Communities of Practice

Building and Sustaining Knowledge Networks to Drive Business Results

Bob Newhouse

APQC

Reid Smith

Schlumberger

Information Today, Inc.
incorporating **KMWorld**

SchlumbergerSema

American Productivity & Quality Center

- Founded in 1977 - funded by 100 corporations
- Non-profit, tax-exempt 501(c)(3)
- Membership - 500 organizations
- Annual revenues $12 million and staff of 100
    - Best Practices research and publications
    - Benchmarking
    - Consulting and Advisory services
    - Conferences and training
- Board of Directors
    - 45 senior executives from corporations, education, and government

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APQC Knowledge Management Benchmarking Studies

Emerging Best Practices in KM (1996)

Using Information Technology for KM (1997)

The Learning Organization and KM (1997)

Expanding Knowledge Externally (1998)

Creating a Knowledge Sharing Culture (1999)

Successfully Implementing KM (2000)   ✹ Schlumberger

Building and Sustaining CoPs (2000)   ✹ Schlumberger

Managing Content and Knowledge (2001) ✹ Schlumberger

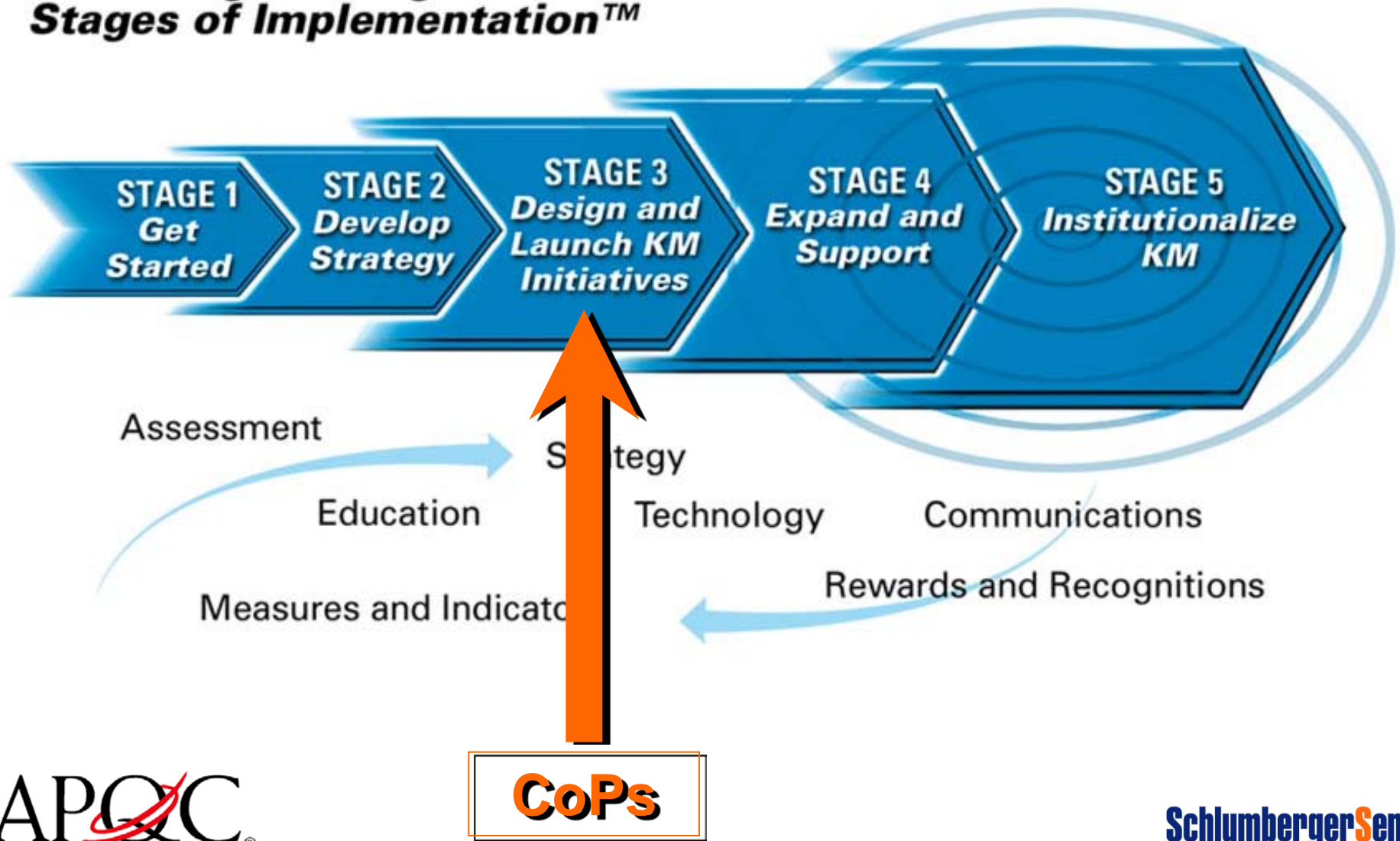Retaining Valuable Knowledge (2002)
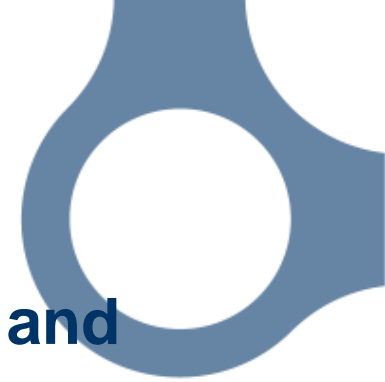
Using KM to Drive Innovation (2002)

