Enterprise Resource Planning Systems: Past, Present and Future

May 15, 2014
Ft. Worth, Texas

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Terra Grande District

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Terra Grande District

- Oklahoma
- Colorado
- Texas
- Arkansas
- New Mexico
- Mexico
- Part of Louisiana
Terra Grande District

- Number one District in the World in APICS Education
- Used to be number one in members, but some districts were combined
  - Currently 3300 members in Terra Grande District
  - Greater Ft. Worth Chapter has 232 members
- Hosts the 6-Packed conference every year
- Hosts Chuck Nelson Paper Contest every year
Apics The Association for Operations Management

- APICS Corporate Initiatives for 2014
  - District Business Development Program
    - To Increase Information on APICS Products and Services
- Millennial Strategy Development (34 and under)
  - Differentiate products and services. Make sure they feel APICS helps them differentiate themselves through Education
  - Technology Astute
  - Image Conscious, Rapid Response, Personal Brand
  - Diverse and Different, more women, more minorities, more education
**APICS** The Association for Operations Management

- Membership Centric Strategy instead of We Centric
  - Customized memberships (Me Centric)
    - Currently a few sizes fit all
    - Evolve as careers advance

- Supply Chain Council merger
  - Over
APICS *The Association for Operations Management*

- **Merger with Supply Chain Council**

Supply Chain Council (SCC) is a global nonprofit organization whose framework, improvement methodology, training, certification and benchmarking tools help member organizations make dramatic, rapid, and sustainable improvements in supply chain performance.

The Supply Chain Operations Reference (SCOR®) is the world standard for supply chain management, a model that provides a unique framework for defining and linking performance metrics, processes, best practices, and people.
Modern World Manufacturing
Early Manufacturing

- Custom made goods
- Skilled craftsmen
- Customer’s specs.
- Great detail
20th Century Manufacturing

- Henry Ford assembly line
- Mass production
- Any color Model T you want as long as it is black
Then.... JIT, Lean & Continuous Improvement

- Waste eliminated
- People empowered
- Improved processes
- Enabled corporations to produce low cost, high quality, standard goods
Manufacturing Today

- 24-hour Customer Service
- Global Competition
- Cost Reduction
- Customers Demand
  - What they want
  - When they want it
- If we don’t do it somebody else will!!
Manufacturing Today

- We must produce:
  - With the responsiveness of skilled craftsmen
  - With the efficiency of mass production
  - During times of fast change
The Rules Have Changed!
What is ERP?

- Little MRP
- MRP II
- ERP

- Latest Enhancements

If someone tells you they do not like ERP, then they must not like anything!
Material Requirements Planning

- Little MRP
- 1970’s and 1980’s
- Translate Gross Requirements into Net Requirements
- Plan and Re-Plan efficiently
- Use BOM’s, Scrap/Yield Factors
- Use Lead Times, Lot Sizes
- Use Min/Max/Safety Factors
- *Once computers could process, it was a major breakthrough and a great Planning System*
Manufacturing Resource Planning

- MRP II
- 1980’s
- Master Scheduling, Forecasting, Customer Service
- Order Entry, Capacity Requirements Planning
- Procurement Enhancements, Inventory Management
- Standard Costing Methods and Accounting
- Closed Loop Information and Re-Planning

*We thought we had almost everything in a Business System*
Enterprise Resource Planning

- ERP in the 1990’s / 2000’s
- Quality Management, Just in Time/Lean/Demand Flow Manufacturing
- Financial Planning and Budgeting
- Business Intelligence and Executive Support Systems (ESS)
- Electronic Data Interchange
- Sales Support and Sales and Operations Planning
- Mfg. Execution Systems (MES), Logistics/Transportation
- Plant and Equipment Management
- Advanced Planning Systems (APS)

*Now we really had everything we needed in a Business System!*
How are Requirements for ERP Changing?

- **Customer Relationship Management (CRM)**
  - What is it?
  - Customer Self-Service
  - Customer Warranty
  - Customer Service
  - Customer Call Center
  - Quotes
  - Customer Information
    - Links to Databases
    - Collaborative Planning and Forecasting
  - Customer is King/Queen
How are Requirements for ERP Changing?

- Sales Force Automation
  - What is it?
  - Contact Manager
  - Store and Forward Technology
  - Remote access for orders, quotes, pricing
How are Requirements for ERP Changing?

- Supplier Relationship Management (SRM)
  - What is it?
  - Supplier Self Service
  - Supplier Schedules
  - Links to Databases
  - Spend Analysis
  - Supplier Analysis
How are Requirements for ERP Changing?

- E-Commerce
  - EDI
    - Traditional

- Storefronts

- Better Web portals
  - Access through Web
  - Workbench / links
    - ERP, WWW, UPS, FedEx, Email, Etc.
How are Requirements for ERP Changing?

- Technology
  - Web Access
  - Store and Forward Functionality
  - Workflow
  - Mobile Technology
  - Better RF and RFID Capability
- Cloud Computing
  - Renting Software
  - Renting Hardware
How are Requirements for ERP Changing?

- Mobile Applications
How are Requirements for ERP Changing?

- Business Intelligence
- Useable Data
- Dashboards
- Better User Generated Reports
- Improved Graphics
- Available on Your Phone
How are Requirements for ERP Changing?

- Reverse Logistics
- Re-Manufacture
- Recycle
- Refurbish
- Repurpose
How are Requirements for ERP Changing?

- Green Sustainability
  - Re-Cycle
  - Reduce Waste
  - Reduce Energy
  - Reduce Carbon Footprint
  - Manage with ERP
What is coming

- More Optimization
- More Mobile Applications
- More Reverse Logistics
- More Green Functionality
  - Carbon Emissions Tracking
- More Sales and Operations Planning
- More Information .....Faster
Thank You Very Much!

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