

# ADM's Journey to an Enterprise Agreement

Presented by **Scott Harmeier**



# Premier Player in Global Agribusiness

Serving Vital Needs Throughout the World

## Key Facts

CY12 net sales      **\$90.6 B**

Employees            **30,000**

Facilities             **700+**

Country sales        **140+**

Market cap           **~\$27 B\***

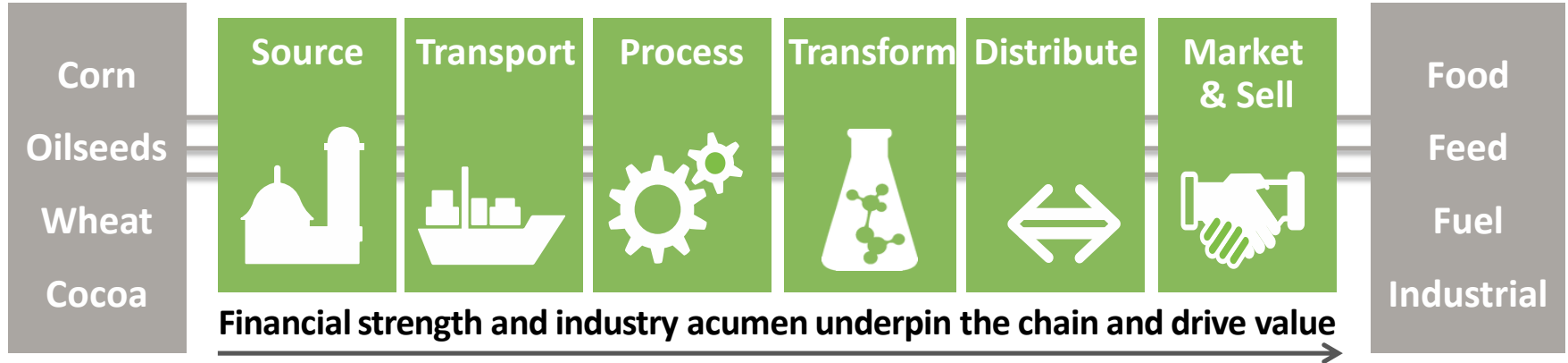
NYSE:                 **ADM**

\*As of Oct. 31, 2013



# ADM's Proven Core Model

- Expand the Size and Global Reach of our Core Model



- Expand Volumes and Diversify Crops

- Expand Volumes and Diversify Product Portfolios



# It Begins with an Oilseed





# It Begins with a Kernel of Corn



Sweetener

Sorbitol



Dietary Fiber

Corn Oil

Starch



Thickeners



Lysine for Feed



Industrial Chemicals



Ethanol



# Everyday Products

## Food



## Animal Feed



## Fuel and Industrial



# Data Utilization Opportunities



ADM – Decatur, IL

- **Regulatory Compliance**
- **Process and Product Quality Control**
- **Process Efficiency Improvement and Monitoring**
- **Process Design**
- **Cost Accounting**
- **Logistics**





# Data and Information Systems Task Force

## Corn Division – Data and Information Systems Needs Task Force

**Strategic Overview:** The corn division currently creates and collects a large amount of data, in a variety of formats, from electronic to paper. This data has uses in a variety of ways, such as:

- Regulatory compliance
- Process and product quality control
- Process efficiency improvement and monitoring
- Maintenance and parts management
- Process design
- Cost accounting
- Logistics

We must improve our ability to turn the data that we currently collect, as well as what we will want and need to collect in the future, into usable information. We must find and implement the proper tools to do so. To guide this effort it is proposed we assemble an interactive, multidiscipline task force to assure a positive outcome.





# Data and Information Systems Task Force

## Corn Division – Data and Information Systems Needs Task Force

**Strategic Overview:** The corn division currently creates and collects a large amount of data, in a variety of formats, from electronic to paper. This data has uses in a variety of ways, such as:

- Regulatory compliance
- Process and product quality control
- Process efficiency improvement and monitoring
- Maintenance and parts management
- Process design
- Cost accounting
- Logistics

We must improve our ability to turn the data that we currently collect, as well as what we will want and need to collect in the future, into usable information. We must find and implement the proper tools to do so. To guide this effort it is proposed we assemble an interactive, multidiscipline task force to assure a positive outcome.



