

# A Leading manufacturer of Paper Rolls

## Case Study

# Overview

## Client Background

Client is a major provider of quality paper rolls for wide range of business machines including cash registers and ATMS.

## Objective

To create web application to generate quotes and estimate the cost files(Items)

## Client Inputs

- ✓ Various types of quote and item, information based on the customer request
- ✓ Various types of paper details such as,
  - Roll Width
  - Paper Width
  - Paper Type
  - Roll outer diameter
  - Inner diameter
  - Paper ply'sto estimate the cost file

## Project Name:

Paper Roll Quality System (PRQS)

## Tool Used:

- ASP .NET 4.0 and Visual C#
- SQL Server 2008R2
- AS400 Database

# Business Challenge

## Save the file in Network path

- ✓ The Quote details should be created as a PDF format and it should be saved in Network shared drive
- ✓ Allowing permission to the PRQS users to access the shared Folder
- ✓ Authorized PQRS users should access the folder.

## Data Synchronization from AS400 Database to SQL Server Database

- ✓ The System needs to get the Items and Customers details in SQL DB from AS400 Database using Windows Service, to create a Quote and to Estimate the cost files
- ✓ The Item and the Customer Details need to be updated back to the AS400 Database after the necessary changes are made in the SQL Server Database along with the Cost details
- ✓ System should have the Synchronization process to get the Items and customers from **AS400 Database to SQL Server Database**
- ✓ The Sync process should occur automatically by every night in the Week days for the specified time using scheduler

## Estimate the Cost of an Item

- ✓ System should dynamically display the cost based on the different types of paper accessories(Such as paper types, Roll width, Core inner and outer diameter, Mill roll width etc.
- ✓ The page should not refresh or reload during cost calculation
- ✓ System should be able to search and select the paper types, core, tray and carton types.

# Project Solution - Save the file in Network path

## Solution Approach

- PDF Files are created using ITextSharp DLL(Free and open source library)
- User can save the PDF file in specified shared folder on the Network
- Folder permissions are provided for different user roles
- Server account can be added to the shared folder with full control permission for PRQS to save the file on the Network Shared folder

## User Benefits

- Authorized user can create, delete and update the file
- User can Email the PDF to respective salesperson and customer
- User can View and Print the PDF file

# Project Solution - Data Synchronization

## Solution Approach

- The sync process is created as windows service for item and customer sync from the AS400 Database to SQL Server Database, without the user intervention
- Implemented ODBC connections to connect the AS400 Database
- The created service can be installed in the server
- This will synchronize the item and customers for every 24 hours in week days
- After the certain interval the updated data are written back to the AS400 database from the SQL Server database with the necessary connections
- The Service has been programmed to Sync the items and customers at the specified time

## User Benefits

- Authorized user can create, delete and update the file
- User can View and Print the PDF file
- User can Create or Estimate cost file

# Project Solution - Estimate the Cost of an Item

## Solution Approach

- Implemented AJAX in order to display the Cost dynamically based on various paper accessories.
- Implemented AJAX to calculate the cost without refreshing the page
- Cost can be calculated using standard formulas
- Tray, Core and Carton values are retrieved from AS400 Database for Cost calculation and the Cost file are maintained in SQL Server DB for creating quotes

## User Benefits

- User can have the flexible user interface to Estimate the cost file
- User can search and select the values from search result
- The authorized user can create, edit and delete the cost file

**Thank You**