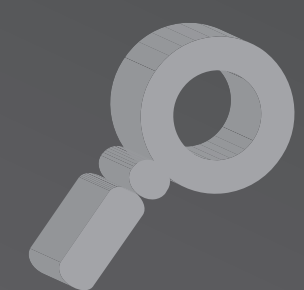


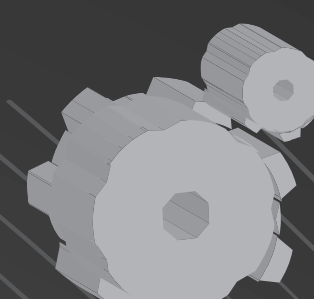
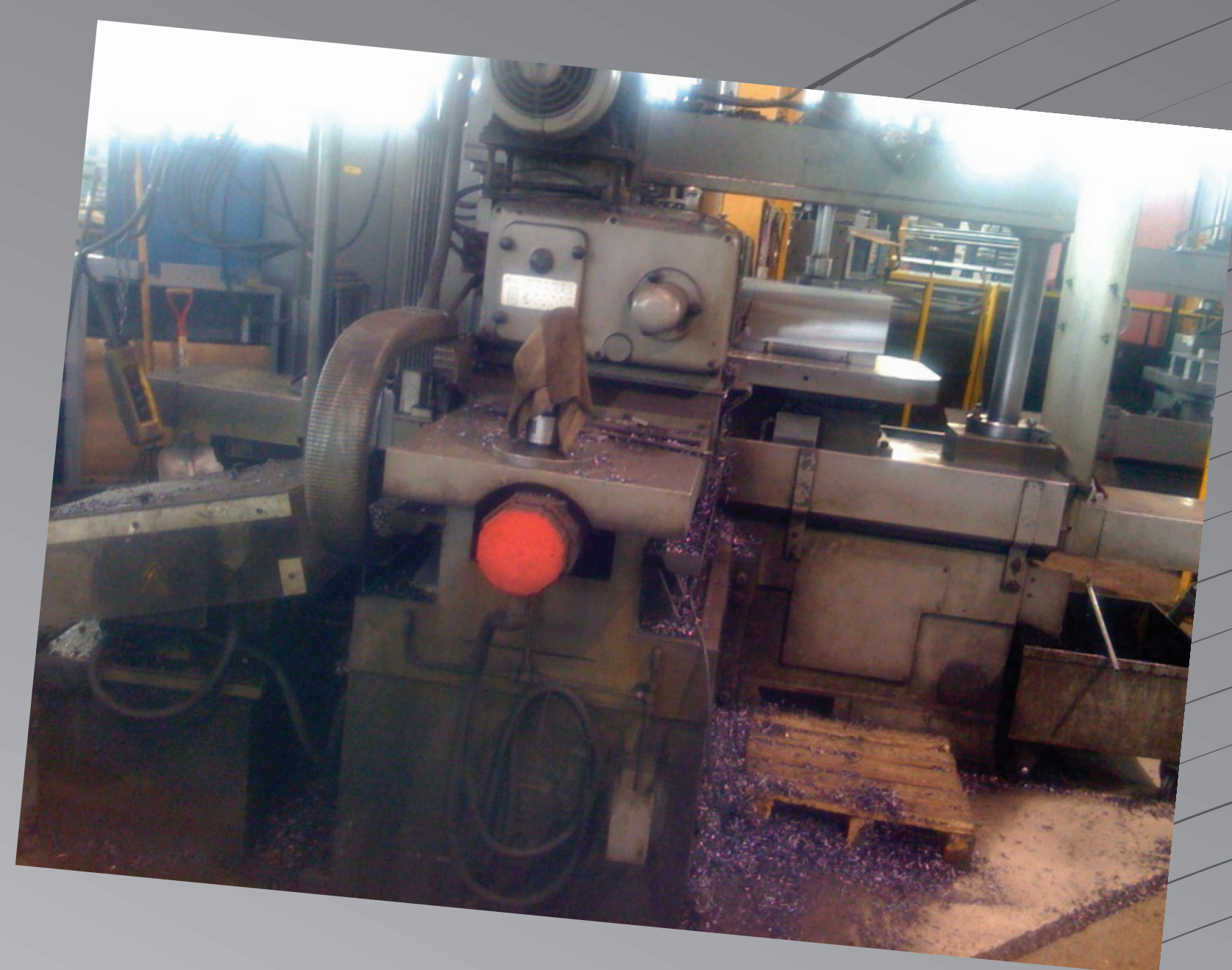
I PRO 342 Development of a Real-Time Information System INTERPROFESSIONAL PROJECTS PROGRAM



