IPRO 320

Planning the Implementation of a new ERP Software Platform

Objective

IPRO 320 was tasked with planning the transition between two major versions of Enterprise Resource Planning (ERP) Software Platforms while also improving the efficiency of operations of a high precision aerospace gear manufacturing factory.

Organization

The team organized itself into 6 groups, each covering a different part of the company structure and software which were: Customer Service / Sales, Engineering, Scheduling / Materials Management, Inventory / Labor / Shipping / Receiving, Quality Assurance and Finance. Our team did not have a leader; when decisions needed to be made, we discussed it as a team.

Key Accomplishments

At preliminary trips to the plant, the individual groups were able to learn operations of their department. Combining their knowledge together, the team gained a good understanding of the company's daily operations. Further meetings allowed the team to learn about the old version of the ERP software as well as the new version by attending training sessions and by using both versions on test computers.

Critical barriers and obstacles encountered

At the onset of the semester, many of our team members were unfamiliar with ERP software, plant operation, and gear manufacturing. This forced the team to spend a lot of time becoming familiar with such systems before being able to discover and address issues. Following this initial research, the team was able to conduct intelligent interviews with company employees and managers.

Through these interviews, we quickly realized that many of the managers were very set in their ways and had the mindsets that "if it works don't fix it." While this is good for some things, it was apparent to the team that the company was not operating at an optimal level.

Summary of results

The team was able to find a total of over 35 issues with company operations, mostly specific to the use or configuration of the ERP software. Over ten of these issues were solved by new features in the new version of the ERP software, which were tracked during the transition process to verify correct implementation, for over 15 of the issues several possible solutions were discovered and presented by the team, and eight need further investigation.

Next steps

The main issue that remains unresolved is the problem of machine time estimates being inaccurate. Further investigation would have to be conducted in order to create a comprehensive system to track and analyze data in order to dynamically create and improve machine time estimates for the purposes of accurately scheduling processes in sequence on machines throughout the shop.

		Team Members		
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