



BAY OF QUINTE
ECONOMIC DEVELOPMENT

INDUSTRY OUTREACH REPORT 2021-2023

**FINDINGS FROM OUTREACH
INTERVIEWS WITH BAY OF QUINTE
REGION MANUFACTURERS**

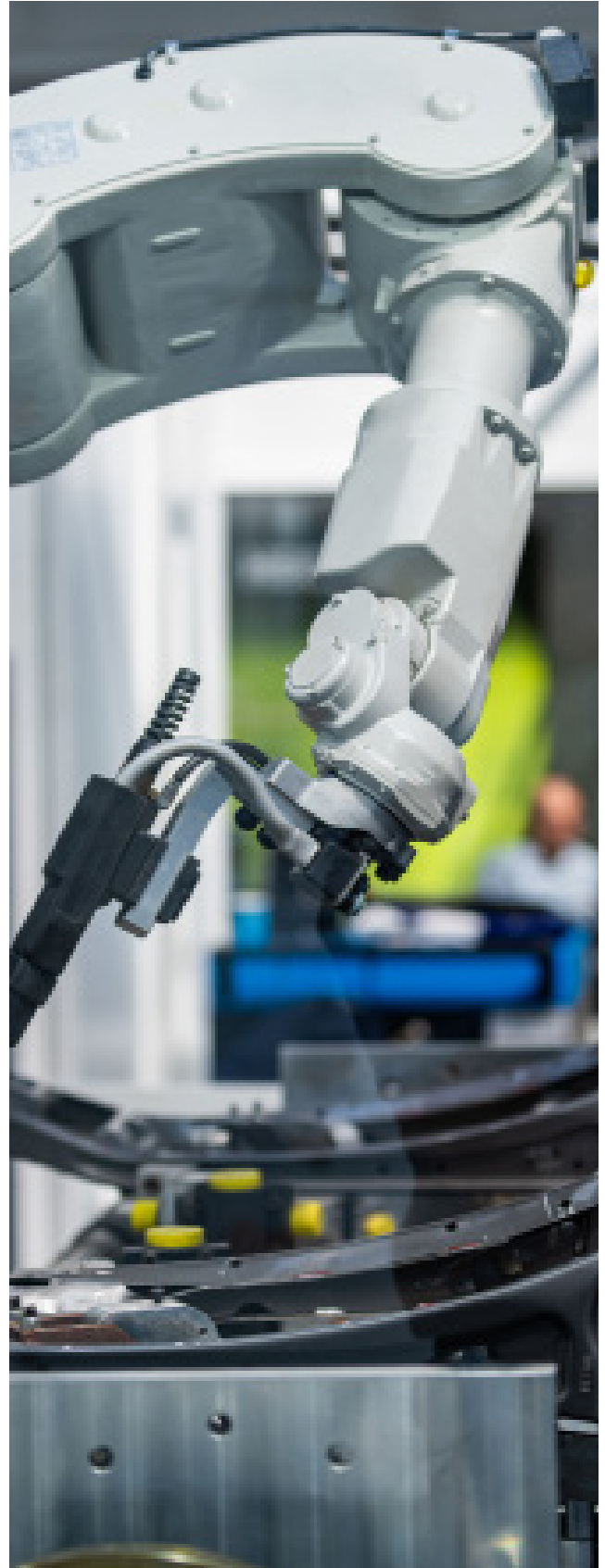
INTRODUCTION

Manufacturing Sector - Ontario Labour Market Partnership (OLMP) Industry Outreach Initiative.

Quinte Economic Development Commission (QEDC) conducted a series of outreach visits with Bay of Quinte region manufacturers between September 2021 and March 2023; this document reports the findings. The goal of the industry outreach project was to reconnect and engage with local industrial businesses to identify sector-specific trends, opportunities, barriers and assistance required by local manufacturers. The Ontario Ministry of Labour, Immigration, Training and Skills Development provided funding to QEDC to support industry outreach activities. The funding also supported manufacturing awareness initiatives and events in the community.

QEDC selected and engaged a local consultant with a background in supporting manufacturing and in delivering customer-focused solutions including workforce-development programs. Chuck O'Malley, retired Business Development Manager from Loyalist Training and Knowledge Centre, was selected to conduct the outreach program to leverage his industry knowledge and connections.

The project team created a survey tool to document the strategic direction of the participating companies. Sixty-four (64) local manufacturers were interviewed providing direct line-of-sight feedback from manufacturers, resulting in immediate opportunities for QEDC to provide follow-up support to participating companies, track future strategic directions of individual companies, and document overall trends in the manufacturing sector.



EXECUTIVE SUMMARY

Quinte Economic Development Commission (QEDC) is tasked with delivering industrial business investment attraction and retention programs for the City of Belleville, the Municipality of Brighton and the City of Quinte West. The work done in this study allows QEDC to support its business retention mandate and better prepare QEDC to support new investments by understanding industry trends and issues.

