Ottawa Manufacturers' Network

200 - 2625 Queensview Drive
Ottawa, Ontario
K2B 8K2

T. 613-314-4OMN (4666)
F. 613-726-3440
www.omnet.ca

Manufacturing in the Ottawa Area

A Summary of the State of the Industry November 2005

Executive Summary

Did you know that:

- We have approximately 700 manufacturers in Eastern Ontario / Western Quebec
- These companies employ approximately 41,000 people
- Manufacturing has a higher multiplier effect in driving other economic activity than any other sector of the Canadian economy (over 3:1)

Many think of Ottawa as a Government town with a healthy high-technology base. What gets overlooked is that there are other companies here making really interesting products – recreational vehicles, aircraft, DNA collection devices, specialty garments, nuclear medical equipment, hardened computing platforms, and solar energy management products, and building materials & products, just to name a few. Any time there is a diversity of OEM’s producing, managing, and selling end products to industry or consumers, there is a certainty that supporting manufacturing services will exist, including machine shops, sheet metal fabricators, plastic injection molders, boxes & packaging manufacturers, and the like. All of this is alive and well in our region!

Will Ottawa ever be a city where manufacturing dominates the landscape? No. Is Ottawa likely to attract ‘heavy’ manufacturing? No. And that shouldn’t be our goal.

What is important to our region is to retain and nurture manufacturing of two types – small to moderate volume production of a variety of end products, and manufacturing of items that support production of those end products.

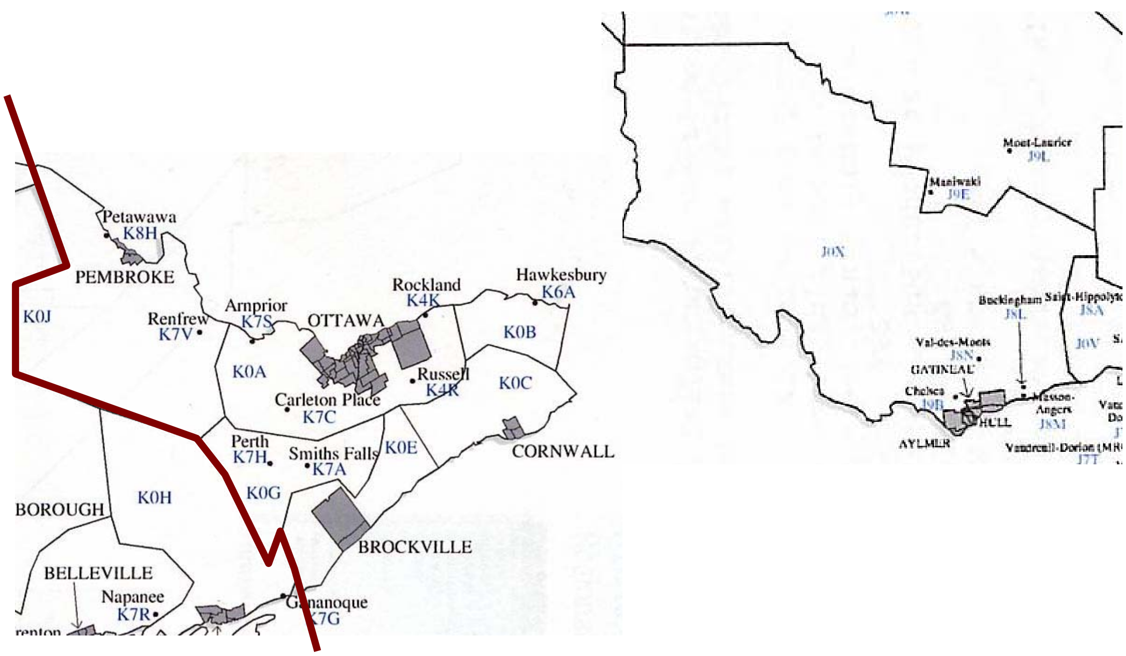
The good news is that both are alive and well around us. The bad news is that manufacturers in our region, and across Canada are facing competition like we've never known and a variety of economic pressures that present challenges for manufacturers. We're up for those challenges, but they're real. The Ottawa Manufacturers' Network (OMN), along with other organizations, is providing services, primarily in the forms of networking and educational opportunities (courses, workshops, etc.), which provide local manufacturers an opportunity to learn from others.

