# Contract Farming with MasterKube Technology

Business Situation

This customer is one of the largest hatcheries in Andhra Pradesh. Now they are expanding from hatchery to full-fledged poultry contract business and later on to the complete supply chain to retail.

As part of the contract farming effort, the chicks are placed in a farm. The biggest risks are the mortality of the chicks in the farm. This needs to be managed; controlling the mortality with right food, medicines, etc. is the fundamental business activity. Daily visits are organized so that the health of the chicken is monitored along with the weight. Once the required weight is arrived, the chicks are released for booking and are then sold to a trader.   Growing charges are paid to the farmer based on the weight of chicks, the amount of food consumed and medicines consumed.

Solution

The fundamental challenge was to build a system that a) builds a very specific solution for this problem; b) the system built should be able to work in a mobile coverage area that is sparse c) seamlessly integrate with their existing accounting system and d) move eventually to low cost devices connected together to deliver a enterprise software system.
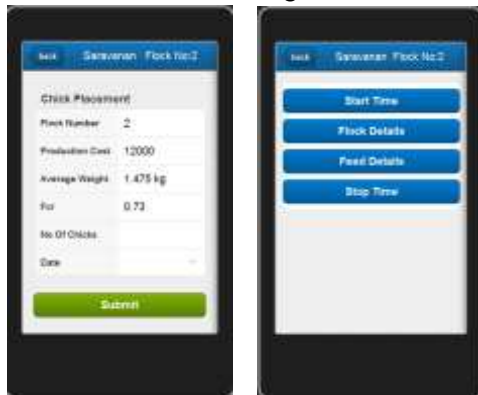
The system is to handle the whole cycle of chick rearing and also to show a real time business intelligence of the actual operations of the contract farming business. The strategy of the management was to move away expensive old enterprise systems to light weight low maintenance enterprise systems. This meant moving away from the wired personal computers to wireless mobile touch devices.

Besides the enterprise application, the customer wanted to know which breed was leading to diseases and which medicines where not effective. This kind of intelligence, rendered on a nice visual medium was an expectation on the team.

Technology Decision

For a successful implementation of the solution it was mandatory to have a technology which needed to have the following characteristics. They are:

- The technology needed to generate very rich User Interface (UI), so that the application gets interactive over the web with a very stateless server side programming environment which was a requirement.
- The system should be seamlessly work for both web and mobile platforms.
- The document storage should be native. To make the platform light weight,, the storage of document should be done as a light weight implementation.

- The system should be as near real time as possible, so that a technology that has constructs with multiple threads as foundation needed to be selected.
- All these technical features need to be packaged in a simple easy to use platform, so that people with simple skills and understanding can effortlessly run this program.

Benefits of MasterKube

MasterKube is an open system platform built ground up to serve an interactive world. MasterKube technology is based on a new computer science algebra that has a unique agent based technology. This reliance on new programming paradigm leads to a systems that has

a) No exception Management,

b) Light weight state less systems,

c) Simple to learn but power programming language,

d) Multi-threaded programming environment.

In addition to all of the above, with MasterKube it is possible to create custom data types which can take files.

Most importantly, the system also provides language constructs to build complex business processes. The system is exposed as REST interfaces. The UI has a rich internet application interface that talks to MasterKube through REST interfaces.

MasterKube technology was selected precisely because of these unique advantages.