

***“The global economy is undergoing a fundamental transformation that will reshape civilization in the twenty-first century. Sophisticated computers, telecommunications, robotics, and other information-age technologies are fast replacing human beings in virtually every sector and industry ...”***

**-- Jeremy Rifkin <http://www.foet.org/JeremyRifkin.html>**

***“The disappearance of labor as a key factor of production is going to emerge as the critical unfinished business of capitalist society ...”***

**-- Peter Drucker <http://www.peter-drucker.com/about.html>**

## **Where The Jobs Are**

**By Anne McDonagh**

**On previous occasions when Learning Curves looked at the labour market, we discussed current trends which are likely to create the kind of jobs we can expect to have in the future. Most of the trends we have discussed previously have continued to work themselves out in the economic, political and social spheres of our piece of the world. The aging population, innovations in technology, the expansion of globalization, increased immigration, the financing of healthcare and education have continued to be major elements affecting the current and future workplace and current and future jobs.**

**Trends in the workplace, however, are not established facts and so we have to assess them warily. Often unforeseen events occur making even the wisest of forecasters look foolish. We don't have to look back too far to realize that international events like 9/11 changed our lives as well as the future workplace—and all of North American society—in major ways. Currently, the rise in the price of oil, the climbing loonie, and the increasing problem of gun violence in our cities are all going to have an impact on the economy and on employment if they have not already.**

**A person who is serious about his or her career keeps informed about current events—political, social and economic. If an event is truly important it will affect the workplace. For example, at the time of writing, as anticipated, avian flu has hit Europe while scientists around the world have been frantically working on a vaccine. Even if this particular virus does not cause a pandemic, that a pandemic is likely at some time in the near future has had an effect on the workplace, especially for the pharmaceutical companies.**

### **THE BIG PICTURE**

#### **The Baby Boomers Retire**

**There is some good news for the current work force and those entering it in the next few years across North America. The employment outlook by 2010 will be**

quite positive, mainly because of the retiring baby boomers. By 2010 there will be labour shortages across the spectrum from truck drivers to professors since approximately a third of the current work force is now over 47 years of age. *Labour market experts predict that this year, 2006, for everyone who enters the work force, two people will leave it, and by 2008, there will be a 10,000,000 continent-wide shortfall in employees.* It should be a worker's paradise for the first time since the sixties. In fact, Statistics Canada reports that between January 2005 and January 2006 a net total of 214,000 jobs have been created in Canada. And the jobs have been good, full-time jobs, averaging nearly \$20 an hour. Many of the job losses were the so-called 'McJobs,' low paid service jobs.

Labour shortages should create a more positive work environment. Employers will provide more benefits, higher wages and better working conditions in order to retain their employees, and they will employ more of the elderly and disabled. In fact, this year Bill 68 banning mandatory retirement at age 65 will come into effect and last year Bill 118, The Accessibility for Ontarians with Disabilities Act, was passed, which, among other requirements, will make it mandatory for all employers, public and private, to hire people with disabilities, in compliance with Employment Equity legislation, and to make the necessary accommodations.

Although the percentage increase of jobs in the next decade will be greatest for those with a university degree or college diploma, the absolute greatest increase in jobs will be for those with only a high school diploma—because they make up the largest group of job-seekers. The fact that there will be labour shortages even for low-skilled workers is an indicator of the positive employment picture that will gradually emerge over the next three to four years.

### **Globalization and Technology**

Globalization and technology continue to work symbiotically to transform the workplace and will eventually undermine the positive employment environment created by retiring boomers.

The ramifications of the partnership between technology and globalization have been far-reaching. They have made it necessary for many companies to compete with the rest of the world, which has created a very demanding work environment for their employees.

Productivity is a key component of competitiveness for Canada since we cannot compete with many other countries in terms of low wages. Canada, therefore, must try to compete by providing a value-added product and do so quickly and/or use technology to increase productivity. After all there are no wages for robots!