New

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APQC Best Practice Partners (1995-2002)

- AMS
- Apple Computer
- Andersen
- Accenture
- AT&T
- Best Buy ✳
- BP
- BT
- Broderbund Software
- Buckman Laboratories ✳
- Cap Gemini Ernst & Young
- Chevron ✳
- Cigna Property & Casualty
- Corning
- DaimlerChrysler AG
- Dow Chemical
- Ford Motor Company ✳
- Gateway Computers
- GE
- Giant Eagle
- HP Consulting ✳
- IBM/Lotus ✳

- Johnson Controls Inc.
- Lotus Development Corp.
- Manpower International
- MITRE Corp.
- Monsanto
- Motorola
- National Semiconductor
- Nokia
- Nortel
- Northrop Grumman
- Pink Elephant Group
- PriceWaterhouseCoopers
- Raytheon ✳
- Schlumberger ✳
- Sequent Computers
- Siemens AG ✳
- Skandia
- Sollac
- Symantec Corp.
- Tennessee Valley Authority
- Texas Instruments
- World Bank ✳
- Xerox ✳

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APQC's Road Map to
Knowledge Management Results:
Stages of Implementation™

STAGE 1
Get
Started

STAGE 2
Develop
Strategy

STAGE 3
Design and
Launch KM
Initiatives

STAGE 4
Expand and
Support

STAGE 5
Institutionalize
KM

Assessment

Strategy

Education

Technology

Communications

Measures and Indicators

Rewards and Recognitions
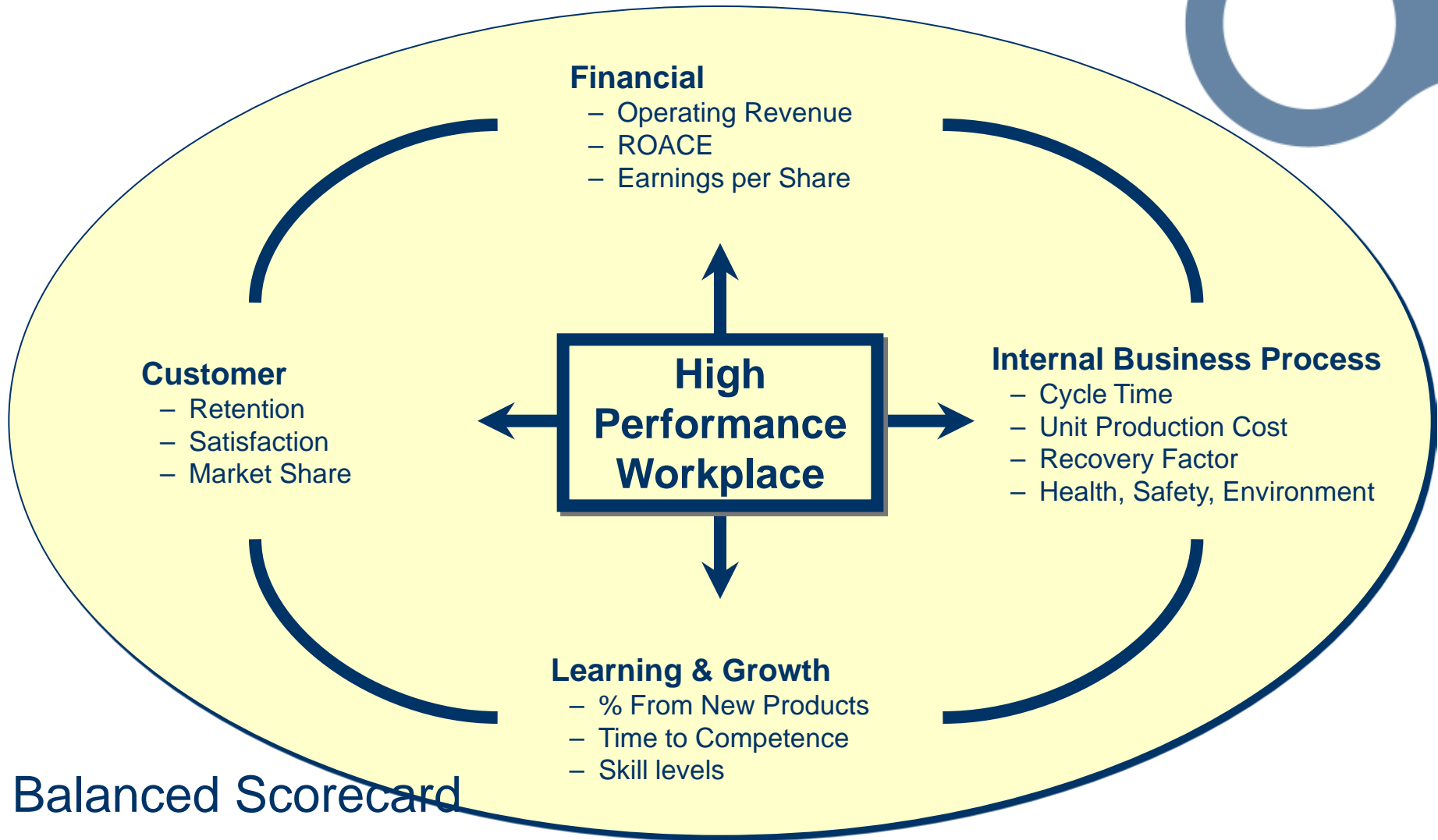
CoPs

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What is Knowledge Management?

- **Systematic approaches to help information and knowledge flow**
  - to the right people
  - at the right time
  - in the right format
  - at the right cost
  - so they can act more efficiently and effectively.
- **Find, understand, share and use knowledge to create value for the organization.**

Knowledge is information in action (contextualized)

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Knowledge Management for Business Results

Financial
- Operating Revenue
- ROACE
- Earnings per Share

Customer
- Retention
- Satisfaction
- Market Share

High Performance Workplace

Internal Business Process
- Cycle Time
- Unit Production Cost
- Recovery Factor
- Health, Safety, Environment

Learning & Growth
