IPRO 342

Second Semester
Developing a Real Time Information System
Advisor: William Maurer
• Purchases and converts plate steel commodities into mold and die bases specialties for the plastic and steel industries.

• Market Niche
  • Fast Turn Around Time - Ability to deliver finished product within 6-7 days.
Magnitude of Problem

- Multiple Software Platforms
  - Microsoft Access
  - Microsoft Excel
  - Exact JobBOSS

- Real Time Access to Inventory

- Generating Inventory and Usage Reports
Team Challenges/Obstacles

• Obtaining the previous semester’s framework
  – Configuring the application to work with our development team members’ computers

• Knowledge of ASP.net and C# (C-Sharp)

• Midwest Steel’s Availability

• Getting the team on the same page
Business Team Objectives

- Evaluate Order Process Flow
  - How are requested quotes received and produced?
  - After client places order, how are those orders fulfilled and tracked?

- Analyze inventory reports
  - How is inventory currently tracked?

- Design system user interface
Current Process Flow

1. Order is Placed
2. Costimator
3. Estimate Provided Order Confirmed
4. Traveler Hits Floor
5. Inventory Pulled
6. Order is Processed
7. JobBoss Interface
   - Scans update JobBoss
8. Reports Produced With Excel
9. Data Gathered for Reporting
10. Results are Cross-Checked with JobBoss Scans

The major flaw in this design is the time gap between order processing and database update.

One week later, the results are entered into JobBoss.

The dotted line represents the gaps between change in information and database updates. This is what our IPRO wants to address first.
Development Team Objectives

- Implement the process flow into a web application
- ‘provide a monthly inventory and usage report’ - Paul Santos | Controller Midwest Steel & Services
Learning, Testing, and Implementing

• Consultation
  – Industry Professionals
  – ITM faculty and graduate student

• Web application
  – ASP.net and C# (C-Sharp)
  – Inventory Functions – view & add
  – Reports – usage
  – Estimation Capability*
  – Job Data adjusting*

* Possible Modules for future IPROs
Who, Where, What...

Midwest Steel & Services, Inc. is a metal service and processing center serving the plastic injection mold building and metal stamping industries. We specifically serve mold builders, mold base builders and stamping die producers. "Turning Steel into Enhanced Productivity" is more than our slogan; it's our way of doing business. With our convenient in-house processing, we provide quick turnaround, saving our customers time and money while helping them focus on their core
Bar Display

Select Grade:
4130 PH

Enter actual thickness of bar:
625

Enter bar width:
75

Enter bar length:
90

Enter bar location:
FLOOR

Enter producing mill name:
IPR0342

Enter cost per cwt:
34.78

Enter heat number:
11IPR0342

Enter supplying vendor:
IPR0342CLASS

Enter PO#:
342

Post Item  Update Item
Delete Item  Reset
Web Application - Reports

Announcements here

Start Date: 1/5/2007
End Date: 1/6/2007

Submit

Total Value | Total Weight
---|---

Grade | Thickness | Width | Length | CostPerHundredWt | Weight | Value
---|---|---|---|---|---|---
A-36 | 0.625 | 1.75 | 46 | 55.30374 | 14.26913 | 7.891362
A-36 | 0.625 | 1.75 | 46 | 55.30374 | 14.26913 | 7.891362
A-36 | 0.625 | 1.75 | 46 | 55.30374 | 14.26913 | 7.891362
A-36 | 0.625 | 2.5 | 29.875 | 55.30374 | 13.23883 | 7.321566
A-36 | 0.625 | 2.5 | 29.875 | 55.30374 | 13.23883 | 7.321566
A-36 | 0.625 | 2.5 | 29.875 | 55.30374 | 13.23883 | 7.321566
A-36 | 0.625 | 3.5 | 34 | 55.30374 | 21.09349 | 11.66549
A-36 | 0.625 | 3.5 | 34 | 55.30374 | 21.09349 | 11.66549
A-36 | 0.625 | 3.75 | 14.25 | 55.30374 | 9.47213 | 5.238443
A-36 | 0.625 | 3.75 | 14.25 | 55.30374 | 9.47213 | 5.238443
A-36 | 0.625 | 3.75 | 14.25 | 55.30374 | 9.47213 | 5.238443
Future Objectives

• Database Redesign
  – Create separate tables for each type of steel category
  – Create Unique ID’s for each inventory item

• Web Application
  – Implement ‘edit and delete record features to Inventory module’
  – Implement ‘Crystal Report’ feature to Reports module
  – Integrate with JobBoss

• Update Flow Chart
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