E-Solutions World McCormick Place, Chicago, IL August 22-23rd, 2001



New Systems & Potential

for
eBusiness & Supply Chain
M anagement



Reasons for This Topic #1

- E-commerce transactions & applications?
 Many B2B companies use e-com sparingly, for basic EDI, few transactions with few partners.
- A more demanding business environment?

All companies operate in the same marketplace where ecommerce influences partner relationships & expectations.

This is why the difference is the business environment, not e-commerce itself, for many companies.

Reasons for This Topic #2

Limitations of Enterprise Systems

What does your CEO use from enterprise systems?

Several facilities or applications?

or

Just financials & selected reports?

- Bottom up design (base: transactions & finance)
- Added layer of reactive management tools
- Little use by executives for business management

The Need:

Wider scope for business management systems

Objective & Topics

Examine feasibility of more comprehensive business management systems

- Management needs & enterprise systems
- E-business management approaches
- Strategies for getting there



E-Commerce or E-Business?

E-Commerce

- Internet based trade (selling & buying)
- You are implementing now
- Essential for survival....today!



E-Business

- Using all the resources of systems & internet
- You probably haven't started
- A huge management area & potential
- Prerequisite for success....tomorrow?

There are different <u>levels</u> of e-com. & e-bus.

Today's Challenges

- Customer service
- Quality
- Responsiveness
- Lead times

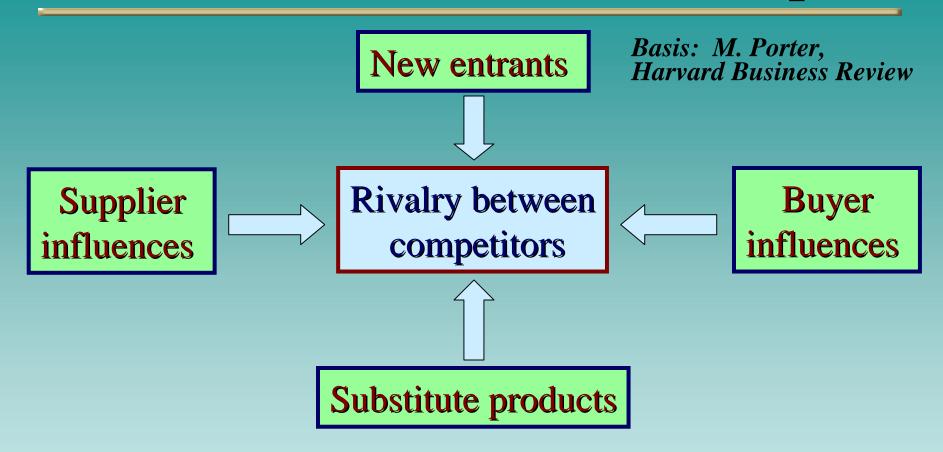


- Faster & more volatile
- Different expectations:
 - Customer
 - Supplier

- More demanding (not less)!
- How to meet the challenge?



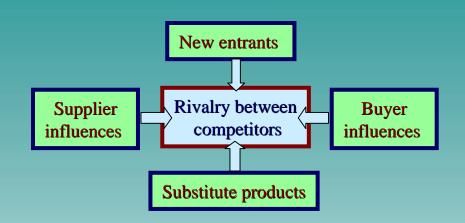
W hat Determ ines Profitability?



- Are these factors covered by typical enterprise systems?
 - How does an executive get all the information?
 - How are the different sources monitored?

Executive's Business Concerns

- Industry issues
- Competitive forces
- Corporate goals
- Possible strategies
- Critical success factors



Since these factors not covered by enterprise systems, the need is for systems to:

- Access any/all information sources
- With filters & alerts for exceptions.

