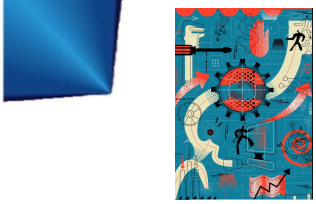
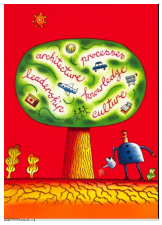
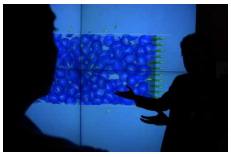
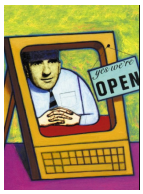
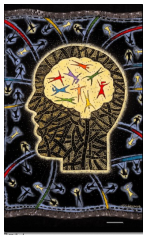





Prospective ICT Governance





©J.-F.David 2012

Jean-François DAVID

Strategist

IBM France 1967-1995
1992-95 R&D Director, IBM Consulting Group France

Since 1995:
- Consultant
- Strategic, Organisationnal & Technological Intelligence
- Lecturer à for HEC/MBA, ESCP, Collège de l 'X,
  Dauphine, MBA Varsovie, Université Nantes...
- Expert APM,CJD, AFNET, ...

jf@davidjf.com
www.davidjf.com
freejfd.blogspot.com

This presentation: http://davidjf.free.fr/ITGov2010english.pdf

©J.-F.David 2012

Zoom on Information Systems and on Information Technologies...

Some managerial frameworks

&

decisional

methods and tools...

…decoding grids,

useful to executive, to understand and behave, within permanent creative mess generated by galloping technologies…

and

…the clear need to generate your own personal ideas and methods on these matters, capitalizing on acquired past and present knowledge.

©J.-F.David 2012

METHODS

©J.-F.David 2012

CIO

Search CIO.com

Search

CIO.com
Current Issue
Previous Issues
Newsletters
Print Links
Subscriber Services
Awards Programs
Site Tour
Site Search

CIO Conferences

The CIO Store

Career
CIO Wanted
Counselor
Movers & Shakers

Analysis/Opinion
Alarmed

CIO Research Reports

Optimizing Business Performance: Using IT for Competitive Advantage, Part II

Jun 03, 2003

Optimizing Business Performance: Using IT for Competitive Advantage

A Study Conducted by CIO Magazine, PRTM, and The InterUnity Group

Aligning IT and business priorities is a key business competency, critical for achieving and sustaining a competitive edge. Although many companies believe that their IT function and business units are aligned, only a few companies have actually achieved this alignment and

Advertisers

Microsoft Business Solutions

Microsoft Business Solutions.
Delivering insight for smarter business decisions.

Harvard Business Review

May 2003

IT Doesn't Matter

by Nicholas G. Carr

As information technology's power and ubiquity have grown, its strategic importance has diminished. The way you approach IT investment and management will need to change dramatically.

©J.-F.David 2012
http://www.roughtype.com/

vendors or partners, security breaches, even terrorism—and some have become magnified as companies have moved from tightly controlled, proprietary systems to open, shared ones. Today, an IT disruption can paralyze a company's ability to make its products, deliver its services, and connect with its customers, not to mention foul its reputation. Yet few companies have done a thorough job of identifying and tempering their vulnerabilities. Worrying about what might go wrong may not be as glamorous a job as speculating about the future, but it is a more essential job right now. (See the sidebar "New Rules for IT Management.")

In the long run, though, the greatest IT risk facing most companies is more prosaic than a catastrophe. It is, simply, overspending. IT may be a commodity, and its costs may fall rapidly enough to ensure that any new capabilities are quickly shared, but the very fact that it is entwined with so many business functions means that it will continue to consume a large portion of corporate spending. For most companies, just staying in business will require big outlays for IT. What's important—and this holds true for any commodity input—is to be able to separate essential investments

New Rules for IT Management

With the opportunities for gaining strategic advantage from information technology rapidly disappearing, many companies will want to take a hard look at how they invest in IT and manage their systems. As a starting point, here are three guidelines for the future:

Spend less. Studies show that the companies with the biggest IT investments rarely post the best financial results. As the commoditization of IT continues, the penalties for wasteful spending will only grow larger. It is getting much harder to achieve a competitive advantage through an IT investment, but it is getting much easier to put your business at a cost disadvantage.

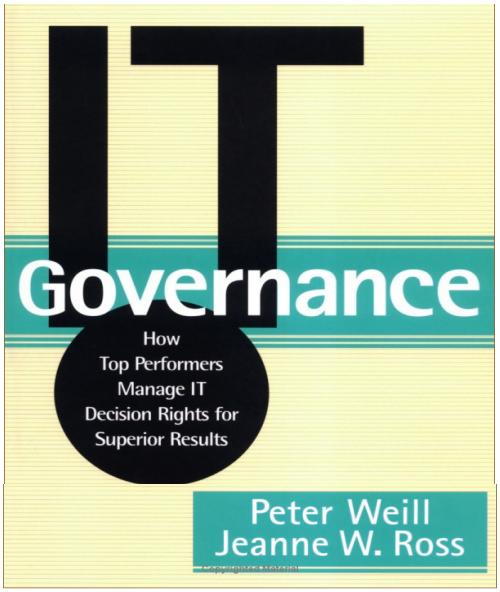
Follow, don't lead. Moore's Law guarantees that the longer you wait to make an IT purchase, the more you'll get for your money. And waiting will decrease your risk of buying something technologically flawed or doomed to rapid obsolescence. In some cases, being on the cutting edge makes sense. But those cases are becoming rarer and rarer as IT capabilities become more homogenized.

Focus on vulnerabilities, not opportunities. It's unusual for a company to gain a competitive advantage through the distinctive use of a mature infrastructural technology, but even a brief disruption in the availability of the technology can be devastating. As corporations continue to cede control over their IT applications and networks to vendors and other third parties, the threats they face will proliferate. They need to prepare themselves for technical glitches, outages, and security breaches, shifting their attention from opportunities to vulnerabilities.

©J.-F.David 2012

Some executives have mixed feelings about IT/IS...

- TIC pervasive, ubiquitous, …
- It doesn't work !
- I already know ! (web, laptops, telephone, …)
- ERP implementation …..!!!
- IT: binary world of false/true vs truth?
- For everybody or for specialists?
- Strategic or utility?
- MBA's "monoculture" (Strat / Finance / Cultures / ….)
- OO + IT = COO



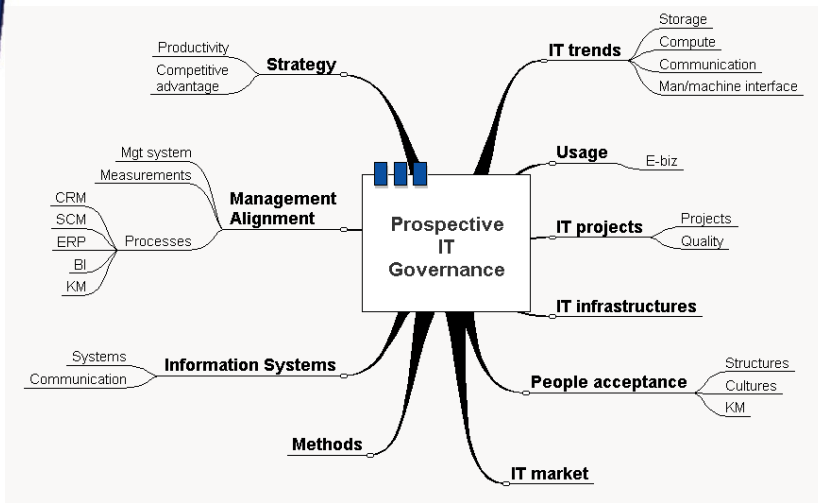
IT Governance: What is it?

IT GOVERNANCE

A structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes.

and its dimensions:

Strategic Alignment
Operational Efficiency
Risk Management
Security
Business Continuity
Change Management
System Integrity
Cost Management
Regulatory Compliance
Value Delivery



+ philosophy + cognitive sciences + neurobiology + arts + ….
+ games +cyberworlds + ….

Teaching Methods

- Formal lectures to motivate on the sub-topic, multi-faces business cases running during the whole course, many real examples from various sectors, some methodological exercises (IT balanced scorecard, culture benchmark, IT quality assessment, ..) and discussions.

Evaluation

- Group's contribution for business cases, individual assignments results, personal contributions during the whole course.
- +….Final formal exam within MC block

"What I hear, I forget.
What I see, I remember.
And what I do, I understand."
Chinese Proverb

Prospective IT governance

Readings

paperback...

web….

Your site: http://davidjf.free.fr/WUTBS/mba.html

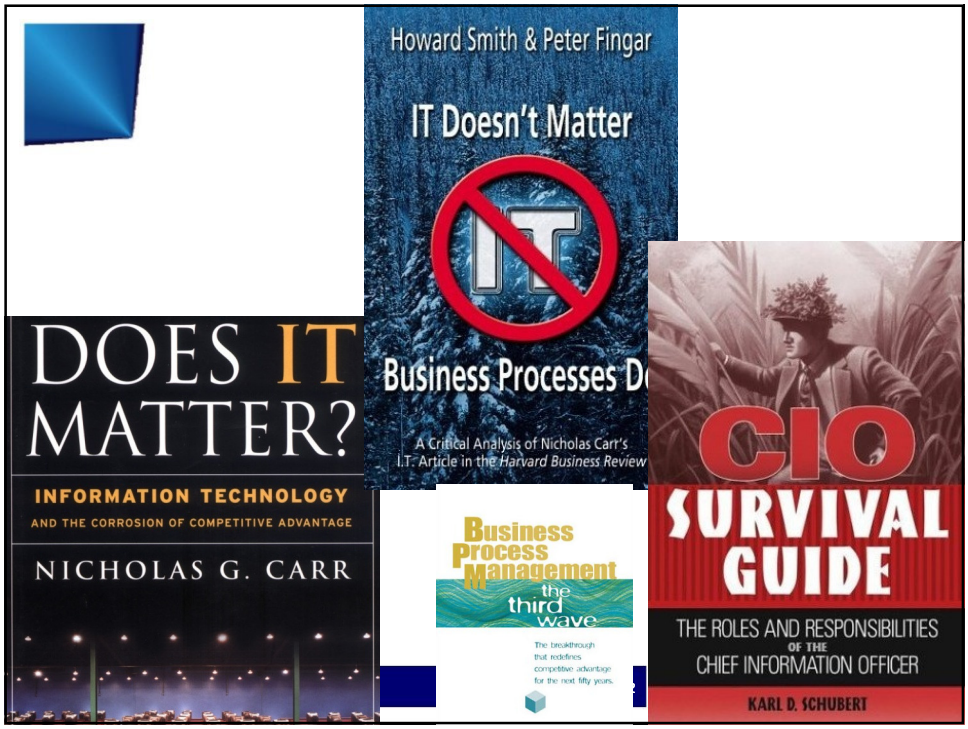
IT governance: why ?

- IT Governance books: some readings….

Computer Confluence	Beekman Tathswohl	Prenctice	Hall	2003	...state of the art
IT Mgr Survival Guide	Aalders Hind		Wiley	2002	...good rules
CIO Survival Guide	Carl Schubert		John Wiley	2004	...some issues
Knowledge Management	Gamble Blackwell		Kogan Page	2002	...good synthesis
KM	Harvard Business R.		HBS	1998	...guru's
Business Value of IT	Harvard Business R.		HBS	1999	...guru's
Gödel, Escher,Bach	Hofstadter		Penguin Books	1980	...man, mind and machines
IBM System Journal v32-1	IBM System Journal v32-2		IBM	1993	...alignment
IT Service Management	Jan le Bon		Addison Wesley	2002	...detailed "bible"
C R M	Kincaid		HP	2003	...CRM
MIS	Laudon		Prenctice Hall	1996-2002	...basics
Customer-Driven IT	Moschella		HBS	2003	...role of IT user
Managing IT as Investment	Moskowitz Kern		Prenctice Hall	2003	...rules of the game
Being Digital	Negroponte		Vintage books	1998	...MIT Medialab guru
Does IT matter	Nicolas Carr		HBS	2003	...a real perspective
IT Governance	Peter Weill, Jeanne Ross		HBS	2004	...IT Governance study
Mass Customization	Pine		HBS	1993	...nice concept
Making IT Count	Willcocks & ...		BH	2002	...impressive rules

- IT governance study (Sloan School MIT 2003)
  - CISR study of 256 global companies reveals that the **profits of companies** with top-notch IT governance practices **are 20% higher** than those of companies with poor IT governance.

©J.-F.David 2012



Prospective IT governance

 ©J.-F.David 2012

Harvard Business Review

May 2003

IT Does ??? Matter

by Nicholas G. Carr

As information technology's power and ubiquity have grown, its strategic importance has diminished. The way you approach IT investment and management will need to change dramatically.

 ©J.-F.David 2012

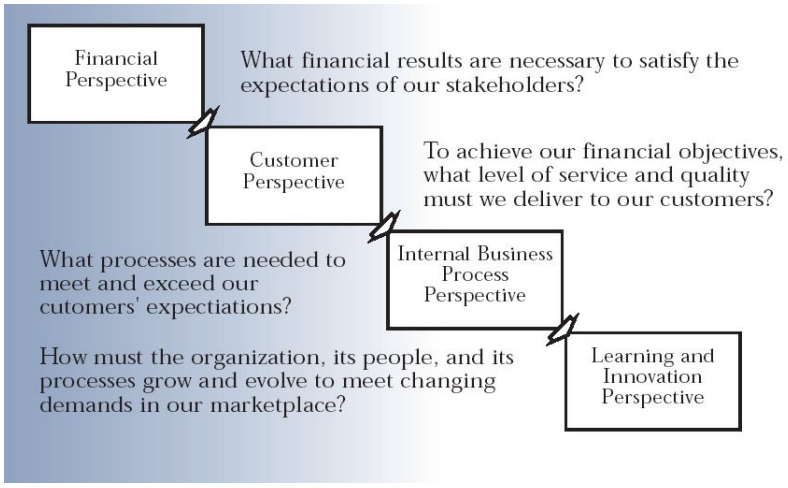
MAIN CHALLENGES FOR THE NEXT FIVE YEARS...