Background

Midwest Steel and Services Inc. provides steel cut to specification within days of confirming orders. Their fast turnaround time makes rapid, accurate tracking of inventory, job progress, and financial results vitally important to their business model.

The current system used to track and record information is effective and accurate, but requires multiple employees to spend a great deal of time on manual data entry, transfer, tracking, and confirmation. It also has difficulty with data analysis and extrapolation of future trends.

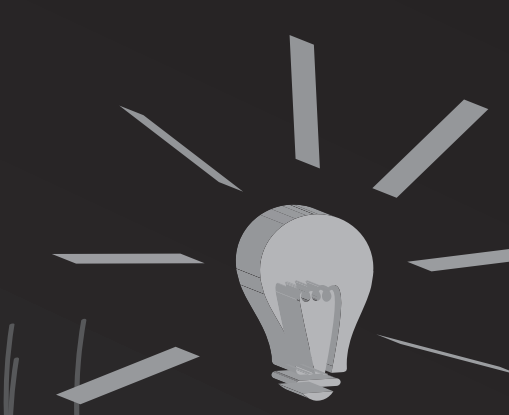


Objectives and Methodology

Become familiar with the flow of information through the company for each job. Identify specific areas of inefficiency or redundancy which might benefit from an alteration to their software or operating procedures.

Analyze the identified problem areas in order to determine what single solution will provide the greatest benefit to the sponsor without disrupting operations and while remaining achievable by I PRO 342 within the timeframe of a single semester.

Design and program the required software for the chosen solution, then provide a working implementation to the sponsor before the end of the I PRO.