# Data and Information Systems Task Force

**We must improve our ability to turn the data that we currently collect, as well as what we will want and need to collect in the future, into usable information. We must find and implement the proper tools to do so.**



# **Data Historian Selection Process**

## **Option #1 - Existing data historian used within ADM**

- **Issues collecting data from primary DCS**

## **Option #2 - Internally developed database used for laboratory data**

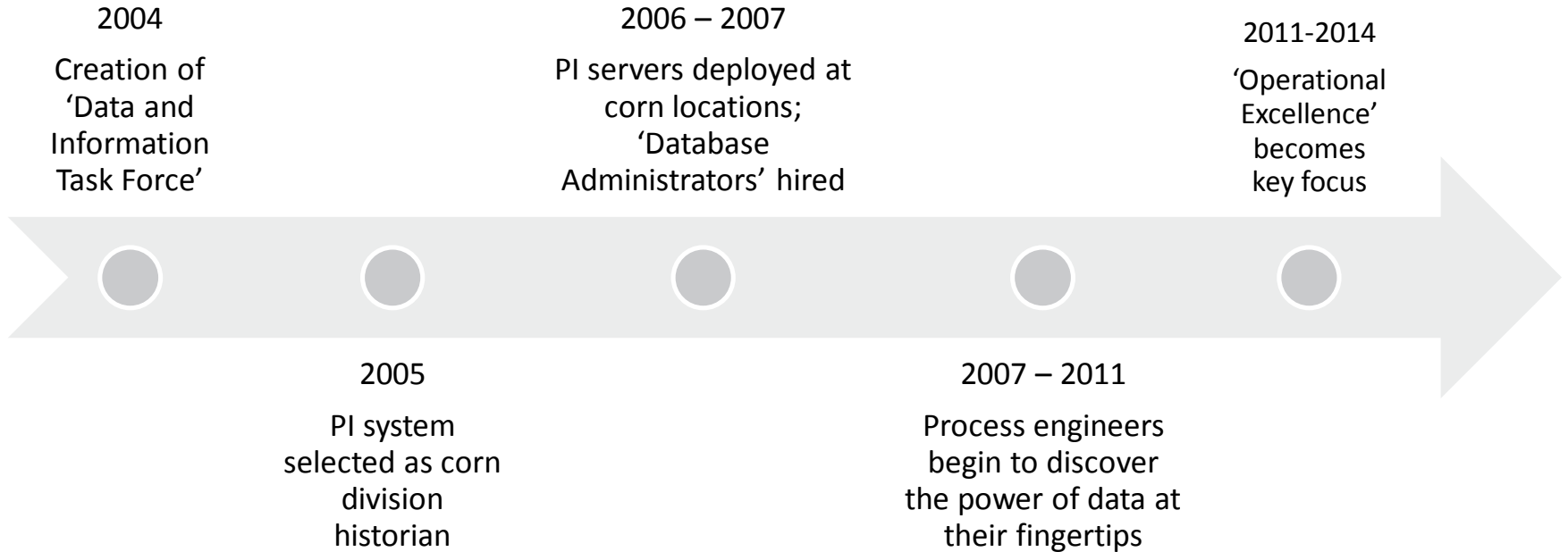
- **Lack of standard tools for retrieving/analyzing data**

## **Option #3 - PI System**

- **Some employees had experience from other companies**



# Data Utilization Timeline



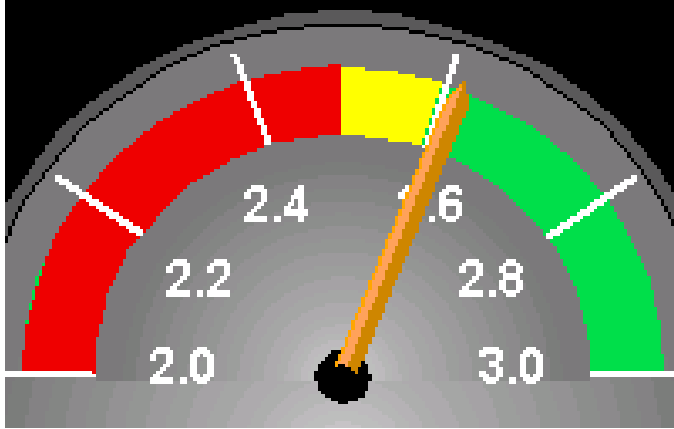
# Operational Excellence



**Drive Continuous Improvements  
in...**

- **Operating Costs**
- **Capital Expenditures**
- **Asset Utilization**
- **Regulatory Compliance**
- **Customer Focus**