**Those who do have jobs are under pressure to work fast. While manufacturing has increased productivity through technology faster than the services sector, the pressure on workers is not confined to manufacturing. Workers providing a service are also under the gun to be productive; for example, call centre representatives are monitored in order to see that they provide excellent customer service in as short a time as possible.**

**Because employers have cut their permanent core work force as much as possible, there are fewer 'full time with benefits' employees in many companies than there were fifteen or twenty years ago. The 'just in time' system of inventory control has been transferred to the 'just in time' work force so that many who would like secure jobs now belong to the 'contingent' work force, that is, contractors, temporary personnel, part timers and other kinds of employees who only work when they are needed and who receive no benefits. Many are not even eligible for Employment Insurance.**

**Most of the contingent work force will need to work past the age of 65 just to survive. For most businesses, in theory at least, the combination of globalization and technology has meant that their location or size doesn't matter. The playing field for small to medium-sized companies has been leveled. (A small company is defined as one having less than 100 employees and a medium-sized company as one having 100 to 500 employees. The acronym is SMEs, Small and Medium-sized Enterprises)**

**SMEs don't need a large work force to produce an excellent product efficiently in smaller quantities than larger companies. By targeting a niche market at home and/or elsewhere in the world, they can make a go of it.**

**Most new jobs today are being created by SMEs. So, people looking for work should never forget the SMEs as sources of employment. Nor should they hesitate to start a small or medium-sized business if they have an idea and some capital.**

**Despite predictions that there will be plenty of jobs for even the high school graduate in the next decade, any job that requires repetitive, routine procedures is in jeopardy. Ever advancing technology will enable employers to shed employees who do routine tasks.**

**Some experts, like Jeremy Rifkin, would say the jobs created by the retirement of the baby boomers are just a blip in the downward trend of an ever decreasing supply of jobs.**

**Others will argue that jobs eliminated by technology will be replaced by new occupations that we haven't even thought of yet. No one can deny, however, that the impact of globalization and technology has been profound. In fact this pair have 'deindustrialized' North America.**

## **The Service Economy**

**What was called the New Economy in the nineties is now being called the New Service Economy. In the nineties, we perceived the New Economy to be primarily about technology. (Remember when everybody was ‘going into computers’?) However, the New Economy, even then, was really the result of deindustrialization, which was, indeed, largely the result of technological innovation. In North America, we have gone fairly rapidly from an industrial and manufacturing economy in the sixties to a service economy by the nineties.**

**Canada was always less industrialized than most developed countries and so did not experience as much dislocation as the United States did. However, like the United States we are now a thoroughly service-oriented economy. In 2003, almost 75 percent (74.7%) of Canadians worked in the services sector; 2.2% in agriculture, 1.8% in forestry, fishing, mining, oil and gas, 5.9% in construction, .8% in utilities and 14.6% in manufacturing.**

**According to economists, deindustrialization was made possible by increased productivity through technology. That means that many factory workers are no longer needed because the technology has achieved a higher productivity than workers could. Critics of this explanation claim that it is globalization, not technology, which has drastically reduced the number of manufacturing jobs in North America by making it easy for manufacturing jobs to be sent off-shore—to be ‘outsourced’—to developing countries where wages are about one-tenth of North American wages.**

**Whether manufacturing jobs have decreased because of technology or because of outsourcing, the fact remains that the corporations and shareholders are the only ones who have benefited from deindustrialization.**

**What are the implications of the service economy? Some people wonder what the source of our prosperity can be since services don’t create anything tangible; yet 75 percent of us work in the service sector. If we depend upon other countries, often unstable ones, to produce the goods we need, are we not making our own country vulnerable to the whims and upheavals of these countries?**

**Another concern is the fact that it is much harder to protect those who work individually or in small numbers for many different types of organizations as workers in the service sector do. *Unions are structured for an industrial/factory economy and do not adapt easily to the service economy.* But without unions, workers are at the mercy of employers. Past history teaches us that an imbalance of power leads to exploitation.**

**Finally, the dislocation of workers has been and continues to be a sad tale of broken dreams and shattered lives. Assembly line workers are unlikely to have the**

skills to go into service jobs at the level of remuneration they left behind. And this mismatch of skills—the disparity between what employers need and what the work force offers—will continue to be a source of complaint for employers and of despair for laid-off factory workers.

### **Outsourcing: Blight or Benefit?**

Outsourcing, the shipping of jobs abroad to countries like Mexico, India, China and many other so-called third world countries, has become a powerful factor in the North American economy. It is also a very valuable tool for corporations' bottom line. Hundreds of thousands of jobs—and not just menial, routine jobs—have left Canada and the United States. If this trend continues, what will happen to the jobs created by the retirement of the baby boomers? To say nothing of the current jobs lost in call centres, factories and the ICT (Information/Communications Technology) industry?

On the other hand, outsourcing for Canadians has a positive, if short term, advantage. In fact, some American companies would prefer to outsource to Canada where the distance is much less and the language and business culture are very similar. The savings in wages are not as great—especially with the rising Canadian dollar—maybe ten or fifteen percent as opposed to eighty or ninety percent—but they save money on transportation and fewer cultural and language misunderstandings. Perhaps most important of all, they save on the cost of health care for their employees.

