

Business Reengineering



REDWOOD RESEARCH

Kai A. Simon

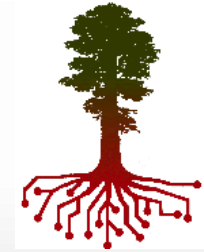
Phone: 0707 - 19 55 03

email: kai@adb.gu.se

<http://www.adb.gu.se/^kai>



A new phenomenon ?



REDWOOD RESEARCH

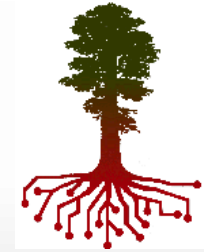


What is Business Reengineering?

- *Buzzword?*
- *Just another trend?*
- *THE solution?*

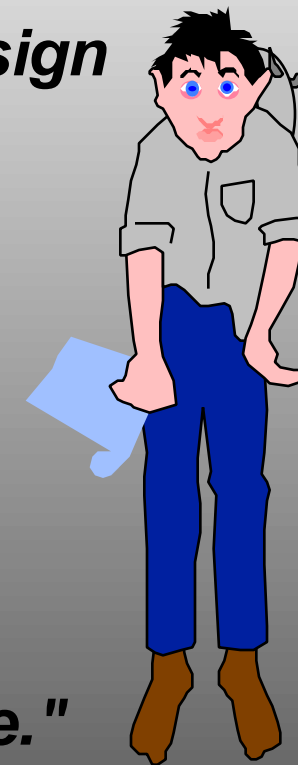


Some definitions



REDWOOD RESEARCH

- **Michael Hammer:**
"The fundamental analysis and radical redesign of business processes to achieve dramatic improvements in critical measures of performance."
- *"Forget what you know about how business should work - most of it is wrong!"*
- **Peter F. Drucker:**
"Reengineering is new, and it has to be done."

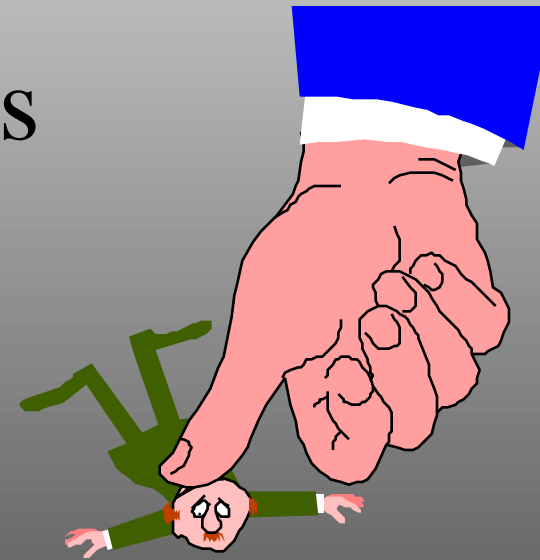


Why Business Reengineering ?



REDWOOD RESEARCH

- Global markets/competition
- Cost reduction
- Renewed competitiveness
(parity or best practice)
- Competitive dominance



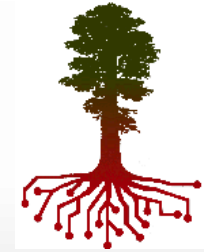
Why Business Reengineering ?



REDWOOD RESEARCH

- Customer requirements
- Customized products
- Product life cycles
- Change becomes permanent

What does it mean ?

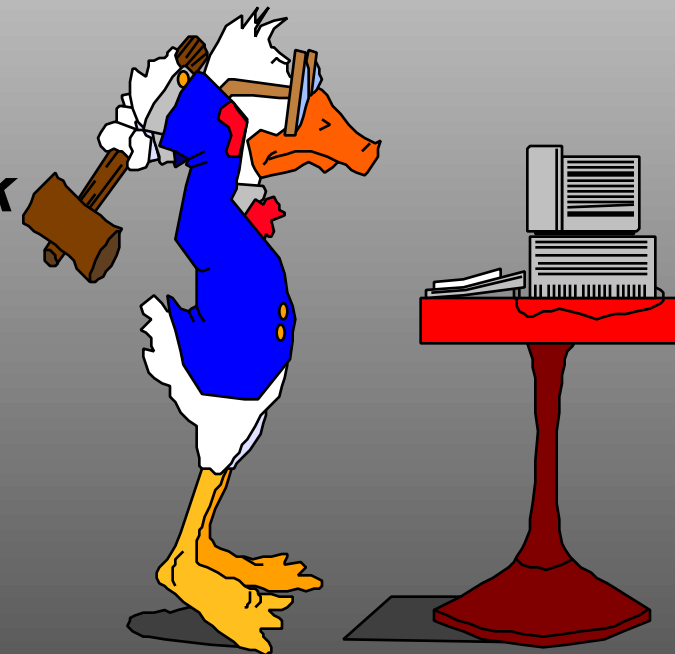


REDWOOD RESEARCH

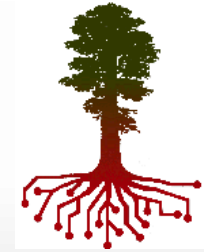
Abandoning long-established procedures and looking afresh at the work required to create a company's product or service.

Given what I know and given current technology, what would the company look like?

~~***"We have always done like this."***~~



A lot of elements come in



REDWOOD RESEARCH

**Value chains, Value Systems,
Time compression management,
Activity Based Costing**

CPI, TQM, etc.

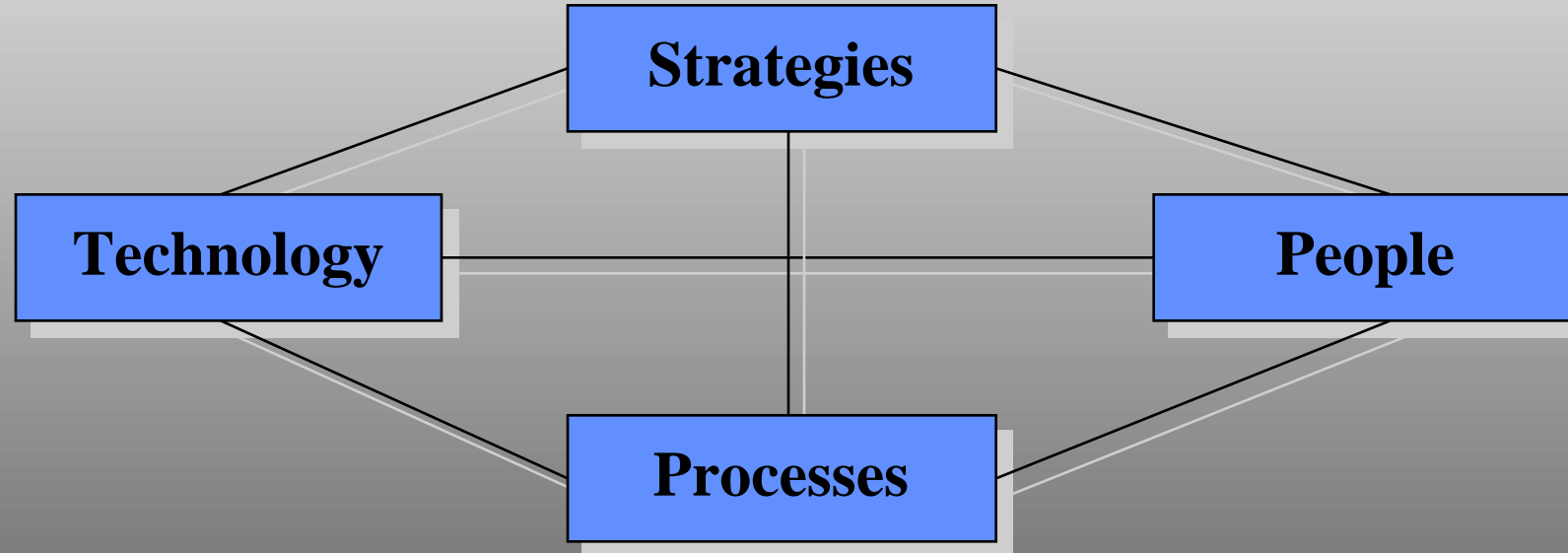
**Enterprise Modelling, Workflow,
IE, Strategic IT Planning**

**BP Reengineering,
BP Innovation,
BP Redesign**

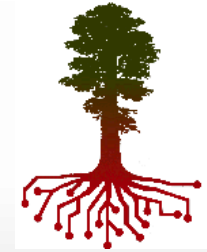
The dimensions of Business Reengineering



REDWOOD RESEARCH

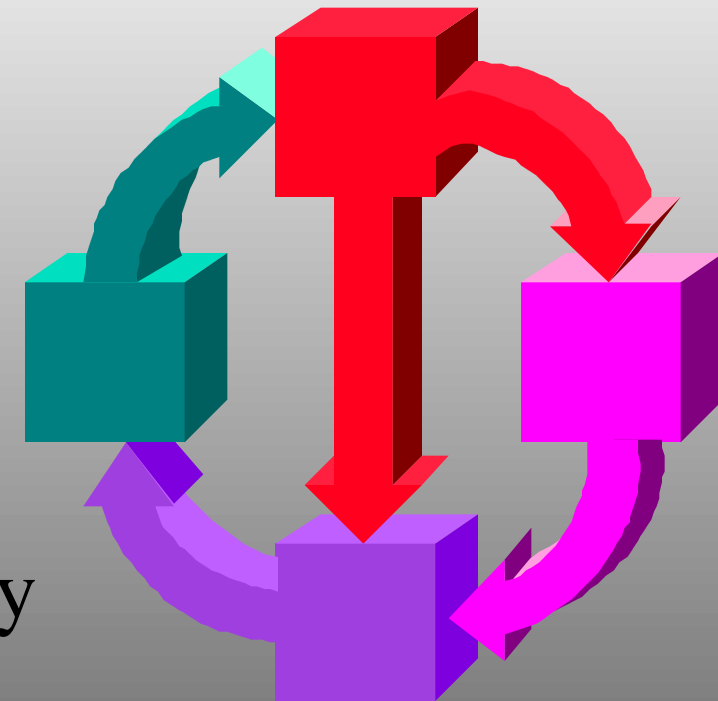


Strategies

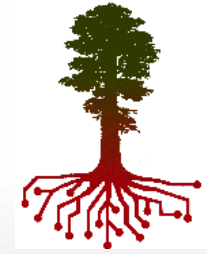


REDWOOD RESEARCH

- Business Strategy
- Organization Strategy
- IT-Strategy
- Link to dynamic marketplaces
- Current, relevant to vision & reality
- Understandable & motivating

