

December 5, 2008

# IPRO 347 Final Presentation

*Subject: Developing a document control system*

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# [ Introduction ]



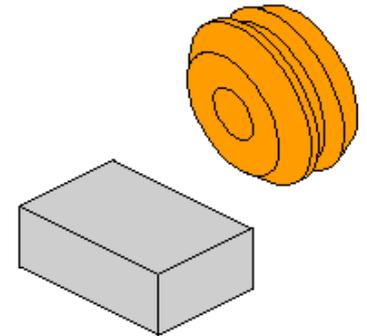
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ABRASIVE-FORM INC.

- Abrasive-Form is a multimillion-dollar contract manufacturer specializing in **creep-feed grinding**
- Principal customers are the industrial Gas Turbine and the Aerospace industry
- Company has been growing since 1976



# [ Problem Statement ]

- **Keeping track** of the customer projects with folders
- Growing company => Problems with **information management**
- Company has a **hard time finding** the information
- **Time** consuming and takes a lot of **space**



# Abrasive-Form Requirements

- **Main Goal** : Replace current physical document storage system
  - Principal Criteria:
    - Real time updating
    - Simple and easy to use
  - Software features:
    - Scan the documents
    - Administrator and user control
    - Search Engine



# Abrasive-Form Requirements

- Software features:
  - Has sub-folders
  - Time stamps
  - Comment logs
  - Off-site backup
  - Email alerts/alarms
  - Remote Access



# Goals of this IPRO

- Using state of the art software to propose a customized online **storage system** :
  - **Efficient** solution
  - Minimum **cost**
  - **Very Simple to use**
- Reducing time spent and space used
- Broadcast the information to all the employees

