

ARENA SIMULATION OF THE MASCHHOFFS FARM SYSTEM

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ABSTRACT

The Maschhoffs desired to evaluate the performance of one group of fixed finishing assets against another group with two main objectives: Evaluate different scenarios in an initial multi-region launch. Focus on one product line/region and evaluate changes to fixed assets within that region in order to improve efficiency. Metrics necessary to achieve the objectives: Time for sites to fill Time sites sit unused Pigs ready to market each month Stocking level for W/F, Nursery, and Conventional farm sites Miles pigs are transported in their lifetime. The system has been used to analyze two business problems to date. In one problem, system stress was estimated by measuring how many pigs each week would move to a sub-optimal placement across the different business options. In the second problem, the company modeled the mileage impact and volume availability with segregation of a particular pig type to a particular packer to earn a premium.