

Enterprise Asset Management vs. Best of Breed

**Making the Integrated
Choice in the Face of
Resistance**

Wabash Alloys Case Study

Scott Hollowell – Asset
Management Solutions

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Overview of Wabash Alloys Wabash, IN

- Founded in 1948
- Secondary Aluminum Alloy producer
- Eight Production and Recycling Plants in the United States, Canada and Mexico
- Extremely Asset Intensive industry with 7000 Assets under maintenance and 127 Maintenance Staff
- JD Edwards Customer Since 2000, EnterpriseOne 8.0 Release
- Previous Maintenance System – DataStream MP2

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History of Maintenance Systems Implementation at Wabash Alloys

- MP2 installed in Early 90's
- Initial implementation of JD Edwards Plant/Equipment Maintenance performed in 2001, Release B73.3.2
- MP2 and JDE PEM Software had limited and inconsistent use, primarily at two larger Facilities
- Implementation of EnterpriseOne 8.0 EAM 2003-2004

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How DataStream MP2 was Selected and Utilized

- MP2 initially chosen by Maintenance department
- Maintenance cost at corporate level was tracked in an Excel Spreadsheet
- Installed at 14 sites as separate installs with no consistent Use
- Not all sites used MP2, primarily just the Larger Plants

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Why the Initial JD Edwards PEM Implementation was Unsuccessful

- Original Maintenance Core-Team member retired 3 months before 'Go-Live', few resources left to assist
- Contracted Implementation Consultants not experienced with the integrated detail of the product
- Maintenance & Operations were not full participants in trying to make implementation succeed
- Poor Configuration not realized until initial Plants attempted to Go-live

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What led Wabash Alloys to re-evaluate Maintenance Systems Strategy

- Company needed to get maintenance costs under control
- Executives could not get accurate data out of B733.2 install because of how bad it was
- We heard a lot about how well the ERP8.0 EAM worked
- ERP8.0 had additional functionality over B73.3.2 and Xe that we needed

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Selection Process of EAM System

- Three Primary Vendors Evaluated – MRO/Maximo, DataStream, JD Edwards/PeopleSoft
- Selection team consisted of personnel from maintenance, IT, accounting and an outside consultant
- Executive sponsors were VP of Production and CFO
- Selection process lasted over 6 months and visited 3 different facilities
- Cost, functionality, user friendly, integration and ease of installation were Selection Criteria

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Why EAM was chosen over Maximo