This report summarizes key facts about manufacturers in our area and also conveys what some of the leaders within our manufacturing community are saying they need for future success.

Background

In summer of 2004, Sunstrum Hanel & Associates Inc., on behalf of the Ottawa Manufacturers Network undertook an effort to explore the extent of manufacturing in the region. One of the first priorities was to define a manufacturer. For the purposes of this work, a manufacturer is defined as any company that conducts manufacturing directly, or has responsibility for manufacturing of a physical product, even if the value-added production steps are outsourced. Most of these firms identify themselves as having a primary NAICS (North American Industry Classification System) code of 31, 32, or 33. Services firms such as consultants and software providers to the manufacturing sector are examples of companies not included in this data, but ones that benefit from the multiplier effect of manufacturing. Manufacturers based outside of the region, with only sales or administrative offices in the region, were also excluded.

It was also important to define the region. We defined it as that area shown in the map below, representing 79 postal codes in Eastern Ontario / Western Quebec.



The Research

A number of sources and methods were used in the assembly of the relevant data, with the primary ones identified below:

- Industry Canada's Strategis 'Canadian Companies Capabilities' (CCC) data base – Industry Canada was extremely helpful with a custom extract of companies with primary NAICS of 31-33, and an office within one of the 79 postal codes that we identified as our region.

- Each company indicated was manually reviewed, mostly via their websites, to judge their legitimacy according to our definition noted above. Over 100 companies were identified that did not fit within our definition of a manufacturer.

- Other directories & data bases – Other directories and databases were reviewed for manufacturers who were not represented in the CCC extract. These included the OCRI / OBJ High-Tech list, the OMN's Regional Manufacturing list, and lists that the province of Ontario Ministry of Economic Development & Trade, the City of Ottawa, and various outlying communities had maintained. These other sources uncovered more than 100 companies not in the original CCC extract that deserved to be added.

Regional Manufacturers – Number and Sectors Represented

672 manufacturers were specifically identified. Given that it is unlikely that 100% of those in existence were uncovered by this process, we estimate approximately 700 manufacturing companies in the region.

Not surprisingly, Computer & Electronic Products was the most common, with 220 identified companies. Most of these companies would also identify themselves as part of the high technology community. These companies produce computer products, telecom equipment, measurement instruments, control devices, aerospace instrumentation, and many other types of products, along with electronic contract manufacturers. The Computer & Electronic Products sector represents 32% of manufacturers in the region.

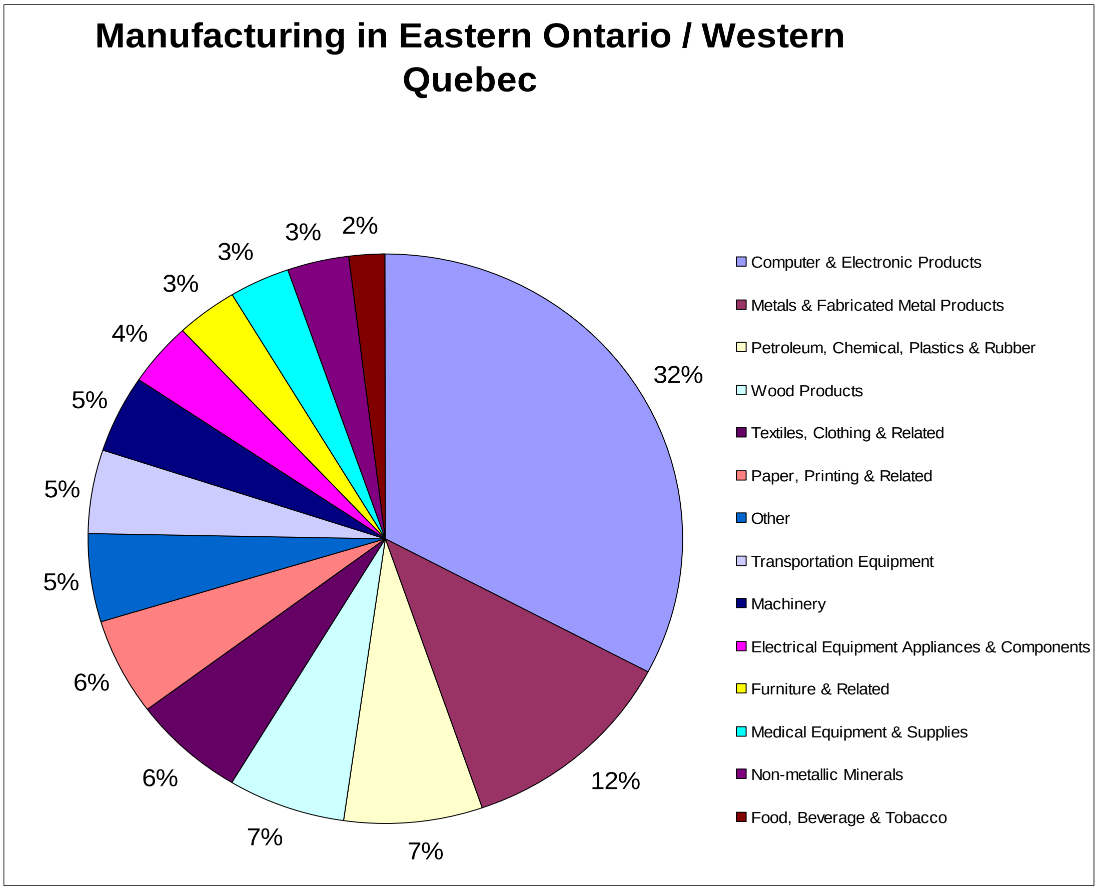
Second as a sector, was Metals & Fabricated Metal Products, with 81 identified companies. To illustrate the importance of the computer & electronic products sector, many of the firms supplying fabricated metal products would identify the high technology firms of the region among their major customers. These firms include sheet metal fabricators, machine shops and other firms dealing primarily with metals. This sector represents 12% of manufacturers in the region.

