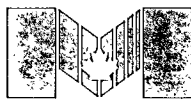


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# **Needs Assessment of Small and Medium Enterprises**

## **Phase I Final Report**

**Prepared for:**

**Entrepreneurship and Small Business Office  
Industry Canada**

**Prepared by:**

**Canadian Manufacturers' Association (CMA)  
in association with  
Energy Pathways Inc. (EPI)**

**March 1996**

## **The ON-SITE/À LA SOURCE Program**

The ON-SITE/À LA SOURCE program is an innovative business-government partnership that has been uniquely successful in meeting the needs of industry and creating value-added employment opportunities for young professionals.

Sponsored by Canadian Manufacturers' Association (CMA), the program places qualified unemployed individuals in companies and institutions for six-month terms, to assist with activities that are incremental to the regular business of the organization and result in positive change. The wages of ON-SITE employees are paid through the Unemployment Insurance Section 25 Job Creation Program of Human Resources Development Canada (HRDC). The participating employers pay \$100 per week to cover the costs of program administration.

ON-SITE is managed for CMA by Energy Pathways Inc. (EPI), a private company which developed the original concept in 1983 and operated ON-SITE projects in various provinces over the next ten years. CMA assumed sponsorship of the program in 1993, and ON-SITE is now a national program delivered from EPI offices across Canada. Overall, the program has placed more than 3,000 people with more than 1,700 employers since 1983.

EPI manages all program activities and reporting. Activities include marketing of the program to employers; helping employers develop appropriate job descriptions; identifying and pre-screening candidate employees; referring the most appropriate candidates to employers for interviews; administering the placement process; and providing technical and professional development support to ON-SITE workers.

Most ON-SITE employees are young (the average age is 29), and for half, the ON-SITE placement represents their first job in their field of study. They generally have university or college degrees in engineering, science, environmental studies and related fields.

The placements of highly qualified young professionals for six-month terms have proven to be very beneficial both to individual workers and to participating companies, as verified through an independent evaluation of the program by Price Waterhouse in 1995. One-third of ON-SITE workers are hired by their host employers at the end of their work terms, and most of the others find employment elsewhere in their field. More than 97 percent of participants are employed within three months of the end of their terms.

In 1996, ON-SITE received approval in principle from HRDC for three years' UI funding, at a level of \$6.8 million for year 1 (1996-97).

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## **Executive Summary**

### **Background**

The ON-SITE/À LA SOURCE program has clearly demonstrated that many workplaces have unrecognized needs for specialized human resources. Activities that cut across many industry sectors all potentially offer opportunities to create incremental positions and help small and medium enterprises (SMEs) improve their competitiveness. Thousands of legitimate positions for young professionals exist but are currently being overlooked by employers. If the service framework, risk management and quality control offered through ON-SITE could be applied to these activities, the program could be expanded to benefit significantly more employers and young professionals.

ON-SITE responds to a number of important employment programming needs. It is the largest private-sector sponsored Section 25 project, and one of the best working models of active income support. The bulk of ON-SITE participants are young (under 30), reflecting another key priority in employment programming.

Recognizing that ON-SITE offers significant untapped potential to assist SMEs in strategic areas, Industry Canada and CMA co-funded an assessment of SME needs. The objective was to identify a short-list of activities that cut across many sectors, for which the provision of human resources can help SMEs improve their competitiveness and productivity, and with which unemployed young professionals would be qualified to assist. The activity areas represent new or emerging areas of interest for Canadian employers, because gaining experience in such areas offers the most promise for the ON-SITE employees themselves.

The most promising of these activities will become new streams of ON-SITE, if additional funding is available from HRDC. The expanded ON-SITE program will be an important part of Industry Canada's proposed Youth in Innovative Business Program.

This report summarizes the results of the first phase of the SME needs assessment, which included a preliminary scan of experts and a limited survey of SMEs. Phase II of the study will consist of detailed surveys of the most promising activities. In determining which activities offer the most potential for further investigation, factors of program operating efficiency as well as SME needs were considered.

### **General Findings on Opportunities for Qualified Young Professionals**

Almost all employers with SMEs agree that "highly qualified young people have had a very tough time entering the job market over the last few years". Furthermore, few think either their industry or the Canadian economy as a whole has done a good job of providing job opportunities for highly qualified young people.

According to SME employers, the most serious problem facing young people seeking work is the lack of practical work experience. Most employers do not think that young professionals have the opportunities they need to gain practical work experience once they complete their education, and most believe that young people need some type of help to enter the work force.

Young people agree, according to the 1995 Price Waterhouse evaluation of ON-SITE. The main reason that young professionals choose to participate in ON-SITE is to gain experience in order to better compete in the labour market.

### **SME Perspectives on Needs**

Employers were asked to rate the importance of 12 different factors that could affect the growth and competitiveness of their businesses over the next three to five years. The highest rating was given to improved customer service. Other factors given high ratings were: better use of advanced technologies for production; innovations (product or service development, product design, R&D); international market development; better use of computers for management and administration; quality management (e.g., ISO 9000); and better

use of computers for marketing and communications. Respondents provided detailed qualitative comments on specific activities within these areas which would be important to their firms.

### **Opportunities for Young Professionals to Meet SME Needs**

After rating the importance of different factors contributing to growth and competitiveness and identifying specific needs to achieve growth, employers were asked to rate their firms' job opportunities for highly skilled young people in these areas over the next 24 months. Overall, for each of the 12 areas assessed, about half of the employers indicated that there would be at least some job opportunities.

The areas rated as having the greatest number of opportunities for young professionals were: advanced technologies for production; customer service; and innovations (product or service development, product design, R&D). Five other activities were rated as having a moderately high number of opportunities: computers for management and administration; quality management (e.g., ISO 9000); computers for marketing and communications; international market development; and domestic market development.

The marketing, assistance and risk-reduction structure provided by ON-SITE can help companies crystallize unmet needs into positions for qualified young people. It is worth noting that environmental management was ranked fairly low by most respondents, yet more than 50 percent of ON-SITE placements are in the environmental field. This suggests that ON-SITE could be even more effective if expanded into activities that are rated as high priorities by SMEs.

### **Findings on Other Themes and Issues**

Most employers usually have younger staff working under the close supervision of an experienced staff member. Employers reported that in a new employee's first six months, an average of about one-quarter of the time of a more senior staff member is required for supervision. Fewer than half of employers reported that it is "easy" to find

suitable candidates when they are recruiting and hiring young people for professional-level positions.

### **Implications of Findings**

The Phase I research revealed seven new streams in which SMEs are interested, and for which there may be moderate to significant potential for young professionals to help them achieve their business aims. Based on analysis of SME needs and requirements for efficient ON-SITE program operation, the following streams were selected for further investigation in Phase II: computers for management and administration; new market development (international); new market development (domestic); customer service; and computers for marketing and communications.

These streams merit further surveying not only because they are of demonstrated interest to SMEs, but because they offer opportunities for graduates with a general range of skills. The bulk of "traditional" ON-SITE candidates have been science, engineering and environmental studies graduates; these new streams offer the potential to bring the benefits of ON-SITE to a more diverse group of graduates with broader skill sets. The range of business sectors interested in these areas is sufficiently broad that the streams offer good potential for the job definition and matching services provided by ON-SITE.

The use of advanced technologies for production and innovations encompass very specific activities and require a more specific set of skills, which would make the marketing and matching processes more demanding. Nevertheless, they offer significant potential and merit further investigation.

Phase I findings indicate strong potential for a significant expansion of ON-SITE to address priority needs of SMEs. Expansion to include non-UI recipients as well as UI recipients would enable a greater number and variety of unemployed youth to benefit from the program, and would further increase ON-SITE's ability to efficiently provide appropriate candidate employees to SMEs. As the domestic internship component of Industry Canada's proposed Youth in Innovative Business Program, ON-SITE could create 10,000 high-quality positions over the next five years by combining new and existing HRDC resources.

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Preliminary Scan: Briefing Document and List of Respondents  
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## **1.0 Introduction**

The ON-SITE/À LA SOURCE program has clearly demonstrated that many workplaces have unrecognized needs for specialized human resources. By placing an individual "on-site" in an organization for six months, ON-SITE demonstrates to management the benefits of augmenting human resources in order to stimulate innovation and improvement. As a result, many employers decide to keep their project workers on after their work terms end.

In the past, ON-SITE focused on areas where the strategic application of human resources could reduce the waste of materials and energy, and/or improve safety and quality. These streams of activity meet the requirements of the Section 25 Job Creation Program, which stipulate that the employment created be incremental (i.e., not replace or compete with an existing position), and that the provision of a program employee not provide an unfair competitive advantage to the employer.

ON-SITE experience has strongly indicated that there are additional opportunities to create incremental positions and help small and medium enterprises (SMEs) improve their competitiveness. Activities that cut across many industry sectors (international market development, integration of new technologies into the workplace, enhancement of business management and administration, customer service, etc.) all potentially offer such opportunities. Thousands of legitimate positions for young professionals exist but are currently being overlooked by employers. If the service framework, risk management and quality control offered through ON-SITE could be applied to these activities, a dramatic increase in program scale would ensue: the program could create 10,000 positions over the next five years by combining new and existing HRDC resources.

Recognizing that ON-SITE offers significant untapped potential to assist SMEs in strategic areas, Industry Canada and CMA agreed to co-fund an assessment of SME needs that could be serviced through the program. The objective of this assessment was to identify a short-list of activities that cut across many sectors, for which the provision of human resources can help SMEs improve their competitiveness and productivity, and with which unemployed young professionals would be qualified to assist. The most promising of these activities will then become new streams of ON-SITE, if additional funding is available from HRDC. The expanded ON-SITE program will be an important part of Industry Canada's proposed Youth in Innovative Business Program.

This report summarizes the results of the first phase of the SME needs assessment, which included a preliminary scan of experts and a limited survey of SMEs. Phase II of the study will consist of detailed surveys of the most promising activities.