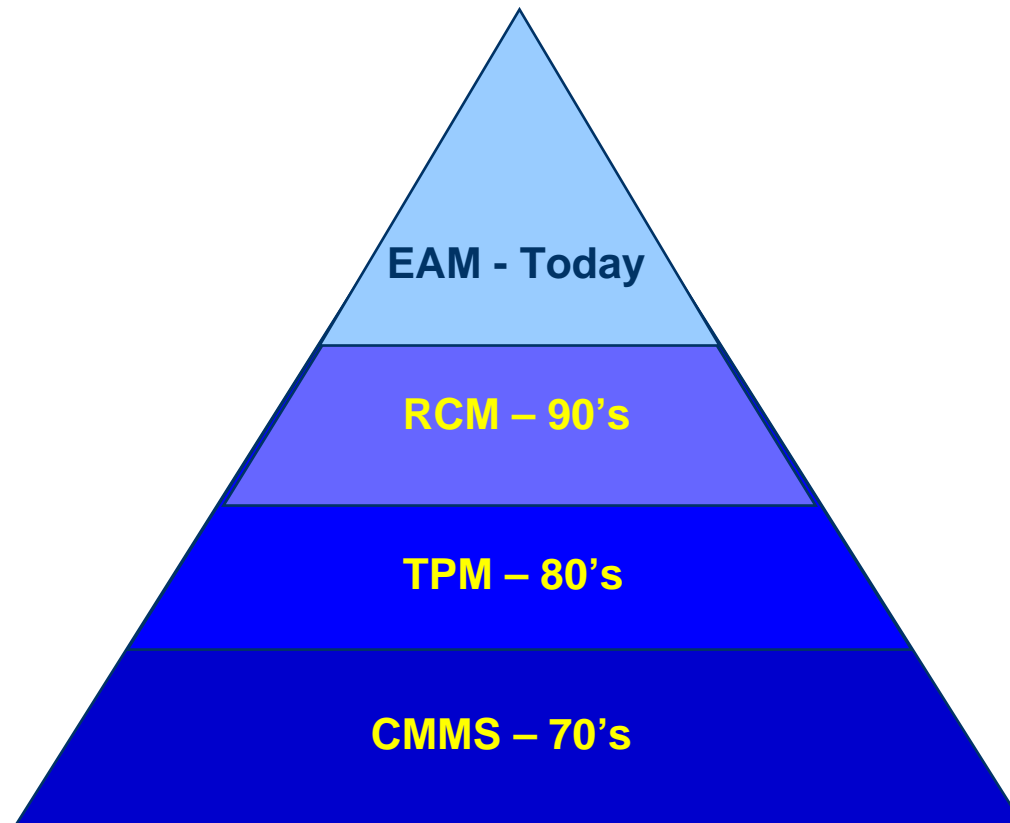
- Integration – Full, out of the box integration with Fixed Assets, G/L, Inventory, Procurement, and Human Resources/Payroll had immeasurable value
- Functional Comparison – Function for Function, EAM could accomplish everything Maximo offered in required functionality
- Cost – Cost to license software and users for Maximo, and integrate to JDE was approx 5x more than EAM
- Systems Support/Consolidation – Lean IT department

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**“EAM functionality is only achieved
when [CMMS is] linked to an ERP
application.”**

Source: Gartner Group

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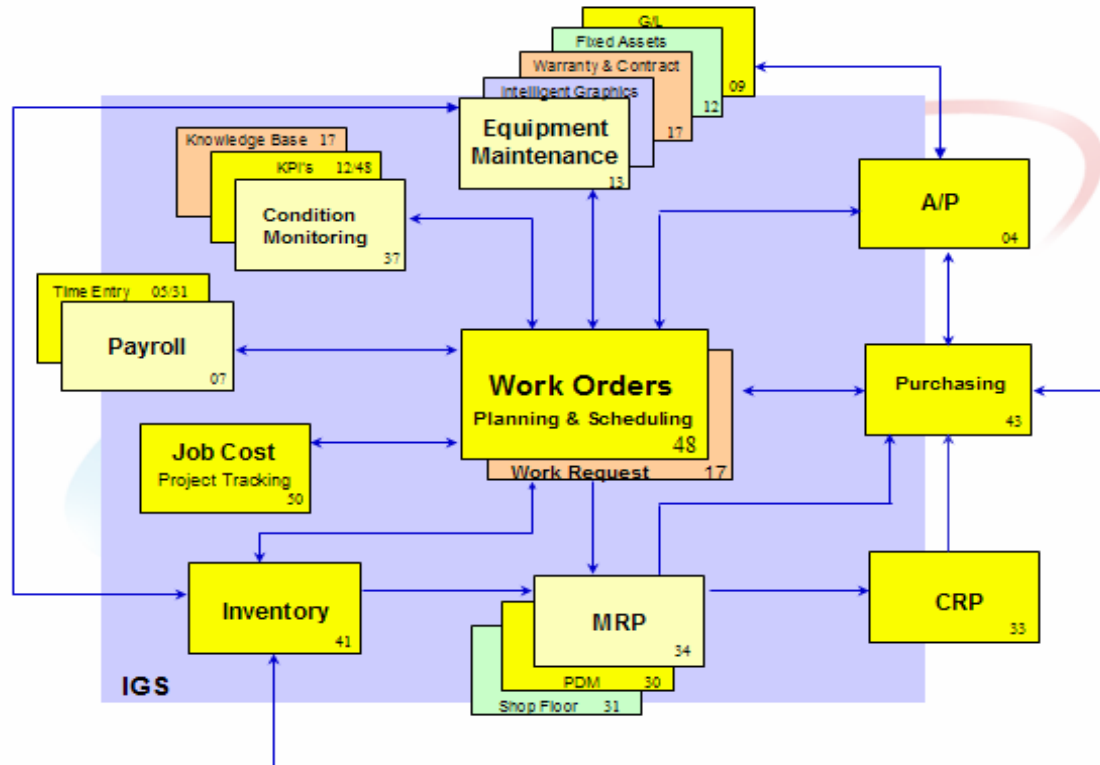
Four Decades of Computerized Maintenance Management

