Notes from the IT Frontline 1965-2003 w/Post 2003 Addendum

From Punched Cards to PDAs

October 1, 2003; revised October 28, 2009

A Journey



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- IT's capacity for inspiring and absorbing creativity often leads to foolishness.

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- Disciplined approaches to applying information systems are critical to success.
- Information systems are technology, process, tools, skills, experience, and culture.

A Growing Dichotomy

Business drivers shape the business strategy that shapes the business configuration that shapes the IT investment decisions that shape IT developments.

Knowledge of IT developments can lead to new strategies.

General Themes

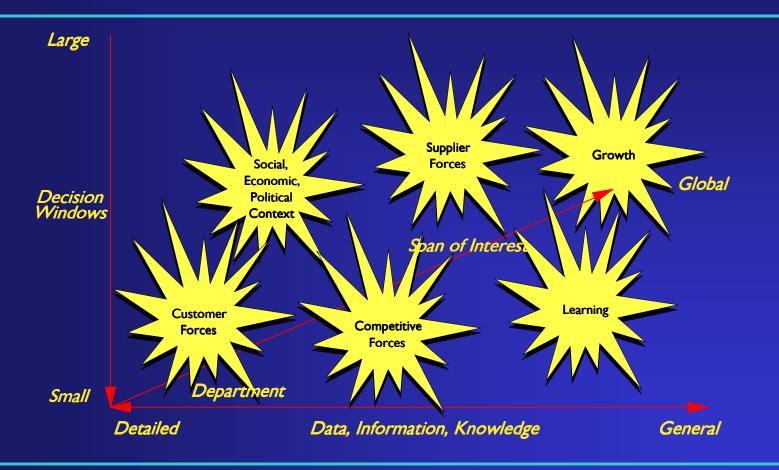
The Spread of Competence and the Rise of Skepticism

The Importance of Business Value

Dynamic Connections

The Business Dimension

Business White Water



Ideas for Running the Business Rapids

- The Adaptive Enterprise
- A Learning Organization
- Real Options
- Highly Reliable Organizations
- A Change in Culture
- Sustainable Organization
- Balanced Scorecard

If these are key ideas that secure the health of the organization and its stakeholders, what are the required roles and responsibilities of information technology as a critical enabler?

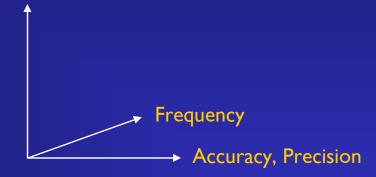
New Principles

Everything important is always visible.

Everything to be managed is always reachable.

So What?

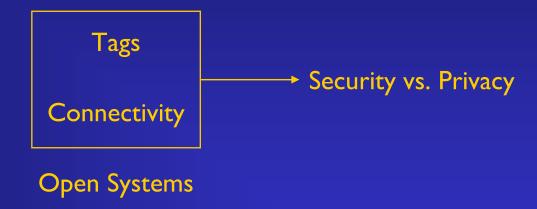
Data, Information, Knowledge



Do these increases lead to business decisions of sufficient value? What sort of decision support systems are required?

The Technology Dimension

Prominent Issues



Implications

Open Systems
Innovation
Products, Tools, Techniques

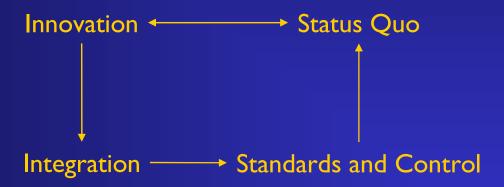
Solutions

Business Value

Implications



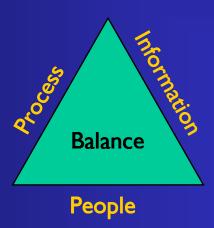
Implications



Synthesis

"Success takes a balance of forces, but technology is not always necessary and is almost never sufficient."

Source: Michael Scott Morton, MIT, *Inventing the Organization of the 21st Century Project*, Co-Director, The MIT Report, December/January 2000, p. 5.



Technology's Levers



Bilateralism



A growing premium on

- Business Expertise
- Leadership
- Strategy
- Project Management
- Relationship Management

Multilateralism

value of business decisions

Business Strategy

IT Strategy

IT Planning

Requirements Gathering

Analysis

Design

Build

Implement

Exploit and Enhance

Identify and involve various parties at times when they can maximize the value of business decisions and minimize the cost of resources.

Cost of resource

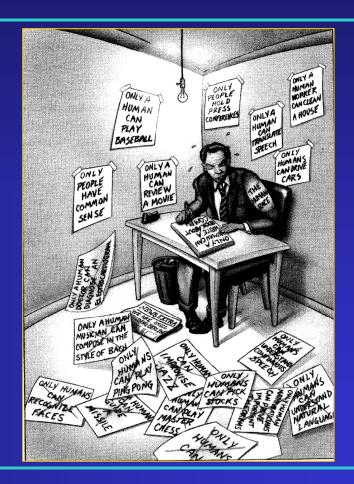
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Changing Emphasis Over Time

Ethics

 Kurzweil, R. (2000). The Age of Spiritual Machines: When Computers Exceed Human Intelligence, Penguin Books.



The primary difference between world class organizations and those viewed as average is that world class firms allocate scarce resources to those things considered most important by their customers rather than dissipating resources on those things viewed by customers to be relatively unimportant.

Source: Douglas M. Lambert, W. Christine Lewis, James R. Stock, *How Shippers Select and Evaluate General Commodities LTL Motor Carriers* (1991)

Post 2003 Observations

High performance, usable and useful, handheld technology with sensors

Where am I?
What's the situation around me?

Always on, always connected, always transmitting

Is this a good thing
has become
maybe this is a good thing

Massive increases in data, information, and knowledge

Growing pressures on discrimination, analysis, and action

The rise of social networks,

Are relationships improving?

Compression of time and space

Less time to collect data, perform analysis, make decisions, and implement actions

Growth in distractions

The issues to be resolved are growing in complexity

"I believe that we're about to witness what may turn out to be the last competitive frontier business will see. It's going to be a war over the one priceless resource. Time. And when it comes, trust may turn out to be the best investment anyone's made."

Jim Kelly, CEO of UPS, Remarks to the Commonwealth Club of San Francisco & Oakland Chamber of Commerce, February 23, 2000