The findings of this report reinforce the strength of industry but also the growth opportunities for both individual companies and the sector. Despite challenges and barriers, companies are seeing new opportunities for growth, expansion, new product mandates, and plans for new automation technologies and digitization while working towards continuous improvement and lean manufacturing strategies. All businesses have a life cycle and there may be closures and downsizings of some facilities but overall, the Bay of Quinte region's manufacturing sector continues to grow.

Labour and skill requirements continue to be ongoing themes in workforce trends that we are seeing across many areas of the world. Locally, companies have plans for hiring workers across a variety of positions, in addition to upskilling and retraining workers to meet business demands.

Many companies have strategic priorities for implementing technology, robotics and automation to address workforce needs; when possible, replacing lower-skilled, labour-intensive operations with automation and redeploying workers to higher, value-added activities within the manufacturing plant.

The information gathered in this report has already been used to support various projects including:

- Referrals to the Quinte Technology Adoption Program (QTAP)
- Referrals to incumbent worker training support through the Elevate Plus program including connections in some cases to Loyalist Training & Knowledge Centre (LTKC) for training options
- Development of company profiles and testimonials
- Company specific training support
- Follow-up Events
- Continuous Improvement Panel Discussion
- Technology Demonstration Fund Grant workshop
- Career Ready wage subsidy program for precision metal companies
- Quinte Manufacturing Association events
- Another round of SDF funding approved

We plan to further leverage this report for future technology, continuous improvement and workforce development support.



FINDINGS



MANUFACTURING IS POISED FOR GROWTH IN THE BAY OF QUINTE

The manufacturing sector in the Bay of Quinte region is strong, active and a major wealth creator for the region's economy. Many companies are poised for growth with opportunities for increased sales, new product mandates, building expansions and new equipment and technology.

WHY IS THIS GROWTH IMPORTANT?

The Bay of Quinte region's large and diverse manufacturing sector provides over 10,500 direct jobs, employs almost 16% of the region's workforce, accounts for 19% of the total wages paid in the region and has some of the highest local private-sector wages.

The sector accounts for 50% of the region's economic output, with manufacturers contributing \$6.9 billion to the region's \$13.6 billion GDP economy.

The manufacturing sector's high economic multiplier* positively impacts other areas of the economy including sectors such as warehousing, equipment fabrication and repair, transportation, product supply, customized training, co-packing, retail, service, construction, and others.

The Manufacturers Alliance for Productivity and Innovation in the U.S. estimates that every \$1.00 of manufacturing generates \$3.60 of value-add elsewhere across the economy.

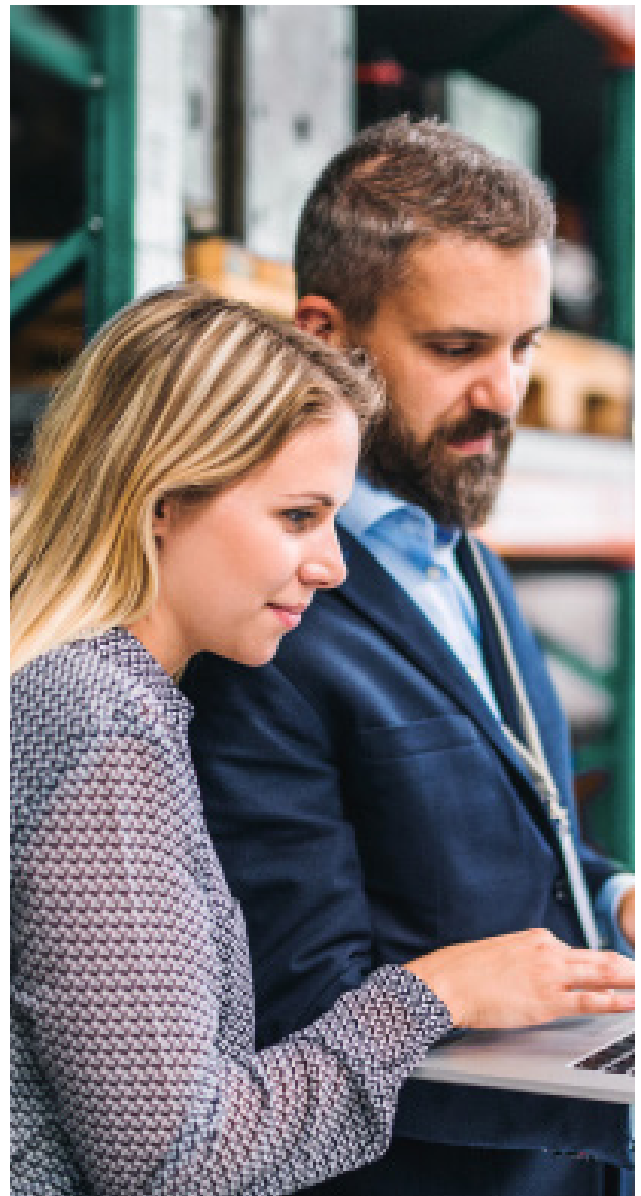
SURVEY TOOL

The QEDC project team created a survey tool to document the findings from each company and this tool enabled direct, line-of-sight feedback from local industry members with a focus on each company's high-level strategic priorities and directions. The survey tool was used as a guide to direct conversation with the manufacturers rather than a checklist style survey tool. Discussions focussed on company-specific strategic directions, opportunities and barriers to growth. The survey did not ask about factors such as municipal or stakeholder services, but those issues were captured if they were specifically identified by a company as a barrier to growth.