- % From New Products
- Time to Competence
- Skill levels

Balanced Scorecard

Knowledge Management for Business Results

Connect

Focus, People, Process, Content, Technology

Definition of Communities of Practice

Groups of people who come together to share and to learn from one another face-to-face and virtually.

They are held together by a common interest in a body of knowledge and are driven by a desire and need to share problems, experiences, insights, templates, tools, and best practices.

Community members deepen their knowledge by interacting on an ongoing basis.

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Four Community Functions

Helping

- Making person to person connections among peers to share ideas, insights, help
    - Schlumberger Eureka, DaimlerChrysler Tech Clubs, Xerox Connect

Best-Practice Sharing

- Managing flow of specific practices from individual insights to documented, verified, used best practices—and from location to location within the organiztion
    - Ford BPR, Schlumberger InTouch

Knowledge Stewarding

- Experts own a body of knowledge; Connect members, collect, organize, upgrade & deploy valuable knowledge
    - Cap Gemini E&Y, World Bank, Northrop Grumman

Innovation

- Crossing boundaries to generate new ideas
    - Siemens ShareNET, DaimlerChrysler Auschtauschgruppe, Corning

First Steps

- Uncover the natural work groups
- Understand the things that could make their work better, faster, easier
- Give them time to share their knowledge and reflect - creation and transfer will follow
- Create the supporting roles, processes and infrastructures that allow them to collaborate

Schlumberger at a Glance

Oilfield Services

Oil & Gas Exploration and Production Services

- **Reservoir Evaluation and Development**
- **Schlumberger Information Solutions**
- **Network Solutions**

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Consulting & Systems Integration

Products & Managed Services

- **Telecom**
- **Utilities**
- **Transaction Systems**
- **Global Services**
- **Major Events**

