

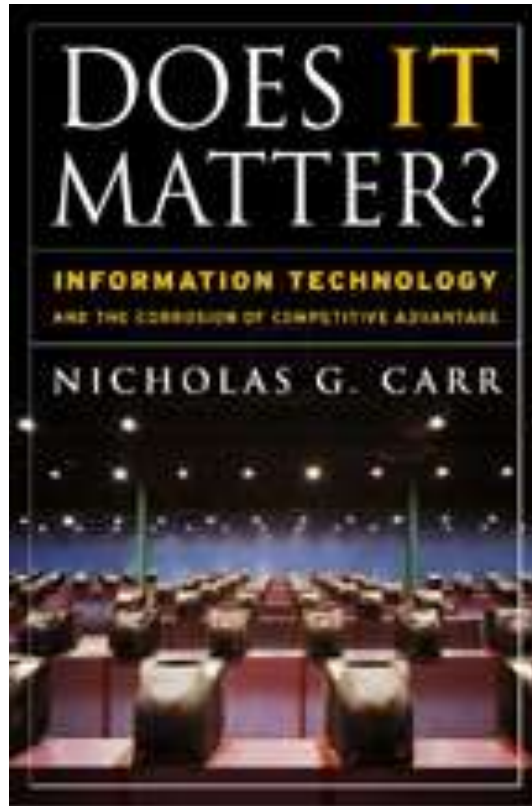
The Future Of Technology: Have We Reached The End?

Bernardo Nicoletti

CIO Strategies Middle East 2010

May 12°, 2010

Are Our Ceo's Thinking This?



Survey Results: The VoC 2011*

Creating new products or services (innovation)	1
Expanding into new markets or geographies	2
Attracting and retaining new customers	3
Creating new capabilities for competitive advantage	4
Improving business processes	5
Targeting customers and markets more effectively	6
Acquiring new companies and capabilities (M&A etc)	7
Improving enterprise workforce effectiveness	8
Expanding current customer relationships	9
Exploiting new customer channels	10

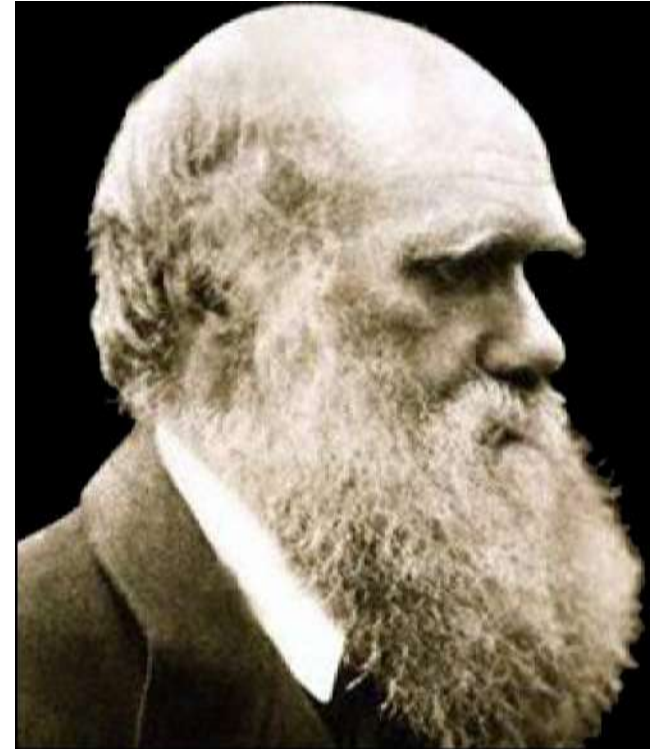
* Gartner, 2010

Evolve or Die

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change."

