



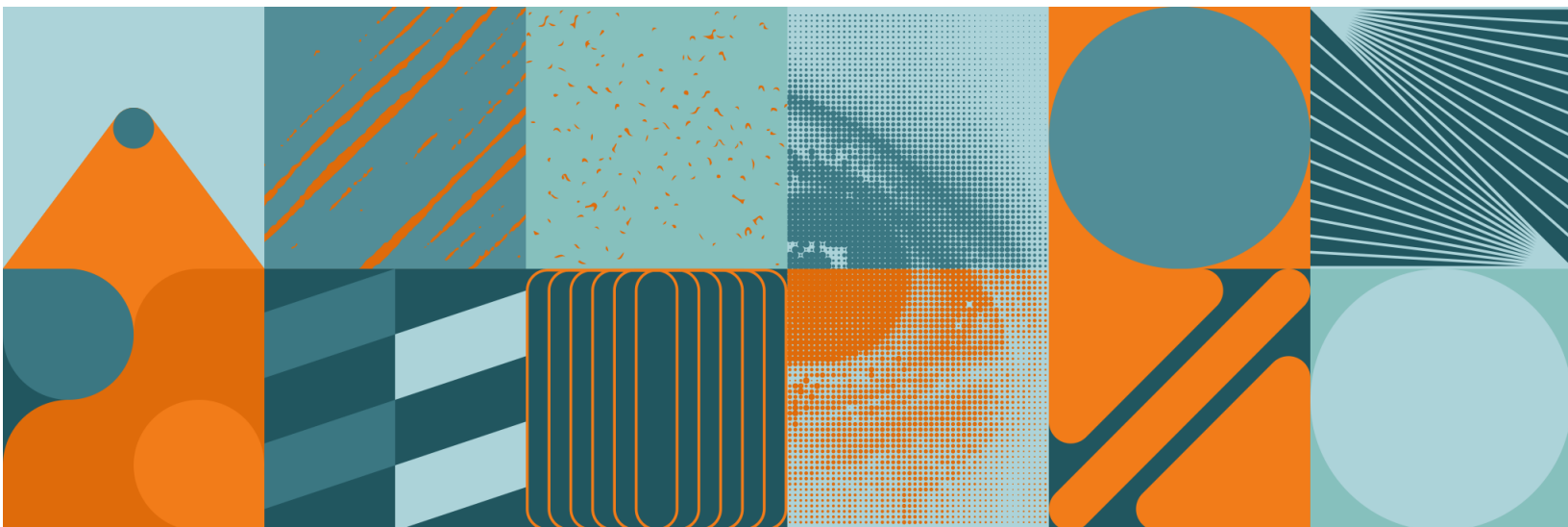
Non-exporter to Exporter: Making the Shift

2025 SMALL MEDIUM ENTERPRISES
BUSINESS SURVEY RESULTS.

Dr. Ron Kalafsky, University of Tennessee
Dr. Mark Raymond†, Saint Mary's University
Simon Raymond, University of Waterloo

Craft Alliance Atlantic Association - Preliminary Conclusions (Do not quote
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† Corresponding author: Mark Raymond, mark.raymond@smu.ca, 902-237-7155



Key Initial Findings

Results of the preliminary analysis of the data indicate that, when compared to firms that do not export, firms that do export are more likely to:

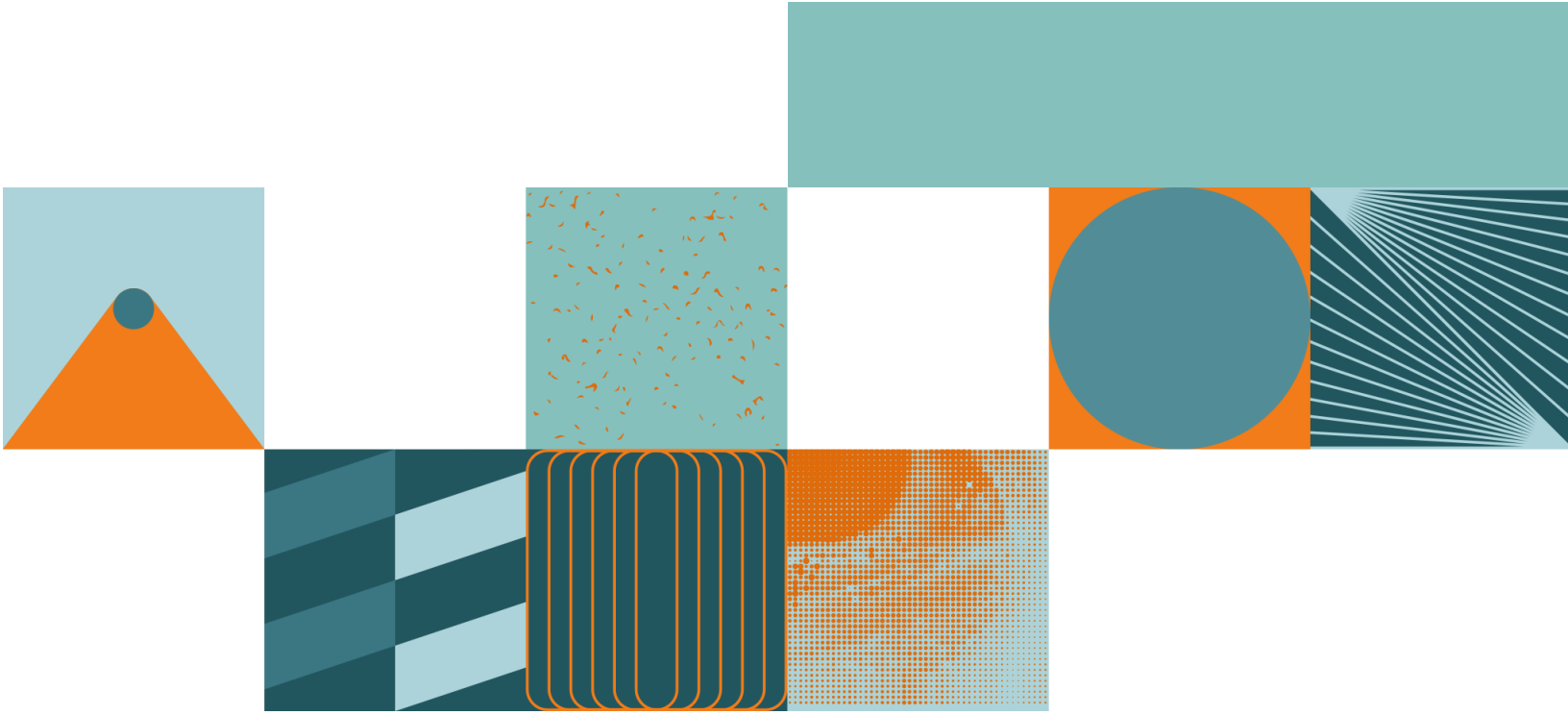
- To have larger established domestic sales
- Employ a combination of selling and promotion techniques including Internet sales
- Employ a direct-to-customer email marketing and promotion campaigns
- Use targeted social media ads
- Have a marketing and promotion budget of over \$500

With these preliminary findings we anticipate that firms that employ a specific business strategy and moreover a specific export strategy within their business strategy will be more likely to export and have more success in export markets.

Moreover, the results presented here shed light on how exporting and non-exporting firms view or “see” the business environment around them.

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1.0 Introduction and Overview

In spring of 2025 the Craft Alliance Atlantic Association (CA) completed a thorough survey with their respective member firms that was meant to follow up from a similar survey completed in 2019. The member firms associated with CA would be considered small medium enterprises (SME) whereby, generally, SMEs are private firms with between 1 and 499 employees. The main survey results were completed by Duggan International Group and provided a comprehensive overview that served as a foundation for this analysis.

Although the survey's focus was more summary in nature, it included questions that dealt with a firm's exports and various export-related sentiments and priorities. Along with questions regarding a firm's business strategies, its choices in marketing and advertising, its overall outlook on the economy and the firm's fundamental characteristics, the survey provides for a rich and unique look at the differences and similarities between firms that export and those that do not.