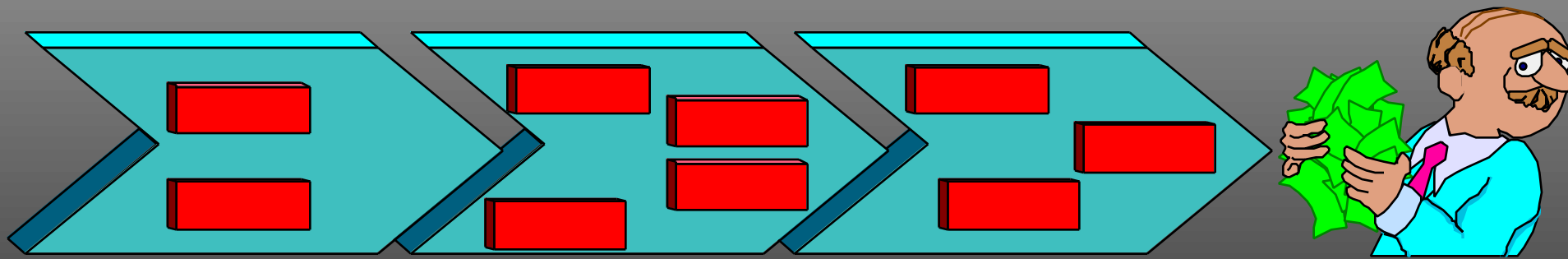


(Business) Processes

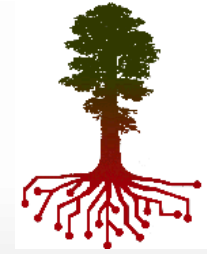


REDWOOD RESEARCH

- Key processes
- Value adding
- Determined by customer needs
- Shift from functional to process driven structure
- Process optimizing

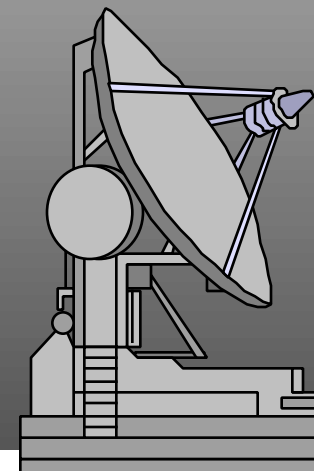
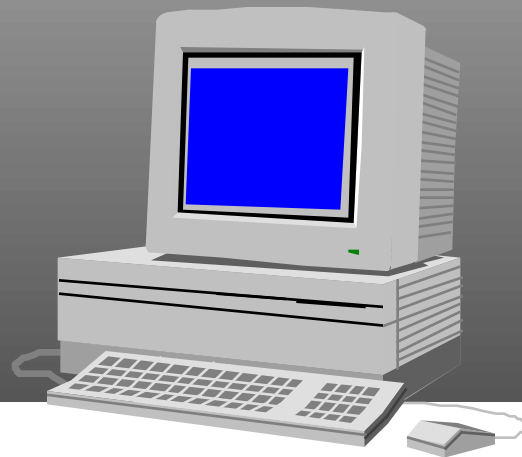
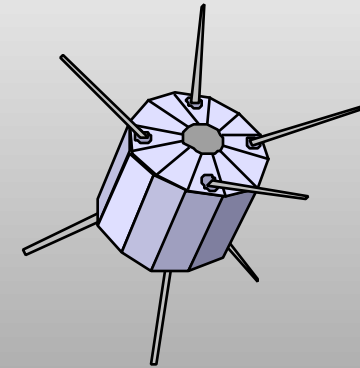


Technology



REDWOOD RESEARCH

- New technology & new methods
- Technology as "enabler", not "improver"
- Acceptance of technological changes
- IT shapes the future



People

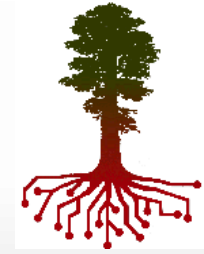


REDWOOD RESEARCH

- The most critical factor
 - Align work force with strategies
 - Address people within their environment
 - Consideration of cultural context
 - Empowerment

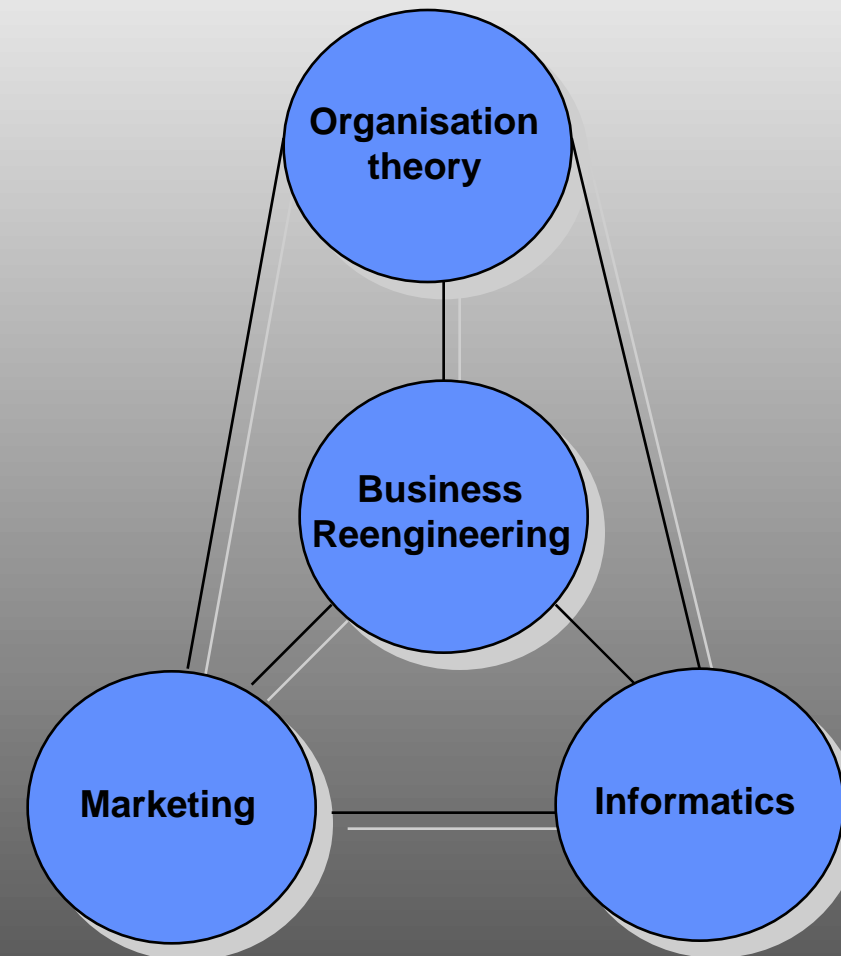


Links to theory



REDWOOD RESEARCH

- Organization theory
 - Organization structure
 - Division of labour
- Marketing
 - Value adding chain
 - Industry value systems
- Informatics
 - Information architecture
 - Information technology