Schlumberger Limited

$12 Billion

$850 Million

$610

Revenue — Net Income — Research & Development
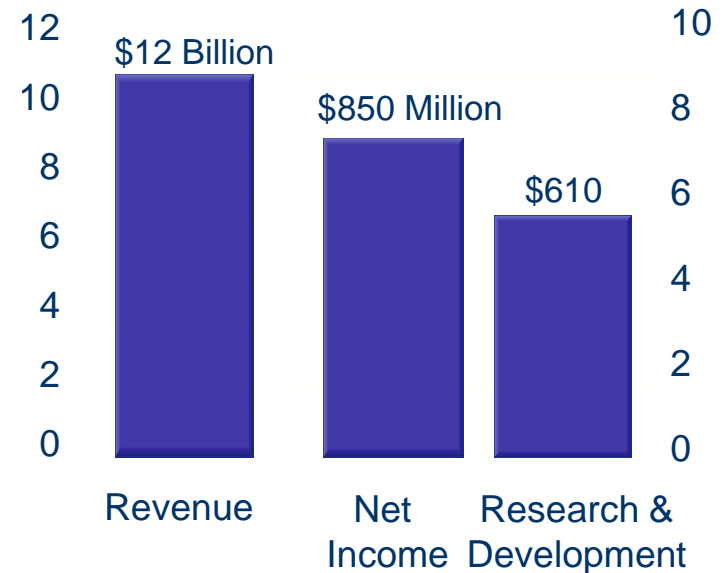
84,000 People
More than 100 Nationalities

Schlumberger Business Vision

- **Three Goals**
  - World-class technologies
  - Complete solutions
  - Be the leader or exit

- **Three Strategies**
  - Deliver integrated solutions locally
  - Real-time dimension to services
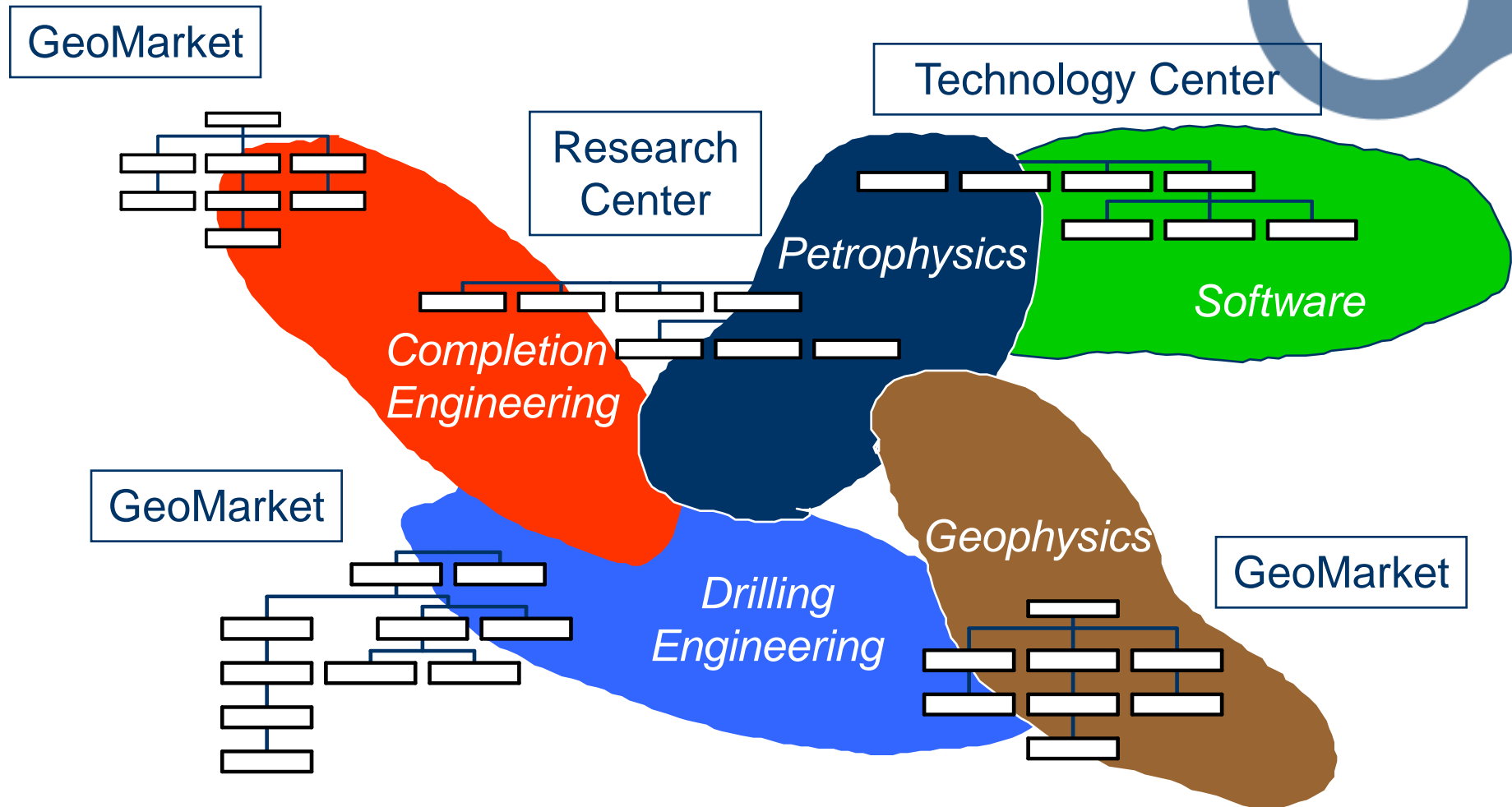 - Knowledge Management