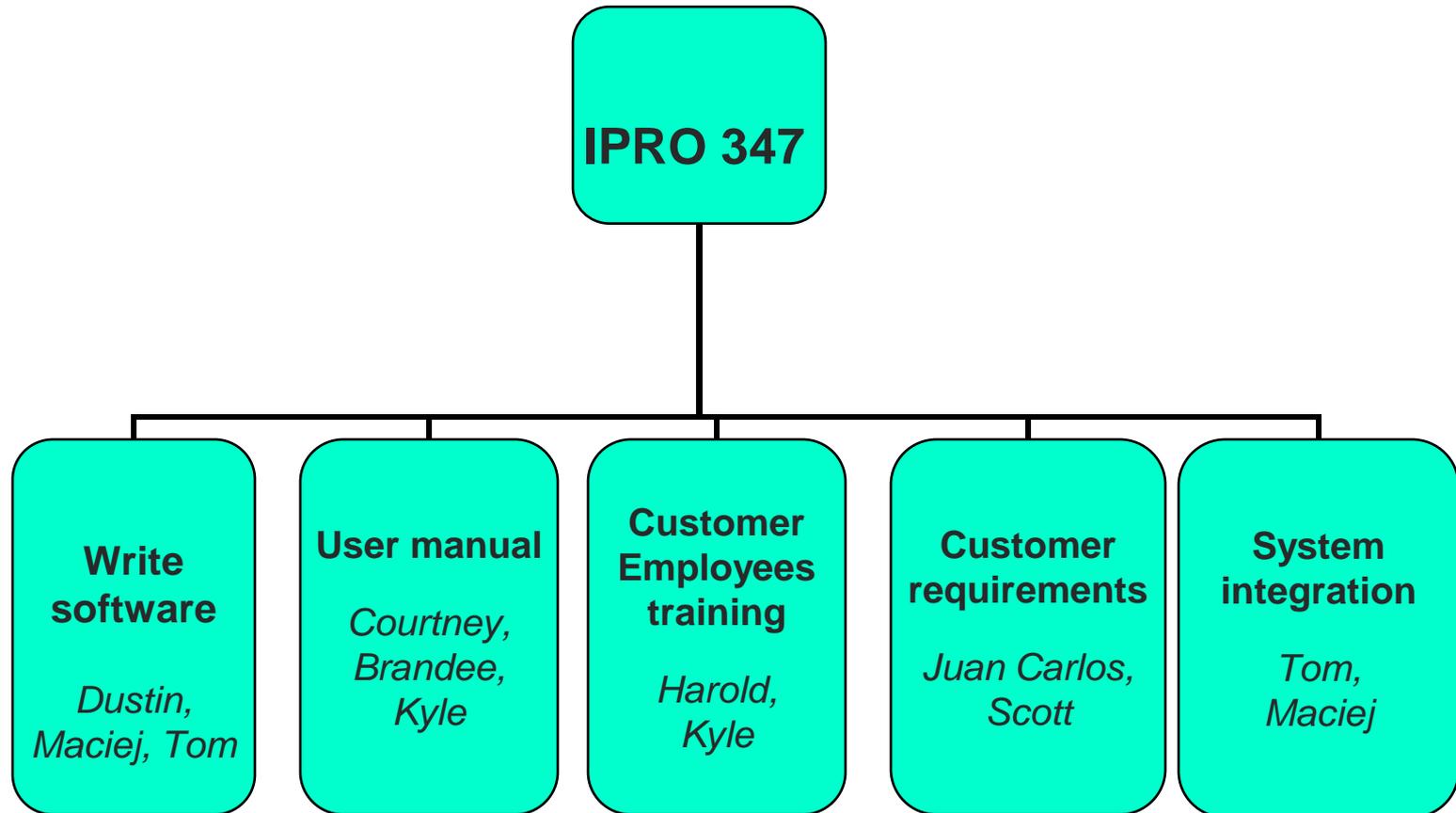


# [ Phases ]

- ❖ **Phase 1** (Summer 2008): Interviewed company personnel and analyzed the situation.
  - Result: Selection of **Microsoft SharePoint** to be implemented as company file archiving system. Initial prototype produce.
- ❖ **Phase 2** (Fall 2008): Implement the SharePoint Solution
  - Complete the software solution
  - Develop the user manual
  - Train company personnel in SharePoint use



# [ Team Organization ]



# [ Work Distribution ]



How did we manage to **customize** the software?



# [ SharePoint ]

## ❖ Pros

- Comes with most Windows servers
- Easy to use
- Powerful engine



# [ SharePoint ]

- Cons
  - Extra firewall is necessary for remote access
  - Must have Windows Server 2003



# SharePoint interface

The screenshot displays a SharePoint web page for a site named 'Abrasive Form'. The page features a top navigation bar with 'Home', 'Abrasive Form', 'Document Center', 'News', 'Reports', 'Search', and 'Sites'. A search box is located in the top right corner, and a 'Site Actions' menu is visible on the right. The main content area shows a 'Jobs' list with the following data:

Job #	Part #	Customer	Date parts received
17974	2100M59P01	General Electric	5/8/2006
18033	372A2758P0C1	General Electric	4/21/2006
20438	209639	Royals Royce Energy Services	3/26/2008
20246	RT62-4-7F.2	Royals Royce Energy Services	3/26/2007
23223	116E1991P001	Goodrich Corporation	5/2/2008
23346	116E1991P001	Goodrich Corporation	5/19/2008

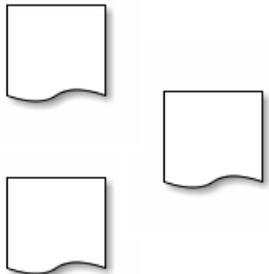
The left sidebar contains navigation options: 'View All Site Content', 'Documents' (with 'Job Documents'), 'Lists' (with 'Customers' and 'Jobs'), 'Discussions', 'Sites', 'People and Groups', and 'Recycle Bin'. The Microsoft Windows SharePoint Services logo is visible in the bottom right corner of the page content.

