



#### Leveraging the

## Enterprise Agreement to

Maximize Value from the

PI System Infrastructure

One Solution at a Time

Presented by Dr. Stuart Watson



#### Maximize Value... One Solution at a Time

**Transformative** 

Maximize Added Value

Journey

Results

Future Steps



#### **Evergreen Packaging**

Fiber Based Food & Beverage Packaging

2 Mills

13 Converting Facilities (6 US)

2 Filling Machine Manufacturing Plants

**9** Equipment Facilities

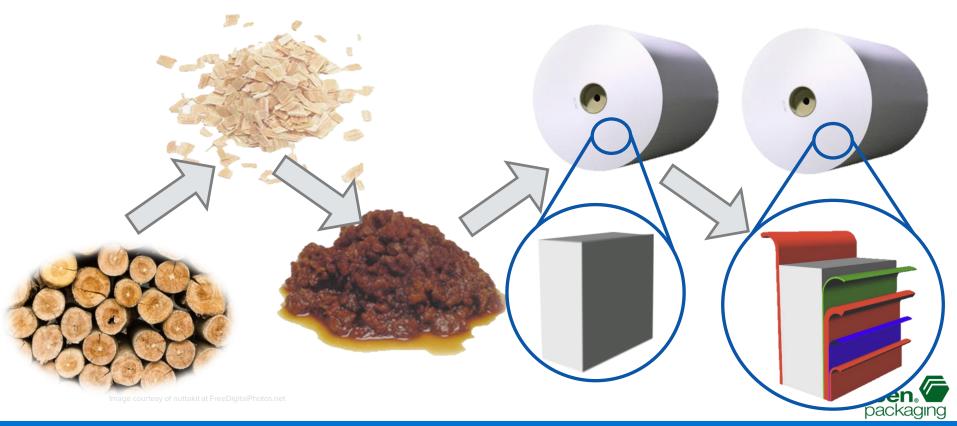
Paper Mill (2)

Converting Facility (6)

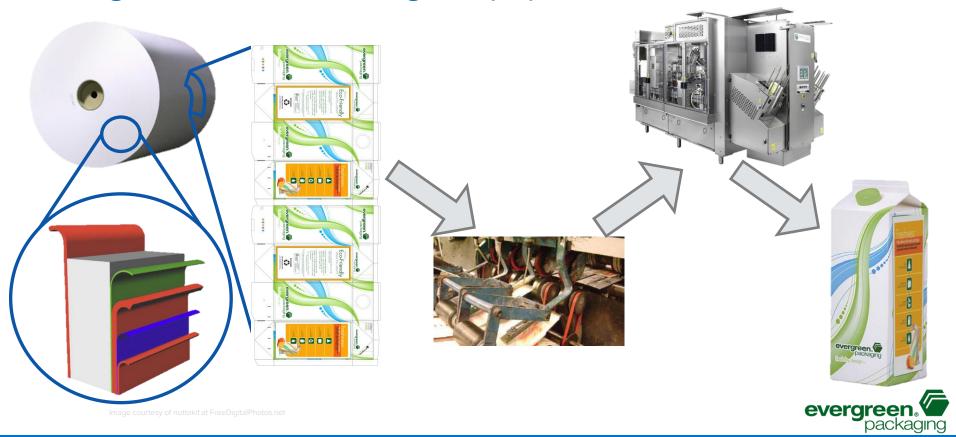




#### Evergreen – Mill Value Chain



#### Evergreen – Converting / Equipment Value Chain



#### Evergreen and OSIsoft

Pre Enterprise Agreement (2013)

27 years in the Mills

**Business Critical** 

130,000+ Tags

Hundreds of PI ProcessBook

and PI DataLink Reports



#### Evergreen and OSIsoft – pre EA Challenges

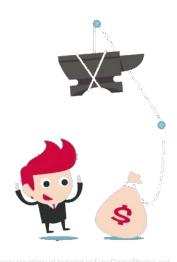
Pre Enterprise Agreement (2013)

**Evergreen Preoccupied with Cost** 

Aging Server Software and Interfaces

Current Arrangement "not enough value"

Something had to change



 $Image\ courtesy\ of\ bplanet\ at\ Free Digital Photos.net$ 

2014 Regional Seminar – Atlanta: Fireside Chat with Larry Shutzberg -

http://www.osisoft.com/Templates/item-abstract.aspx?id=11843`



#### Evergreen and OSIsoft – Enterprise Agreement

Enterprise Agreement signed January 2014 CIO was Enterprise Agreement Evangelist







#### Enterprise Agreement – Limitless Technology

#### Unlimited Tags

#### Updated Versions

- PI Server
- PI Interfaces
- Pl DataLink
- PI ProcessBook

#### New Technologies

- Asset Framework
  - Notifications
  - Event Frames
- PI Coresight
- PI Manual Logger



#### **Enterprise Agreement Resources**

- Online Training
- Conferences and Seminars
- AF Cookbook
  - Solution Recipes
- Training Credits
  - AF WorkshopEvergreen Specific

- Field Services
- Managed PI
- Enterprise Agreement Team



#### Evergreen and OSIsoft – post EA Challenges

**Established PI Mindset** 

Transformative Resources are Busy

Understanding of New Technologies

Implementation

Capabilities

New Technologies - Reliant on Asset Framework

Paralyzed by enormity - 130,000 Tags at 2 Mills

Tags Inconsistent - Created by Organic Growth



#### Using New Technologies

EA Team – "Get Value Now" AF Cookbook

AF Workshop





Image courtesy of Stuart Miles at FreeDigitalPhotos.net



#### AF Workshop – Business Problem

Went to Business Unit – what problems do you have?