A number of new activity areas were investigated in the Phase I research. The activity areas investigated represent new or emerging areas of interest for Canadian employers, because gaining experience in such areas offers the most promise for the ON-SITE employees themselves.

It is important to remember that ON-SITE is a completely voluntary program—UI recipients choose to work during their benefit periods in order to gain the experience they feel they need to compete in the job market. In a third of the cases, the experience results in a position with the host employer. For the remainder of ON-SITE employees, the usefulness of their placements will be determined by the extent to which the experience they gain is relevant to their future job search.

The more closely an ON-SITE employee's experience matches widespread new and emerging employer needs, the better and more immediate the payback for the participant. The areas investigated, like existing ON-SITE streams, represent change activities in Canadian workplaces. For young professionals, one of the best ways to ensure future employability is to gain experience in managing change.

From the employers' point of view, there are many subject areas and particular sectors in which the assistance provided by ON-SITE would undoubtedly be useful. However, in determining which new streams are most appropriate, factors of program efficiency and cost must also be considered. The ON-SITE approach works best in subject areas that are of interest to a wide range of employers and for which the skills required are readily available among recent graduates. In essence, the larger the employer and candidate pools, the more likely it is that matches between employers and candidates can be made efficiently and effectively. In determining which activities offer the most potential for further investigation, factors of program operating efficiency as well as SME needs were considered.

## **2.0 Summary of Phase I Methodology**

### **2.1 Preliminary Scan**

The preliminary scan involved telephone contacts with government and industry association representatives, human resource and labour market specialists and subject area specialists. The briefing document used as the guide for these consultations is provided in Appendix A, along with a list of those consulted.

### **2.2 In-depth Industry Scan**

#### **2.2.1 Survey Methodology**

The methodology for the in-depth industry scan employed a self-administered, mail-back questionnaire distributed to SME employers in five industry sectors:

- ◆ manufacturing;
- ◆ transportation and communications;
- ◆ construction;
- ◆ finance, insurance and real estate; and
- ◆ services.

The survey was sent to a sample of 200 employers randomly selected from a business data base procured from a leading industry supplier. The questionnaire was also distributed to members of the Boards of Directors of provincial branches of the CMA.

The design of the survey questionnaire was based upon the results of the preliminary scan. The questionnaire was designed to collect both quantitative and qualitative information. The quantitative sections asked questions dealing with the labour market for young professionals, barriers to hiring young people, factors related to SME growth and competitiveness, job opportunities for young professionals, and characteristics of the employers. The qualitative sections were designed to collect information about employer-defined activities which would contribute to the growth and increased competitiveness of the respondents' firms.

The survey included a single wave questionnaire mailout with a reminder letter sent 10 days later. Some telephone reminder calls were also made to some companies.

#### **2.2.2 Sample Characteristics**

A total of 62 completed questionnaires were received by the time of writing. Some of the key sample characteristics are as follows:

##### *Industrial Sector*

- ◆ 33 firms in manufacturing
- ◆ 29 in other sectors



*Position of the Respondent*

- ◆ 37% owners, presidents or CEOs
- ◆ 35% senior managers, executive officers or general managers
- ◆ 24% other management positions

*Experience of Respondents With Their Companies*

- ◆ respondents have owned or been employed by their firms for an average of 11 years
- ◆ 50% of respondents have been with their firms for 8 years or less; 50% have been with their firms for 9 years or more

*Size of the Firms*

- ◆ 53% of respondents represent firms with 100 employees or fewer (at the respondents' location); 47% represent firms with more than 100 employees
- ◆ respondents represented firms with an average of 180 employees
- ◆ 54% of firms operate at a single location; 46% operate at multiple locations including 19% with offices or facilities in other countries

*History of Firms*

- ◆ respondents represented firms that have been operating for an average of 36 years
- ◆ 50% of firms have been operating for 29 years or less; 50% have been operating for 30 years or more

### **3.0 General Findings on Job Opportunities for Qualified Young Professionals**

Experts interviewed during the preliminary scan responded positively to the idea of an expansion of ON-SITE into other areas if appropriate matches can be made between industry needs and the skills of unemployed young professionals. It was noted that young ON-SITE workers should not be responsible for work that is "mission critical". The most successful approach is one that places individuals in situations where they are exploring new fields of activity or looking a new ways to make improvements to existing activities.

#### **3.1 Quantitative Findings**

##### ***3.1.1 Opinions About The Labour Market for Qualified Young Professionals***

Almost all employers with SMEs agree that "highly qualified young people have had a very tough time entering the job market over the last few years": 88% of survey respondents agreed with this statement, including 35% who "strongly agreed" (a score of 7 on the 7 point scale). Among employers with companies with over 100 employees, 95% agreed with this statement.

Furthermore, few SME employers think either their industry or the Canadian economy as a whole has done a good job providing job opportunities for highly qualified young people. Overall, just 22% agreed that the Canadian economy as a whole has done a good job providing job opportunities for highly qualified young people. Not many more, just 25%, agreed that their industry has been successful at providing jobs for young people.

Employers are much more positive about their own firms' successes in bringing highly skilled young people into their organizations. Overall, 41% agreed that their "organization has been successful at bringing in new talent in the form of highly skilled young people." These findings are similar for both small and medium-sized employers.

##### ***1) The Need for Work Experience***

Most employers do not think that young professionals have the opportunities they need to gain practical work experience once they complete their education. Fewer than one in five (17%) agreed that highly qualified young people have adequate opportunities to gain work experience. Employers with more than 100 employees are even less likely to agree: just 9% think young professionals have adequate work experience opportunities compared to 28% of employers with fewer than 100 employees.

Most employers believe that young people need some type of help to enter the work force. Almost two-thirds (63%) disagreed with the statement that "bright and talented young people will find jobs on their own and do not need any help to enter the labour force"; only 22% agreed with this statement. Smaller firms with fewer than 100 employees are far more likely than larger firms to agree that young people should find jobs on their own: 36% and 10%, respectively.

### ***3.1.2 Other Difficulties Facing Young People Entering the Job Market***

#### ***1) Skills and Characteristics of Young People***

Employers with SMEs were asked about the barriers which young people encounter when trying to get jobs in their respective industries. These questions dealt with two major types of barriers to labour force participation: 1) the skills and characteristics of the prospective young worker; and 2) hiring problems faced by employers, including costs and changing human resource practices.

According to SME employers, the most serious problem facing young people seeking work is the lack of practical work experience (see Table 1). This is a more serious problem than any skill or attitudinal deficiencies of prospective young workers or any barriers to hiring faced by employers. Overall, 85% of employers cite a lack of practical work experience as at least a moderate problem, including 35% who think it is a serious problem. This finding is consistent for both small and medium sized companies. Manufacturers are only slightly less likely to think that a lack of work experience is a problem for young people getting jobs (75%).

The enthusiasm and commitment of young people is not a problem for most employers; a majority (57%) do not see this as a problem. Only 21% of employers consider a lack of enthusiasm and commitment to be a serious problem. This result is similar for different sizes of employers and employers in different sectors.

Most employers, however, think that young people have unrealistic expectations about their value in the job market. Overall, 70% of employers indicated that this is at least a moderate problem for young people trying to get a job; 35% think it is a serious problem. Smaller employers with fewer than 100 employees are more likely to see this attitudinal problem of young people as a barrier to jobs; 83% see this as at least a moderate problem and 46% think it is a serious problem. Employers in sectors other than manufacturing (i.e., non-CMA members) are also more likely to see the unrealistic expectations of young people as a barrier to jobs; 45% think it is a serious problem.

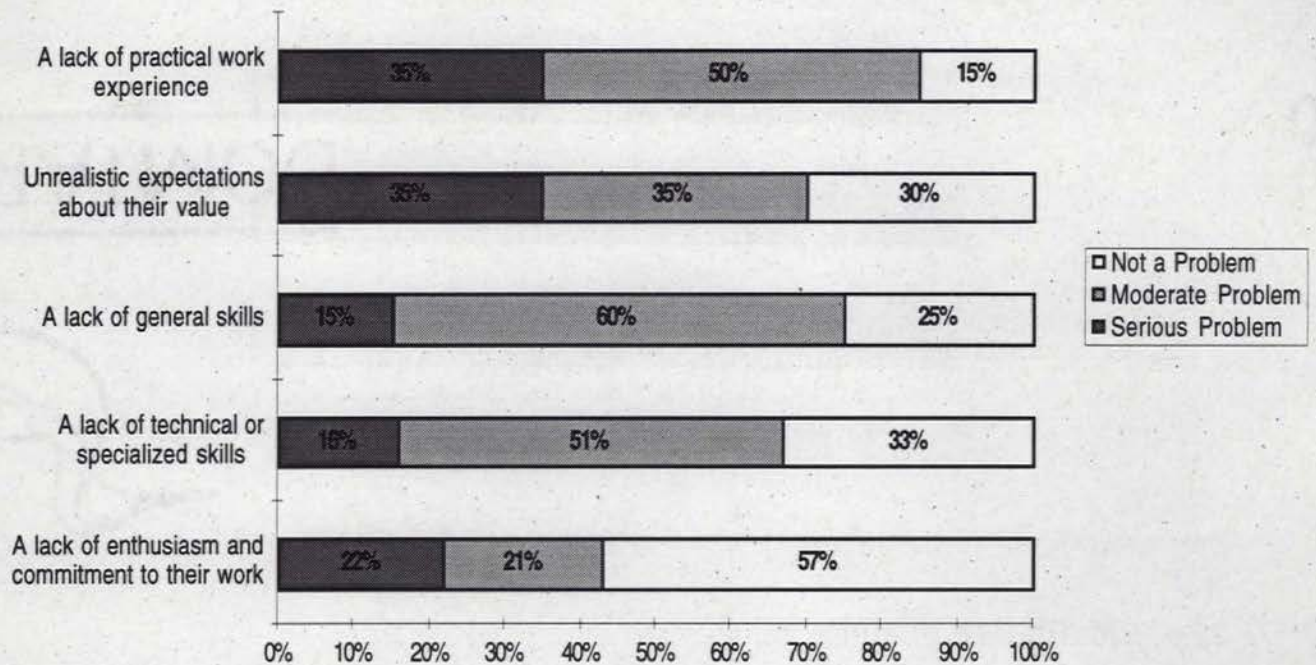
Skill deficiencies, whether general skills in language, mathematics and communications or more technical or specialized skills, are considered by most employers to be only moderate barriers to labour force participation for young people. For general skills, the most frequent response (50% of employers) was a four (moderate problem) on the seven point scale. Just 15% thought a lack of general skills in language, mathematics and communications is a serious problem.