Exam ple: Executive Business Planning

Typical business scenario...looking at sales revenue Examples of information sources

- Period sales/revenue forecast
- Current representative pipeline
- Recent sales analysis (trends)
- Current orders (backlog)
- Asset/inventory status
- Activity/production resource status
- Competitor's new products or pricing
- New entrants, technology, substitutes
- Customer business outlook or credit status
- Industry or analyst projection
- Current sales, marketing, operating budgets

Much of this information is external (red), on PC's or elsewhere

Executive Planning Needs

- Period sales forecast
- Sales representative pipeline
- Recent sales analysis (trends)
- Current orders (backlog)
- Asset/Inventory status
- Activity/production resource status
- Competitor's new products or pricing
- New competitors, entrants, technology
- Customer's business cutback or credit status
- Industry or analyst projection
- Current sales & marketing budgets

Today's approach...
meetings with staff who
collect/collate information



Is there a better way to get all this together and...

- Assess impacts
- Decide actions
- Monitor activity
- Identify future problems?

Enterprise System s: Bottom Up Design

Based on transactions & financial operations...
...with added layer of management tools (e.g.ERP)



- Little help with CEO's wider responsibilities
- A top down perspective would be beneficial
- But must take advantage of current systems

Enterprise System s Are Reactive

Typical Enterprise System:

Exception messages only triggered when desired result is past and not achieved.

Examples:

- Customer order is behind schedule.
- Expected replenishment not arrived.
- Revenues/sales below forecast.
- Costs higher than budget.



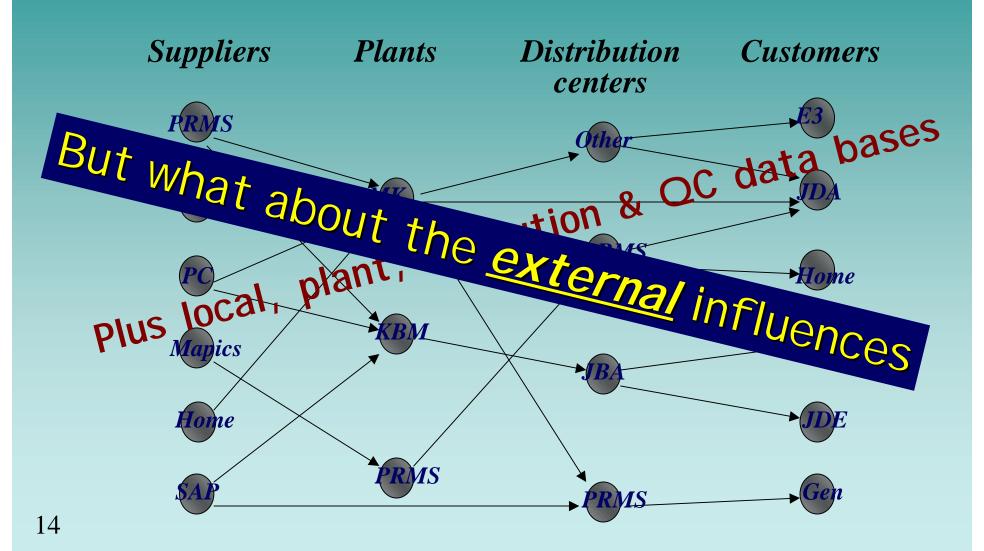
Is there a proactive alternative?

For Proactive Inform ation

- Earlier knowledge...forewarned is forearmed
- Future influences outside enterprise system
- More than local operational data needed
- Consider such aspects as:
 - External data sources (Nielsen, D & B, analysts)
 - Data analysis & monitoring of events/activity
 - Rules for context & direction for action
 - Presentation of exceptions/alerts
 - Pattern identification & prediction capabilities
 - Disparate internal systems to be integrated

Exam ple: The Supply Chain

Network of events & activities across disparate systems



Influences on Supply Chain

Examples of **external** influences



All of utmost importance to top management

Supply Chain Execution Factors

- Commodity or material scarcity or price changes
- Supplier performance and profitability
- Transportation disruptions
- Changes to major client credit or business outlook
- Current and projected weather
- Energy availability and prices
- International economic & currency projections
- Quality variances
- Available resource capacity
- Cash flow
- Etc.



All are important to proactive & comprehensive management, but relevance varies by company

Objective & Topics

- Management needs & enterprise systems
- E-business management approaches
- Strategies for getting there



TypicalE-Business System s Strategy

- Base is legacy enterprise applications
- Add applications for:
 - Web-sites & CRM
 - Additional EDI or XML
 - E-buy & e-Sell
- Extend common systems across enterprise

But these approaches....

