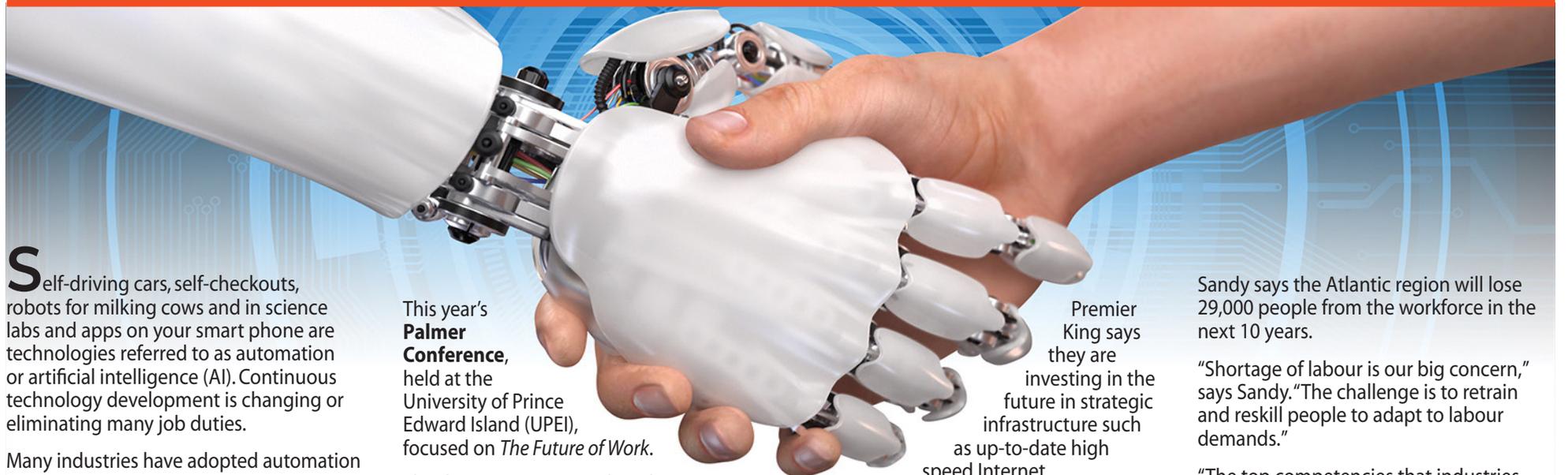


# The Employment Journey on PEI

MANY JOB OPTIONS ON PEI  
PRINCE EDWARD ISLAND • CANADA

## The future of work: the continuous impact of technology

by Gloria Welton



**S**elf-driving cars, self-checkouts, robots for milking cows and in science labs and apps on your smart phone are technologies referred to as automation or artificial intelligence (AI). Continuous technology development is changing or eliminating many job duties.

Many industries have adopted automation because of a shortage of skilled workers. "The aging workforce issue is hitting Atlantic Canada hard," says **Chris LeClair**, Policy Intel Inc., PEI.

"The region has the lowest number of 15 to 19 year-olds and the highest number of 60 to 64 year-olds in the country. Many sectors face issues when it comes to the availability of workers."

"Atlantic Canada needs to bring 23,000 new people into the labour force every year," says **Francis McGuire**.

"Of those new jobs, 30 percent require a trade certification or college diploma, and 20 percent require a university degree.

"ACOA believes 8,000 of those jobs could be eliminated with automation and advanced manufacturing."

Brookfield Institute for Innovation and Entrepreneurship identified 31 trends impacting the future of work across Canada. It says that AI may potentially affect every industry.

The report went on to indicate today's high demand for employees trained in computer science, data science, math, statistics, and economics will continue to increase and may result in a talent gap.

It stated that digital skills will be critical for all Canadians as a foundational skill, and more education programs will be created to support AI learning and training.

This year's **Palmer Conference**, held at the University of Prince Edward Island (UPEI), focused on *The Future of Work*.

The discussions centered on the challenges and opportunities technologies such as artificial intelligence and automation are having on the workforce.

The conference brought together policy makers, public servants, and stakeholders, including the non-profit and business community. **Dr. Don Desserud**, UPEI Professor and Author, welcomed all to the conference.

**Premier Dennis King** said in his opening remarks that his government inherited a strong economy that is well positioned to succeed into the future. "We need to be great researchers, planners, and forecasters to build a strong future.

"There is no denying that the changing pace of our world certainly causes concern for the future of our workforce.