One of the best practices of this project was the establishment of an after-action debrief meeting and response plan. The surveyor(s) and the QEDC team reviewed the findings after each visit and delivered a timely response to manufacturers with information, assistance, resources and referrals to the participating companies. Each interview typically resulted in 3-4 follow-up response actions.

To be respectful of the time of each participant, the surveys were planned for 45 to 50 minutes. Surveys often went longer as the manufacturers were pleased to share their stories and are proud of the work they do. Plant tours were not requested as part of the survey but were frequently provided by the companies to show in person the opportunities or barriers that they were facing.

The survey results were captured and entered into a master spreadsheet and uploaded into QEDC's CRM system. Individual company reports are kept confidential and overall trends are included in this report.



Eastern Region- Ontario Labour Market Partnerships (OLMP) Project Manufacturing Sector Workforce Development and COVID-19 Recovery			
Date of Survey		Done by:	
A. COMPANY INFORMATION			
Company Name			
Address			
City	PC		
Contact	Title		
Email	Tel		
Is the person completing this questionnaire same as above? YES NO			
If not, please provide contact information below			
Contact	Title		
Email	Tel		
B. COMPANY STRATEGIC DIRECTION AND INITIATIVES CURRENTLY PLANNED OR UNDERWAY 1-5 YEARS OUT			
Please check off any that apply to your company			
Digital transformation (Data, technology, process, org capability)			
New technology			
Automation/Robotics			
New equipment/process			
New product lines			
Expansion/contraction			
Research and Product development			
Continuous improvement- lean, six sigma, TPM, other			
Energy Management			
Supply chain integration			
Logistics			
Market Access			
People on boarding, training and development			
Other (Specify)			
C. WHAT CURRENT CHALLENGES/OPPORTUNITIES DO YOU ENVISION RELATED TO THE INITIATIVES MENTIONED?			
D. WORKFORCE			
What, if any, workforce changes do you anticipate due to: growth, succession plans, retirements, turnover, expansions. If so, what specific roles and numbers do you anticipate?			
ROLE	QTY		
Production associate			
Machine operator			
Manufacturing technician/process equipment technician			
Maintenance- Electricians			
Millwrights			
Engineering			
Quality assurance			
IT			
Leadership/management- team leads, supervisors, senior leaders			
Human resources			
Warehouse logistics-MHD			
automation specialist			
Other (specify)			
E. WHAT CHALLENGES, GAPS, AND OR OPPORTUNITIES DO YOU SEE WITH RESPECT TO WORKFORCE DEVELOPMENT? (SKILLS, KNOWLEDGE, ABILITIES GAPS, COSTS, RELEASE TIME ETC.)			
F. WHAT CHALLENGES, GAPS, AND OR OPPORTUNITIES DO YOU SEE WITH RESPECT TO WORKFORCE ATTRACTION AND RETENTION (EMPLOYEE ENGAGEMENT, CHECK ON IMMIGRANT WORKERS AND KNOWLEDGE OF ONTARIO IMMIGRANT NOMINEE PROGRAM (OINP))			
G. WHAT IS THE LEVEL OF EMPLOYEE ENGAGEMENT AT YOUR PLANT / FACILITY?			
Rate response between a Scale of 1 - 10			
H. WHAT SPECIFIC TRAINING/DEVELOPMENT IS REQUIRED AND FOR WHOM (SEE ABOVE GROUPS)			
I. POTENTIAL NEW PROGRAM - SKILLSADVANCE ONTARIO (SAO FUNDED) EQUIPMENT TECHNICIAN / MANUFACTURING TECHNICIAN - ROLE DESCRIPTION - SEE ATTACHED			
a. What is the most critical specific content areas you would like to see developed:			
Technical- mechanical			
Technical- electrical/instrumentation			
Continuous improvement-lean six sigma-green belt, TPM, 5S			
Interpersonal effectiveness.			
Computer skills- excel, etc.			
Other (specify)	1)		
	2)		
	3)		
b. What other post secondary or micro credential skill programs would you like to recommend that would help you address your workforce challenges / opportunities			
J. ARE THERE ANY INNOVATIVE SOLUTIONS YOU HAVE TRIED THAT YOU WOULD LIKE TO SHARE?			
(Contingent workforce, hiring back former retired employees, New shifts to accommodate childcare, New immigrant hiring etc.)			
ADDITIONAL COMMENTS			

MAJOR THEMES AND RESULTS

As the survey results were collected immediate themes emerged and were maintained throughout the project. Keep reading to find these themes highlighted and summarized below.

