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Promoting Export Activity in the Dayton Economy

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PROMOTING EXPORT ACTIVITY IN THE DAYTON ECONOMY

An internship report submitted in partial fulfillment of the requirement for the degree of Master of Science

by

DEENA LYN WILL
B.S., Weber State College, 1983

1991
Wright State University
March 28, 1991

I HEREBY RECOMMEND THAT THE INTERNSHIP REPORT PREPARED UNDER MY SUPERVISION BY Deena Lyn Will ENTITLED Promoting Export Activity in the Dayton Economy BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Science.

[Signatures]
Faculty Advisor
Director, Master of Science in Social and Applied Economics
ABSTRACT


The development and implementation of a mail questionnaire proved to satisfy the goal of the Dayton Area Chamber of Commerce to promote export activity in the region. The results of the survey indicate that over one third of the respondents to the survey are actively engaged in exporting. The identification on these firms will allow the Chamber to more effectively promote their goods and services abroad.

The manipulation of the results obtained from the survey will be used to publish a listing of companies in the Dayton area engaged in exporting goods and services to foreign countries. The resultant export listing will enable the Chamber to promote foreign interest in the Dayton business community, thereby stimulating the local economy.

The Harris Industrial Listing and other data bases maintained by the Chamber were used to identify business
leaders in the Dayton area. These business leaders were identified as the recipients of the mail survey. Of the 600 firms polled 250 responses were received. This averaged an impressive response rate of 42 percent. Of those firms responding to the survey 181, or 74 percent, were actively engaged in exporting their goods and services abroad. The categories of exported goods and services ranged from plastic parts to high-tech computer services.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. SURVEY OF THE LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>III. PROBLEMS LIKELY TO ENCOUNTER</td>
<td>8</td>
</tr>
<tr>
<td>IV. QUESTIONNAIRE CONSTRUCTION</td>
<td>11</td>
</tr>
<tr>
<td>V. QUESTIONNAIRE RESULTS</td>
<td>15</td>
</tr>
<tr>
<td>VI. CONCLUSION</td>
<td>17</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>A. Questionnaire</td>
<td>20</td>
</tr>
<tr>
<td>B. Cover Letter</td>
<td>23</td>
</tr>
<tr>
<td>C. Questionnaire Results</td>
<td>25</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>26</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

This internship report discusses the procedures implemented to support the Dayton Area Chamber of Commerce in achieving its long range goal of promoting the development of greater export activity in the Dayton area. The main objective of this study was to develop a questionnaire that would capture information on companies in the Dayton Area who engage in exporting their products to foreign countries. The results of the questionnaire are to be used by the Dayton Area Chamber of Commerce to compile a directory of companies currently exporting their goods and services abroad. In addition, the directory will identify countries the firms are exporting to and will provide a product description of the export. The geographical area encompassed in survey includes Clark, Darke, Greene, Miami, Montgomery, and Preble counties.

Initial estimates from the Chamber indicated that approximately 200 to 300 firms in the Dayton area were actively engaged in exporting goods and services abroad. The Chamber's main incentive for wanting to stimulate exports is to attempt to offset the enormous trade and current account
deficits that have become the subject of increasing public concern. The trade and current account deficits are depicted as showing that U.S. goods and services are not competitive enough in international markets. Therefore, some changes must be made to enhance the ability of U.S. firms to compete if current standards of living are to be protected. Many of the recent proposals aimed at reducing the deficit are directed at boosting productivity (Baldwin and Richardson, p. 2). The policies implemented to achieve this goal include combatting unfair foreign trade practices and promoting exports that will in fact reduce the deficits. It is the goal of the Chamber to stimulate competitiveness by promoting exports originating in the Dayton arena to interested foreign parties. This in turn will increase Dayton's share of total export revenues generated abroad.
The Chamber of Commerce levied several requirements on the project by weighing the advantages and disadvantages of differing survey methods. The mail survey method was selected based on four criteria that have been shown to improve the ability of mail survey to succeed (Dillman, pp. 368-370). First, the Harris Industrial Listing and other data bases maintained by the Chamber were available for use in aggregating a listing of recipients of the questionnaire. Second, the people receiving the questionnaire, business owners or managers, would most likely possess higher education skills. Third, the limited number of open-ended question items required by the questionnaire. Fourth, the length of time available for the implementation of the survey. These criteria along with the anticipated lower cost of conducting a mail survey were paramount to the selection of the mail questionnaire.