Charles Darwin

Charles



Solution Agility

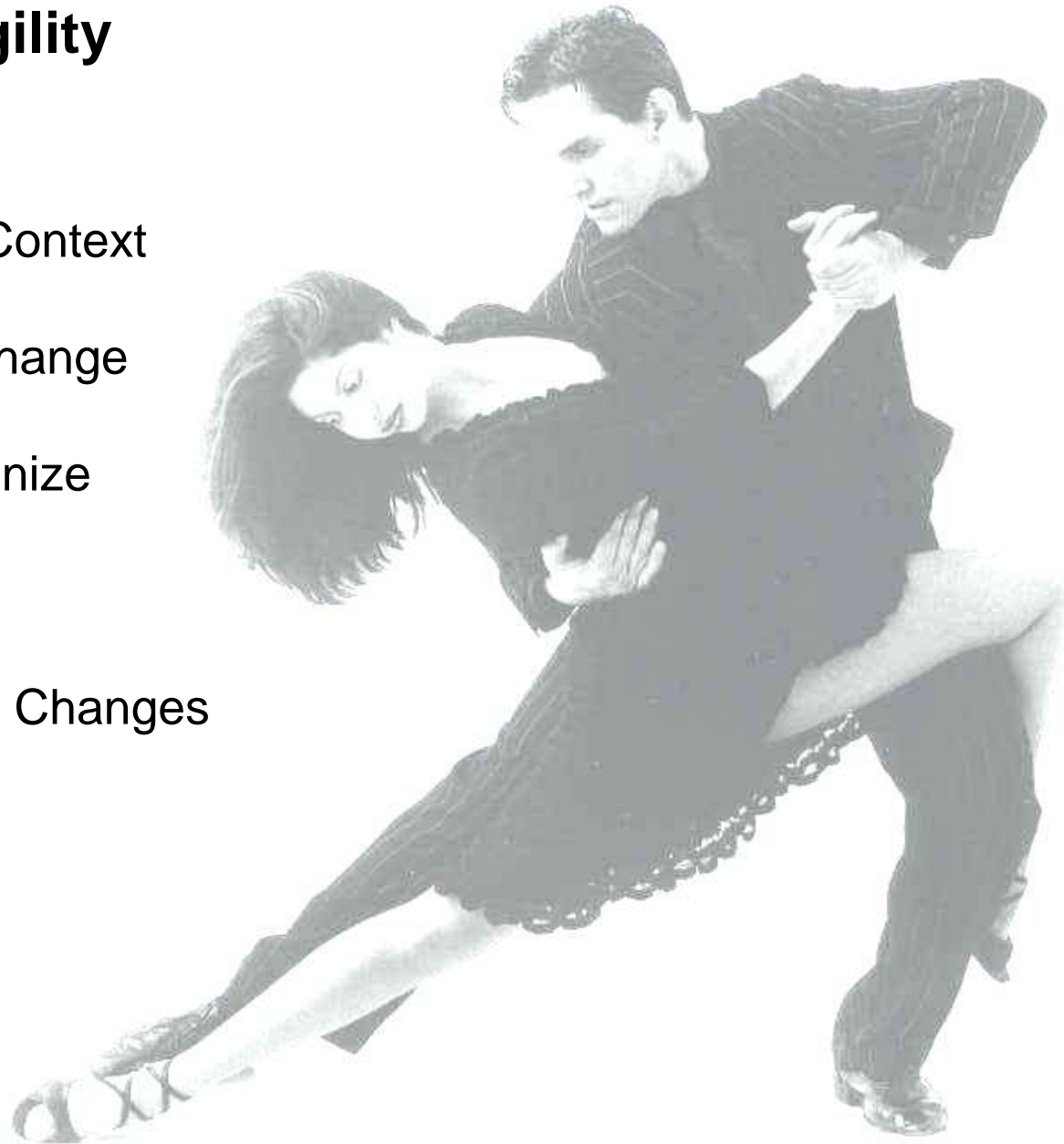
Evaluate the Context

Respond to Change

Try to Commonize

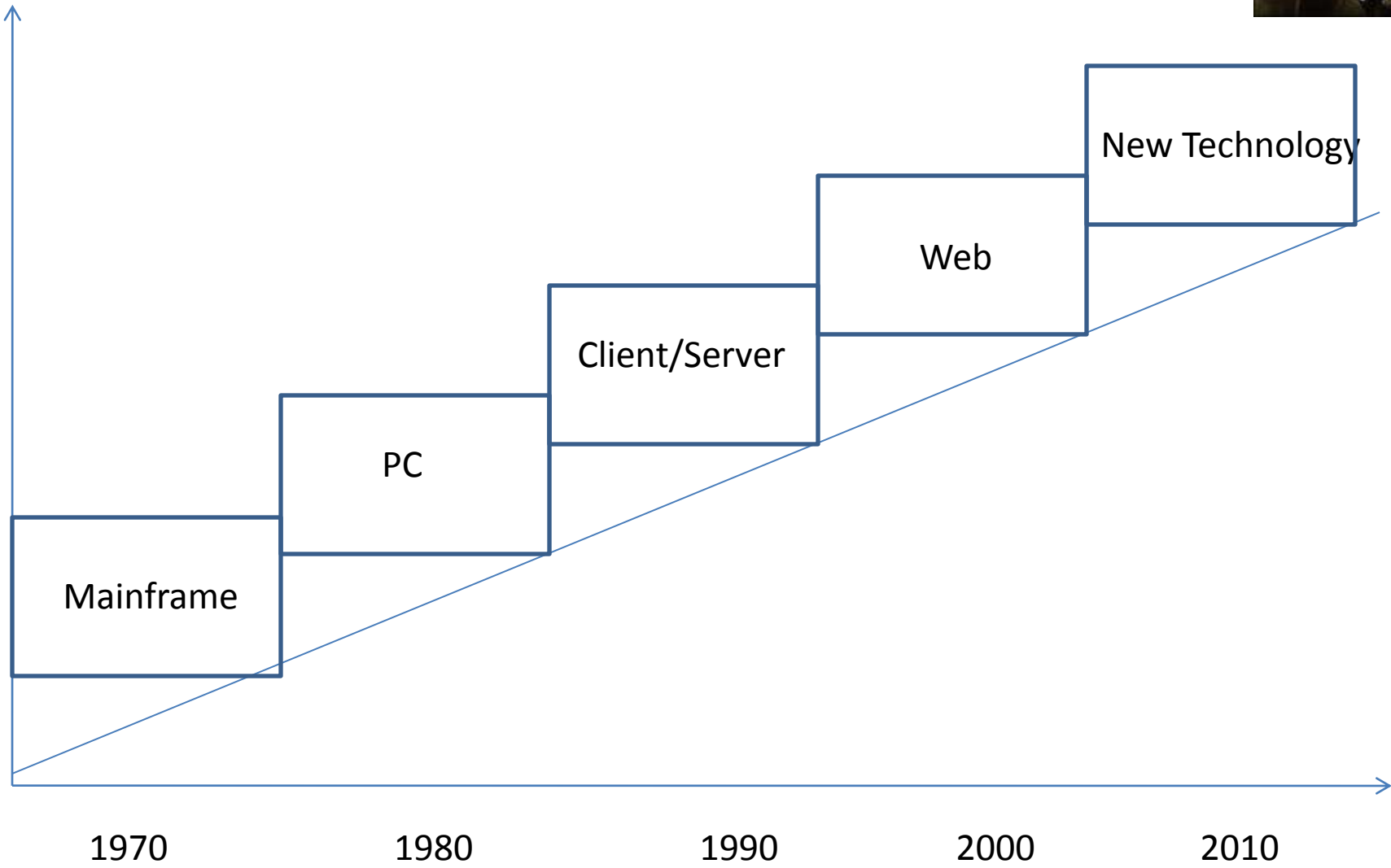
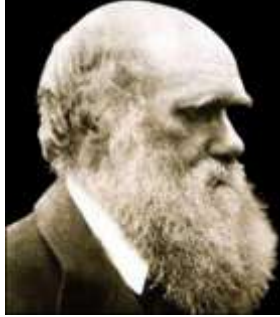
Customize

Enable Future Changes



“When things change you must be ready to change with them”, Paulson

New Technology is a Must

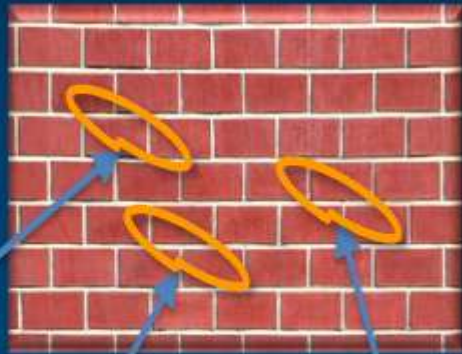


SOA Carries The Day

Yesterday Today



Application



Business Function 1

Business Function 2

Business Function 3



Services Custom Templates



Business Process, Information, Collaboration

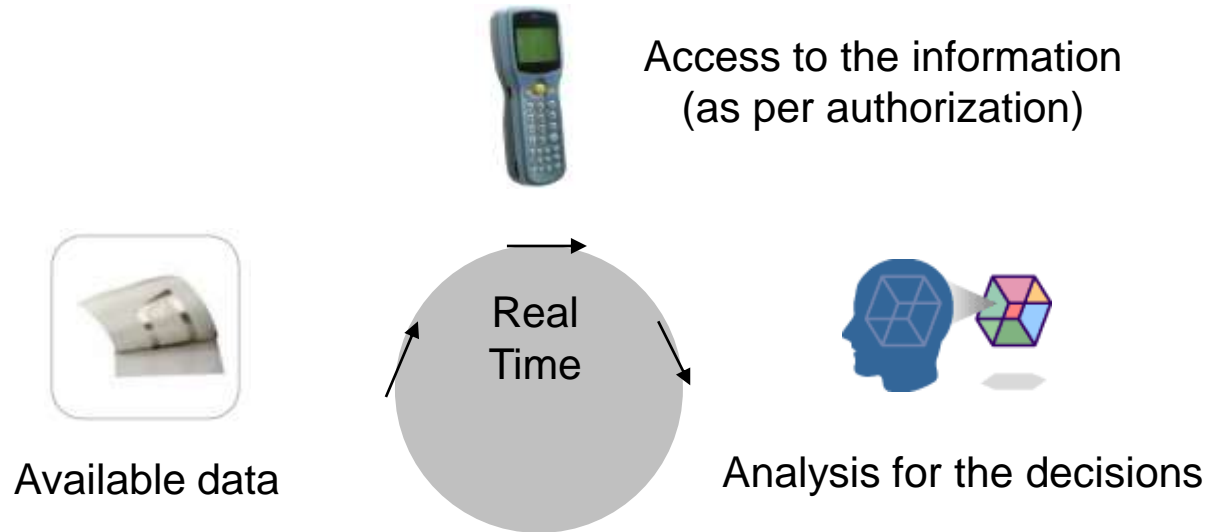
Things Get Cloudy



Migrate Licenses?
Processes in the Cloud?

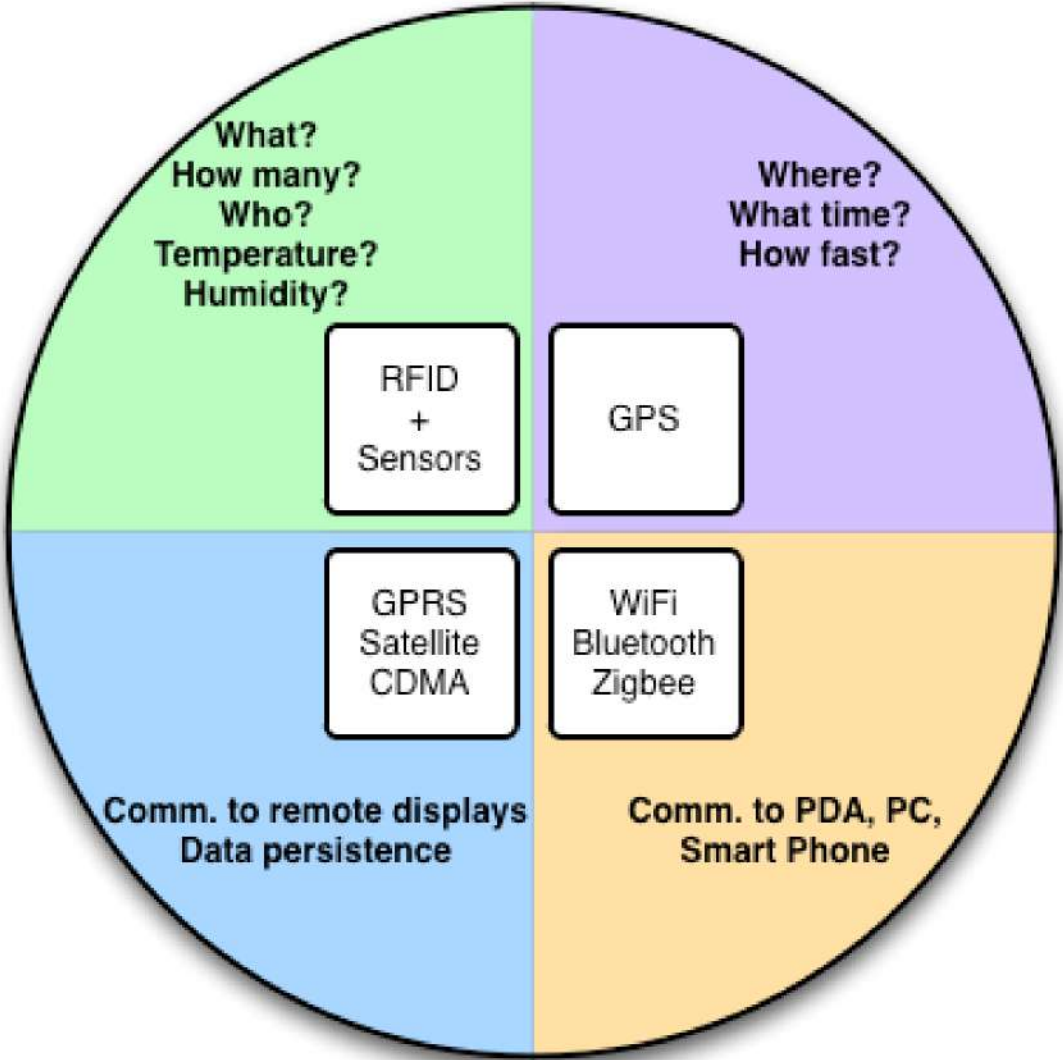
Is It Risk or Reward?
Can Your Vendor Help?
Loss Leaders?
Collaboration?

