export performance* was measured by a single item with a five-point Likert scale (1-strongly decreased to 5-strongly increased) which asked respondents to indicate the firm's current export performance relative to that of the previous 12 months. *Overall firm performance* was measured by five items with a five-point Likert scale (1-strongly decreased to 5-strongly increased) which asked respondents to indicate the firm's current performance relative to that of the previous 12 months in the areas of turnover, profitability, market share, number of employees and productivity.

Independent variables. The independent variable in this study is the *intensity of engagement in three types of MD*. The *intensity of engagement* refers to the extent to which the SME owner-manager has engaged in specific MD activity in the past 12 months. There were 15 items describing various MD-related activities. Respondents were asked on a five point Likert scale the intensity of their engagement in the 15 listed activities (5 - to large extent to 1- not at all). The identification and classification of the MD activities were guided by the literature and content-validated by academics specialising in MD as well as by government and industry experts.

Control variables. Firm size, firm age, nature of the industry, and educational qualifications of owner-managers were accounted for as control variables. *Firm size* refers to the total number of employees. *Firm age* refers to the number of months or years a firm has been operating since inception. The nature of the *industry* refers to whether the firm is engaged in manufacturing or service activities.

#### *Data Analysis*

The data were analysed using multiple regression aided by the software Stata version 9.1. Both logistic regression and regression using ordinary least squares (OLS) method were used, whichever was applicable to a set of data (discrete or continuous in nature) in order to test the hypotheses. Robust technique for logistic and OLS analysis was also used as a confirmatory approach whenever there were potential deviations from the assumptions of multiple regression such as heteroskedasticity and multicollinearity. Principal component analysis was used as the method of data reduction for variables that are measured by multiple items.

#### *Preliminary Data Analysis*

Data reduction. Principal component analysis (PCA) was performed to reduce the number of items describing the MD activities. Three components were identified which are consistent with the typologies of MD developed by Mumford (1993) and Gray & Mabey (2005). Consequently, MD activities were classified into three groups – practice-based, distal and proximate activities and summated score or index was computed for each group. Practice-based MD activities can be described as those that involve learning through engagement in everyday goal-directed work activities and management practice. Proximate MD activities involve learning through social interaction with proximal sources of information and learning. Distal MD activities involve learning through more distal sources of information and learning. The three components exhibited Cronbach alpha values between .67 and .79 which are considered acceptable indicators of reliability (Hair et al 2006). The results of PCA are shown in Appendix A. PCA was also performed on the five items measuring overall firm performance. The result showed only one component with a reliability coefficient of .73.

Table 1 shows the mean, standard deviation and correlations of the continuous variables used in the study.

Insert - Table 1. Descriptive statistics - here

Logistic regression was performed to determine the relationships between the three categories of MD activities and that of the four types of innovation. The discrete or categorical nature of the data on innovation requires the logistic type of regression in order to test the posited hypotheses. The educational qualifications of the owner-managers were controlled for as they potentially impact the intensity of engagement in MD and that of the innovation activities of the firms. Likewise, the effects of size and age of the firms and their industry classification were also controlled for. Table 2 shows the results of logistic regression analysis that highlighted the odds ratio or likelihood of owner-managers who had intense engagement in a particular category of MD activities to report that their firms have also introduced a particular type of innovation. A significant  $\chi^2$  indicates adequate fit of the data to the regression model. The pseudo  $r^2$  suggests the extent to which intensity of engagement in MD can account for the tendency of firms to be innovative or not. A non-significant Hosmer-Lemeshow  $\chi^2$  suggests that the regression model adequately fits the data.

The results suggest that whilst intense engagement in distal MD activities is positively associated with introduction of new or significantly improved products or services, the goodness of fit indicators such as  $\chi^2$  and Hosmer and Lemeshow  $\chi^2$  do not support very well the fit between the model and the data. There are only two significant findings. One is the positive relationship between intense engagement in practice-based MD and introduction of new or significantly improved organisational or managerial processes, particularly for younger firms. The other finding is the positive relationship between intense engagement in distal MD activities and that of innovation related to the sales and marketing activities of the firm. No other significant associations have been found. It must be noted, however, that the results show that larger and older firms tend to have more process, managerial and marketing

related innovation relative to small and younger firms. Likewise, older firms tend to have more product-related innovation relative to younger firms.