These results were very similar for the question about more specialized or technical skills. Non-manufacturers were somewhat more likely than manufacturers to think that deficiencies in both general and specialized skills are a serious problem for young people (20% compared to 10% for manufacturers).

#### ***2) Barriers for Employers***

Employers feel that the biggest problem they face in trying to bring qualified young people into their organizations is changing human resource practices, including downsizing, outsourcing and greater use of contract workers. Almost three-quarters of employers (72%) rated changes in human resource practices as a problem, including 46% who consider it a serious barrier to hiring young people.

**Table 1: Skill and Attitudinal Barriers to Young Professionals Getting Jobs**



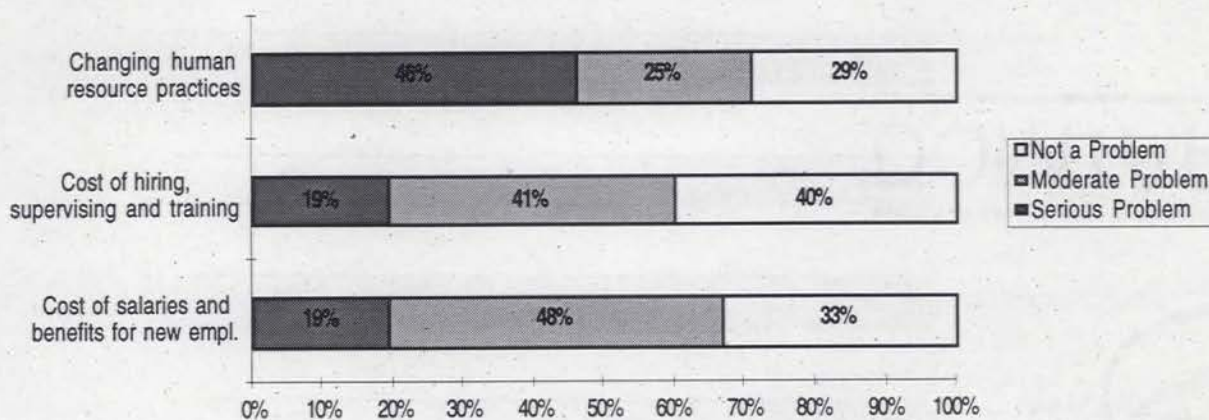
Note: "Serious Problem" = 6, 7 on the 7-point scale; "Moderate Problem" = 4, 5; "Not a Problem" = 1, 2, 3.

The costs of hiring young workers, whether the costs of hiring, supervising and training young workers or the direct costs of salaries and benefits, are only considered to be moderate barriers to labour force participation for young people by most employers. Almost half (41% and 48%, respectively), rated these problems as moderate barriers. Just 19% and 20%, respectively, rated these problems as serious barriers (6 or 7 on the 7 point scales).

Non-manufacturers are more likely to consider these types of costs as more serious barriers: 26% rated the costs of salaries and benefits as a serious problem (compared to 10% of manufacturers) and 28% rated the costs of hiring, supervising and training young workers as a serious barrier (compared to 5% of manufacturers). The responses for small and medium sized companies (i.e., fewer or more than 100 employees) were very similar for the two questions about costs. The responses to these questions are summarized in Table 2.



Table 2: Employer Barriers to Providing Jobs for Young Professionals



Note: "Serious Problem" = 6, 7 on the 7-point scale; "Moderate Problem" = 4, 5; "Not a Problem" = 1, 2, 3.

### 3.2 Qualitative Findings

Qualitative comments on problems faced by young people in the job market reinforce the quantitative findings. The major problems cited were downsizing practices, the consequent competition from more experienced unemployed individuals and scarcity of available jobs; and the lack of practical workplace experience among young professionals. High payroll taxes were mentioned by a few respondents. Comments included the following.

*"If companies can hire experienced people for the same money as new grads, they will hire those most experienced. It is expensive to train."*

*"Je pense que l'enseignement devrait davantage fournir une expérience pratique. L'apprentissage théorique est certes nécessaire, mais il y a toujours un manque au niveau des tâches à exécuter sur le marché du travail."*

*"There are too many applicants for too few jobs."*

*"Greatly increased levels of productivity achieved by a combination of product innovation and process innovation have greatly reduced the number of jobs available to younger workers. Companies are reluctant to arbitrarily move older employees out to make room for younger workers."*

There are limits to what the ON-SITE approach can accomplish in the face of these challenges—for instance, the program cannot reverse current trends towards downsizing and outsourcing. However, ON-SITE does provide young professionals with an opportunity to gain the practical experience that employers demonstrably want, and to compete in an increasingly tight job market. Some ON-SITE workers go on to form their own companies or work on contract rather than in "traditional" jobs. Whatever form their work opportunities ultimately take, the practical experience they gain in their ON-SITE placements stands them in good stead.

## **4.0 SME Perspectives on Needs: Factors Contributing to Growth and Competitiveness**

The preliminary scan indicated that a number of activities were likely to be of interest to SMEs, including adoption of computers and information management technologies; improvements to business management and administration capabilities, market development, and basic innovation in product and process engineering. These findings were confirmed by the detailed industry scan. For some activities, most notably customer service, the results of the detailed industry scan indicate more interest than was revealed by the preliminary scan. What this interest means to ON-SITE is something to be explored in Phase II (see section 7).

### **4.1 SME Perspectives on Needs: Quantitative Findings**

Employers were asked to rate the importance of 12 different factors that could affect the growth and competitiveness of their businesses over the next three to five years. The list of these factors was prepared on the basis of factors identified during the initial consultations with experts. The survey results provide further evidence with which to establish employer priorities among the different factors contributing to their growth and competitiveness.

Employer ratings of the importance of the 12 factors fall into three categories. It should be noted that the sample size of this survey does not permit us to make statistical inferences about the overall relative ranking of factors within these three broad groupings. The results are illustrated in Table 3.

The highest rating—the most important factor—was given to improved customer service. Almost 80% of employers rated improved customer service as either a very important or extremely important factor (6 or 7 on the 7 point scale). The overall average score on the 7 point scale was 6.2. The proportion of employers who rate customer service as important is highest among the non-CMA respondent sample: 90% of these employers rated improved customer service as either a very important or extremely important factor. For CMA members, the corresponding figure is 60%.

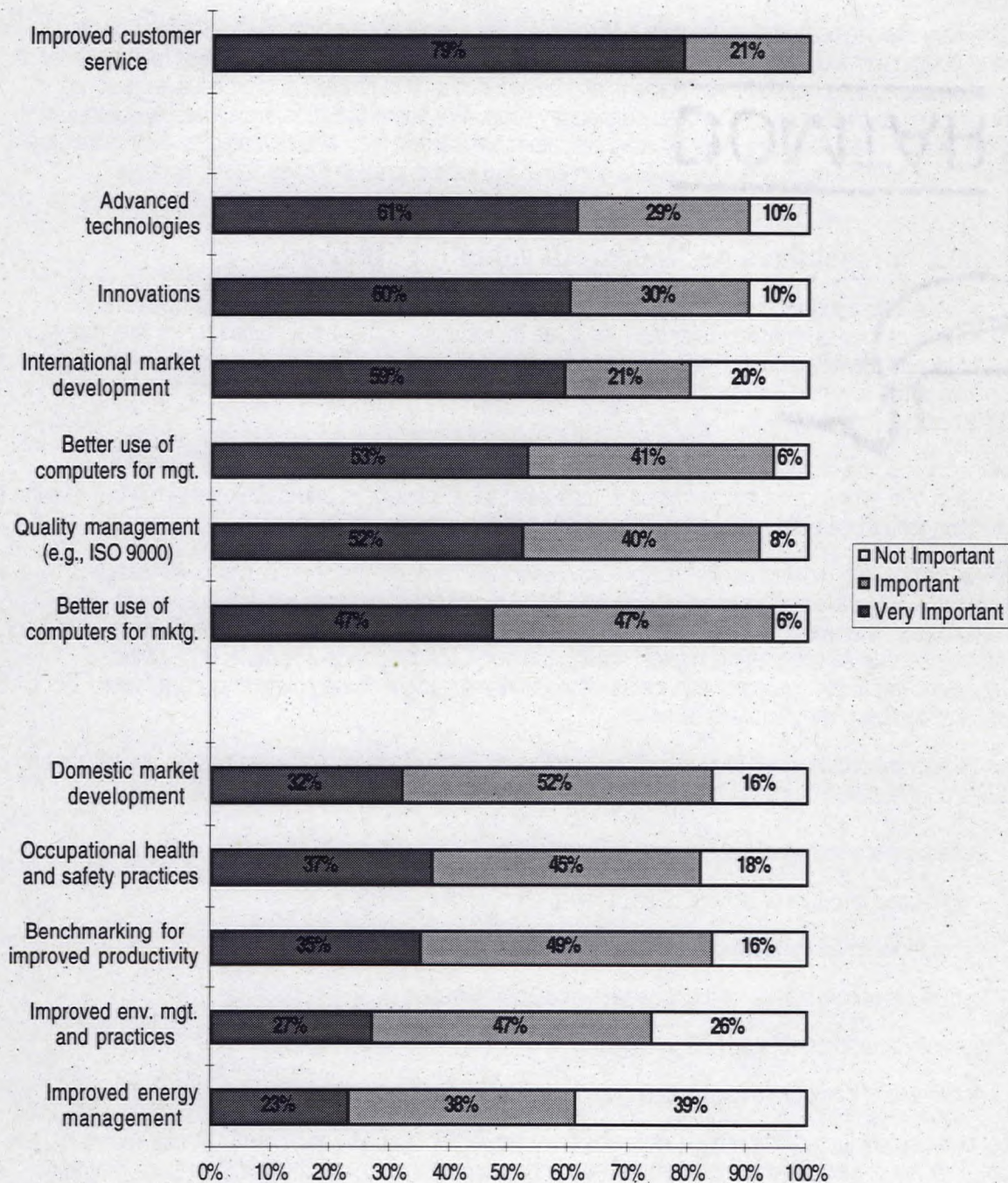
Six other factors were also given high ratings by employers. Each of these six factors has an average rating of at least five on the seven point scales:

- ◆ better use of advanced technologies for production;
- ◆ innovations: product or service development, product design, R&D;
- ◆ international market development;
- ◆ better use of computers for management and administration;
- ◆ quality management (e.g., ISO 9000); and
- ◆ better use of computers for marketing and communications.

