

Mapping the Ontario Manufacturing Sector: TrilliumGIS

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At the Economic Developers Council of Ontario 2021 annual conference “EvolveOn”, Janean Currie, Bunmi Okuwa, Myrick Rodrigues, students in the post-graduate Public Administration Program at Seneca College summarized the workshop entitled “Mapping the Ontario Manufacturing Sector: TrilliumGIS”. The presenter was Brendan Sweeney, Managing Director of the Trillium Network for Advanced Manufacturing.

Abstract

The Trillium Manufacturing Network is a non-profit organization funded through the Canadian federal and provincial governments and dedicated to supporting the growth of Ontario’s manufacturing industry through mentorship and collaborative research opportunities (“Ontario Manufacturers Directory: TrilliumGIS”). With this goal in mind, the Trillium Network launched TrilliumGIS, an interactive business directory with over 20,000 members of Ontario’s manufacturing and innovation network.

The TrilliumGIS tool helps companies to easily access a visual database of manufacturers and educational institutions in Ontario to simplify access to information and to promote collaboration and innovation. Government supports ensure that the Trillium Network can continue to grow with the company now promoting manufacturing success through business-to-business mentorship, attracting investment opportunities, and building partnerships with educational institutions.

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Introduction

Based out of Western University in London, Ontario, Trillium Network for Advanced Manufacturing was incorporated in 2015. In response to a competitive global economy, the company developed TrilliumGIS, a successful mapping tool that contains information about Ontario based manufacturing companies. A provincially funded not-for-profit corporation, Trillium aims to raise awareness of Ontario’s advanced manufacturing ecosystem in a manner that supports growth and competitiveness.

Research conducted by the Lawrence National Centre for Policy and Management, (“Future of Canadian Manufacturing”), cited three areas of focus to contribute to the growth of Canadian manufacturing: business mentorships, educational partnerships and enhanced collaboration of investment attraction. TrilliumGIS, a brainchild of the Lawrence Centre, is a large step toward achieving these goals.

1) Keep it Local

Increased foreign competition paired with the common perception that manufacturing and industrial production in Ontario is waning has forced the continued search for effective business growth methods and staying competitive globally.

Ontario has the most diverse sub-national manufacturing ecosystem in North America. Brendan Sweeney, Managing Director, cites the recent success of TrilliumGIS assisting in the quick response to Personal Protection Equipment (PPE) shortages. When imported supplies were cut off, Ontario manufacturers connected, collaborated, and retooled their production lines, filling the gaps and supplying over two million PPE supplies to date. Manufacturers guaranteed a supply of food, medicine, and PPE needed by healthcare and emergency responders.

TrilliumGIS uses its network to connect partners and make them aware of initiatives that support manufacturing. "TrilliumGIS shows us that manufacturing is alive and well in Ontario and that we can make anything in Ontario." - Brendan Sweeney, Managing Director of Trillium Network for Advanced Manufacturing. The collaboration required for this kind of innovation is made possible through information tools such as asset and capability-mapping.

2) What is Asset and Capability-Mapping?

TrilliumGIS has identified a large and dynamic pool of manufacturing companies offering a wide range of products and with varying capabilities through asset and capability-mapping. Asset and capability-mapping is a compilation and provision of detailed information about companies which includes, what they do, what they offer, and where they are located. This form of mapping is not only a geographical locating service but also highlights company specializations and potential subsidiary products companies may offer. Publicly available information is collected and organized and can be searched by their North American Industry Classification System (NAICS) codes, their industry sector, or company products (TrilliumGIS).

As mentioned, there is a persistent belief that Ontario needs to outsource products due to a shrinking local industry. A sustainable asset and capability-mapping system raises awareness of an extensive variety of manufacturing companies. In fact, TrilliumGIS has identified 6999 manufacturing companies to date, and this number is growing daily. This awareness supports growth and competitiveness, ensuring a lively and diverse industry with bulk production abilities. This easy access platform encourages collaboration, can leverage a diverse manufacturing base, and identify potential intersections between manufacturers and potential customers, suppliers, and research and development partners. Enabling the connections between demand and the supplies which fill those demands, existing services and products can continue without disruption. They can develop a productive procurement process and build the necessary infrastructure to continue production.