Data Have a Value



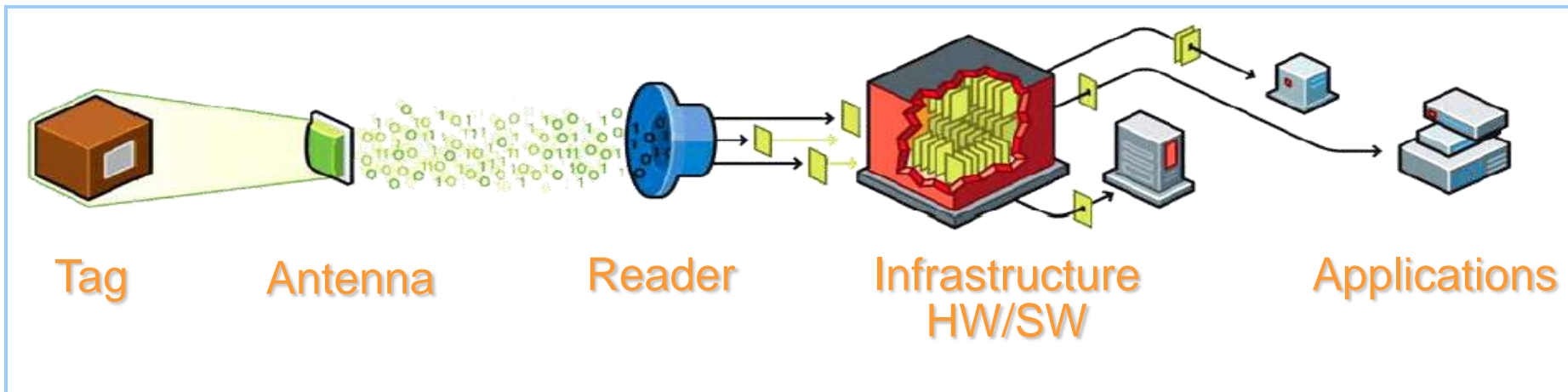
- The ROI of an application increases with its ability to manage data:
- Data should be reliable and available real-time
 - Data should be captured near the event and in connection with operations

Possible Data Sensors



The RFID Technologies

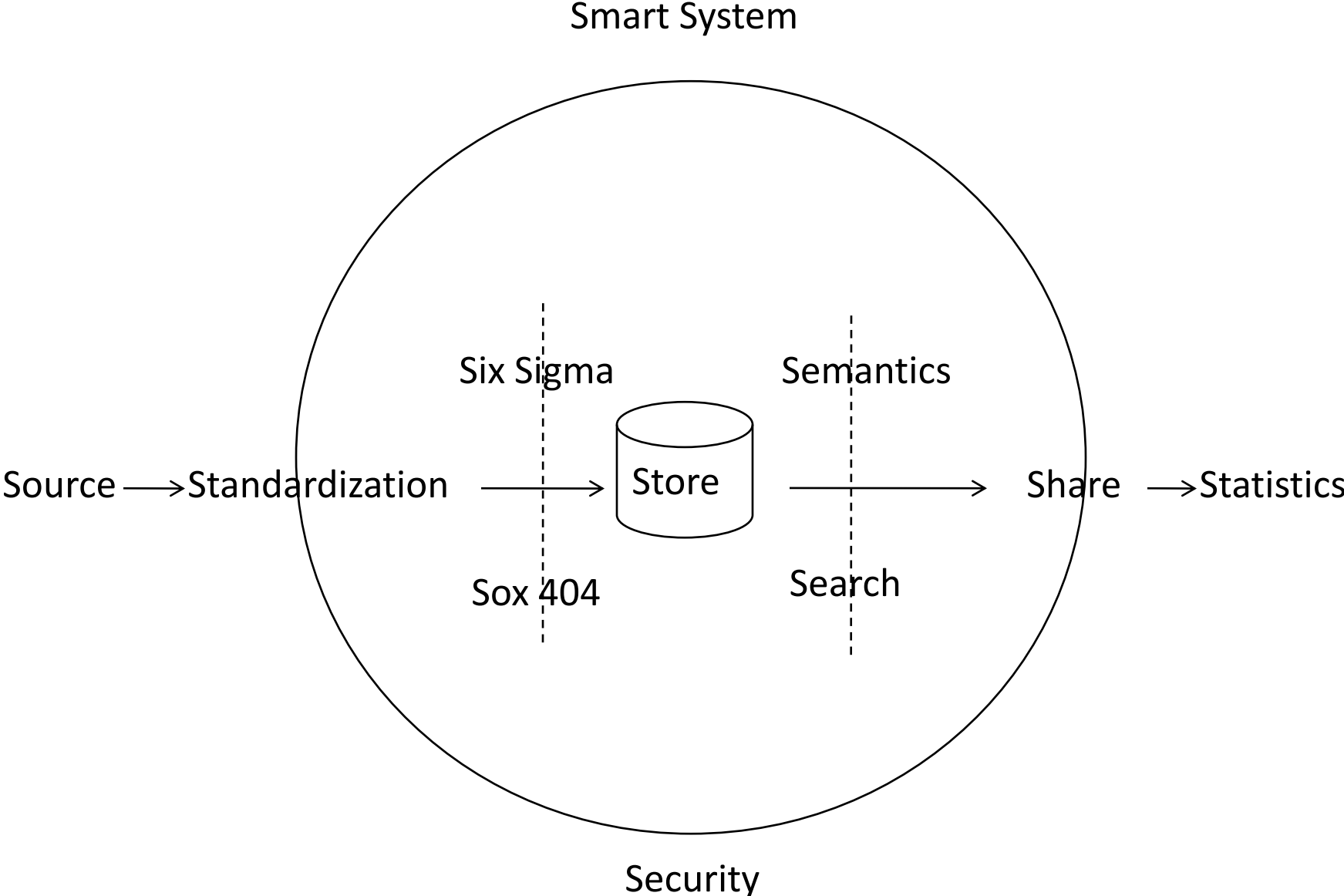
RFID (Radio Frequency Identification device) is a technology which allows one, through the use of transponders (tag), to get, store (in a limited amount) and transmit information (univocal identity, properties, status etc.) relative to an object (or indeed to a person) which hosts the transponder.



Unified Knowledge Management

- Until now ICT has concentrated in managing structured data. They represent only roughly 20-30% of all the information of the organizations.
- The unstructured information (docs, drawings, graphs, pdf, images ecc.) are much more interesting but not easy to manage.
- Most of the tangible knowledge of many companies are contained in these contents.
- It is important to define a process for managing this contents. This is what we call Unified Knowledge Management.

Unified Knowledge Management: The Model of the 10+1 S’*



* Copyright B. Nicoletti, 2010

Web 2.0 Captures a Theme - Community

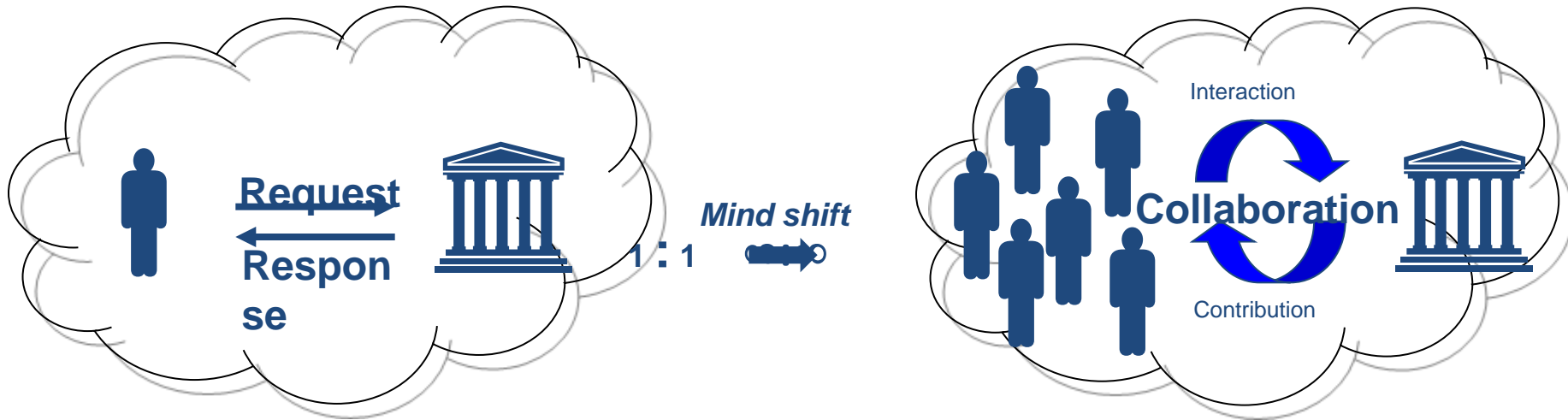
Web 1.0

- Business connecting people to business
- Drive to efficiencies; new channel
- Support web activity



Web 2.0

- People connecting people to people
- Business connecting people to people
- Drive activity by adding value
- Drive value by adding activity



Web 2.0 is
Community; Engagement; Enrichment

Web 2.0 is not
Technology; Specifications; An Industry

The Web 2.0 5 C's

Tools Improve

Wikis, Commenting, Shared Workspaces	- Collaboration	<input type="radio"/>
Blogs, Podcasts, Videocasts, Peer to Peer	- Communication	<input type="radio"/>
Previsioni e informazioni di Mercato	- Collective Estimation	<input type="radio"/>
Tagging, Social Bookmarking/Filtering, User Tracking, Rating, RSS ⁽¹⁾	- Creation of Metadata	<input type="radio"/>
Social Networking, Network Mapping	- Cooperation	<input type="radio"/>

More
Collaboration
improves results
and productivity



⁽¹⁾Really Simple Syndications

The Future is of the Internet of Things (M2M): An example: Remote and Predictive Maintenance