The purpose of this initial investigation undertaken here is to begin an analysis of key findings found in CA's Atlantic Canada Small Scale Manufacturers Sector Survey 2025. It is important to point out that only anonymized data were used for this work. This initial analysis and report are meant to highlight areas for further and deeper investigation. However, the results presented here shed light on how exporting and non-exporting firms view or "see" the business environment around them. Further, the results indicate that certain strategies for firms may be more helpful than others when development agencies are providing assistance to firms in the areas of business and export promotion.

2.0 Fundamentals and initial key outcomes and recommendations

The CA survey consisted of forty-four questions. As we refer to survey questions, we will note the question accordingly. We begin this analysis by separating the data set into two subgroups, specifically “exporters” and “non-exporters”. For the CA survey, question 18 is the means by which we can divide the firms into the two groups of either “Exporters” and “Non-exporters”. This question was very specific and holds a traditional definition of exports. We review Question 18 of the CA survey and the responses below:

CA-Q18 Do you currently export outside of Canada, or have you exported within the previous 24 months?

Answered: 186

Skipped: 23

Responses:

Response	Number of respondents	Percentage
Yes	85	46
No	101	54

Thus, we conclude that 46% of firms are “Exporters” and 54% of the firms are “Non-exporters”.

3.0 Growing into an Exporter or Exporting into Growth

At the outset of the analysis, we were interested in comparing the various characteristics of exporters and non-exporters. Throughout our analysis we find a consistent pattern of how firms who report as “Exporters” are significantly different than firms who report as “Non-exporters”.

3.1 PERCEPTIONS ON BARRIERS FOR BUSINESS EXPANSION OR EXPORTING

We were interested in how exporters and non-exporters perceive potential barriers for expanding their businesses or in expanding their levels of exports.

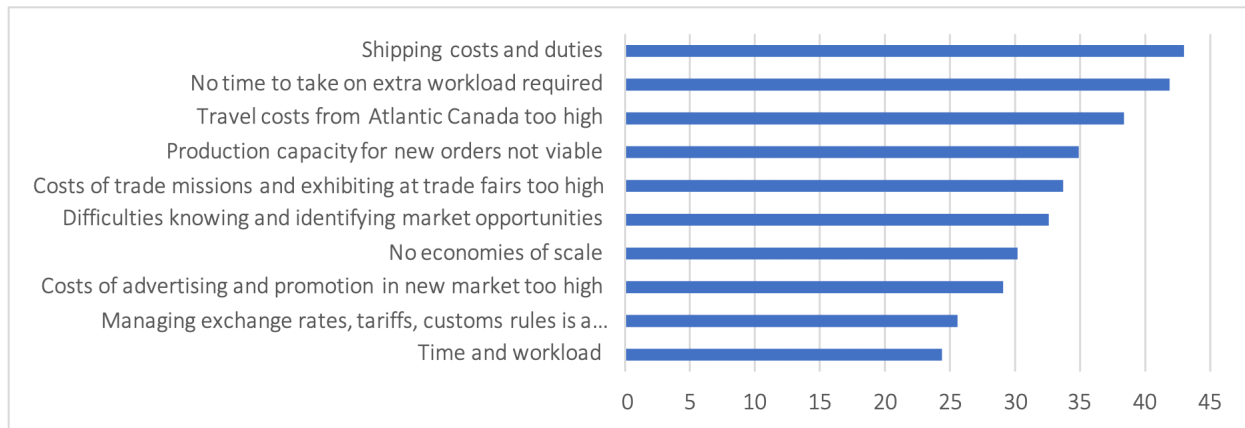
CA-Q35 What barriers do you face for expanding your business or exporting? Please check all that apply. (Top 10 barriers selected by percentage - firms had 38 options from which to select.)

Answered: 164
Skipped: 45

Exporters (% choosing)



Non-exporters (% choosing)



We note that the top-10 orders are slightly different between exporters and non-exporters but for the most part there were no significant differences in the percentage of firms (in each group) that selected a given competitive barrier. Despite not being in the top-10, one exception was found.

Taken from CA-Q35 Cost of adapting or changing products to suit the likes of a new market are too high or difficult.

	No	Yes	% Yes
Non-exporter	77	9	10
Exporter	119	4	3

Chi-square = 4.514, p = 0.034

We note that the large chi-square values and small p-values presented in all our findings indicate highly significant results. (Well above 95% confidence.)