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The Value of Integration

- EAM fully integrated with all EnterpriseOne Modules
- In many cases, dependent on Licensing model, EAM may be included in purchase of Mfg Suite
- Reporting and technical support requires common EnterpriseOne skill set
- Single source for Software Support

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The Risk of Interfacing

- Interface of Best of Breed to EnterpriseOne must be completely done to be of value and will primarily raise issues in the Procurement, Inventory, and Fixed Asset modules.
- Interfacing establishes a condition of “Version Lock”
- Choosing not to interface and run in Stand-alone negates the strategic value, and becomes a Computerized Maintenance Management System, not an EAM

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Risk of Interfacing Continued

- Most Best of Breed Vendors will not take responsibility for the interface, instead referring customers to Third-Party implementers. Most won't even allow this part of the Project to be on "Their Contract" for fear of liability.
- According to one Best of Breed Implementation Consultancy, "MIA (the Maximo Interface Application), which is designed to interface Maximo to SAP, Oracle, JDE/PeopleSoft can only be implemented by a small handful of people in the world, and is very complex to establish and maintain."

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Cost of Installation / Systems Support

- According to a Best of Breed consultancy, “It can easily take one week *just to load* Datastream 7i on the servers, let alone configuration or interfacing.”
- Stand-alone and Interfaced Best of Breed solutions require additional Hardware, IT Support, and Training cost.

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Client Viewpoint

Wood Pulp and Paper Products Company

“[Our decision to replace Maximo with EAM] really boiled down to two things; 1) Integration and 2) Cost of Ownership.”

Meri Beth

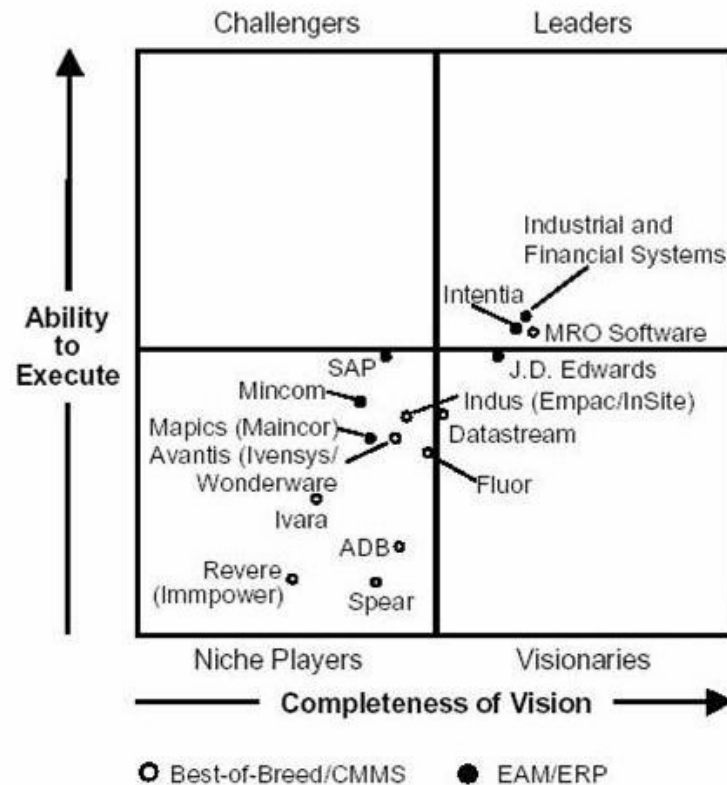
Chief Information Officer

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The Functional Argument

- “ERP can’t be as functional as Best of Breed”
- “ERP isn’t as user friendly as Best of Breed”
- “EnterpriseOne is more of an Accounting Package than an Operations Software”