# [ Data Input ]



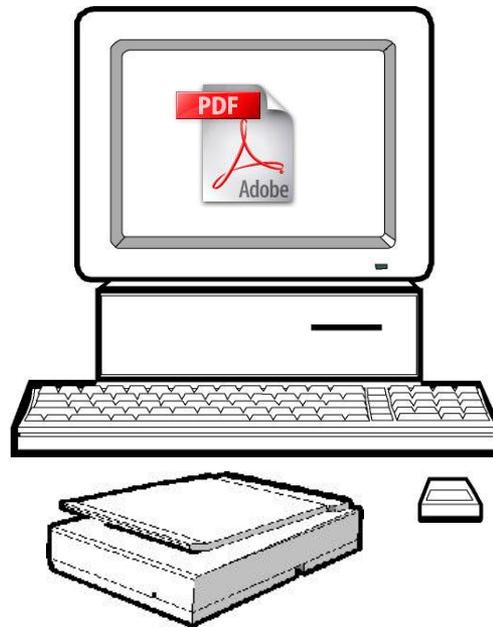
## Job Folder

Contains many documents



## Documents

- Job traveller
- Shipping
- Purchasing
- Inspection Sheets



## Scanner/Workstation

Librarian converts docs to PDF format

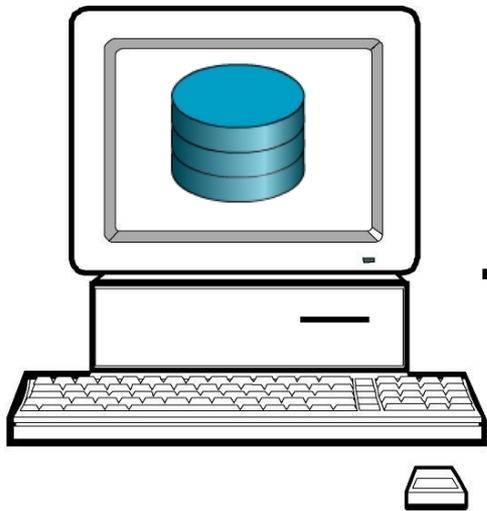


## SharePoint Server

Digitized docs are sent over the company network to a central server

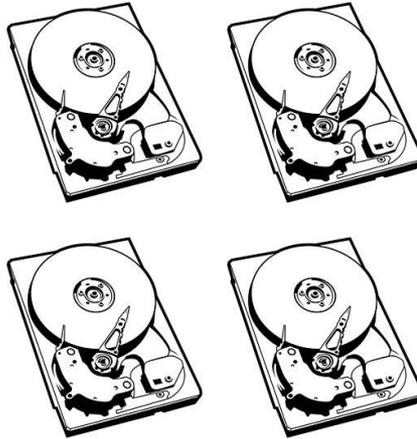


# Storage



## SharePoint + SQL

SharePoint server uses SQL to write and retrieve data



## Storage Area Network

Documents stored locally on the server. More space available with SANs.



## Offsite Backup

Electronic job docs may be backed up online



# [ Data retrieval ]



## SharePoint Server

Documents available in electronic job folders, on a website visible to the VPN only



## End User

From SharePoint, employees can:

- Print docs
- Send docs as email
- Annotate docs on the server
- More?



# [ Results ]



- ❖ Completed SharePoint Template
- ❖ Recommendations to Customer:
  - Storage
  - Security
  - Scanning Hardware



# [ Work Distribution ]

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How did we manage to **create** a User Manual?



# [ User Manual ]

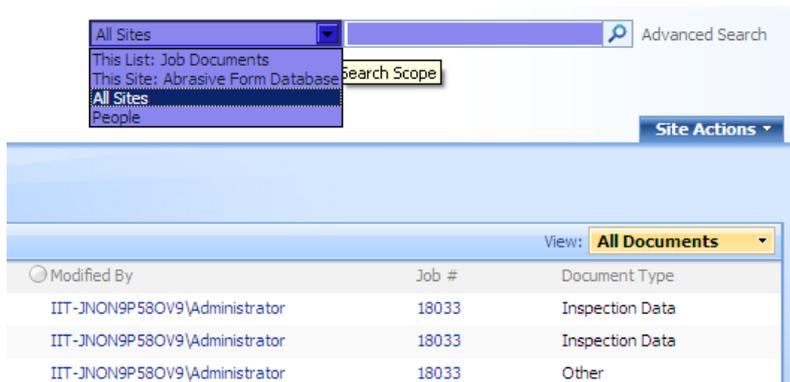
## ❖ Objectives

- To create a user friendly manual that is easy to read and understand
- Organized for either regular users or administrator users