Once the type of survey to be implemented had been selected several other issues impacting the development of the survey surfaced. These concerns involved the ability to
maintain and retrieve the data collected from the surveying tool at a reasonable cost. A software support package, Question Analyzer™, a product of Oasis Computer Solutions, San Jose, California was selected to fulfill this requirement. The package supports the management of the data base that the questionnaire will produce and was available from the Chamber at no additional cost.

With these requirements levied on the project the process of the actual development of the questionnaire began. The major issues involved in the evolution of the mail survey are discussed below and range from initial question writing to survey follow-up procedures.

The motivational appeal of the questionnaire is of utmost importance to the successful construction of a mail questionnaire. Not only is response quantity critical to its success but also response quality. A procedure called "Total Design Method" (Dillman, p. 2) was developed to facilitate these critical success factors. The Total Design Method (TDM), also referred to as a social exchange theory, is based on a theory of response behavior and includes a detailed administrative plan to direct its implementation.
Although a wide variety of topics are covered in the literature on TDM, its broad topics can be narrowed into two categories: question writing and questionnaire implementation. Question writing includes knowing what is needed from the respondents in order to meet the survey objectives. A list of issues covered by Sheatsley includes the use of open versus, closed questions, response categories, question ordering, questionnaire format and length, and pretesting of the questionnaire (pp. 205-227). The underlying goal of question writing is to maximize the accuracy of the data received in response to the questionnaire.

An implementation system must be invoked to ensure the questionnaire's success because even the most well written and formatted questionnaire does not in itself ensure the success of a mail survey. A questionnaire implementation plan attempts to solve problems by building a set of complementary techniques that together produce a high quantity and quality of survey responses (Dillman, p. 161). Personalization of the questionnaire is the key to the implementation plan. The cover letter is the best tool offered by Dillman to achieve personalization (p. 165). Since it is the first portion of the mailout package to be reviewed by the respondent it can introduce and hopefully motivate the respondent to complete
the questionnaire. Dillman emphasizes that in order to achieve the TDM objective, the cover letter must convince those being polled that a problem exists that is of importance to a group with which they identify, and that their help is needed to obtain a solution (p. 162).

Two other major topics included in the implementation plan include pretesting and the follow-up procedures. Literature on TDM stresses pretesting as a method of ensuring success of the questionnaire. According to Dillman, pretesting should be conducted on three types of people: colleagues, potential "users" of the data, and people drawn from the population to be sampled (p. 156). Colleagues include those people who understand the purpose of the survey and are experienced in surveying procedures. Potential "users" include people that are knowledgeable with the topic of the survey. People drawn from the population include people very much like those to be surveyed (Dillman, p. 156). The purpose of pretesting is to correct any problems the survey may contain prior to releasing the questionnaire to the interviewees. If problems are not identified prior to release it may be necessary to remail the questionnaire after finding the initial responses are inadequate. By implementing pretesting procedures the quality and quantity of survey
responses will increase and additional survey development and mailing costs can be eliminated.

TDM calls for follow-up procedures to be developed in the initial stages of survey development. This ensures a smooth transition from survey initiation to survey completion. Dillman states that by implementing timely follow-up mailings, response rates should double from those normally attained through TDM (Dillman, p. 183). Follow-up procedures may include additional mailouts or telephone calls. Due to the additional costs associated with these procedures it is imperative to plan for them in the initial planning stages. An important thing to remember with follow-up procedures is that they must be established prior to the discovery of a survey suffering from low response rates.
III. PROBLEMS LIKELY TO ENCOUNTER

Obviously, one of the major problems likely to be encountered when conducting a mail questionnaire deals with low response rates. Rossi, Wright, and Anderson state that survey response rates average around 15 percent (p. 5). Two reasons attributable to the low response rate can be traced to the fear of consequences of reporting accurate information and the loss of autonomy by the respondents. By promising to publish the conclusions of the survey in aggregate, thereby guaranteeing confidentiality, it may be possible to increase the number of respondents. Other methods are also available to stimulate the response rate. One of the more popular enticements is the offer to provide the respondents with a copy of the final report.