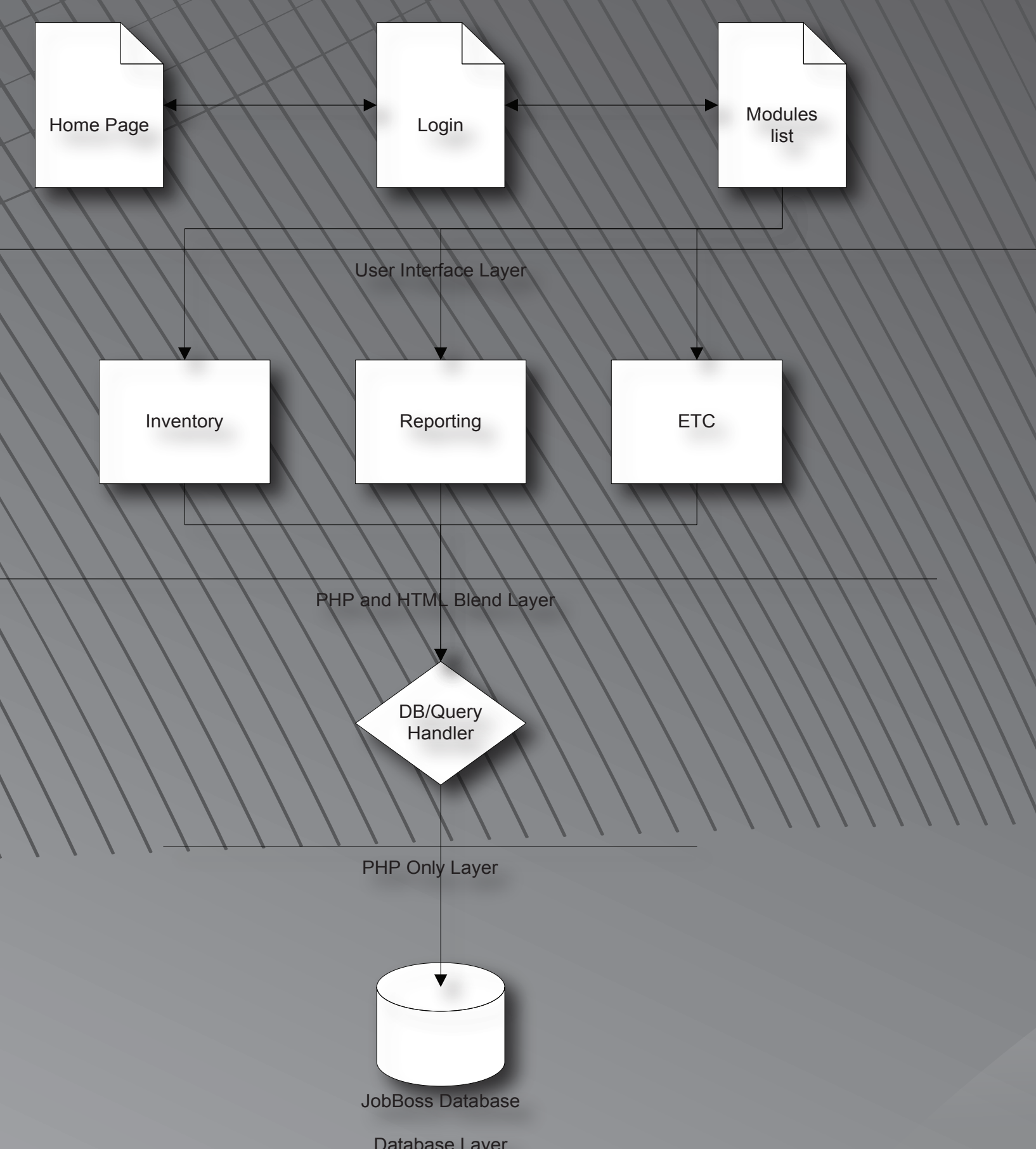
Results

I PRO 342 went to the Midwest Steel and Services facility and met with their personnel repeatedly in order to gain as complete an understanding of their operations as possible.

The I PRO team then worked with the information acquired to design, code, and finally provide a modernized database and interfacing system which allows the sponsor's inventory to be tracked and updated in real-time with minimal effort.

The software created by I PRO 342 is crafted specifically to be highly expandable, allowing the company as well as future I PROs to build on the existing framework easily.

Three-Tier Software Design



The Team

Jarrod Godfrey, Computer Science
Michael Lagioia, Information Technology and Management
Michael Mikulka, Electrical and Computer Engineering
George Murphy, Computer Engineering
Kyle Pritchard, Computer Science
Donald Spears, Computer Science
Ryan Strand, Computer Engineering

