I3 Systems Use Case

Smarter Agriculture

Current Operations: The agriculture industry is rapidly adopting technology to improve production, reduce risks, and enhance business operations resulting in higher production yields, lower costs, and improved business outcomes. However, agriculture technology is expensive, complicated to deploy, and requires special skills to maintain. As a result, big agriculture with their large economies of scale stands the most to gain from use agri-tech and this creates an environment which leaves the small and medium farms farther and farther behind.

Issues: While continued progress is being made to reduce the cost of agri-tech, it is impossible for small and medium farms to match the scale of big agriculture on a standalone basis. Hi tech solutions that allow these farms to compete with massive corporate farms require that small farms come together and work collaborative to deploy tech based solutions that allow them to survive and thrive in a tech centric world. When industrialization first entered the agriculture space, famers came together to create community grain silos and community owned harvesters. In the light of our information based economy, the farming community needs to come together again and begin to create community centric information networks that allow the small and medium farmers to benefit from the advances of the information age.

Solution: i3 Systems has created an information network that builds on top of the existing end-to-end data networks to allow many participants to build collaborative information-based infrastructures. Each individual participant remains in complete control of the information they self-generate and they are given the ability to share this information with their other collaborative partners. Farmers, working together, through managed information sharing agreements can achieve more with high tech systems than any individual farmer can achieve working in isolation.

Benefit: Individual famers can deploy high tech solutions to improve their localized production and yields. However, the cost to deploy such systems is high and their benefits are limited. By working together and sharing information with one another, farmers can begin to use regional data to plan their planting programs, understand local risk from threats, and scheduling harvests for optimal yields. There is no reason the information from a farmer on one side of the county can be used to improve agriculture yields across the entire county.

Status: i3 Systems is working with cities and private business organizations to create information collaborative that embrace the idea that organizations can achieve more by working with collaboratively generated information that individuals can achieve with individualized data silos. Creation of such community based information structures have to focus on providing the management and control needed to allow participants to retain autonomy and control over the data they own while still supporting a the level of information sharing needed between approved partners, necessary to support a successful community. i3 Systems looking to take these same community based concepts into the world of small and medium agriculture and is seeking partners, both farming communities and tech system developers, who believe that working together provides the key to enabling success for everyone.