

Wanted: Tech and ag-savvy employees

BY PETER GREDIG

There are many exciting technologies poised to dramatically change agriculture. To be a leader in agri-food technology, Canada needs young energetic free thinkers – and we need them now.

When I started building mobile apps for agriculture in 2009, there were almost no mobile developers. There were no schools or courses. The experts were very young and mostly self-taught. Finding developers who understood both mobile coding and agriculture was nearly impossible.

There are more people available today and they are much more skilled and educated, but usually employers are left to choose between a very adept developer with little ag knowledge and an ag-savvy person who needs training on the tech side.

I think this is a common scenario in many of the emerging agricultural technologies, including big data and artificial intelligence, robotics and autonomous machinery, as well as the Internet of things.

Traditionally, new technology is introduced via early adopters, researchers or entrepreneurs and if it finds traction, academic programs pop up. This model takes years and is simply too slow to address the technologies moving quickly from prototype to field trials. There are

schools reacting as quickly as possible, but the range of skills required is diverse and moving fast.

Worldwide, assessing and implementing new technologies in agriculture will be at least as important as agronomy and business management, and Canada can be a global leader. It starts at your kitchen table. We need rural young people fascinated by artificial intelligence and machine learning to develop ag applications. We need researchers with farming backgrounds to build algorithms that fully take advantage of all the data we're creating. Gene editing will be crucial to the industry, but we need scientists and product developers who are passionate about agriculture.

Where courses specializing in agriculture do not exist, the path is to learn the generic science but bring it back to agriculture. What excites me most about encouraging young people to dive into agricultural technology is the fresh perspective they'll bring. We need that. Too many innovations get shoehorned into established thinking.

Having the brain power and people to lead Canadian agriculture into a new technological era is a huge challenge and an incredible opportunity. We need to start talking tech to our children and grandchildren. Our future depends on it. ■

