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# Technological Innovation Studies Program

## Research Report

A STUDY OF THE PROBLEMS BROUGHT TO THE  
ATTENTION OF THE BUSINESS STUDENT  
CONSULTING TEAMS SPONSORED BY THE  
SMALL BUSINESS ASSISTANCE PROGRAMME  
OF THE GOVERNMENT OF ONTARIO

by

Principal Investigator:

Rein Peterson

Research Assistant:

Ira Smith

FACULTY OF ADMINISTRATIVE STUDIES  
YORK UNIVERSITY (Dec.1978)

## Rapport de recherche

## Programme des études sur les innovations techniques

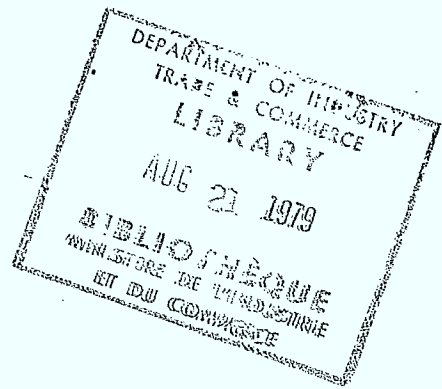


Industry, Trade  
and Commerce

Industrie  
et Commerce

Technology  
Branch  
Ottawa, Canada

Direction  
de la technologie  
Ottawa, Canada



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The views and opinions expressed in this report are those of the authors and are not necessarily endorsed by the Department of Industry, Trade and Commerce.

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PURPOSE AND SCOPE:

Our objective was to analyse data collected during the period 1974-76 on the twelve Ontario Government sponsored University Small Business Assistance Programmes (SBAP) to gain a clearer picture of the type of problems experienced by these small businesses, how they are being met by the SBAP's, and to make recommendations on how these needs might be met in the future.

METHODOLOGY:

General information on SBAP's was available for the summers of 1975 and 1976 at the Ontario Ministry of Industry and Tourism, but we concluded that the categories of problems were not consistently defined by all reporting universities. No general information for 1974 was available at all at the Ministry. Seven universities were visited in an attempt to remedy these deficiencies in available data, after permission was granted by the Ministry.<sup>1</sup> A total of eight SBAP's were approached by the Principal Investigator for permission to examine their files. Questionnaires seeking opinions on a variety of topics (See Exhibit A) were mailed out to all twelve Faculty Coordinators, of which eleven were returned. No questionnaire was received from the University of Toronto nor did they grant us permission to look at their files.

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<sup>1</sup> Letter of Permission, N. Ross Radford, Executive Director, Small Business Operations Division, Ministry of Industry and Tourism, Ontario.

SUMMARY OF FINDINGS AND CONCLUSIONS

- (1) Ontario University Small Business Assistance Programmes (SBAP) gave assistance in the following problem areas during the 1974-1976 period.

<u>MOST FREQUENTLY MENTIONED</u>		<u>LEAST FREQUENTLY MENTIONED</u>	
<u>PROBLEM AREA</u>	<u>NUMBER</u>	<u>PROBLEM</u>	<u>NUMBER</u>
General Advice	228	Plant Layout	6
Bookkeeping Systems	205	Import/Export Advice	8
Cost Control/Systems	137	Production Scheduling	10
Sales and/or Advertising	132		
Financial Analysis	103		

(See Table 5 and Appendix B for complete details.)

- (2) Universities through the Ontario Small Business Assistance Programme (SBAP) handled a wide range of problems for a wide range of clients. (See Tables 1-8).
- (3) Small Businesses seemed to be able to obtain management consulting that was wider in scope from Ontario SBAP's than from (say) their accountants who are specifically trained to handle accounting problems, or from Chartered Banks only serving in a lending capacity.
- (4) Differences in the type of clients assisted were not so much a result of each SBAP's uniqueness or expertise as being due to regional differences within the Province of Ontario as to the distribution of economic activity.
- (5) Ontario SBAP's carried out consulting assignments that were similar in scope to those done by private consultants, but at a lower cost to the client.

- (6) More interaction of co-operation between all of the SBAP's in Ontario would be desirable.
- (7) There is a need for more emphasis on small business in existing business courses offered at Ontario Universities. At present, York University is the only one offering a complete programme in this area.
- (8) University based SBAP's have the potential of becoming multifaceted resource centres for small businesses, operating within local business communities, as is presently done in the United States through the Small Business Development Centers.



An Overview of the Small Business Assistance Programmes in Ontario

The Ontario Small Business Assistance Programme operates through the faculties or departments of business in twelve Ontario Universities. It has the following purposes.<sup>2</sup> First, to provide management consulting and assistance to small business concerns. Second, to afford to both graduate and undergraduate students of business administration an opportunity to apply skills and knowledge, acquired in an academic setting, to practical problems in the business community. Third, to provide through the SBAP's a structure for combining the resources at Ontario Universities with those of Provincial and Federal Governments and the business community in general, and thereby increase communication and awareness, as well as to exert a positive influence on the prosperity of the province.

Small businessmen were provided with a relatively low cost consulting service in a wide range of problem areas (to be discussed). Although similar services were potentially available from accountants, bankers, financial analysts and independent consulting firms, these professionals either could not afford to invest the necessary time, or alternatively, the small business manager could not afford their services or they were reluctant to contact these sources. Hence, it was believed that an unfulfilled need was being met by the SBAP's.

Most University Programmes were able to establish a close relationship with the business community in which they were situated, and a few generated ideas for research and/or lecture material through the programmes.

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2 1975 Small Business Assistance Programme Summary, Ontario Ministry of Industry and Tourism.

### The Nature of the Data Examined

There were great differences between the twelve programmes. For example, there was no generally accepted definition of "client" for reporting purposes. Some Universities counted consultation over the telephone, others considered firms as clients only if a final written report was prepared, delivered and fee billed and collected (or waived if the circumstances warranted it). Some universities limited the maximum number of days (or equivalently dollars billed) which could be spent on any one client, which probably, limited the scope of the assistance rendered. Finally, the extent of implementation of proposed solutions to client problem areas differed greatly among client files examined. Some files included not only a description of the problem and suggested remedies, but also explained in detail exactly how implementation should be carried out. Other programmes prepared six page business reports with brief problem statements and analysis sections.