For most of these six factors the ratings were relatively similar for the CMA and non-CMA member sub-samples. The major exception is international market development, a factor which 80% of CMA members rated as either very important or extremely important; the corresponding figure for non-CMA members is 45%.



**Table 3: Importance of Different Factors to Growth and Increased Competitiveness**



Note: Very Important = 6,7 on the 7-point scale; Important = 4,5; and Not Important = 1,2,3

Five other factors were rated by employers as less important for the growth and competitiveness of their businesses over the next three to five years. Each of the following five factors received an average rating of between four and five on the seven point scales:

- ◆ domestic market development;
- ◆ improved occupational health and safety practices;
- ◆ analysis/benchmarking for improved productivity;
- ◆ improved environmental management and practices; and
- ◆ improved energy management.

For three of these five factors, the ratings of the non-CMA members in the sample were higher than those of CMA members. For analysis/benchmarking for improved productivity, 45% of companies provided a rating of six or seven on the scale (compared to 20% of CMA members). For improved occupational health and safety practices, 48% of companies provided a rating of six or seven on the scale (compared to 20% of CMA members). For improved environmental management and practices, 34% of companies provided a rating of six or seven on the scale (compared to 15% of CMA members).

## **4.2 Qualitative Findings**

### **4.2.1 Factors Contributing to Growth and Competitiveness**

Qualitative responses to question 3 on needs for growth and competitiveness emphasized the importance of globalization and increased competition, as well as the need for customer service, in determining priorities. Comments included the following.

*"All of these factors {advanced technologies, international market development, innovation, environmental management and customer service} are related to improved customer service and the image of our company. Without being constantly aware of these factors, the company will cease to grow."*

*"Our computer expertise is seriously lacking and our response time to customer inquiries needs to be quicker."*

*"Il devient primordial de viser une augmentation de la compétitivité. La gestion des ressources humaines devient un secteur de haute gérance."*

*"Potential growth in our business is in the international arena. Winning this business and maintaining it will be done on the basis of product quality, cost and service."*

### **4.2.2 Meeting Specific Needs to Achieve Growth**

Use of computers to improve administration and management, use of computers to improve marketing and communications, use of advanced technologies for production, and international market development were all areas that had been identified by ON-SITE managers as offering good potential for recent graduates.

Computerization and application of new technologies are new, rapidly growing fields in which up-to-date academic and technical skills can be as important as, or more important than, industry experience.



International market development is an incremental activity about which many companies know very little, and the research skills that an ON-SITE worker can bring to a company can be very valuable in the initial stages of determining export potential and export-readiness. These areas also offer potential for graduates with a wide range of skills, including social science and business graduates as well as the more "typical" ON-SITE profile of science and engineering graduates.

The intention of question 4 of the questionnaire was to obtain more information on activities that businesses consider important in each of these streams, in order to determine the extent to which ON-SITE employees could assist SMEs in these areas.

### ***1) Use of Computer Technologies***

Questionnaire respondents were asked to indicate three specific areas related to the use of computer technologies that would help to achieve growth in their businesses.

#### ***Computers for Production***

The greatest number of responses related to improving current production methods. Manufacturers in particular were interested in this, citing interest in computer-assisted design (CAD) and CAD output to control manufacturing (CAD/CAM), production planning, materials requirement planning and various specific high-technology systems. These responses were considered along with responses to question 5 which dealt with new technologies for production (see "Other Areas Rated as Important").

#### ***Training and Education***

The next major area of interest was training and education in computer use and software. As one respondent noted, "we spend little on software training, yet expect employees to be proficient." This is an area where ON-SITE employees could make a contribution.

#### ***Business Management and Administration***

A number of studies have noted that SMEs are weak in the area of business management and administration, and this point was raised by several interviewees during the preliminary scan. It would be extremely difficult for a young ON-SITE employee to introduce a strategic planning mentality, change management attitudes or impose new management systems on a company. However, introduction of computerized management and administration systems is an area where recent graduates can bring valuable new skills to SMEs. The skills required are readily available among recent graduates: the task does not require computer science graduates. Science, social science, business and engineering graduates should all have appropriate computer skills to undertake such work.

ON-SITE management anticipated that many companies would recognize that introducing computerized systems offers the potential to increase administrative and management efficiency, and this was borne out by the questionnaire comments. There was strong interest in the use of computers to improve business management and administration. General business management and administration, human resources management, decision timeliness, information generation from data bases and labour/productivity tracking were some of the specific activities mentioned.

#### ***Internet***

As might be expected, businesses also expressed strong interest in Internet activity. This is in line with the results of a recent survey by the Canadian Federation of Independent Business, which indicated that while only about 15 percent of small businesses were already connected to the Internet, usage is expected to double over the next year.

### ***Computers for Marketing and Communications***

Use of computers for marketing and communication was the other major area of interest. Customer data base marketing, sales analysis and use of the Internet for marketing were among the activities noted. There was also interest in establishment of computer networks.

## ***2) New Market Development***

Questionnaire respondents were asked to indicate three specific areas related to marketing that would help to achieve growth in their businesses.

### ***Market Analysis/Market Studies***

The activity of greatest interest was that of market analysis/market studies. This is an area where recent graduates with research and business skills could potentially be very helpful.

### ***Marketing and Communications***

The other major area of interest was in marketing/sales/communications/follow-up on market leads. There is considerable potential for ON-SITE-type employees to assist with this sort of work. Specific areas noted include presence at trade shows, following up on market leads, international communication (particularly in the case of candidates with foreign language skills), use of the Internet for communications and marketing in export markets, and preparation of sales materials.

### ***Research into Trade and Documentation Procedures***

Companies also indicated a need for more information on trade and export documentation procedures. This work is well-suited to the qualifications of ON-SITE employees: it is labour-intensive, requires good research skills and does not require a great deal of industry experience.

### ***Other***

Other areas in which there was some interest included determination of modifications needed in products and procedures for export markets, and competitive analysis/niche identification.

Determining modifications needed to existing products and procedures for export markets would require more technical skills and understanding of the product line, but a graduate engineer could assist with this work under appropriate supervision. Similarly, a business graduate could assist with the research needed to carry out a competitive analysis of new markets.

## ***3) Other Areas Rated as Important***

Question 5 asked respondents to provide more detail on activities relevant to areas, other than computers and marketing, which they considered very important for competitiveness.

### ***New Technologies for Production***

Activities noted under new technologies for production covered a wide range.

A number of respondents indicated interest in very specific systems or technologies, ranging from CAD/CAM, materials requirement planning, digital imaging, vision systems/artificial intelligence, automated test equipment and plant simulation software to call centres. Others expressed their needs in more general terms, such as

better control of existing equipment, faster turnaround, reduction of rejects and improvements to quality, computerization of manual functions, and better data retrieval and compilation.

### ***Customer Service***

Although many respondents rated customer service as very or extremely important, few provided comments on specific activities related to customer service that would contribute to growth. Of those that did, activities noted included better analysis of customer data and market needs; relationship selling; better communications with customers (better customer service representatives, improved feedback opportunities for customers); and training of personnel.

Factors related to product quality and delivery speed were also noted as important components of customer service. One manufacturer provided detailed comments on what was needed for good customer service in a manufacturing environment:

*"Provide added value—solve technical problems with the customer.*

*Provide added service—special packaging, custom work.*

*Provide added support—work technically with customer on product."*

The range of activities noted by respondents, and the high importance given to customer service, point to the need to explore this activity further in Phase II.

### ***Innovation (R&D, Product and Service Development)***

In the context of innovation, a variety of activities were noted as important.

R&D, creation of new products, redesign of products to enable more efficient production, new material development and development of new production processes were noted.

There was also considerable interest in improving existing products and processes, confirming comments by interviewees in the preliminary scan who pointed to the need among many SMEs for basic process engineering improvements. Activities noted included development of more economical processes, improvements to existing designs, "improved ways of doing things", and finding new methods to bring products to market.

### ***Environmental Management***

A few respondents noted the importance of improving environmental management. Activities noted included analysis of present practices, communicating the company's environmental awareness to customers, and waste reduction/waste management improvements. These are all activities that are covered under the existing ON-SITE environmental stream.

## **5.0 Opportunities for Young Professionals to Meet SME Needs**

### **5.1 Specific Opportunities: Quantitative Findings**

After rating the importance of different factors contributing to growth and competitiveness and identifying specific needs to achieve growth, employers were asked to rate their firms' job opportunities for highly skilled young people in these areas over the next 24 months.

Overall, for each of the 12 areas assessed, about half of the employers indicated that there would be at least some job opportunities for young professionals over the next 24 months. The areas rated as having the greatest number of opportunities for young professionals are as follows (average scale ratings of 3.6 or higher):

- ◆ advanced technologies for production;
- ◆ customer service; and,
- ◆ innovations: product or service development, product design, R&D.