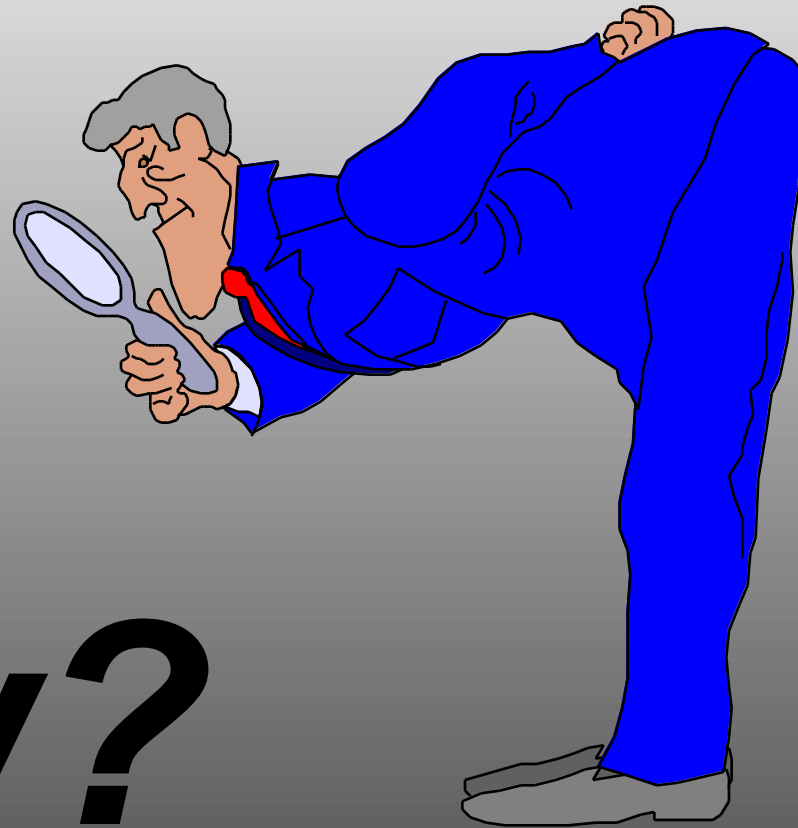


Business Reengineering

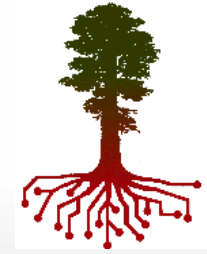


REDWOOD RESEARCH

*What
is
new?*



Scientific Management

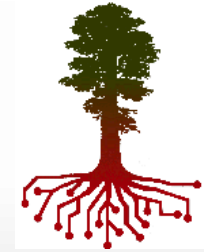


REDWOOD RESEARCH

Frederick Taylor, 1911



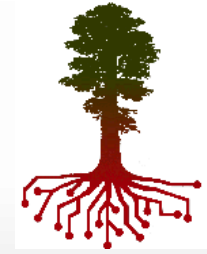
Administrative Science



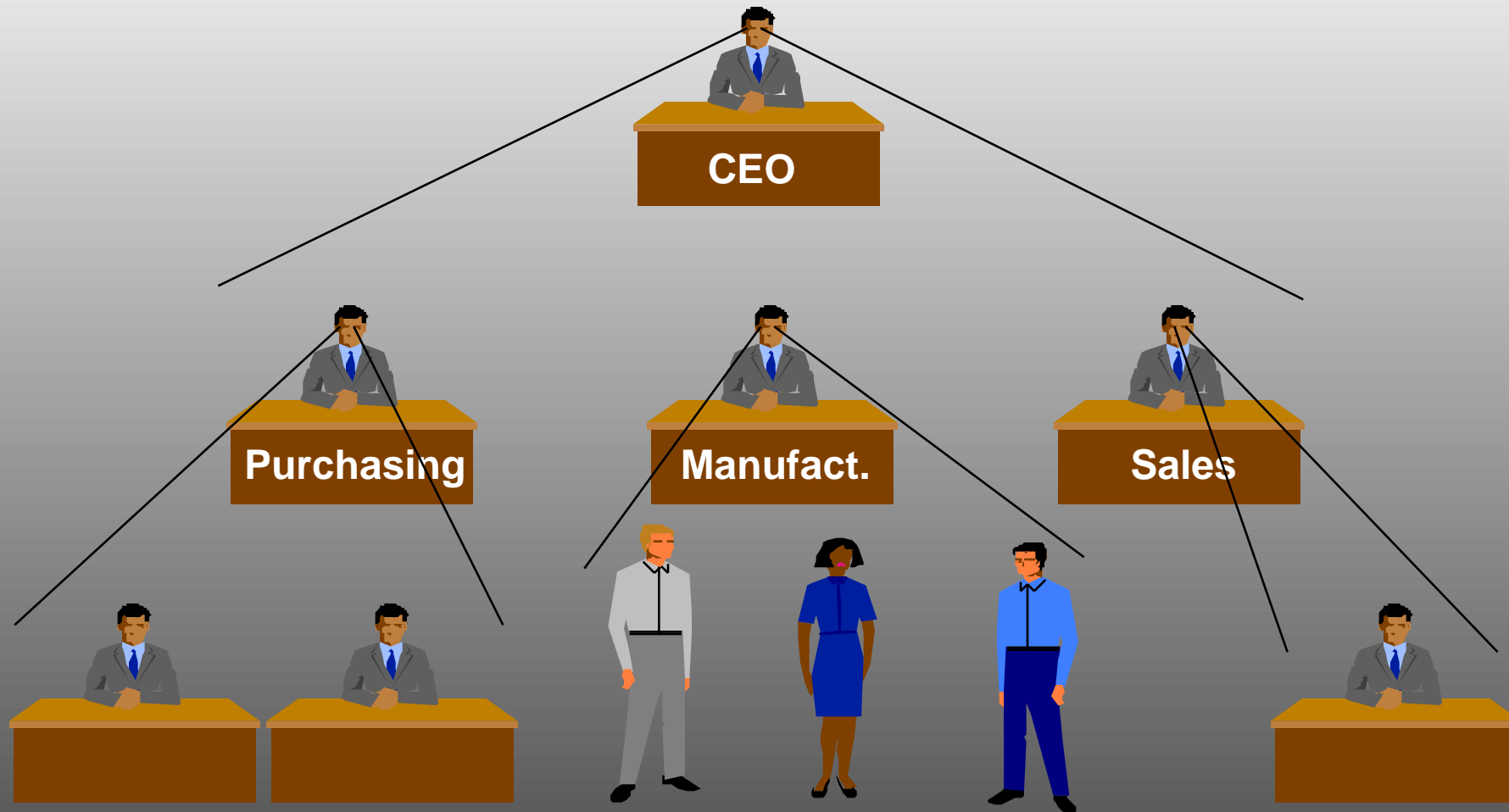
REDWOOD RESEARCH

- Oliver Sheldon, *The Philosophy of Management*, 1926
- Henry Fayol, *General and Industrial Administration*, 1930
- Gulick & Urwick, *Papers on the Science of Administration*, 1937
 - Departmentalization by process
 - Departmentalization by purpose

Bureaucracy



REDWOOD RESEARCH



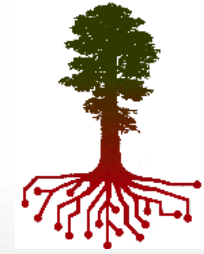
Pathologies



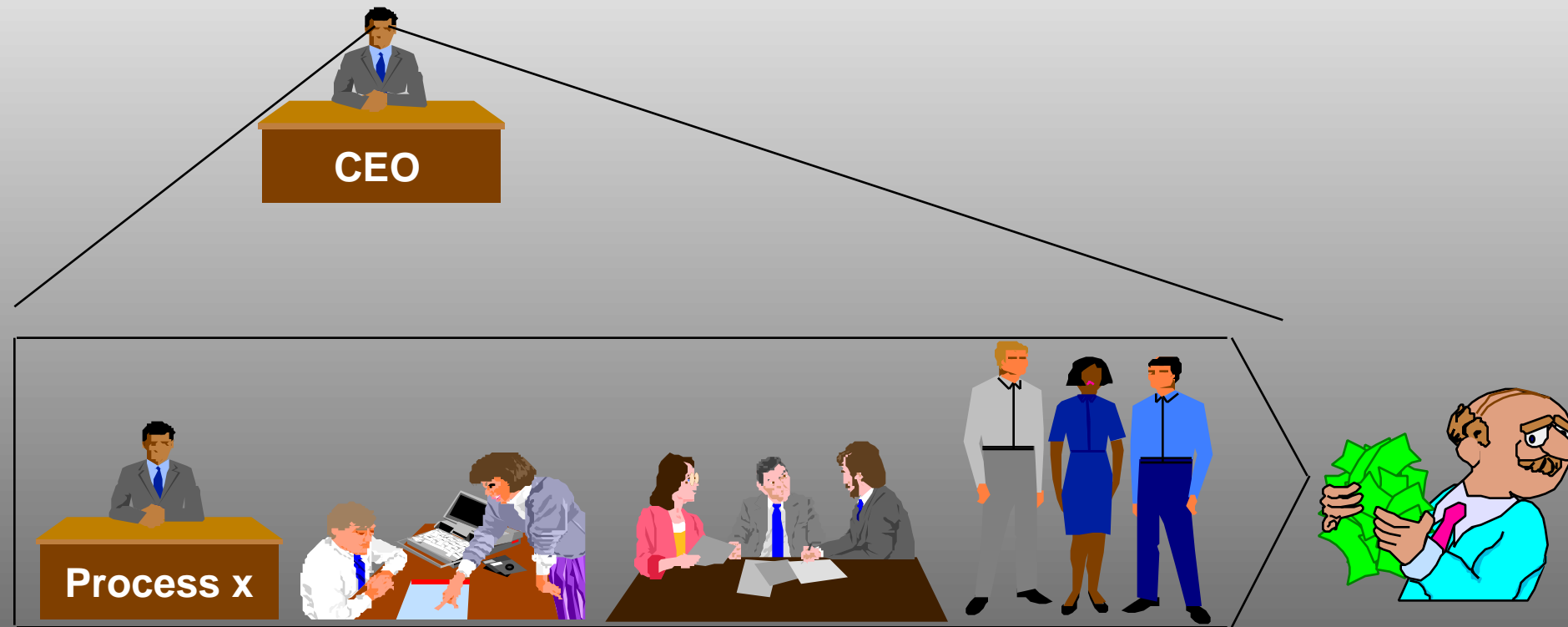
REDWOOD RESEARCH

- No responsibility for a whole process.
- Vertical flow of process-related information.
- Difficult to customize.
- Difficult to implement quality.
- “Scale” is not an advantage any more.