Therefore, any data regarding the total number of "clients assisted" that is reported, must be interpreted with caution. A time consuming aspect of this research was the close examination of many clients files, their problem areas, and the extent of the assistance given in order to produce a more meaningful comparable set of data.

### Detailed Findings From Quantitative Data

Table 1 lists both the number and sources of enquiries received in 1975 and 1976, by the 12 University programmes in Ontario. The data tends to confirm previous findings<sup>3</sup> that claim there is a lack of information concerning government programmes (both on a Provincial and Federal level) in the business community and that only those activities located directly within the small business community by a highly visible group elicit requests for assistance.

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3 A. George Fells, Mitchell J. Kostuch, "Profile of the Canadian Entrepreneur", SB Capital Corporation Ltd., May 1976.



TABLE 1

NUMBER AND SOURCE OF ENQUIRIES REPORTED TO M.I.T. \*

	<u>Enquiries</u>		<u>Generated by Programme</u>		<u>From M.I.T.</u>	
	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>
Laurentian	64	80	N/A	63	N/A	17
McMaster	72	68	34	46	24	22
Ottawa	31	52	18	45	13	7
Queens	60	74	42	68	4	6
Toronto	143	122	39	99	11	23
Western	144	153	99	100	45	53
Windsor	62	78	50	73	5	5
Wilfred Laurier	51	34	21	21	20	13
York	111	125	54	100	19	25
Carleton	57	105	49	99	8	6
Lakehead	23	22	18	20	5	2
Ryerson	31	52	26	26	0	26
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	849	965	450	760	154	205

N/A = Not Available

\* The enquiries not generated by M.I.T. or a University Programme are those which reached the Programmes through referrals or by chance encounter (as opposed to direct advertising campaigns).

TABLE 2

NUMBER OF CLIENTS ASSISTED AS REPORTED TO M.I.T.

	<u>1974</u>		<u>1975</u>		<u>1976</u>	
	<u>NUMBER</u>	<u>%</u>	<u>NUMBER</u>	<u>%</u>	<u>NUMBER</u>	<u>%</u>
Laurentian	20	3	51	9	64	9
McMaster	80	13	58	10	68	10
Ottawa	12	2	18	3	37	5
Queens	40	6	46	8	60	9
Toronto	200	32	50	9	86	12
Western	82	13	102	17	88	13
Windsor	42	7	55	9	62	9
Wilfred Laurier	24	4	41	7	28	4
York	68	10	73	13	72	11
Carleton	35	6	47	8	62	9
Lakehead	16	2	19	3	18	3
Ryerson	14	2	26	4	40	6
TOTAL	633	100%	586	100%	685	100%

NOTE:

The definition of "clients assisted" is not consistent across the years and the Universities listed. For example, in 1974, the University of Toronto included advice or enquiries over the telephone in their total. At York we define "clients assisted" as those who received a written report that is presented to the client along with a bill.

In the years examined, the bulk of SBAP enquiries were generated by the universities themselves, mainly through the distribution of brochures, community service media time and referrals from satisfied clients.

Each SBAP has its own set of criteria for accepting or rejecting an enquiry as a client. In Table 2 the refusal ratio ranges from nil, to a high of 2.5:1. Over the three years the number of clients serviced (as reported by the SBAP's) has remained approximately the same (due to budget constraints), as has the distribution of clients between the individual programmes. 54% of the clients assisted were located in the Toronto-Hamilton-London region of Southern Ontario.

The fact that SBAP clients were being successfully generated by each individual University programme should be viewed as encouraging. Previous research<sup>4</sup> has found that businessmen are generally unaware of the resources available to them through their local university, and this lack of awareness leads to a negative attitude toward the Canadian academic community in general. The SBA Programme is potentially an interaction between businessmen, student-consultants and faculty members that can reverse such negative attitudes.

Due to time and monetary constraints, we were not able to personally visit all twelve SBAP's, but we believe a representative sample of actual client files was scrutinized. Out of a total of 1904 clients handled by Ontario SBAP's in 1974, 1975 and 1976 (Table 2), 1066 files (Table 3) were examined in detail by this research.

The data in Table 3 indicates that most clients experience multiple problems. This touches on several important points. First, as previous studies indicate,<sup>5</sup> the owner-manager is a lonely individual. Where the corporate

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4 S. Bahen, M.A. Fraresso, R. Peterson, "On Helping the Small to Medium-Sized Enterprise", Division of Research, Faculty of Administrative Studies, York University, Downsview. December, 1973

5 British Productivity House, "Tackling the Problems of the Smaller Firm," 1966.

TABLE 3  
NUMBER OF CLIENT FILES  
EXAMINED IN THIS RESEARCH

	York	Ryerson	Queen's	Wilfrid Laurier	Windsor	McMaster	Western	Total
1974	68	0	41	0	36	56	94	318
1975	81	31	44	39	54	32	102	383
1976	72	46	54	29	52	60	84	365
	221	77	139	68	142	148	280	1066

NUMBER OF PROBLEM AREAS  
ENCOUNTERED IN THE CLIENT FILES EXAMINED

1974	125	0	67	0	57	86	115	450
1975	158	50	84	52	81	43	138	606
1976	137	56	111	49	66	86	129	634
	420	106	262	101	204	215	382	1690

manager has peers, superiors and professional staff to discuss daily events with, the owner-manager usually has no one to share his problems with. Hence a student consultant often becomes a non-threatening, welcome sounding board and advisor in more than just one area. Secondly, even though a owner-manager may pinpoint one area as being "the problem", more often than not, it is only a symptom of a much deeper set of problems. Finally, note that the 1690 problem areas understates the true number of problem areas encountered, since some problem categories such as: "policy advice" and "business plan and overall strategy" in themselves encompass many more problems, which were lumped together.