"Employees worry about remaining relevant in the labour market, and employers are concerned about where to find the talent they need. Labour issues are the biggest issue we deal with every day in this province.

"Statistics say more Islanders are working than ever before. We are leading or nearly leading the country in a wide variety of economic indicators, including growth in housing starts, retail sales, population growth, and wholesale trade.

"The key is to keep up this momentum and build upon those foundations."

Premier King says they are investing in the future in strategic infrastructure such as up-to-date high speed Internet.

"With half our population being rural and more people having home-based businesses, we need that infrastructure to be successful."

He referred to the Brookfield Institute for Innovation and Entrepreneurship study. "One of the trends is lifelong learning. We are committed as a government to invest in programs and services that enhance and encourage lifelong learning."

He reported that people are working longer and engaging in more careers than ever before, which means learning must take place throughout our lives. "The mandate of the Department of Education and Lifelong Learning is to concentrate on the early years, the transition into adulthood, and beyond.

"With the speed of change and technology, everyone needs to engage in lifelong learning to remain relevant, so we can prepare Islanders for the future workforce."

### Shifts in the workforce, what is to come and solutions to challenges

#### Sandy MacDonald

"Holland College has 2,500 students in full-time programs, and approximately 700 students in Adult Education are upgrading their academics. Approximately 700 students from across the globe who have immigrated to PEI are learning English at Holland College, and 2,000 are in 10 partner schools across China."



Sandy MacDonald, President and CEO of Holland College, and Atlantic Canada's representative on the Future Skills Council.

Sandy says the Atlantic region will lose 29,000 people from the workforce in the next 10 years.

"Shortage of labour is our big concern," says Sandy. "The challenge is to retrain and reskill people to adapt to labour demands."

"The top competencies that industries are looking for, such as leadership skills, critical thinking, and relational management, are very difficult to evaluate. However, our job is to train students to adapt as industry needs shift, so they can maintain employment and manage their career path."

**Jon Malloy**, Professor at Carleton University, has done research focused on PhD career development and mentoring in Canadian universities. "I co-authored a book called *Work Your Career* which maintains that no matter what level of education one obtains, preparation for future careers and opportunities is lacking.

"Many of our graduates are working at a level that is very satisfying, but many are doing short-term work with no idea of where their career path should go."

**Stephen Higham**, from the Conference Board of Canada, said they recently partnered with Ryerson University and Blueprint ADE to deliver the federally funded Future Skills Centre. "We have a mandate to help prepare the Canadian workforce, and vulnerable populations in particular, for many of the issues currently being discussed, including short-term limited work options, industry disruption, and how we can reskill displaced workers."

**Steven Tobin** is Executive Director of the Labour Market Information Council. "Our mandate is to ensure Canadians, stakeholders and policy makers have the necessary information and insights to succeed in a changing, dynamic world of work.

"However, much of the information on the future of work is narrow in focus and does not take into account that many of the drivers or megatrends are interacting with one another – often in uncertain and conflicting ways."

continued on page 2...

## The future of work: the continuous impact of technology *Continued...*

"We assist industry to look at the future of work, what it means to be a leader and have models that help with revolutionary change, as we focus on lifelong career development," says **Lisa Taylor**.



Lisa Taylor, Author and President/Founder of Challenge Factory and the Centre for Career Innovation, Toronto.

"Around the world, PHD and Masters programs, researchers, and thinkers are constantly updating how people navigate work and learning. However, North America is unique in the developed world, as we do not recognize career development as a profession responsible for lifelong career guidance. In Canada, career practitioners are not as recognized and we have few post-graduate level academic programs.

"The field of career development is a hidden gem which can provide the tools and research that industry, educational systems, and government are looking for," says Lisa.

"The 2019 International Centre for Career Development and Public Policy symposium in Norway, of which I was a member, involved about 34 countries. They talked about key areas they are struggling with. Public policy people in the career development communities work to solve complex problems. Scotland, Norway, Singapore, and South Africa have reported interesting successes."

Lisa proposed that together we can increase capacity in creative ways. "As we move forward on our career journey, we need the critical skill of knowing how to navigate and transition with purpose over and over again across our career. This skill set is not taught well, and it is not engrained in the Canadian mind frame. Other countries are doing this better, and we can do it better as well.

"Right now we are creating graduates who don't know which way to go. We need to offer skill sets that will help graduates transition into the workplace and navigate their career throughout their lives."