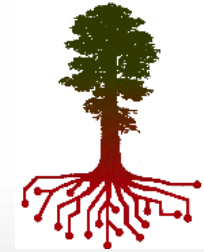
Business Process



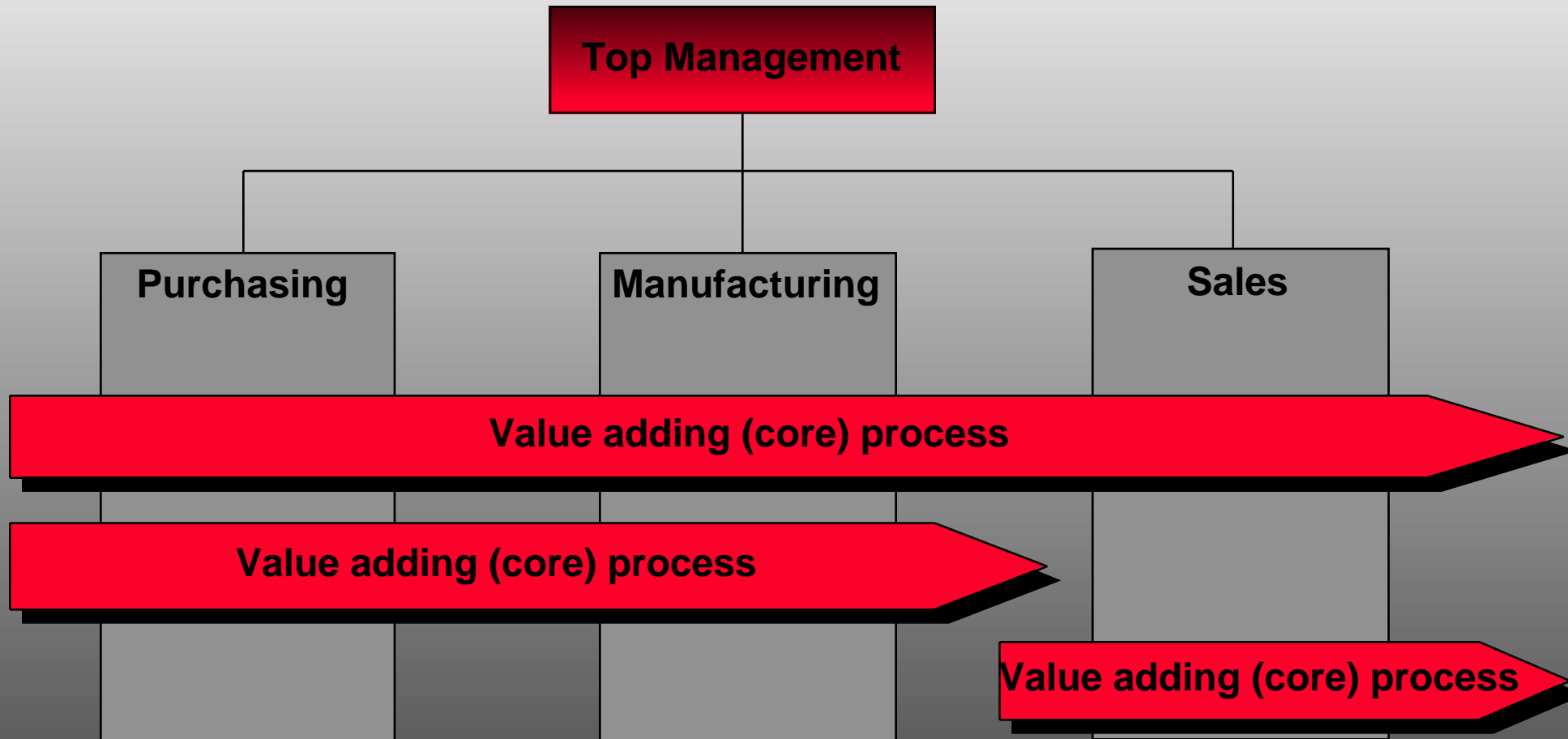
REDWOOD RESEARCH



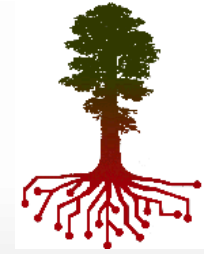
Business Process Approach



REDWOOD RESEARCH



What is a business process ?



REDWOOD RESEARCH

“A process is a structured, measured set of activities designed to produce output for a particular customer or market.”

Characteristics:

- **Cross-functionality**
- **Start/Stop**
- **In-/Output**
- **Owner**

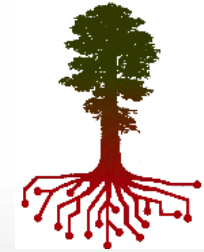
Why process focus ?



REDWOOD RESEARCH

- Customer focus.
- Improved coordination.
- Reduced transaction costs.
- Improved determination of value adding capacities.
- Concentration on core competencies.
- Multi-dimensional work.

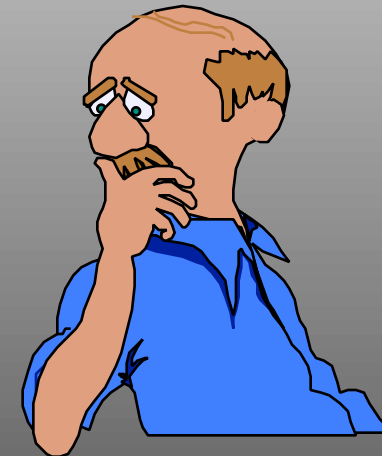
Word for the day !



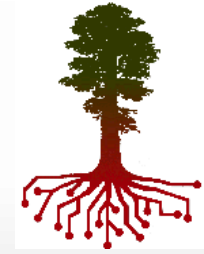
REDWOOD RESEARCH

“To persist with slash-and-burn downsizing, along with the sort of neutron-bomb re-engineering that leaves only the buildings standing, is tantamount to management malpractice.”

Peter Scott-Morgan

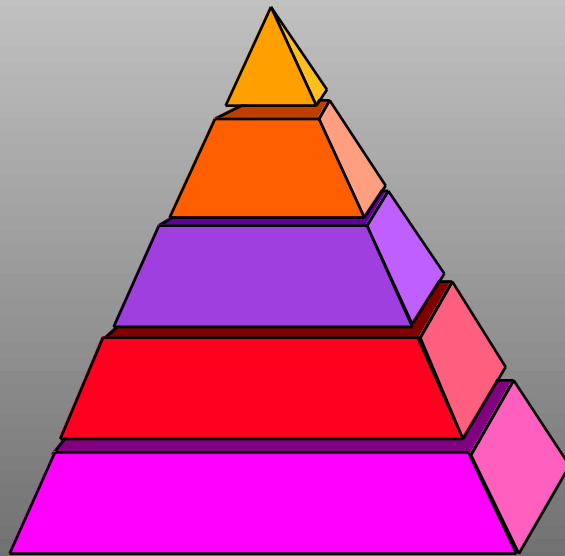


From hierarchy to flat organization

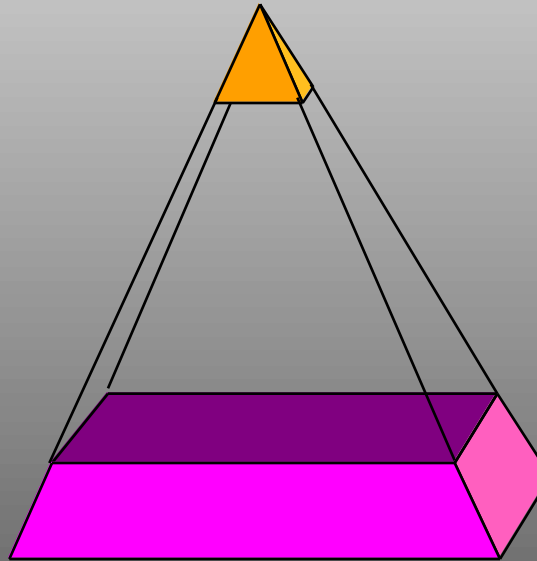


REDWOOD RESEARCH

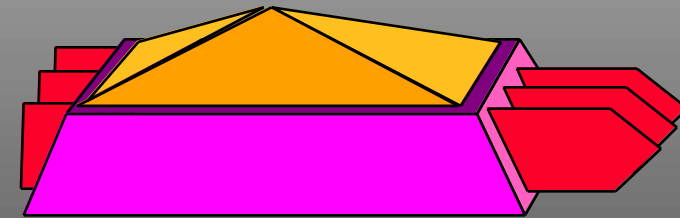
Hierarchy



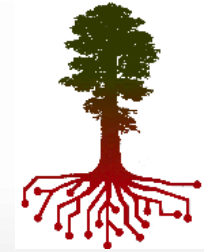
Removed middle management



Flattened organization

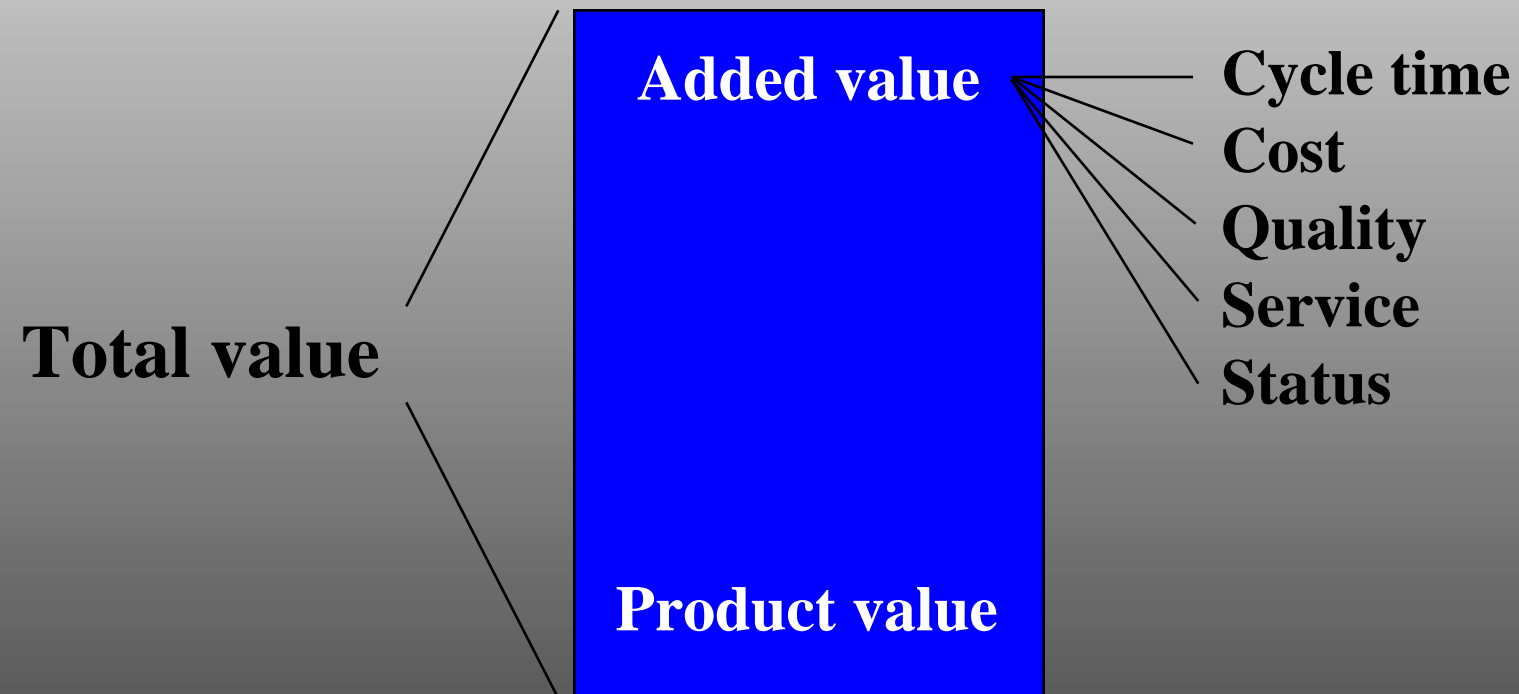


What is value ?