Third was Petroleum, Chemical, Plastics & Rubber Products. Plastic firms such as injection molders supply parts into the computer & electronic products sector and many others, including automotive. The chemical firms are producing soaps, chemicals for nuclear medicine (cancer treatment), enzymes for denim 'stonewashing' and various other interesting chemicals. This sector represents 7% of manufacturers in the region.

Also representing 7% of the manufacturers in the region, are those companies in the Wood Products sector. Included in this sector are kitchen cabinets, stairs, and roof trusses.

All manufacturing sectors recognized in the North American Industry Classification System are represented with at least 10-15 companies in each. Some such as Food, Beverage & Tobacco Products, and Transportation Equipment, surprise some people. We have companies producing a huge variety of end products.

An overview of the manufacturers and the sector, into which they best fit, is shown below.



Regional Manufacturers – Employment by Sector

Those companies found via the CCC data base have published employment figures. For other firms, employment was estimated, in some cases with direct interaction with the companies. It is estimated that the 700 companies identified in this report, directly employ about 41,000 people.

Of this number, the 4 leading sectors by numbers of companies are slightly more dominant in employment. These 4 sectors represent 58% of companies, and 62% of employment, as summarized in the table below. The single sector that drives this most dramatically is the Computer and Electronic Products sector, representing 32% of companies but 41% of manufacturing employment.

Manufacturing Sector	Percentage of Manufacturing Companies	Percentage of Manufacturing Employment
Computer & Electronic Products	32%	41%
Metals & Fabricated Metal Products	12%	8%
Petroleum, Chemical, Plastics & Rubber Products	7%	7%
Wood Products	7%	6%
Total (Top 4 Sectors)	58%	62%