01

EMPLOYEES

There is an on-going need for new workers and upskilling of the existing workforce.

02

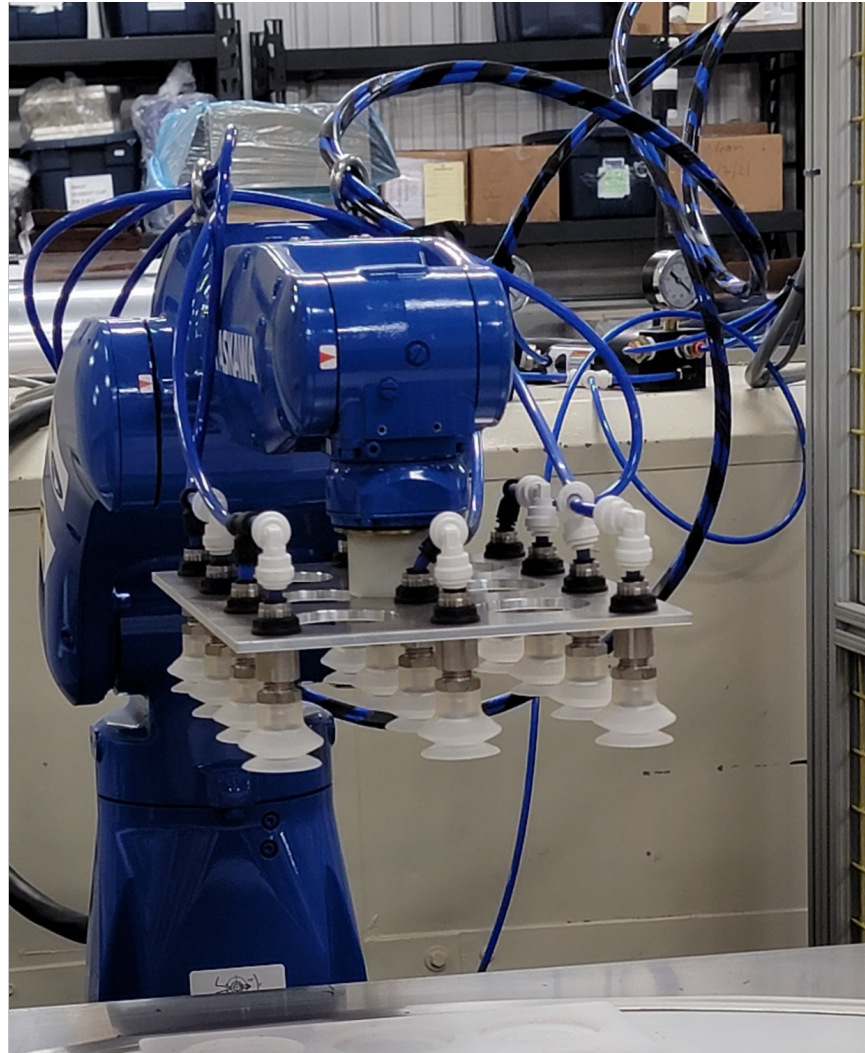
GROWTH

Many companies are experiencing growth opportunities enabling the adoption of new technologies, the purchasing of new equipment, and building expansion.

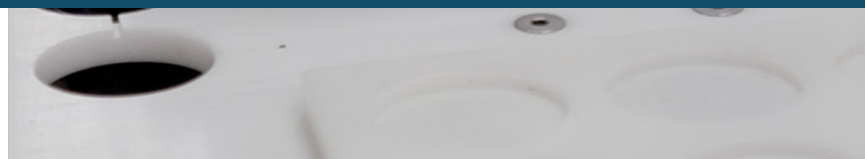
03

NEW CAPACITY

Manufacturers are competing to secure new product mandates and production lines.



Manufacturers are facing complex and interrelated issues while managing growth and expansion opportunities.



04

NEW TECHNOLOGY

Automation and the implementation of new technologies is being planned to address worker issues, reduce costs, and improve environmental sustainability.

05

SUPPLY CHAIN IMPACTS

Supply chain challenges were prevalent among interviews conducted during the height of the COVID-19 pandemic. Companies struggled with availability and cost increases from suppliers.

06

IMMEDIATE ACTION ITEMS

Each company interview typically resulted in 3-4 follow-up items from QEDC.

Survey responses demonstrate strong growth opportunities for many manufacturers that could lead to increased sales, expanded markets, additional production lines, new technologies and facility expansions. To capitalize on these opportunities, companies must address the various barriers and gaps they are facing through workforce development and technology implementation and to exploit the advantages many of them have identified.