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Source: Gartner Research

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ORACLE Sign Out

Crew Scheduling Workbench - Search for Unscheduled Work [?] [?]

Save and Close Cancel

You are currently scheduling work for the Next Period for crew 71757. (10/10/2005 - 10/16/2005)

Select a Query Save Query Edit Queries

People Location Dates Status Order Definition Reference

Crew Resource - Crew 3

Supervisor

Lead Craft

Craft

Find

Records 1 - 10 Customize Grid

<input type="checkbox"/>	Order Number	Oper Seq#	Craft	Description	Planned Start Date	Estimated Hours	Or Ty	W.O. Type	Priority	WO St	Unit Number
<input type="checkbox"/>	56686		ELEC	Twisted Blade	10/10/2005	18.00	WM	1	M	MA	09-103
<input type="checkbox"/>	56687		ELEC	Engine Cleaning	10/10/2005	10.00	WM	1	M	MA	09-103

Crew Availability by Craft

Crew Resource - Crew 3

Schedule Period * Schedule Date Range *

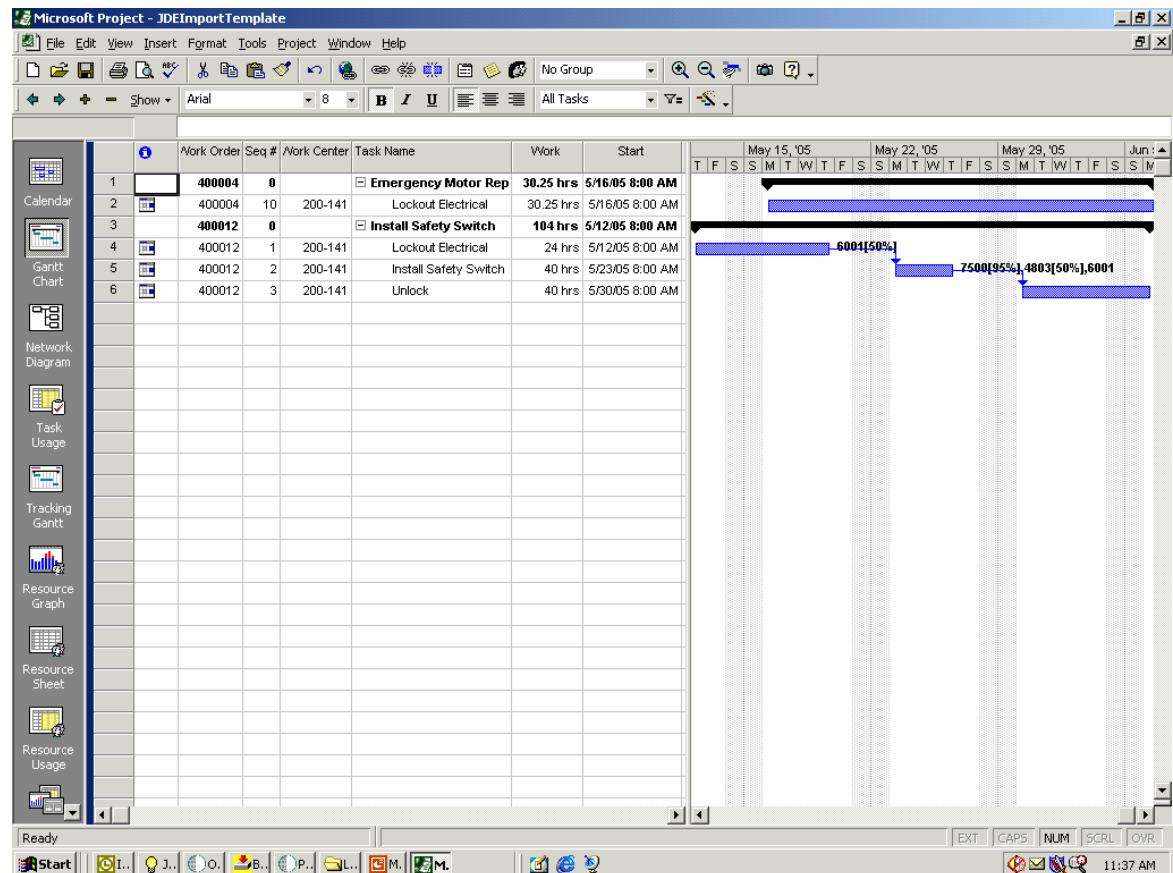
Records 1 - 5

Craft	All	ELEC	INST	MECH
Target Hours	97.20	32.40	32.40	32.40
Scheduled Hours	13.50	13.50		
Variance	83.70	18.90	32.40	32.40
Scheduled %	13.88 %	41.66 %		
Load %	90.00 %	90.00 %	90.00 %	90.00 %

Save and Close Cancel

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MS Project Integration



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Equipment Cost Analysis

Equipment Cost Analysis - Pumps - Equipment Cost Detail

Find Close Form Row Tools

Group/Subgroup Columns 1-5 Columns 6-10 Display

Equipment Group: PUMP
Equipment Subgroup:

Records 1 - 9 [Customize Grid](#)

	Detail	Description	Total Per Hour	Total Per Hour + Rollup	Total Maint.	Total Roll
	FEED PUMP	Boiler Feed Pump				
	FEED PUMP - Q1 03	Feed Pump Analysis - Q1 03				
	PP-FP01	Boiler Feed Pump 1	1.19	1.19	2,424.51	
	PP-FP02	Boiler Feed Pump 2	1.22	1.22	2,431.40	