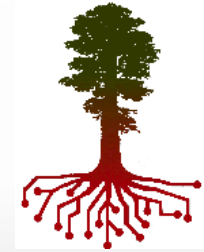


REDWOOD RESEARCH

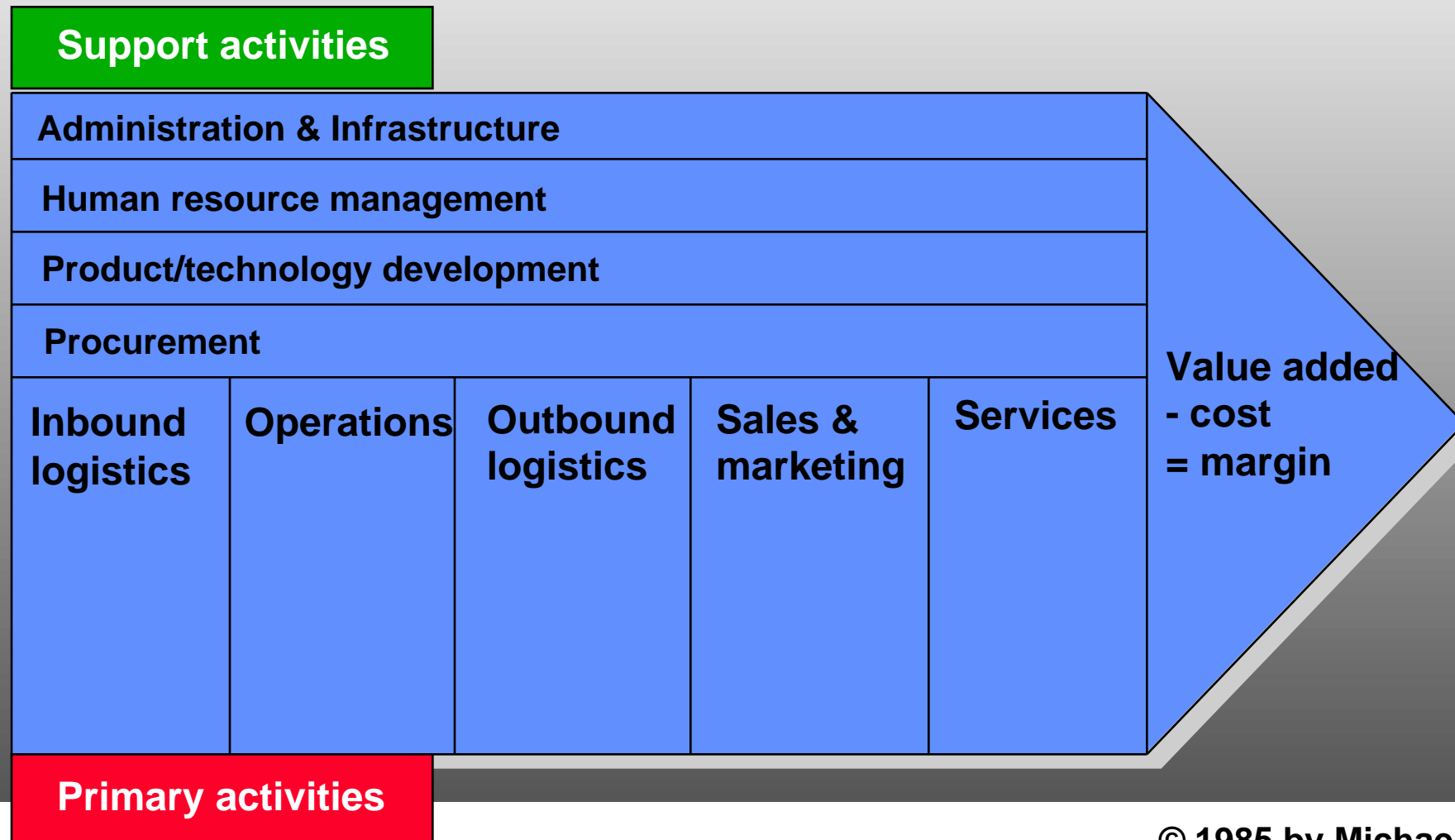
Total value = Product value +
Added value



M. Porter's value adding chain

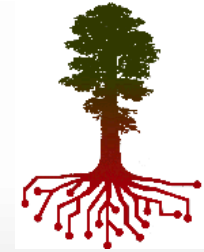


REDWOOD RESEARCH

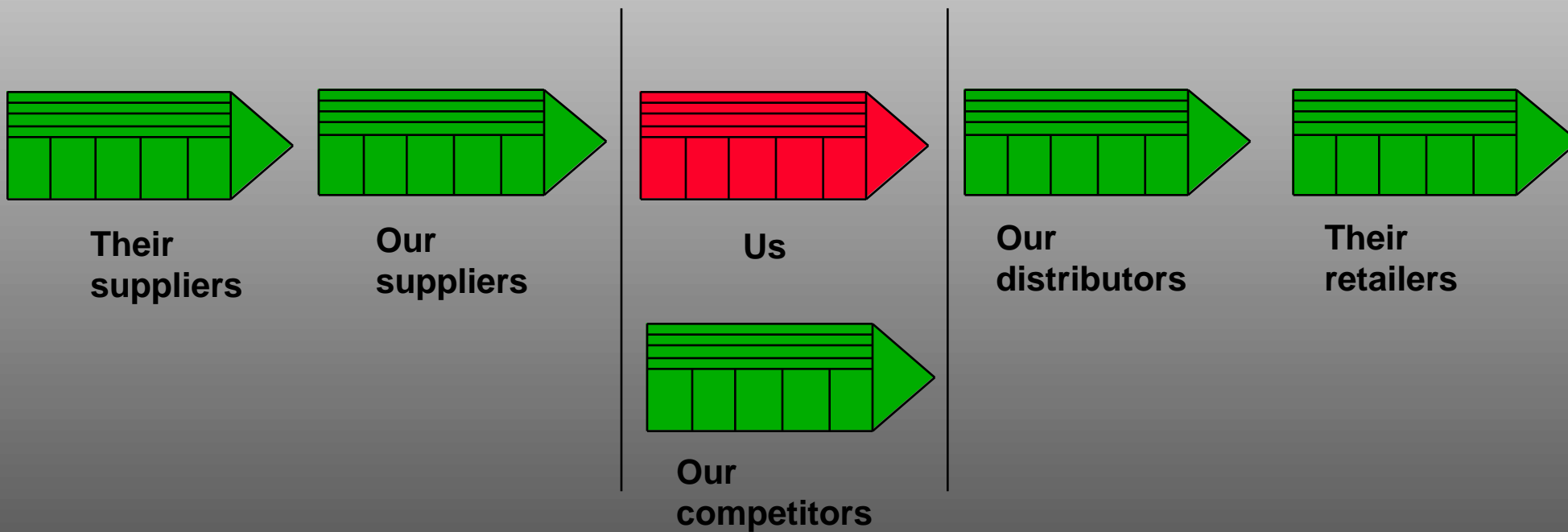


© 1985 by Michael Porter

The industry value system



REDWOOD RESEARCH



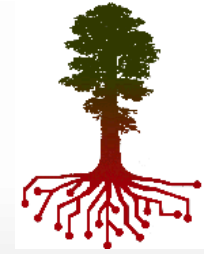
Process levels



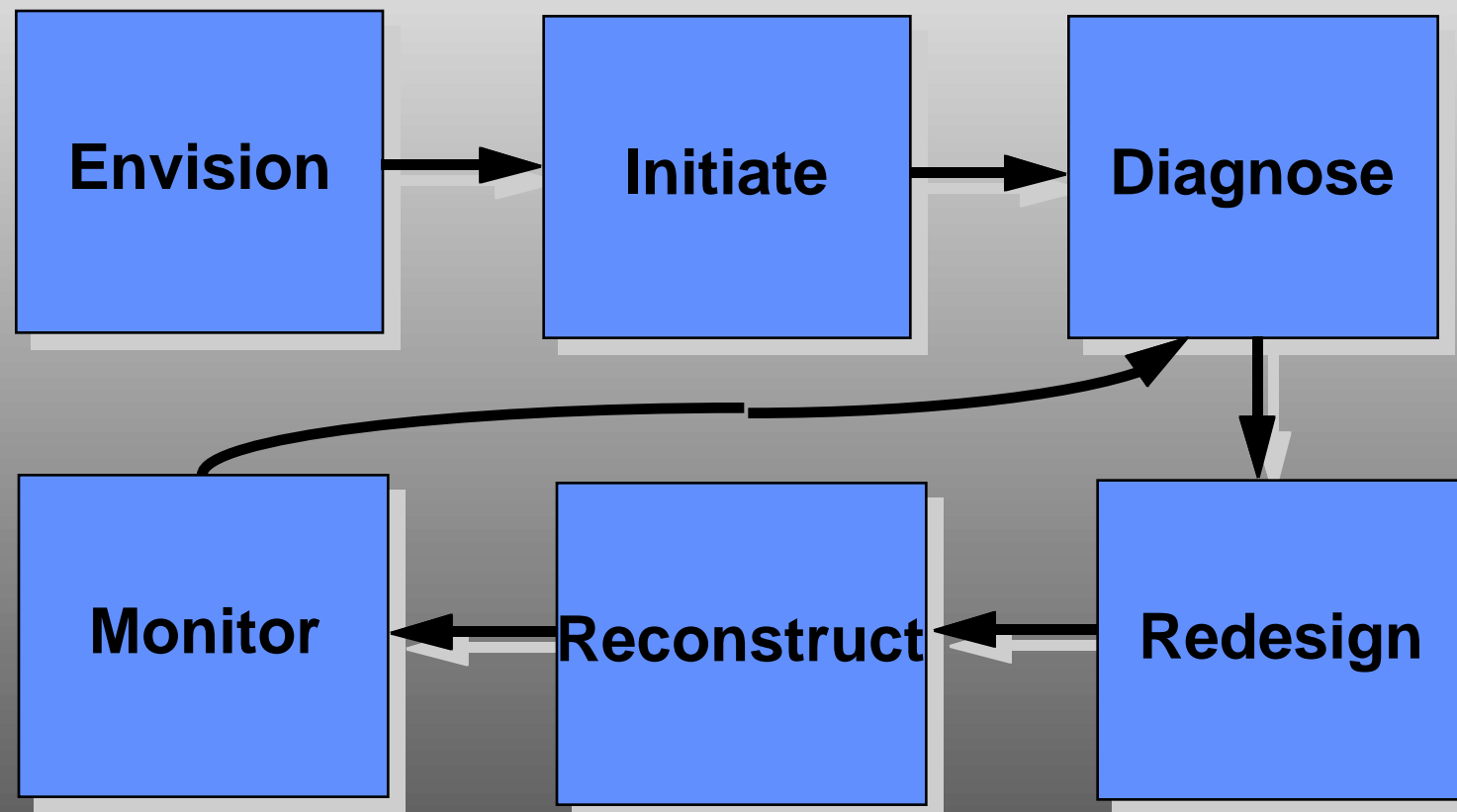
REDWOOD RESEARCH

- Meta-process
(Primary & secondary act.)
- Business process
(Purchasing, budgeting etc.)
- Sub-process
- Activities