Although a small number of firms in total selected this issue, the way exporters and non-exporters viewed this reason is significantly different and will require further investigation as we examine the specific firm characteristics of the 13 firms responding with a “yes”.

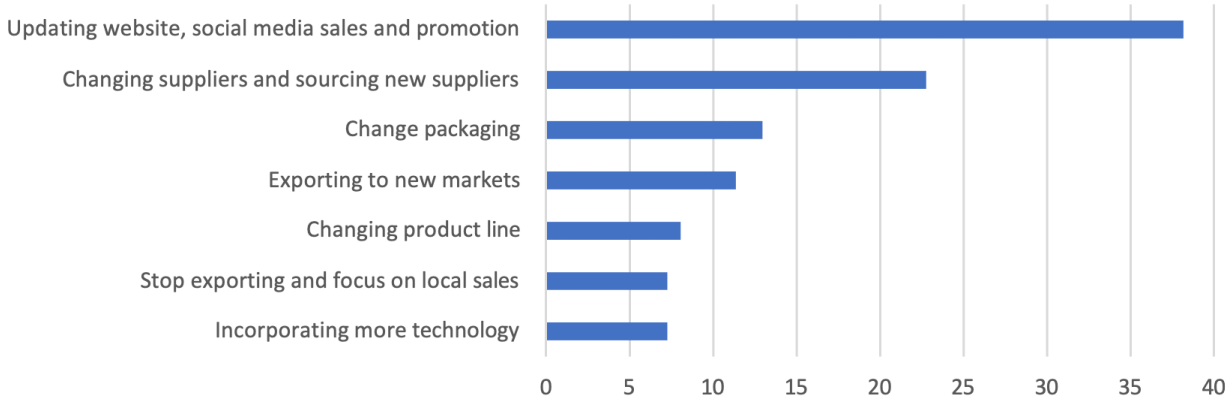
Firms in the CA survey were asked about upcoming business trends for small scale manufacturers that are reflecting any changing consumer preferences, technological advancements, and global market shifts. They were also asked to comment on positive or negative business trends in the industry they were working in with two open-ended questions. Firms were then asked about what their company was doing, if anything, to take part in or combat these trends.

CA-Q39 What is your company doing, if any, to participate in or combat these trends? Please select all that apply.

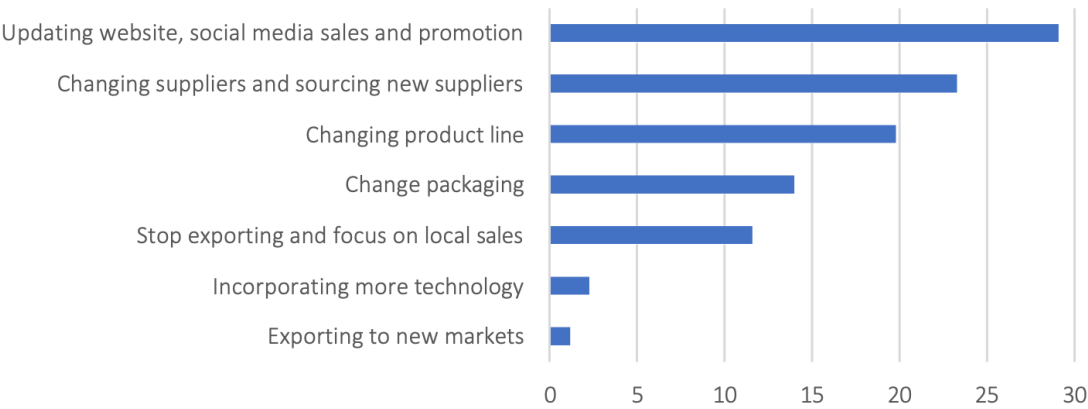
Answered: 129

Skipped: 80

Exporters (% choosing)



Non-exporters (% choosing)



We noted that overall fewer non-exporters were engaging in any kind of strategies to adjust to market trends. Beyond this, there were two significant differences with regard to the frequency with which the two groups of firms selected these strategies. The first – exporting to new markets – is obvious, as we’re comparing exporters and non-exporters. The second was somewhat keeping in line with pattern we are noticing.

Taken from CA-Q39. What is your company doing, if any, to participate in or combat these trends?