### **THE LOCAL SCENE**

How do we get to know our local labour market? We need to read the business section of the newspaper for information on how the economy is doing, what companies are growing and so on. However, we also need to keep on top of all the social and political factors that could affect the labour market in our community. Here are a few factors to consider.

#### **Population Growth**

- *The population of Toronto will grow by half a million by 2031 from 2.45 million to 3 million. The GTA will grow by more than 2.6 million in the same time period, from 4.78 million (in 1996) to 7.45 million. Think of the jobs that will be created in the next decade and beyond! The construction industry will be kept busy building housing, schools and office buildings for the burgeoning population. Teachers, doctors, lawyers, police, firemen, dentists, pharmacists will all be needed to look after them.*
- **The list is endless of the services that will be required to accommodate such an increase in population. Issues like waste management, energy, clean water, and air pollution will continue to be enormous challenges. It is not too far-fetched to think that at long last the health of the environment will be taken seriously and that jobs will follow that concern.**

## **Immigration**

- **Toronto is the most multicultural city in the world with slightly more than 50% of its residents born outside of Canada. With immigration continuing, at least up to now, as government policy, there will be jobs in teaching ESL and other settlement jobs for some time to come.**
- **The multicultural nature of our society will be one of its major tourist attractions and thus provide jobs in the tourist industry.**

## **Violence Prevention**

- **The increasing violence in certain parts of Toronto and the GTA will have to be addressed in several ways. More police will be hired and more financial investment will have to be made in poverty-stricken communities. There will likely be, therefore, more jobs in social services as well as in police services for some time to come.**

## **Entrepreneurship**

- **According to a CIBC report, starting a small business is easier in Canada than anywhere else in the world and the fastest pace of growth in small business formation is in Oshawa followed by Toronto.**
- **It is predicted that by 2010 one in five Canadian workers will be their own boss. Entrepreneurs on average work longer hours and make less money than their counterparts who work for someone. For many, however, they are doing what they love and so it doesn't seem like work, and the money is not as important as it might be in a regular job.**
- **More than 20 percent of self-employed individuals are immigrants. So if you have a hankering to start your own business, you certainly won't be alone.**

## **Politics**

**Politics plays a part in the labour market as well. The new Conservative government in Ottawa may create jobs in the course of implementing its agenda or it may not. For example, if the national daycare program is scuppered as Mr. Harper has promised, thousands of jobs for Early Childhood Educators may not materialize.**

## **Health Care and Education**

- **The Ontario Liberal government's re-investment in health care and education means there are and will be jobs in those fields.**
- **In health care there is a need for doctors, for nurses, for nurse practitioners, for activation co-coordinators, for personal support workers and so on. Since the working hypothesis is that preventive health care is essential in keeping down health care costs, there will be more work for dieticians, social workers, health educators, mental health workers etc. in the near future. Environments to keep an eye on are retirement and nursing homes, home care and Community Health Centres. These locations, rather than hospitals, will be where many new jobs are**

created. Currently there is already a shortage of general practitioners and pharmacists.

- In public education (elementary and secondary), money withdrawn by the Conservative government is gradually returning. Obviously, because of this influx of money, there will be jobs for teachers. In any case, there would have been because of retirements.
- The Ontario government seems willing to implement the recommendations of former premier Bob Rae who conducted a survey of post secondary education. As with elementary and secondary education, there will be jobs anyway because of a looming shortage of professors and lecturers due to retirements.

### **The Crumbling Infrastructure**

- Years of neglect have left much of Ontario's infrastructure in a deplorable state. The former Liberal government had already delivered some of the money for its ten-year infrastructure renewal plan. That money is for clean water infrastructure, sewage treatment facilities, municipal roads and bridges, public transit and waste management facilities. These projects will mean work for civil and environmental engineers, engineering technologists and technicians as well as many types of workers in the construction industry for quite awhile. Presumably the new Conservative government will continue the flow of money for infrastructure renewal

There is good reason to be optimistic about jobs in Toronto and the GTA for the next decade, even the next two decades. Of course, the best jobs will go to the well-educated and the entrepreneurial, but it seems there will be enough jobs to go around for everyone despite the long-term trend of deindustrialization and sending jobs off-shore.