Data from 1976 from the Ministry of Industry and Tourism showing the general areas of assistance reported by the Programmes are presented in Table 4. Accounting and marketing related problems were reported as the most prevalent. More specifically, the design and implementation of bookkeeping systems, general advice on business procedures and/or minor aspects of business strategy, the choosing of proper sales and/or advertising methods, and financing and budgeting assistance was requested by businesses most frequently SBAP's in Ontario.

Detailed data on the problem areas was also collected from the sample of several university SBAP's (see Tables 5-8). That is, we took the general categories of assistance reported to the M.I.T. and broke them down into finer, presumably more consistent, categories using the definitions given in Appendix B.

We concluded from this closer examination that the programmes offered assistance in a fuller range of problem areas than the aggregated M.I.T. data in Table 4 suggested. Although organizational behaviour and production related problems consistently received the least emphasis.

The data in Table 6 lists by number and percentage the client industry categories for the entire 1976 SBA Programme as reported to the M.I.T. Tables 7 and 8 present similar information for the subset of client files reviewed by

TABLE 4

GENERAL AREAS OF ASSISTANCE REPORTED TO M.I.T. BY INDIVIDUAL PROGRAMES (1976)

		<u>%</u>
Marketing	244	33.29
Finance	137	18.69
Production & Inventory Control	44	6.00
Personnel & Organization	89	12.14
Accounting	219	29.88
	TOTAL	733*

\* The type of assignment total is greater than the total number of clients (685) because some received assistance in more than one area.



TABLE 5  
SUMMARY OF THE  
PROBLEM AREAS ENCOUNTERED  
IN THE CLIENT FILES EXAMINED

<u>PROBLEM AREA</u>	<u>YEAR</u>			<u>TOTAL</u>
	<u>1974</u>	<u>1975</u>	<u>1976</u>	
(1) <u>FINANCE</u>				
Budgeting/Cash Flow	17	11	54	82
Financing Advice	33	26	22	81
Loan Application Assistance	6	15	3	24
Investment Decision	<u>18</u>	<u>30</u>	<u>20</u>	<u>68</u>
	<u>74</u>	<u>82</u>	<u>99</u>	<u>255</u>
(2) <u>ACCOUNTING</u>				
Bookkeeping Systems	59	59	87	205
Internal Control	15	34	20	69
Cost Control/Systems	27	41	69	137
Financial Analysis	21	48	34	103
Advice	<u>10</u>	<u>22</u>	<u>25</u>	<u>57</u>
	<u>132</u>	<u>204</u>	<u>235</u>	<u>571</u>
(3) <u>MARKETING</u>				
Product Development	0	0	2	2
Marketing Survey	9	26	28	63
Product Research	12	8	15	35
Sales/Advertising	29	55	48	132
Import/Export Advice	2	2	4	8
Advice	<u>2</u>	<u>18</u>	<u>21</u>	<u>41</u>
	<u>54</u>	<u>109</u>	<u>118</u>	<u>281</u>

TABLE 5 (CONTINUED)

<u>PROBLEM AREA</u>	<u>YEAR</u>			<u>TOTAL</u>
	<u>1974</u>	<u>1975</u>	<u>1976</u>	
(4) <u>POLICY</u>				
Business Plan	20	6	13	39
Overall Strategy	26	26	19	71
Specific Segment Evaluation	2	3	1	6
Advice	<u>74</u>	<u>80</u>	<u>74</u>	<u>228</u>
	<u>122</u>	<u>115</u>	<u>107</u>	<u>344</u>
(5) <u>ORGANIZATIONAL BEHAVIOUR</u>				
Job Description/Classification	2	2	1	5
Management Evaluation	5	6	4	15
Employee Evaluation	3	11	10	24
Job Search	1	4	0	5
Incentive Policies	<u>4</u>	<u>5</u>	<u>9</u>	<u>18</u>
	<u>15</u>	<u>28</u>	<u>24</u>	<u>67</u>
(6) <u>PRODUCTION</u>				
Production Scheduling	2	5	3	10
Inventory Planning	2	5	7	14
Inventory Control	11	29	18	58
Planning/Layout	<u>3</u>	<u>1</u>	<u>2</u>	<u>6</u>
	<u>18</u>	<u>40</u>	<u>30</u>	<u>88</u>
UNCLASSIFIED	<u>35</u>	<u>28</u>	<u>21</u>	<u>84</u>
	<u>450</u>	<u>606</u>	<u>634</u>	<u>1690</u>

TABLE 6

Industries Serviced by all University SBAP's in Ontario (1976)

Manufacturing	186	27.15%
Construction	27	3.94%
Mining	0	
Agriculture, Forestry & Fisheries	8	1.17%
Transport, Communications & Public Utilities	6	0.88%
Wholesale Trade	34	4.96%
Retail Trade	173	25.26%
Services	248	36.20%
Finance, Insurance & Real Estate	3	0.44%

TOTAL CLIENTS ASSISTED 685

NOTE:

The client categorization was carried out by each of the individual programmes, with little direction from M.I.T. as to definitions to be used.

TABLE 7

Industries Serviced by The Sample of University SBAP's Visited

<u>SIC CATEGORY</u>	NUMBER OF						TOTAL
		CLIENTS		ASSISTED			
	%	1974	%	1975	%	1976	
MANUFACTURING	24.09	73	23.01	98	27.43	113	284
CONSTRUCTION	3.3	10	2.11	9	3.16	13	32
MINING	.33	1	0	0	0	0	1
AGRICULTURE, FORESTRY & FISHERIES	.67	2	1.41	6	1.21	5	13
TRANSPORTATION, COMMUNICATION & OTHER	7.26	22	1.64	7	10.92	45	74
WHOLESALE TRADE	7.59	23	7.04	30	4.61	19	72
RETAIL TRADE	19.14	58	32.16	137	23.54	97	292
SERVICES	34.98	106	30.28	129	28.64	118	353
FINANCE, INSURANCE & REAL ESTATE	<u>2.64</u>	<u>8</u>	<u>2.35</u>	<u>10</u>	<u>.49</u>	<u>2</u>	<u>20</u>
	100%	303	100%	426	100%	412	1141*

\* NOTE: THIS TOTAL WAS BUILT UP FROM ACTUAL CLIENT FILES AND M.I.T. DATA. THE DISCREPANCY OF 75 CLIENTS FROM THE TOTAL OF 1066 IN TABLE 3 IS A RESULT OF NOT ALL THE UNIVERSITIES HAVING COMPLETE FILES.

