Process Improvement By Using Promodel Simulation

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Abstract. In this report, we propose a solution for Stahmanns Inc. that produces and processes pecans. Here the project concentrates on packaging area. The main concern here is, too many boxes are getting accumulated in the stack area obstructing the progress in that part of the system. The methodology used in this project is to construct a simulation model using promodel to imitate the reality in the facility. We have collected data to implement the simulation. We had to assume some data to simulate the model in promodel, for example, arrival time of entities, and some other distributional processing times. Data has been involved in a statistical program such as SPSS, SAS, or Stat Fit combined with the simulation program, promodel which is feasibly used in our project. We analyzed the current model with the available data. Then we came up with the improvements and changes to the current model. The main improvement is the change of the layout. Moreover, to do simulation, it is significant to understand the real process and the parameters involved in to make computer be familiar with locations, resources, entities, etc., and based on all those mentioned factors, we have built our simulation model to achieve our objectives. The proposal solutions take care with that area to arrange the boxes coming out of the final process we try to control some variables like percentage of utilization, total number of exits, total number of entries, average time per entry, and resources (average time per usage) because simulation will guide to trace the processing and routing of whole system.