

Digitizing logistics for Halton's SME Manufacturers to reduce costs and increase competitive advantage.



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HALTON REGION

LOGISTICS OPTIMIZATION

In the just in time manufacturing world, efficient logistics is a critical success factor for manufacturers of every size. It is estimated that this sector generates over \$170 million of freight, 20-30% of the vehicle kilometers driven and consumes 20% of all energy in the region. Heavy vehicle transportation has a significant association with air pollution, noise, road wear and traffic fatalities.

Advances in technology allow for real time tracking and awareness of location of every truck in a fleet, however, many trucks are still leaving or arriving at the shipping dock at only 50% of their load capacity. Further, 20% of all trucks on the road are empty. This drives up costs for both manufacturers and transportation companies. Like other areas of the GTA, **Halton Region** experiences construction and traffic congestion frustrating everyone on the road and preventing a smooth flow of goods across the region. From an environment perspective, fuller trucks mean fewer trucks on the road burning less fuel.

Halton Region Manufacturing*:

SME Manufacturers	Employees
352	21,295

*Excludes Distribution Centers, Retail, and Hospitals

Yearly, there is an estimated \$170M of inbound and outbound freight through Halton Region representing 6-8% of manufacturing costs.

The speed and efficiency of the logistics processes has a major impact on operations, profits and customer experience. Manufacturers and transportation companies, face a time consuming and paper intensive process to ship products or determine arrival dates. One of the major challenges is the lack of integrated systems for trading and logistics partners. Even companies that have invested in technology don't have access to a broader collaborative network to enable optimization beyond their own suppliers or customers.

The Opportunity:

The advances in cloud technology combined with existing ERP data from manufacturing companies make it possible to track the real time freight requirements of the entire region. Artificial intelligence can be utilized to optimize freight movements using the available trucks and locations. This will increase the amount of cargo per truck, improve the tracking of goods in transit for manufacturers and reduce the number of trucks on the road during peak traffic times. Digitizing logistics transactions will enable load requests, pricing, invoicing and payments to be automated. Reducing inefficiencies leads to lower costs and higher profits.

Why address these challenges now:

- Manufacturers need competitive advantage
- Advanced in cloud technology and A.I make cost effective solutions possible
- Advance Manufacturing Super Cluster is in place to support efforts
- Addressing logistics challenges not only has a positive impact on bottom line, but also saves time and boosts customer satisfaction

Next Steps:

Capitalizing on the opportunity requires early engagement from manufacturers who can help in further defining the current state and potential savings in digitizing logistics process.

To kick start the collaboration, we invite you to join a working group to further define the project goals, objectives and outcomes.

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