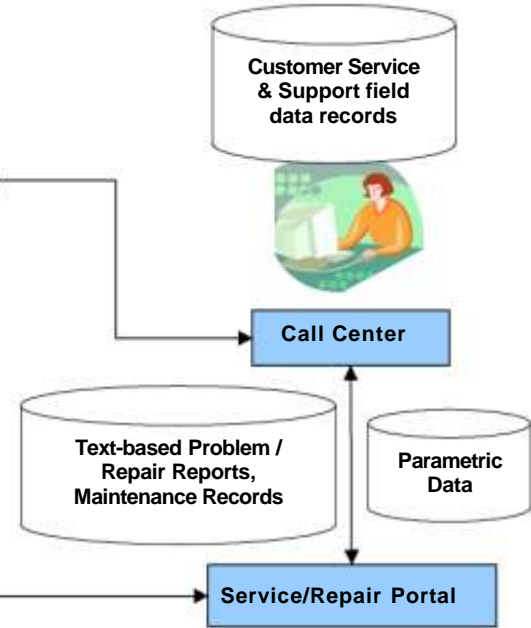
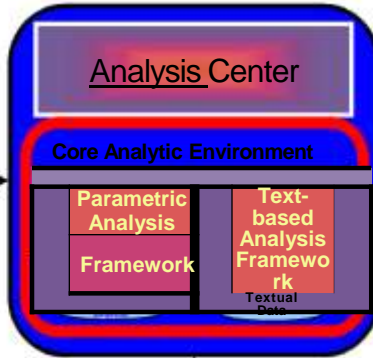
PAC Provides Development Frameworks, Tools, and Portals
 Data Visualization Tools
 Semantic and Case-Based Reasoning
 Data Management, Analysis and Correlation
 Feature (MetaData) Extraction



Service Engineer
 Design
 EgrQuality Engineer

Engineering Portals

Create Diagnostics and Prognostics Methods, Techniques, Algorithms, and on demand Services using:
 Rules Engine and Authoring Tools
 Integrated Development Environments

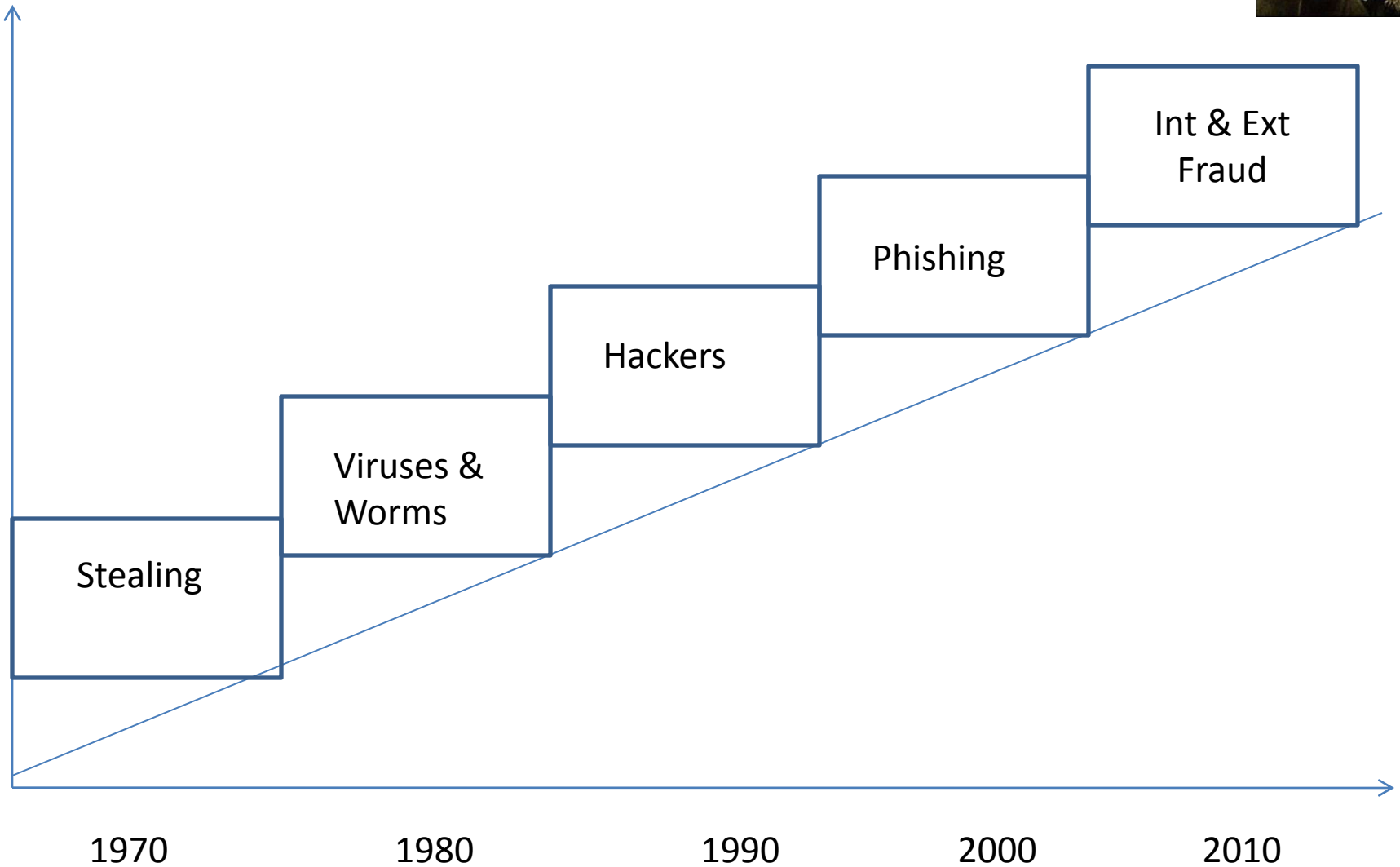
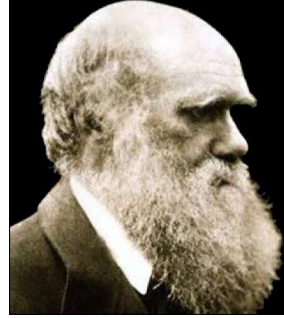


Local Wireless (802.11, Bluetooth)

Wired Interface



Security is more and more a Challenge



More Threats on the Horizons

Business

- Globally distributed and contracted workforce: Information can be accessed in real-time
- Integrated partner networks: Reputation is shared, outside direct control
- Compliance mandates are many, increasing, complex
- Petabytes of information
- Managing, finding and protecting unstructured data
- Hackers and Criminal attacks (not just for the sake of it)
- Data Privacy breaches

Technology

- Server/Storage virtualization
- Desktop shared directory and operations.
- Appliances that are really computers.
- Information and application sit in the Cloud computing
- New viruses: Conficker .. A, B, C, D .. ?
- Password crackers embedded in virus/worms
- New developments: SOA and Web 2.0
- Rogue Software (Pirates, P2P, etc.)
- Faster attacks (24h after warning – getting less)

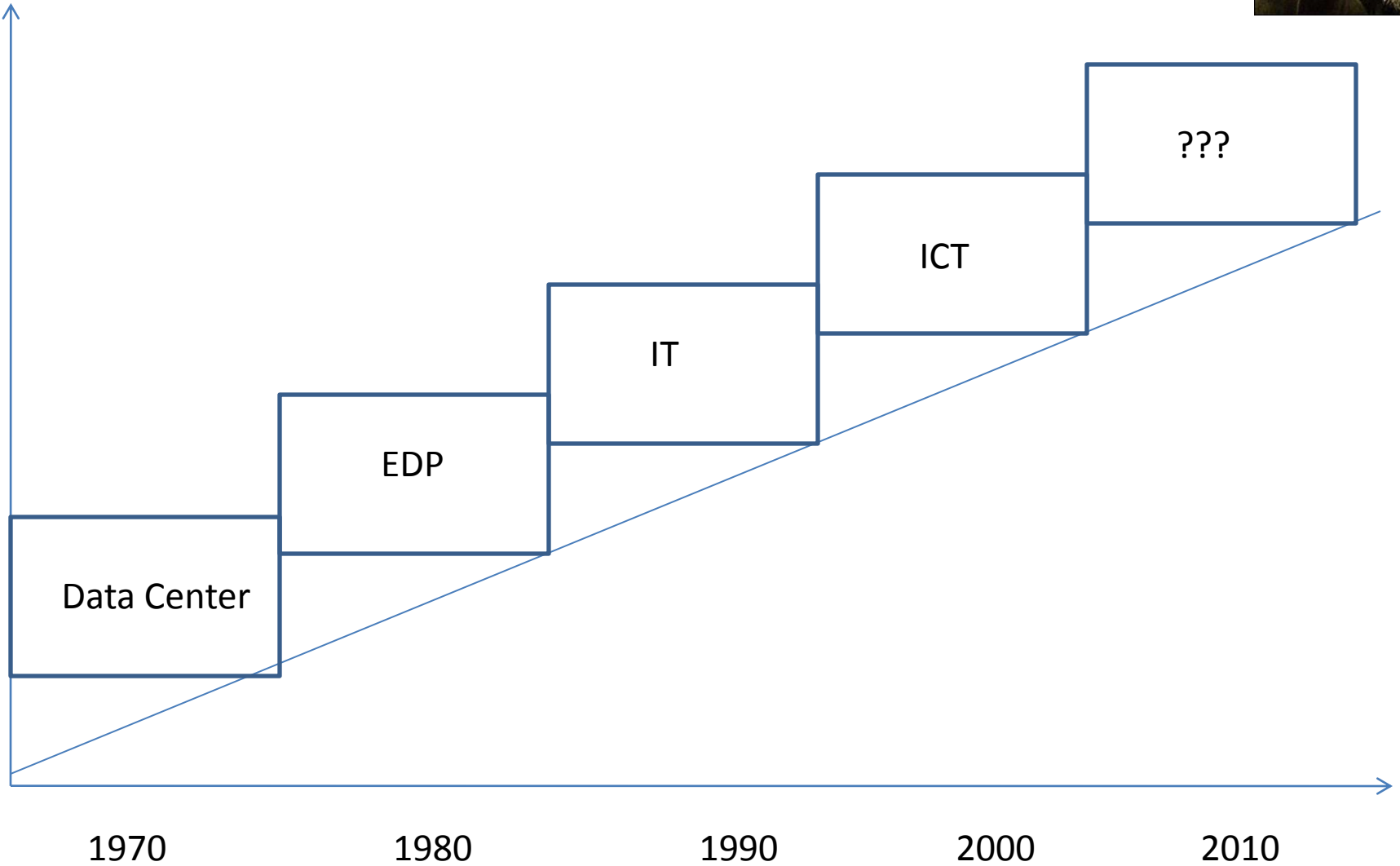
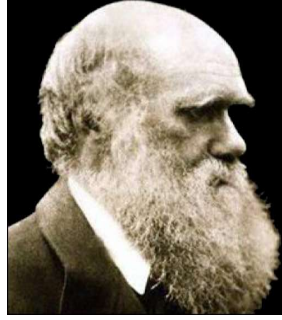