1. Develop the organizational capabilities of the company (response time and flexibility, total quality, innovation) (92%)
2. Increase market share in the core business towards leadership (90%)
3. Develop a full understanding of the client's needs and desires (87%)
4. Increase the international development (85%)
5. Launch productivity and cost decrease programs (83%)
6. Increase the competency level inside some critical structures (technologies / factories/ marketing) and allows sharing of these by profit centers (81%)
7. Redesign the main processes (reengineering) and in-depth transform the organization and the way the company acts (72%)

BCG European study 1994/95

©J.-F.David 2012

Balanced Score Card



©J.-F.David 2012

THE US CEOs LOOK TO THE FUTURE
Foundation for the Malcolm Baldrige National Quality Award 1998

Six trends affecting major U.S. companies are judged to be "major" by more than 70% of the CEOs surveyed:

- globalization (94%)
- improving knowledge management (88%)
- cost and cycle time reduction (79%)
- improving supply chains globally (78%)
- manufacturing at multiple locations in many countries (76%)
- managing the use of more part-time, temporary and contract workers (71%)

Eight other trends were judged to be major by between 50% and 70% of the CEOs:

- developing new employee relationships based on performance (69%)
- improving human resources management (68%)
- improving the execution of strategic plans (68%)
- developing more appropriate strategic plans (64%)
- ongoing measurement and analysis of organizational processes (60%)
- developing a consistent global corporate culture (56%)
- outsourcing of manufacturing (55%)
- creating a learning organization (52%)

©J.-F.David 2012

and now.....

The top three challenges?

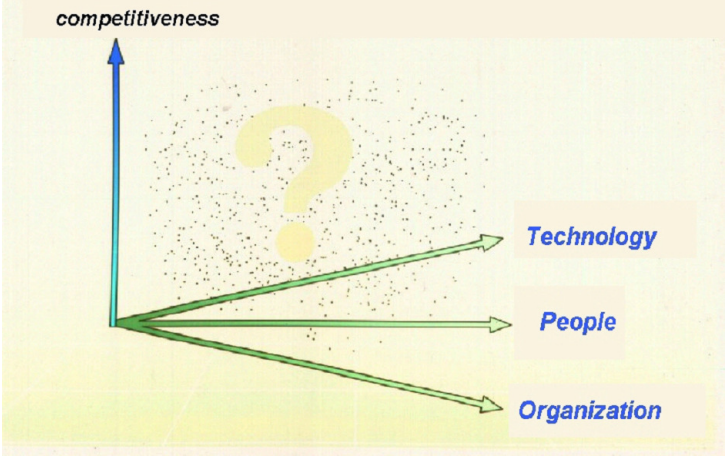
Not surprisingly, they are all related to competitiveness as measured by revenue growth. The Conference Board's annual survey for 2004 listed the top three challenges identified by CEOs worldwide as:

1. Sustained and steady top-line growth
2. Speed, flexibility, adaptability to change
3. Customer loyalty, retention

In the AT Kearney survey, only 28 percent of IT leaders ranked IT as a top 10 percent issue; only 37 percent of ALL the executives surveyed ranked IT as being this important.

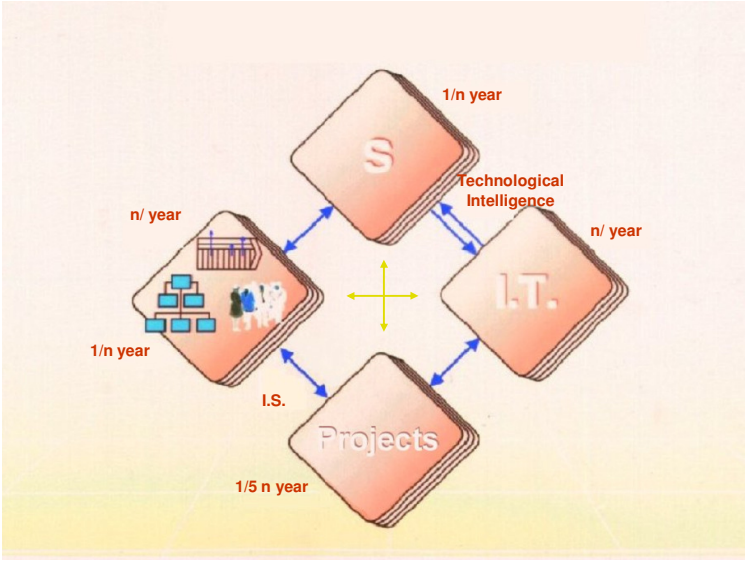
©J.-F.David 2012

Which final tool towards competitiveness?



13 23 / 370 ©J.-F.David 2012

Strategic Alignment



14 24 / 370 ©J.-F.David 2012

©J.-F.David 2012

J. de Rosnay

B. Walliser

G.Bateson

Palo-Alto

E.Hall

L. Von Bertalanffy

P.Watzlawick

E.Berne

TA

E.Morin

J.Mélèse

J.-L. Lemoigne

complexity
constructivism

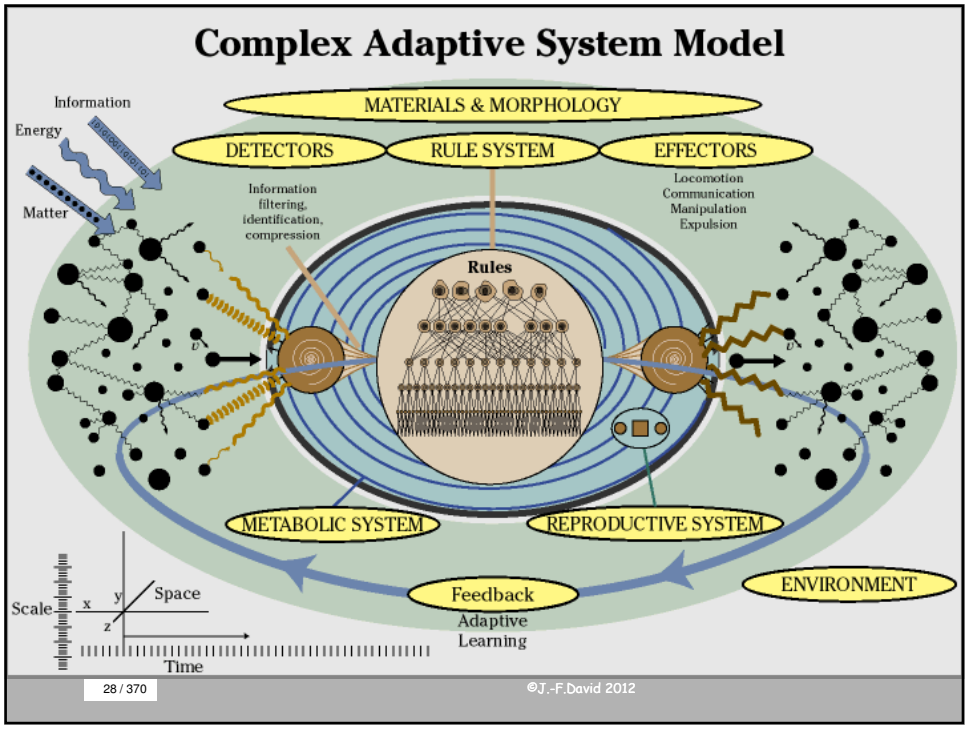
©J.-F.David 2012

SYSTEM

"A system is a set of elements in dynamic interaction, organized according to a purpose" Joël de Rosnay

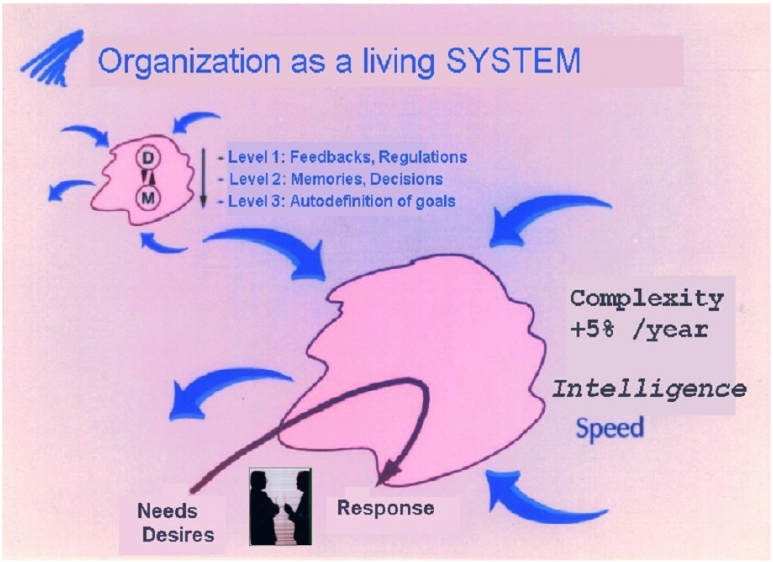
1) A set in mutual connection with an environment, this interdependence insuring it a certain autonomy
2) This set is formed by systems in interaction, this interdependence insuring it a certain degree of coherence
3) It undergoes more or less deep modifications along time while preserving a certain durability " B.Walliser

©J.-F.David 2012



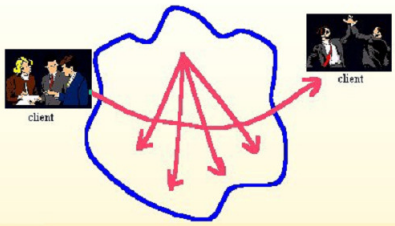
©J.-F.David 2012

Organization as a living SYSTEM



©J.-F.David 2012

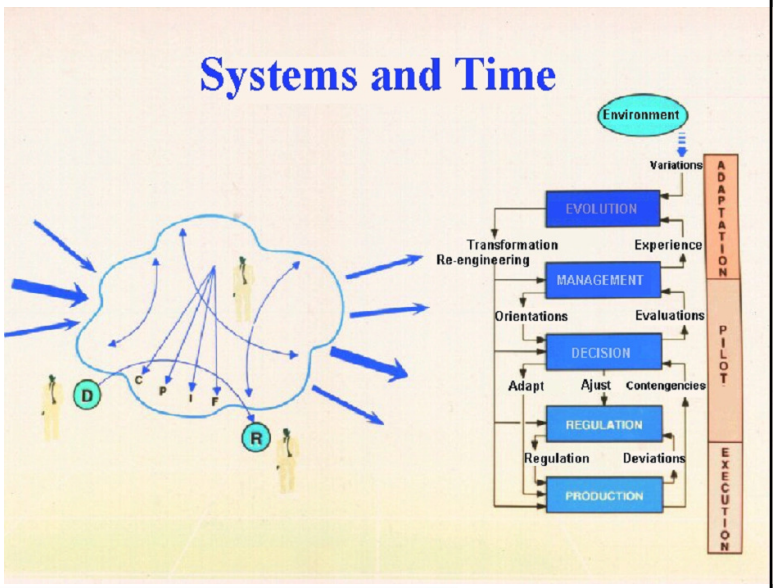
Structures.... Processes.... X-functionnalities....



" Organisations are not built to serve customers,
they are built to preserve internal order.
To customers, the internal structure may not only mean very little,
it may serve as a barrier.
Organization charts are vertical,
but serving the customer is horizontal"

G.Fischer, CEO, Motorola

©J.-F.David 2012



The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information

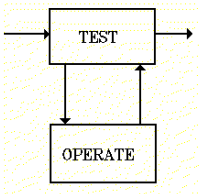
by George A. Miller

originally published in *The Psychological Review, 1956, vol. 63, pp. 81-97*

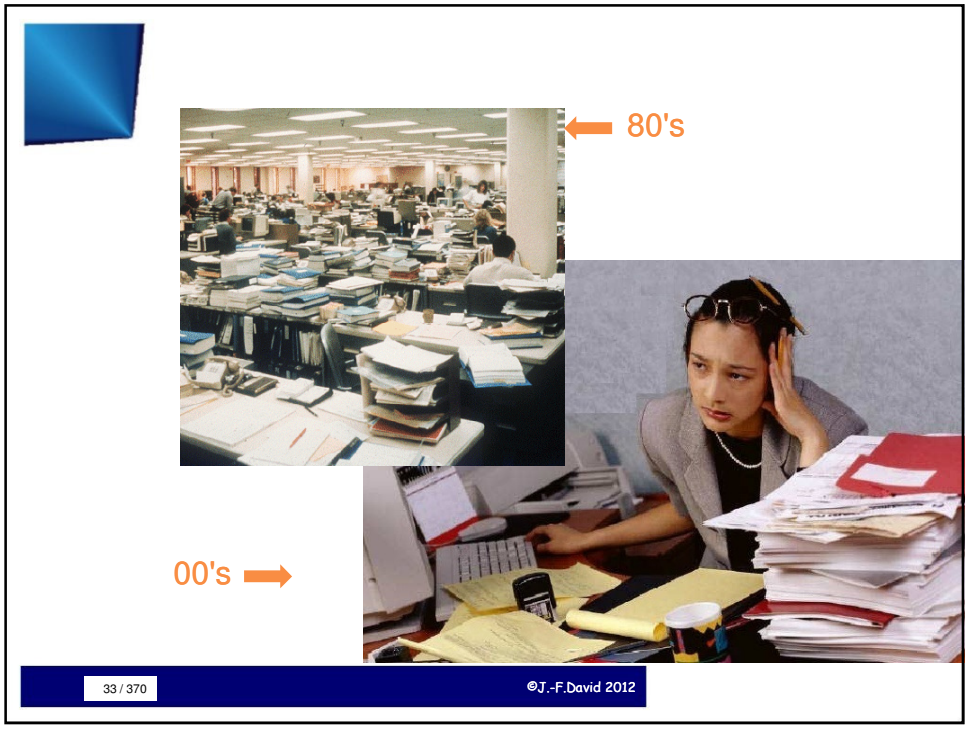
Information Processing Theory (G. Miller)

Overview:

George A. Miller has provided two theoretical ideas that are fundamental to cognitive psychology and the information processing framework.