This database of reliable, accessible, and up-to-date information will benefit the manufacturers by encouraging collaboration, which encourages innovation. Sharing information provides companies with the knowledge of what is in demand, how that demand can be filled, and how a relationship with Ontario suppliers can be developed and maintained. When manufacturers partner and collaborate the knowledge and expertise shared increases companies' overall capacity.

This platform is intended to be free and accessible to everyone. A sharing of manufacturing companies' stories, what they do, and how they do it. A sharing of public information may be difficult to find if left to standard methods of sourcing.

3) TrilliumGIS

TrilliumGIS provides evidence that there are many manufacturers in Ontario and tries to capture every establishment to ensure all manufacturers are included in the platform (Sweeney, "Five Things You Should Know About TrilliumGIS").

TrilliumGIS provides information that identifies companies in different manufacturing segments and shares their location and capabilities. The TrilliumGIS platform can be used to (TrilliumGIS):

- Get information about Ontario's manufacturing capabilities and supply chains for potential investment opportunities.
- Connect with potential suppliers and companies to supply.
- Discover some potential Research and Development and work-integrated learning partners.
- Find out about prospective employers and employment opportunities.

The intended users for TrilliumGIS include provincial and federal government agencies, municipal economic development offices, industry associations, site selectors, manufacturers, education and research institutions, job seekers, and anyone who values information about manufacturing establishments in Ontario (TrilliumGIS).

TrilliumGIS serves as an important tool for manufacturers to identify potential customers, suppliers, and partners. Increasing efficiency in the supply chain and open communication channels.

Educational institutions could use TrilliumGIS to identify work-integrated learning partners. This benefits the companies in locating appropriate apprentices and apprenticeships, filling employment gaps with fresh and innovative minds, increasing diversity in the workplace.

TrilliumGIS is also believed to be a valuable resource for foreign companies looking for promising new locations in Ontario for manufacturing investments and site selection firms advising the investors. The TrilliumGIS system opens new avenues to revenue for

Ontario companies and offers potential for increased manufacturing geographic diversity.

In addition to connecting companies with each other, suppliers, and potential investors, many manufacturing companies are shifting their hiring practices. TrilliumGIS has partnered with the non-profit organization Build a Dream to identify best practices and methods of implementing new processes that support efforts to shift the perception and improve employment outcomes for women in manufacturing. The partnership focuses on diversity and inclusion and aims to tackle barriers women face in manufacturing through the following steps (Sweeney):

- Identifying challenges related to advancing the employment of women in manufacturing.
- Identifying Ontario manufacturers that have implemented effective practices to engage, recruit, and retain women.
- Developing an Action Plan for use by manufacturers, governments, educational institutions, and industry associations to engage, recruit, and retain women.

These actions and initiatives continue to be updated and improved and are made available to manufacturing companies across Ontario (Sweeney).

Conclusion

Ontario has a large and diverse manufacturing industry offering Ontario made products ranging from automotive parts to food production and most recently PPE and ventilator parts in response to the Covid19 pandemic.

To ensure the growth of the manufacturing industry in Ontario, TrilliumGIS Offers a free platform for the sharing of information promoting collaboration and innovation, boosting Ontario's economic development (TrilliumGIS).

Initiatives such as Supply Ontario (Ontario.ca), a centralized supply chain agency, could benefit significantly through using TrilliumGIS by sourcing quality Ontario made products quickly and efficiently.

Through public service announcements, the province can create awareness and prioritize and the participation of manufacturing industries in TrilliumGIS. Its success guarantees a bright future for manufacturing in Ontario and could provide insight into broader national policies and strategies.

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