Changing Product Line

	No	Yes
Non-exporter	69	17
Exporter	113	10

Chi-square = 6.093, p = 0.014

While the number of firms selecting this strategy is quite small, we note that interestingly, more non-exporters chose this option. (Perhaps exporters already have a competitive product?) Again, although a small number of firms in total selected this issue, the way in which exporter and non-exporters viewed this reason is significantly different and will require further investigation as we examine the specific firm characteristics of the 27 responding with a “yes”.

3.2 ADVERTISING AND MARKETING

Another series of questions asked about firm-level budgets for marketing. Some interesting and significant differences emerged between the two groups of firms:

Taken from CA-Q29. What is your annual budget for marketing? None – I use free social media sites.

	No	Yes	%Yes
Non-exporter	43	43	50
Exporter	94	29	24

Chi-square = 15.648, p < 0.001

Taken from CA-Q29. What is your annual budget for marketing? None – I don’t advertise

	No	Yes	%Yes
Non-exporter	66	20	23
Exporter	110	13	10

Chi-square = 6.127, p = 0.034

These results seem to suggest non-exporters are significantly more likely not to spend any funds on social media or marketing.

3.3 CURRENT DOMESTIC SALES AND YEARS IN BUSINESS

We also observed that current domestic sales and years in business can both be strong predictors of exporting. Exporting firms tend to have high sales and have been in business for more than five years.

Taken from CA-Q21. What is the range of your domestic sales? \$100,000 or more?

	No	Yes	%Yes
Non-exporter	83	3	3
Exporter	104	19	15

Chi-square = 7.685, p = 0.006

Taken from CA-Q21. What is the range of your domestic sales? Under \$1000?

	No	Yes	%Yes
Non-exporter	66	20	24
Exporter	119	4	3

Chi-square = 19.925, p < 0.001

Taken from CA-Q5. How long have you been selling your products? One to five years?

	No	Yes	%Yes
Non-exporter	52	34	41
Exporter	92	31	25

Chi-square = 4.851, p = 0.028

3.4 THE ROLE OF TARIFFS

Interpreting the difference between how exporting and non-exporting firms behave is also complicated by recent developments with key trading partners and the implementation of tariffs.

Taken from CA-Q19. How has the threat of impending tariffs changed how you do business? Do not export to the US.

	No	Yes	%Yes
Non-exporter	23	63	73
Exporter	120	3	2

Chi-square = 117.474, p < 0.001

Taken from CA-Q19. How has the threat of impending tariffs changed how you do business? Still exporting to existing clients in the US.

	No	Yes	%Yes
Non-exporter	86	0	0
Exporter	74	49	40

Chi-square = 44.753, p < 0.001

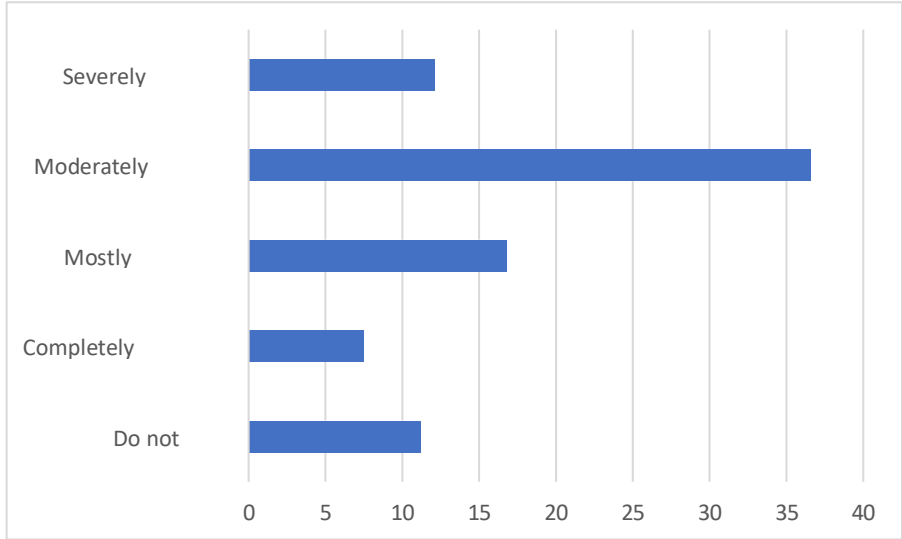
Taken from CA-Q19. How has the threat of impending tariffs changed how you do business? Have stopped pursuing the US and will concentrate on Canada.