# Operational Excellence



## Create Demand for...

- Definition of metrics and real time costs
- Visualization through DCS graphics
- Expanded spreadsheet reporting
- Demand for data in other divisions



# Challenges to Data Utilization

## Existing PI System Installations

- **Tag based – no asset structure**
- **Inconsistency in versions, collected data, and tools**
- **Data resolution issues**

## Other Plant/Business Data Sources

- **Bringing together multiple data sources**
- **DCS calculations and visualizations**
- **Scalability of spreadsheet reports**





# **Wrong Tool for the Job**

## **DCS Calculations and Visualizations**

- **DCS calculations are difficult to document and are not presented in an appropriate time-frame**
- **Custom visualization objects are time-consuming to create and hard to maintain**

## **Spreadsheet Reporting**

- **Most reports begin in a spreadsheet**
- **As the spreadsheet grows, things slow down**



# Relationship with OSIsoft

## Data Aggregation

- **Several software solutions were studied**
- **The goal was to find a visualization tool that could connect to multiple data sources**
- **PI system was viewed as one of many data sources**
  - **Transactional Relationship**

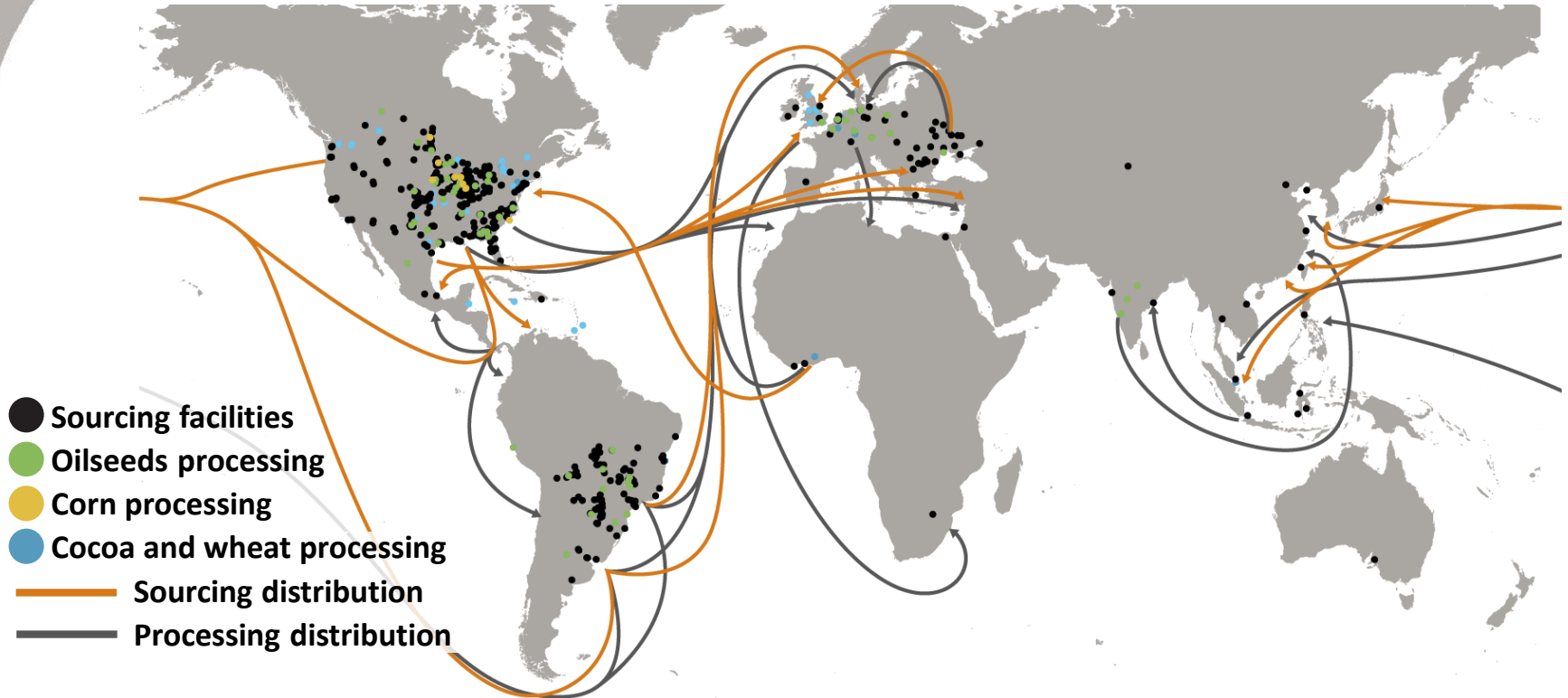


# Relationship with OSIsoft

## UC2013

- Learn more about the PI system as an infrastructure product
- Discussed possible approaches to accelerate ADM's use of the PI system
- Two parts to the problem...
  - Software
  - Resources

# Unmatched Assets and Global Scale



# Path to an Enterprise Agreement



## EA Questions

- **What is an Enterprise Agreement?**
- **Why do we need it?**
- **How much does it cost?**



# Understanding the Enterprise Agreement

## What is an Enterprise Agreement?

- A partnership with OSIsoft to deliver highest value from PI assets in the least amount of time.

## Why do we need it?

- When data is processed, organized, structured or presented in a given context so as to make it useful, it is called information.
- Collect, Historize, Find, Analyze, Deliver, Visualize