The first concept is "chunking" and the capacity of short term memory. Miller (1956) presented the idea that short-term memory could only hold 5-9 chunks of information (seven plus or minus two) where a chunk is any meaningful unit. A chunk could refer to digits, words, chess positions, or people's faces. The concept of chunking and the limited capacity of short term memory became a basic element of all subsequent theories of memory.


80's
00's
33 / 370
©J.-F.David 2012


Gates Warns on Information Overload - Yahoo! News - Mozilla Firefox
Fichier Edition Affichage Aller à Marque-pages Outils ?
http://story.news.yahoo.com/news?tmpl=story&cid=528&e=2&u=/ap/20050520/ap_on_hi_te/ceo_summit
YAHOO! NEWS
Sign In
New User? Sign Up
News Home - Help
News Home U.S. Business World Entertainment Sports Tech Politics Science Health Most Popular Index
Internet | Personal Tech. | Communications | Software | Enterprise | Apple/Macintosh | Linux/Open Source | Tech Tuesday
Search: All News Search Advanced
Gates Warns on Information Overload
Associated Press
By ELIZABETH M. GILLESPIE, Associated Press Writer
20 minutes ago
REDMOND, Wash. - At his annual shindig for CEOs, Microsoft Corp. Chairman Bill Gates told executives that businesses need to do more to help their employees sort through an ever-growing flood of information that threatens to become a drain on productivity.
"It's overwhelming," Gates said Thursday at the software company's ninth annual CEO Summit. "Nobody's paid to do search or just find information. At the end of the day you're paid for designing a new product, having a satisfied customer and doing that with the minimum amount of time, the minimum amount of people."
He said Microsoft's Office division is already developing products designed to make it easier for people to stay on task, collaborate on projects and quantify whether they're hitting their targets.
Without giving many details, Gates announced that the next wave of Office products, code-named Office 12, will be released in the second half of 2006, with test versions coming out this fall.
He said the programs will help businesses be more competitive in what he called the "new world of work," where it will be easier to set priorities, understand important data and spend less time organizing information.
AP Photo: In this photo provided by Microsoft Corp. Microsoft Chairman and Chief Software Architect Bill Gates...
Slideshow: Microsoft and Bill Gates
RELATED QUOTES
MSFT 25.0000 +0.09
UIS 6.7200 -0.01
^DJUSS 383.3200 -5.28
Get Quotes
34 / 370

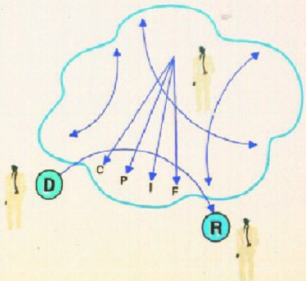
Communicational Opulence

MEDIA + MESSAGES

NEEDS + DESIRES

©J.-F.David 2012

Individual Time...



- Temporal "bubble"
- Mgt "double language"
- Trade-offs
- Generalized Ergonomia

©J.-F.David 2012

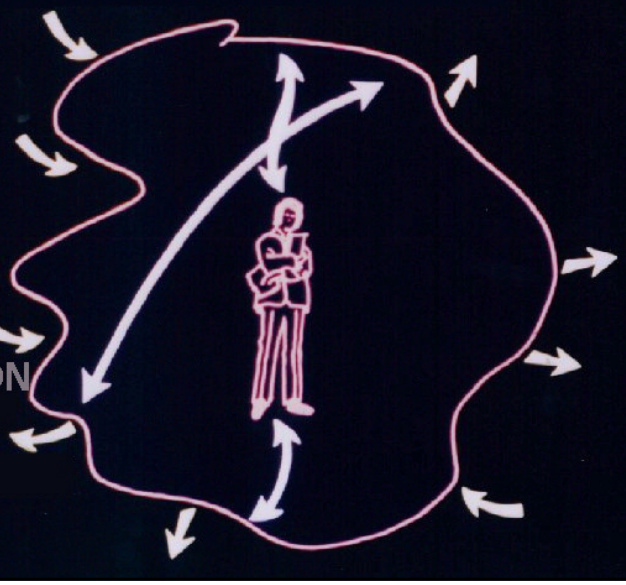
Organization timing and people timing

30 37 / 370 ©J.-F.David 2012

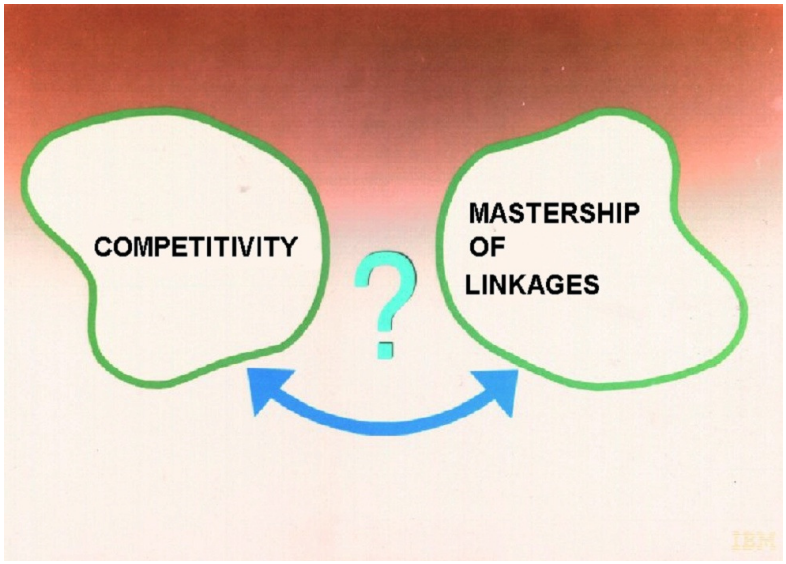
General Systems Theory

REACTIVITY
5%

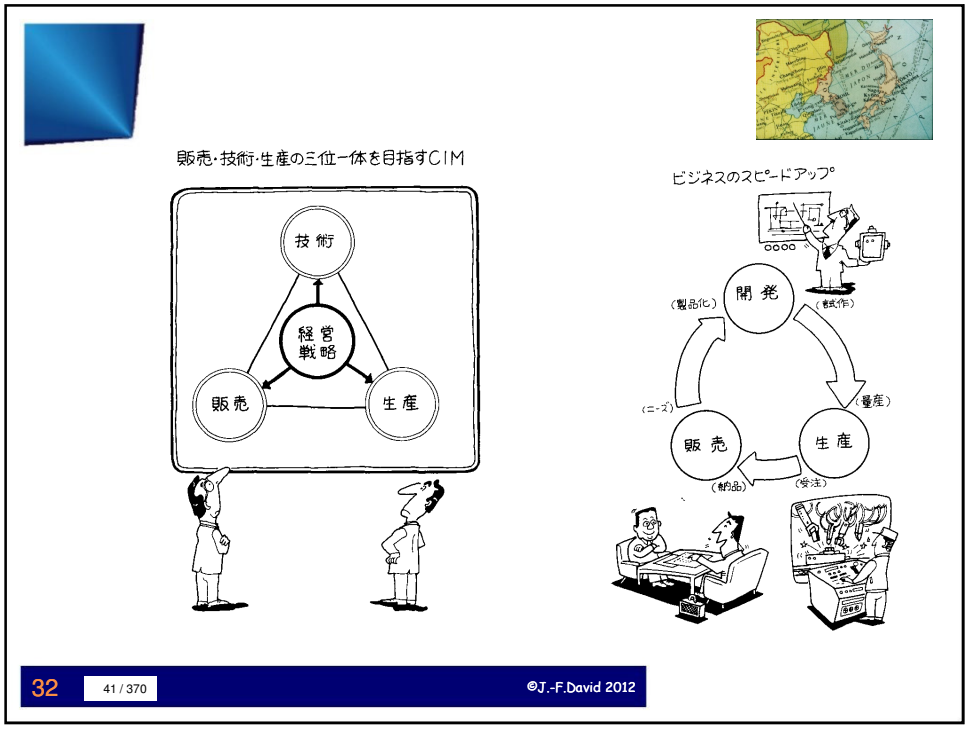
HIRING
EDUCATION
ORGANIZATION
D.P.



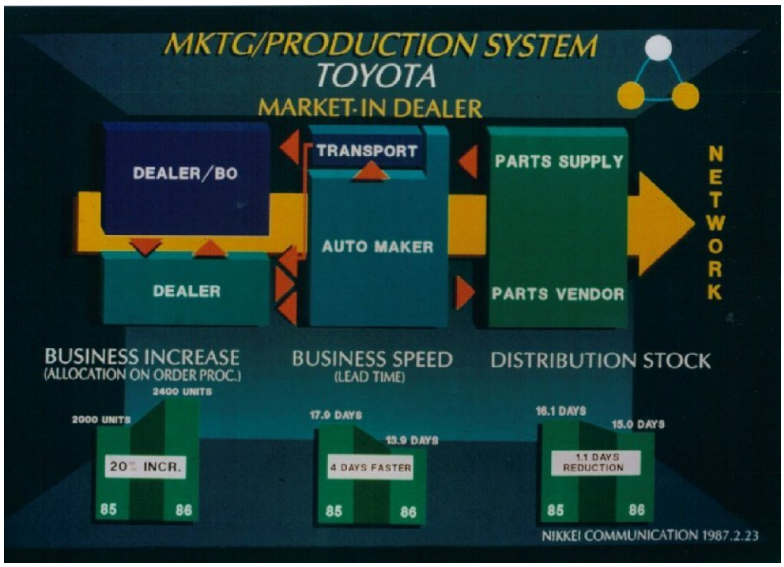
31



32 39 / 370 ©J.-F.David 2012

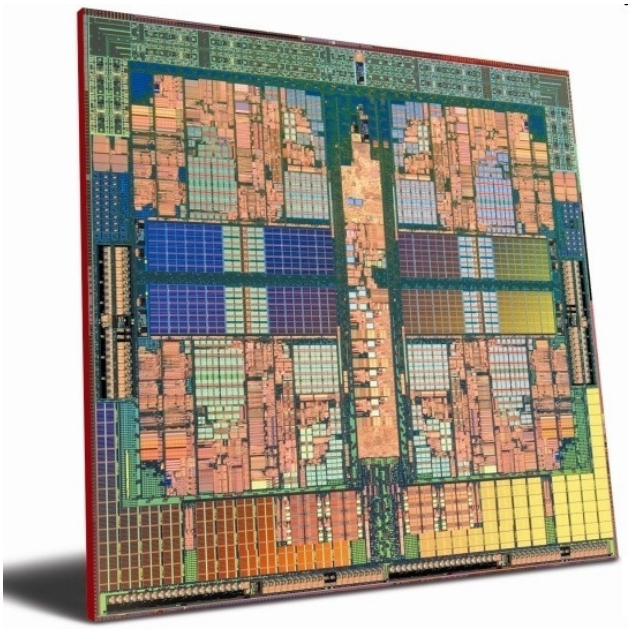

販売・技術・生産の三位一体を目指すCIM
技術
経営戦略
販売
生産
ビジネスのスピードアップ
開発
(製品化)
(試作)
(ニーズ)
(量産)
販売
生産
(納品)
(受注)
32
41 / 370
©J.-F.David 2012


技術 技術 技術 技術 技術 技術 技術
技術
技術
技術
技術
32



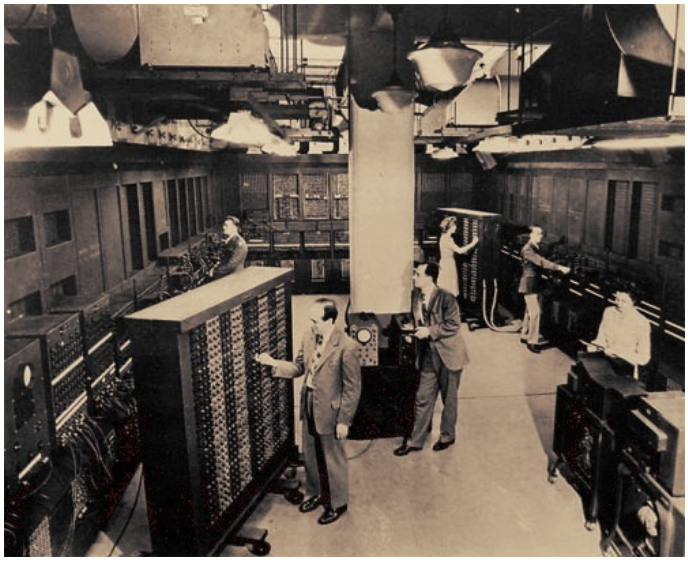
 ©J.-F.David 2012

 ©J.-F.David 2012



©J.-F.David 2012

©J.-F.David 2012

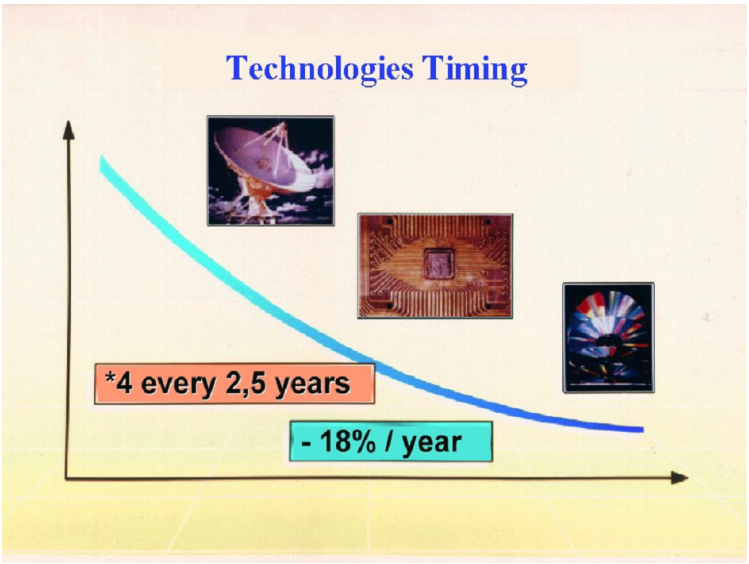


Key technologies

FAST & CONTINUOUS PROCESS

but unequal

Source: IBM France



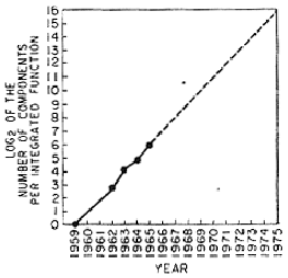
The experts look ahead

Cramming more components onto integrated circuits

With unit cost falling as the number of components per circuit rises, by 1975 economics may dictate squeezing as many as 65,000 components on a single silicon chip

By Gordon E. Moore

Director, Research and Development Laboratories, Fairchild Semiconductor division of Fairchild Camera and Instrument Corp.