  - D.E. Baird, Chairman & Chief Executive Officer
    November, 1998

Schlumberger

Schlumberger Communities of Practice

- Technical Communities – Eureka
  - Knowledge Stewarding,
  - Helping

- Operational Communities – InTouch
  - Helping,
  - Best-Practice Sharing,
  - Knowledge Stewarding
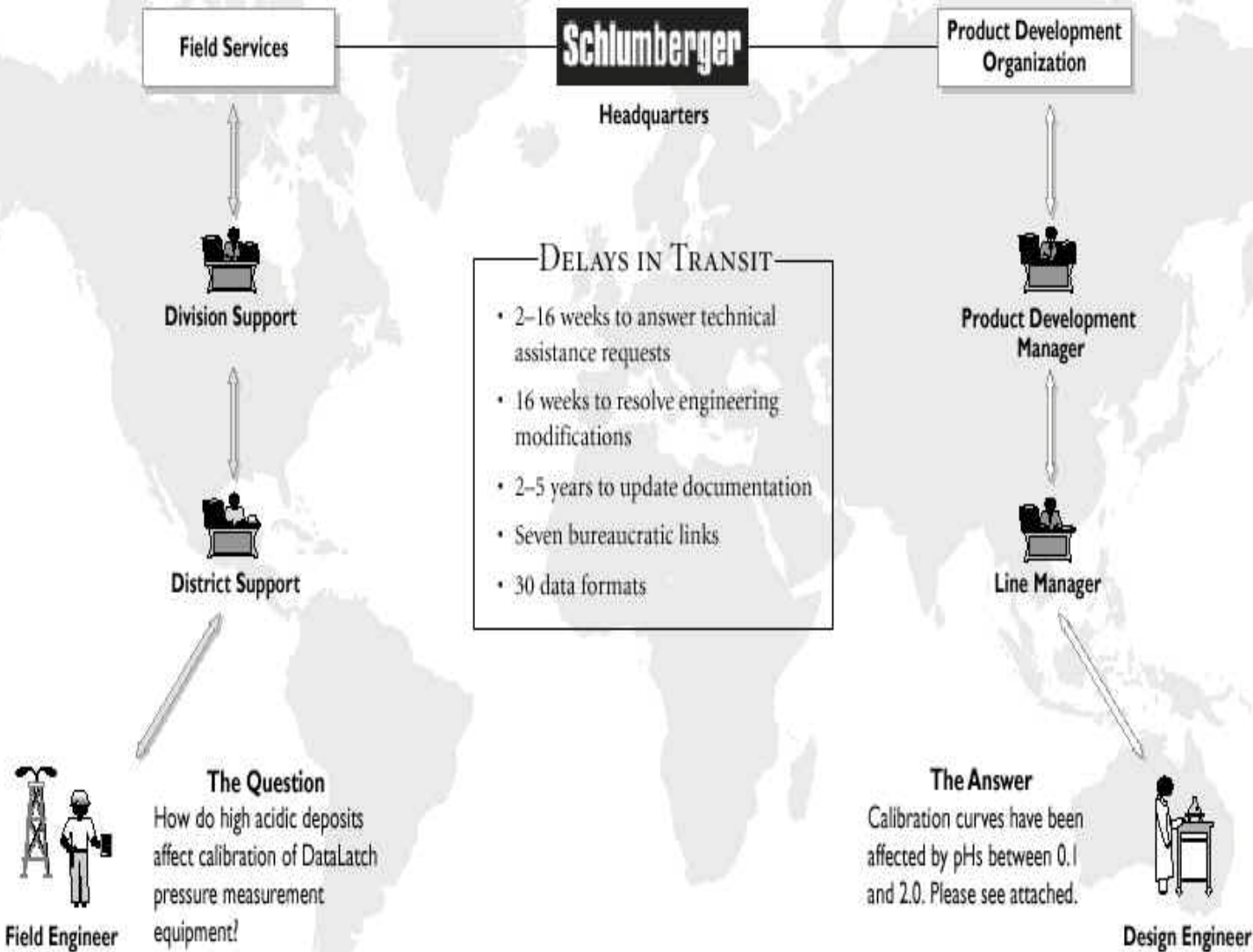
Eureka Technical Communities

GeoMarket

Technology Center

Research Center

Petrophysics

Software

Completion Engineering

GeoMarket

Drilling Engineering

Geophysics

GeoMarket

19 communities, 8800 members

InTouch

Field technical request moving through bureaucracy...