#### Business Problem – Quality Investigation

Customer Quality Complaint Investigations
Customer Roll Number



Roll: CAW934W181205A



#### Business Problem – Quality Investigation

Can have Multiple Coatings

**Quality of Coating** 

Spots, Drops, Holes, Streaks,

Basis Weight, Caliper, Globs,

Strength, Adhesion, Dyne, etc.



#### Business Problem – Extrusion Quality Investigation

Customer Quality Complaint Investigations

Customer Roll Number to Root Cause

**Operational Data** 

Order Data

**Quality Data** 

Can take days



Roll: CAW934W181205A



#### AF Workshop – Business Problem

Went to Business Unit – what problems do you have?

**AF** Workshop

Run by OSIsoft EA Team

Maximize Hands-on

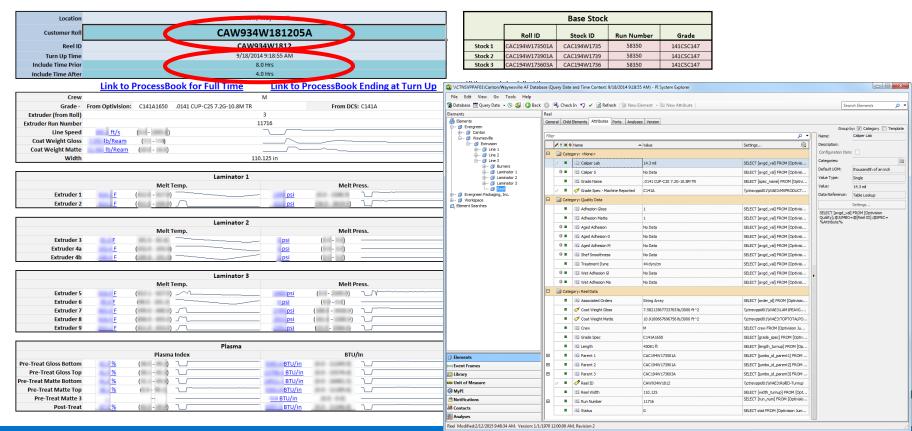
Educate PI Admins on AF

Educate Operations Team on Data

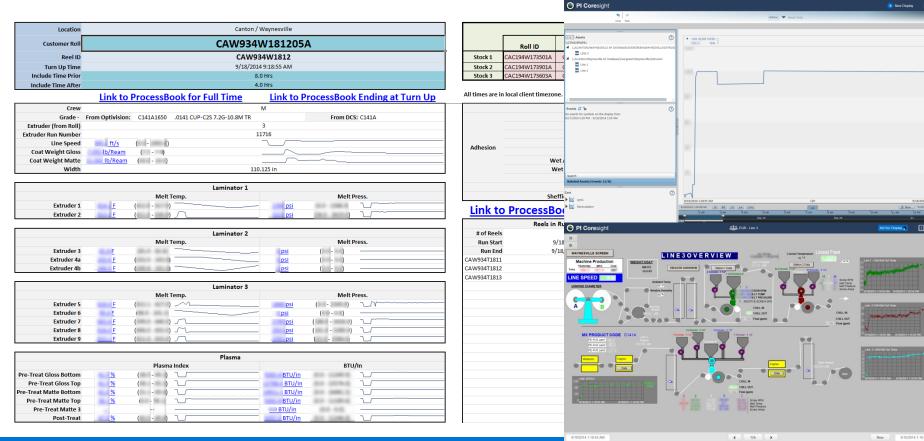
Goal – Solve Real Business Problem



#### Business Solution – Extrusion Quality Report



Business Solution – Extrusion Quality Report





#### Business Solution – Extrusion Quality Report

Saves hundreds of skilled hours

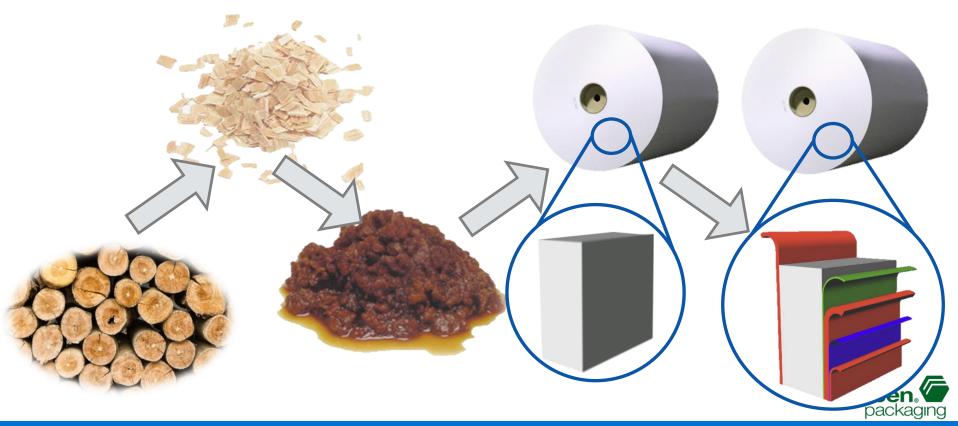
Makes data more accessible

Showcase of possibilities

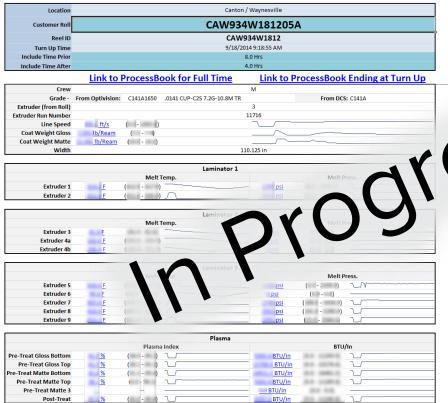




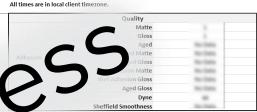
#### Business Solution – Process Quality Reports



#### Business Solution – Process Quality Report



Base Stock				
	Roll ID	Stock ID	Run Number	Grade
Stock 1	CAC194W173501A	CAC194W1735	58350	141CSC147
Stock 2	CAC194W173901A	CAC194W1739	58350	141CSC147
Stock 3	CAC194W173603A	CAC194W1736	58350	141CSC147



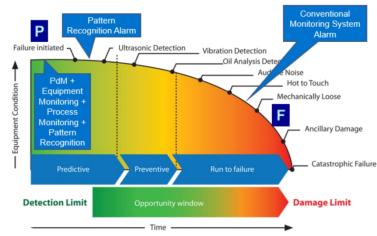
#### Link to ProcessBook for Run 11716

Reels in Run 11716					
# of Reels	3				
Run Start	9/18/2014 4:24:11 AM				
Run End	9/18/2014 12:00:36 PM				
CAW934T1811					