STRATEGIC DIRECTION

One of the main goals of this industry outreach initiative was to understand manufacturers' current and future strategies to maintaining and growing their businesses. Companies were asked to provide information on strategic direction and initiatives currently planned (1-5 years) or underway.

Themes discussed included automation, robotics, digitization, new products, markets and equipment, continuous improvement, supply chain, and workforce.

There is a strong drive in the region to implement new technologies, and automation while also increasing employee recruitment and upskilling.

Companies are exploring ways to expand by developing new products and entering new markets, whether locally or globally.

The following charts summarize key items companies will need to advance their strategic direction. Within the major categories such as Digital Transformation companies identified the items they need help with. In many cases multiple companies identified the same item.

91%

Plan to purchase or have already purchased new technology, equipment and automation

48%

Plan to develop new products or already have new products in development

86%

Plan on hiring additional staff to fill open positions or are actively recruiting to these ends

36%

Want to increase local marketing and company awareness

81%

Need training and development support

28%

Plan to enter new markets or have already entered new markets

66%

Have plans for further growth and expansion

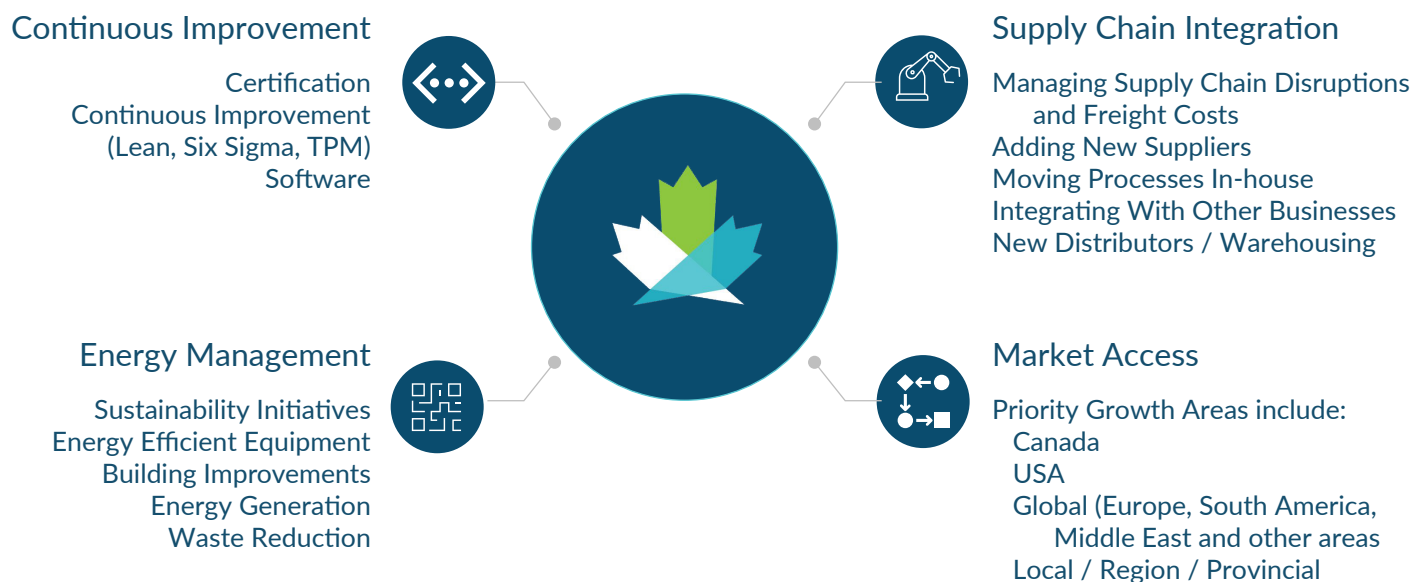
27%

Plan to implement building expansions

Priority Items: Technology and Production



Priority Items: Continuous Improvement, Energy, Supply Chain and Markets



CHALLENGES TO IMPLEMENTATION

Companies were asked to share the challenges and barriers related to implementing their strategies. The main responses that emerged as barriers or challenges to moving ahead were grouped into the following four themes

People

- Difficulty in recruiting new staff
- Retention of current workers
- Labour market causing upward wage pressure

Supply Chain

- Supplier issues - timing and availability
- Increased input costs of raw materials and other inputs
- Increased shipping costs in particular during recent years

Customers

- Increased product demand making it difficult to keep up with demand
- Decreased product demand causing slow down
- Uncertain customer demand making production forecasting difficult

Regulations

- Regulatory Compliance
- Changing regulations and rules during Covid

In addition to the main responses there were other items that did not emerge as often but are worth reporting as there may be opportunities to address some of these through various initiatives.