	FEED PUMP - Q1 04	Feed Pump Analysis - Q1 04				
	PP-FP01	Boiler Feed Pump 1	.69	.69	343.77	
	PP-FP02	Boiler Feed Pump 2	2.00	2.00	3,000.52	

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CatBase - View Assemblies and Parts - Microsoft Internet Explorer

ALLI KV52W Pump KV52W (SHOP.56424)

Drawing Move Toggles Annotations Shopping List Options ONEWLRD Help

ALLI 350971 Seal
Item 59026 Pump Seal, Allis
44500 , P , , 4.0
Delete from Shopping List

A	S	Item	Part No	Internal No	Q...	Re	D
<input type="checkbox"/>		1	50880		1		Handle
<input type="checkbox"/>		2	50881		6		Protection cap
<input type="checkbox"/>		3	50882		3		Nut
<input type="checkbox"/>		4	50884		1		Terminal board
<input type="checkbox"/>		5	35966		1		Seal
<input type="checkbox"/>		6	50902		1		O-ring
<input type="checkbox"/>		7	350967		1		Bearing lid, upp
<input type="checkbox"/>		8	06115		.62L		Oil
<input type="checkbox"/>		9	350968		1		Stator 230V 50H
<input type="checkbox"/>		10	350969		1		Rotor with shaft
<input type="checkbox"/>		11	350970		1		Screw
<input checked="" type="checkbox"/>		12	350971	59026	1		Seal
<input type="checkbox"/>		13	350972		1		Bearing lid, lowe
<input type="checkbox"/>		14	350973		4		Screw
<input type="checkbox"/>		15	00721		2		O-ring
<input type="checkbox"/>		16	350974		1		Holding ring
<input type="checkbox"/>		17	51085	122445-992	1		Impeller
<input type="checkbox"/>		18	350975		1		Volute
<input type="checkbox"/>		19	5090410		10M		Cable 3x1.0mm
<input type="checkbox"/>		20	350130	727226	1		Cable gland KV
<input type="checkbox"/>		21	350131		1		Cable clamp
<input type="checkbox"/>		22	50910		1		Screw
<input type="checkbox"/>		23	50907		1		O-ring
<input type="checkbox"/>		24	50911		1-2		Tie wrap
<input type="checkbox"/>		25	350977		1		Capacitor
<input type="checkbox"/>		26	50885		1		Screw
<input checked="" type="checkbox"/>		27	03504	356782	1		Ball bearing

