ELECTRONIC PROCUREMENT What does it buy you?

Example: Rocky Flats Environmental Technology Site

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PRESENTATION TOPICS

- Ø e-Procurement Overview
- Ø Benefits
- Ø Rocky Flats Project Example
 Industry Structure & Profiled Companies
 Results and Project Challenges
- Ø e-Procurement Entry Points

WHAT IS E-PROCUREMENT?

- **Ø Online Catalogs, Marketplaces**
- Ø Internal Purchasing Software (approvals, catalogs, management)
- **Ø** Reverse Auctions
- ØInformation Exchanges: Web portal to information, Web GIS, RFPs

?

VALUE PROPOSITION

- Ø Reduce transaction costs by >30% [paperwork, approvals, etc...]
- Ø Improve PM's effectiveness [faster receipt and status checks]
- Ø Reduce prices of goods & services procured by 10-40%
- Ø Purchasing data consolidation / integration/ management

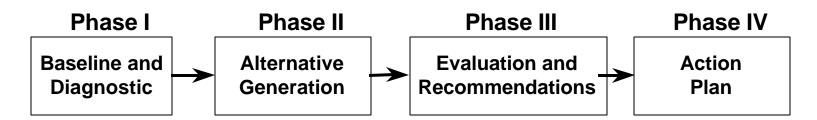
RFETS EXAMPLE

Fall of 2000: Evaluated the value and practicality of a web-based procurement system for RFETS.

Specifically, the project addressed the following core issues:

- ØWhere are the greatest sources of economic leverage in the procurement system?
- ØWhat are the components of an e-commerce solution for procurement and what alternatives exist for supplying them?
- ØWhat barriers, level of investment and return on investment (ROI) can be expected?
- ØWhat implementation plan makes sense?

PROJECT PHASES AND ACTIVITIES



- Extensive interviews
 - Management team
 - Project Managers
 - Procurement personnel
 - Vendors/suppliers
- Collection and analysis of cost/performance data

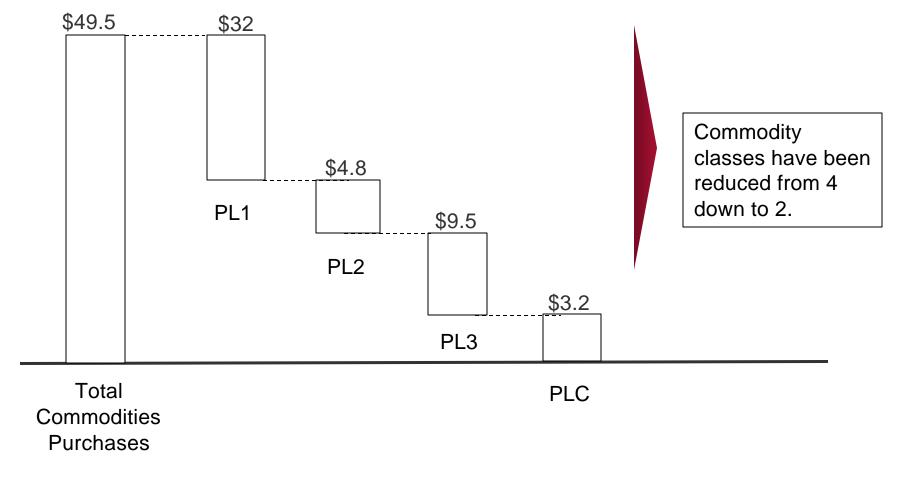
- Organize industry analysis and research
- Evaluate models applicable
- Describe specific solutions
- Identify new systems, skills, and technologies for each applicable model
- Interview potential e-commerce vendors

- Revise scope & approach based on Phase II
- Evaluate shortlist of alternative solutions and vendors in greater detail: economics, system requirements, etc.
- Recommend solution(s) and vendor(s) for consideration

- Create specific action plan with options for implementation
- Select e-commerce software or vendor
- Install system and rollout