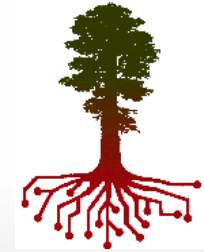
Six stage reengineering life-cycle



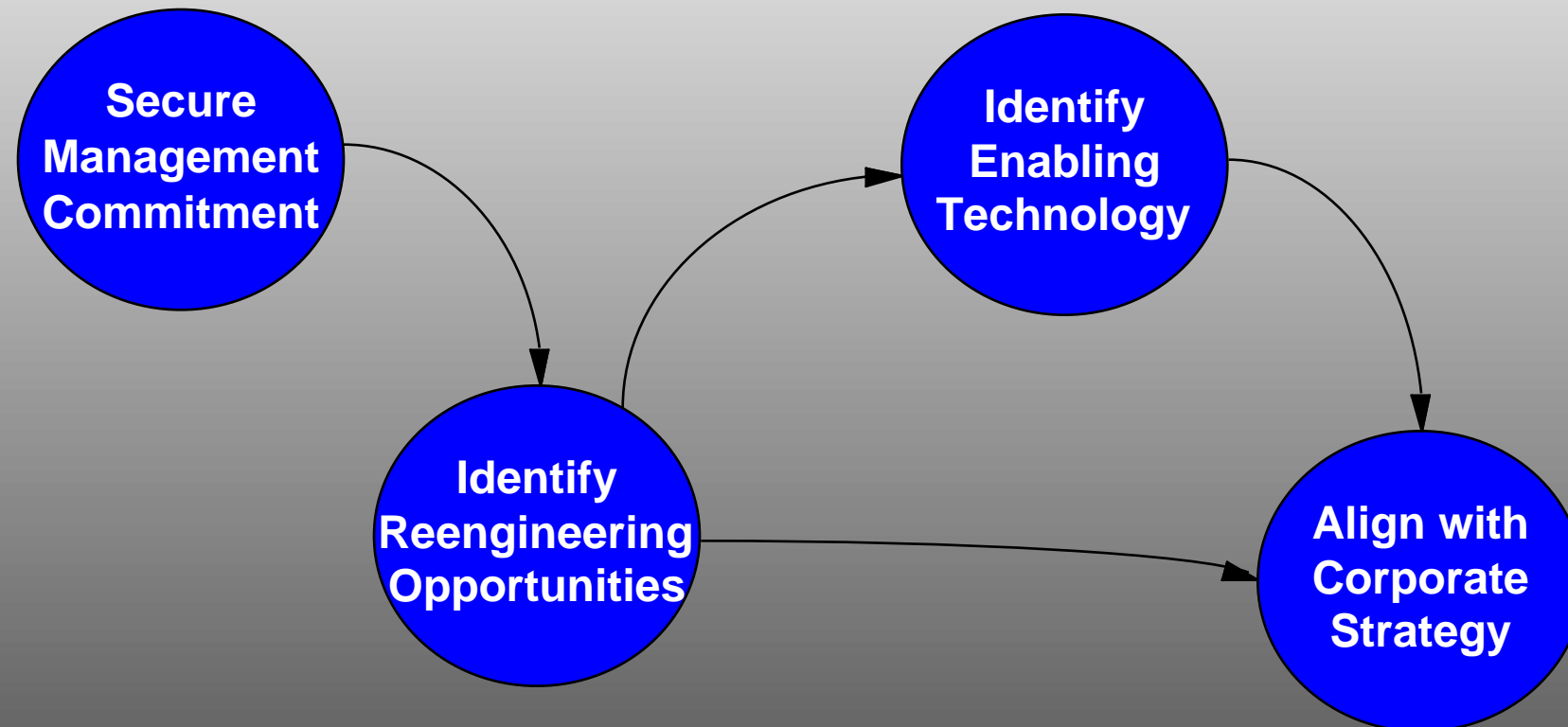
REDWOOD RESEARCH



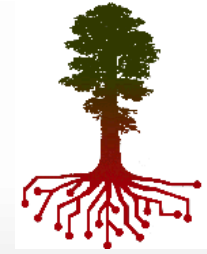
Envision



REDWOOD RESEARCH



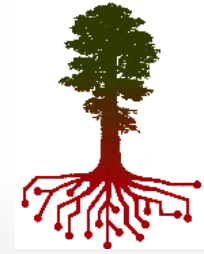
Envision



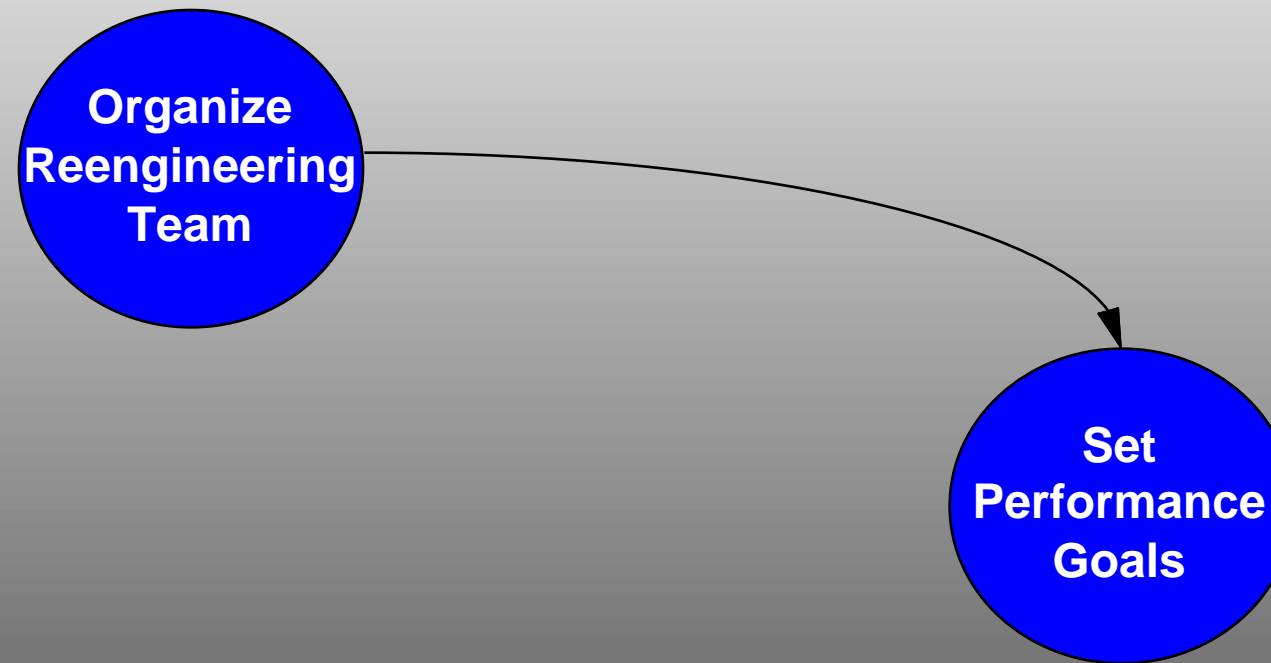
REDWOOD RESEARCH

- Management commitment throughout the entire change process.
- Reengineering opportunities on multiple levels.
- Current technology (OO, C/S)
- Reconsider strategy
 - Adapt reengineering effort to strategy
 - Redefine strategy

Initiate



REDWOOD RESEARCH



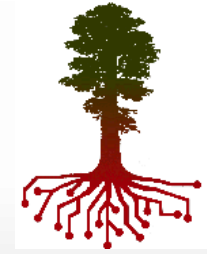
Initiate



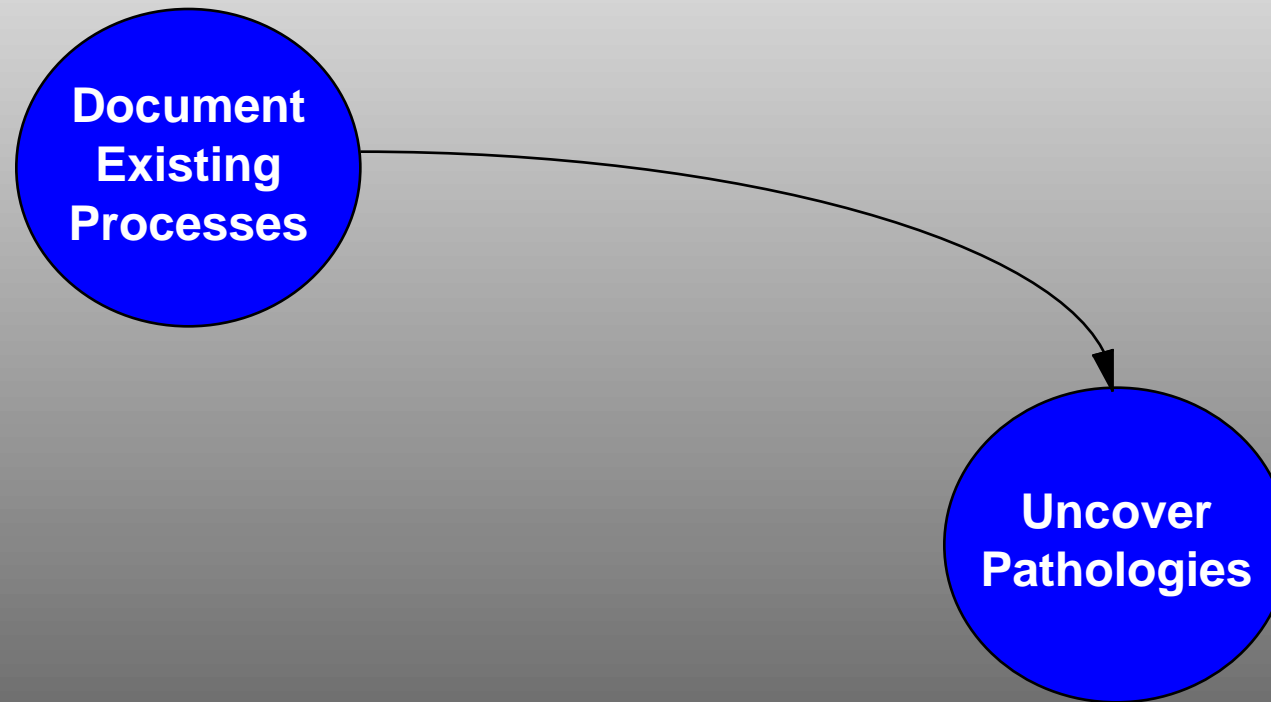
REDWOOD RESEARCH

- Identify involved groups.
- Multiplicity of competence.
- Roles in the team.
- Set visionary goals, but
 - make them current, relevant, achievable.
 - understandable.
- People must commit to goals.