Intelligent
Graphics
Solution

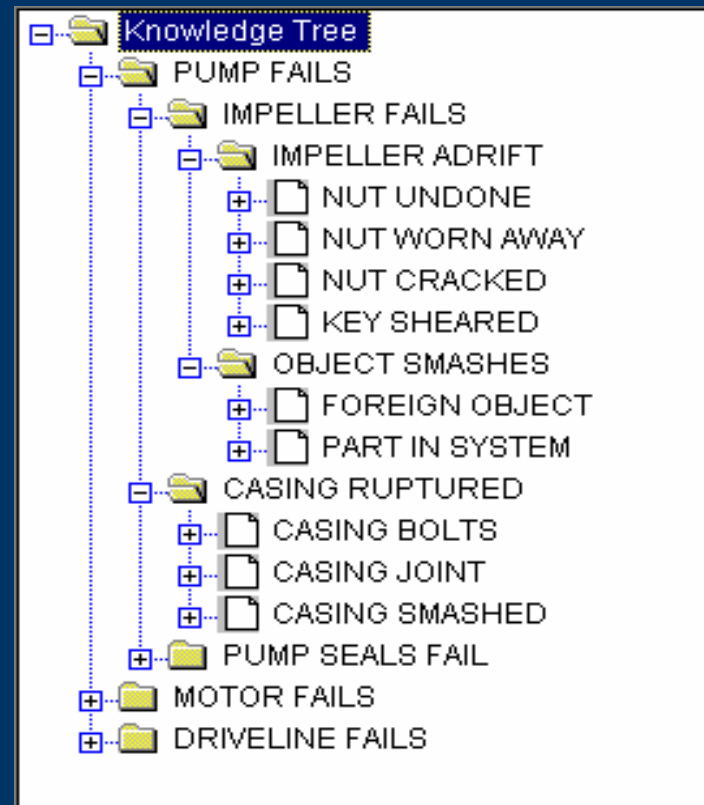
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Failure Analysis

- Supports RCM
- Analyze Breakdown

Root Causes

- Pareto Analysis



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Work Order Backlog - Failure Analysis Pareto Analysis

Select Find Close Tools

✓ 🔍 ✗ 🗑️

Failure: MOTOR REQUIRES EXCESSIVE POWER

Records 1 - 2 Customize Grid

	% Hits	Description	Code 1	Code 2	Code 3
<input checked="" type="radio"/>	82.61	STUFFING PACKED TOO TIGHT	HI MOTOR POWE	STUFFING TIGHT	
<input type="radio"/>	17.39	ROTATING PARTS BIND	HI MOTOR POWE	BINDING PARTS	

Text 🔍

Last modified 04/22/2004 09:12:04 by PLANNER

STUFFING PACKED TOO TIGHT

Total Hits: 23

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Client Viewpoint

1800 MW Base-Load Coal Power Station

“The driving force for moving from our legacy CMMS (Maximo) to the JDE EAM solution was the “all in one” software approach that JDE offers. The real time financial information with no transfer of flat files or interfaces from the accounting group is very efficient, the day to day planning and scheduling is very impressive, and the leverage and money savings on inventory and procurement by standardizing across the [23 plant] fleet was a big sale.”

Brian

Maintenance Planning Supervisor

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Questions?

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