Prints for Productivity

Overview
Currently at Rockland Manufacturing, all machine shop employees use the same set of engineering prints with two-dimensional part drawings, dimensions, and work instructions for producing a product. Nittany Prints has been assigned the task of investigating the existing technology capable of creating step-by-step work instructions from existing models and drawings as well as new designs created by Rockland’s engineers. The chosen technology must meet a set of requirements important to Rockland, and the cost of implementation must be exceeded by the benefits of efficiency.

Objectives
- Establish a complete understanding of Rockland Manufacturing Company’s current working system regarding the movement of prints from one stage to another
- Provide research on alternative software options available and conduct analysis determining which is most favorable for the Rockland Manufacturing Company
- Establish an efficient, simplistic method of displaying information from the prints in order to increase work flow through the system

Approach
- Became familiar with Autodesk Inventor 2012, Rockland's current CAD package by meeting with experts and self-exploration of the software.
- Established a set of requirements that the chosen software must include, and created a rating system based on the importance of each requirement to the overall solution.
- Performed an analysis of possible software solutions based on their performance regarding the established set of requirements.
- Chose a favourable solution based on the rating of possible software solutions.
- Created a prototype instruction set using the chosen software and a Rockland product as an example. An instruction set was also created to be provided to the Rockland team to aid with the training to use the new software.

Outcomes
The chosen software solution was Autodesk Inventor Publisher. The following deliverables were provided to Rockland.
- Demonstration of prototype and explanation by the team.
- An instruction set explaining the steps required for replicating the prototype.