Five other activities were rated as having a moderately high number of opportunities (average scale ratings between 3.0 and 3.3):

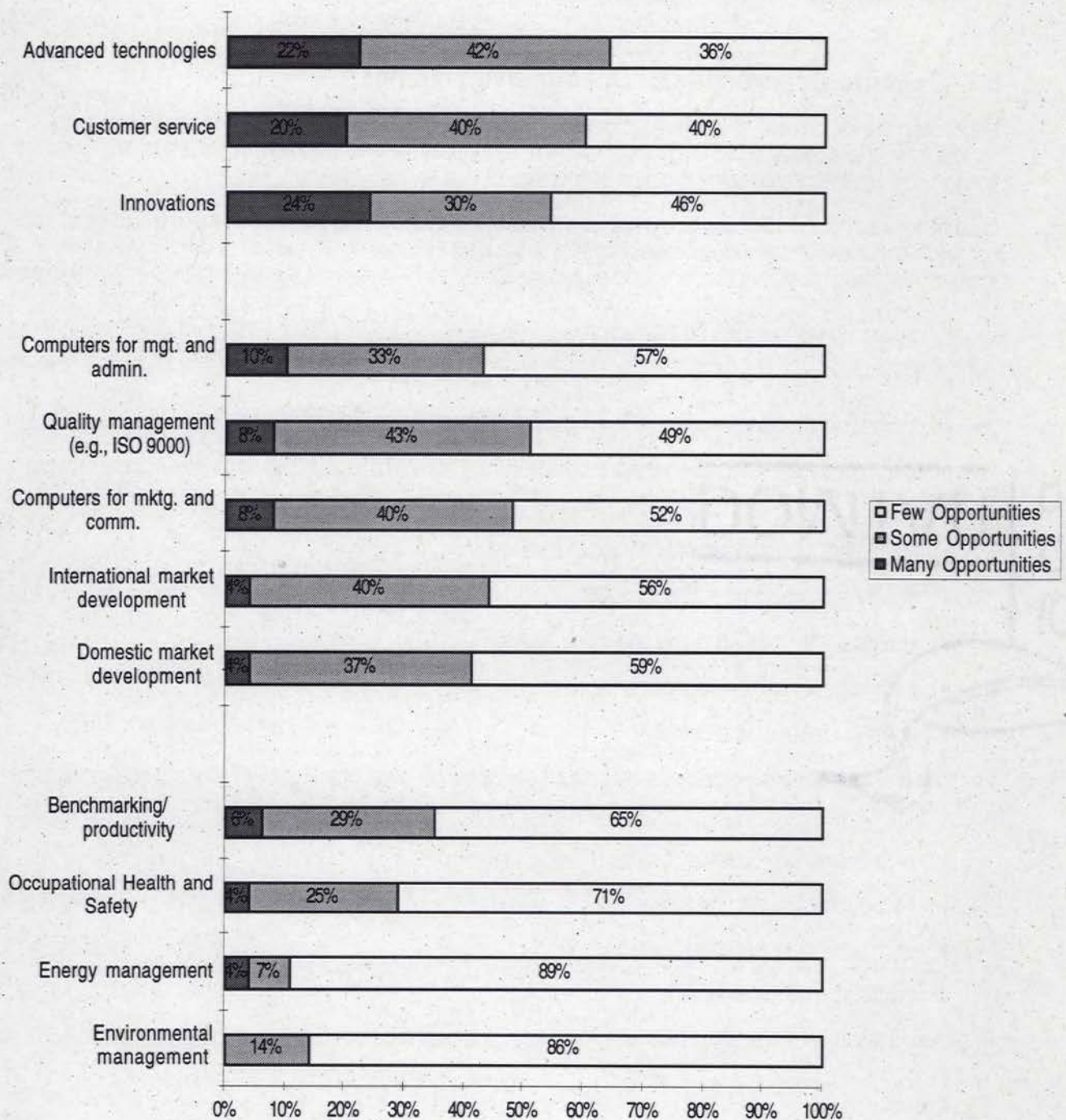
- ◆ computers for management and administration;
- ◆ quality management: e.g., ISO 9000;
- ◆ computers for marketing and communications;
- ◆ international market development; and
- ◆ domestic market development.

For the other four activities, employers indicated there would be fewer opportunities (average scale ratings of less than 3.0):

- ◆ benchmarking/productivity analysis;
- ◆ occupational health and safety;
- ◆ improved energy management; and
- ◆ environmental management.

The overall results of the analysis, with employer ratings expressed as percentages, are presented in Table 4.

**Table 4: Employer Ratings of Job Opportunities for Young Professionals**



Note: Many Opportunities = 6, 7 on the 7-point scale; Some Opportunities = 4, 5; Few Opportunities = 1, 2, 3



While the small size of this exploratory survey does not permit us to make detailed sectoral breakdowns, the results show that the job opportunities for young professionals reported by employers are not uniformly distributed throughout the economy. For example, manufacturers were more likely to report that there are job opportunities in the use of computers for marketing and communications: 60% of CMA members indicated that there will be at least some opportunities compared to 40% of non-CMA respondents. CMA members were also more optimistic about job opportunities in domestic market development: 53% compared to 33% of other respondents. For customer service, non-CMA members were more likely to report job opportunities than other employers (63% compared to 55%).

Overall, the results indicate that SMEs recognize a number of business needs and see opportunities for qualified young people to help them meet these needs. Our experience is that the marketing, assistance and risk-reduction structure provided by ON-SITE helps companies crystallize unmet needs into positions for qualified young people. It is worth noting that environmental management was ranked fairly low by most respondents, yet more than 50 percent of ON-SITE placements are in the environmental field. This suggests that the ON-SITE approach could be even more effective if expanded into activities that are rated as high priorities by SMEs.

## **5.2 Specific Opportunities and Skill Needs: Qualitative Findings**

The preliminary scan indicated cross-sectoral needs for skill groups such as research, business management and computer skills. In the in-depth industry scan, very few respondents provided additional information in the qualitative question on specific skill needs (question 8). Specific skill needs mentioned related primarily to technical skills (particularly computer programming, design engineering, advanced electronics engineering, trades such as welding). There were also a few comments that sales and business management professionals would be useful.

Several respondents noted that their companies preferred to promote from within rather than hire new professionals. By introducing young professionals into a company in a low-risk, short-term placement, ON-SITE can help improve their likelihood of longer-term employment with such companies.

## **6.0 Findings on Other Themes and Issues**

### **6.1 Quantitative Findings**

#### ***6.1.1 Workplace Situations for Young Workers***

Most employers (59%) usually have their younger staff working under the close supervision of an experienced staff member. Over one-quarter (27%) usually have younger staff working as a junior member of a team. About one in six firms (14%) have their younger staff take on a new task or work independently on a task. These findings were similar both for firms with less than 100 employees and firms with more than 100 employees.

Manufacturers are more likely to let their younger staff take on a new task or work independently on a task: 26% of CMA members indicated that this is the typical workplace situation for younger workers compared to just 7% of non-CMA members in the sample.

Employers reported that in the first six months on the job for a new employee, an average of about one-quarter (23%) of the time of a more senior staff member is required for supervision. For over half of employers (53%), the amount of supervision time ranges from 15% to 30%. For three-quarters of employers (75%), the amount of supervision time ranges from 10% to 40%. These results were similar for companies with more or less than 100 employees and for CMA and non-CMA members in the sample.

The amount of supervision required during the first six months on the job underscores the risk involved in hiring: if the person does not prove suitable, considerable time and company resources will have been wasted. This suggests that the low-risk aspect of ON-SITE, which provides a six-month period during which the employer has no salary costs, should be very attractive to SMEs.

#### ***6.1.2 Finding Suitable Candidates for Professional-level Positions***

Fewer than half of employers (43%) reported that it is "easy" to find suitable candidates when they are recruiting and hiring young people for professional-level positions. Of these employers, just 11% find it "very easy" (6 on the 7 point scale) and just 4% find it "extremely easy" (7 on the 7 point scale). The most frequent responses from employers are "neither" (28%) or "easy" (5 on the scale - 28%).

Companies with more than 100 employees are much more likely to be positive about their experiences with hiring young people: 60% reported that they find it easy to find suitable candidates and just 15% reported that it is difficult. For smaller companies, 43% said it is difficult and 35% said it is easy. There were no significant differences for manufacturers and companies in other sectors.

In some respects, it is not surprising that smaller companies have greater difficulty finding staff: they generally have fewer resources to devote to the search and recruitment process and are less likely to be approached independently by job-seekers. This suggests that the recruitment service provided by ON-SITE may be particularly valuable to smaller companies, and this should be stressed marketing the program to these companies.

## **6.2 Qualitative Findings**

### ***6.2.1 Difficulties in Finding Suitably Skilled Young Candidates***

Question 12 of the questionnaire asked about major difficulties encountered by businesses in finding suitable young candidates for positions requiring high level of skills and education. Consistent with responses to other questions, the major impediment cited was a lack of experience on the part of young candidates.

Other problems noted were unrealistic attitudes and expectations, lack of specific skills (noted especially by manufacturers), and unrealistic salary expectations. Several rural businesses also noted difficulties in attracting young candidates because of their remote locations.

ON-SITE is structured to help remove many of these potential barriers for SMEs. The program's candidate search and screening system helps identify candidates with the specific skills companies are seeking, saving SMEs the burden of having to undertake a labour-intensive candidate search themselves. Because ON-SITE candidates have voluntarily chosen to work during their UI benefit period, they have a positive attitude towards work. ON-SITE employees also tend to have realistic expectations of their value in the workplace, because they have encountered first-hand the difficulty of finding work in their field and have recognized the importance of gaining experience.



## **7.0 Implications for ON-SITE/A LA SOURCE**

### **7.1 Streams of Interest**

The Phase I research revealed seven new streams in which SMEs are interested, and for which there appears to be moderate to significant potential for young professionals to help them achieve their business aims. These streams include customer service, better use of computers for management and administration, better use of computers for marketing and communications, international market development, domestic market development, better use of advanced technologies for production, and product and service innovation.

