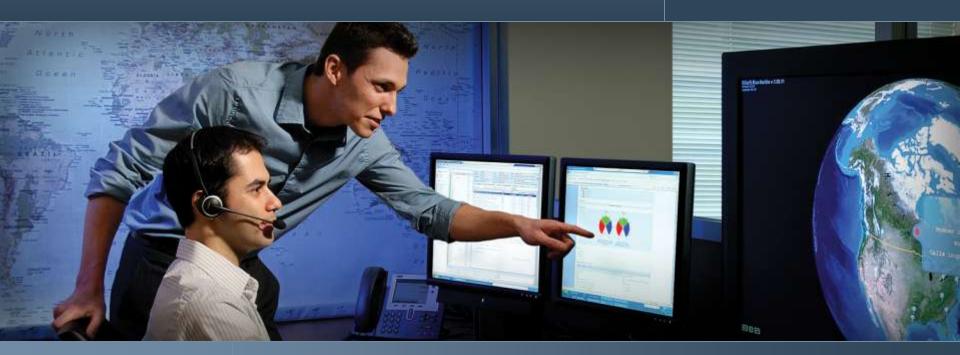


Regional Seminar Series Cork, County Cork, Ireland



Enabling Business Process Integration and Manufacturing Intelligence

Marc Gallant Business Development OSIsoft, LLC

Date

Raise your hands...



- October 7, 2010: Fota Island Golf Resort, Cork
- September 8, 2006: Sheraton Fota Island Golf Resort, Cork?
- March 13, 2003: Rochestown Park Hotel, Cork?
- All Three?

Thank you for your Business, Support and Hospitality

InformationWeek, May 24, 2010 by Doug Henschen





Article Quotes



- This article discusses "Business" Intelligence
- Same principles and challenges apply to what we call "Manufacturing" Intelligence
- "IBM, SAS, MicroStrategy, and others can make a strong argument that most companies have diverse applications, so companies need analysis tools that are agnostic to the data source and application."

Article Quotes



"There are two key tests for companies:

Can they get better, timelier, and more usable intelligence from their apps and vendors?

And can they drive operational decisions that are tied to their unique strategies?

They can, though only if they carefully align those insights with their business goals and not depend on cookie-cutter dashboards and analytics."

"If application vendors succeed in delivering real-time transactional insight with reduced information management infrastructure, it would be a game changer."

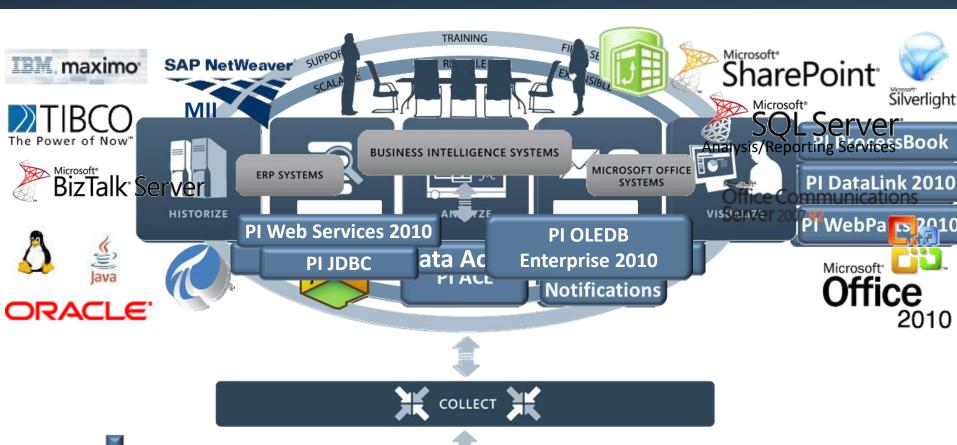
Challenges



- Timely information on the entire manufacturing process is critical for maintaining control and consistency
 - In some cases "real time" information can allow in process "tuning" to maximize effectiveness
- Manufacturing needs a Real Time Data Store versus a traditional Business Warehouse
 - Does not require moving data where it doesn't make sense
 - Can manage relational and non-relational data in the visualization environment
- Reconciliation of Data Models from many Data Sources