...can take months to reach expert

Field Services

Schlumberger

Headquarters

Product Development Organization

Division Support

Product Development Manager

District Support

Line Manager

DELAYS IN TRANSIT

- 2–16 weeks to answer technical assistance requests
- 16 weeks to resolve engineering modifications
- 2–5 years to update documentation
- Seven bureaucratic links
- 30 data formats

The Question
How do high acidic deposits affect calibration of DataLatch pressure measurement equipment?

Field Engineer

The Answer
Calibration curves have been affected by pHs between 0.1 and 2.0. Please see attached.
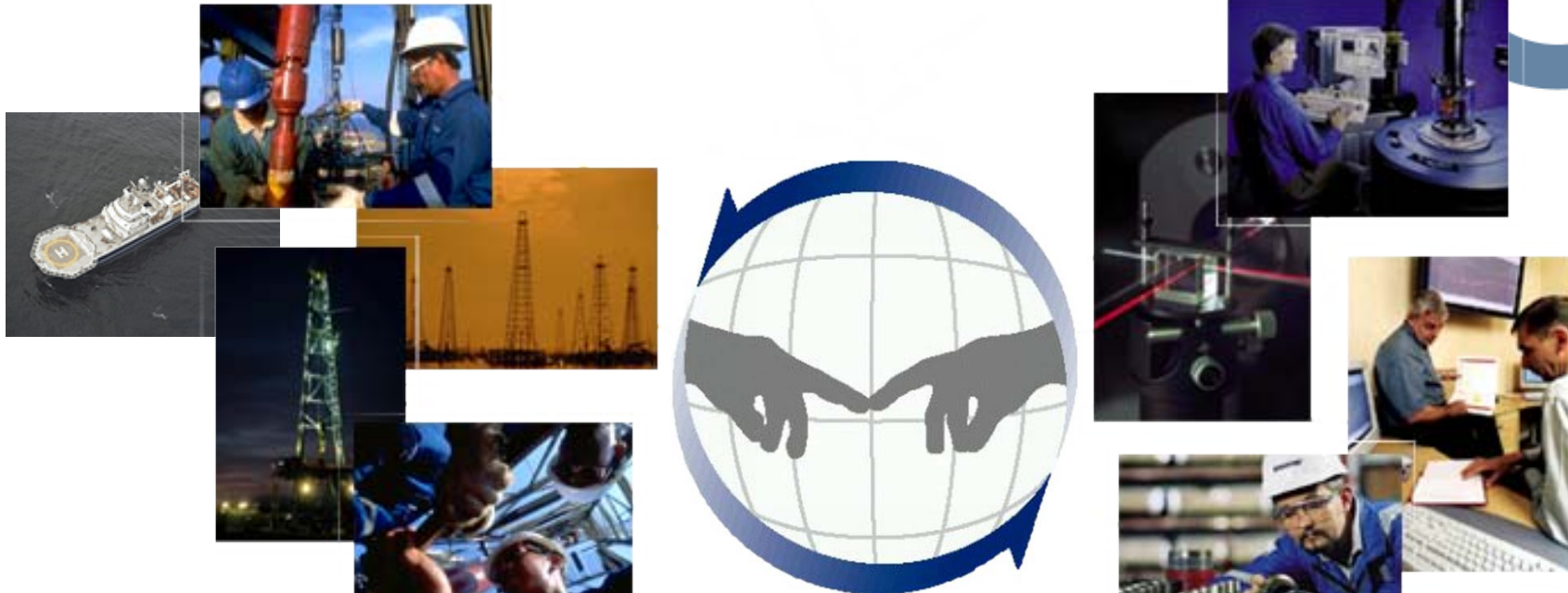
Design Engineer

InTouch

- Goal
  - **Create a quantum leap in operational efficiency and service to our customers**

- Strategy
  - **Direct access to information, by connecting**
    - **technology centers ↔ field**
    - **field ↔ field**