Of existing streams, only quality management appeared to be of strong interest. In the last two years, this stream has grown from being an almost negligible component of ON-SITE to accounting for more than 25% of placements. It appears that interest in quality management is still high among SMEs.

Although interest in the other "traditional" streams of ON-SITE (environment, health and safety and energy management) appeared low, the program still succeeds in placing significant numbers of young professionals in these areas. This suggests very good potential for the streams rated of higher interest by SMEs.

### **7.2 Implications for Phase II Research**

#### ***7.2.1 Streams to be Investigated***

Based on analysis of SME needs and interests, and requirements for efficient ON-SITE program operation, the following streams were selected for further investigation in Phase II:

- ◆ computers for management and administration;
- ◆ new market development: international;
- ◆ new market development: domestic;
- ◆ customer service; and
- ◆ computers for marketing and communications.

These streams merit further surveying not only because they are of demonstrated interest to SMEs, but because they offer opportunities for graduates with a general range of skills. General research and computer skills can be found among a broad group of arts, social science and business graduates. The bulk of "traditional" ON-SITE candidates have been science, engineering and environmental studies graduates; these new streams offer the potential to bring the benefits of ON-SITE to a more diverse group of graduates with broader skill sets. The range of business sectors interested in these areas is sufficiently broad that the streams offer good potential for the job definition and matching services provided by ON-SITE.

For three of these streams in particular (computers for management and administration, international market development and domestic market development), there was a high correlation between respondents' interest and their perceptions of opportunities for young professionals (i.e., between responses to questions 3 and 7). This suggests that companies with a strong interest in the area should be receptive to the idea of hiring young professionals through ON-SITE to assist them in the area. Computers for management and administration is a particularly attractive stream because it has broad appeal across sectors and company sizes.

Between 75 and 80% of manufacturers considered international market development to be important to growth, and 74% of manufacturers indicated some job opportunities for young professionals in this area. In general, these tended to be larger companies (more than 100 employees). Although job opportunities for ON-SITE workers may not be quite as broadly based as for computers for management and administration, there appears to be very strong potential for an international market stream in the manufacturing sector.

Although there was less interest in domestic market development, it is worth noting that 53% of manufacturers indicated some job opportunities for young professionals in this area. There was a very strong correlation between interest in international market development and interest in domestic market development, suggesting that both merit investigation, as there may be opportunities for cross-marketing or other program efficiencies.

The particularly high importance rating given to customer service emphasizes the importance of surveying on this stream to better define its parameters. The correlation between interest in the subject and opportunities for young professionals was lower than for some of the other streams, but 20% of respondents indicated very high job opportunities in customer service. The interest spans a broad range of sectors and company sizes.

There are limitations to what a young professional can accomplish vis-à-vis improving customer service within a company. For example, it is not reasonable to expect a recent graduate to be able to change a company's culture, and it would be difficult for a youthful, relatively inexperienced professional to train older workers in customer service or bring about significant changes in employee attitudes. However, it is reasonable to expect that a recent graduate in arts or social sciences could assist with surveying employee and customer attitudes, or with the implementation of computerized systems to provide more accurate feedback on customer needs and quality of service.

The findings suggest that there may be opportunities for ON-SITE employees in a customer service stream, if the job opportunities are clearly defined and targeted. Although companies indicated a strong interest in customer service, they provided relatively little qualitative information on exactly what types of skills they needed. There is a need for more detailed surveying on this issue to clarify if, and how, ON-SITE employees can help SMEs meet their customer service needs.

Correlation between company interest in computers for marketing and communications and perceptions of opportunities for young professionals was lower than for computers for management and administration. This suggests there may be fewer, more specialized jobs in marketing and communications. However, companies with more than 100 employees were much more likely to identify marketing (55% noted some job opportunities), and the stream was also strong among manufacturers (60% of manufacturers noted some job opportunities). This interest, combined with the broad range of skills sets that could be employed in this stream, indicate that this stream is worth investigating further.

### ***7.2.2 Other Streams of Interest***

The use of advanced technologies for production, and innovations (R&D, product and process engineering, product and service development) demonstrate considerable promise, and merit further investigation. Both streams show a high correlation between employer interest and perceptions of opportunities for young professionals, particularly for larger companies.

Despite strong industry interest in these streams, they were not selected for Phase II surveying because they encompass very specific activities and appear to require a more specific set of skills (i.e., more advanced science and engineering skills). As such, ON-SITE streams in these areas would be attractive to more restricted groups of both candidates and employers, making the marketing and matching process more demanding. However, the importance given to these activities indicates that, within these constraints, the streams offer significant potential and should be further explored.

### **7.2.3 Sample and Survey Considerations**

Five activity areas (one more than originally proposed) will be surveyed in more detail in Phase II.

- ◆ *Computers for management and administration, and computers for marketing and communications* will be investigated through a survey sent to 2,000 cases. There is a good likelihood that many companies interested in computers for management and administration will also be interested in computers for marketing and communications. Therefore, rather than sending separate surveys to 1,000 cases each, it is appropriate to survey twice as many SMEs on both issues. This approach will provide even more useful data.
- ◆ *Export market development and domestic market development* will also be investigated through one survey sent to 2,000 cases. Phase I data showed a strong correlation between interest in these areas, and surveying a larger sample on both issues will provide a greater number of valid responses in each area.
- ◆ *Customer service* will be investigated through a survey sent to a sample of 1,000 SMEs.

Some actual and potential ON-SITE streams are more applicable to some sectors than others. Taking into account the overall applicability of the ON-SITE concept to various sectors, samples for the Phase II surveys will be randomly selected from the following sectors of SMEs:

- ◆ Manufacturing (50%)
- ◆ Construction (10%)
- ◆ Transportation and Communications (15%)
- ◆ Finance, Insurance and Real Estate (10%)
- ◆ Services (15%)

Findings from both the preliminary scan and the questionnaire suggest that the way in which ON-SITE is marketed to small companies will be crucial to the success of any new streams of activity. In addition to probing needs, Phase II surveys will address how the program can best be marketed to SMEs.

### **7.3 Implications for Program Expansion**

Phase I findings indicate strong potential for a significant expansion of ON-SITE to address priority needs of SMEs. Expansion of ON-SITE to include non-UI recipients as well as UI recipients would enable a greater number and variety of unemployed youth to benefit from the program, and would further increase the program's ability to efficiently provide appropriate candidate employees to SMEs in order to address a wide range of priority business needs. As the domestic internship component of Industry Canada's proposed Youth in Innovative Business Program, ON-SITE could create 10,000 high-quality positions over the next five years by combining new and existing HRDC resources.

## **Appendix A**

### **Preliminary Scan: Briefing Document and List of Respondents**

## NEEDS ASSESSMENT

The Canadian Manufacturers' Association (CMA), in partnership with Industry Canada and Human Resources Development Canada (HRDC), is undertaking a needs assessment of small and medium enterprises (SMEs) in Canada. **The purpose of this project is to identify areas where provision of human resources can improve the productivity and competitiveness of SMEs, thereby creating employment opportunities for young Canadians.**

### BACKGROUND

In partnership with HRDC, CMA operates a national industrial competitiveness and employment program called ON-SITE/À LA SOURCE. This program **places unemployed, skilled individuals in workplaces for limited terms to assist with activities that result in positive workplace change**, such as environmental or quality management improvements. HRDC pays salary costs and participating employers contribute \$100 per week for operating costs. The program is managed for CMA by Energy Pathways Inc. (EPI), a private company. The program is open to manufacturers, service industries and institutions.

ON-SITE has placed more than 3,000 individuals with Canadian employers, with extremely good results. One-third of participants are hired by the employers after their work terms, and a greater number obtain work elsewhere, primarily because of the quality of the work experience provided by the program. For participating companies, the human resource assistance contributes to improvements in productivity, environmental performance and competitiveness.

**ON-SITE has demonstrated that many companies have as-yet unrecognized needs for specialized human resources.** The program's success is due to the fact that CMA and EPI actively market it to employers, helping companies define their human resource needs. By placing an individual in a company for six months, ON-SITE makes visible the benefits of augmenting human resources to pursue opportunities which would otherwise not be exploited.

To date, ON-SITE has focused on areas where the strategic application of human resources can reduce waste of materials and energy and/or provide broader benefits in terms of improved safety or quality. However, **the program's experience indicates that there are other opportunities to assist SMEs and create employment, either through ON-SITE or using a similar program model.**

**The purpose of the needs assessment is to identify and rank these opportunities.** The study methodology consists of a **preliminary scan** to identify opportunities (interviews with industry leaders, government policy experts and academics); a **general survey** of a limited number of SME senior managers to identify the four most promising such opportunities; and a **series of subject-specific surveys** of SME managers to rank the four opportunities and identify precisely what human resources are required.

## **OPPORTUNITIES**

**There are a number of activities that cut across industry sectors, which offer potential for employment development and benefits to industry.** In order to be suitable for HRDC-funded employment programs, an activity must meet the following criteria:

- it must be incremental to existing activities (so that the position created does not replace or compete with an existing position)
- the provision of a program employee must not provide an unfair competitive advantage to the employer
- there must be a sufficient supply of appropriately trained labour to work on the activity
- the activity must be compatible with overall government policy objectives, and
- it must be viewed as important by industry, so that companies will be motivated to take up the human resources offered.

**Activities that appear to meet these criteria are outlined below.** The activities are listed in no particular order. All present SMEs with opportunities for growth, savings and/or productivity improvements, but also require resources (human and otherwise) that are often in short supply in SMEs.

1. Adoption/Implementation of New Technologies (for Marketing/Communications and for Administration/Management)
2. Adoption/Implementation of New Technologies (for Production)
3. Export Development
4. Research and Development
5. Customer Service
6. Industrial Design
7. Productivity Analysis

In addition to these and other new opportunities, there may be factors and trends that result in opportunities to expand the "traditional" activities covered by the ON-SITE program. These activities include

8. Environmental Management
9. Energy Management
10. Occupational Health and Safety
11. ISO 9000 (Quality Management)

**The purpose of our research is to determine which of these activities offer the most promise for employment creation partnerships, and to identify other appropriate activities if these exist.**

## ISSUES FOR INTERVIEW DISCUSSION

As part of our preliminary scan work, we would like your views on the following issues.

