

ABSTRACT

Information technology has been developed by many companies to achieve supply chain performance, E-farming is an application developed to register own sugarcane land/cane people by monitoring the progress of plant cultivation with GIS and satellite technology which is monitored based on Android and web mobile applications. This study uses a quantitative study with a survey method by filling out questionnaires on E-farming actors/users at PTPN X. This survey method was conducted on large and small populations in business units with 352 samples from 610 populations filling out questionnaires. The analysis used is Structural Equation Modeling (SEM) with SmartPLS 3.0 software. Based on the calculations and analysis, the results show that there is a positive and significant effect of E-Farming Implementation on Supply Chain Performance. This means that to improve Supply Chain Performance, it is necessary to increase the role of the application of E-Farming technology, especially application tools can be developed to increase the effectiveness of the company's business processes.

Kata Kunci : E-Farming Implementation, Supply Chain Performance, SEM



ABSTRAK

Teknologi informasi banyak dikembangkan perusahaan untuk mencapai kinerja rantai pasok, E-farming merupakan aplikasi yang dikembangkan untuk melakukan pendaftaran lahan tebu sendiri/tebu rakyat dengan pengawasan kemajuan budidaya tanaman dengan teknologi GIS maupun satelit yang dimonitor berbasis *mobile application* android dan web. Penelitian ini menggunakan merupakan penelitian kuantitatif dengan metode survei melalui pengisian kuesioner pada pelaku/pengguna E-farming di PTPN X. Metode survei ini dilakukan pada populasi besar dan kecil di unit usaha dengan jumlah sampel yang mengisi kuesioner sebanyak 352 sampel dari 610 populasi. Analisis yang digunakan adalah *Structural Equation Modeling* (SEM) dengan *software* Smart PLS 3.0. Berdasarkan perhitungan dan analisis menunjukkan hasil terdapat pengaruh positif dan signifikan Implementasi E-Farming terhadap Kinerja Rantai Pasok. Artinya untuk meningkatkan *Supply Chain Performance*, perlu ditingkatkan peran penerapan teknologi E-Farming, terutama tools aplikasi dapat dikembangkan untuk meningkatkan efektifitas proses bisnis perusahaan.

Keywords : *E-Farming Implementation, Supply Chain Performance, SEM*