A robust technique of logistic regression offered by Stata was also applied as a confirmatory approach to account for possible issues with data distribution in the continuous independent variables. The output of the robust technique confirmed the original results. Hence, the results indicate that H<sub>1</sub> is only partly supported by the study's empirical data.

#### Insert - Table 2. Logistic Regression Models

Hierarchical multiple regression using ordinary least squares method was performed to determine the relationships between the four types of innovation, export intensity, export performance, and overall firm performance. Table 3 shows the results of regression analysis showing the standardised beta coefficients as well as the f values which indicate if the model is significant. The  $r^2$  indicates the percentage of variance in the dependent variables that is accounted for by the independent variables. Only the final models are presented in the table for brevity. The results suggest that only product innovation has significant relationship with export intensity. It must be noted, however, that younger firms tend to have lower levels of export intensity relative to older firms whilst larger firms tend to have higher levels of export intensity relative to the smaller firms. Moreover, the low value of the  $r^2$  suggests small effect size which further indicates that the extent or magnitude of the product innovation-export intensity link may not be as substantial as was expected (Field 2005; Pedhazur 1982). The results further indicate that innovation has no impact on export performance and on the overall performance of firms.

The robust technique of multiple regression offered by Stata was also performed to cross check the results of OLS method and to account for possible issues with the distribution of the continuous data. Results of robust regression confirm the OLS regression output. The empirical evidence suggests that H<sub>2</sub> is only partly supported whilst the rest of the hypotheses are not supported by the data.

Insert - Table 3. Multiple Regression using Ordinary Least Squares Method – about here

### **Discussion and Conclusion**

There is little consistent empirical evidence in the current study that MD activities will have any effect upon innovation levels in small exporting firms. Engagement in MD by owner-managers tells us little about the scale of organisation-wide innovation in a firm. Perhaps other tangible resources, like finance, are more critical than MD activities for creating new and improved products and services. (Lages et al 2009). The results show that if MD activities have any impact such impact will only be on peripheral activities, such as marketing and managerial processes, rather than on a business's core activities – producing goods or services. Producing new or significantly improved goods and services or operational processes depends more on a firm's dynamic technical capability than on owner-managerial development alone.

The owner-manager of a small exporting firm will learn most by engaging in some of the day-to-day operations of firms. Such engagement may lead to changing some of the value-creating-processes within the firm. Perhaps sales and marketing are the most profitable places for the owner-manager's engagement. Overall, it is reasonable to advance the argument that participation in MD activities may have direct and positive consequences for the non-technical innovative aspects of small exporting firms that were included in the study. But according to Porter (2008) the big gains for exporting firms (small and large) require cost leading products, specifically-tailored to niche markets. To succeed in those international markets exporting firms need to invest heavily in product innovation.

Still our results show no link between innovation and performance in the small exporting firms we measured. This seems to contradict Porter's view. Several issues may have contributed to this particular finding. The low level of innovation amongst the firms included in the study may have affected the findings. The measurement of innovation may be too generic to take into account the specific nature, scale, degree of novelty, and magnitude of the reported innovation. Innovations that

are “new to the world” compared to “innovations that are new to the firm”, for instance, are likely to generate divergent performance outcomes (Damanpour 1991). The same is true for incremental relative to radical types of innovation which obviously will generate different financial or market-related performance outcomes at one point in time. These methodological limitations of the study may have contributed to the general findings of the study.

The current study is indicative only, more exploratory than exhaustive. The 263 exporting firms have provided a sample too small for generalization. Others may find improved measures for MD from a two-pronged attack. One prong could investigate the nature, extent, quality and relevance of MD activities. The other prong could examine how well the skills learned in formal MD activities are transformed into organisational-level processes as well as products – goods and services. Such targeted research could generate more informative MD theory and eventually provide input to the formulation of government policy.