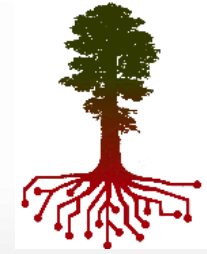
Diagnose



REDWOOD RESEARCH



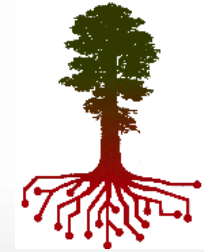
Diagnose



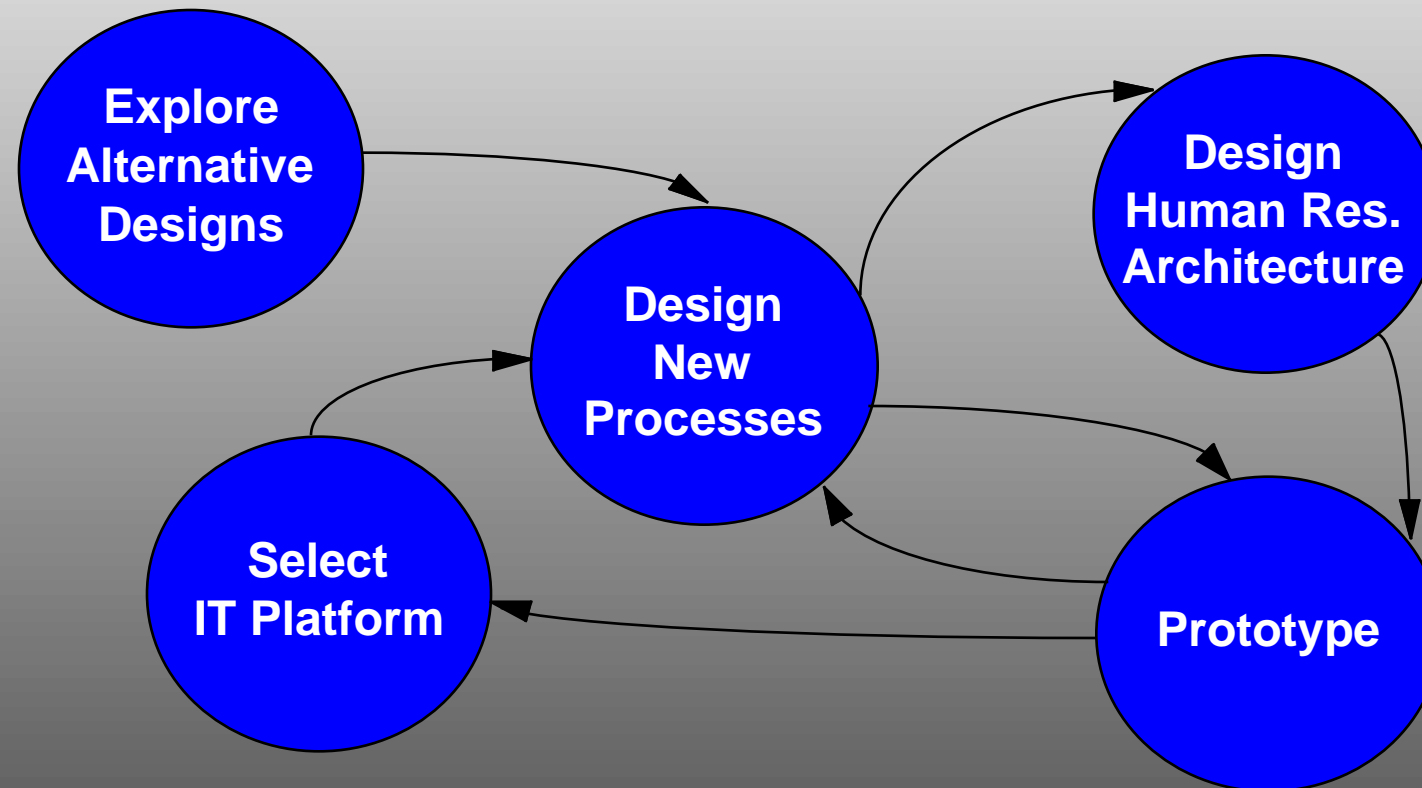
REDWOOD RESEARCH

- Document processes
- Identify owners
- Identify requirements
- In-/Output
- Value-adding capacity
- Reality vs. requirements

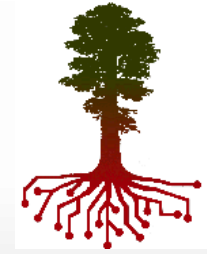
Redesign



REDWOOD RESEARCH



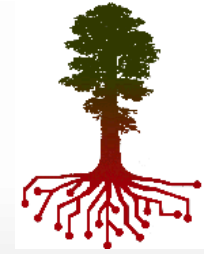
Redesign



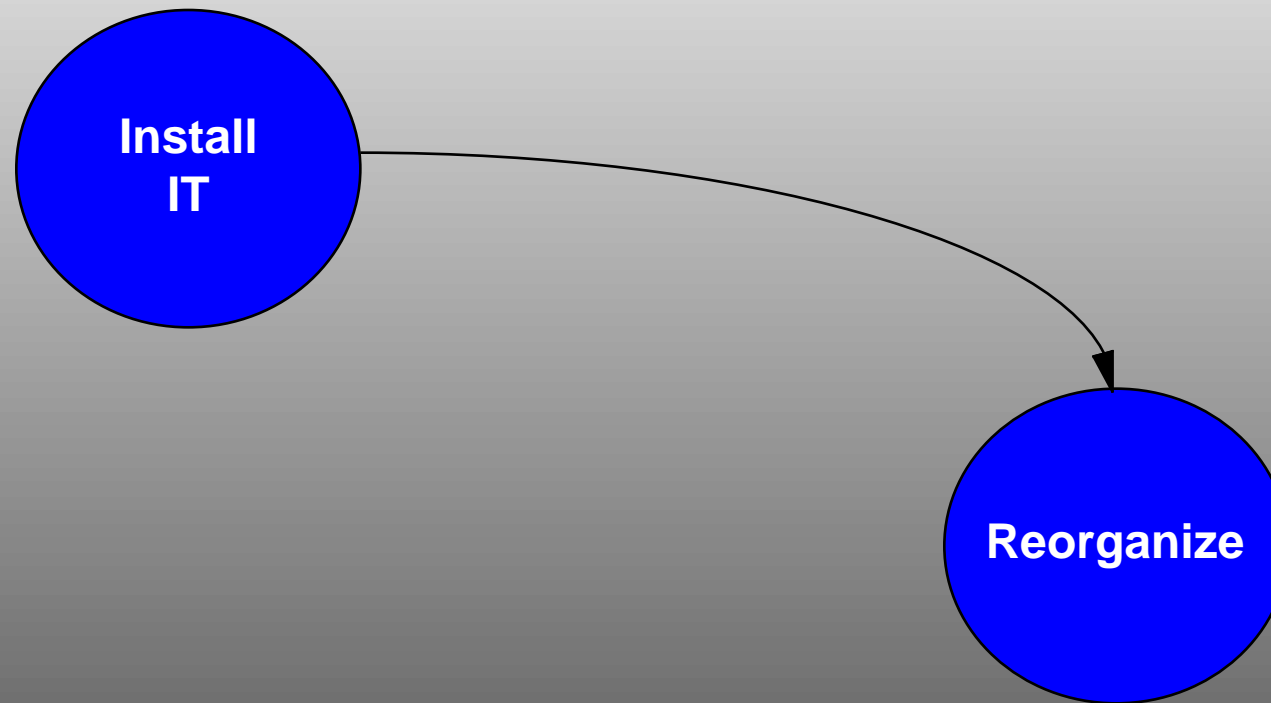
REDWOOD RESEARCH

- Iterative design process
- Identify required skills/training
- Cycle-times, frequency, volume
- Resource allocation
- Tasks, results
- Improvement opportunities
- Relate to enabling technology