1. In your view, which of the activities noted on the previous page are the most important/present the greatest opportunities for small and medium enterprises?
  - Are there other activities which offer opportunities?
  - Has your organization conducted any recent research/studies in these areas?
2. Are small and medium companies in a position to take advantage of opportunities in these areas? What progress has been made so far? What are the barriers?
3. How do the needs and capabilities of firms to develop in these areas vary across different sectors or types of firms?
4. Is there an adequate supply of qualified personnel available to small and medium enterprises to enable them to take advantage of these opportunities? If not, what are the problem areas?
5. What is the role/contribution of young professionals in these areas? Which of these areas represent the best opportunities for young professionals?
6. What are realistic objectives for an employment program for young professionals in these fields?
7. Which types of employers are most likely to be interested? What are the best methods for communicating with employers about the program?
8. Do you have any suggestions regarding the survey portion of this needs assessment (e.g., contact people, questions to ask firms etc.)?

# **Needs Assessment: Industry Canada**

## **List of Respondents**

Lynne Allen, Ontario Ministry of Economic Development, Trade, and Tourism

Elizabeth Atkinson, Canadian Environmental Industries Association

Walter Basler, Vice-President, Canadian Manufacturers' Association (Saskatchewan)

Rhéal Bilodeau, Canadian Tourism Human Resource Council

Jack Burkholder, President, Burkholder Marketing Services and consultant to Canadian Manufacturers' Association

Jay Chrysler, Small Business Group, Alberta Economic Development and Tourism

Gerry Cluney, Regional Vice-President (New Brunswick and PEI), Canadian Manufacturers' Association

Nancy Coulas, Environmental Research Analyst, Canadian Manufacturers' Association, Ottawa

Tim Dugas, Consultant, Labour Market Analyst

Jean Fauteux, Services-conseils en gestion d'entreprises, Ministère de l'industrie, commerce et de la technologie du Québec

George Gritsiotis, Canadian Labour Force Development Board

Ian Howcroft, Director of Human Resources Policy, Canadian Manufacturers' Association, Toronto

Dieter Hollweck, Executive Director, Forum for International Trade Training (FITT)

Constantine Kapsalis, Economist, Consultant, formerly with the Canadian Labour Market and Productivity Centre

Bent Larsen, Executive Director, Canadian Industrial Program for Energy Conservation, Canadian Manufacturers' Association, Toronto



Marc Lévesque, Statistics Canada, Household Surveys Division

Peter Lloyd, Policy Branch, Ontario Training and Adjustment Board

Charles MacArthur, International Trade Centre, Halifax

Keith MacEachern, Project Manager, Environmental Management Systems Pilot Project,  
Canadian Standards Association

Rick Mackenzie, Director, Energy Ventures Division, Natural Resources Canada

Ted Mallett, Director of Research, Canadian Federation of Independent Business, Toronto

Greg Meredith, Science and Technology Section (RENI), Foreign Affairs and International Trade

Patricia Miller, Project Manager, Canadian Council for Human Resources in the Environment  
Industry

Jason Myers, Senior Economist, Canadian Manufacturers' Association, Toronto

Glen Nichols, Acting Director of Business Development, Canadian Commercial Corporation

Paul Nykanen, Vice-President (Ontario), Canadian Manufacturers' Association

Burf Ploughman, Vice-President, Canadian Manufacturers' Association (Newfoundland)

Robert Redhead, Director of Government Relations, Laidlaw Inc., and Chairman of the Board,  
Canadian Council for Human Resources in the Environment Industry

Richard Roy, HRDC, Labour Outlook Program

Doreen Ruso, Exports Section, Canadian Manufacturers' Association

Bob Saari, Vice-President, Canadian Manufacturers' Association (Alberta)

Jonas Sammons, Vice-President, Canadian Manufacturers' Association (Manitoba)

Derwin Sangster, Canadian Labour Market and Productivity Centre

Andrew Sharp, Centre for the Study of Living Standards

Nick Shepherd, ISO 9000 Consultant, BRI International, Toronto, Ontario

Marc Sincennes, Responsable du programme Stratégie à l'emploi, Ministère de l'industrie, du commerce, de la science et de la technologie, Hull, Québec

Dick Smythe, Vice-President, Canadian Manufacturers' Association (Nova Scotia)

Steve Sulphur, President, Ottawa Construction Association

Doug Tripp, Executive Director, Canadian Energy Management and Environmental Training, Canadian Institute for Energy Training (CIET)

Peter Woolford, Senior Vice-President of Policy, Retail Council of Canada

## **Appendix B**

### **Questionnaire Document for In-depth Industry Scan**

# National Survey of Work Opportunities for Qualified Young Professionals

March 12, 1996

Dear Employer:

Industry Canada and Canadian Manufacturers' Association (CMA) are conducting a survey of Canadian companies about work opportunities for qualified young professionals. The objectives of this survey are to identify productive areas for youth employment and to find better ways to match qualified young workers with high-skill opportunities in the private sector: for example, in junior professional, technical and management positions.

A current CMA initiative called ON-SITE/A LA SOURCE has been very successful at achieving this potential, placing more than 3,000 skilled young workers with satisfied employers. Industry Canada, CMA and other associations are now working to establish sectoral and subject-area partnerships that will realize more of these opportunities for youth employment.

We have randomly selected a small number of Canadian firms for this survey. Because we want to get a complete picture both of industry needs and of work opportunities for youth, our sample of firms represents many sectors of the economy and all regions of the country. For the study results to represent the views of firms in Canada accurately, we would appreciate you taking a few minutes to complete this questionnaire. Of course, your participation is entirely voluntary. Please note that your responses will be kept completely confidential and that your answers will never be associated with your name or the name of your company.

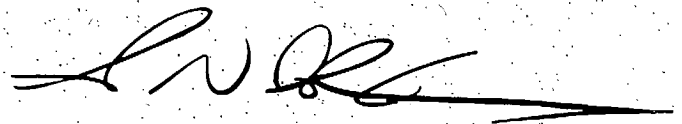
When you have completed the questionnaire, please mail it to us by March 26, 1996 in the envelope provided. If you would like additional information about the survey or if you have any questions about completing the questionnaire, please telephone (collect) Ann Simpson or Kathy Deeg at Energy Pathways Inc. in Ottawa: (613) 235-8086. Thank you for your assistance.



Peter Sagar  
Director General  
Entrepreneurship and Small Business Office



Industry Canada Industrie Canada



Stephen Van Houten  
President



Canadian Manufacturers' Association  
Association des manufacturiers canadiens

## **Background on the ON-SITE Approach to Work Opportunities for Youth**

Canadian Manufacturers' Association's ON-SITE/À LA SOURCE program is an innovative industry-government partnership that has been uniquely successful in meeting the needs of industry and creating value-added employment opportunities for young people. ON-SITE places qualified unemployed individuals in companies and institutions for six-month terms, to assist with activities that are incremental to the regular business of the organization and result in positive change. The positive response to ON-SITE from industry has clearly demonstrated that many companies have needs for specialized human resources that young workers can help to meet.

In ON-SITE, employers select their workers from a number of candidates prescreened by program administrators. A private sector company administers the program for CMA. The salaries of employees are paid by Human Resources Development Canada in the form of enhanced Unemployment Insurance benefits. Participating employers pay \$100 per week for the management of the program.

The placements of highly qualified young professionals for six-month terms have proven to be very beneficial to both individual workers and participating companies. One-third of ON-SITE workers are hired by their host employers at the end of their work terms, and most of the others find employment elsewhere. More than 97% of participants are employed within three months of the end of their terms.

ON-SITE has been successful because it is market-driven and responds to industry's needs. Currently, the program provides qualified personnel to work on environmental, energy management, occupational health and safety, and quality management projects. These personnel are primarily young, university-educated individuals with good technical skills but limited workplace experience.

CMA and Industry Canada believe there are other opportunities to meet the needs of small and medium enterprises and to improve the employment prospects of young professionals, using the ON-SITE approach. We would like your views on areas in which young professionals could help your company achieve its goals, as well as your broader perspective on the human resource needs of your industry.

***Questions? Call the Survey Help Desk collect at (613) 235-8086.***

# I Job Opportunities for Qualified Young Professionals

*To begin, we are interested in your views about the job opportunities available in Canada for highly qualified young people: for example, university graduates and people with technical qualifications.*

1. **Do you agree or disagree with the following statements about the labour market for qualified young people and professionals?** *Please circle the appropriate number for each statement below.*

	STRONGLY DISAGREE (1)		NEITHER AGREE NOR DISAGREE (4)		STRONGLY AGREE (7)		DON'T KNOW (9)	
a) The Canadian economy as a whole does a good job of providing job opportunities for highly qualified young people.	1	2	3	4	5	6	7	9
b) My industry does a good job of providing job opportunities for highly qualified young people.	1	2	3	4	5	6	7	9
c) Highly qualified young people have had a very tough time entering the job market over the last few years.	1	2	3	4	5	6	7	9
d) In general, highly qualified young people have adequate opportunities to gain work experience once they complete their education.	1	2	3	4	5	6	7	9
e) My own organization has been successful at bringing in new talent in the form of highly skilled young people.	1	2	3	4	5	6	7	9
f) Most bright and talented young people will find jobs on their own and do not need any help to enter the labour force.	1	2	3	4	5	6	7	9

## II Difficulties Facing Young People Entering the Job Market

2. Please rate the extent to which you think the following problems present barriers to young people who want to get jobs in your industry.