CAW934T1812					
CAW934T1813					



#### Business Problem – Condition Based Maintenance

Detecting Failure Before Catastrophe



Many Metrics not Metered Maintenance Rounds (Condition Evaluation) An Important Component





#### Business Problem – Maintenance Rounds

Manual Pen, Paper, Clipboard

Lengthy Rounds

Filed Away after each Round

Valuable Operations Data being left in the Drawer

Lack of Integration

Plant Maintenance System

Notifications



#### Business Solution – Manual Logger

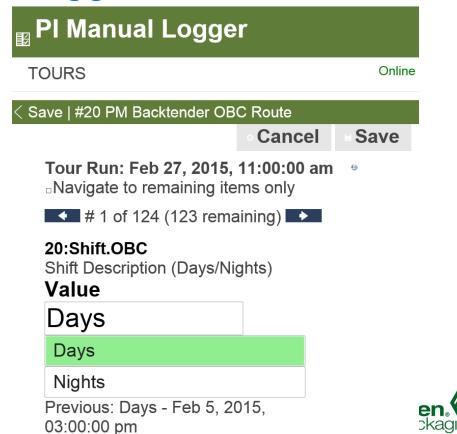
**Basic Data Entry** 

**User Friendly** 

**Historical Data** 

**Notifications** 

**Automation** 



#### Recent AF Workshops – More Opportunities

- Paper Machines
  - Quality
  - Excursion Notifications
- Pulp
  - Digester Performance
  - Down Stream Impact
- Recovery
  - White Liquor Quality
  - Process Performance

- Environmental
  - Compliance Tracking
  - Compliance Notifications
- Utilities
  - Performance
- River and Sewer Levels
  - Notifications



#### Summary

AF Workshops

OSIsoft and Evergreen

One Solution at a Time

Building Asset Framework

Maximizing Data Value



#### **Next Steps**

Continue to Engage Data Administrators

**Build out Asset Framework** 

Continue to Engage Data Owners

Recognize Opportunities

**Demand Action** 

Transform





#### Conclusion

**Enterprise Agreement** 

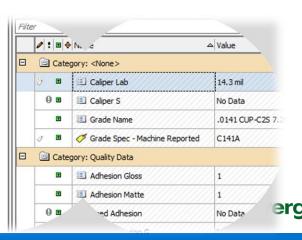
So much more than unlimited tags

Maximize Business Value

Best to have Demanding Users







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Mill Decision Support Systems Architect



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### Questions

Please wait for the microphone before asking your questions

State your name & company







# IHANK Y()[]