TABLE 8

SIC CATEGORY BREAKDOWN OF CLIENT FILES SAMPLED

	YORK	RYERSON	QUEEN'S	WILFRID LAURIER	WESTERN	MCMMASTER	WINDSOR	TOTAL
<u>1974</u>								
MANUFACTURING	18	N/A	4	N/A	27	14	10	73
CONSTRUCTION	2		2		3	10	2	10
MINING	0		1		0	0	0	1
AGRICULTURE, FORESTRY & FISHERIES	0		0		1	1	0	2
TRANSPORTATION, COMMUNICATION & OTHER	15		2		1	1	3	22
WHOLESALE TRADE	11		2		5	2	3	23
RETAIL TRADE	10		9		22	16	1	58
SERVICES	15		20		34	20	17	106
FINANCE, INSURANCE & REAL ESTATE	<u>5</u>		<u>1</u>		<u>1</u>	<u>1</u>	<u>0</u>	<u>8</u>
TOTAL:	<u>76</u>		<u>41</u>		<u>94</u>	<u>56</u>	<u>36</u>	<u>303</u>
<u>1975</u>								
MANUFACTURING	20	2	9	13	26	21	7	98
CONSTRUCTION	1	0	2	2	0	2	2	9
MINING	0	0	0	0	0	0	0	0
AGRICULTURE, FORESTRY & FISHERIES	1	0	0	1	1	0	3	6
TRANSPORTATION, COMMUNICATION & OTHER	0	1	1	4	0	1	0	7
WHOLESALE TRADE	18	0	1	2	4	5	0	30
RETAIL TRADE	37	17	8	9	31	17	18	137
SERVICES	23	6	22	7	40	10	21	129
FINANCE, INSURANCE & REAL ESTATE	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>4</u>	<u>10</u>
TOTAL:	<u>101</u>	<u>26</u>	<u>46</u>	<u>38</u>	<u>102</u>	<u>58</u>	<u>55</u>	<u>426</u>

TABLE 8. (CONTINUED)

SIC CATEGORY BREAKDOWN OF CLIENT FILES VIEWED

	YORK	RYERSON	QUEEN'S	WILFRID LAURIER	WESTERN	McMASTER	WINDSOR	TOTAL
<u>1976</u>								
MANUFACTURING	19	8	7	10	21	33	15	113
CONSTRUCTION	0	0	6	2	2	2	1	13
MINING	0	0	0	0	0	0	0	0
AGRICULTURE, FORESTRY & FISHERIES	0	0	2	1	1	0	1	5
TRANSPORTATION, COMMUNICATION & OTHER	36	5	0	3	0	0	1	45
WHOLESALE TRADE	7	5	2	0	2	0	3	19
RETAIL TRADE	3	11	21	3	33	11	15	97
SERVICES	7	17	13	6	29	22	24	118
FINANCE, INSURANCE & REAL ESTATE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>
TOTAL:	<u>72</u>	<u>46</u>	<u>51</u>	<u>25</u>	<u>88</u>	<u>68</u>	<u>62</u>	<u>412</u>



this research study during field research. From all this data it is clear that the Service, Retail Trade and Manufacturing sectors of the economy benefit most from SBAP's, while the Mining, Agriculture, Transportation and Finance sectors benefit the least. This appears to be mainly due to the fact that a larger number of owner-managed firms are found in those sectors. Also it is considered generally easier and less threatening by the student-consultants to deal with non-technical problems. Students who previously worked as engineers are somewhat reluctant to handle technical problems because they wish to practice new-found business skills. Criteria used to select student-consultants appears to be somewhat biased against specialist-technical skills. While Table 5 indicates that SBAP's did not handle problems of a technical/production nature, it should not be concluded that they could not do so, given proper selection procedures, objectives and incentives. Most MBA programmes involve students with an incredibly wide range of previous experience and training that could be mobilized in this direction.

The main conclusion which can be drawn from Table 8 is that the geographical location of each SBAP correlates positively with the type of clients it assists. For example, the Toronto, Kitchener and Hamilton Programmes surveyed, handled approximately 55% of all the manufacturing clients, while the other programmes assisted mainly clients from the retail trade and service sectors. The main exception is the Ryerson SBAP which handles only retail clients.

The number of employees in the companies serviced by the consulting programmes ranged from 1 to over 45 (see Table 9 - 12). Most of the clients were reported to have less than five employees. This is partly due to the way the M.I.T. programme is structured. Only smaller firms are referred

to and sought by the universities, since over the relatively short 15 week period, it is extremely difficult to perform an adequate service for many large clients within the objectives set for the SBAP's by M.I.T.

Comparable data, to classify size of clients by SIC categories, was not available for all three years from all seven programmes. We attempted to classify post hoc, all client files by SIC category, but the data available from M.I.T. and from actual client files proved to be inadequate. Therefore Table 9 contains such a breakdown for 1974 from York files only.

Tables 9-12 also show that 56% of all SBAP clients in 1975 and 1976 employed fewer than 5 people, whereas only 5% of the clients had more than 45 employees. The same regional differences which influenced the SIC categories of clients serviced also seem to affect firm size serviced by each programme. That is, those universities serving manufacturing firms tend to have larger clients.

#### Some General Conclusions And Findings

The average consulting assignment in 1976 entailed six consulting days (Table 13). The average fee billed to small business was \$70.00, and the Ontario Government paid in addition an average of \$611.00 per client (Tables 14 and 15). Therefore the average small business consulting assignment cost \$681.00 or \$113.50 per day.<sup>6</sup> Comparing this cost (both client and Government) with the value of assistance received, the scope of services rendered, we conclude that SBAP's through student consultants provide a service comparable to many private consultants at a lower cost to the business community. (There are, of course, private consultants who have specialized expertise and experience not possessed by student consultants.)