Technology and Technology Convergence Make Risk Higher

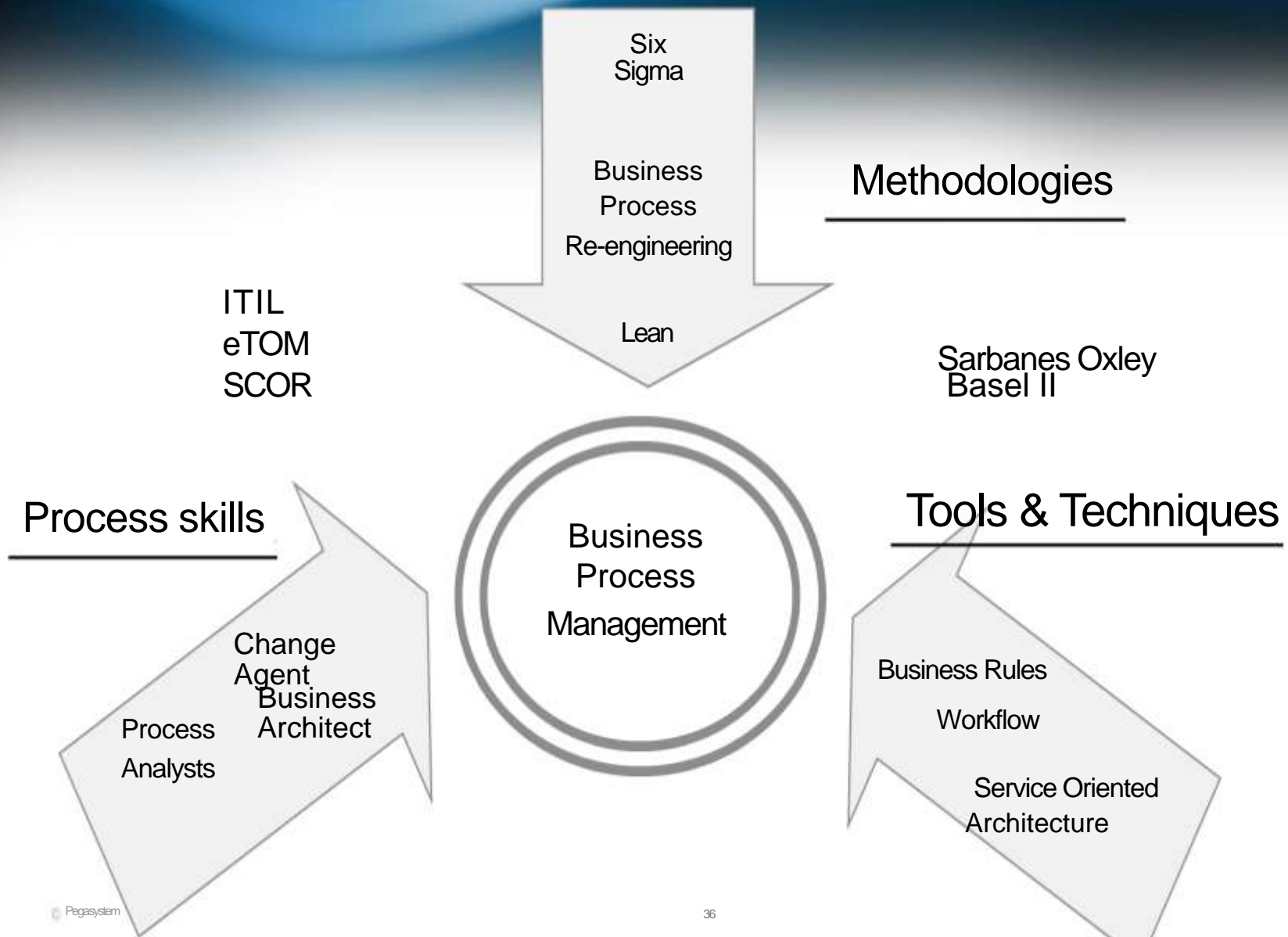


- On the Internet EVERYONE lives next door!
- Low-cost high-speed portable data storage
- 8GB USB 2.0 Flash Drive with Final Price: \$9.99
- Vulnerabilities are at a high plateau
- Secure Web presence has become the Achilles heel of corporate IT security
- Successful exploitation typically leads to the installation of information-stealing Trojans
- China hosts the most malicious Web sites, surpassing the US for the first time in 2008

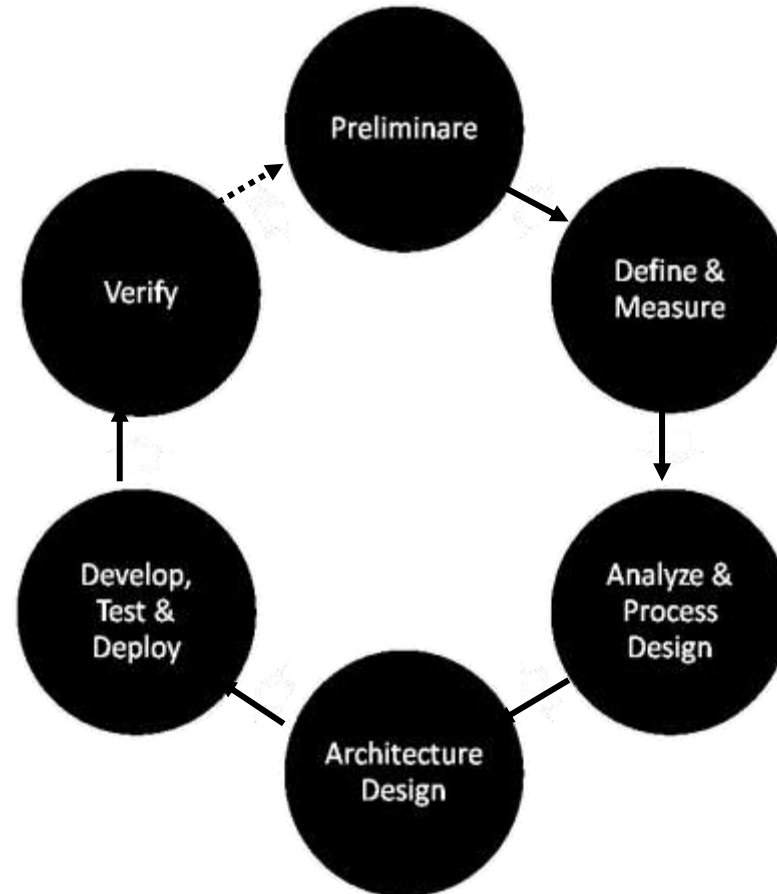
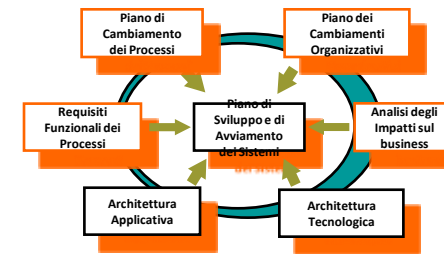
IT Evolution



Firms attack processes from different angles



The Lean & Digitize Methodology*



“... information systems have to do more than manage huge amount of financial data...” Bill Gates