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## Appendix A. Principal Component Analysis

Constructs and Corresponding Indicators	3 Components with Factor Loadings		
<b>Practice-based MD activities</b> (Cronbach $\alpha = .74$ )			
Carrying out everyday managerial work activities	.72		
Reviewing what I did and thinking about how to do it better	.85		
Discovering what does and does not work (trial and error)	.75		
Reading books, journals and/or information on the internet	.44		
<b>Proximate MD activities</b> (Cronbach $\alpha = .67$ )			
Learning from suppliers or customers		.56	
Getting advice from an accountant/bank manager		.61	
Learning from other people running a business		.65	
Learning from family and/or friends		.80	
<b>Distal MD activities</b> (Cronbach $\alpha = .79$ )			
Attending occasional off-site management training courses, seminars and workshops			.79
Studying university and/or polytechnic courses			.45
Being mentored or coached			.54
Getting information from business events			.66
Getting information provided by government agencies			.50
Getting information from Chambers of Commerce, economic development agencies, and professional and industry associations			.74
Joining a group of business owners reviewing current business issues			.69

Table 1. Descriptive Statistics

Variables	Mean	Standard deviation	Practice-based	Proximate	Distal	Export Intensity	Export Perform	Overall Perform	Firm Size	Firm Age	Educ. Qual.
Practice-based	3.45	.78	1								
Proximate	2.7	.75	.40**	1							
Distal	1.93	.67	.35**	.50**	1						
Export Intensity	2.86	1.46	-.09	-.06	-.08	1					
Export Performance	3.05	.78	-.02	.06	-.01	.21**	1				
Overall Performance	2.99	.66	.06	-.05	-.01	.01	.36**	1			
Firm Size	13.03	15.84	.03	-.02	.09	.14*	.01	.10	1		
Firm Age (in months)	25.29	19.76	-.01	-.10	.02	-.06	.01	.01	.42**	1	
Educ. Qualifications	4.13	1.79	.08	-.06	.09	.03	-.02	-.05	.03	-.04	1
** = significant at $p < .01$											
* = significant at $p < .05$											

Table 2. Logistic Regression Models

Independent variables	<b>Dependent variables: Types of Innovation</b>			
	<i>Product</i>	<i>Process</i>	<i>Managerial</i>	<i>Marketing</i>
	Odds Ratio			
Practice-based MD	1.23	1.11	1.83**	1.17
Proximate MD	0.86	1.01	0.82	1.44
Distal MD	1.54*	1.38	1.54	2.15***
<i>control:</i>				
Educational Qual	1.02	1.01	0.93	0.95
Firm Size	1.11	1.14**	1.11*	1.01*
Firm Age	1.01*	1.02**	1.01*	1.01**
Industry	1.06	1.25	1.35	1.16
no. of observations	214	211	210	213
$\chi^2$	7.4	12.13	19.59*	24.90***
Pseudo $r^2$	0.02	0.04	0.07	0.09
Hosmer-Lemeshow $\chi^2$	8.51***	n/a	9.34	5.34
*** = significant at $p < .01$				
** = significant at $p < .05$				
* = significant at $p < .10$				

Table 3. Multiple Regression using Ordinary Least Squares Method

Independent Variables	<i>Dependent Variables</i>		
	<i>Export Intensity</i>	<i>Export Performance</i>	<i>Firm Performance</i>
	<i>standardised <math>\beta</math>(se)</i>		
Product Innovation	.53** (.19)	.11 (.12)	-.05 (.09)
Process Innovation	.20 (.24)	.08 (.14)	.03 (.11)
Managerial Innovation	-.39 (.24)	.03 (.14)	-.18 (.11)**
Marketing Innovation	.03(.20)	.13 (.12)	.04 (.04)
<i>control:</i>			
Age of Firm	-.02*** (.01)	-.01 (.01)	-.05 (.01)
Firm Size	.01** (.01)	.01 (.01)	-.08 (.01)
Industry	.41 (.19)	.02 (.12)	.08 (.09)
no. of observations	208	196	211
F values	(7,200) 4.99***	(7,188)1.09	1.341
$r^2$	0.12	0.04	0.04
*** = significant at $p < .01$			
** = significant at $p < .05$			
* = significant at $p < .10$			

## Management Development, Innovation and Performance of Small Exporting Firms in New Zealand

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*Acknowledgements: The authors are thankful to the ANZAM 2010 anonymous reviewers, Nick Roelants and Nick Park of Massey University, New Zealand for their comments and suggestions to improve the quality of the paper.*