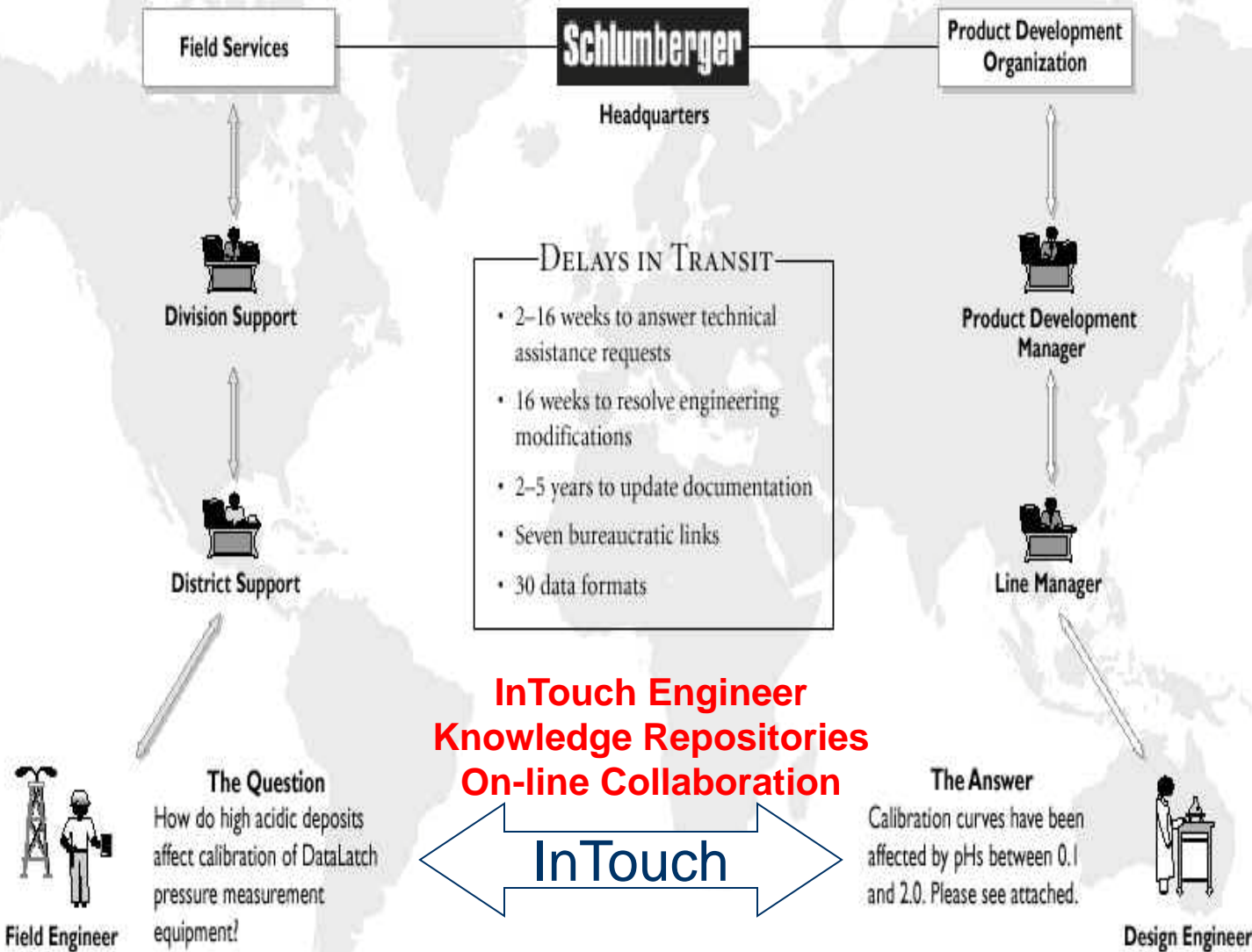*Apply everywhere what we learn anywhere*

InTouch

- 95% reduction in time to resolve technical queries
- 75% reduction in time to update engineering modifications
- $200 Million+ annual savings

InTouch

Field technical request moving through bureaucracy...

...can take months to reach expert

Field Services — **Schlumberger** Headquarters — **Product Development Organization**

Division Support

District Support

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Product Development Manager

Line Manager

InTouch Engineer
Knowledge Repositories
On-line Collaboration

InTouch

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Field Engineer

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Design Engineer

CoP Critical Success Factors

- Focus on Key Performance Indicators of the business
  - Link with a core value, business need, or business opportunity

- Community leadership
  - Define roles & responsibilities
- Dedicated Resources
  - Time
- Alignment
  - Build on existing networks
  - Unify with standard performance appraisal process
  - Measure and assess
- Technology

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Keys to Sustaining Communities