	No	Yes	%Yes
Non-exporter	73	13	15
Exporter	88	35	28

Chi-square = 5.090, p = 0.024

Taken from HP-Q36. How will your business be impacted by the threat of significant, across-the-board tariffs on products entering the United States from Canada, as well as Canada's potential retaliatory tariffs?

(percentage of exporters responding)



These preliminary results seem to suggest that exporting firms, when compared to non-exporting firms, are better able to deal with changes in the markets they are facing. It has long been touted that market diversification is beneficial for firms and the economy of a given region. These preliminary results tend to support this view.

4.0 Clues of causality and advanced empirical work – next steps

Thus far these results seem to suggest that there is strong relationship between firms that export and other key characteristics of the firms. What is not clear at this point is what direction, if any, the causation effect might be working. What will be of value for the next phase of the research is to examine the factors that might be causing firms to choose exporting and what can be done to help non-exporters begin to export.

To that end, we employed predictive random forest modeling to address two main questions.

- 1) First, does the data itself have good predictive power to explain if a firm exports or not? This is especially important given the relatively small sample size associated with the survey. If the predictions are poor (for example an area under the curve (AUC) below 0.7), then “listening” to the predictors is not helpful.
- 2) Second, what are the key predictors for exporting?

Our initial results indicate that the answers from firms to specific questions in each of the surveys show promise in terms of helping to predict what factors will lead to greater chances of success in growing exports for a firm. In Table 2 we observe that the AUC of 0.811 is well above the threshold of 0.7.

In Table 1 below, we provide a quick overview of the base questions that we focused on for this part of the analysis. All data was converted to be binary and in selecting base questions, we focus on only what should be predictive, in theory, to avoid any “data leakage”. This would be equivalent to endogeneity if the models were causal.

Table 1: Craft Alliance: Base Questions and Response Counts

Base Question	Variables
What is the range of your domestic sales?	7
How do you sell your products?	11
How to you advertise and promote your business?	7
How many years have you been in business?	5
How many people do you employ full time?	1
Do you belong to a professional trade association?	1
What is your annual budget for marketing and promotions?	4

Instead of training a single random forest model, we train the model 100 separate times. During each of these runs, we calculate and temporarily store key metrics such as the model’s performance (OOB AUC/SE)¹, the importance of each predictor variable (Mean Decrease in Accuracy), and the specific impact of each variable on the outcome (Partial Dependence). After all 100 iterations are complete, we take the mean of these metrics. This approach eliminates any worry of models performing well due to a lucky or unlucky test split in the data. We note that our AUC is sufficient to continue (i.e. well above 0.7), especially given the sample sizes.

Table 2: Random Forest Model Performance Metrics

Model	OOB AUC	SE	Number of Trees
Craft Alliance	0.811	0.0294	1500

In Table 3 below we display the Mean Decrease in Accuracy (MDA) and the partial dependency values for each variable. The binary partial dependence values are shown via the P(0) and P(1) columns which represent the model’s average predicted probability of the outcome when a specific binary feature is absent (0) versus when it is present (1). They are useful to see the direction of a relationship. Normally the Partial Dependency Plots will be non-linear but since we have purely binary data, this allows us to table the values out cleanly. The Average Marginal Effect (AME) is the difference between the P(1) and P(0) values. This is not a causal marginal effect that is found with lpm/logit/probit models. Rather it is the average change in the predicted probability of an outcome when a predictor variable increases by one unit (p(0) to p(1)), calculated for every observation (using out-of-bag data) in the data and then averaged.

The specific number of MDA is not important rather it is the relative importance of each variable to each other that matters. The MDA is a measure of how much the model’s accuracy decreases when a specific variable is permuted/shuffled. A higher MDA indicates that the variable is more important for the model’s predictions. A negative MDA indicates that the variable is not useful for the model and is rather adding noise to the model. AMEs are then useful to be able to see the direction/how the model is using the variables.