- Incur disruption & unnecessary expense
- Only deal with internal information & applications
- Only cover selected (not all) trading partners

....and may not provide what is needed!

Key to E-Business M anagement

Design for executive <u>top down view</u> & perspective of total business & influences



Contextual visualization

Key performance indicators

Filters & alerts

Workflow rules

Predictive analysis

Internal & external information sources

E-BusinessM anagem entArchitecture

Contextual Notification for enabled management



& Business Intelligence & Work Flow Tools







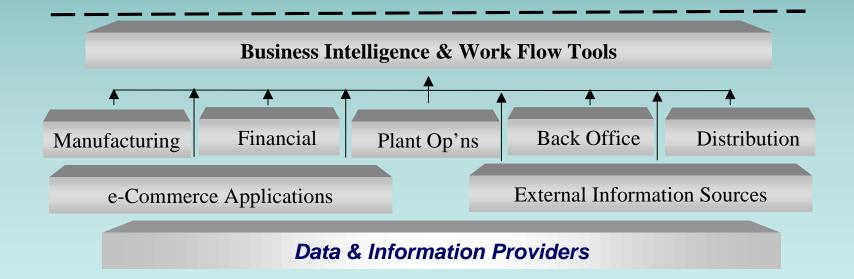
Data & Information Providers internal & external

Layers of facilities & tools

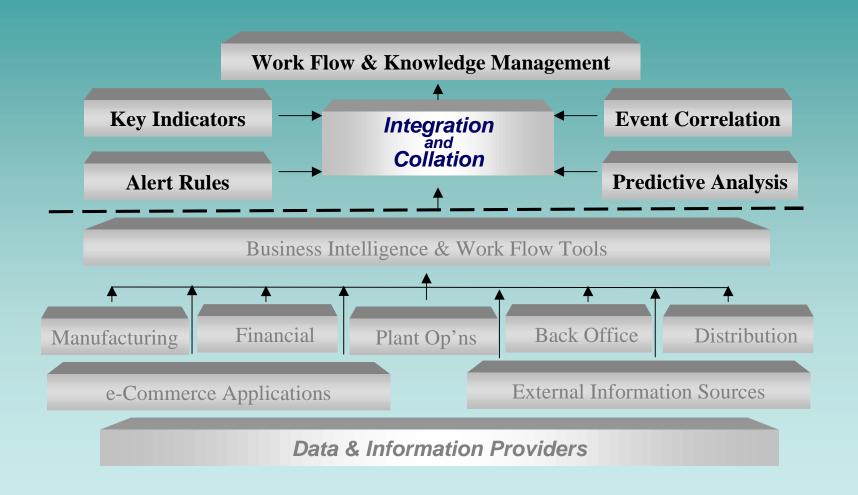
E-Business M anagement System (1)



E-Business Management System (2)



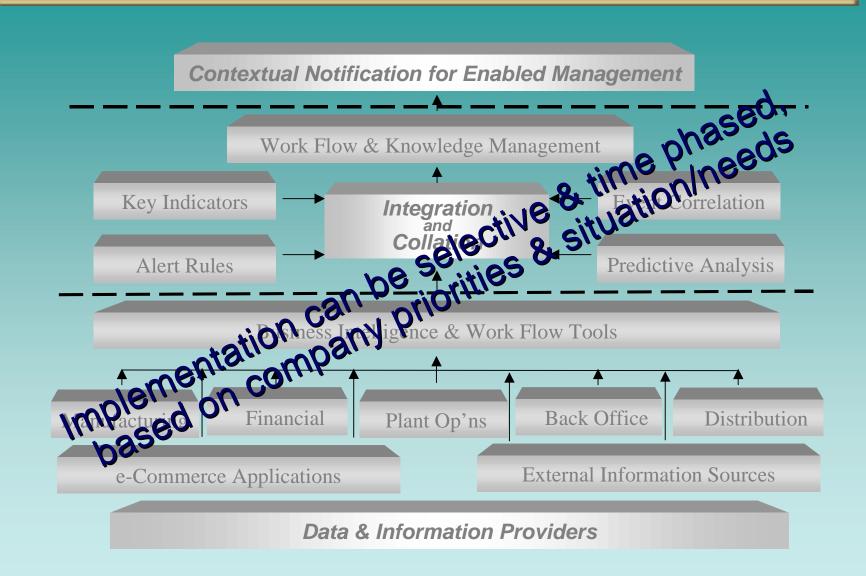
E-Business M anagement System (3)



