

ΕΜΠΟΡΙΚΟ ΚΑΙ ΒΙΟΜΗΧΑΝΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ

Η επιχείρηση μετά τα ε

Τα Συστήματα Επιχειρησιακών Πόρων ERP

Παρουσίαση στα πλαίσια των κύκλων εκπαίδευσης του ΕΒΕΘ

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Extended Enterprise Applications

"The Extended Enterprise"

Supplier / Vendor Facing Systems
Optimize Relationships w/ Business Partners
Reduce Cost of Goods Sold

Internal Systems
Facilitate Internal Operations & Increase Productivity

Customer Facing Systems
Optimize Business Relationships w/ Customers
Increase Services Effectiveness

VALUE CHAIN

Source: Cherry Tree & Co. Research

Τα ERP είναι η «ραχοκοκαλιά» των σημερινών επιχειρησιακών πληροφοριακών συστημάτων

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What is ERP?

ERP is a multi-module application software that helps a company manage the important parts of its business.

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What does ERP do?

ERP helps businesses with:

- Product Planning
- Parts Purchasing
- Managing Inventories
- Interacting with Suppliers
- Providing Customer Service
- Tracking Orders
- Company Finances
- Human Resource Management

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Where do you get ERP?

Some of the sources of ERP software are:

- SAP
- Microsoft
- Oracle
- J.D.Edwards
- IBM
- Many smaller companies

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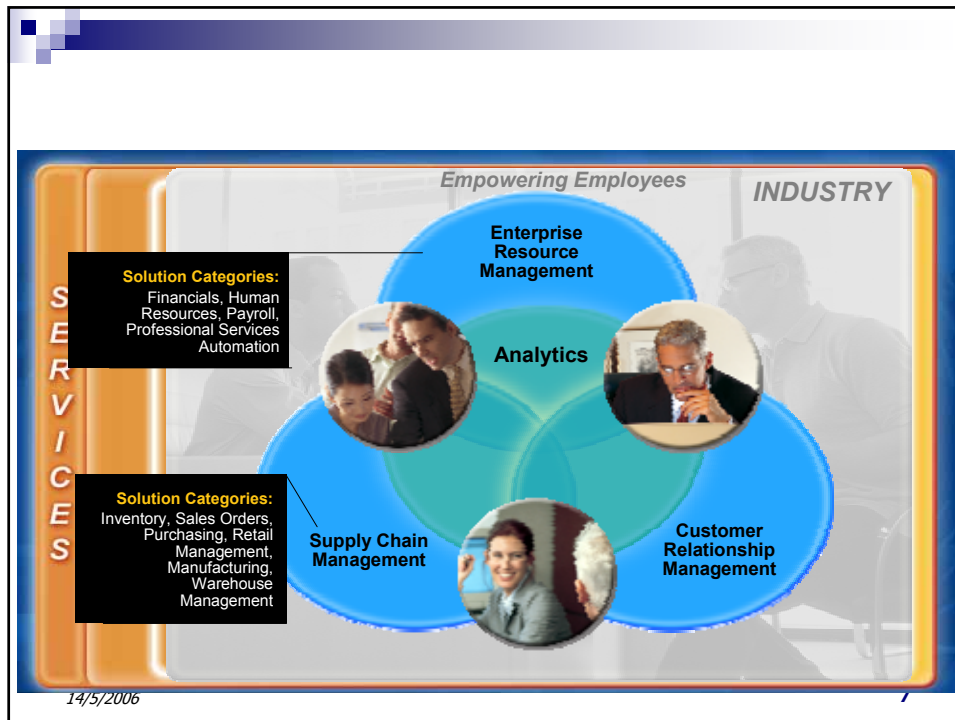
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How does ERP work?

- ERP works like grease for information
- It eases the exchange of data among corporate divisions
- Unites all major business practices within a single family of software modules
- Modules run on client/server networks
- PC's are connected to more powerful computers that feed them data
- Each module works separately performing specific data-processing functions

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ERP by Example

1. Clerk enters order.
2. ERP checks the *BOM module* to see what parts are needed.
3. *Inventory-management module* automatically determines if enough material is on hand and sets up the purchasing procedure if materials are needed.

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ERP by Example (cont'd)

4. *Other modules determine that machines will be needed to make the “widgets”.*
5. *Finally, the shop floor module creates the work order.*
6. *Later, the billing module creates an invoice.*

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ERP by Example (cont'd)

Through the use of bar-codes, it is possible to track the progress of an order through every step of the manufacturing process which helps customer service respond to requests for early delivery or order status.