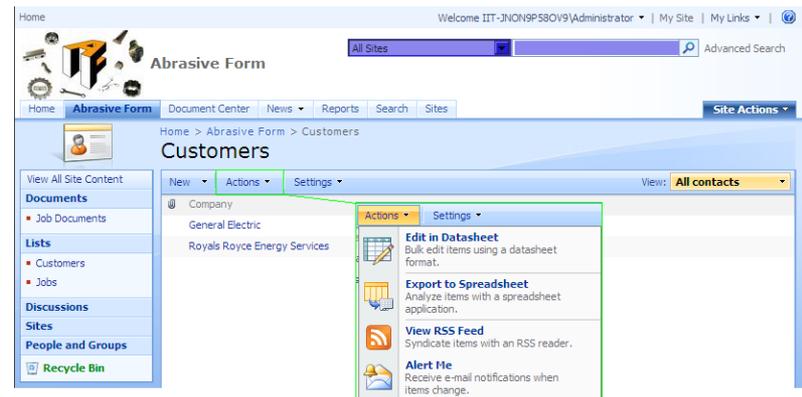
# User Manual

- ❖ The user manual utilizes screen shots
- ❖ Easy to understand descriptions



This screenshot shows a search interface. At the top, there is a search bar with a dropdown menu for 'All Sites' and an 'Advanced Search' button. Below the search bar, there is a table of documents. The table has columns for 'Modified By', 'Job #', and 'Document Type'. The 'View' is set to 'All Documents'.

Modified By	Job #	Document Type
IIT-JNON9P580V9\Administrator	18033	Inspection Data
IIT-JNON9P580V9\Administrator	18033	Inspection Data
IIT-JNON9P580V9\Administrator	18033	Other



This screenshot shows a SharePoint site for 'Abrasive Form'. The site is titled 'Customers' and has a 'View: All contacts' dropdown. The 'Actions' menu is open, showing options like 'Edit in Datasheet', 'Export to Spreadsheet', 'View RSS Feed', and 'Alert Me'.



# [ User Manual ]

- 25 copies given to customer
- Electronic copies delivered to customer



# [ Work Distribution ]

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How did we manage to **train** the company?



# [ Training ]

- Follow format of the User Manual
- Utilize Multiple Screen Shots
- Help Employees understand structure of SharePoint



# [ Training ]

- Interactive session at end of each presentation
- Help teach navigation of site to employees
- Overall success