E-Business M anagement System (4)

Contextual Notification for Enabled Management Work Flow & Knowledge Management **Event Correlation Key Indicators Integration** Collation Alert Rules Predictive Analysis Business Intelligence & Work Flow Tools Distribution Financial **Back Office** Manufacturing Plant Op'ns **External Information Sources** e-Commerce Applications Data & Information Providers

E-BusinessM anagementSystem



Objective & Topics

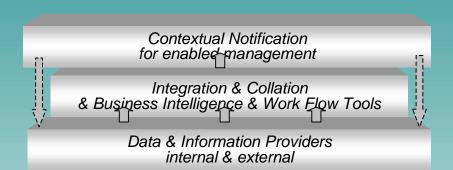
- Management needs & enterprise systems
- E-business management approaches
- Strategies & getting there



E-BusinessM anagementTools

Summary:

- Information providers
- Integration & collation
 - Key indicators
 - Alert rules
 - Event correlation
 - Predictive analysis
 - Workflow and KM
- Contextual notification & visualization





Expanding to E-Business M anagem ent

Concept

Achieving an e-business management system requires different and expanded approaches for:

- Integrating multiple and disparate internal systems, home grown and different vendors.
- Including information from external sources, such as D&B, Nielsen, competitors.
- Analyzing and presenting alerts for required action while avoiding information overload.
- Providing more than a rear view mirror view to support proactive management

Expanding to E-Business M anagem ent

Strategy

- Overcome limitations of enterprise systems
- New & strategically viable systems must be:
 - Based on a new look at requirements
 - With mindset change & more creativity
 - Top down view, not bottom up
 - Focused on key business issues
 - Proactive rather than reactive
 - External & internal sources



Six Levels of E-business

Top to bottom business management External & internal information integration Trading communities & exchanges From basic web Trading partner transactions Selected partner communications Web site information and catalogs

True
e-business
with high
payback

Typical
e-commerce
vision and
strategy

Different Levels of E-business

From basic web presence to e-business management

- How to use them?
- How to get there?
- Without disruption

Top to bottom management

External & internal information integration

Trading communities & exchanges

Trading partner transactions

Selected partner communications

Web site information and catalogs

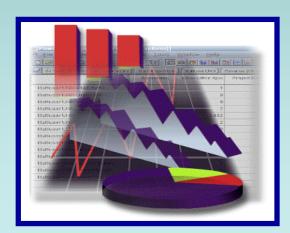
Complete internal & external based management system

Transaction system for internal units & selected partners

Expanding to E-Business M anagem ent

Challenge: bridging any IT/executive disconnect by:

- Getting to know what is needed
- Mapping an IT strategy to provide
- Prioritizing the opportunities
- Starting now, before your competitor



Expanding to E-Business M anagem ent

- Plan for e-commerce & e-business:
 - Planning & execution
 - Management
- Technology is there, not so difficult/costly
- Make sure you look at strategic need
- Focus on top management concerns
- Involve executives in function definition
- Specify & prioritize all information sources
 i.e. Internal & external information sources
- Current mindset is the only constraint

Sum m ary: E-Business M anagem ent

- Provide unified view of all resources for global control
- Build on existing investments in technology
- Support collaboration with customers & suppliers
- Bridge existing & disparate platforms and the internet
- Contextual visualization for faster, better decisions
- Retain executive attention with manage-by-exception
- Use past events & conditions to predict future
- Deliver right information, early, to right manager



Three Options? Think About It...

- Anyone can make a decision given enough facts
- A good manager can make a decision without enough facts
- A perfect manager can operate in complete ignorance

Which situation do you want in your company?

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Thank you for your time



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