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ΠΛΕΟΝΕΚΤΗΜΑΤΑ ERP - Εταιρικά Οφέλη

- Αποσαφήνιση της επιχειρησιακής δομής προκειμένου να επιτευχθεί η εταιρική στοχοθέτηση με σαφείς αρμοδιότητες ανά διαδικασία βάση του νέου λογισμικού συστήματος (PROCESS REENGINEERING)
- Αξιοποίηση των συστημάτων για ευελιξία , λειτουργικότητα και αποδοτικότητα των εταιρικών διαδικασιών (CHANGE MANAGEMENT)

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Εταιρικά οφέλη

- Μείωση των κοστών διαχείρισης πελατών προμηθευτών και συνεργατών (Supply Chain Management, Sales Chain Management)
- Βελτίωση των σχέσεων συνεργασίας με πελάτες, προμηθευτές και συνεργάτες (Customer Relationship Management)

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Εταιρικά οφέλη

- Ενοποιημένη διαδικασία προμηθειών (E-procurement)
- Ενοποιημένη εμπορική διαχείριση
- Ακρίβεια και αξιοπιστία στην Διοικητική πληροφόρηση (Management Information Systems)

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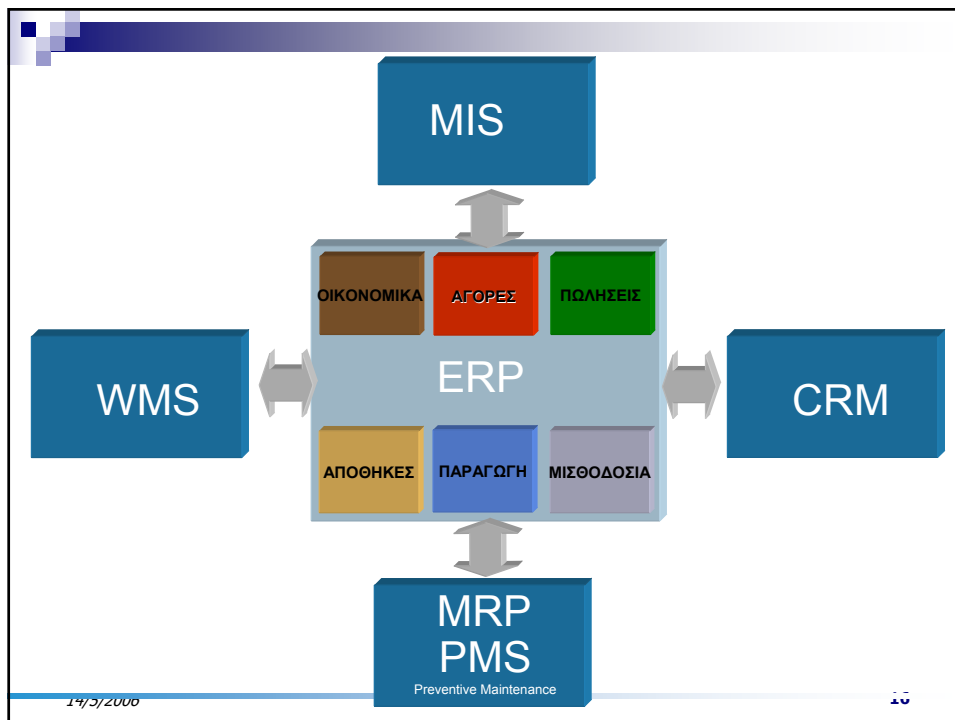
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Εταιρικά οφέλη

- Δημιουργία των βέλτιστων υποδομών για την τεχνολογική και επιχειρηματική ανάπτυξη της εταιρίας και συνεπώς την βέλτιστη διαχείριση της εταιρικής τεχνογνωσίας
(Knowledge Management Intranets)
- Προετοιμασία και δημιουργία υποδομής για νέες στρατηγικές συνεργασίες λόγω αποθήκευσης σημαντικών πληροφοριών αγοράς
(Data Warehouse, Data Mining)

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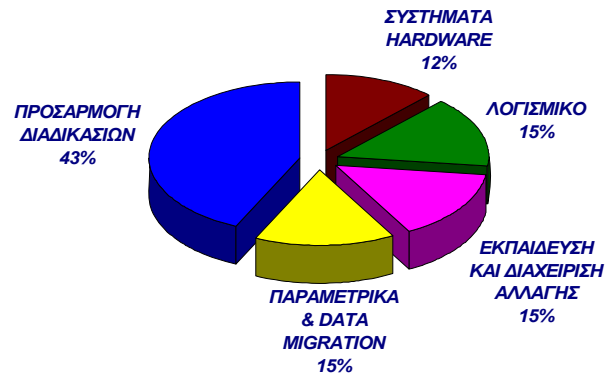
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ΕΦΑΡΜΟΓΗ ΝΕΟΥ ΠΛΗΡΟΦΟΡΙΑΚΟΥ ΣΥΣΤΗΜΑΤΟΣ



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What's the big deal?