While the quantity of responses is of extreme importance to the success of a survey, quality is equally important. Since the nature of this survey deals with exports it seems appropriate to define exports. Most simply put, "a nation's exports represent expenditures for its output that originate outside the nation's borders" (Norton, p. 51). While this
definition appears to be rather simplistic upon first examination, additional investigation indicates the possibility of misinterpretation by the survey population. One example of this deals with the information industry. Consider the case of a computer program purchased at Radio Shack by a foreigner. Does this constitute an exported service? Even if the definition of an exported service were agreed upon how would the company know a foreigner had purchased the service (Hamilton, p. 60)? One other problem that illuminates the gray area in the definition of an export is the transfer of goods and services, with no established monetary value, between a corporate branch in one country to an office in another country (Hamilton, p. 61). These examples illustrate the potential for misinterpretation by the respondents and the subsequent accuracy of their responses.

One final consideration is the selection of the interviewees who will receive the questionnaire. In other words, how is the person that has the knowledge to respond to the survey identified. For purposes of this survey, it is assumed the individual or individuals maintained in the Harris Industrial Data Base or the other data bases maintained by the Chamber are the most appropriate individuals to respond to the survey. Since these individuals hold senior level positions
in the firms being surveyed their selection is expected to have a positive influence on the number of respondents and on the accuracy of their responses.
IV. QUESTIONNAIRE CONSTRUCTION

The evolution of the questionnaire and the accompanying cover letter will be discussed in this section of the paper. Various stages in the development of the questionnaire and the cover letter are provided in Appendix A and Appendix B, respectively. Representatives of the Dayton Area Chamber of Commerce who assisted in this project included the Vice President, Mr. Harry L. Bumgarner and the Research Manager, Dr. Lee Geary Grafton. Assistance was also provided by the Economics Internship Program Advisor, Dr. John J. Treacy.

In the initial stages of the survey development a meeting was held at the Dayton Area Chamber of Commerce to discuss the details of the questionnaire. Mr. Bumgarner and Dr. Grafton identified several areas of interest to the Chamber. Included in this initial list were identifying companies engaged in exporting, the countries to whom they were exporting, and the number of employees employed by the firm. The Chamber emphasized it was willing to minimize the complexity of the questionnaire in hopes that the response rate would be high. For this reason several items were to be excluded from the
These items pertained to obtaining information on annual gross sales, the location of parent firm incorporation, etc. These items were not only complex in nature but were also thought to deter from the quantity and quality of responses and were, therefore, not included in the survey.

Based on the initial items of interest identified by the Chamber, Draft 1 of the Questionnaire (Appendix A) was developed and provided to the Chamber for comments. Several changes were made to the questionnaire. First, the Questionnaire Number was removed from the survey to reduce the fear of traceability to the respondents. The very nature of the survey requires some degree of traceability to the respondents since the information will be compiled in a listing. By removing the number the appearance of traceability should be diminished. Second, the open-ended question number two requesting the survey respondents to identify the countries to whom they export was revised to a close-ended question. A listing of the most popular countries for exports was substituted along with a space for other countries to be filled in. Finally, an optional section of the survey was added to obtain information on what goods and services the firms were currently exporting and for those they wished to export in the future. This portion of the survey
was included to entice firms to respond to the survey. Although this type of information is not typically asked of the Chamber, potential respondents may find it beneficial in stimulating interest in their goods and services abroad.