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6 This figure includes the overhead of unbilled hours and "non-productive" work such as answering telephone enquiries, training of consultants, generating clients, etc.

There was no clear relationship between client size and length of a consulting assignment undertaken. Many times a large client was reported as using a consultant for a very specific short-lived task, while a small client asked for assistance on a variety of problems. Table 13 shows for 1976, the duration of consultations for each university. From the client files viewed, the length of assignment in most cases was not a product of relative efficiency or inefficiency but stemmed from two sources:

- (i) the programme's definition of what constitutes a client and
- (ii) the programme's policy on the scope of a consulting engagement that may be undertaken by student consultants.

Some universities took a very cursory look at a client's needs, while others carried out an in-depth consulting service (i.e. Differences in quality of work were quite noticeable during our research).

Most programmes had a low percentage of repeat clients. The main reason for this appeared to be that one goal of most programmes was to assist as many new clients as possible.

TABLE 9

DISTRIBUTION OF CLIENTS BY INDUSTRY AND NUMBER OF EMPLOYEES

1974 DATA FROM YORK FILES

SIC CATEGORY

<u>NUMBER OF EMPLOYEES</u>	<u>MFG.</u>	<u>CONST.</u>	<u>MINING</u>	<u>A, F &amp; F</u>	<u>T, C &amp; O</u>	<u>WHOL.</u>	<u>RETAIL</u>	<u>SERVICES</u>	<u>F, I &amp; R</u>	<u>TOTAL</u>
0 - 4	10	1	0	0	5	4	6	14	5	45
5 - 9	3	1	0	0	1	1	2	1	0	9
10 - 14	2	1	0	0	1	3	0	0	0	7
15 - 19	0	0	0	0	0	1	0	0	0	1
20 - 44	1	0	0	0	0	1	0	0	0	2
45 +	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
	<u>17</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>7</u>	<u>10</u>	<u>8</u>	<u>15</u>	<u>5</u>	<u>65</u>

NOTE: THIS DATA WAS NOT AVAILABLE FROM M.I.T. OR FROM OTHER UNIVERSITIES TO COMPARE ACTUAL CLIENT FILES ON A CONSISTENT BASIS.

LEGEND:

- MFG. - MANUFACTURING
- CONST. - CONSTRUCTION
- A, F & F - AGRICULTURE, FORESTRY & FISHERIES
- T, C & O - TRANSPORTATION, COMMUNICATION & OTHER
- WHOL. - WHOLESALE TRADE
- RETAIL - RETAIL TRADE
- F, I & R - FINANCE, INSURANCE & REAL ESTATE

TABLE 10

SUMMARY

DISTRIBUTION OF YORK CLIENTS BY NUMBER OR EMPLOYEES

<u>NUMBER OF EMPLOYEES</u>	<u>1975</u>	<u>1976</u>	<u>TOTAL</u>
0 - 4	332	381	713
5 - 9	92	128	220
10 - 14	66	51	117
15 - 19	22	19	41
20 - 44	53	58	111
45 +	<u>26</u>	<u>34</u>	<u>60</u>
	<u>591</u>	<u>671</u>	<u>1262</u>

TABLE 11  
DISTRIBUTION OF CLIENTS BY NUMBER OF EMPLOYEES  
(1975)

NUMBER OF EMPLOYEES	LAURENTIAN	McMASTER	OTTAWA	QUEENS	TORONTO	WESTERN	WINDSOR	WILFRID LAURIER	YORK	CARLETON	LAKEHEAD	RYERSON	TOTAL
0 - 4	36 (.72)	40 (.63)	2 (.11)	19 (.41)	33 (.66)	75 (.74)	31 (.54)	6 (.15)	27 (.37)	30 (.64)	12 (.63)	21 (.70)	332
5 - 9	6 (.84)	4 (.76)	0 (.11)	15 (.74)	6 (.78)	15 (.88)	15 (.81)	10 (.39)	12 (.53)	4 (.72)	1 (.68)	4 (.83)	92
10 - 14	3 (.90)	5 (.84)	5 (.39)	5 (.85)	6 (.90)	9 (.97)	4 (.88)	9 (.61)	11 (.68)	5 (.83)	3 (.84)	1 (.87)	66
15 - 19	1 (.92)	0 (.84)	1 (.44)	4 (.93)	2 (.94)	1 (.98)	1 (.89)	5 (.73)	5 (.75)	1 (.85)	0 (.84)	1 (.90)	22
20 - 44	4 (1.00)	5 (.93)	7 (.83)	2 (.98)	1 (.96)	1 (.99)	5 (.98)	10 (.98)	13 (.93)	2 (.89)	2 (.95)	1 (.93)	53
45 +	<u>0 (1.00)</u>	<u>4 (1.00)</u>	<u>3 (1.00)</u>	<u>1 (1.00)</u>	<u>2 (1.00)</u>	<u>1(1.00)</u>	<u>1(1.00)</u>	<u>1(1.00)</u>	<u>5(1.00)</u>	<u>5(1.00)</u>	<u>1(1.00)</u>	<u>2 (1.00)</u>	<u>26</u>
	<u>50</u>	<u>58</u>	<u>18</u>	<u>46</u>	<u>50</u>	<u>102</u>	<u>57</u>	<u>41</u>	<u>73</u>	<u>47</u>	<u>19</u>	<u>30</u>	<u>591</u>

Note: Figures in brackets are cumulative percentages per university programme.