- Cuts production and inventory costs
- Improves customer service
- Plans and forecasts product demand
- Improves cost allocation
- Measures and accounts for product waste
- Ensures the required materials are available when needed

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Investment Justification

- Plants become more efficient
- Increased delivery/performance
- Reduced lead times
- Increased inventory accuracy
- Reduced work-in-process inventory

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Business Risks

- High initial investment (\$100M for large companies is common)
- Uncertainties (software)
- Employees are given much greater responsibilities

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Long-term/Short-term Cost Factors

- Implementation costs
- Consultant and internal costs
- Maintenance costs

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ERP's Impact on Industry

- Lowers total costs in complete supply chain
- Shortens throughput times
- Reduces stock to a minimum
- Enlarges product assortment
- Improves overall product quality
- Increases reliability of delivery dates
- Improves customer service
- Coordinates demand, supply and production

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The Evolution of ERP

- Through a series of continuous innovations:
- Computers
- MRP
- MRPII
- ERP/MRPII
- ERP/APS

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How is ERP implemented?

- Who is responsible?
- When can it be done?
- Where are we now?
- Where are we going?
- Where do we start?

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Who's responsible for implementation?

- Implementation Team Leaders/Members
- Project leader (IS Department)
- Module/Phase leaders (subject area experts)
- Individual team members

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Where are we now? (pre-ERP)

- **Software**
 - MRP/MRP II
 - Other
- **Hardware**
 - Mainframe
 - Client server
- **Personnel**

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Where are we going? (post-ERP)

■ Expected Benefits

- Improved process flow
- Reduced Inventories
- Better data and analysis
- Better customer information
- Improved margins
- Others

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What is really needed?

■ Module Selection/Priority

■ Full or Partial Implementation?

- Must have
- Want
- Do not need

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Where do we start?

- Data Entry
- Debugging
- Post Implementation Evaluation

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ERP Implementation Factors

- Forecasting the Economic Impact
 - Manager Support
- Technology Diffusion in the Market
 - Applications Compatibility
- Service/Technical Support
 - Contract Service Support
 - Company Stability

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ERP Implementation Factors (cont'd)

- System Links
 - Resource Linking
 - Customer Satisfaction
- Limitations
 - Policies and Procedures
 - Pay Back Period

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Management Requirements

- Commitment
- Global Readiness
- Time Line
- Clear Milestones
- Training

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What's the catch?

- High cost of implementation
- Difficult to measure return
- "Betting the company"
- Political & sociological impact
- Over dependence on vendors or consultants
- Success is highly dependent on commitment from upper management

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Measuring ERP's Performance (a macrocosmic perspective)

- Decrease data entry
- Decrease IS overhead - one system vs. many
- Centralize information for decisions
- Decrease WIP inventory
- Decrease delivery cycle
- Increase profit margin
- Increase customer satisfaction and loyalty

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Measuring ERP's Performance (a microcosmic perspective)

- Average transaction time
- Interface complexity - "number of screens"
- Availability (uptime)
- Performance metrics - "on time delivery"

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How does ERP affect the customer?

- Reduces errors in ordering, billing, shipping
- Decreases lead time
- Increases quality
- Includes the customer in the process - "Extranets"

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The Big IF for ERP

IF you have...

- ERP solvable process efficiency problems
 - Commitment of Upper Management
 - Commitment of Middle Management
 - Solid Strategy & Thorough Design
 - Financial, Technological & Human Resources
- ...then ERP *may* pay off big for your organization.

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ERP Web Resources

<http://cmit.edi.gatech.edu/cmit/erpmrp.htm>
http://www.intermec.com/erp/erp_part.htm
<http://www.techweb.com> (enter erp in search box)
<http://www.softwarejobs.com/erpnews.html>
<http://www.praxisint.com/erp.html>
<http://whatis.com/today.htm> (search for keyword ERP under "E's")
<http://www.erptech.com/overview.html>
<http://www2.computerworld.com/>
<http://www.manufacturingsystems.com/>

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More ERP Web Resources

<http://www.datamation.com/>

<http://rosewell.dis.uct.ac.za/thesis/sapr3/contents.html>

<http://www.forbes.com/asap/>

<http://www.mfg-erp.com>

<http://www.brint.com/ISJournal.htm>

<http://news.pulpandpaperonline.com/wires/19980912-263343066.html>

<http://www.itmweb.com>

<http://www.sentrytech.com/Aug98/sm088f5.htm>

<http://www.softwarejobs.com/cgi-bin/swjobs/erpnews.cgi?action=show&catgory=/home/user2/swjobs/ERPNEWS/GENERAL>