Lean & Digitize (L&D)*

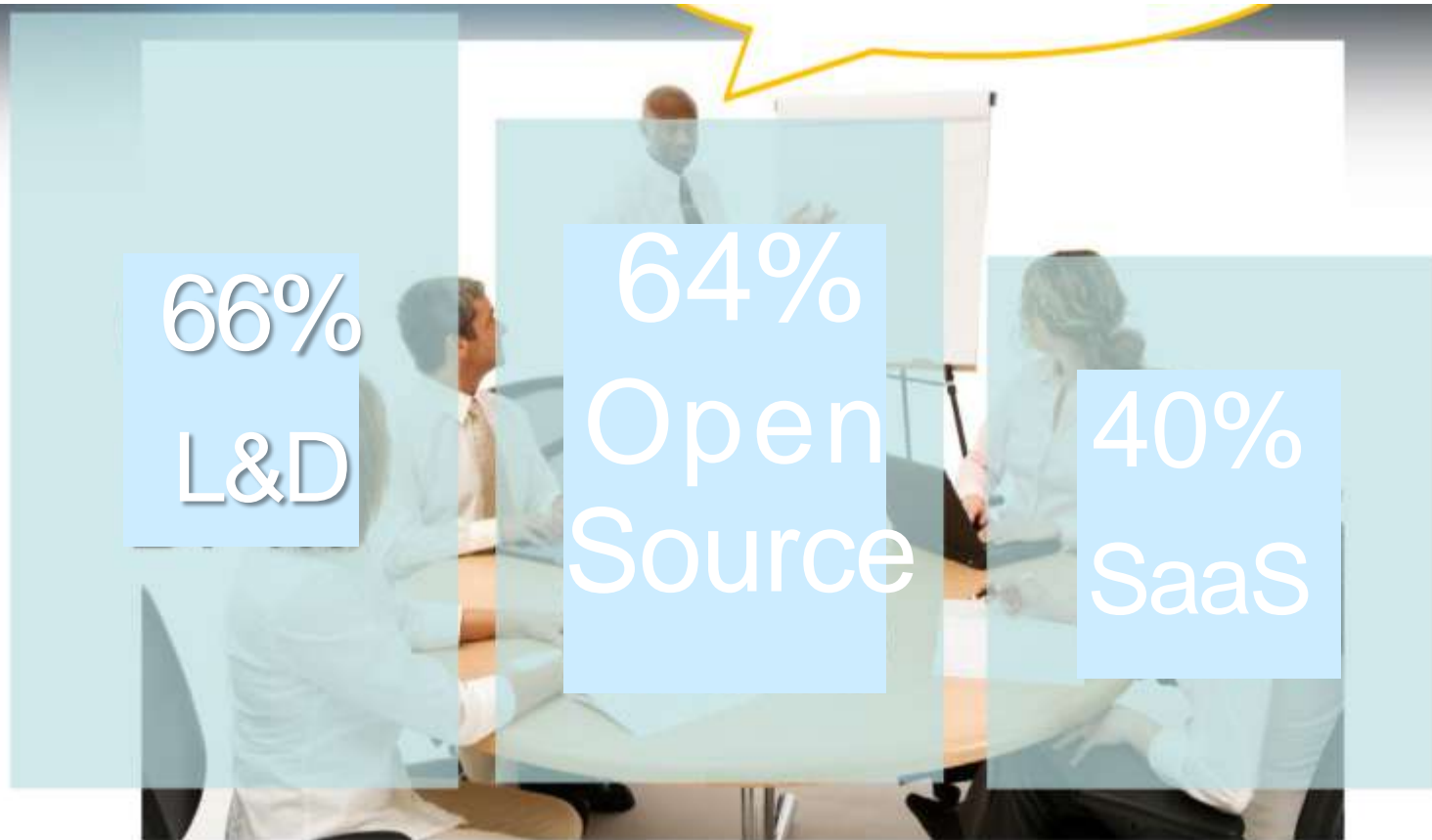
- L&D focuses on and integrated and continuous improvement of cross-functional end-to-end processes
- Process improvement methodology and automation essential ingredients for success
- Require a specific set of process skills and talents in order to be truly effective
- BPM suites and other technology can greatly accelerate and institutionalize L&D

L&D is a proven methodology to promote business effectiveness and efficiency by bridging the gap between business objectives and IT applications

* Copyright B. Nicoletti, 2010



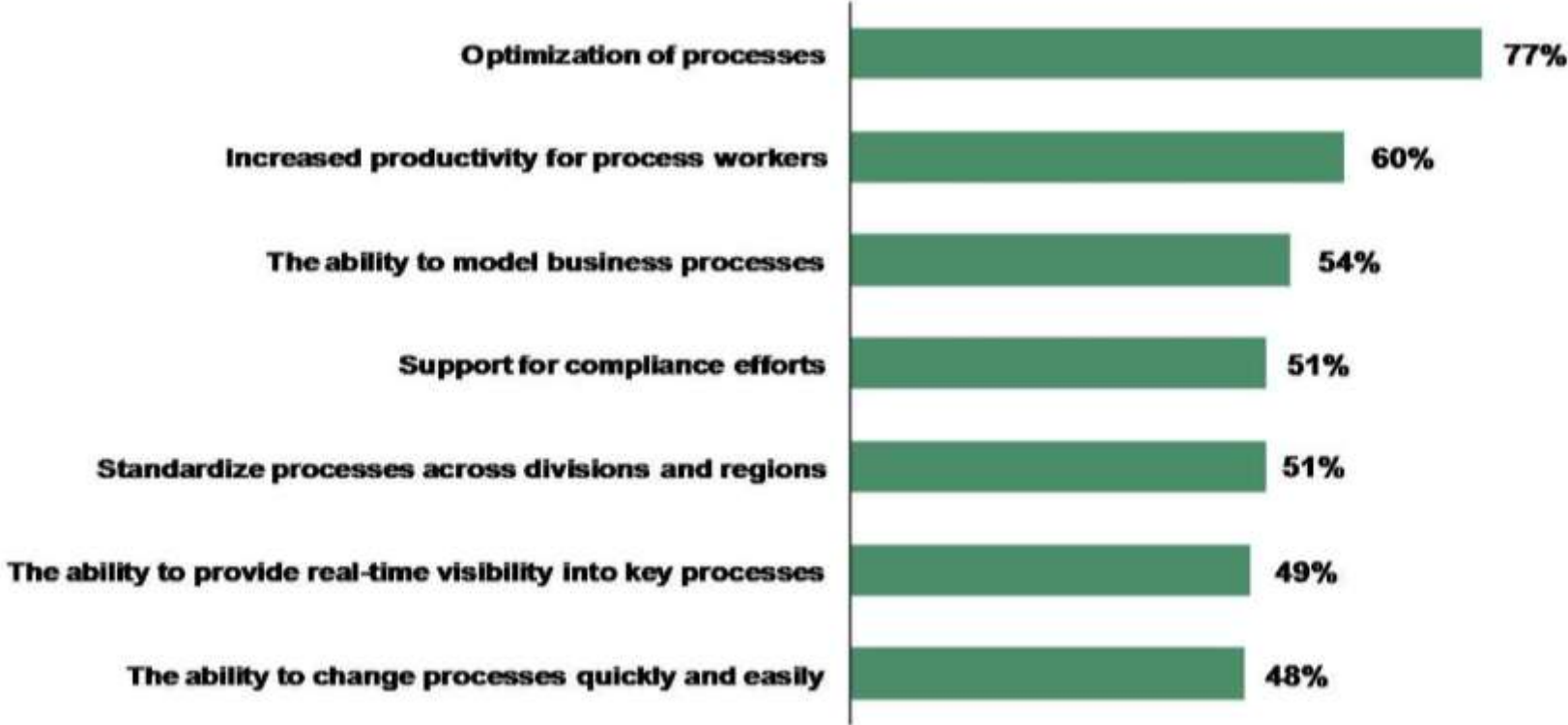
L&D helps improve profitability



Survey of 2227 SMB and Enterprise IT decision makers

Diverse factors trigger firms to investigate BMP potential

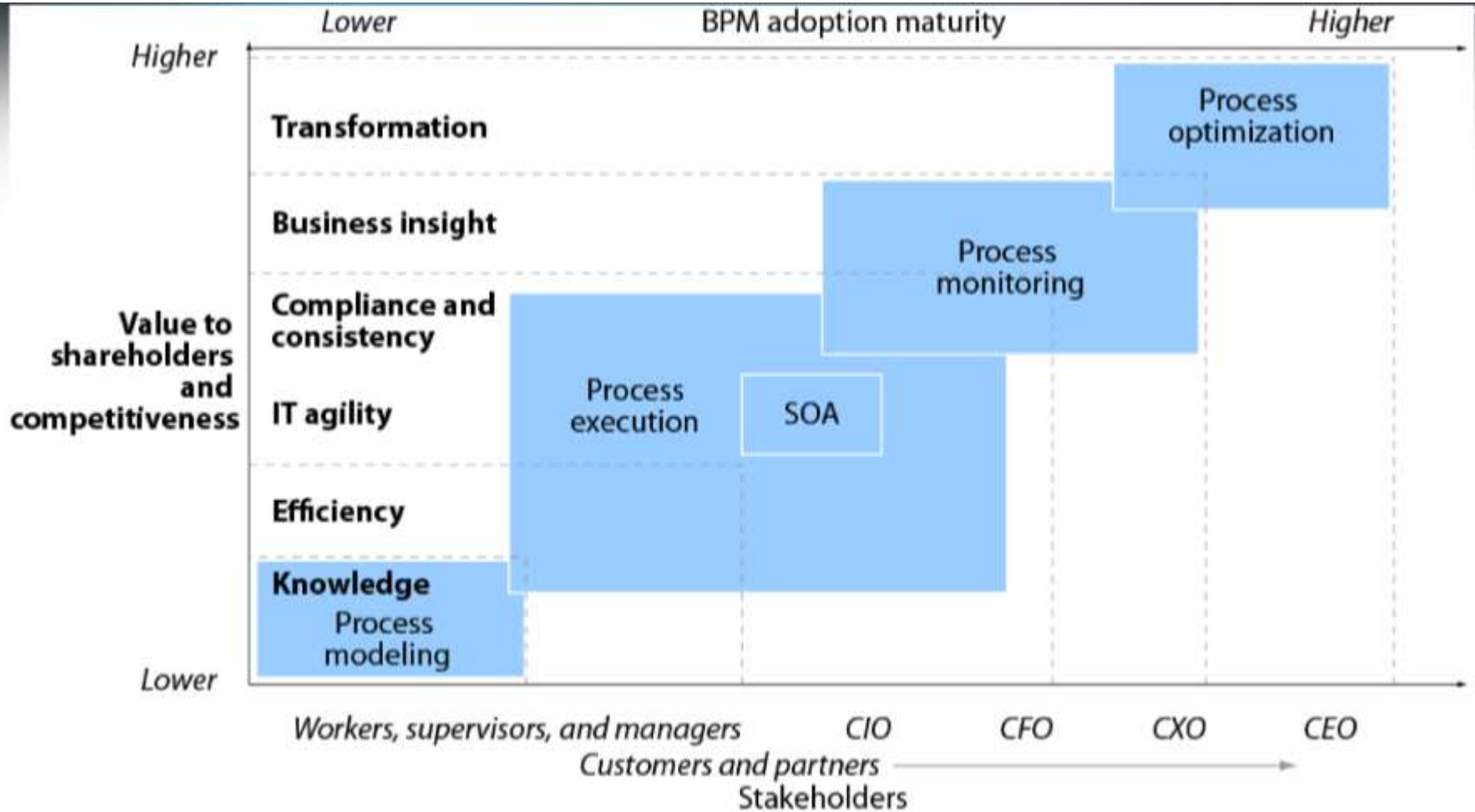
Which of the following have been major drivers for your BPM initiative?