BREAKDOWN OF COMMODITY SPENDING BY CLASS - 2000 \$ millions

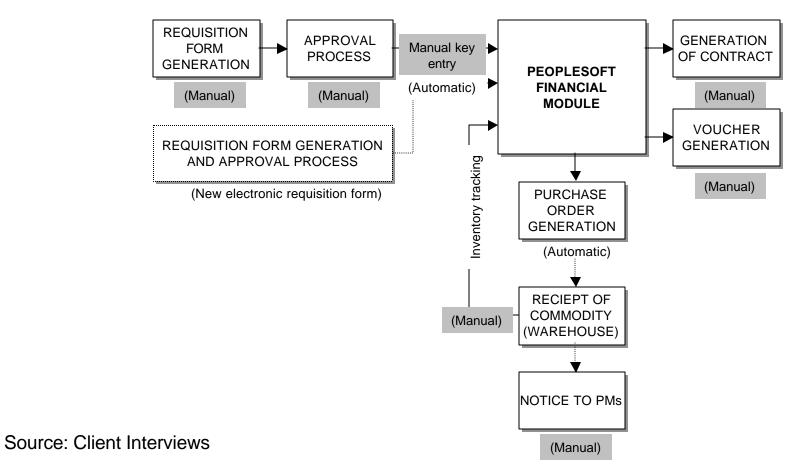
RFETS Annual spending: Commodities = \$50M; Services = \$350M



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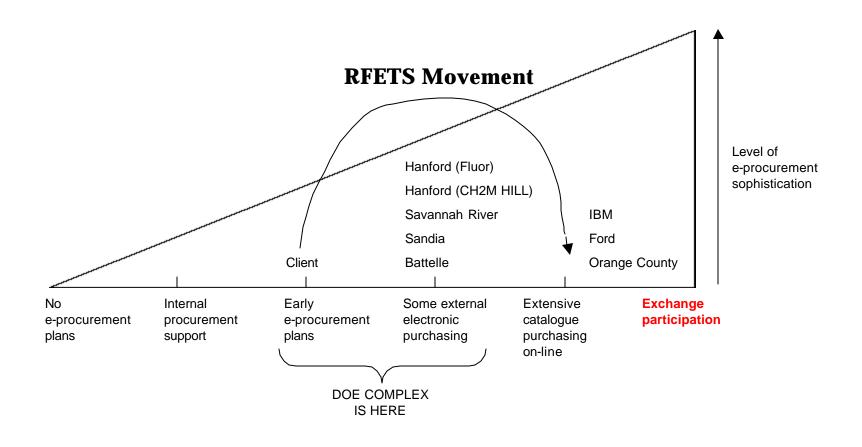
TRANSACTION COSTS PROCUREMENT SYSTEM CONFIGURATION

The lack of procurement system integration and high level of manual input requirements continued to drive costs up and increase time needed for project completion.



SPECTRUM OF e-PROCUREMENT SOPHISTICATION

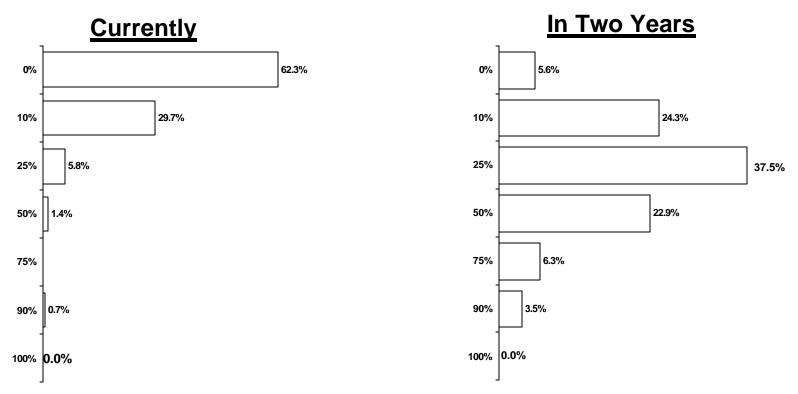
The DOE-complex was relatively unsophisticated in electronic commerce compared to the private sector.



ENR MAGAZINE SURVEY OF CONSTRUCTION INDUSTRY*

Even the relatively conservative construction industry expects to have a significant portion of its business on-line within two years.

Survey Question: What percent of your firm's business transactions are done on the Internet?