People

- Improve /encourage employee engagement
- Apprentice and employee poaching
- Impacts of aging workforce, loss of legacy knowledge, skills, experience, and labour
- Address workforce resistance to change

Community

- Lack of employee housing / affordable employee housing
- Improve public transit, including across municipal borders

Customers

- Loss of contracts / customer retention
- Constantly changing market conditions

Suppliers

- Contractor availability

Facility

- At full capacity in the plant
- Lacking space to expand
- Capital expenditure decisions made elsewhere
- Cash flow / capital availability
- Implementation resources required for growth

Information Technology

- Connectivity issues (internet speed)
- Cybersecurity concerns/risk

ENABLING IMPLEMENTATION

Companies participating in the survey also shared things that are in place or will soon be in place that will facilitate the implementation of their strategic plans. The main responses that emerged are listed below and were grouped into the themes of Facility, People, and Customers:

Facility

- Automating processes for efficiencies
- New products being developed for the site
- Adding space to accommodate growth
- Continuous improvement to enhance performance
- Expanding community presence to increase awareness of their business and job opportunities

People

- Up-skilling existing employees to support growth and technology
- Employee engagement facilitating change
- Succession planning to transfer knowledge from retiring workers to new workers

Customers

- Increased product demand creating growth opportunities
- Entering new markets to increase sales and diversify their customer base

In some cases what one company viewed as a barrier to implementation another saw as an opportunity. In one instance a company saw increased customer demand as a challenge for their facility as it strained their available resources while in another company the increased customer demand allowed them to make better use of their infrastructure while also improving their competitiveness.

The following items were not mentioned as often but they are worth reporting as they reveal some additional ways that companies are moving forward with implementing their strategic plans.

Leveraging relationships

- Partnering with post-secondary
- Sharing with sister plants
- Co-manufacturing

Utilizing existing space/capabilities

- Bringing outsourced processes in-house
- Free up space
- High performance work solutions
- New ERP system

People

- Temporary foreign workers



WORKFORCE

The workforce discussions related to changes in workforce due to:

- growth
- succession plans
- retirements
- turnovers
- expansion or downsizing.

Companies provided their specific numbers for selected primary occupations in the manufacturing sector. Production Associates and Machine Operators were the two occupations that had the highest number of forecasted workers needed in the future. We did not ask about positions such as management, office staff or sales and marketing but if they were mentioned they were recorded as “Other”.

It should be noted that the early interviews were conducted while Covid was still significantly impacting manufacturers. At that time many manufacturers were having difficulty forecasting their needs, however there was a positive trend towards growth and new hiring.

694

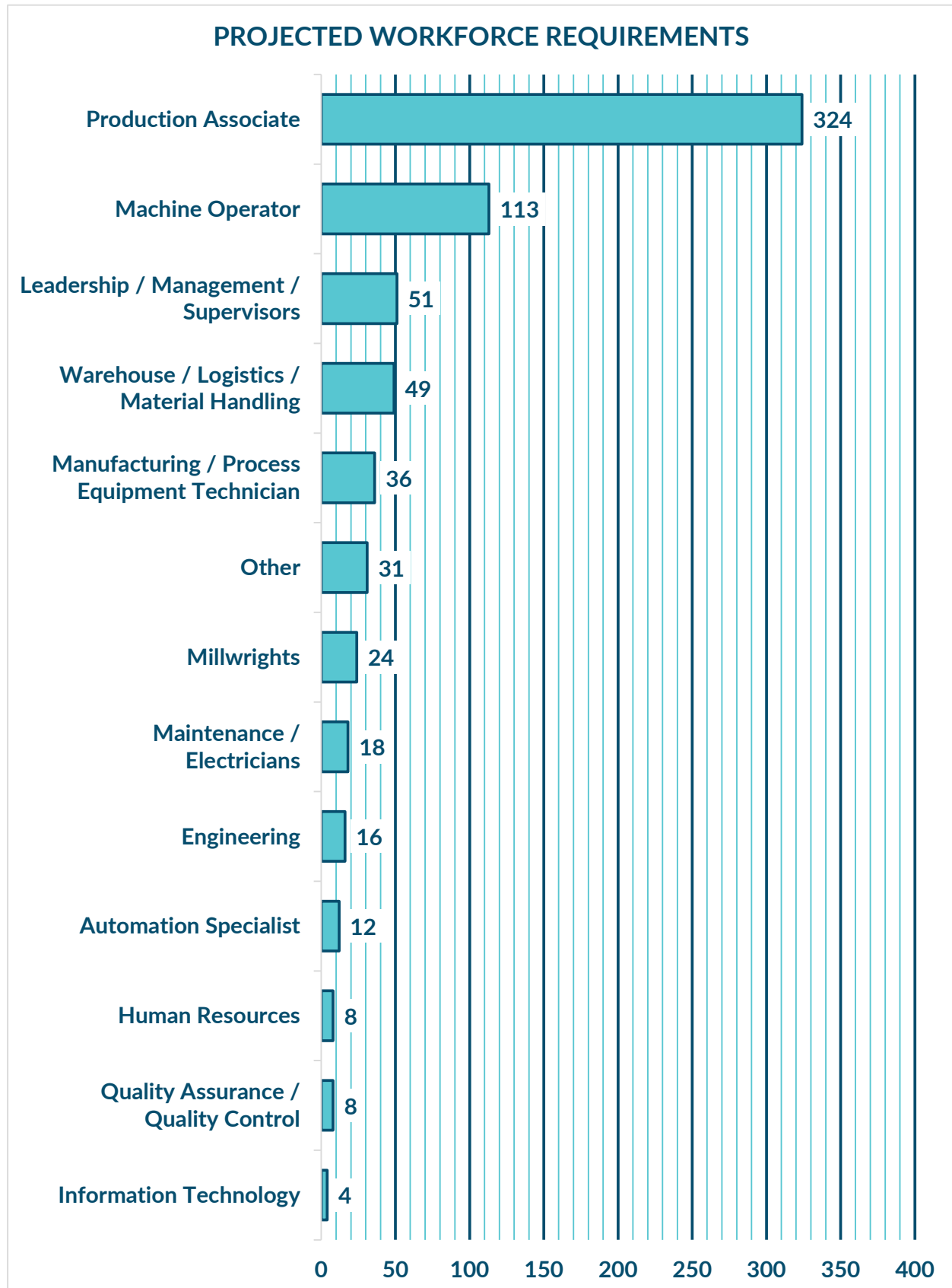
Number of new employees needed to fill identified positions