Survey of 227 Enterprise and SMB IT Decision Makers

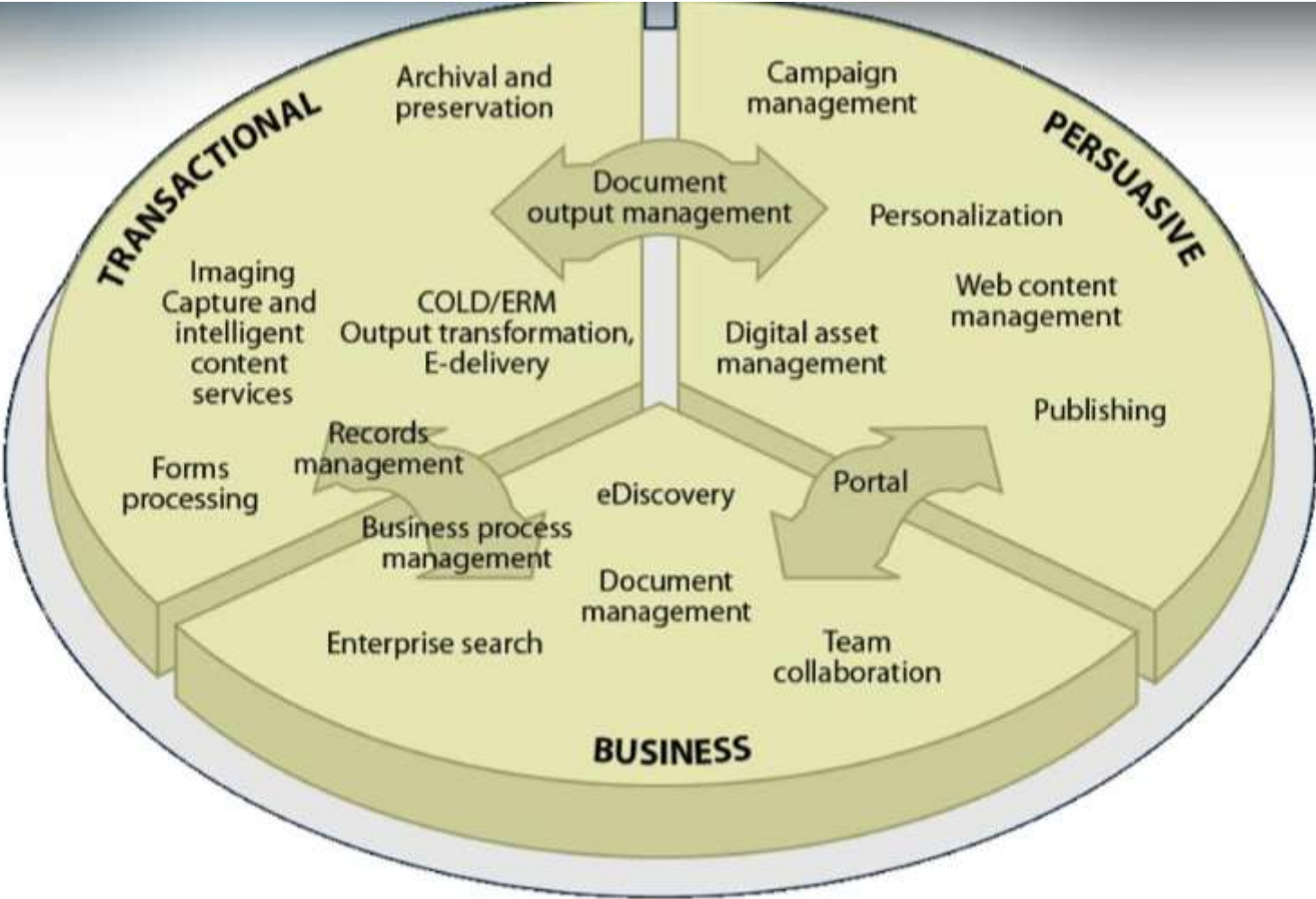
Enterprise And SMB Software Survey, North America And Europe, Q4 2009

L&D has Many Facets

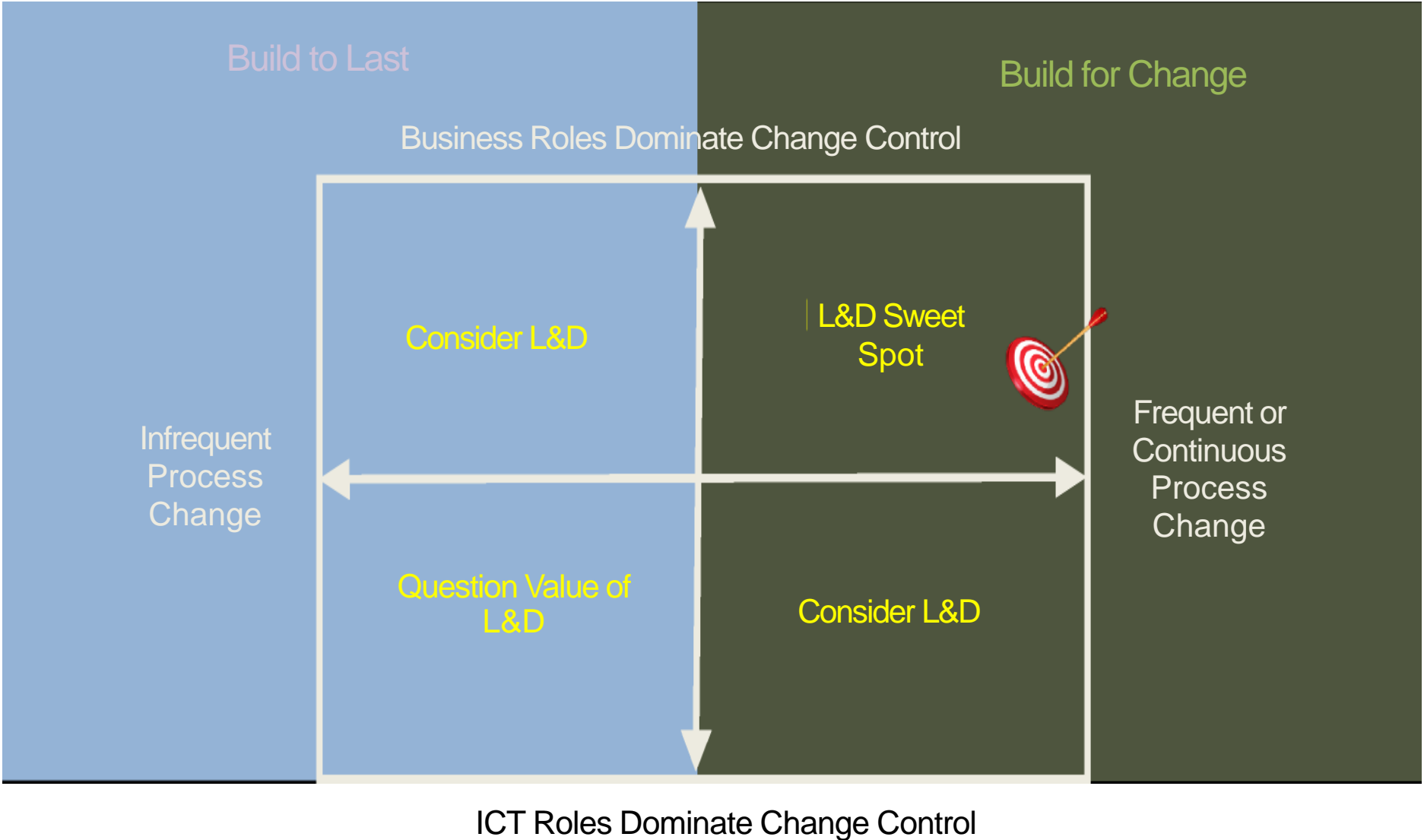


October 2008 "Drive BPM Initiatives To Higher Business Value"