The future of integrated electronics is the future of electronics itself. The advantages of integration will bring about a proliferation of electronics, pushing this science into many new areas.

Integrated circuits will lead to such wonders as home computers—or at least terminals connected to a central computer—automatic controls for automobiles, and personal portable communications equipment. The electronic wristwatch needs only a display to be feasible today.

But the biggest potential lies in the production of large systems. In telephone communications, integrated circuits in digital filters will separate channels on multiplex equipment. Integrated circuits will also switch telephone circuits and perform data processing.

Computers will be more powerful, and will be organized in completely different ways. For example, memories built of integrated electronics may be distributed throughout the machine instead of being concentrated in a central unit. In addition, the improved reliability made possible by integrated circuits will allow the construction of larger processing units. Machines similar to those in existence today will be built at lower costs and with faster turn-around.

Present and future

By integrated electronics, I mean all the various technologies which are referred to as microelectronics today as well as any additional ones that result in electronics functions supplied to the user as irreducible units. These technologies were first investigated in the late 1950's. The object was to miniaturize electronics equipment to include increasingly complex electronic functions in limited space with minimum weight. Several approaches evolved, including microassembly techniques for individual components, thin-film structures and semiconductor integrated circuits.

Each approach evolved rapidly and converged so that each borrowed techniques from another. Many researchers believe the way of the future to be a combination of the various approaches.

The advocates of semiconductor integrated circuitry are already using the improved characteristics of thin-film resistors by applying such films directly to an active semiconductor substrate. Those advocating a technology based upon films are developing sophisticated techniques for the attachment of active semiconductor devices to the passive film arrays.

Both approaches have worked well and are being used in equipment today.

The author

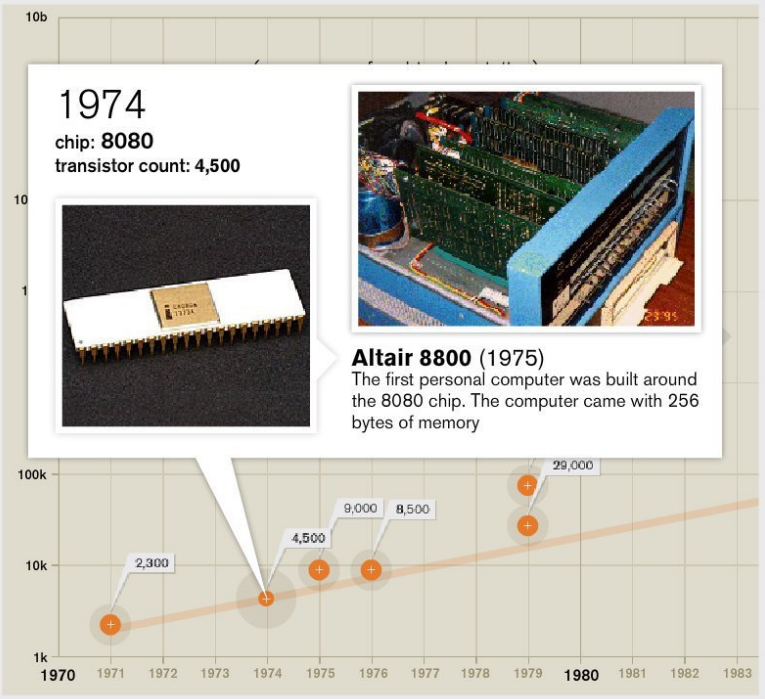
Dr. Gordon E. Moore is one of the new breed of electronic engineers, schooled in the physical sciences rather than in electronics. He earned a B.S. degree in chemistry from the University of California and a Ph.D. degree in physical chemistry from the California Institute of Technology. He was one of the founders of Fairchild Semiconductor and has been director of the research and development laboratories since 1959.

Electronics, Volume 38, Number 8, April 19, 1965

Microprocessor trends

Year	Product	Process type	Line width (µm)	Transistors (M)	Mask layers	Cell Construction				Layers		Die size (mm)
						Proc/bus (bits)	Clock (MHz)	Voltage (V)	Cache (Kbits)	Poly	Metal	
1971	4004	PMOS	10	0.0023	---	4	0.108	12	0	1	1	13.5
1972	8008	PMOS	10	0.0035	---	8	0.2	12	0	1	1	15.2
1974	8080	HMOS	6.0	0.006	---	8	2	12	0	1	1	20.0
1976	8085	HMOS	3.0	0.0065	---	8	0.37	5	0	1	1	20.0
1978	8086	HMOS	3.0	0.029	---	16	5-10	5	0	1	1	28.6
1979	8088	HMOS	3.0	0.029	---	16/8	5-8	5	0	1	1	28.6
1982	80286	CMOS	1.5	0.134	---	16	6-12	5	0	1	2	68.7
1985	80386DX	CMOS	1.5	0.275	10	32	16-33	5	0	1	2	104
1989	80486DX	CMOS	1.0	1.2	12	32	25-50	5	0	1	3	163
1992	80486DX2	CMOS	0.8	1.2	---	32	50-66	5	0	1	3	81
1993	Pentium	BiCMOS	0.8	3.1	18	32/64	60-66	5	0	1	3Al	264
1994	80486DX4	CMOS	0.5	1.6		32	75-100	5	0	1	3Al	
1995	Pentium Pro	BiCMOS	0.35	5.5	20	32/64	150-200	3.3	0	1	4Al	310
1997	Pentium II	CMOS	0.35	7.5	16	32/64	233-300	2.8	0	1	4Al	209
1998	Celeron	CMOS	0.25	19	19	32/64	300-333	---	128	1	5Al	-
1999	Pentium III	CMOS	0.18	28	21	32/64	500-733	1.65	256	1	6Al	140
2000	Pentium 4	CMOS	0.18	42	21	32/64	1,400-2,000	1.7	256	1	6Al	224
2001	Pentium 4	CMOS	0.13	55	23	32/64	2,000-2,200	1.5	512	1	6Cu	146
2001	Itanium	CMOS	0.18	25	21	64/64	733-800	-	96	1	6Al	-
2002	Pentium 4	CMOS	0.13	55	23	32/64	2,000-3,000	1.5	512	1	6Cu	131
2002	Itanium II	CMOS	0.13	220	23	64/64	900-1,000	-	256/1,500	1	6Al	421
2003	Pentium 4	CMOS	0.09	>55	25	32/64	>3,000	1.2	>512	1	7Cu	-

©J.-F.David 2012



Moore's law: 

*2 every 18 months

Metcalfe's law: 

network value = ^nb of users

Gilder's law: 

bandwidth *3 every year

communication volume=*2 every 100days

Worldwide IT Spending Forecast (Billions of US Dollars)

	2009 Spending	2009 Growth (%)	2010 Spending	2010 Growth (%)
Computing Hardware	333	-12.5	353	5.7
Software	221	-2.1	232	5.1
IT Services	777	-4.0	821	5.7
Telecom	1,892	-3.4	1,988	5.1
All IT	3,223	**-4.5**	**3,394**	**5.3**

Source: Gartner (April 2010)

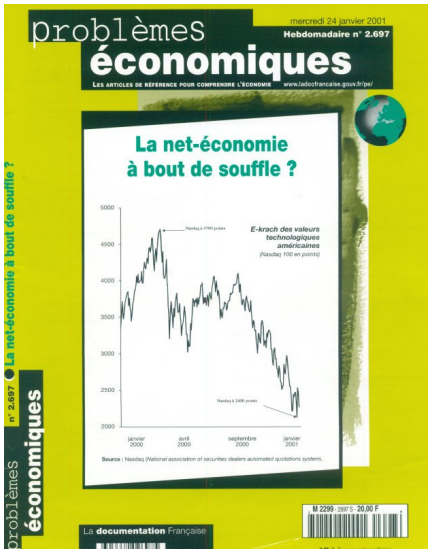
©J.-F.David 2012

e-"too much"

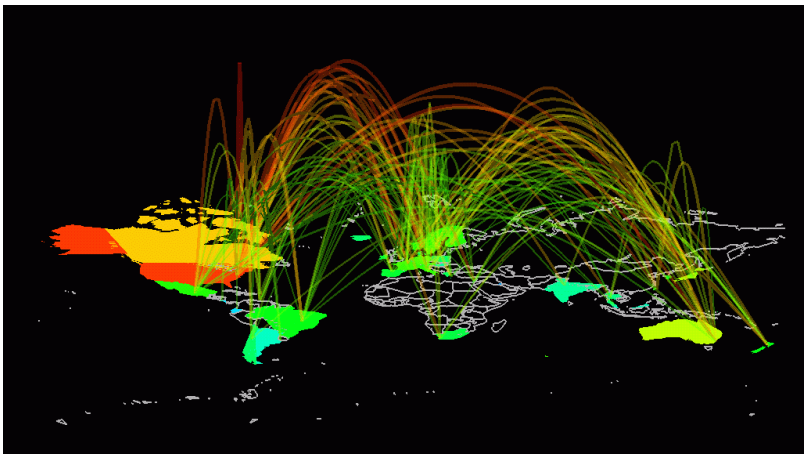
e-economy
e-business
e-procurement
e-sourcing
e-customer care
e-commerce
e-payment
e-learning
e-turbulence
e-transformation
e-manager
e-volution
e-success
e-commitment
e-infrastructure
e-xcellence
e-cceleration

To e- or not to be...

©J.-F.David 2012



37 57 / 370 ©J.-F.David 2012



38 58 / 370 ©J.-F.David 2012

Web 2.0, …

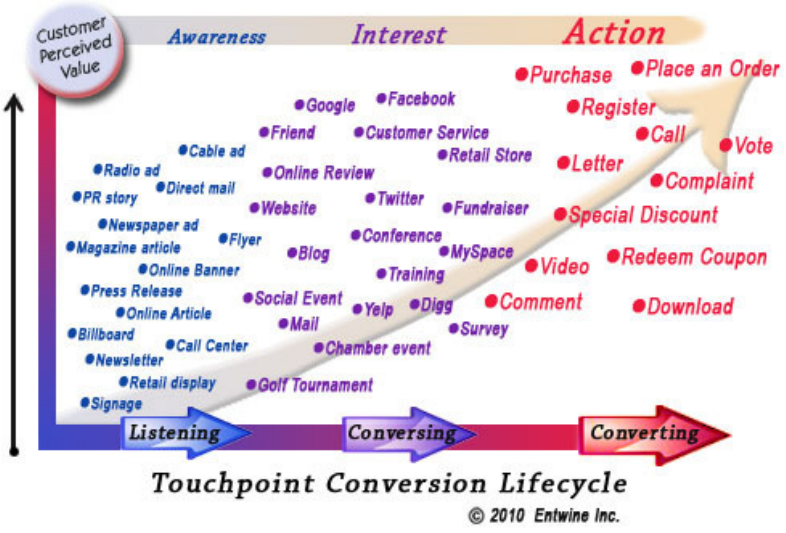
©J.-F.David 2012

©J.-F.David 2012

Click there to see activity

http://www.personalizemedia.com/media/socmedcounter.swf

©J.-F.David 2012

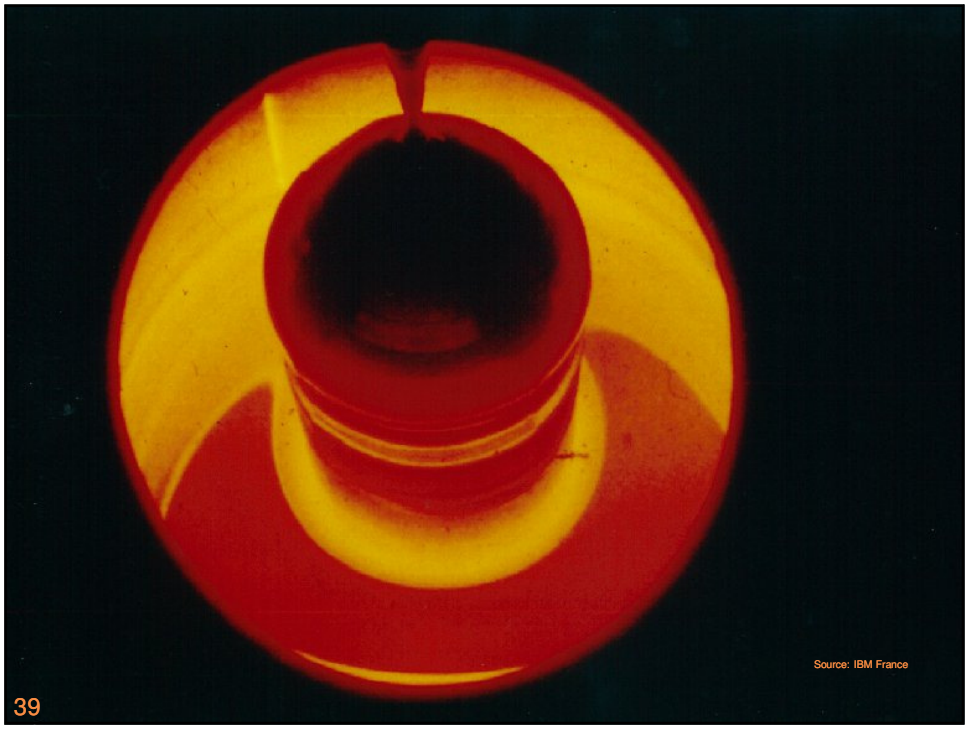


©J.-F.David 2012

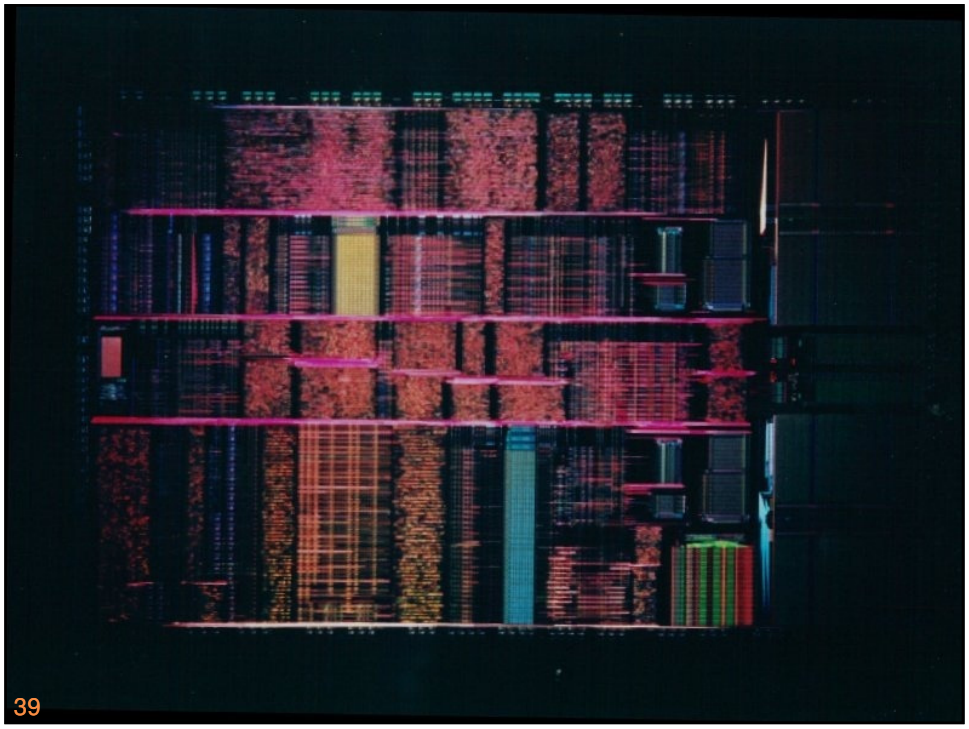
"On the Internet, nobody knows you're a dog."