After incorporating the changes identified above, Draft 2 of the Questionnaire (Appendix A) and Draft 1 of the accompanying Cover Letter (Appendix B) was provided to the Chamber and to Dr. Treacy for additional comments. Dr. Treacy advised revising question number three to expand the categories dealing with the number of people employed by the various firms. This revision will provide more detailed information on company size to the Chamber. The only other changes to the Questionnaire and Cover Letter were editorial in nature. Final copies of the Questionnaire and Cover Letter are contained in Appendix A and Appendix B, respectively.

While the development of the questionnaire was being carefully constructed other aspects of the survey were also being addressed. The mailing labels were abstracted from the Harris Industrial Listing and an International Directory maintained by the Chamber. Due to the duplication between the two data bases a manual interrogation was implemented to identify duplicate addressees and to determine a count of the
number of survey packages for printing. The Chamber published a notice in their newsletter announcing the survey to all interested firms. This would allow any interested firms who may not be listed in the two data bases to participate in the survey.

While the final copies of the Questionnaire and Cover Letter were being printed follow-up procedures were being established. It was determined that one follow-up would be made, by telephone, to each addressee not responding by the survey return date. Since the majority of the names and telephone numbers of those being surveyed were resident in the two data bases minimal research would be involved in the follow-up process.
V. QUESTIONNAIRE RESULTS

By the survey response date, 150 responses had been returned to the Chamber. Within two days, 17 additional responses had been received through the mail. With an initial mailing list of 635 addressees, this represented a 26 percent response rate. Although, this rate seems extremely low, an average response rate of 15 percent is considered normal for a mail survey.

Follow-up procedures by telephone were immediately implemented and an additional 66 responses were obtained. In addition, 17 mail responses were received during this follow-up period. The final response rate was increased to 39 percent which is more than double the normal response rate for a mail survey.

All responses to the survey were entered into the Question Analyzer™ data base. Several queries were developed using the Question Analyzer™ software to facilitate the development of the Export Listing. These queries were provided to the Chamber but due to the sensitivity of the
information are not contained in this report. Aggregate statistics for the first three questions of the survey are provided in Appendix C.
VI. CONCLUSION

The tasks performed in conjunction with the Economics Internship Program at Wright State University proved to be successful for the completion of an Export Directory for the Dayton Area Chamber of Commerce. Over 250 Dayton area businesses participating in survey have provided pertinent information that will allow the Chamber to promote local business abroad.

The construction and administration of the export survey was intentionally modeled after the TDM offered in the survey of literature. A germane step in this method that was somewhat overlooked in the process was the treatment of a thorough pretest of the questionnaire. As noted in the survey of the literature, pretesting should be conducted on three sets of individuals: colleagues, potential "users" of the data, and people drawn from the population to be sampled (Dillman, p. 156). While these first two categories of people were included in the pretesting the people drawn from the survey population were not. While the actual impact of excluding the third group from the pretesting procedures is
unknown its effect was noted when conducting the follow-ups by telephone. It appeared that many individuals completing the survey by telephone were not certain what comprised an export. Some questioned whether shipments to dealers, who in turn export the goods or services abroad, should be considered exports. Others questioned whether shipments of goods or services to Canada comprised an export. By following with the earlier definition of an export: "a nation's exports represent expenditures for its output that originate outside the nation's boarders" (Norton, p. 51), it is clearly obvious that in the first case the goods or services should not be considered exports. Expenditures for the output does not originate outside the United States until the dealer's strike a deal with a foreign country. In the second case the transfer of output should be considered an export. Although Canada is a close neighbor, it is still considered a foreign country and thus outside the nation's borders.