She said that the trend of people working longer can be a competitive edge for employers to capitalize on. "Organizations that engage employees across all life stages will outperform their competitors."

Lisa's co-authored book called *The Talent Revolution* discusses concepts such as eliminating ageism, optimizing the workforce, and unlocking untapped talent.

"There is a new stage of life that we have named legacy careers. As you grow older, you won't necessarily stay in your existing career, but may make other choices to accommodate this stage in life.

"As the population continues to age, the number of people who want to continue to be in the workplace is increasing. These people can be seen either as surplus or as an asset."

"Employers are now struggling with succession planning and leadership development, and are putting more emphasis on recruitment and branding to bring people in.

"From the research for our book and our work over the last five years, we found that by 2030 more 70 and 80 year-olds will be working than ever before.

"Smart CEOs will shift their thinking about succession planning, and they will need to consider how to value and profit from employee at all stages of their career life.

**Benjamin Pring** is the Co-founder of the Center for the Future of Work, New Jersey. "Our clients tend to be banks, airlines, and government departments around the world. We help them take a look at the future of work to help plan technology advancements and ward off disruptive threats.

"In the future, we must be prepared to add artificial intelligence into our work. Now that computers are able to do a wide variety of tasks that a few years ago could only be done by humans, we have to move along with the shift."

Underpinning this discussion is the need for career preparation starting in the early years, with not only digital skills building but considering how to navigate and plan our careers over our life-span. It involves planning, dismissing myths, collaboration, identifying best practices, having concrete data of the impact, and action.

It is like a ship being maneuvered through all kinds of conditions of the sea. It takes navigational maps, all hands on deck, strength, determination, hope and perseverance, and having the right instruments for success as it approaches what is on each horizon.

## PEI trades and technology represented on world stage *by Stacy Dunn*

For the first time in the history of Skills Canada PEI two competitors were part of Team Canada and competed at the 45th WorldSkills International competition in Kazan, Russia in August.

**Justin Buchanan**, a graduate of Holland College's Video Game Art and Animation program, and **Robbie McMahon**, a graduate of the college's Industrial Electrical Technology program, joined more than 1,300 competitors from around the globe.

"I work mostly on control panels for automation in factories," says Robbie, who is a third-year Electrical Apprentice at Olympia Electric Ltd. in Charlottetown. "In competition, I did both manual wiring and software programming from beginning to end on one project."

Robbie has participated in four provincial and two national competitions. "Competing is fun and looks good on a resumé. At WorldSkills, I learned what the international standards are in industrial electrical programming."

Justin's interest in art and animation started when GameForce PEI, an after-school program teaching video game design, visited his junior high school. "I competed in provincials for all three years of high school and went to two nationals. I like that I am testing my skills and staying current."

Justin was the flag bearer at the opening ceremonies in Russia. His specialty is 3D Digital Game Art, a new competition for Skills Canada PEI.

**Chris Sharpley**, Learning Manager of Holland College's Video Game Art and Animation program, is a Canadian WorldSkills Expert in this field.

"I saw 3D Digital Game Art at the last competition in Abu Dhabi in 2017 and helped Skills Canada create this competition on the national and provincial levels. I saw the need for Canada to showcase its talent in 3D internationally."

**Sue LeFort** is the Canadian WorldSkills Chief Expert in CNC Turning. "I am amazed at the technical level of our youth. From a skills perspective, I learn so much from the competitors when I am in the judging and leadership role.



The PEI contingent of Team Canada: (from left) trainer Tiffany Baxter, chief expert Sue LeFort and expert Chris Sharpley, competitors Justin Buchanan and Robbie McMahon, executive director, Skills Canada PEI Tawna MacLeod, and trainer William Callbeck, Olympia Electric Ltd.

"Everyone, including the competitors, trainers and experts, learn from each other, and learn new trends, digitalization and training that get results.

"The value that comes back from this competition to PEI will be huge for education, industry and the competitors' career paths," says Sue.

"These students and apprentices have worked countless hours preparing for competition," said **Tawna MacLeod**, Executive Director of Skills Canada PEI.

"It's a great testament to our volunteers, our education system, and the support from local industry. The competition was very stiff, and the entire team has done the Island proud."

For information about **Skills Canada PEI**, visit [www.skillscanada.pe.ca](http://www.skillscanada.pe.ca).

For information on programs at Holland College, visit [www.hollandcollege.com/programs](http://www.hollandcollege.com/programs)

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