*First, consider the skills and characteristics of the prospective young worker.*

	NOT A PROBLEM (1)		MODERATE PROBLEM (4)			SERIOUS PROBLEM (7)		DON'T KNOW (9)
a) A lack of general skills such as language, math and communications	1	2	3	4	5	6	7	9
b) A lack of technical or specialized skills for the job or profession	1	2	3	4	5	6	7	9
c) A lack of enthusiasm and commitment to their work	1	2	3	4	5	6	7	9
d) A lack of practical work experience	1	2	3	4	5	6	7	9
e) Unrealistic expectations about their value in the job market	1	2	3	4	5	6	7	9

*Next, consider the problem of barriers to jobs for young people from the perspective of the employer.*

	NOT A PROBLEM (1)		MODERATE PROBLEM (4)			SERIOUS PROBLEM (7)		DON'T KNOW (9)
a) The costs of hiring, supervising and training new employees	1	2	3	4	5	6	7	9
b) The costs of salaries and benefits for new employees	1	2	3	4	5	6	7	9
c) Changing human resource practices (for example, downsizing, outsourcing and greater use of contract workers)	1	2	3	4	5	6	7	9

*Do you have any other comments about the problems facing highly qualified young people who want to enter the labour force?*

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### III Factors Contributing to Growth and Increased Competitiveness

3. Looking ahead over the next three to five years, how would you rate the importance of each of the following factors to growth and increased competitiveness of your business? *(Note: The factors in this list have been chosen both for their potential importance to industrial growth and competitiveness and for the opportunities they present for youth employment.)*

	NOT AT ALL IMPORTANT (1)		MODERATELY IMPORTANT (4)			EXTREMELY IMPORTANT (7)		NOT APPLIC- ABLE (8)	DON'T KNOW (9)
	1	2	3	4	5	6	7	8	9
a) Better use of computers for management and administration	1	2	3	4	5	6	7	8	9
b) Better use of computers for marketing and communications	1	2	3	4	5	6	7	8	9
c) Better use of advanced technologies for production	1	2	3	4	5	6	7	8	9
d) New market development: international	1	2	3	4	5	6	7	8	9
e) New market development: domestic	1	2	3	4	5	6	7	8	9
f) Innovations: product or service development, product design, R & D	1	2	3	4	5	6	7	8	9
g) Improved energy management	1	2	3	4	5	6	7	8	9
h) Improved customer service	1	2	3	4	5	6	7	8	9
i) Improved environmental management and practices	1	2	3	4	5	6	7	8	9
j) Analysis/Benchmarking for improved productivity	1	2	3	4	5	6	7	8	9
k) Quality management (e.g., ISO 9000)	1	2	3	4	5	6	7	8	9
l) Improved occupational health and safety practices	1	2	3	4	5	6	7	8	9

***What are your reasons for rating these factors as important? Are there other key factors for growth?***

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## IV Meeting Specific Needs to Achieve Growth

*One of the main objectives of this survey is to identify business activities in which human resources can contribute to growth and improve competitiveness.*

4. We are very interested in your views about two important areas: computer technologies and marketing.

Please identify three specific activities related to each of these areas that would help to achieve growth in your business.

- a) **Use of Computer Technologies**  
(for communications, marketing or production)

**Activities**

(e.g., software training, hardware and software needs analysis, business management and administration, new marketing opportunities such as the Internet and customer data base marketing, improving current production methods)

- i) \_\_\_\_\_  
ii) \_\_\_\_\_  
iii) \_\_\_\_\_

- b) **Marketing**  
(domestic and international)

**Activities**

(e.g., market analysis, following up on marketing leads, export readiness audits, research into foreign business procedures and regulations, trade show preparation and attendance)

- i) \_\_\_\_\_  
ii) \_\_\_\_\_  
iii) \_\_\_\_\_

5. If you rated other areas in Question 3 as very or extremely important (i.e., 6 or 7), please select the two most important of these areas and list three specific activities that will contribute to growth.

a) **Selected Area 1:** \_\_\_\_\_

**Activities:** \_\_\_\_\_

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

b) **Selected Area 2:** \_\_\_\_\_

**Activities:** \_\_\_\_\_

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

## V Opportunities for Qualified Young Professionals in Your Industry

*Next, we would like to know whether there are ways in which qualified young people can take advantage of some of the opportunities you have identified.*

6. Thinking ahead to the next 24 months, how would you rate the overall job or work opportunities for highly qualified young people:

	NO OPPORTUNITIES (1)			SOME (4)		MANY OPPORTUNITIES (7)		DON'T KNOW (9)
a) In your company?	1	2	3	4	5	6	7	9
b) In your industry?	1	2	3	4	5	6	7	9

**7. Thinking about your firm's needs over the next 24 months, how would you rate the job opportunities for young people with skills in the following areas?**

	NO OPPORTUNITIES (1)			SOME (4)		MANY OPPORTUNITIES (7)		NOT APPLIC- ABLE (8)	DON'T KNOW (9)
	1	2	3	4	5	6	7	8	9
a) Computers for management and administration	1	2	3	4	5	6	7	8	9
b) Computers for marketing and communications	1	2	3	4	5	6	7	8	9
c) Advanced technologies for production	1	2	3	4	5	6	7	8	9
d) International market development	1	2	3	4	5	6	7	8	9
e) Domestic market development	1	2	3	4	5	6	7	8	9
f) Product or service development, product design, R & D	1	2	3	4	5	6	7	8	9
g) Energy management	1	2	3	4	5	6	7	8	9
h) Customer service	1	2	3	4	5	6	7	8	9
i) Environmental management	1	2	3	4	5	6	7	8	9
j) Benchmarking/productivity analysis	1	2	3	4	5	6	7	8	9
k) Quality management (e.g., ISO 9000)	1	2	3	4	5	6	7	8	9
l) Occupational health and safety	1	2	3	4	5	6	7	8	9

**8. Are there other specific skills or areas in which your firm will require qualified young people?**

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9. **Which of the following workplace situations does your company use most frequently for younger workers?** *Please circle one response.*

Working under the close supervision of an experienced staff member ..... 1  
 Working as a junior member of a team or group of employees ..... 2  
 Taking a new area or task and working more or less independently on this task ..... 3  
 Other (please specify) ..... 4  
 Don't know ..... 9

10. **On average, approximately how much supervision would you say is required for new employees in their first 6 months on the job?** *Please express your response as a percentage of the supervisor's working time.*

% of supervisor's time per new employee

11. **When you are recruiting and hiring young people for professional-level positions in your company, how difficult is it to find suitable candidates?**

EXTREMELY DIFFICULT (1)		NEITHER DIFFICULT NOR EASY (4)		EXTREMELY EASY (7)	NOT APPLIC- ABLE (8)	DON'T KNOW (9)
1	2	3	4	5	6	7

12. **What are the major difficulties you have in finding suitable young candidates for positions requiring a high level of skills and education?**

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## VI Communications about the Labour Market and Employment Issues

13. There are many sources of information about employment issues such as the labour market, training, and job opportunities for young people. How important are each of the following sources to your knowledge and understanding of these issues?

	NOT AT ALL IMPORTANT (1)		MODERATELY IMPORTANT (4)		EXTREMELY IMPORTANT (7)		DON'T KNOW (9)	
a) Management in your company	1	2	3	4	5	6	7	9
b) Workers in your company	1	2	3	4	5	6	7	9
c) Business groups (e.g., CMA, other associations, Chamber of Commerce)	1	2	3	4	5	6	7	9
d) Labour groups (e.g., Canadian Labour Congress)	1	2	3	4	5	6	7	9
e) Educational institutions (e.g., universities and colleges)	1	2	3	4	5	6	7	9
f) Academics/Experts	1	2	3	4	5	6	7	9
g) The mass media (TV, radio, newspapers)	1	2	3	4	5	6	7	9
h) Trade publications and professional journals	1	2	3	4	5	6	7	9
i) The federal government (publications, Statistics Canada, Employment Centres)	1	2	3	4	5	6	7	9
j) The provincial government	1	2	3	4	5	6	7	9

## VII Background Characteristics

*Finally, we would like to ask a few questions about you and your company.*

14. Does your organization operate at

- A single location? ..... 1 SKIP to Q. 17 (skip 2 questions)
- Multiple locations in one province only? ..... 2
- Multiple locations in Canada? ..... 3
- Multiple locations in Canada and other countries? ..... 4

**15. Your location is**

- Head Office ..... 1  
A Division ..... 2  
A Subsidiary ..... 3

**16. In general, are staffing and decisions made at head office or at the local level?**

- Head office ..... 1  
Local office ..... 2

**17. Your company is**

- Publicly traded ..... 1  
Privately owned ..... 2

**18. How many full-time staff does your company employ?**

- At your location? .....      
In Canada? .....

**19. Over the last 24 months, how many new staff has your company employed for jobs requiring highly skilled workers: e.g., management, professional, technical positions? (If you don't know, please circle 999.)**

Number of new hires in last 24 months:    999 Don't Know

**20. How many of these new hires have been young people under 30 years of age?**

Number of new hires under 30 in last 24 months:    999 Don't Know

**21. How many years has your firm been operating?**

Years

**22. What is your position within the organization?**

- Owner, President or CEO ..... 1  
Senior Manager, Executive Officer, General Manager ..... 2  
Manager: Human Resources/Personnel ..... 3  
Manager: Other areas of responsibility (please specify) ..... 4  
Line Manager ..... 5  
Other (please specify) ..... 6

**23. How many years have you been employed with this company?**

Years

24. We welcome your comments on the topics covered in this survey.

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Would you be interested in receiving the following information?

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>

a) A brief summary of the results of this survey?

1	2
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b) Information about highly qualified young people who could be matched to work opportunities in your company?

1	2
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***If "Yes", please print your name and mailing address below.***

***Please note that the information below will be kept separate from your responses to this survey. An independent consultant will process this information and will not provide your responses to Canadian Manufacturers' Association or Industry Canada with your name or address attached.***

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_ Postal Code: \_\_\_\_\_

Tel: ( \_\_\_\_\_ ) \_\_\_\_\_ Fax: ( \_\_\_\_\_ ) \_\_\_\_\_

Internet/E-mail: \_\_\_\_\_

**DATE DUE**  
**DATE DE RETOUR**

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# ESBO RESOURCE CENTRE

DOCUMENT #: 981

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