HIGH-TECH COWBOYS

Even though it’s an idea that sounds kind of Montana-centric, actually it isn’t because ranching is an activity that exists across the world. We have ideas here in Montana that can be world-class businesses.”

-Paul Gladen, director, UM Blackstone LaunchPad

Running a ranch with vast landscapes and numerous livestock can be complicated, but UM student Walker Milhoan has a technology that he thinks will make ranching more sustainable and profitable. And his business venture is promising enough that he was selected as a finalist at Blackstone LaunchPad’s recent Demo Day in New York City.

Milhoan’s business venture, Ranchlogs, was one of 20 selected to attend the event where students competed to win prizes ranging from $10,000 to $25,000 to be used to further their business development. Paul Gladen, UM’s Blackstone LaunchPad director, nominated Milhoan to attend the competition, where he progressed to the final rounds with the top six. The LaunchPad, an experiential campus program designed to introduce entrepreneurship as a viable career path, began on the UM campus in February 2014, and it has advised more than 100 ventures, including Ranchlogs.

Ranchlogs is an interactive, Web-based software platform that serves as a livestock inventory and range management tool that can be used to create custom ranch maps, track key performance indicators, and perform analysis within any ranching operation.

Financial Metrics and Key Performance Indicators
Livestock Inventory and Tracking
Grazing Management and Monitoring
Custom Ranch and Resource Mapping

UM Student’s Technology Helps Make Ranching More Profitable

by Shannon Furniss

Walker Milhoan, UM student entrepreneur
Learning Ranch Management

When Milhoan talks about Ranchlogs, he points out that it is software “built by ranchers for ranchers.” And he knows a bit about ranches. He spent his childhood visiting his grandfather’s ranch in Colorado, riding horses, working cattle, and jumping into piles of hay. From 2010-11, he attended Texas Christian University’s Ranch Management Program, which he jokingly calls the Harvard of ranching. One of his school projects involved building a ranch management plan on a working ranch. First, he had to learn all of the intricate functions of Excel spreadsheets and file management systems. Then he compiled and analyzed data about costs, marketing, health protocol, genetics, market outlets, and long-range business plans.

“The was amazingly beneficial for ranchers but extremely hard to put together,” Milhoan said. “Typical ranchers wouldn’t do this level of detail. It’s really time-consuming and inefficient. It took four months to do it.” It was then that he started thinking about a way to customize this process and make it easier.

Teaming Up with a Big Sandy Ranch

Over the years, Milhoan spent some time as a helicopter ski guide based out of Cordova, Alaska. He also spent a year at Montana State University studying snow science and skiing the rugged backcountry, all the while keeping up with the ranching community.

An active member of the Montana Stockgrowers Association, Milhoan always has enjoyed talking with ranchers. At an association meeting, he met Rich Roth, the vice president of the IX Ranch Company in Big Sandy, and they struck up a conversation about the future of ranching and how mobile technology could increase productivity. Interestingly, the Big Sandy ranch had been using software that a family member and MIT graduate had developed in 1984. Over the 30 years, the ranch has reported a 30 percent increase in native grasses and an 8 percent decrease in cow costs by using the software.

Milhoan started to see the possibilities. What if he could take the underlying logic and workflow that’s in the original software and move it into an environment that uses modern programming and software as a service environment?

In cooperation with the IX Ranch Company, Milhoan formed Ranchlogs (www.ranchlog.com), and he hopes to build on the technology and make it accessible to ranches of all sizes.
A movement that is occurring to improve Internet capabilities in rural areas also will be helpful. While some ranchers have limited cell-phone service and Internet access, accessibility is getting better across the country, said Gladen.

There is always the question of whether ranchers in a traditional industry will choose to adopt technology. According to Milhoan, many ranchers already are tech-savvy and understand the benefits. And the younger generation, who will be taking over their parents’ ranches, have grown up on technology. In fact, the modern rancher is more likely to have an iPhone than a notebook in his shirt pocket for keeping records.

Sustainability and Profitability

Another aspect that bodes well for Ranchlogs is the corporate push toward sustainability, said Milhoan. For example, corporations like, say, Walmart and McDonald’s, may soon require that cattle producers provide documentation that their ranch is sustainable. Corporations are concerned about the ecological health of a ranch and will want to know about grazing rotations, fencing, genetics, and more. Milhoan believes his technology will make that information easier to track and more efficient. Ranches that adopt technology will be more attractive as suppliers and, ultimately, more profitable.

“The first part of sustainability is profitability,” he said. “If you don’t have profits to reinvest in your ranch, you’re not going to be sustainable.”

Ranching has a historical profit margin of 1 to 4 percent, said Milhoan. “If you can get your average profit margin up, then you’re going to stay in business. And your ranch isn’t going to get sold, or subdivided, or turned into a golf course.”

Future Plans

The experience at the New York City competition gave Milhoan the boost to further develop his venture. “It was really great because it shifted my thinking about the concept and what this could be,” Milhoan said. “What are the numbers? How’s it going to save people money? How’s it going to make people money? It opened up a lot of doors and a lot of thinking.”

Finding Inspiration at the UM Business School

While contemplating a technological solution that would digitize ranch data, Milhoan met his wife, Whitney, a native Montanan, and moved to Missoula in 2011. He found his way to the University of Montana School of Business Administration, where he discussed his ideas with Professor Cameron Lawrence (see sidebar, pages 12-13). The professor inspired him to enroll in the business school’s Management Information Systems program to find out if he could come up with a solution. How could he take this 5 ½-inch thick ranch management binder and 30-year-old software from the Big Sandy ranch and use technology to modernize the system? Professor Lawrence provided him with some direction, and then Milhoan discovered UM’s Blackstone LaunchPad, which would help him further develop his ideas.

Technology is Reshaping Ranching

Technology is changing the way ranchers do business, and the timing on Milhoan’s business venture may be perfect, according to UM’s Gladen. “An important set of trends is coming together at a good time to be doing what he’s doing.”

First is the ability to use mobile technology like smartphones to access data over the Internet — people do not necessarily have to be sitting at computers in their offices. They can be out in the field or out on a ranch, said Gladen. Then, there’s the ability to have a platform in the Cloud where users can rent software over the Web. Next is the new wave of remote-sensing technology where people can gather data from a distance and observe the environment.

“These technologies will generate a whole new set of opportunities in a remote, sparsely populated place like Montana,” said Gladen.

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The latest advances in geophysics, nanotechnology, engineering, and production management have led to the shale energy revolution and a dramatic increase in the country’s energy production. There have been significant increases in the supplies of natural gas and crude oil from locations as varied as the mid-Atlantic states, the Montana-North Dakota border, and traditional supply areas such as Texas. In Montana and North Dakota, the Bakken oil fields have brought hundreds of oil companies, workers, and investors — and economic prosperity to Montana, particularly the eastern part.