

Circumference Technology Services

Circumference is a business and technology services company offering software engineering and performance solutions for small to mid-sized companies.

Headquarters	842 Victoria Street N, Kitchener, Ontario, N2B 3C1
Year Established	2002
NAICS	
Employees	15
Major Expansions	2010
Exports	N/A
Parent Company	N/A
Other Locations	N/A

Organization

Manufacturers are regularly being reminded of the need to leverage the benefits of IIOT and disruptive Industry 4.0 technologies and processes. For most small to mid-sized manufacturers (SMEs) this is perceived as a daunting task suited only to large corporations like Siemens or automotive OEMs. In reality, smaller manufacturers will benefit by taking steps to move in the direction of Industry 4.0, and will uncover significant opportunities as well. Circumference Technology Services (Circumference) helps SMEs take the right steps to move in this direction, and to develop their data-driven capabilities and smart factory approaches without need for a massive capital budget.

Based out of the Waterloo Region, Circumference is a technology and services company offering business and software solutions for small to mid-sized manufacturers needing to transition towards connected, smart(er) factories and Industry 4.0 capabilities. The firm works with clients to determine ways to increase the efficiency and overall quality of their production process using data and software tools to create actionable information. Circumference employs a “bite-sized” approach that takes a holistic view of a company’s supply chain and determines what practical, efficient, and budget-friendly steps the manufacturer can take to increase its competitiveness. In designing the data and information pathways for the company, an emphasis is placed upon minimal disruption to regular business. The team at Circumference understands that while change is taking place, business must continue without interruption and without adding more stress in the workplace.

History

The idea for Circumference began in Ottawa with the company's owner, John Peacock, in 2002. Peacock wanted to help companies organize their mission-critical information systems as computers and digital systems were changing the business landscape. In 2010, he moved the head office to Waterloo Region to be closer to family and to have better access to the multitude of manufacturing companies distributed throughout Southwestern Ontario and the GTA. Today, Circumference has team members based in different cities between Ottawa and Kitchener-Waterloo, and offers services to companies throughout Ontario.

Performance

To help companies get started, Circumference offers a complimentary [Industry 4.0 Readiness Assessment](#). The assessment involves sitting down with the manufacturer's management team to identify the company's status with respect to its systems and processes, predominantly in terms of data use and information management. From there, Circumference works with the managers to recommend initial steps the company can take moving forward, including help in identifying what its short- and long-term goals might look like.

Work typically begins when Circumference and company managers mutually decide on a manageable, bite-sized, project which can be completed in a few months. Projects address the individual needs of the manufacturer, but often consist of digital data collection and analysis, software and application development, website development, ERP or MRP services, or business systems development. For many manufacturers, the first step often revolves around data collection and traceability concerns. This does not mean mindlessly collecting data. The Circumference team focuses on a strategic action to identify and surface the right data, and how to visualize it to provide actionable information; this leads to data-driven decisions and cutting-edge insights for Ontario manufacturers.

To provide value added, data-driven solutions, Circumference uses a diverse team of professionals. About half the team and its entire leadership group are senior in the industry with decades of experience, while the other half are promising young talent with a knowledge of technology, programming, and business. Peacock fosters ongoing communication between team members to ensure that all key decisions are informed with insight and knowledge of the entire process.

A key measure of success for Circumference is that most of its business comes from repeat customers and the majority of its new customers from referrals. What starts out as a small project often turns into an extended engagement because the business impact is so valued.

Circumference also engages their business community and builds relationships through its peer-to-peer mentoring and networking sessions in the greater Ottawa area and Waterloo Region. These sessions provide a platform where business owners and leaders learn from each other by sharing knowledge and best practices within their respective industries. Circumference also creates online content to help manufacturers improve their performance and profitability as they transition towards Industry 4.0. These initiatives help build up the general level of knowledge among Ontario manufacturers and provide opportunities for all participants to find new, mutually beneficial relationships through networking.

Challenges

A challenge facing Circumference is to effectively communicate the message that Industry 4.0 does not have to be a scary, costly journey that is only relevant to large corporations. Unfortunately, many Ontario manufacturers are skeptical of adopting Industry 4.0 technologies and processes because it seems intimidating, and many have had similar initiatives fail in the past. These reservations are overcome (or at least helped) by Circumference's initial [Industry 4.0 Readiness Assessment](#), which serves as a guiding hand for executives looking to navigate perceived daunting changes. By offering this guidance, the Circumference team hopes to change the narrative surrounding Industry 4.0 and what it truly means for Ontario manufacturers.

A secondary challenge for Circumference is to spread awareness that adopting technologies simply for the sake of technology is not the right approach. Circumference advocates that any path to improvement needs to be well-planned and based on an informed analysis, as opposed to making significant capital investment before an adequate direction is in place. Combining this approach with expert guidance from Circumference helps companies fully leverage the exponential benefits of Industry 4.0 and other paths to success.

Prospects

It is becoming increasingly difficult for Canada to compete globally on labour costs, so manufacturers at home must look for better ways to regain competitiveness. If Ontario manufacturing is going to thrive moving forward, some of this competitiveness must come from leveraging new technologies and processes. Circumference recognizes that, for the foreseeable future, advances in manufacturing will be largely data-driven, and that there are many reasonable, yet practical steps that Ontario manufacturers can take to adopt the needed technology and business paradigms.

The team at Circumference holds up that Industry 4.0 is not to be thought of as the end goal, but a direction that manufacturers take in order to remain competitive. Circumference adds value within the sector by using its business expertise to help manufacturers find that direction, and its technical expertise to create the tools they need to move forward.