TABLE 12  
DISTRIBUTION OF CLIENTS BY NUMBER OF EMPLOYEES  
 (1976)

NUMBER OF EMPLOYEES	LAURENTIAN	MCMASTER	OTTAWA	QUEENS	TORONTO	WESTERN	WINDSOR	WILFRID LAURIER	YORK	CARLETON	LAKEHEAD	RYERSON	TOTAL
0 - 4	32 (.50)	87 (.54)	19 (.51)	23 (.48)	62 (.72)	61 (.69)	37 (.60)	10 (.38)	21 (.29)	44 (.71)	9 (.50)	26 (.65)	381
5 - 9	14 (.72)	11 (.71)	9 (.76)	12 (.73)	5 (.78)	12 (.83)	12 (.79)	8 (.69)	26 (.65)	13 (.92)	4 (.72)	2 (.70)	128
10 - 14	8 (.84)	1 (.72)	4 (.86)	5 (.83)	5 (.84)	11 (.95)	7 (.90)	1 (.73)	4 (.71)	1 (.94)	2 (.83)	2 (.75)	51
15 - 19	5 (.92)	0 (.72)	1 (.89)	3 (.90)	1 (.85)	2 (.98)	0 (.90)	1 (.77)	4 (.76)	0 (.94)	1 (.89)	1 (.55)	19
20 - 44	5 (1.00)	11 (.88)	2 (.95)	4 (.98)	3 (.88)	1 (.98)	5 (.98)	3 (.88)	16 (.99)	3 (.98)	1 (.94)	4 (.88)	58
45 +	0 (1.00)	8 (1.00)	2 (1.00)	1 (1.00)	10 (1.00)	1(1.00)	1(1.00)	3(1.00)	1(1.00)	1(1.00)	1(1.00)	5(1.00)	34
	<u>64</u>	<u>68</u>	<u>37</u>	<u>48</u>	<u>86</u>	<u>88</u>	<u>62</u>	<u>26</u>	<u>72</u>	<u>62</u>	<u>18</u>	<u>40</u>	<u>671</u>

Note: Figures in brackets are cumulative percentages per university programme.

TABLE 13

DURATION OF CONSULTATIONS (1976)

	<u>1-3 Days</u>		<u>4-10 Days</u>		<u>11 Days &amp; Over</u>		<u>TOTAL</u>
	<u>%</u>	<u>ACTUAL</u>	<u>%</u>	<u>ACTUAL</u>	<u>%</u>	<u>ACTUAL</u>	
Laurentian	30	19	44	28	26	17	64
McMaster	56	38	29	20	15	10	68
Ottawa	24	9	35	13	41	15	37
Queens	48	29	43	26	9	5	60
Toronto	76	65	8	7	16	14	86
Western	32	28	61	54	7	6	88
Windsor	32	20	50	31	18	11	62
Wilfred Laurier	21	6	21	6	58	16	28
York	25	18	50	36	25	18	72
Carleton	35	22	45	28	20	12	62
Lakehead	28	5	6	1	66	12	18
Ryerson	30	12	48	19	22	9	40
<b>TOTAL</b>		<b>271</b>		<b>269</b>		<b>145</b>	<b><u>685</u></b>
		<b>(40%)</b>		<b>(39%)</b>		<b>(21%)</b>	

TABLE 14

BILLINGS  
(Dollars) \*

	<u>1975</u>		<u>1976</u>	
	<u>Total</u>	<u>Per Consultant</u>	<u>Total</u>	<u>Per Consultant</u>
Laurentian	\$3,000	\$300	\$3,060	\$306
McMaster	2,220	185	2,340	195
Ottawa	900	90	2,220	222
Queens	4,440	370	3,471	267
Toronto	5,600	560	10,632	886
Western	6,704	419	8,256	516
Windsor	1,536	128	2,090	209
Wilfred Laurier	1,757	251	1,998	222
York	7,500	625	7,420	742
Carleton	1,800	180	5,020	502
Lakehead	1,197	171	372	62
Ryerson	<u>664</u>	83	<u>1,386</u>	231
TOTAL BILLING	\$37,318		\$48,265	

$$1976 \text{ Average Billing} = \frac{\$48,265}{685 \text{ clients}} = \underline{\underline{\$70}}$$

\*NOTE:

These data are misleading. The York Small Business Assistance Programme has in the past collected more than 95 percent of its billings. We understand this may not be the case in other programmes.

TABLE 15

FUNDS ALLOCATED FROM  
MINISTRY OF INDUSTRY AND TOURISM  
TO UNIVERSITY PROGRAMMES

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Laurentian	35,000	35,000	35,000
McMaster	35,000	39,970	43,460
Ottawa	30,000	32,300	24,580
Queens	39,500	40,530	42,410
Toronto	45,000	32,600	41,660
Western	53,000	53,390	54,480
Windsor	28,000	40,530	37,200
Wilfred Laurier	8,000	20,740	29,740
York	45,000	39,530	35,960
Carleton	20,000	29,900	31,200
Lakehead	13,650	23,740	23,880
Ryerson	17,000	23,630	19,060
TOTAL	\$369,150	\$411,860	\$418,630

$$\begin{aligned} 1976 \text{ Average} &= \frac{\$418,630}{685 \text{ Clients}} \\ &= \underline{\underline{\$611}} \end{aligned}$$

Detailed Findings Based on Questionnaires Mailed to Faculty Coordinators

While the main difference between programmes appeared to be that imposed by geographic location, there were differences in the operating policies and philosophies between programme coordinators. We attempted to document some of these, through the use of a research questionnaire (Appendix C) and through personal observation. Generally, coordinators were not in favour of having an increasing scale of fees for repeat clients (as was suggested by ITC) since they saw no reason for such a procedure. Some of the actual written comments were: "The aim of the program is to help small business and not to make money." "What is the point?" "Our repeat customers typically know what they want and what we can do - hence more successful engagement." It was suggested that there are other ways to discourage "clients who begin to regard the consulting service as a source of cheap labour".

Consulting assignment fees were reported as being based on an average charge per consultant-day (unless a client could not afford to pay, but needed help badly). In practice clients were probably charged what was perceived as reasonable and collectable.

Out of the 11 universities responding, only 5 reported having small business courses, per se. This finding is corroborated by previous research.<sup>7</sup> This surprisingly low teaching activity must be improved upon if universities hope to become resource centres for small business.

The most extensive small business teaching, consulting and research programme exists at York University where a formal Special Programme in Entrepreneurial Studies has been established. The following courses were available to students during the 1978/79 academic year:

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7 R.W. Kao, 8th Management Research Forum, Ryerson Polytechnical Institute, May 13, 1977.

