

WaveMaker Case Study

Cumberland Genetic



How WaveMaker & Cumberland Genetic Are Taking Livestock Data Collection Software Mobile

Cumberland Genetic specializes in development of livestock data collection analysis and reporting systems. They have most recently built a web-based animal tracking application that runs on iPhone and Android using WaveMaker. Mark Lowerison, quantitative geneticist and president of Cumberland Genetic, tells us about his project.

WaveMaker: Mark, tell us about your application and your client.

Cumberland: We built a web-based, animal tracking application for a purebred pig breeding company in Canada – Genesis Genetics. Genesis breeds and sells purebred male and female breeding pigs to commercial pig farmers.

WaveMaker: What problem was Genesis trying to solve?

Cumberland: Genesis has a group of sales people who call on farmers to sell female breeding pigs (gilts). The sales team didn't have any way of finding out what inventory was available while they were in the field. The existing system was a very messy and based on Microsoft Excel!

We set out to build a system that gave salespeople a real-time view of inventory and an easy way to place orders from the field using iPhone or Android smartphones. The application not only had to be accessible by web and mobile devices, it also had to accurately track animal inventory based on a number of different, changing parameters - including constant orders from the field and varying production from the breeding units.

"WaveMaker allows non-computer science people to build Java web apps with a nice gradual learning curve and over 80% less code. WaveMaker's standards-based architecture means that there is nothing you can't do but lots you don't have to."

- Mark Lowerison, President of Cumberland Genetic

Cumberland: Animal inventory is not a straightforward "available" or "not available" type of inventory system. Genesis has 15 different farms, each producing up to six different breeding lines, and gilt are only available for sale 6-8 weeks after being weaned. Customers need to place orders detailing such specifications as weight on particular dates, the number of pigs, and the breeding line.

Genesis also wanted to reduce costs by using zip codes to determine the optimal delivery distances from each farm. The application also needed to have sophisticated reporting inventory reconciliation an entry-level office employee could easily access and manipulate.

WaveMaker: Sounds complicated. How did you get involved?

Cumberland: Genesis didn't have the resources to build the application in-house, so they looked for a consulting firm with animal tracking experience. Happily, they found us - Cumberland Genetic. A collaborating group tried to build the application with Microsoft Access and it hadn't worked out. That led me to look for a high productivity solution for building web applications that would also work with mobile devices - that led me to WaveMaker.

WaveMaker: Why did you choose WaveMaker?

Cumberland: I decided on WaveMaker because it was
1) a Web 2.0 rapid application development platform,
2) it also worked on mobile, and
3) it was easy for me to learn.

I am not a full-time developer - I am a quantitative geneticist who taught myself web development to help pay the bills in grad school! With WaveMaker, I found I could get a prototype of the application up and running quickly and that adding in new functionality was easy.

WaveMaker's community support was another big reason I was able to be so successful. The people in the community are very friendly and quite knowledgeable. That helped a lot!

Now, Genesis' sales people are able to get reports on demand, enter orders from the field, and even email order pdfs to the client in real time. Both Genesis and Cumberland Genetic have been very pleased with the results.

WaveMaker: Great! So what's your favorite thing about WaveMaker?

Cumberland: I love that WaveMaker lets me focus on writing Java services to do the hard math - it lets me focus on my real work. With WaveMaker's productivity, I was able to see revenue from my application much more quickly than I could have

WaveMaker: What's next?

Cumberland: Well, we have been considering opening up the ordering capabilities for this application to a public website and, of course, there are many more WaveMaker applications I have been building for other clients. Maybe we'll get a chance to talk about those in other interviews ;)