William Maurer, Industry Professor, Industrial Technology and Management

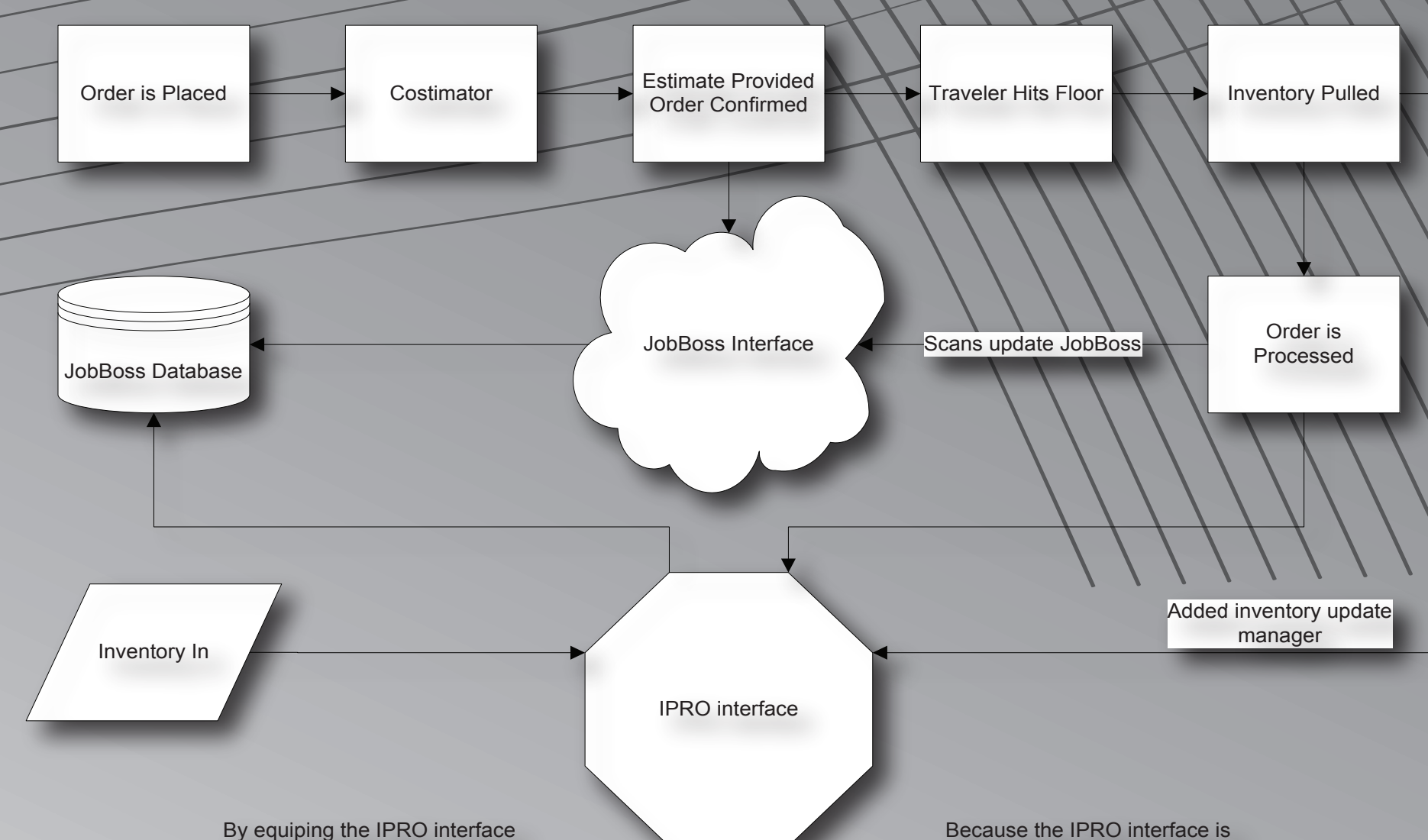
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Problem

Midwest Steel and Services Inc. has been unable to efficiently administrate their operations due to an information tracking system reliant upon multiple databases, repeated printouts, and overly redundant checks throughout their operations.