Data

Information



# **Understanding the Enterprise Agreement**

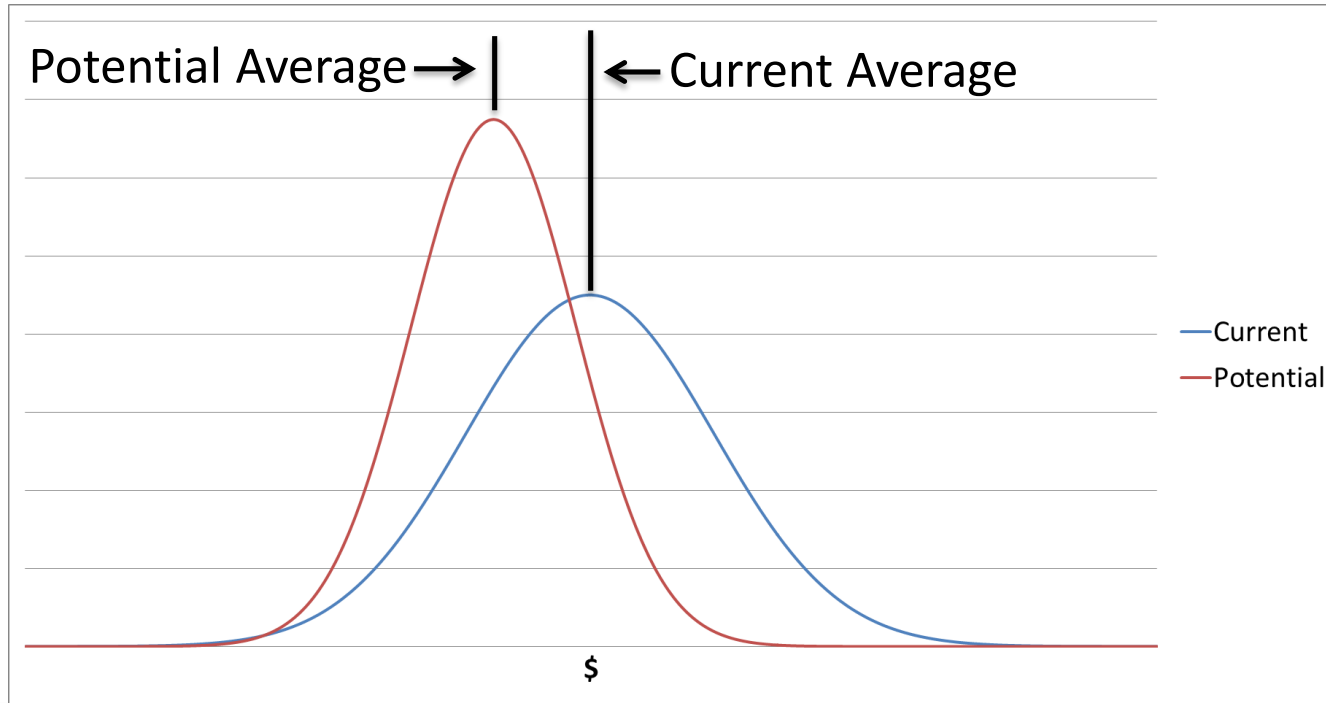
## **How Much Does It Cost?**





# Understanding the Enterprise Agreement

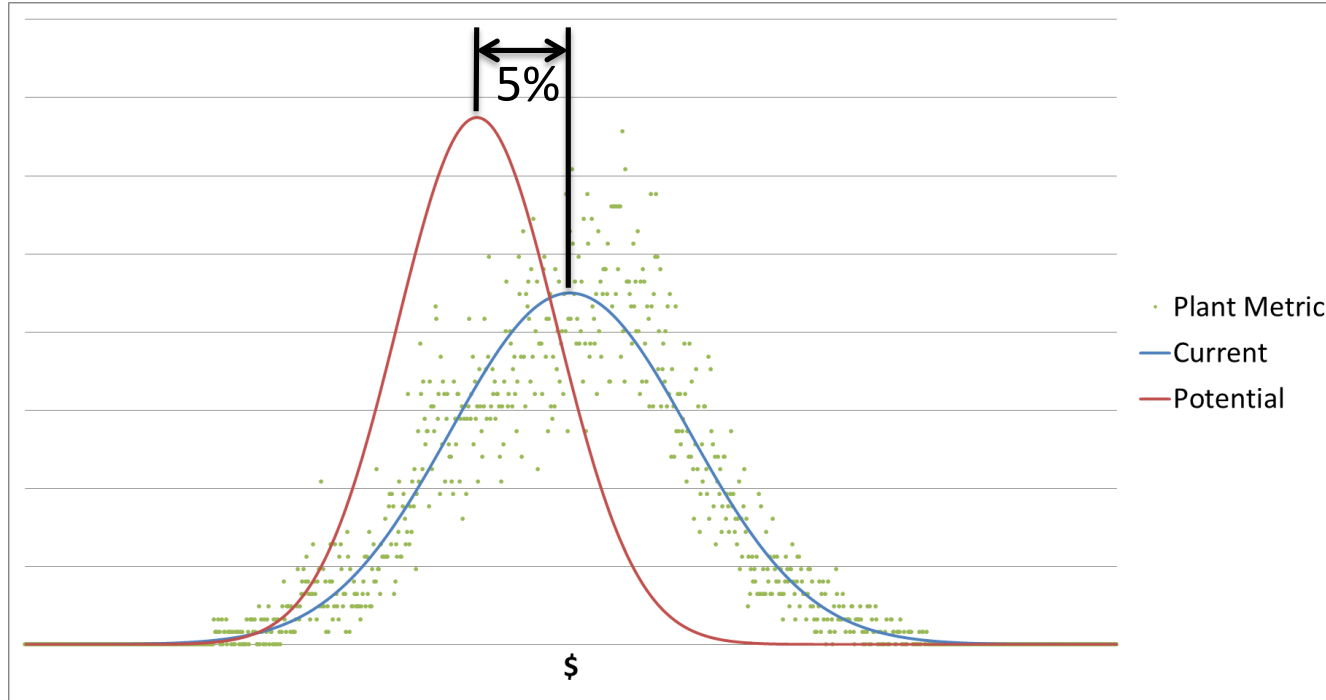
## ~~How Much Does It Cost?~~ What's the Payback?





# Understanding the Enterprise Agreement

## How Much Does It Cost? What's the Payback?





# **Finalizing the Enterprise Agreement**

## **EA Metric**

- **Scalable**
- **Easy to determine**
- **Applicable to the entire enterprise**

## **Buy-in**

- **Align EA deliverables with corporate initiatives**
- **Engage stake holders**

**Start April 22, 2013 – Finish December 31, 2013**



# **Utilizing the Enterprise Agreement Architecture and Reliability**

- **Standardize and deploy best practices**
- **Leverage NOC to maximize availability**

## **Utilize Value Realization Process**

- **Enterprise Roadmap**
- **Turn Opportunities into Results**



# Data Utilization ~~Opportunities~~ Results



- Regulatory Compliance
- Process and Product Quality Control
- Process Efficiency Improvement and Monitoring
- Process Design
- Cost Accounting
- Logistics



THANK  
YOU

Brought to you by  **OSIsoft.**