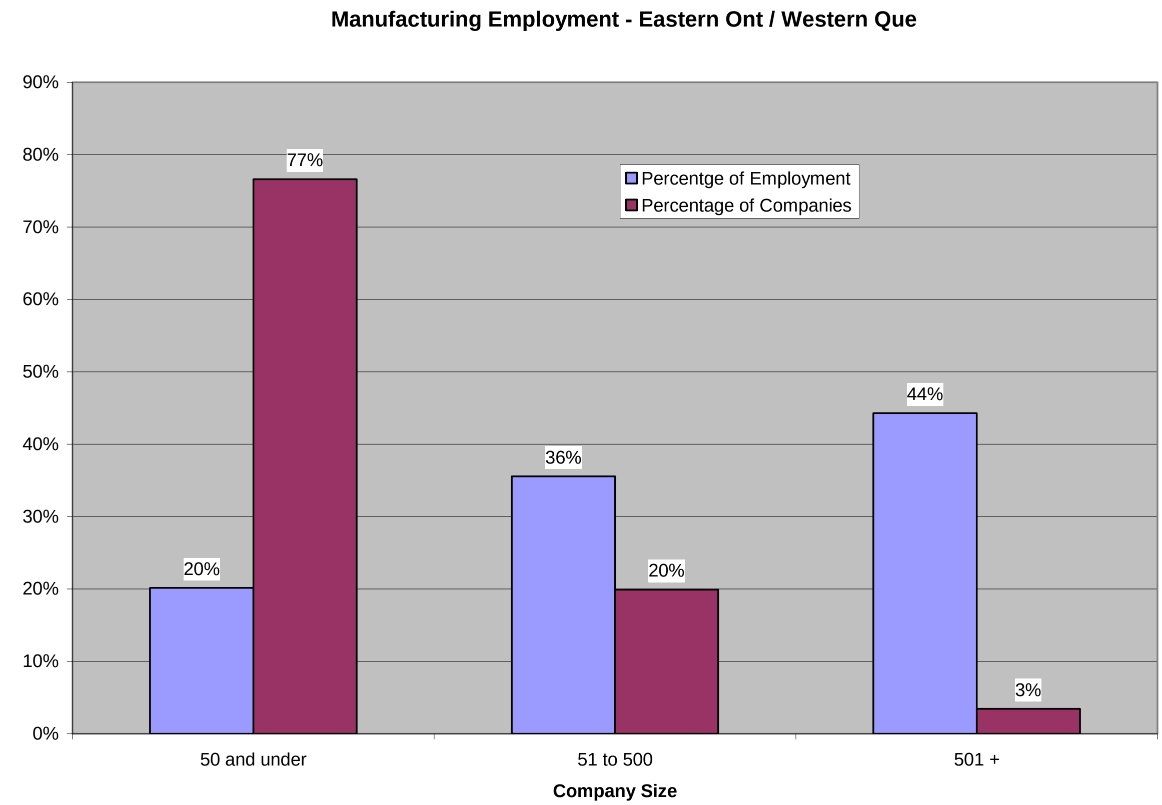
Regional Manufacturers – Company Size

Manufacturing employment in the region is dominated by the larger companies. To be more specific, companies employing more than 500 people represent approximately 3% of the companies in this report, but 44% of the employment. Examples of the large firms are the Royal Canadian Mint, Alcatel, BreconRidge, General Dynamics Canada, Domtar, Veritas Tools, MDS Nordion and the Canadian Bank Note.

On the other extreme, companies employing 50 people or less represent 77% of companies but only 20% of employment. This is not to imply that these companies are not important. Many of the small firms provide manufacturing services which enable the larger firms to succeed. Conversely, without the larger firms as customers, the smaller companies may not be as successful, further emphasizing the importance of keeping a substantial number of large manufacturers in the region.

The mid sized companies, with 51 to 500 employees represent 20% of companies and 36% of employment in the manufacturing community.

This is summarized in the graph shown below.



What Regional Manufacturers are Saying

The Ottawa Manufacturers' Network hosted an Industry Roundtable event in June 2005, involving approximately 20 of the areas most influential manufacturing leaders. The purpose of this meeting was to openly discuss the challenges facing them, and the kinds of programs and services that the OMN could provide to help with those challenges. Not every identified challenge lent itself to a specific OMN response, but all are included in this overview.

The following were the major themes that were identified as representing the major challenges facing manufacturers in the region. These are neither ranked nor orchestrated to be precisely unique…some overlap exists.

People - There are ongoing gaps in skilled trades and in junior leadership roles in manufacturing. Some are unsure of how to fully evaluate an employment candidate to ensure they have the aptitude for a manufacturing role and will have the ability to continue to learn & develop. There are also some concerns about the simple quantity of people available for certain jobs as our workforce ages.

Money - Some gap in understanding of how to manage risk related to foreign exchange rates remains. Also, the eligibility of manufacturing projects, including lean manufacturing for tax incentives…SR&ED and otherwise was unclear. Finally, it was recognized that there are numerous government programs, at all levels, that can be helpful to manufacturers, but it's not easy to keep tabs on the best ones, and understand how to access them.

New Product Introduction **-** This is a huge topic with concerns focused around the skills and practices needed to manage increasingly shortened product lifecycles and pressure on time to market, time to volume, and time to profitability. Skills such as program management play an enabling role and may not be well enough understood and staffed.