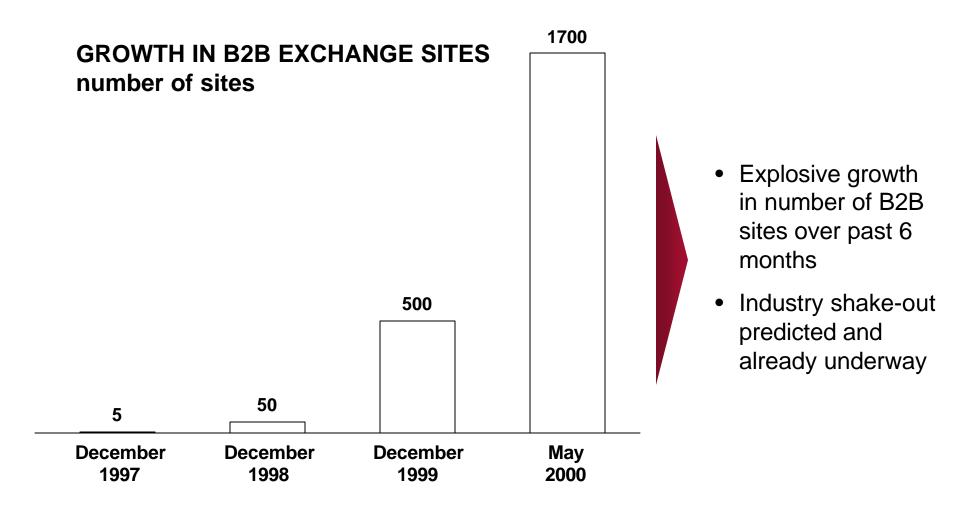


^{*}Electronic poll of 150 senior construction industry executives at the Associated General Contractors Exposition 2000 in Seattle, March 2000.

Source: ENR Magazine

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RAPID B2B GROWTH LED TO CONSOLIDATION



Source: Merrill Lynch; Economist

HORIZONTAL AND VERTICAL EXCHANGES

e-Commerce companies and vendors can be characterized by whether they serve across industries (horizontal) or within an industry (vertical).

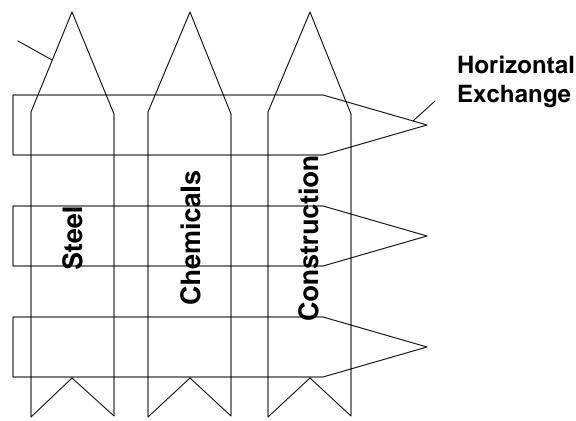


Maintenance, Repair and Operation (e.g., MRO.com)

[Officedepot.com]

Market Makers

Customer Service Software (e.g., Siebel)



Source: University of Denver (2000)

B2B COMPANIES MOST APPLICABLE TO RFETS

Hundreds of companies were screened based on their stability, business model, and applicability to RFETS. Five were selected to respond to an RFP. 4 Responded!

	Commodities				Services					Project Management				
Company	Existing Marketplace	Develop Marketplace	Host Marketplace	Vertical/ Horizontal	Standard	Delivery Order	RFP Development	RFP Advertising	RFP receipt/ Evaluation	e-meetings	Info/ doc Management	Workflow Tracking	Invoicing/ Payment	Outsourcing
Ariba	✓	\checkmark	✓	V/H	✓	✓		\checkmark	\checkmark	✓	✓	✓	✓	
BidCom	✓			٧					✓	✓	✓	✓	✓	
Buzzsaw	✓			٧				✓	✓	✓	✓	✓	✓	
Cephren	✓			٧				✓	✓	✓	✓	✓	✓	
CommerceOne	✓	✓	✓	V/H	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ContractorHub.com	✓			✓				✓	✓	✓	✓	✓	✓	
FedBid	✓			Н					\checkmark	✓	✓	✓	✓	
FedCenter	✓			н	✓								✓	
FreeMarkets	✓			Н	✓								✓	
IBM		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pengroup	✓			н	✓			\checkmark	\checkmark	✓	✓	✓	✓	
ProcureNet	✓			Н	✓								✓	
Rightworks	✓	✓	✓	V/H	✓	✓		✓	✓	✓	✓	✓	✓	
VerticalNet	√	✓	✓	V/H	✓								✓	

The RFETS Solution

Business Process Reengineering

Issue RFP

Selection of Ariba Buyer

CH2M Hill Partnership with American Management Systems (AMS) for software integration