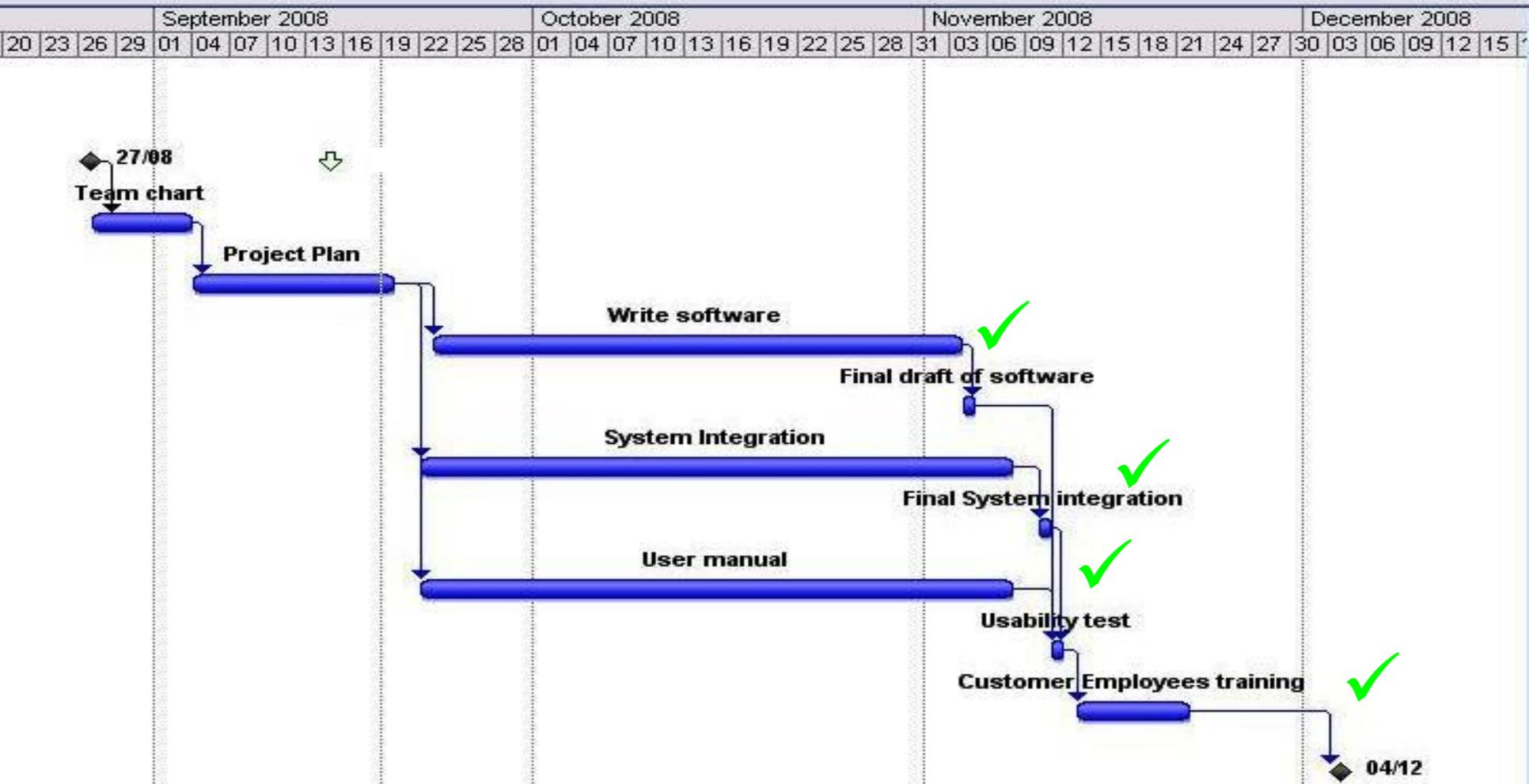
# [ Work Distribution ]

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How did we manage the project?



# Project Plan



# [Obstacles]

- ❖ Coordinating with Company
- ❖ Establishing Test Server
- ❖ Majority of the team not familiar with programming



# [ Looking Ahead ]

- Some of the IPRO members will **stay in contact** with the company if any implementation problems comes out :
  - **Krolkowski Maciej** (Summer IPRO + Part of the software team)
  - **Barksdale Dustin** ( Software team + Major in Computer Science)
  - **Lewis Phil** (Teacher Responsible)



# [ Team Ethics ]

- A confidential agreement was signed for the IPRO (Summer + Fall 2008)
- The team's Ethics Plan stresses respecting the non-disclosure agreement with Abrasive-Form®
- Disclosing information about Abrasive-Form® could cause the team to acquire biased information



# [ Results for the company ]

- Fulfilled their **expectation** regarding the software template
- Impressed with the employee training and the quality of the user manual
- Overall, Very **Satisfied** with the IPRO Team

**Happy Customer = Successful IPRO**



# [ Results for the IPRO team ]

- Learned business world experience
- Learned how to deal with a real customer
- Allowed us to apply our skills to a real world problem.



# [ Acknowledgements ]

- **Greg Zilinsky**, Manager of Strategic Programs, Abrasive-Form Inc.
- **Mark Sami**, IIT Alumni and SharePoint Consultant



[ Thank you for your attention! ]



Any questions?