The following information is taken from the Government of Canada's Job Futures site <http://www.jobfutures.ca/en/brochure/table1.html>:

### **MOST PROMISING OCCUPATIONS**

<p><b>HEALTH</b></p> <ul style="list-style-type: none"> <li>• physicians, dentists, pharmacists, registered nurses</li> <li>• medical technologists and technicians</li> <li>• dental hygienists and therapists</li> <li>• ambulance attendants</li> <li>• elemental medical and hospital assistants</li> </ul> <p><b>INFORMATION TECHNOLOGIES</b></p> <ul style="list-style-type: none"> <li>• computer systems analysts and</li> </ul>	<p><b>MANAGEMENT</b></p> <ul style="list-style-type: none"> <li>• managers in public administration</li> <li>• construction managers</li> <li>• financial and human resources managers</li> <li>• managers in health care and social services</li> <li>• sales, marketing and advertising managers</li> <li>• information systems and data processing managers</li> </ul>
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<p><b>engineers</b></p> <p><b>EDUCATION</b></p> <ul style="list-style-type: none"> <li>• <b>university professors</b></li> <li>• <b>college</b></li> <li>• <b>other vocational instructors</b></li> <li>• <b>administrators in education and training</b></li> </ul> <p><b>ENGINEERING AND SCIENCE</b></p> <ul style="list-style-type: none"> <li>• <b>physical science professionals</b></li> <li>• <b>engineers</b></li> <li>• <b>electronic service technicians (household and business equipment)</b></li> </ul> <p><b>BUSINESS</b></p> <ul style="list-style-type: none"> <li>• <b>Human resources professionals</b></li> <li>• <b>business service professionals</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>sales and service supervisors</b></li> <li>• <b>supervisors in manufacturing and processing</b></li> <li>• <b>supervisors in mining, oil and gas</b></li> <li>• <b>contractors and supervisors, trades and related workers</b></li> </ul> <p><b>OTHER OCCUPATIONS</b></p> <ul style="list-style-type: none"> <li>• <b>Judges, lawyers and Quebec notaries</b></li> <li>• <b>psychologists</b></li> <li>• <b>paralegal and related occupations</b></li> <li>• <b>police officers and firefighters</b></li> <li>• <b>technical sales specialists in wholesale trade</b></li> <li>• <b>aircraft mechanics and inspectors</b></li> </ul>
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**EMERGING OCCUPATIONS**

**ENVIRONMENT**

<b>University</b>	<b>College/Technical</b>	<b>High School or less</b>
<ul style="list-style-type: none"> <li>• <b>Biophysicist</b></li> <li>• <b>Agrologist</b></li> <li>• <b>Specialist in geomatics</b></li> <li>• <b>Hydrogeologist</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Air quality specialist</b></li> <li>• <b>Environmental technologist</b></li> <li>• <b>Pollution prevention officer</b></li> <li>• <b>Environmental inspector</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Landfill equipment operator</b></li> <li>• <b>Silviculture and forestry worker</b></li> <li>• <b>Aquaculture and marine harvest labourer</b></li> </ul>

**BIOTECHNOLOGY**

<b>University</b>	<b>College/Technical</b>	<b>High School or less</b>
<ul style="list-style-type: none"> <li>• <b>Biologist: cellular, molecular, plant, animal</b></li> <li>• <b>Biochemist</b></li> <li>• <b>biophysicist</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Chemical technician and technologist</b></li> <li>• <b>Biological technician and technologist</b></li> <li>• <b>Water supply manager</b></li> </ul>	N/A

**AEROSPACE**

<b>University</b>	<b>College/Technical</b>	<b>High School or less</b>
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<ul style="list-style-type: none"> <li>• <b>Aeronautics specialist</b></li> <li>• <b>Aerospace engineer</b></li> <li>• <b>Electrical engineer</b></li> <li>• <b>Sales and marketing specialist</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Mechanic</b></li> <li>• <b>Aircraft inspector</b></li> <li>• <b>Machinist</b></li> <li>• <b>Tool and die maker</b></li> <li>• <b>Industrial design technologist</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Assembler</b></li> <li>• <b>Machining tool operator</b></li> <li>• <b>Aircraft electronic assembler</b></li> </ul>
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**MULTIMEDIA**

<b>University College/Technical</b>	<b>High School or less</b>
<ul style="list-style-type: none"> <li>• <b>Multimedia producer</b></li> <li>• <b>Project manager</b></li> <li>• <b>Computer graphics designer</b></li> <li>• <b>2D and 3D animation designer</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Product tester</b></li> <li>• <b>Library/information clerk</b></li> </ul>

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