The Value of a Common Plant Floor Abstraction Layer



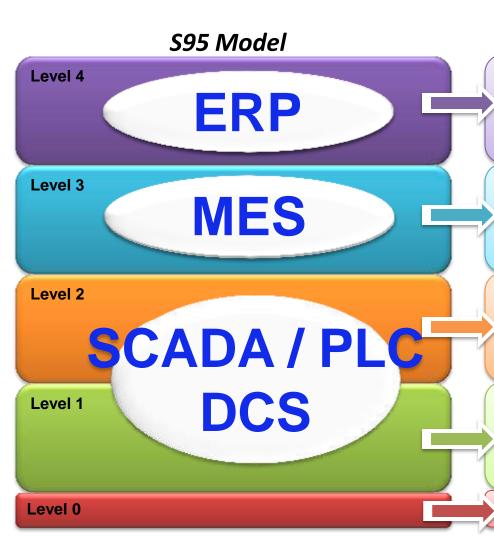


All Released PI
Client and Server
Products



ISA S95 Architecture



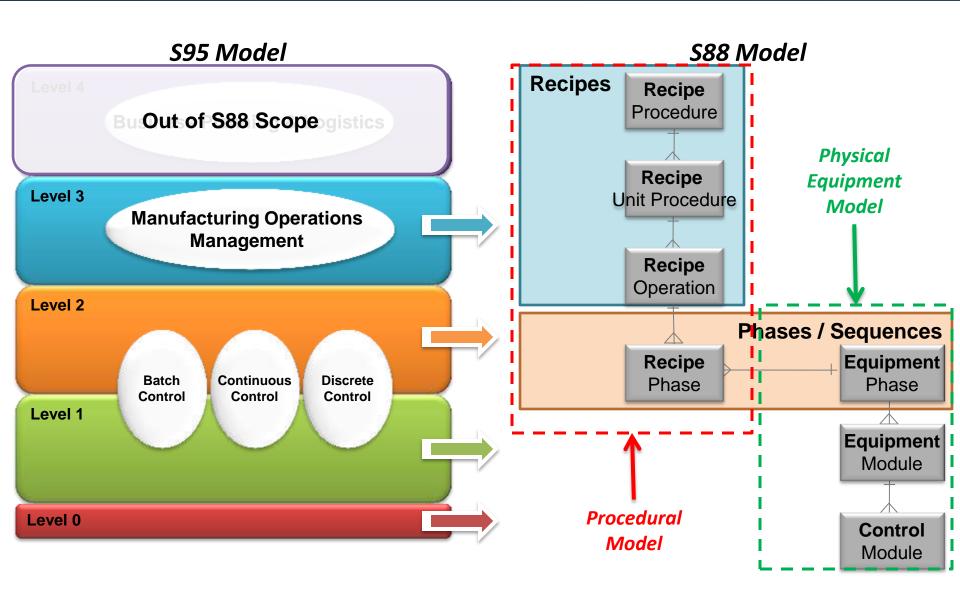


- **L4** Establishing the basic plant schedule production, material use, delivery, and shipping. Determining the inventory levels.
- L3 Work flow / recipe control, stepping the process through states to produce the desired end products. Maintaining records and optimizing the production process.
- **L2** Monitoring, supervisory control and automated control of the production processes
- **L1** Sensing the production process, manipulating the production process