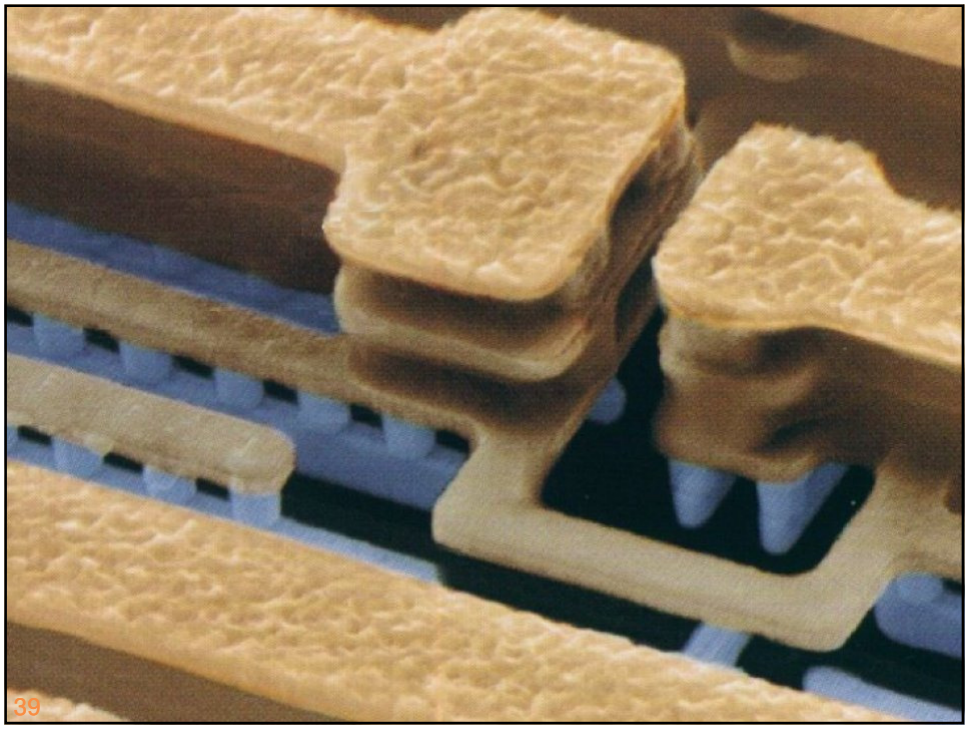
cartoon by Peter Steiner The New Yorker (Vol.69 (LXIX) no. 20) only for academic

©J.-F.David 2012

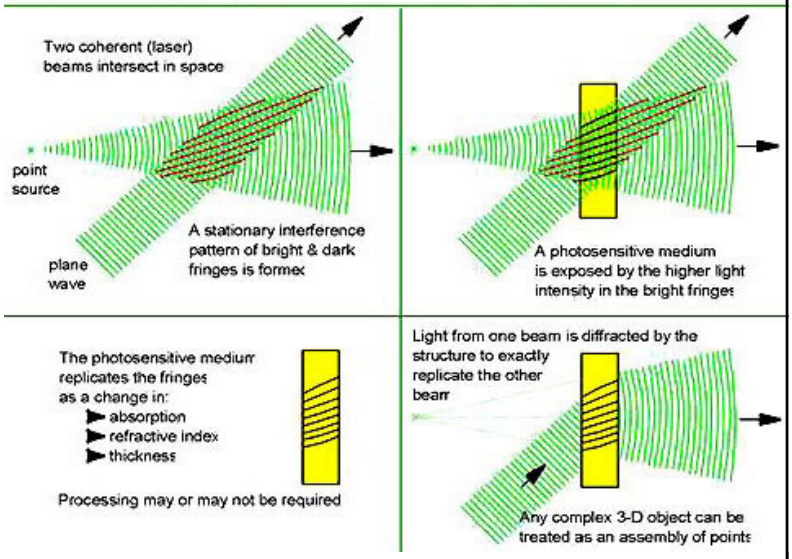


39


39


39

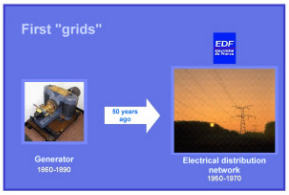
Physics of Holography

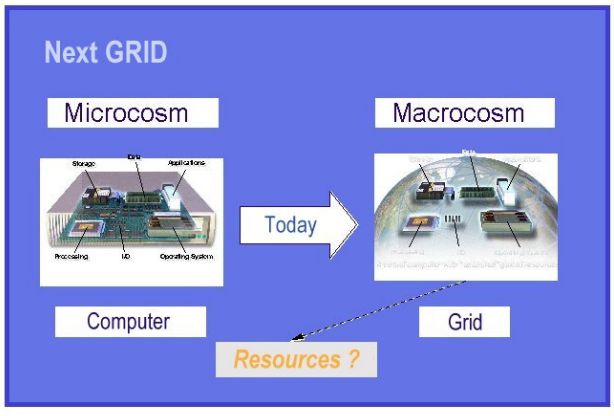


39 67 / 370 ©J.-F.David 2012

Source: IBM

GRID computing : or how virtualize...





68 / 370

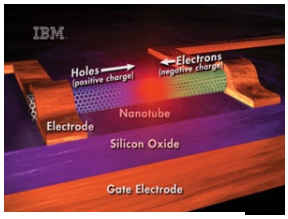
39

Emerging Technologies: GRID

Three types of Grids are known as per today.

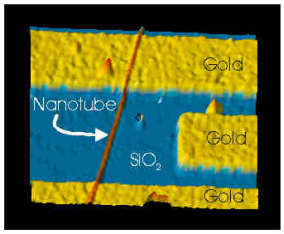
- Computational Grid Examples are
SETI, RSA-155, Genome, Virtual Supercomputing.
- Storage Grid Examples are
P2P applications on music, video, scientific data.
- Information Grid Examples are
virtual organizations.

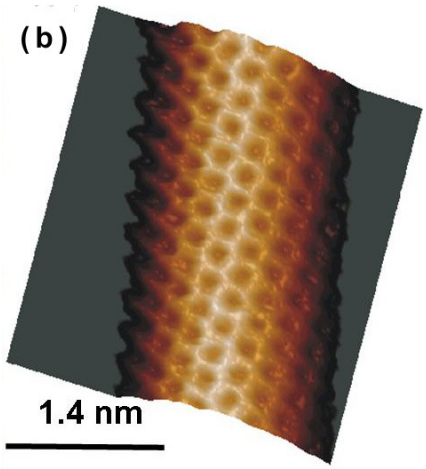
Can we think of gBusiness and gSociety?



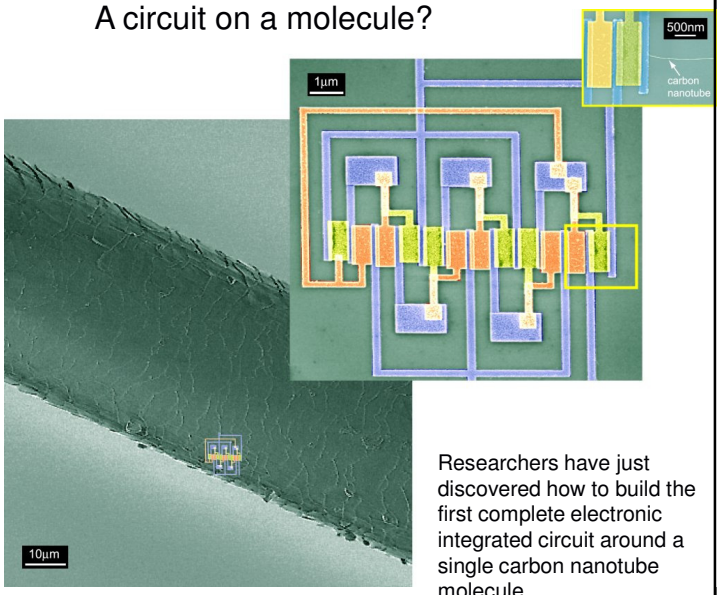
Nanotube field-effect transistor

Transistors are the basic building blocks of integrated circuits. To use nanotubes in future circuits it is essential to be able to make transistors from them. We have successfully fabricated and tested nanotube transistors using individual multi-wall or single-wall nanotubes as the channel of a field-effect transistor (FET).





A circuit on a molecule?



Researchers have just discovered how to build the first complete electronic integrated circuit around a single carbon nanotube molecule

39 71 / 370 ©J.-F.David 2012

10^{24}	yotta	Y	1 000 000 000 000 000 000 000 000
10^{21}	zêta	Z	1 000 000 000 000 000 000 000
10^{18}	exa	E	1 000 000 000 000 000 000
10^{15}	peta	P	1 000 000 000 000 000
10^{12}	téra	T	1 000 000 000 000
10^{9}	giga	G	1 000 000 000
10^{6}	méga	M	1 000 000
10^{3}	kilo	k	1 000
10^{2}	hecto	h	100
10	déca	da	10
1			1
10^{-1}	déci	d	0,1
10^{-2}	centi	c	0,01
10^{-3}	milli	m	0,001
10^{-6}	micro	u	0,000 001
10^{-9}	nano	n	0,000 000 001
10^{-12}	pico	p	0,000 000 000 001
10^{-15}	femto	f	0,000 000 000 000 001
10^{-18}	atto	a	0,000 000 000 000 000 001
10^{-21}	zepto	z	0,000 000 000 000 000 000 001
10^{-24}	yocto	y	0,000 000 000 000 000 000 000 001

[1993 update: hacker Morgan Burke has proposed, to general approval on Usenet, the following additional prefixes:

groucho 10^(-30) harpo 10^(-27) harpi 10^(27) grouchi 10^(30)

We observe that this would leave the prefixes zeppo-, gummo-, and chico- available for future expansion.

The holographic technology under development would be able to store so-called yottabytes of data, and deal with all of the Internet and multimedia data starting to appear. Exabytes, the successor to petabytes, are 10Mb of data to the square of 15, while yottabytes are 10Mb to the square of 24. Other definitions say an exabyte as, in decimal terms, a billion gigabytes.

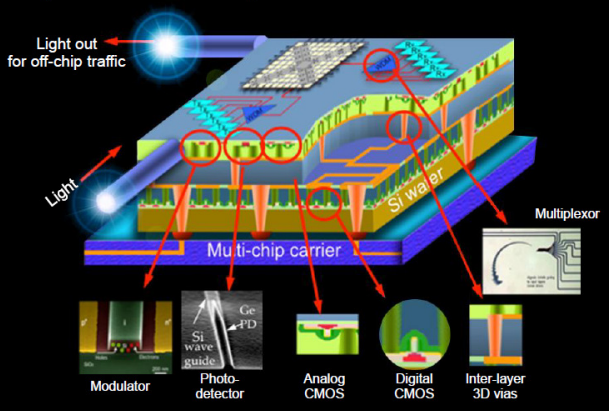
"If we make the assumption that everyone needs 40 petabytes of data in a lifetime of 100 years, then the world could use 200 yottabytes of data, including video, which takes up the most storage space,"
said Bill Cody, senior manager of exploratory data management research at IBM's Almaden Research Center in California.