Borders - There are challenges at the U.S. border related to new homeland security-driven practices and controls for importers, exporters, and carriers. In a different vein, the virtual border has caused some Canadian manufacturers to suffer from a renewed preference to source materials and services within the U.S.

Speed / Change Management **-** The message was loud and clear that the world around us is changing faster than ever before, but with no corresponding relaxation of requirements and expectations. Lean is but one set of philosophies, tools and practices that can increase agility. The rate of change remains staggering, even in a context of a full lean implementation.

Access to Information - In the money areas and beyond there is so much data available to manufacturing leaders today…websites, e-newsletters, print media, etc., that we often end up information-poor. It is not easy to find the real gems related to accessing government assistance, or sending staff to the right training offerings, as just two examples.

There was also recognition that the manufacturing community in the region is poorly understood which is not helpful to efforts in recruitment and government co-operation. This has lead, in part, to the existence of Manufacturing Week 2005, 21-25 November, 2005.

The OMN Response

The primary purpose of the Industry Roundtable was to identify the major challenges that the 2005-06 OMN Program could help with. The OMN's reaction has included:

1. Further emphasis on the 'Money' theme - How to find relevant money, manage exchange rates, etc. One workshop was already held in October, in co-operation with the Ministry of Economic Development & Trade, on the topic of government financing programs with particular applicability to manufacturers. Another event, planned for 22 November will focus on the misconceptions that hinder maximization of Scientific Research & Development (SRED) tax credits.

2. Further emphasize on 'New Product Introduction' – There have already been two speakers in the year's lunchen/breakfast program that had at least some NPI dimension to their presentation. The topic of NPI is so broad, that it's a challenge to design the most efficient programs and services. As a result a survey is underway to better understand the specific needs.

3. Continuation of Lean offerings, including the Special Interest Group, that will meet next on 24 November, and a new Lean Training Series, which commenced in September. This training series is sold out, and an additional one is being considered for early 2006.

4. Manufacturing Week has been initiated to help to highlight to the community that we have hundreds of manufacturing companies, employing 10's of thousands of people in a diverse set of industry verticals. This is happening 21 to 25 November, and this report is being issued in concert with Manufacturing Week.

5. Initiation of regular Executive Forum meetings focused on manufacturing and related issues. These events are by invitation.

Manufacturing in Ontario

(Excerpts from Canadian Manufacturers & Exporters Manufacturing 20/20 – Eastern Ontario Report, 15 Jan 2005)

Manufacturing is the largest business sector in Ontario and also in the Canadian economy.

- Manufacturing directly accounts for 20% of all economic activity in Ontario
- Almost 1.1 million Ontarians are employed in manufacturing (18% of the workforce)
- Manufacturing makes an even larger indirect contribution to the community as a customer for the commodities, energy, and services produced by other sectors of the economy. Every dollar of manufacturing output in Ontario generates $3.19 in total economic activity – the largest economic multiplier of any business sector in the province.
- Since 1990, in Ontario, manufacturers production volumes have grown by 60% while value of manufacturing shipments has increased by more than 90%

There are a number of challenges facing manufacturers in Ontario. The list uncovered by the Manufacturing 20/20 initiative has much in common with the OMN list above.

In looking to the next five to ten years, Ontario manufacturers indicate that their future competitiveness and growth opportunities depend on Time, Service, Product differentiation, Innovation, Global sourcing, Global markets, Continuous improvement, Agility, Leadership, People, Integrity, Collaboration, Productivity improvement, and Cost competitiveness.

Issues specific to Eastern Ontario, although largely common with the rest of Ontario, or Canada for that matter, had some unique twists

Discussion and Conclusions

Whether the source is the more extensive Canadian Manufacturers & Exporters initiative, Manufacturing 20/20, or the Ottawa Manufacturers Network Industry Roundtable, the message is clear that there are certain things that manufacturers in our region, or any region must do to maintain or increase competitiveness.

The themes of People, Money, New Product Introduction, Borders, Speed / Change Management, and Access to Information are pervasive. We can, and should look to government to help set the scene to enable improvement in these important areas, and organizations such as Industry Canada, through Manufacturing 20/20 and other programs, the Ontario Ministry of Economic Development and Trade, and the City of Ottawa are all taking positive steps to foster a positive manufacturing climate.

