WHAT IS
AG TECH
ALL ABOUT?

by Kathryn Doan, AgCareers.com Director of Global Business Development

AGRICULTURAL TECHNOLOGY, or simply put, Ag Tech, is enabling the agriculture industry to grow and do more with less. These professionals are working simultaneously to deliver sustainability with more nutritious food, healthier land, higher yields and reduced manual labour.

Canadian consumers are concerned about the impacts of agriculture and food production on climate change, and they are expressing those concerns with their purchasing dollars. Consumers want sustainable qualities without missing out on food quality. Also, tastes are changing and include novel ingredients, world food, alternative proteins, local food, and nutraceuticals.

The solution is agricultural technology's seemingly endless applications facilitating the production of quality, nutritious food, more sustainably throughout the supply chain. Some solutions involve cutting waste through operating more directly with producers (i.e. consumers purchasing directly from farms or their online stores). Other solutions involve sensor supported, data-driven, decision making, used by some fruit field crop producers, orchards,

and vineyards to decrease water and inputs consumption, while maintaining or even increasing yields at the same time as increasing efficiency and sustainability. Still others include efficiencies in food processing where they are combining food, plant and animal sciences, such as breeding for specific traits that improve both cultivation and culinary experiences.

Stephen Betthany, Director of Operations, Robes Inc. has long been associated with green ventures starting with the Greenbelt Foundation. When asked "is the Cannabis industry Ag Tech?", he described a compliance-based industry that often grows indoors and where tech is essential to meet the "rigours of the supply chain." For those companies integrated from cultivation to consumer, those rigours include reporting on physical quantities and product specifications to Health Canada and other concerned agencies during cultivation, harvest, processing, transportation, packaging, and marketing.

High-quality assurance standards, regionally based high growth organizations and so much compliance, led the cannabis industry to sensor

technology and in turn automatic data capture. The industry is working in partnership with Seneca College on both software development to support business and compliance requirements as well as course curriculum for those seeking a career in the cannabis industry.

In the farming world, sensor and robotic technology that supports data collection and reduction in manual labour could be the next frontier. Manual labour is one of the greatest challenges on farms due to availability, cost, and social change. Any technology that can augment manual labour represents value as well as higher level, higher wage employment opportunities for those involved in developing and selling the technology.

COVID-19 has increased comfort levels with technology and highlights its usefulness. "Still though, producers often need an incentive to capture data," says Betty-Jo Almond, General Manager at AgSights. Once captured, further data analysis is not pursued, so there is no apparent value. Although, many would benefit from just a little more information in an easily "digestible format" to understand where they are and to >>>

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help guide them towards their goals.

AgSights, are developers of farm, ranch, and supply chain management solutions, Go360 bioTrack and bioLinks Meat Shop. Go360 bioTrack is a comprehensive herd and flock management system that flexes with the type of operation. bioLinks Meat Shop is an inventory management/tracking, traceability system that seamlessly links to Go360 bioTrack for field to fork movements and information tracking that can be used by the farmer, processor, retailer, and consumer with privacy and security. The information collected by bioTrack and bioLinks is in demand by big customers like McDonald's under the requirements of their sustainability program.

"The key is to keep it simple," says Chris Cameron, CEO of AGSI "and cellphone-based as most everyone carries their phone in their pocket— always accessible. Also, provide the connection between the data and value of the data to encourage producers to collect it." AGSI are software and database developers using the power of geography to harness data. They are also partners in Go360 bioTrack.

New Ag Tech opportunities for food preparation are also opening with cloud kitchens, a centralized licensed commercial food production facility where one to dozens of restaurants rent space to prepare a delivery menu. Food kits like Hello Fresh and delivery services like Instacart are also using tech to provide new opportunities to serve clients. Both scenarios are seeing an upsurge in demand from consumers due to COVID-19.

At AgCareers.com, we are responding with additional virtual opportunities for industry and potential talent to interact, with more educational opportunities for job seekers and employers, and with greater exposure and connections than ever before. We are also listening to our customers to identify trends and anticipate, communicate, and link talented people with rewarding careers in agriculture and food. **AG**