

# *E-Business The Transition*



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## *Overview*



- Develop a plan
- Prepare users
- Migrate legacy systems
- Develop high profile targets of opportunity
  - E-procurement
  - Customer service
- Move to Enterprise Resource Planning
  - Selection
  - Implementation
- Move to E-business

## *Develop a Plan*

- Develop a clear goal statement
  - Efficiency
  - New channels
  - Value chain – supply and demand
- Establish a strategy
  - Top down
  - Bottom up
  - Continuous improvement

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## *Questions to answer*

- Customers
  - Who are they? – segmented analysis
  - How are their expectations changing?
- Technology
  - How can technology help me reach prime customers?
  - What technology changes are on the horizon?
- Competition
  - Who are my real competitors?
  - What are they doing with technology?
  - What business model are they using?

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## *Prepare Users*

- First steps
  - Email and browser facility
  - Search engine and portals awareness
  - Certificates, signatures, and directories
- Skills in more advanced software
  - Mail, calendaring, and collaborative authoring
  - E-forms that target human time critical processes – HR, expense reports, etc.

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## *Prepare the Systems*

- Expand online information sources. Target volatile materials and work to eliminate hard copy
  - Policy manuals
  - Procedure manuals
  - Benefits information
  - Sales Information
- Shadow selected data stores to the web
  - Catalog
  - Inventory
  - Production schedules

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## *First Steps – Pre ERP*

- **Become an active E-Buyer**
  - Office supplies, furniture, computer equipment
  - Reduce order to delivery time
  - Reduce expensive inventories
  - Manage by exception
- **Customer Relations Management(1)**
  - General customer services -- information
  - Sales force access to selected information
  - Major customer access to selected information

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## *Goals of ERP Systems*

- **Replace old systems**
- **Gain greater control of systems**
- **Integrate global operations**
- **Improve strategic decision making**
- **Allow better customer management**
- **Allow better supply chain management**

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## *Focus of ERP Systems*

- **Internal Focus**
  - Manufacturing
  - Logistics
  - Financials
  - HR/Payroll
- **External Focus**
  - Supply Chain Planning
  - Supply Chain Execution
  - Demand Chain Planning
  - Demand Chain Execution

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## *ERP Installation Options*

- ERP software can be purchased or built
- Most organizations choose Commercial Off The Shelf (COTS) systems because
  - It cheaper
  - Packages incorporate best industry practices
- ERP software can be deployed slowly or rapidly
  - Rapid deployment requires pre-simplification of business processes for success
  - Rapid deployment still requires planning and assessment

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## *Next Steps – Post ERP*

- **Additional Process Reengineering**
  - Planning
  - Employee relations
  - Production
- **Supply Chain/Vendor Management**
  - Procurement
  - Production
- **Customer Relations Management(2)**
  - Competitive intelligence – news, services
  - Catalog and order management
  - Demand chain integration

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## *Transforming Steps*

- **Reverse markets and auctions**
  - Customer driven processes
  - Data mining of transactions
- **E-Channels and E-Markets**
  - Bit oriented auxiliary businesses
  - Expanded consumer bases
- **Reengineer expensive mission critical processes**
  - Preparation of planning documents and reports
  - Collaboration and information sharing

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## *E-business Development Issues*

- Performance, reliability, and scalability
- Software development/selection
- Security and standards

## *Performance, Reliability & Scalability*

- E-Business sites require real time response
  - Databases must be query optimized
- E-Business sites need to operate 24 x 7 x 365
  - fault tolerance and backups are required
  - online transaction processing error recovery (roll back)
- E-Business sites have to be built to handle peak loads and expected growth
  - Anticipation of peak loads
  - Anticipation of new uses

## *Development Languages*

- ERP environments
  - Movement toward component technologies
  - Dynamic configuration options
  - Extension to the value chain
- Internet/Web environments
  - Data base compatibility
  - Language consistency
  - XML capability

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## *Web Suites*

- Microsoft
  - Visual Basic, Visual C++
  - VBscript
  - ASP, ODBC/SQL,
  - OCX and Microsoft Transaction Server
- Java
  - Javascript and Applets
  - Servlets and JSP, JDBC/SQL
  - Enterprise Java Beans and CTM
- XML

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## *Software development Recommendations*

- The case for Java
  - Robust OOPL
  - Single development language (staff training)
- The role of XML
  - Single document/data description language
  - Universally understood markup (all browsers)
  - Rapidly evolving companion standards for linking, transformation, query, and presentation
  - An extensible method for defining both data and document types (allows encapsulation of EDI to SME)

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## *Security and Standards*

- All web enabled applications need to insure appropriate security for data
  - Privacy of data behind the firewall
  - Authentication of access to data
- Standards
  - XML will likely be the base standard for data description
  - SOAP will likely be the base standard for message transfer
  - LDAP will likely be the standard for directory information

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