One final problem experienced in this exercise was from the software, Question Analyzer™. Being that the software was untested by the Chamber some problems were experienced when generating report queries. These problems were identified to Oasis Computer Solutions, San Jose, California, who are in the process of evaluating the queries and
attempting to remedy the problems.
APPENDIX A

Questionnaire, Draft 1

Questionnaire Number _____

Company: _____________________________________________

Address: _____________________________________________

City: _______________ State: ___ Zip: _______

Phone: ____________

1. Do you currently export any of your goods or services abroad?
   ___ YES ___ NO

2. If YES, to which countries?
   _____________________________________________  _____________________________________________
   _____________________________________________  _____________________________________________
   _____________________________________________  _____________________________________________

3. Do you currently employ over 100 people in your domestic operations?
   ___ YES ___ NO
Dayton Area Chamber of Commerce
Export Survey

Company: ____________________________________________________________

Address: ____________________________________________________________

City: ___________________________ State: ____ Zip: ____________

Phone: ________________________

1. Do you currently export any of your goods or services abroad?

   ___ YES  ___ NO

2. If YES, to which countries?

   ___ Canada  ___ France  ___ West Germany
   ___ Japan  ___ Mexico  ___ United Kingdom
   ___ Korea  ___ Taiwan  ___ Australia
   ___ Belgium  ___ Other _________________________

3. Do you currently employ over 100 people in your domestic operations?

   ___ YES  ___ NO

4. What products or services do you currently export?

   ________________________________ ________________________________

5. What products or services would you like to export in the future?

   ________________________________ ________________________________

Questionnaire, Draft 2
Export Questionnaire

Company: __________________________________________________________

Address: _________________________________________________________________________________________________

City: __________________________ State: ___ Zip: __________

Phone: ______________

1. Do you currently export any of your goods or services abroad?

   ___ Yes    ___ No

2. If Yes, to which countries?

   ___ Canada   ___ France   ___ United Kingdom
   ___ Japan    ___ Mexico    ___ Australia
   ___ Korea    ___ Taiwan    ___ Belgium    ___ Germany
   ___ Other ______________________________________

3. Number of employees in the Dayton area?

   ___ 1-99   ___ 100-500   ___ over 500

*** Optional Section ***

4. What products or services do you currently export?

   __________________________________________________________
   __________________________________________________________

5. What products or services would you like to export in the future?

   __________________________________________________________
   __________________________________________________________

Questionnaire, Final Draft
October __, 1990

Dear Constituent:

Enclosed is our 1990 Export Survey. This survey will be used to assemble a list of companies in the Dayton area that are currently exporting their goods and services abroad. Your response will allow us to provide valuable information to other countries around the globe interested in your products.

Your participation in the Export Survey is very important. With your help, we will be able to provide accurate, up-to-date information that will promote local business development through Chamber and business cooperation.

Please answer all applicable questions on the survey and enclose it in the postage-paid response envelope. The deadline is October __, 1990 for mailing your survey responses.

Thank you for your cooperation in completing this survey. Upon your request, the resulting listing will be made available to you.

Sincerely,

Thomas E. Heine
President

Enclosure
Cover Letter, Final Draft

October 24, 1990

Dear Constituent:

Enclosed is our 1990 Export Survey. This survey will be used to assemble a list of companies in the Dayton area that are currently exporting their goods and services abroad. Your response will allow us to provide valuable information to other countries around the globe interested in your products.

Your participation in the Export Survey is very important. With your help, we will be able to provide accurate, up-to-date information that will promote local business development.

Please answer all applicable questions on the survey and enclose it in the postage-paid response envelope. The deadline is Wednesday, November 14, 1990 for mailing your survey responses.

Thank you for your cooperation in completing this survey. Upon your request, the resulting listing will be made available to you.

Sincerely,

Thomas E. Heine
President

Enclosure
APPENDIX C

Questionnaire Results

Aggregate Statistics

1. Do you currently export any of your goods or services abroad?
   - 181 Yes
   - 65 No

2. If Yes, to which countries?
   - 151 Canada
   - 64 France
   - 102 United Kingdom
   - 76 Japan
   - 92 Mexico
   - 80 Australia
   - 53 Korea
   - 46 Taiwan
   - 48 Belgium
   - 79 Germany
   - 102 Other

3. Number of employees in the Dayton area?
   - 163 1-99
   - 64 100-500
   - 16 over 500
BIBLIOGRAPHY