1. Entrepreneurship and Small Business
2. New Venture Formation (Fall)
3. New Venture Formation (Winter)
4. Advising Small Business (Fall)
5. Advising Small Business (Winter)
6. Individual Research (Any Term)
7. Policy Report to the Faculty (Special Small Business Section)-  
equivalent to Masters Thesis.

The enrolment in these courses for the 1978/79 year is 250. Only about 50% of the applicants to the Advisory Small Business course at York University are accepted each term, because of limited available space in these courses.

An active small business case writing programme is under way at York. (This is also the situation at Western where Russ Knight has been preparing cases for several years.) A Faculty supported research assistant was hired for 1977/78 and 1978/79 and a paid Student Advisor has always worked along with the student-consultants in the two Advising Small Business courses. York has had year-around small business assistance programme since 1976.

Discussion with the University of Waterloo, School of Engineering, was initiated in August, 1977 to explore the format for establishing a joint York-Waterloo Invention Evaluation Service to provide consulting services for high technology new ventures. Such a service is now operational in the 1977/78 academic year.

In the 1978/79 academic year additional courses: "Managing the Smaller Business" and "Accounting and Managerial Control for Smaller Firms" will be introduced. At least one Ph. D. candidate in small business will be in residence starting September, 1979. A total of 3 faculty members will be teaching in the Entrepreneurial Studies Programme. One full time (Peterson),



two part time: R. Grasley (financial consultant, New Venture Formation Course) and P. Alley (owner of his own business, Managing the Smaller Business Course). In addition to Peterson, three other faculty members (K. Weiermaier, D. Horvath and C. MacMillan) are actively doing research in the small business area. In September, 1977 the York Small Business Assistance Programme moved into year around permanent office space and took possession of a seminar room which will be dedicated to its use year around. During 1979 the programme will be federally incorporated as the York Enterprise Development Center. At Windsor, three small business courses were available in 1977:

1. Small Business Management I: Principles
2. Small Business Management II: Field Work
3. Independent study in Entrepreneurship.

The first two courses are offered at the under-graduate level and have experienced some difficulty in achieving the minimum required enrollment of 12 to 15 students per term, required by the University. The Independent Study course, at the graduate level, is very popular. Professor Ragab has for the past several years run a small year-round consulting programme through his Independent Study course.

At Laurentian, three small business half courses were listed in 1977.

1. Operating Problems for Small Business Management: Cases
2. Venture Initiation: Lectures
3. Entrepreneurship: Field Work

None of these courses will be offered in the 1977/78 academic year, but, it is expected that the lecture and field work courses will be offered in 1979. Venture Initiation is studied from a business perspective, while Entrepreneurship focuses on the behavioural aspects of being a small businessman. It is not known if the case course will continue to be offered.

Other universities teach at most a single course which usually encourages field research into new venture formation. (See Table 16) Almost all universities

TABLE 16

AVAILABLE AND PLANNED SMALL BUSINESS OR

ENTREPRENEURIAL COURSES REPORTED

(1977 - 78)

<u>UNIVERSITY</u>	<u>NUMBER OF COURSES</u>	<u>PLANNED NUMBER OF COURSES</u>
LAURENTIAN	2	1
MCMASTER	0	N/A
OTTAWA	0	N/A
QUEEN'S	0	1
TORONTO	N/A	N/A
WESTERN	1	0
WINDSOR	3	0
WILFRID LAURIER	0	1
YORK	5	2
CARLETON	0	0
LAKEHEAD	0	0
RYERSON	1	0

reported interest in developing more courses in this area:

"The first course dealing with Small Business will be offered this fall - as a direct result of my involvement with the SBA Programme." "We do not have any courses specifically relating to small business. On the other hand, most of our courses deal with the problems of small business." "No course deals specifically with small business. However, the topics covered in at least 40 half courses could be applicable to small businesses." "Possibly some (1-2) in the future, but not yet well defined."

Concluding Comments: An Evaluation of the Ontario S.B.A. Programme

The final comment in this research will be left to a faculty member who was asked to sum up his evaluation of the consulting service in the questionnaire mailed to him. His reaction seems to capture the general tenor of all the replies:

"If the Small Business Consulting Service is to justify its use of government funds, then it must provide a useful service to the community. The goals of our programme have been set on this basis. Any benefits conveyed to students or the school are secondary to these primary objectives and are not taken into account. As a result, clients are accepted based on the benefits that the service can provide. No client has ever been accepted because of its educational value for the consultants.

Therefore, although our Service makes use of school facilities, all consultants regard themselves as employees of the Ministry of Industry and Tourism. It is the goals and objectives of the Ministry that they strive to meet.

In evaluating the programme, I feel that the Number of assignments completed and the number of dollars billed would be the most effective criteria.

The number of inquiries for assistance is a good reflection of the community support for the project; however, it is not necessarily an indication of the quality of the work done by the consultants. Because many of the businesses dealt with are in serious trouble, we have found that each year a number of clients are not able to pay, even though they are pleased with the results. Therefore, this would be the least valid evaluative method.

The practical experience gained by the students, and the improved reputation of the school are excellent side benefits, but are irrelevant to the evaluation of the programme. All information gained by the Consulting Service are strictly confidential and no faculty member has access to them."

APPENDIX A

THE ONTARIO SMALL BUSINESS ASSISTANCE PROGRAMMES

School of Commerce  
Carleton University  
Ottawa, Ontario  
K1S 5B6

School of Business Administration  
Lakehead University  
Thunder Bay, Ontario  
P7B 5E1

School of Commerce & Administration  
Laurentian University  
Sudbury, Ontario  
P3E 2C6

Faculty of Business Administration  
McMaster University  
Hamilton, Ontario  
L8S 4M4

School of Business  
Queen's University  
Kingston, Ontario  
K7L 3N6

School of Business  
Ryerson Polytechnical Institute  
50 Gould Street  
Toronto, Ontario  
M5B 1E8

Faculty of Management Studies  
University of Ottawa  
Ottawa, Ontario  
K1N 6N5

Faculty of Management Studies  
University of Toronto  
246 Bloor Street West  
Toronto, Ontario  
M5S 1V4

School of Business Administration  
The University of Western Ontario  
London, Ontario  
N6A 3K7

School of Business & Economics  
Wilfred Laurier University  
Waterloo, Ontario  
N9B 3P4

Faculty of Business Administration  
University of Windsor  
Windsor, Ontario  
N9B 3P4

Faculty of Administrative Studies  
York University  
4700 Keele Street  
Downsview, Ontario  
M3J 1P3

APPENDIX B

DEFINITION OF TABLE 5 CATEGORIES

(1) FINANCE

Budgeting/Cash Flow

Total planning and control for both current and future operating periods. Cash flow being a subset of the total budgeting process indicates the cash needs of the firm on a monthly basis.