59%

The 64 participating companies represented 59% of the region's 110+ manufacturers

60%

The participating companies combined workforce of 6,300 employees accounts for 60% of the region's 10,500 manufacturing employees

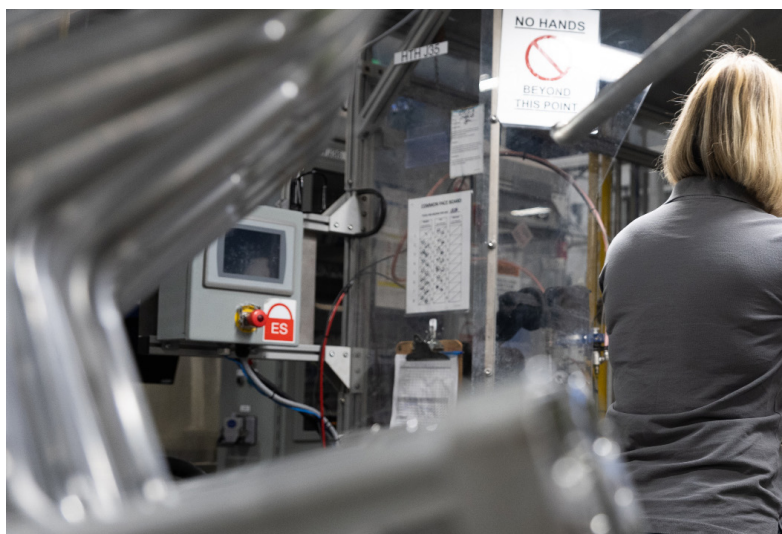


WORKFORCE ATTRACTION AND DEVELOPMENT

Employers were asked about their challenges and opportunities related to attracting, retaining and developing their workforce. In many cases something that was an impediment or an advantage to attracting someone new to their workforce was also an impediment or an advantage to retaining workers so we have combined these sections of the survey for the purpose of this report.

Challenges

- The tight labour market impacts costs, worker availability and the ability to retain workers.
- The lack of job seekers and public awareness about the manufacturing sector, individual manufacturing companies, career opportunities and community benefits directly impacts employee attraction and retention.
- Recruiting job seekers with specialized experience related to company or process specific jobs.
- Labour demand for Monday to Friday day schedule at odds with employer need for shift-structured employment
- The current rate of pay of individual companies was noted by some plant leaders as a challenge in attracting and retaining workers. For others their higher rate of pay was an advantage.
- The aging workforce requires employers to replace skills and knowledge, and implement succession planning
- Labour demand for different incentives and pay structures at odds with employer perceptions of work effort.
- The availability and cost of housing is a barrier to attracting workers from outside the region and can impact the lives of current employees.
- For some employers a small workforce can limit flexibility and the ability to grow.
- For many companies the bulk of their training is on the job and there is no support for the costs associated with this. As the knowledge can be specialized it is hard to find external trainers which means internal resources need to be used which can impact production.
- For some positions the learning process can be very long before an employee is able to perform at or near an optimum level.
- Implementing technology or new processes to augment the workforce and improve productivity can be expensive and can tie up internal resources.
- Third party partner integration introduces new challenges based on different corporate structures and workforces.