©J.-F.David 2012

IBM **Investor** Briefing

IBM

Vision: >1 Tbps on a 3D chip



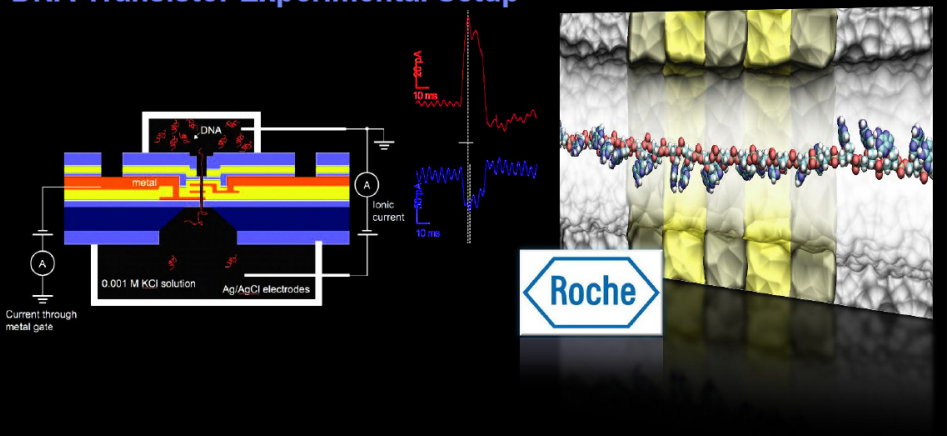
© 2011 International Business Machines Corporation

©J.-F.David 2012

IBM **Investor** Briefing

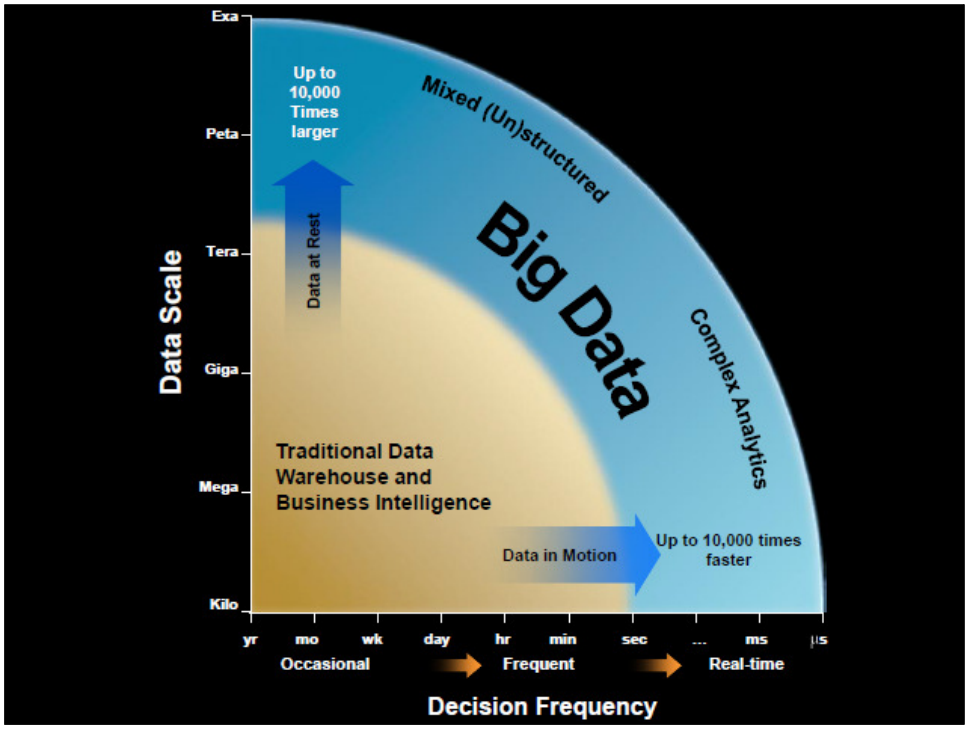
IBM

DNA Transistor Experimental Setup



© 2011 International Business Machines Corporation

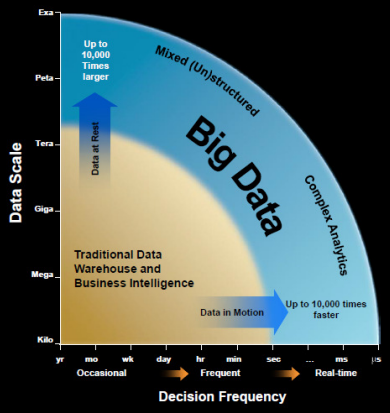
©J.-F.David 2012



IBM Investor Briefing

IBM

New Big/*Fast* Data Brings New Opportunities, Requires New Analytics



Homeland Security
600,000 records/sec, 50B/day
1-2 ms/decision
320TB for Deep Analytics

Telco Promotions
100,000 records/sec, 6B/day
10 ms/decision
270TB for Deep Analytics

DeepQA
100s GB for Deep Analytics
3 sec/decision

Smart Traffic
250K GPS probes/sec
630K segments/sec
2 ms/decision, 4K vehicles

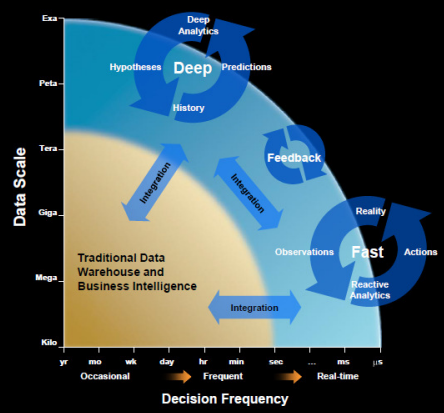
© 2011 International Business Machines Corporation

©J.-F.David 2012

IBM Investor Briefing

IBM

Maximum Insight Requires Combining Deep and Reactive Analytics



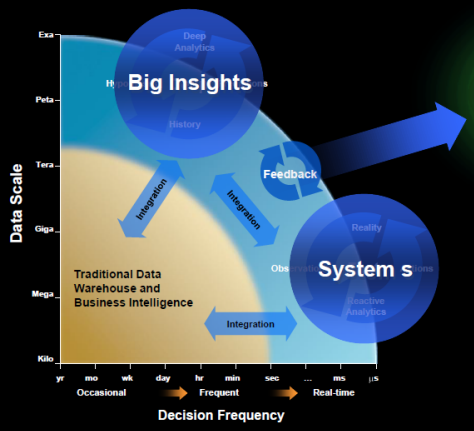
© 2011 International Business Machines Corporation

©J.-F.David 2012

IBM **Investor** Briefing

IBM

Maximum Insight Requires Combining Deep and Reactive Analytics



New Client Value

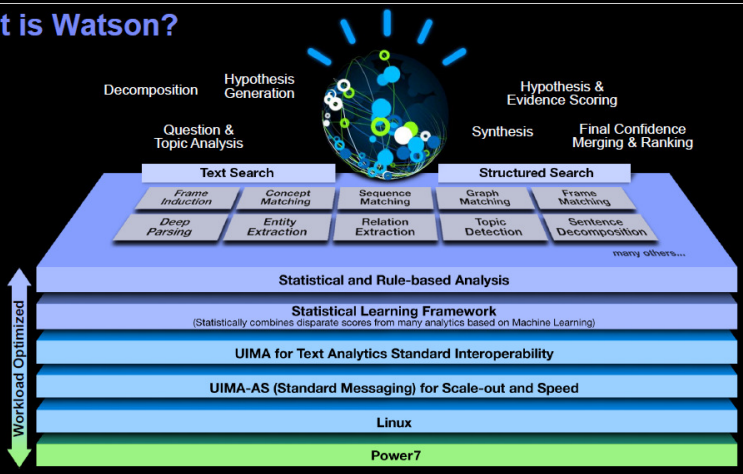
© 2011 International Business Machines Corporation

©J.-F.David 2012

IBM **Investor** Briefing

IBM

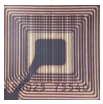
What is Watson?

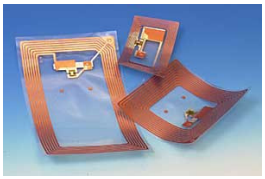


© 2011 International Business Machines Corporation

©J.-F.David 2012

©J.-F.David 2012





©J.-F.David 2012

©J.-F.David 2012

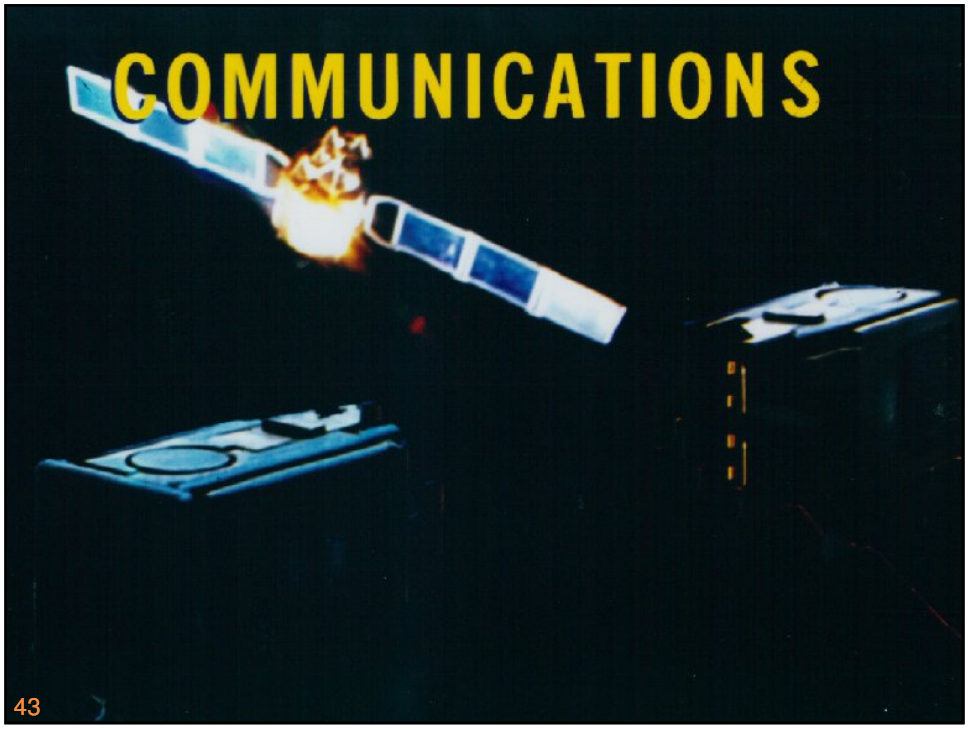
AUTONOMIC

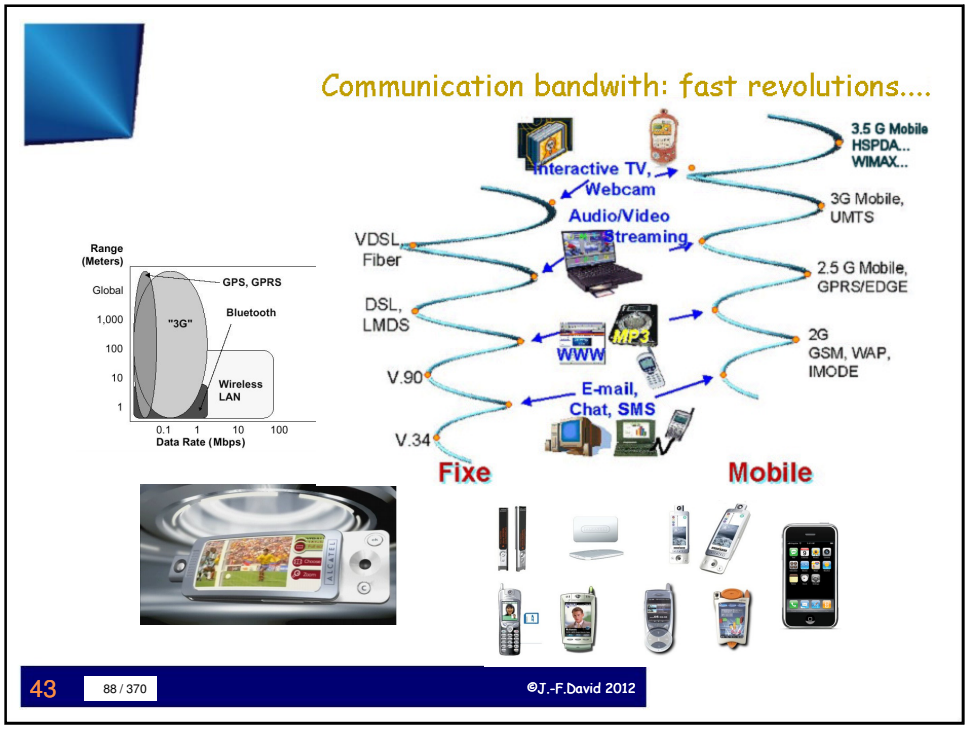
Source: IBM France

Wearable computers: Aesthetics

How comfortable would you be chatting socially with this guy?

Figure from Proem, a wearable system for exchanging flexible user profiles


COMMUNICATIONS
43


Communication bandwith: fast revolutions....
Range (Meters)
Global
1,000
100
10
1
GPS, GPRS
"3G"
Bluetooth
Wireless LAN
0.1
1
10
100
Data Rate (Mbps)
Interactive TV, Webcam
Audio/Video Streaming
VDSL, Fiber
DSL, LMDS
V.90
V.34
WWW
MP3
E-mail, Chat, SMS
3.5 G Mobile HSPDA... WIMAX...
3G Mobile, UMTS
2.5 G Mobile, GPRS/EDGE
2G GSM, WAP, IMODE
Fixe
Mobile
43
88 / 370
©J.-F.David 2012

UBIQUITY

uCommerce Tactics uCommerce Strategies

- Characteristics
  - IT technology everywhere and embedded in everything
  - Global connectivity and always on
  - Physical world joining virtual
    - cyberspace acts can affect real-world processes and vice versa
  - Web pages and portals for everything
    - documents, people, things, places, events, processes
    - pages give access to files, sensors, actuators, controls
- Enablers
  - performance: more bang for buck in less space
  - mobility

Devices Applications Operating Systems, Languages and Standards

The uCommerce Technology Mix Wide Area Networks Local Area Networks Establish a Connection

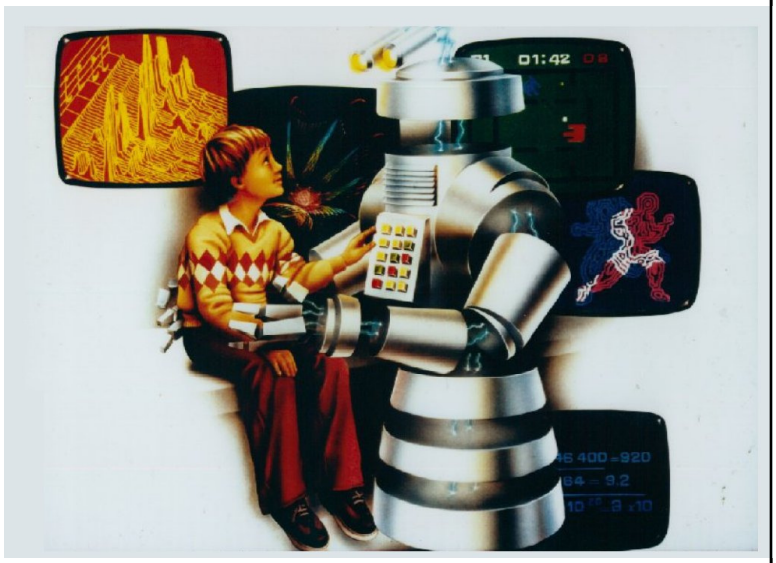
Risks, Security, ...

