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Impact and Results of Cuts in Training and Development Budgets on Local Small Businesses in Southern MN

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Abstract:

This study investigates whether training costs had an impact on small business profitability between 2006 and 2010. The results show that companies that increased or maintained their spending on training between 2006 and 2010 had higher profitability overall as compared to companies that cut or did not invest in training. In fact, companies that continued to invest at the same or higher levels had a net income after taxes of approximately $12,000. The research, however, was limited to companies that employed 100 or fewer people in the southern Minnesota area and therefore are not applicable to other geographic areas.

Introduction:

In an economy where recession is present, many small businesses start looking for areas to cut their spending as a protection against potential loss of profits. Areas of overhead are often cut first, with training and development budgets often decreased or eliminated. However, research continues to encourage emphasis on training programs and its benefits to profitability such as increased efficiency and effectiveness without a concomitant increase in human resources (Loan-Clarke et al, 1999).

Between 2006 and 2010, southern Minnesota businesses were pressured like many businesses to cut costs. This study chose to examine the way small businesses managed their training and development budgets during that period. A literature review was conducted to obtain other variables in addition to training that could impact profitability. A regression model was used to determine the significance that the variables had toward profitability. The results of the study are analyzed and discussed.

Literature Review:

The area of training and development in small businesses *is* a relatively under-researched area according to Loan-Clarke et al (1999). In their article "Investment in management training and development by small businesses," they discuss the need for an understanding of the links between training and development investment and profitability. Panagiotakopoulos (2011) in his article "Barriers to employee training and learning in small and medium-sized enterprises (SMEs)," suggests barriers that negatively impact business profitability. One particular barrier he mentions is negative attitudes or "ignorance" towards training. He states that most owners think that training costs outweigh their returns. Some are so caught up in the short-term business pressures that owners don't think to invest in their employees. The article also discusses the importance of emphasis on training and how it would benefit the company. (Re-formatted to 1.15 spacing)

Lichtenstein (1992) discussed the small business employer's need for skill in a labor surplus in his article "Training small business employees: Matching needs and public training policy." He claimed that owners run into problems hiring because they want more employees to have industry and position specific skills. The article introduces the idea of offering more public certifications and training to meet those needs. This concern is echoed in Panagiotakopoulos' 2011 article. But the articles do not limit influence on profitability to just training and development. They, particularly Loan-Clarke et al (1999), suggest that industry type, ownership,

organizational structure, human resource management policy, and location also have an impact on profitability and should be considered when conducting small business analysis.

Finally, a common rationale for cutting or reducing training in the face of probable declining profits is that the training available would not be able to meet the specific needs of the particular small business because small business enterprises vary in their requirements (see Stanworth and Gray, 1991; Kirby, 1990).

Materials & Methods:

Storey and Westhead (1994) have argued that it is important to recognize that small businesses are not simply "scaled down" versions of larger organizations and that their needs may vary from their large counterparts. Therefore, we selected to focus only on enterprises with fewer than 100 employees within the southern Minnesota community. Typically organizations of this size are excluded from study for two reasons: first, because they undertake the least training of any size of small business (Curran et al., 1996); second, because such organizations are likely to have only a few people who need constant training. Another reason is that training can be specific to small organizations and geographic areas.

Initially I planned to use a questionnaire to collect our data but quickly found, after talking to economic development organizations, that the desired data is considered commercially sensitive despite an assurance of confidentiality. Therefore, I decided on data supplied by third parties and extracted the variables from the data supplied. From the supplied data we were able to ascertain net profit after taxes for eighty-three companies with 100 or fewer employees for 2006 and 2010. We were also able to obtain information about ownership, training investments, number of employees in both years, and type of industry. The eighty three companies represent more than 25% of the small businesses in the southern Minnesota community. This allowed for the use of non-parametric statistical techniques. The sample was also representative of the type of businesses and ownership in the region. The breakdown of our data by industry is shown in Table 1: Breakdown by Industry. Eight percent of the businesses were listed as woman-owned and sixteen percent were listed as minority owned.

Using results from prior research our hypothesis is:

Small businesses in southern Minnesota that cut their training budgets would have significantly less probability to be profitable between 2006 and 2010.

Table 1: Breakdown by Industry Type

Industry Type	Industry Description	Number	Percent
1	Services	23	28%
2	Retail	21	25%
3	Manufacturing	17	20%
4	Services/Retail	12	14%
5	Other	10	12%
Total		83	100 %

Results:

Following models developed in earlier studies, we used as independent variables industry type, ownership type, and whether or not the company had lower training costs in 2010 than in 2006. Because of the growth in social media and the use of the Internet, we also included variables if the company had a website or a Facebook presence as indicated in the dataset. Whether or not profitability increased from 2006 to 2010 was the dependent variable. We ran a non-parametric regression model. The resulting R-squared term was 0.14 which indicates that the selected variables did very little to explain why certain companies had higher profitability in 2010 than in 2006. The results of the coefficients from the model can be found in Table 2: Regression Output.

Table 2: Regression Output

Variable	Coefficients	Standard Error	t Stat	P-value
Intercept	0.69	0.23	2.99	0.00
Industry 1	0.06	0.19	0.32	0.75
Industry 2	-0.19	0.21	-0.92	0.36
Industry 3	-0.16	0.21	-0.80	0.42
Industry 4	-0.05	0.22	-0.23	0.82
Woman owned	-0.07	0.21	-0.34	0.73
Minority Owned	-0.07	0.17	-0.43	0.67
Website	0.14	0.12	1.15	0.25
Facebook Presence	-0.06	0.12	-0.50	0.62
Training Cut	**-0.33**	**0.17**	**-1.96**	**0.05**

The intercept variable of 0.69, shows that 69 percent of companies were profitable after the recession. The coefficient of the "TrainingCut" variable is -0.33, indicating that companies that cut their training decrease their chance of being profitable by 33%. More precisely, only 36% of companies that decided to cut training were profitable after the recession years. We ran the study without the website and Facebook variables and the training cuts variable was even more significant at less than 0.05! So we know that for future research we need to understand better the impact of the Internet and social media on profitability. Significance is established at 0.05 or less. We accept our hypothesis that cutting training budgets has a negative impact.

Discussion:

The findings related to training for small businesses in southern Minnesota are interesting in a number of ways. They reinforce the findings of prior research that investment in training is important to profitability. Our study suggests that region analysis that could benefit economic

development organizations in improving the consulting of small businesses during difficult financial times. Such organization can help with developing affordable training opportunities because ooverall, cutting training in small businesses, does lower profitability. But it isn't the only factor. As stated before, by running various models, we were able to ascertain that certain activities, such as the Internet and Facebook, reduced the impact of training cuts on profitability. This study will be continued to identify other important or underlying variables.

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