Abstract

mAgriculture is a subset of eAgriculture, referring to the delivery of agriculture- via mobile communications technology. Agricultural traceability refers to the collection, documentation, maintenance, and application of information related to all processes in the supply chain. Innovative technology of integrated RFID and mobile computing are fast being used for integrated traceability systems. This paper proposes to provide a model of communication which would harness the capabilities of RFID technology and mobile technology to provide agricultural vendors and institutions to track the seeds purchased by farmers from them (the RFID tagged seed bags) to find how they are being used for cultivation and get feedback from
the farmers about the health of the crops after seed utilization and provide various advisories to them if required. Also the RFID data accumulated over a period of time can be used for analytics and a fuzzy approach to analyze the data using the concentration of the seed purchasers in particular areas which would enable the vendors to establish an effective network of their customers. The paper envisages providing an overview methodology for the same.

References

- Christine Zhenwei Qiang, Siou Chew Kuek, Andrew Dymond and Steve Esselaar, “Mobile Applications for Agriculture and Rural Development”, ICT Sector Unit, World Bank, December 2011
- Dirk Henrici, Aneta Kabzeva, Tino Fleuren and Paul Müller, http://www.intechopen.com/download/get/type/pdfs/id/8489
- Dritan Bleco and Yannis Kotidis, Algorithms for temporal and spatial aggregation of RFID data streams, First Workshop on Global Sensor Networks (GSN &apos;09), Collocated with kivs&amp;apos;09 Kassel, Germany March 6th, 2009
- Bill Hardgrave, Cynthia K. Riemenschneider, Deborah J. Armstrong Making the Business Case for RFID www.springer.com/cda/content/.../cda.../9783540768616-c1. pdf?.0...

Index Terms

Computer Science
Artificial Intelligence
Keywords
Traceability in Agriculture  Rfid Systems  Analytics  Fuzzy Logic Based Decision Making