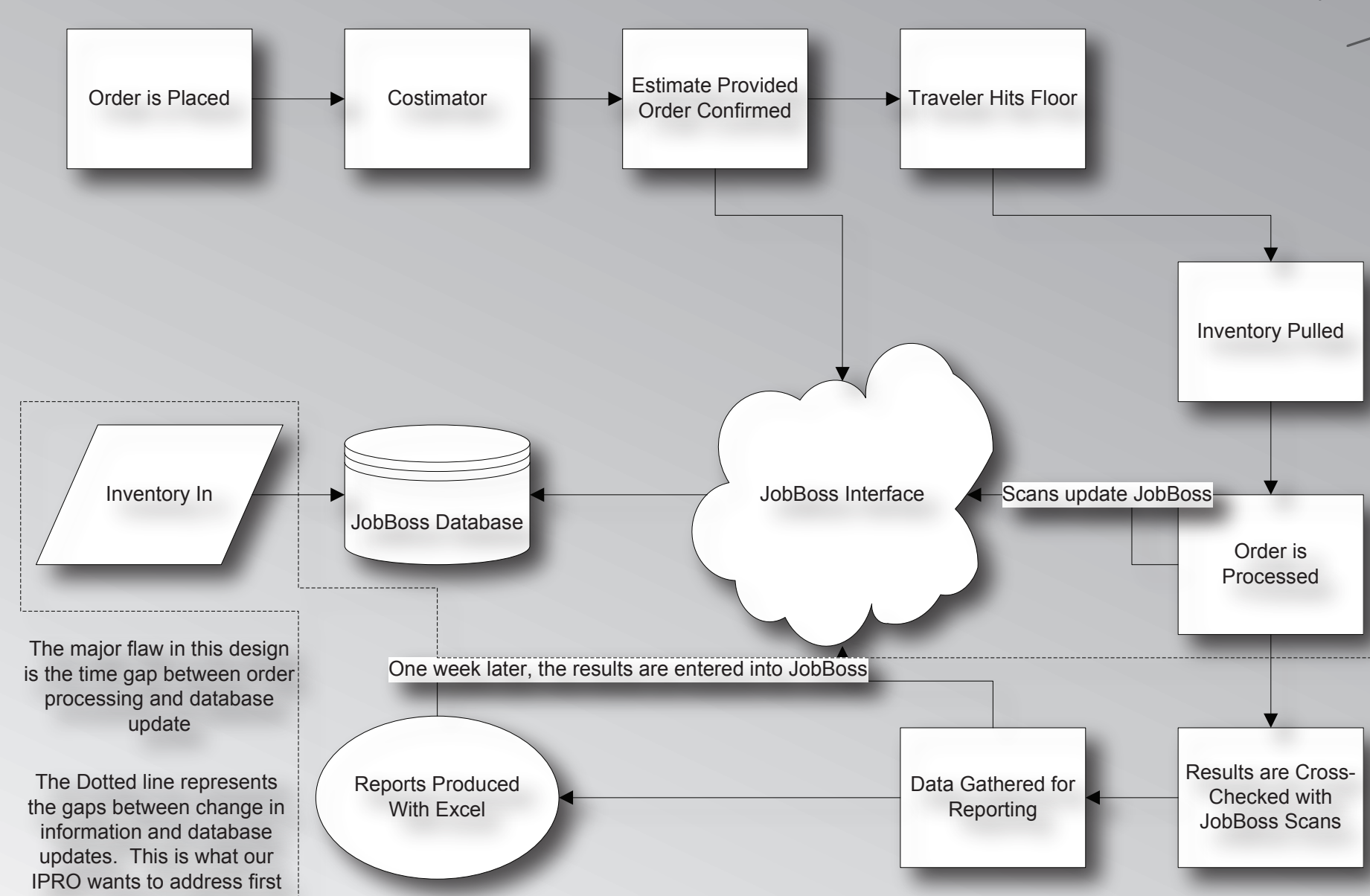
Our Solution



By equipping the I PRO interface with the tools necessary to obtain data reports and track inventory as soon as it is added and removed, there is now a unified information store.

Because the I PRO interface is built upon the existing JobBoss database, it can be used in tandem or in place of JobBoss for various functionality, without loss or corruption of data.

Current Process



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

The Dotted line represents the gaps between change in information and database updates. This is what our I PRO wants to address first.