Financing Advice

Information regarding the possible areas of financing for a firm (both public and private sector) researched and presented.

Loan Application Assistance

Preparation of statements and/or reports required by a specific lender (Chartered Bank, FBDB, etc.) and accompanying client to make the presentation.

Investment Decision

An analysis of alternative investment opportunities. This includes capital budgeting decisions and possible areas for excess cash investment.

(2) ACCOUNTING

Bookkeeping Systems

The design and implementation of a new or refinement of an existing bookkeeping system for the recording of business transactions and production of relevant information.

Internal Control

The study, recommendation and implementation of a firm's paper and work flow to safeguard the proper maintenance of assets.

Cost Control/Systems

The determination of an organization's costs of doing business with recommendations for decreasing costs while increasing efficiency. In manufacturing concerns this may include the implementation of a job costing system.

Financial Analysis

An analysis of operations on both a historic and/or pro forma basis in order to improve future financial and operational performance.

Advice

General advice relating mainly to matters such as the collection and payment of Provincial and Federal sales taxes.

(3) MARKETING

Product Development

Advice as to the physical characteristics of a product to meet user needs.

Marketing Survey

The research, preparation, implementation and analysis of a program designed to quantify a perceived need to serve as a basis in deciding whether or not to



produce and market a proposed product, or how best to market an existing product.

Product Research

Investigation into the existence of a proposed unfilled market need to determine if one so exists to justify market surveys and product development.

Sales/Advertising

Recommendations as to how a firm should proceed in its attempt to increase sales.

Import/Export Advice

Assistance in obtaining information and/or advising on possible import/export opportunities.

(4) POLICY

Business Plan

Creating a "blueprint" for the firm to follow in all business areas in order to meet its objectives. This is achieved through researching the firm, its principals and employees and the industry itself.

Overall Strategy

Advising on both possible and preferred courses of action for the firm in total in order to achieve growth and profitability.

Specific Segment Evaluation

Analysis and implementation of recommendations to achieve better performance within a specific segment, i.e. accounting, marketing, production, etc.

Advice

General advice on business procedures.

(5) ORGANIZATIONAL BEHAVIOUR

Job Description/Classification

Preparation of written documents detailing the duties and responsibilities inherent in positions within the organizational structure of a business.

Management Evaluation

A study on the effectiveness of management performance with recommendations for improvement.

Employee Evaluation

A study of present employee performance and/or future needs with recommendations to maximize employee output.

Job Search

Performing the personnel function of a firm to place a qualified individual in its employ.

Incentive Policies

The research, design and implementation of compensation systems used as a tool to motivate employees.

(6) PRODUCTION

Production Scheduling

The study of a firm's production process with recommendations for improvement.

Inventory Planning

Research into past and future sales and production data to determine required levels of inventory, reorder quantities, etc.

Inventory Control

The design and implementation of systems in order to safeguard inventories and provide information for management.

Planning/Layout

Recommendation of approaches to minimize costs of production while maximizing efficiency through alternative plant layouts and work flow.

APPENDIX C

ONTARIO SMALL BUSINESS ASSISTANCE PROGRAMME

RESEARCH STUDY QUESTIONNAIRE

(1) Do you feel that there is a relationship between client size (i.e. sales, number of employees, etc.) and length of consulting assignment?

No \_\_\_\_\_

Yes \_\_\_\_\_ (Please explain briefly)

(2) Do you feel that the incidence of student consultants obtaining employment in small businesses upon graduation is enhanced by working for the Small Business Assistance Programme?

More \_\_\_\_\_ Less \_\_\_\_\_ No Difference \_\_\_\_\_

(3) From your experience, do you think that Small Business Assistance consultants are more likely to start their own businesses than other students?

Yes \_\_\_\_\_ No \_\_\_\_\_ No Difference \_\_\_\_\_

(4) Are there any types of problems which your Programme will not handle (e.g. technological, legal, other)?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, please list problem type and to whom the client would be referred to for assistance.

Problem Type

Referred To

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(5) In your Programme, what percentage of clients are repeat customers?

0 - 10% \_\_\_\_\_ 11 - 25% \_\_\_\_\_ 26-50% \_\_\_\_\_ 50% + \_\_\_\_\_

(6) What class of small businesses comprise the largest number of repeat clients?

Agriculture \_\_\_\_\_ Forestry \_\_\_\_\_ Fishing and Trapping \_\_\_\_\_

Mines, Quarries and Oil Wells \_\_\_\_\_ Manufacturing \_\_\_\_\_

Construction \_\_\_\_\_ Transportation, Communication \_\_\_\_\_

Trade \_\_\_\_\_ Finance, Insurance, Real Estate \_\_\_\_\_

Service \_\_\_\_\_ Retail \_\_\_\_\_ Wholesale (Jobber, etc.) \_\_\_\_\_

(7) What would you think about having an increasing scale of fees for repeat customers?

In Favour \_\_\_\_\_ Not In Favour \_\_\_\_\_

Please explain.

(8) What is the maximum number of courses dealing with small business that a student consultant could take on the average at your University?

Total Number Possible \_\_\_\_\_

Comments:

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TECHNOLOGICAL INNOVATION STUDIES PROGRAM  
PROGRAMME DES ÉTUDES SUR LES INNOVATIONS TECHNIQUES  
REPORTS/RAPPORTS

<u>AUTHOR(S)/AUTEUR(S)</u>	<u>UNIVERSITY/UNIVERSITÉ</u>	<u>REPORT TITLE/TITRE DE L'OUVRAGE</u>
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