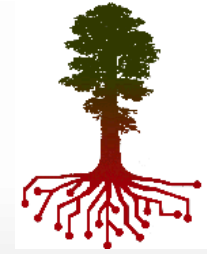
Reconstruct



REDWOOD RESEARCH



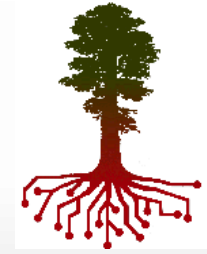
Reconstruct



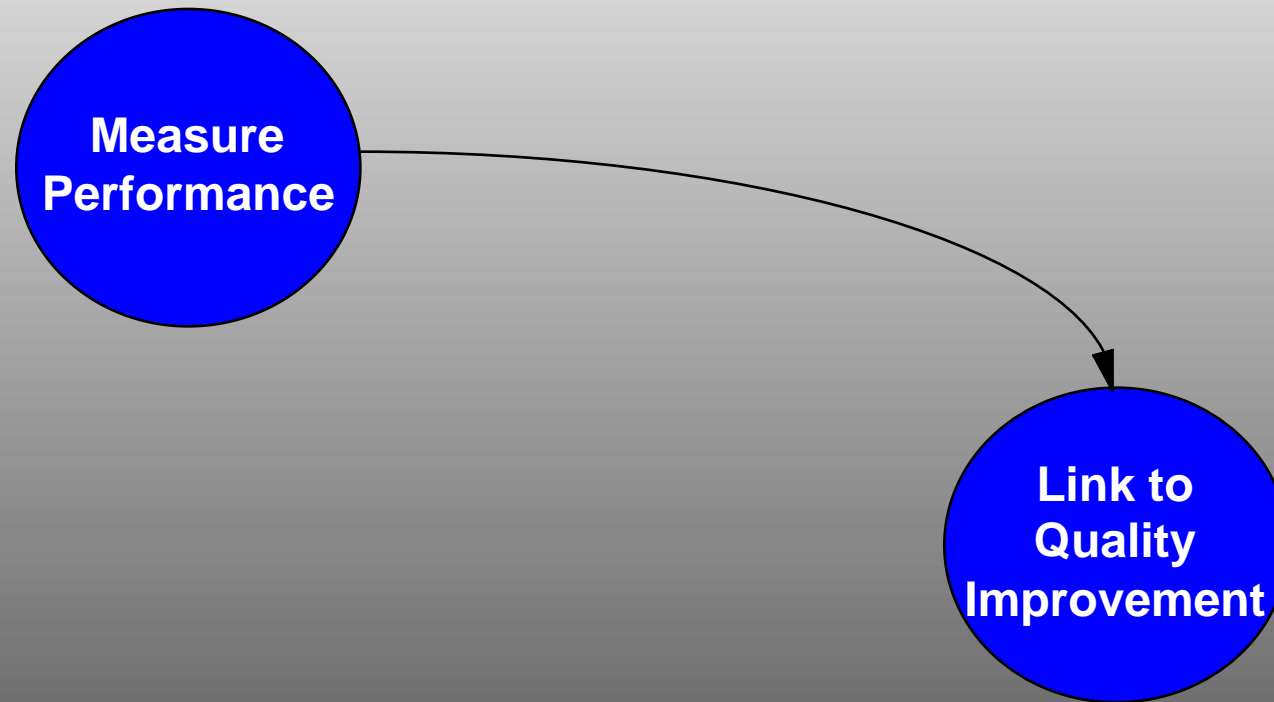
REDWOOD RESEARCH

- Successive IT replacement
- Away from tailor-ware
- Hard- and software
- Re-usability
- Organizational change
- Institute training and development

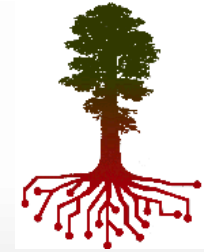
Monitor



REDWOOD RESEARCH



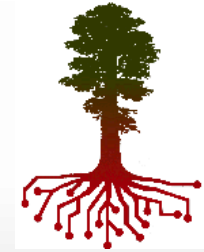
Monitor



REDWOOD RESEARCH

- **Financial factors**
 - Cost, results, etc.
- **Non-financial factors**
 - Productivity
 - Effectiveness
 - Adaptability
- **Links to quality improvement**
 - TQM, CPI, etc.

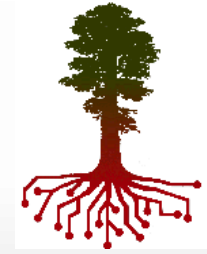
Financial measures



REDWOOD RESEARCH

- Results
 - > Business unit
 - > Product
 - > Market
 - > Customer
- Costs/income
- ROI

What is measured ?



REDWOOD RESEARCH

Productivity

- Reduce waste, use of resources, etc.

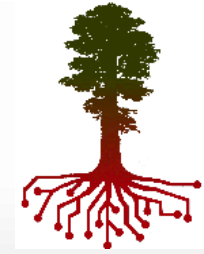
Effectiveness

- Meet requirements

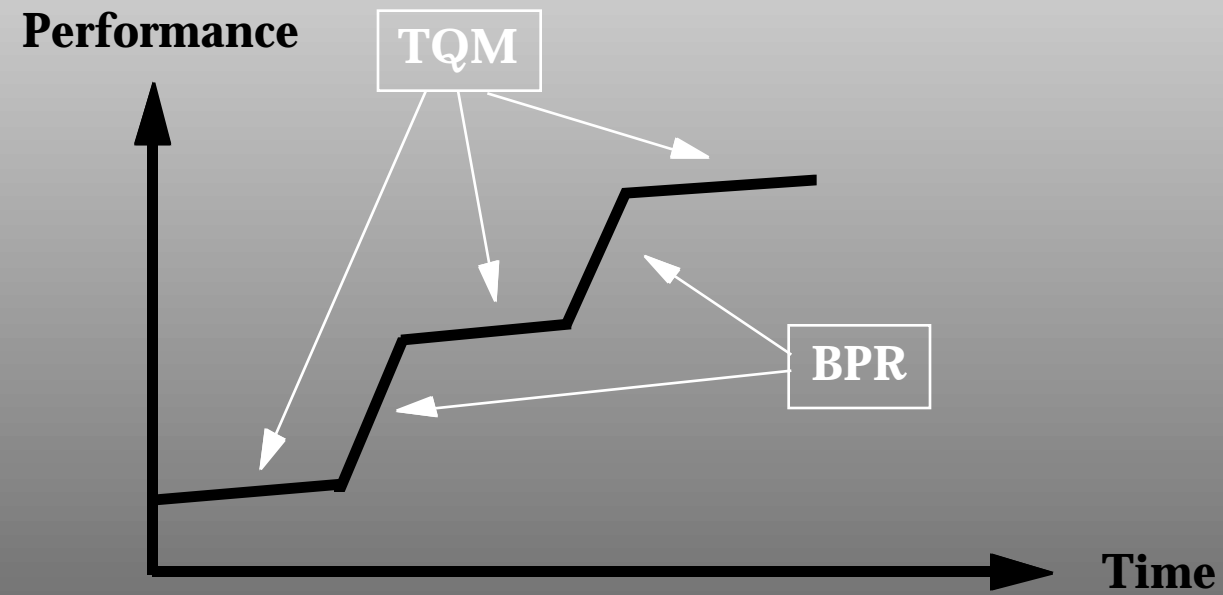
Adaptability

- Environmental dynamics, customizing

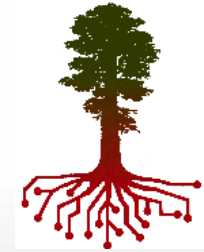
Link to quality improvement



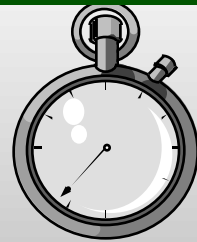
REDWOOD RESEARCH



Example IBM Credit



REDWOOD RESEARCH



Average: 6 days, up to 2 weeks
Actual work: 90 minutes



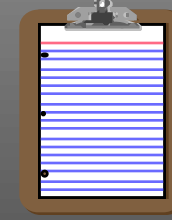
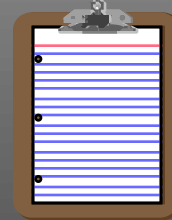
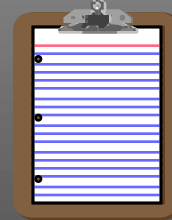
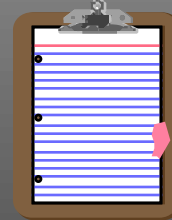
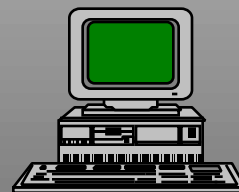
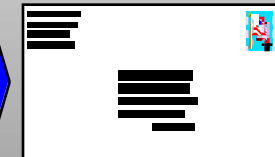
Log request

Check credit-worthiness

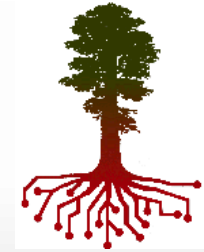
Modify standard loan

Pricing

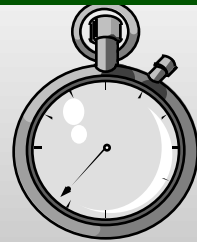
Quote letter



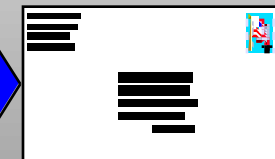
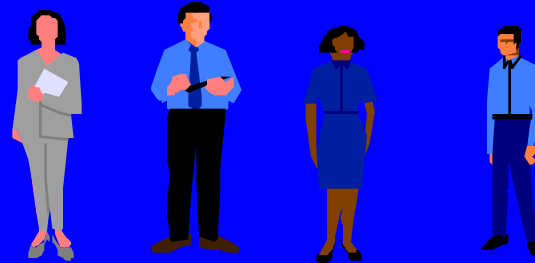
IBM Credit after



REDWOOD RESEARCH

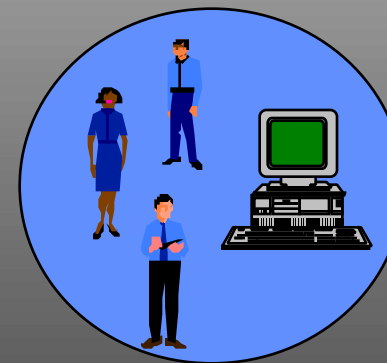


4 hours



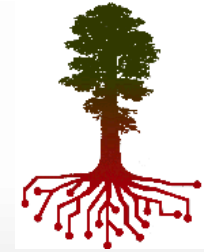
Results:

- Cycle time -90%
- Productivity +10.000%
- Small head-count reduction



Specialist
pool

Bibliography I



REDWOOD RESEARCH

Michael Hammer & James Champy

Reengineering the Corporation: A Manifesto for Business Revolution

Harper Business, 1993

Thomas H. Davenport

Process Innovation: Reengineering Work through IT

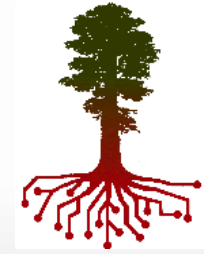
Harvard Business School Press, 1993

M. Hellström

BPR - synsätt, metoder, datorstöd

Triadrapportnr 24/94, SISU

Bibliography II



REDWOOD RESEARCH

H. J. Johansson et.al.

BPR: BreakPoint Strategies for Market Dominance

John Wiley & Sons, 1993

Geary A. Rummler, Alan P. Brache

Improving Performance: How to Manage the White Space ...

Jossey-Bass Publishers, 1990

Michael S. Scott-Morton

The Corporation of the 1990s: IT and Organizational Transformation

Oxford University Press, 1993