- Keep the passion
- Encourage evolution
  - Assess health
  - Create accountability
- Continue support
- Institutionalize
  - Make communities visible
  - Create a mechanism for influence
  - Ingrain community into daily work
 - Build into normal budgeting & planning
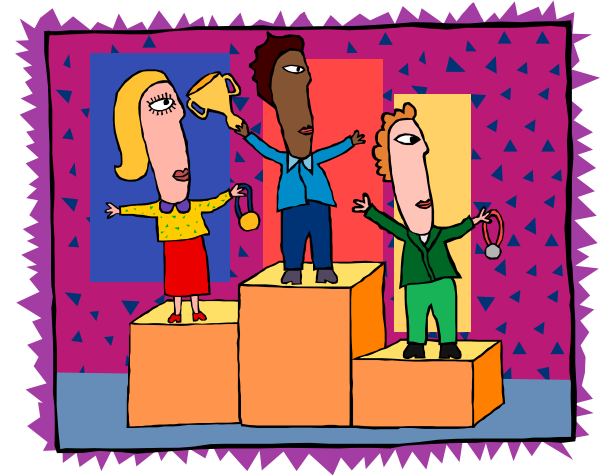
Schlumberger and APQC to Create First Complete Knowledge Management Solution for the Oil & Gas Industry

Industry leaders combine energy expertise with knowledge management methodology and technology to transform oil and gas corporate knowledge into intellectual capital

HOUSTON, September 7, 2001 Schlumberger Oil & Gas Information Solutions (SIS) announced today the signing of a joint marketing agreement with the American Productivity & Quality Center (APQC). This alliance establishes the oil and gas industry's first complete knowledge management (KM) solution, giving oil companies the tools and processes to link people to information, expertise and best practices through communities of practice, technology and ongoing training and support.
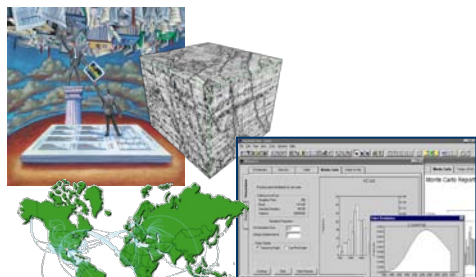
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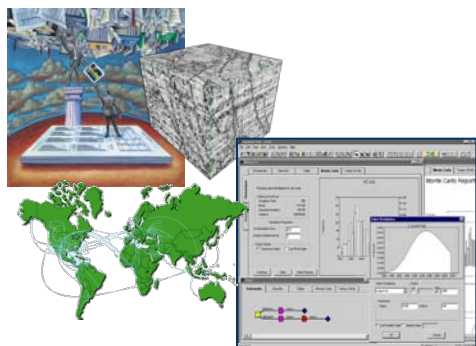
Technology

Domain Expertise

Service Delivery

Expert Services, Benchmarking, Training

- Knowledge Management
- Change Management
- Strategy Development
- Workflow Analysis
- Balanced Scorecard

APQC - Schlumberger Partnership

Domain Expertise

- **People to People**
  SmartPeople
- **People to Information**
  DecisionPoint
- **People to CoPs**

  *i*Collaborate, MindShare
- **People to Best Practices**
  SmartPractice, Learning@Work
- **People to Workflows**
  *i*Work, LiveQuest
- Networks and Security
- IT

- eLearning
- Data Management
- Validation and Database Cleanup
- Content Management
- Hosting

SchlumbergerSema

about APQC • explore our products
discover our services • examine your industry
focus on k-16 education • join our team

• search
• membership

contact us

APQC.
AMERICAN PRODUCTIVITY
& QUALITY CENTER

How is KM enabled? Cindy Hubert

Select a module...

Knowledge Management and Technology

- Knowledge transfer and exchange
  - Structured document repositories (a.k.a. databases)
  - Discussion databases
  - Pointers to expertise
  - Document exchange and video infrastructure
- Data analysis and performance support
  - Performance support systems
  - Problem resolution systems
  - Data to knowledge conversion systems
    - Data mining
    - Decision support
    - Real-time intelligent data analysis

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** 16 17 18 19 20
21 22 23 24 25 26 27
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About the Speaker: Cindy Hubert
Cindy is a Senior Consultant in Knowledge Management and Manager of the Custom Solutions KM Practice Area for APQC. Her focus is on

Prior to joining APQC six years ago, Cindy spent fifteen years in the oil and gas industry and in the retail industry as a controller and general manager. There she promoted quality and continuous improvement and served as a consultant to a number of total quality, benchmarking, and re-engineering projects.

Links:
An executive summary for the Knowledge Sharing Culture.

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Sema

How to Learn More

www.slb.com

The Schlumberger Knowledge Hub > Knowledge Management

www.apqc.org

knowledge management