- Virus
- Back-ups
- Hackers
- Spywares, worms
- Phishing
- Attacks, accidents
- Bugs (Gödel theorem !)
- Networks
- Distance screen capture
- Big Brother...
- ….

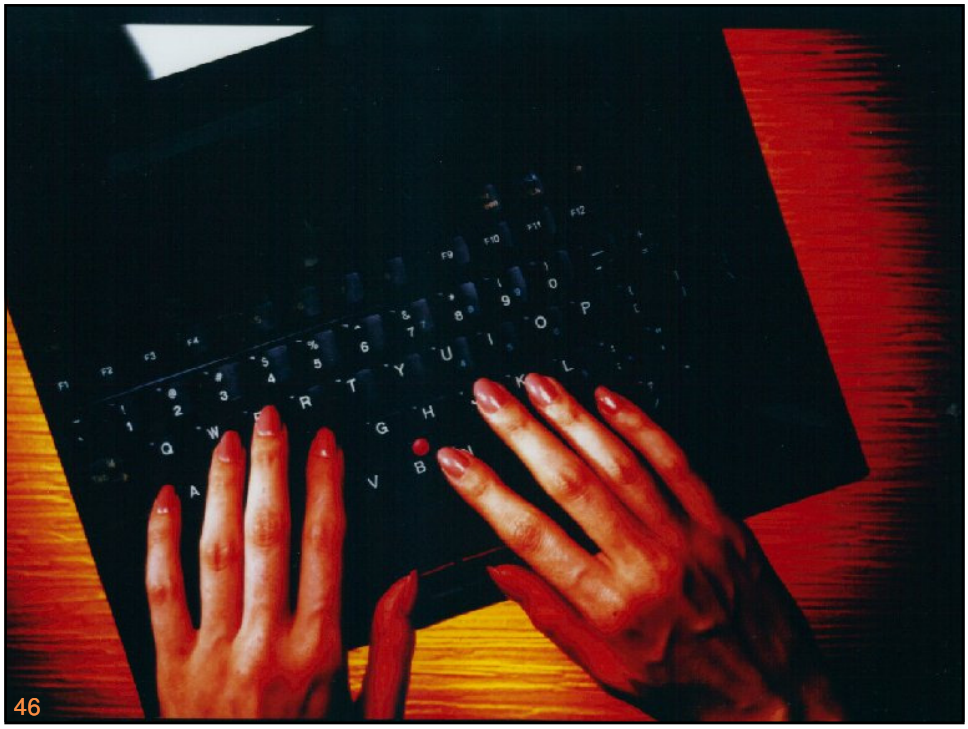
Threats

Threats in the digital world, as in the analogue one, originate with people. These people fall into five groups:

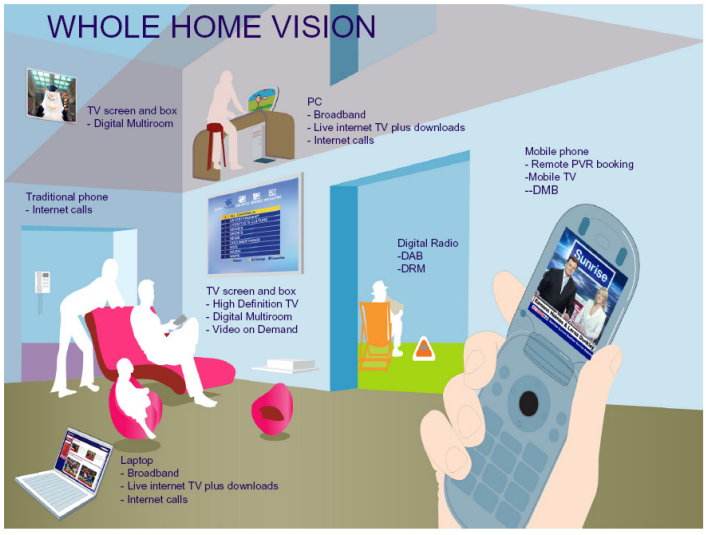
- Criminals (thieves, fraudsters, organized crime),
- Malefactors (hackers, vandals, terrorists, cyber-warriors, some ex-employees and other disgruntled or vengeful individuals),
- Spies (commercial and governmental),
- Undesirables (scam artists, spammers, 'ethical' hackers and nerds), and
- The incompetent, or the simply unaware (staff, contractors, customers and other third parties).



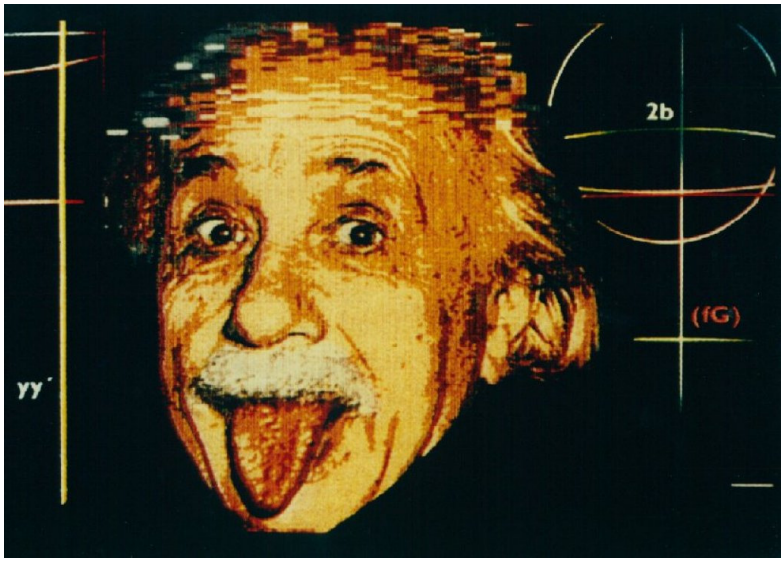
©J.-F.David 2012

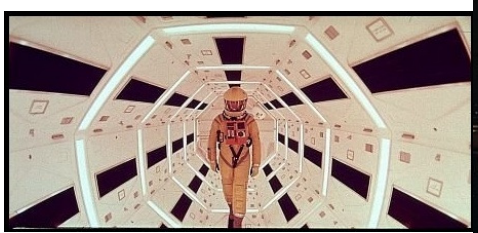


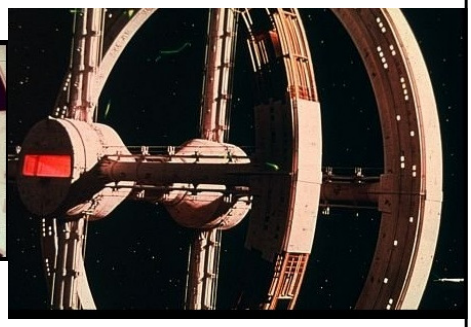
46



©J.-F.David 2012


2b
(fG)
yy'





"Just what do you think you're doing, Dave? Look, Dave, I can see you're really upset about this. I honestly think you ought to sit down calmly, take a stress pill and talk things over."

— HAL, just prior to disconnection, 2001: A Space Odyssey, a film by Stanley Kubrick

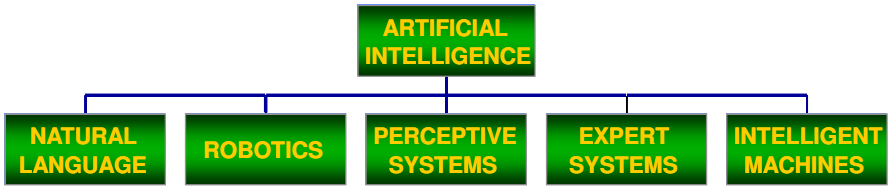
 ©J.-F.David 2012

What is AI?

- Artificial Intelligence involves studying the thought processes of humans and representing those processes via machines (computers, robots, etc).
- AI has three objectives
  - To make machines smarter (the primary objective)
  - To understand what intelligence is (the Nobel Laureate purpose)
  - To make machines more useful (the entrepreneurial purpose)
- Can a machine become human? What is human intelligence?
- AI is a branch of computer science that deals with ways of representing knowledge using symbols and heuristics

 ©J.-F.David 2012

AI FAMILY



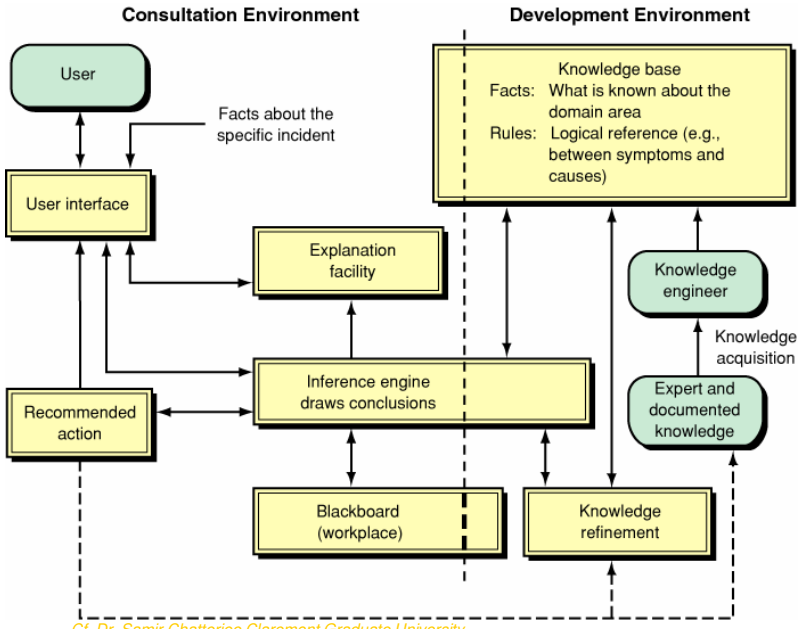
©J.-F.David 2012

Expert Systems

- What does an expert do?
  - Provides solutions to complex problems
  - They have specific knowledge and experience in problem area
  - They are aware of alternate solutions, chances of success, and how much it will cost
  - The more unstructured the situation, the more specialized and expensive is the advice
- What is an expert system?
  - ES are an attempt to mimic human experts.
  - AI technology have proved to be very successful.

©J.-F.David 2012

Expert System

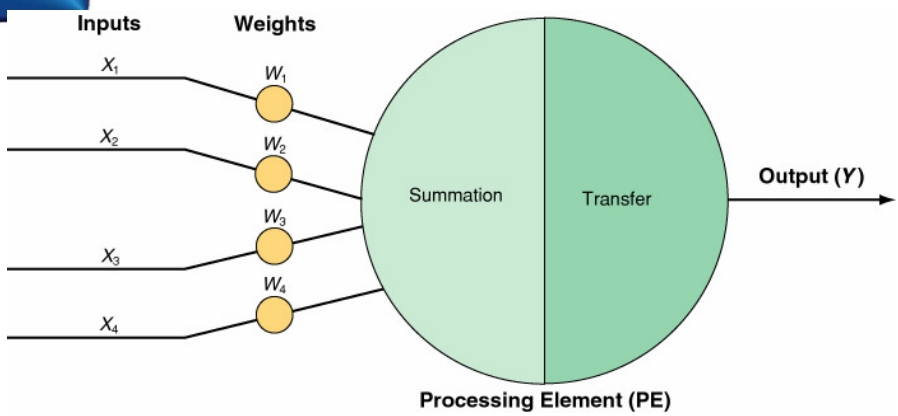


47 Cf. Dr. Samir Chatterjee Claremont Graduate University

NLP and Voice Technology

- NLP refers to communicating with a computer in English like language.
- Give computer directions what to do and it does that.
- NLP understanding investigates methods of allowing a computer to comprehend instructions via keyboard or voice (known as voice recognition).
- NL generation allows computers to produce ordinary English language on screen or by voice (known as voice synthesis)

Neural Processing

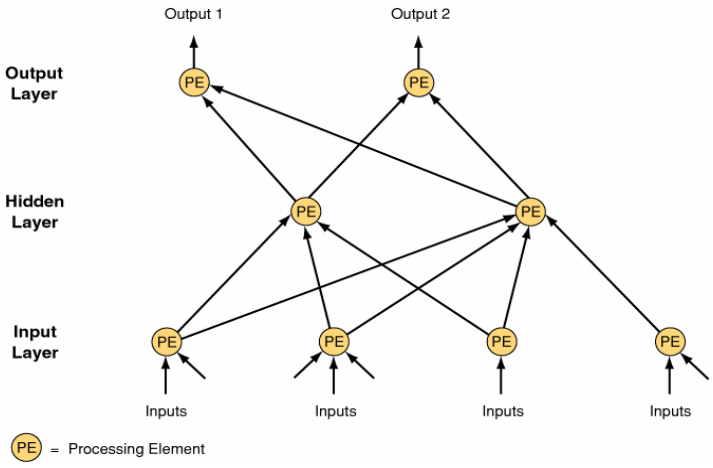


Input – attributes of a problem; weights – relative strength; output – solution to a problem