¹ OOB AUC: Out-of-Bag Area Under the Curve; SE: Standard Error

Table 3: Craft Alliance: Predictors of Exporting (Yes/No)

Variable	MDA	P(0)	P(1)	AME
What is the range of your domestic sales?				
100 000+	20.7334	0.3900	0.5354	0.1454
under-1000	14.4094	0.4124	0.3206	-0.0918
50 000 to-100 000	12.7225	0.3967	0.4630	0.0664
5000-10 000	8.6885	0.3977	0.4493	0.0517
20 000 to-50 000	6.3082	0.3945	0.4482	0.0537
1000-5000	6.2887	0.4075	0.3791	-0.0284
10 000 to-20 000	0.1362	0.4060	0.3921	-0.0139
How do you sell your products?				
Combination including Internet sales	39.8382	0.2778	0.5167	0.2388
Internet only	11.4890	0.3928	0.4594	0.0667
Consignment	4.2259	0.3990	0.4272	0.0281
Direct to end customer only	4.2222	0.4076	0.3989	-0.0087
Commission	3.0876	0.4065	0.3963	-0.0102
Christmas Craft Shows only	2.1539	0.3964	0.4327	0.0363
Other	1.8417	0.4061	0.3935	-0.0125
I have my own permanent store or kiosk	-0.8641	0.4027	0.4221	0.0195
Pop up Store	-1.6200	0.4035	0.4105	0.0071
Local craft fairs and flea markets only	-2.1935	0.4106	0.3888	-0.0218
Wholesale to retail buyer only	-2.4227	0.4037	0.4008	-0.0029
How to you advertise and promote your business?				
Email marketing to customer list	13.4617	0.3870	0.4684	0.0814
Social media ads to target audience	11.1891	0.3857	0.4541	0.0684
Event or trade show website or show guide ads o...	6.0271	0.3936	0.4513	0.0577
Other	3.5066	0.3980	0.4154	0.0174
Companies own social media pages-Facebook-Twitter...	3.3850	0.3944	0.4090	0.0146
Company website only	1.6176	0.3966	0.4239	0.0273
Printed brochures-flyers and catalogs distribution...	-3.6701	0.4082	0.4025	-0.0058
How many years have you been in business?				
0-5 years	9.9262	0.4191	0.3718	-0.0474
20 years	8.2268	0.3896	0.4471	0.0575
15-20 years	-0.4023	0.4041	0.4015	-0.0025

10-15 years	-3.6047	0.4034	0.4029	-0.0006
5-10 years	-4.4828	0.4042	0.4019	-0.0023
How many people do you employ full time?				
1-5	1.5477	0.3871	0.4165	0.0293
Do you belong to a professional trade association?				
craft council or guild-Yes	-1.2123	0.3906	0.4095	0.0190
What is your annual budget for marketing and promotions?				
Over 500	16.1382	0.3881	0.5036	0.1155
None-I use free social media sites	4.6100	0.4032	0.3962	-0.0070
less-500 a year	0.3854	0.4118	0.3968	-0.0150
None-I do not advertise	-0.8652	0.4008	0.4102	0.0093

MDA: Mean Decrease in Accuracy; P(0): Probability when feature absent; P(1): Probability when feature present; AME: Average Marginal Effect

5.0 Preliminary Conclusions and Next Steps

The results shed light on how exporting and non-exporting firms view or “see” the business environment around them differently. Our results indicate areas for more in-depth analysis that could help with policy and government initiatives meant to promote business development. With the data collected from the survey we expect being able to provide a set of suggested “best practices” for helping more firms to export and then helping firms to export more.

Indeed, preliminary results indicate that firms that export are more likely to:

- To have larger established domestic sales
- Employ a combination of selling and promotion techniques including Internet sales
- Employ a direct-to-customer email marketing and promotion campaign
- Use targeted social media ads
- Have a marketing and promotion budget of over \$500

With these preliminary findings we anticipate that firms that employ a specific business strategy and moreover a specific export strategy within their business strategy will be more likely to export and have more success in export markets.

Helping firms to address impediments and work on their business strategy and specifically an export strategy shows exceptionally good potential. These results, in conjunction with “Growth Compass”, show great promise in helping firms grow their exports.