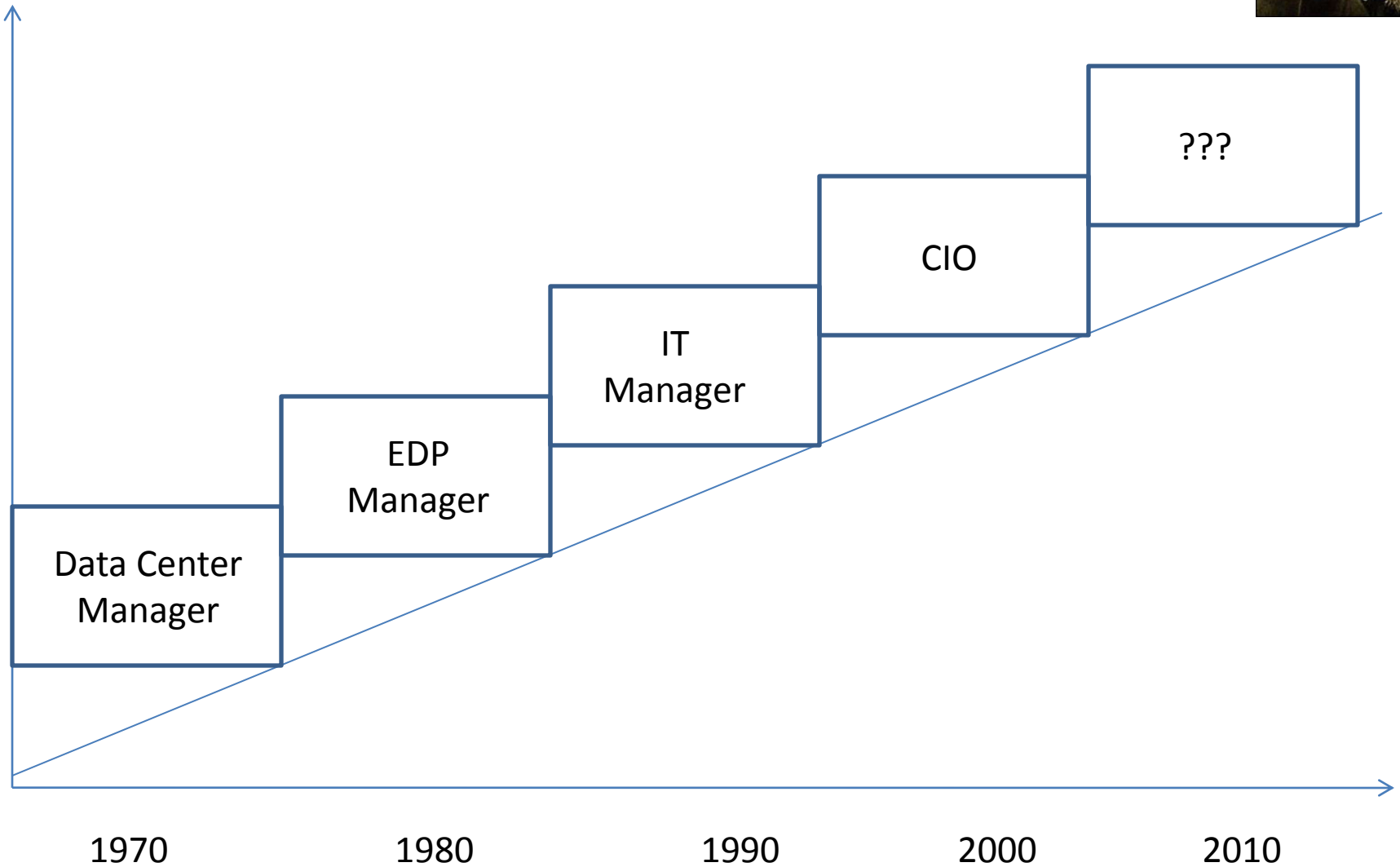
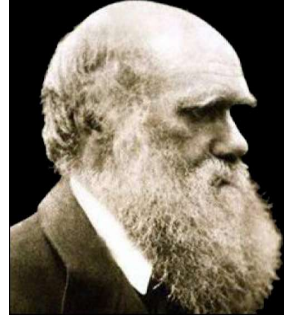
Explore where L&D fits within your current mix of applications



When Is L&D Most Appropriate?



Organizations are changing



The CIO's need to build the Bridge

**Business
Operations**

**Business process
management competency**

**IT
Function**

25%

**of CIOs now claim BPM as an
additional responsibility**

The Role of the CIO

From IT to BT => Information Technology to Business Transformation

From CIO to CIO => From Chief Information Officer to Chief Innovation Officer

Agile Project Management



Software development is more prone to changes than brick and mortar construction projects

Businesses must be nimble to maintain a competitive edge

Agile methodologies are better suited in situations where requirements are subject to change

Benefits

Gives you options to move when you need

Issues/Impediment are brought to the surface quickly

Less time is lost if you get it wrong.

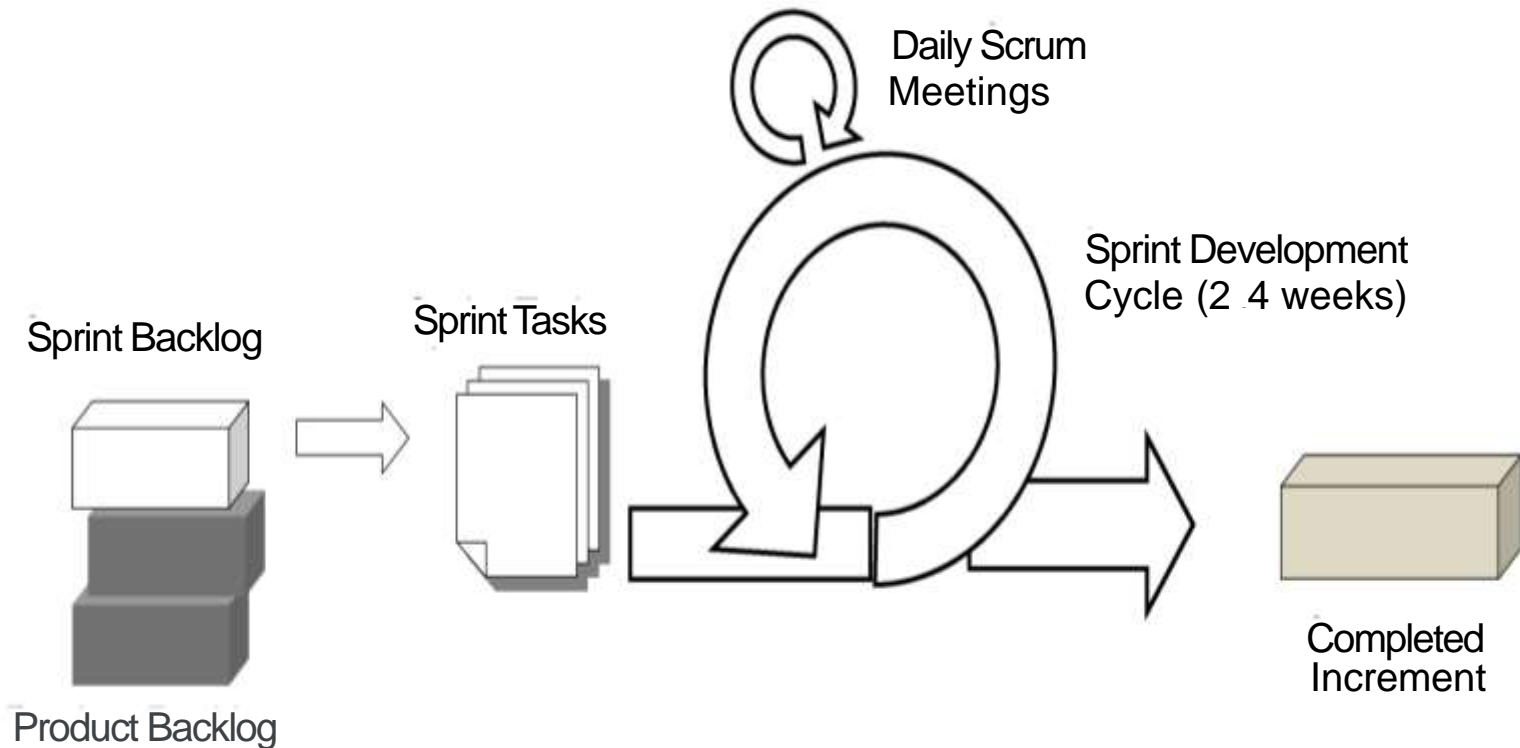
Frequently assessment and prioritization of features

(90% of users use approximately 10% of features)



Scrum

In this agile methodology, iterative development is accomplished in short cycles known as “Sprints”



6

Benefits

- Accomplish the tasks that provide the greatest benefit first
- Sprint team is autonomous
- Frequent Communication
- Output is potentially shippable software at end of each Sprint

Critical Success Factors

- Assure an enthusiastic business sponsor
- Engage all the Stakeholders
- Agree and align on goals
- Select the right first project
- Pick up an excellent PL
- Install the right metrics
- Use the right tools and technologies
- Invest in an L&D Center of Excellence



**Transformation
must
become Endemic!**

Thank You – Any Question ?

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Director**

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Appendix



Resume



- Fulbright Scholar with a Master from Carnegie Mellon University and a Degree from the Polytechnic of Turin, Italy
- Worked in 10 Countries in several companies
 - MIS and CTO in Alitalia
 - Project Leader in Airplus
 - Program Leader in Galileo
 - CEO in Sigma Plus
 - CTO in GE Money
 - CIO in GE Oil & Gas
 - CIO in AIG UPC Latin America
 - Management Consultant for Pinion with projects in Saudi Arabia
- Master Black Belt
- Management Consultant and Business Coach