With that said, there is little that is more powerful than a group of individuals or companies that decide to take it upon themselves to optimize their fortunes! That is what the OMN fosters – companies working together to learn from each other, to bring expertise to the table that would be otherwise less affordable, and to plant the seeds of new ideas with each other.

Manufacturing Week 2005, November 21-25 is an attempt at elevating the profile of manufacturing in the region – likely to become an annual event.

Manufacturing in Ottawa will continue to fight misconception, and will continue to play a significant but quiet role, behind the more evident force of governments and “high tech”.

As introduced in the executive summary, it is unlikely that the manufacturing base in Ottawa will expand dramatically, but modest growth in manufacturing activity is a real possibility, with focus in selected areas:

- Small to moderate volume production of a variety of end products – Although the total set will be broader than this, the two dominant groups of end products which Eastern Ontario is expected to be strong in are advanced technology products (telecom & similar) and consumer goods for which transportation costs are a major factor (kitchen cabinets, heavy metal products, etc.).
- Manufacturing of supporting products – the wood products, metals, plastics, packaging materials, labels, and other input items to the end products noted above will enjoy spin-off benefits of local production.

To close, manufacturing represents approximately 41,000 jobs in 700 companies in Eastern Ontario / Western Quebec. Computer & electronics is the largest sector, representing 32% of companies and 41% of employment. There are real challenges, as is the case nationally, but they are being addressed at various levels, and to sum it up – manufacturing is alive and well in the Ottawa region

Manufacturing Week 2005 Calendar of Events *Appendix 1*

Monday, November 21	**Tuesday, November 22**	**Wednesday, November 23**	**Thursday, November 24**	**Friday, November 25**
Executive "Kick-off" Reception Kanata Lakes Golf Club 4.30-6.30 pm	SRED Workshop MDS Nordion 7:00-9:00 am • **Misconceptions about the SRED Program** *Tom West and Cedric Don Carolis – SRED Solutions Inc.* • **A Manufacturer's Perspective of the SRED Program, and Misconceptions Experienced** *Dr. Michel Jullian – President, OCM Manufacturing*			OMN November Lunch Travelodge Hotel 11:30 am to 1:30 pm **NPI-Accelerating Innovation from the Lab to the Marketplace** *Dr. Nicolas Cudre-Mauroux, Director of R & D and Business Development, E.I. Dupont Canada, Kingston*
Tours: Different industry sectors, different locations across the city				
Hovey Industries (2005) Inc. 4:30 to 6:00 pm 2794 Fenton Road Ottawa, Ontario K1T 3T7 **Contact for Registration** Michael R. Wilcox Director of Sales & Marketing Tel: (613) 822-1765 Ext. 108 Email: mwilcox@hovey.ca	**Smith Induspac** 2 tours: 10:00 am and 2:00 pm 5499 Canotek Road Gloucester, Ontario K1J 9J5 Tours last approximately 1.5 hours. If you have it, please come equipped with safety attire: steel toe safety boots, and safety glasses. **Contact for Registration** David Wyngaarden Packaging Consultant david.wyngaarden@smithpackaging.com (613) 742-6766 ext 244 Solectron Kanata 1:00 to 3:00 pm Open House 3:00 to 5:00 pm Review of Solectron's RoHS Experience 425 Legget Drive Kanata, Ontario K2K 2W2 (613) 271-6533 MDS Nordion Theratronics Building (low building closest to the Carling Ave/March Road intersection) 447 March Road Kanata, Ontario K2K 1X8 Phone: (613)592-3400 **Contact for Registration** Elizabeth Mustaphi emustaphi@mds.nordion.com	**BreconRidge Manufacturing Solutions** 1:00 to 2:30 pm 500 Palladium Drive Ottawa, Ontario K2V 1C2 **Contact for Registration** Barb Perfitt Barb_Perfitt@BreconRidge.com **Iogen Corp.** 4:30 pm Bio-Products Division 300 Hunt Club Rd. East Ottawa, Ontario K1V 1C1 **Contact for Registration** Tom Janidlo tom.janidlo@rogers.com (613) 274-3376	**General Dynamics Canada** 3:00 to 5:00 pm 3785 Richmond Road Ottawa, Ontario K2H 5B7 Building #5 (green glass building) **Contact for Registration** Eugenio Rino eugenio.rino@gdcanada.com (613) 596-7552 No recording devices of any type permitted on the premises.	