L0 – Physical Equipment

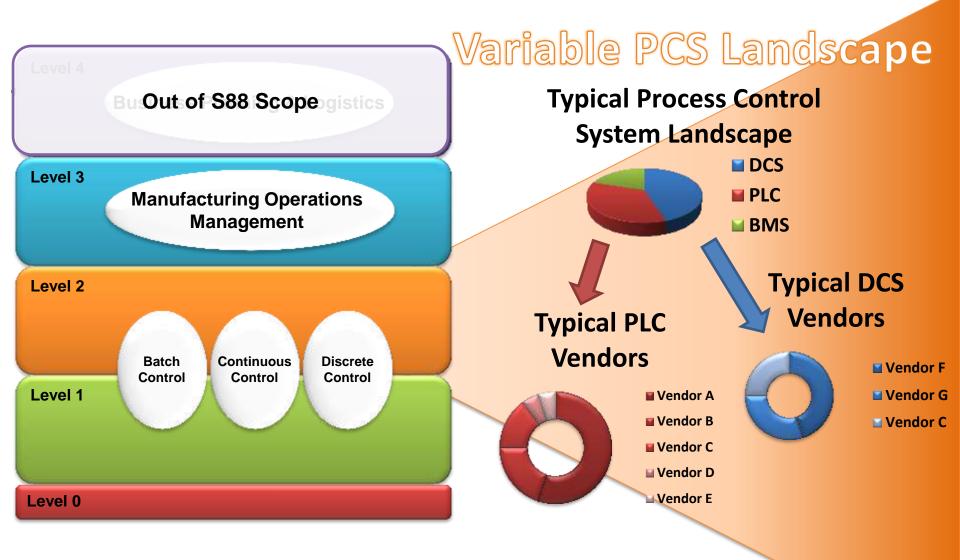
Batch Concept through S95 & S88



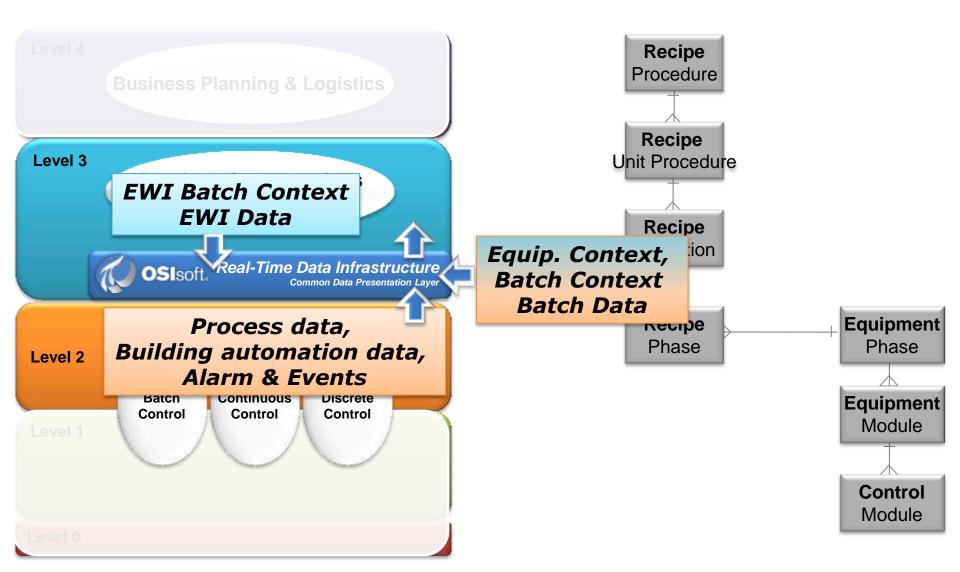


Challenges at Level 2



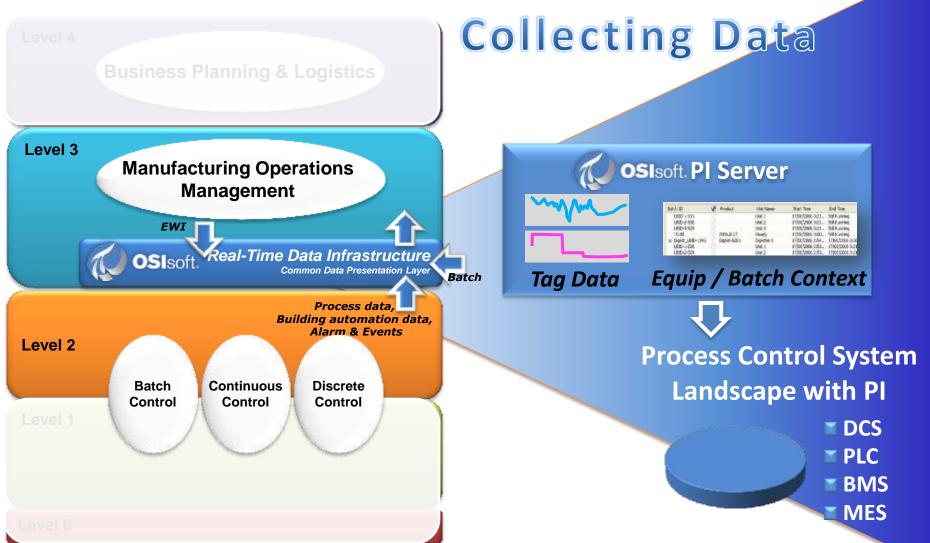


Real-Time Data Infrastructure: A Key Enabler





Common Infrastructure for



Application of Manufacturing Intelligence (

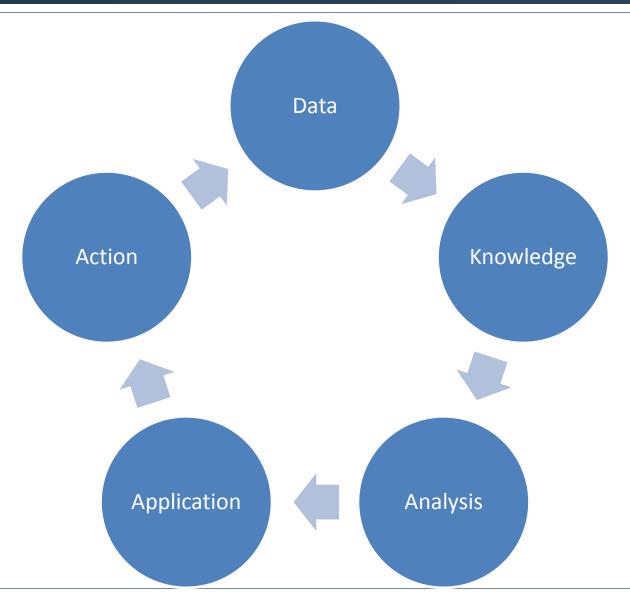


Data to Knowledge

- Leveraging Manufacturing Intelligence visualization with historical and real-time PI Data -> New learned process knowledge
- Knowledge to Analysis
 - Use that Knowledge -> Creates template based PI Analytics and builds into AF Template
- Analysis to Application
 - AF Template -> Update all assets of that type across the Enterprise
- Application to Action
 - PI Notification Template for the new 'KPI' -> Apply to all of same assets
- Action to Data
 - WebParts Display to Visualize the condition -> Brings us back to beginning of Manufacturing Intelligence visualization circle

Circle of Applied Knowledge







Thank you

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