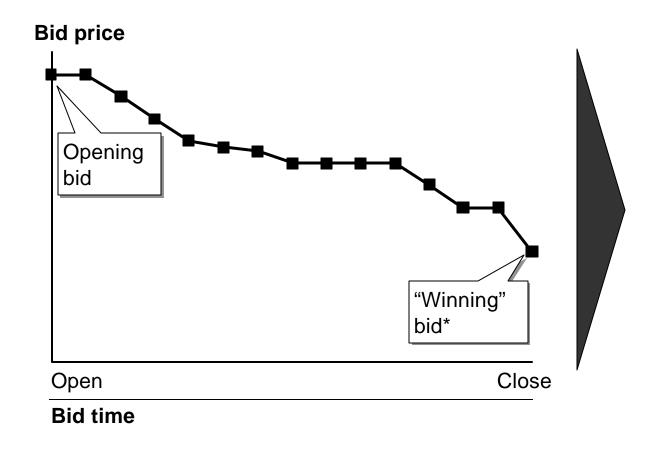
Online in February, 2001

Projected savings \$20M - \$30 per year

Other e-commerce solutions upcoming...

REVERSE AUCTIONS

Rapidly growing method for competing services.



* On price only; other criteria considered for "best value"

INFORMATION EXCHANGES

Better information = less uncertainty = less "cushion" in bids

Contractors view interactively

- Facility plans
- As-built drawings
- Demolition requirements
- Contamination locations
- Contracting terms
- Bid format



Rocky Flats Obtains

- Focused inquiries
- Qualified, prescreened contractors
- Consistent bid format
- Reduced uncertainty in Cost estimates
- Potentially lower fixedprice contracts

WHEN DOES E-PROCUREMENT MAKE SENSE?

e-Commerce solutions are now more scalable so organizations of all sizes can achieve savings and e-commerce "wins"

Reverse Auctions - \$40K pilot program to conduct 5-6 auctions.

e-Procurement software - Total solution cost ranges from \$150,000 (CH2M Hill Purchase Platform) to \$2M (Ariba Buyer)

Participation in/ creation of online marketplaces (Ariba, CommerceOne)

e-Procurement is most valuable when the following conditions exist:

High transaction costs (slow/ cumbersome approval processes)

Most purchasing is from catalogs (as opposed to custom fabrications)

Procurement organization is fragmented

Strong relationships with suppliers

CHALLENGES AND LESSONS LEARNED

Integration with other systems is the "hidden" cost.

Business Process Reengineer is essential to realize savings.

Don't do the wrong thing faster!

Two critical success factors:

- Ø Strong program management (hint: know the PM)
- Ø Proactive vendor relations

Payback periods:

- Ø Services = approximately 6 months
- Ø Commodities = approximately 1-2 years

ATTACHMENT: Screen Captures of e-Procurement Systems

CH2M Hill Online Purchasing Platform In Partnership with ENI.Net

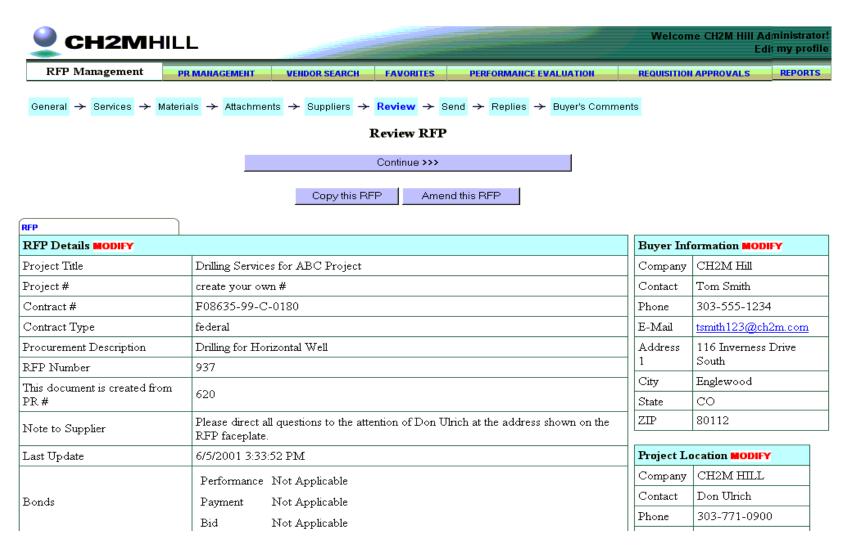
Ariba Buyer

CH2M Hill Online Purchasing Platform In Partnership with ENI.Net - Home Page



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CH2M Hill's Online Purchasing Platform In Partnership with ENI.Net - Request for Proposal



Ariba Buyer at RFETS - Home Page