CHALLENGES AND OPPORTUNITIES

Workforce Attraction Opportunities

- Ongoing opportunities to fill recruitment and attraction needs fulfilled through hiring new Canadians and international students/graduates from Loyalist College.
- Employment Ontario and Quinte Immigration Services (QuIS) helps employers access workers.
- Ontario East Economic Development Commission's LinkedIn recruitment tools pilot project provides specialized support.
- Optimized job interview screening processes create better results and helps identify right-fit candidates faster.
- Diversity, Equity and Inclusion efforts on employee and organizational level increases cultural awareness and helps to attract and retain a more diverse workforce.



Workforce Development Opportunities

- Career pathway mapping and internal promotions creates workforce development opportunities.
- Cross-training employees on multiple production processes and production lines provides more flexibility and better utilization of employees.
- Loyalist College student projects connect students and employers and provide real-world training in manufacturing.
- Companies overcome labour force gap, continue to capitalize on business opportunities, and develop worker skills by hiring foreign temporary workers.
- Specialized software helps companies and workers to focus on value-added manufacturing activities and work more efficiently.



SKILLS DEVELOPMENT

Companies were asked what types of training they would like to see that may already be available or that could be developed or delivered closer to the region.

Training was grouped into various categories and some of the main items are include below included:

Technical

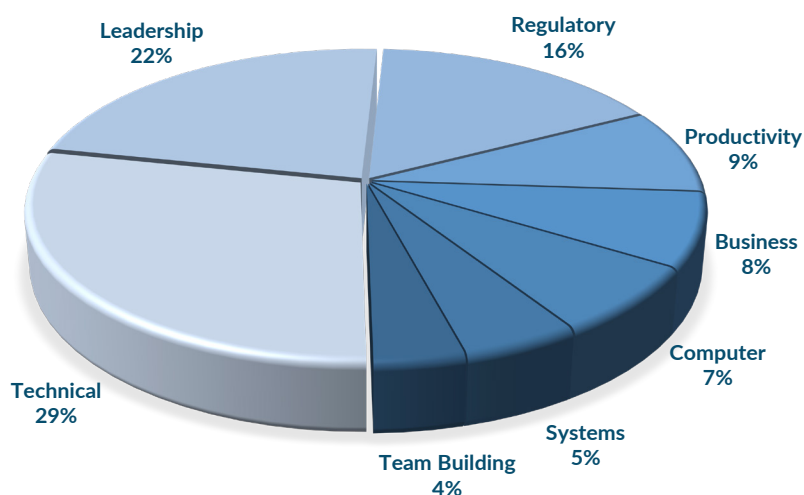
- Vendor equipment training
- Robotics
- Sector specific courses

Leadership

- Leadership fundamentals
- Mentoring/coaching skills
- Train the Trainer

Regulatory

- Forklift
- Joint Health & Safety Committee
- Physical demands analysis



Productivity

- A broad range of productivity tools (such a Lean and Six Sigma)

Business

- Financial fundamentals
- Sales & Marketing fundamentals
- HR principles

Computer

- CAD/CAM/Autodesk/etc.
- Excel

Systems

- Quality management
- ERPs

Team building

- Team building
- Respectful workplace
- Personality Dimensions

CONCLUSIONS

This outreach project had immediate outcomes for individual companies in addition to providing insight into where the region's manufacturing sector is heading. Economic development and stakeholders can use the findings to align their resources and support for the manufacturing sector.

- The main reminder for economic development organizations, municipalities and stakeholders is the importance of deliberately connecting and staying engaged with our manufacturing and industrial partners.
- After action reviews are an essential component of the process. During this project, 3 to 4 follow-up items were typically identified during each interview that could immediately assist the manufacturer. These included referrals to the pilot Quinte Technology Adoption Program (QTAP), Loyalist College, connection to resources, supply chain connections, and assisting companies to increase their profile in the region.
- Many manufacturers across the region have opportunities and are planning on growing and expanding their businesses despite the barriers and challenges they face. Manufacturing will continue to be a key economic driver and wealth creator in the community. Communities and stakeholders need to continue to support the growth potential with strategies, resources and available industrial land that facilitates this growth.
- Manufacturing is transforming with an increased focus on technology, robotics and automation. Government funding programs that want to support manufacturing should focus on local strategies and the funding of programs that drive improved performance through technology adoption, continuous improvement and skills development. Programs and funding need to support companies at the point they are at - there is no "one size fits all" solution, for one company a small investment may have a huge impact on their operation while another may require more substantial support.
- Encourage and support Loyalist College in their efforts to expand skills development space, programs, equipment and training capacity in advanced manufacturing, automation and robotics in addition to skilled trades especially for machinists, millwrights and industrial electricians.
- There is an on-going demand for employees who are more technical, skilled, and engaged. Manufacturers need convenient and ready access to programs, strategies and resources that support employee attraction and development.
- Manufacturers in this region have tremendous pride in their companies, people and products. The community should continue to recognize and celebrate the amazing contributions individual manufacturers and the entire sector bring to the Bay of Quinte Region.



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ECONOMIC DEVELOPMENT

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