Cf. Dr. Samir Chatterjee Claremont Graduate University

©J.-F.David 2012

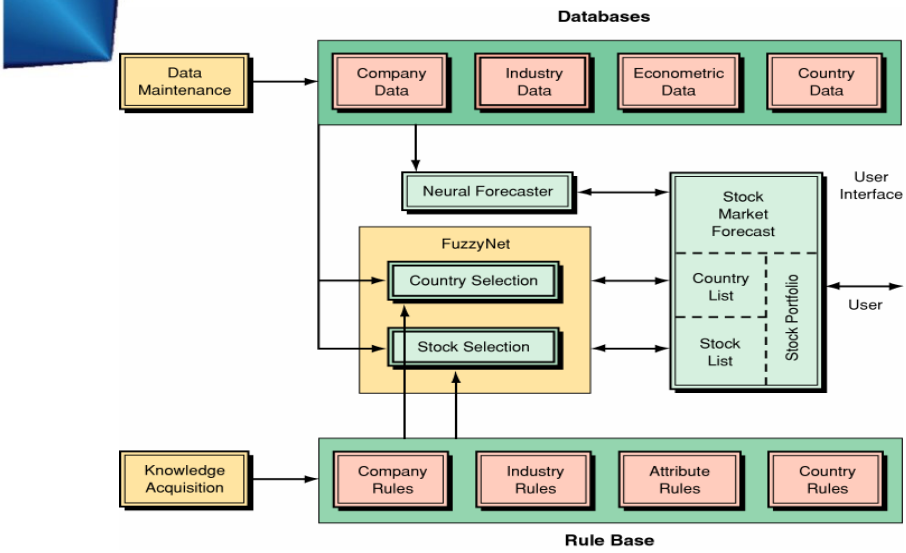
Neural Network



Cf. Dr. Samir Chatterjee Claremont Graduate University

©J.-F.David 2012

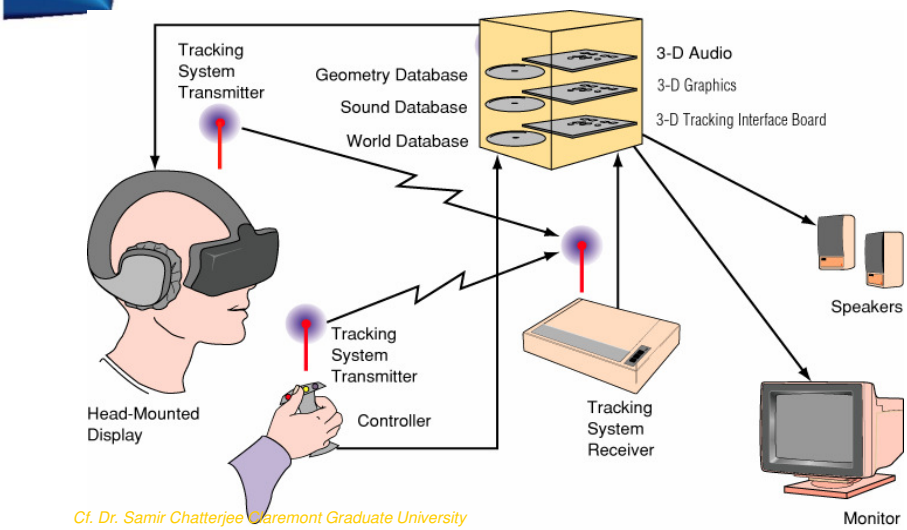
Fuzzy Logic



Cf. Dr. Samir Chatterjee Claremont Graduate University

©J.-F.David 2012

Virtual Reality



Cf. Dr. Samir Chatterjee Claremont Graduate University

©J.-F.David 2012

Intelligent Agents

- IA helps humans to filter information and can play important role in e-commerce
- They are also called software agents, wizards, knowbots, softbots.
- What can it do?
  - Information access and navigation
  - Decision support and empowerment
  - Repetitive office activity
  - Mundane personal activity
  - Search and retrieval
  - Domain experts

©J.-F.David 2012

The 2 faces of bots...

Intelligence function

Turned towards understanding and adaptation

- "a priori" objectives
- "a posteriori" suggested
- "over the shoulder"

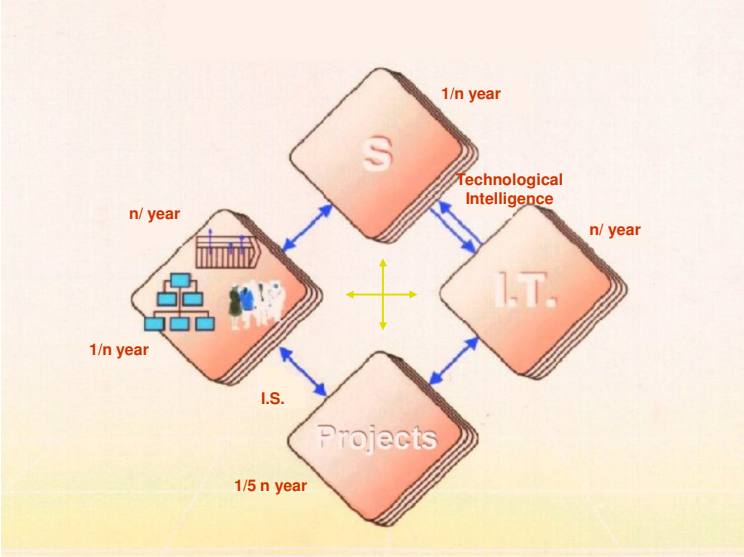
Agent function

Turned towards execution of the mission

©J.-F.David 2012

©J.-F.David 2012

Strategic Alignment



©J.-F.David 2012

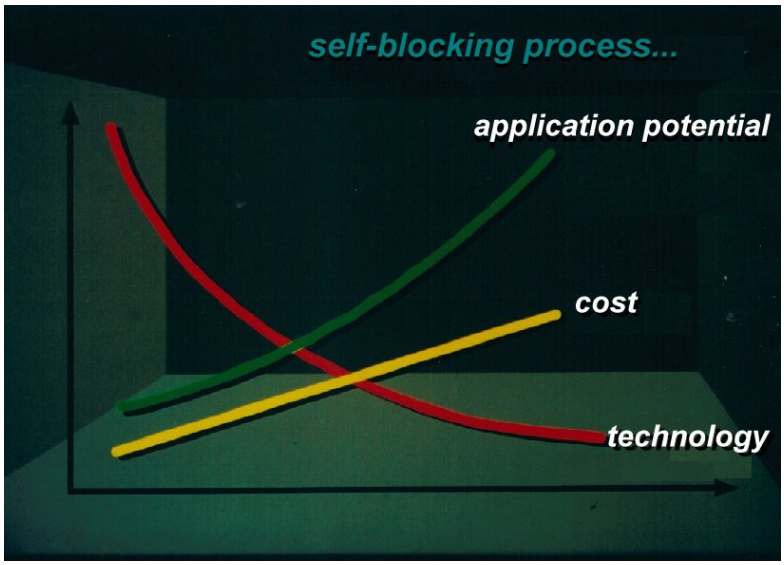
Harvard Business Review

IT Doesn't Matter

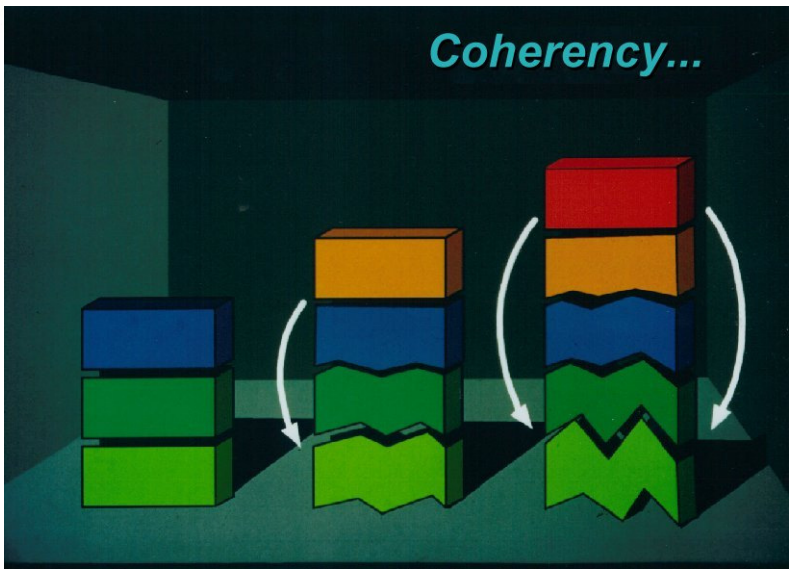
by Nicholas G. Carr

As information technology's power and ubiquity have grown, its strategic importance has diminished. The way you approach IT investment and management will need to change dramatically.

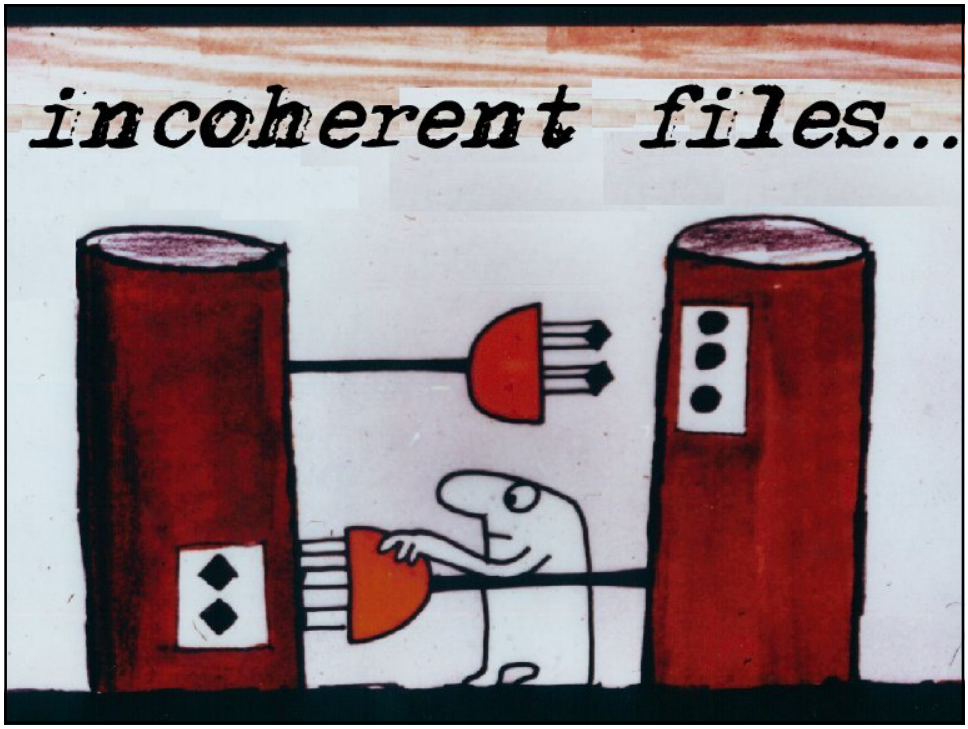
©J.-F.David 2012

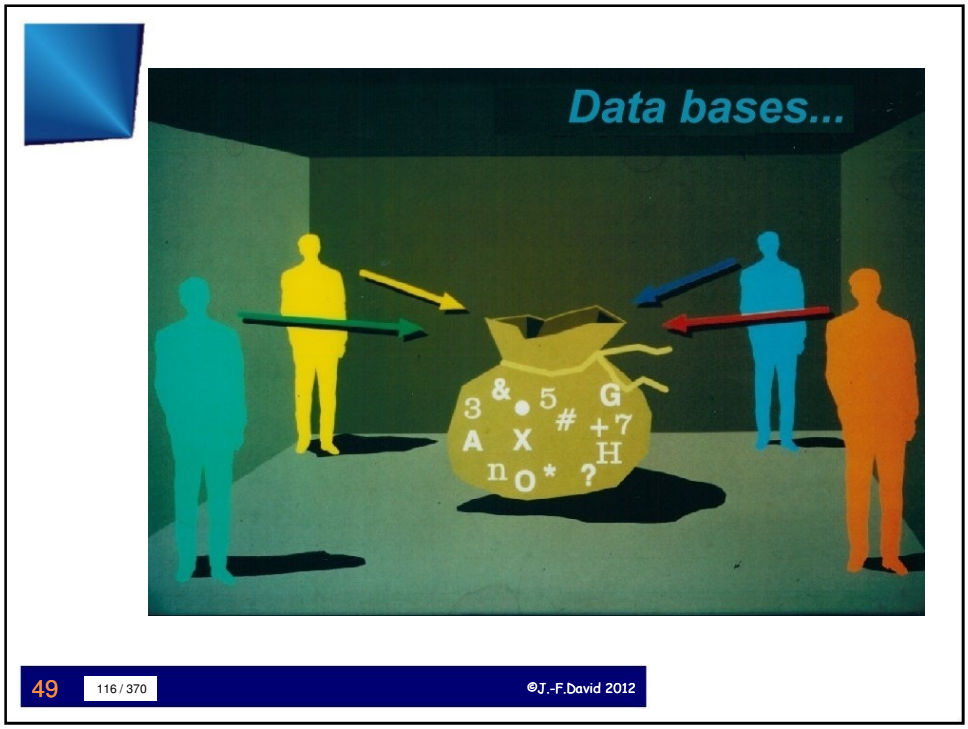


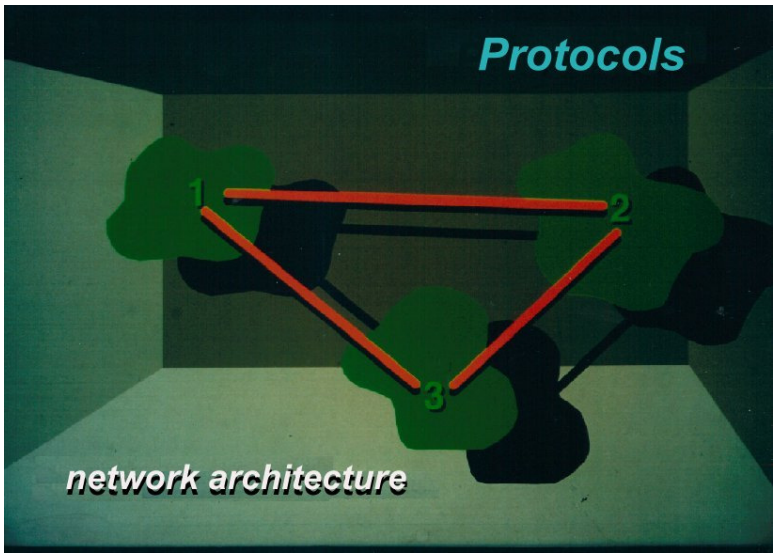
 ©J.-F.David 2012



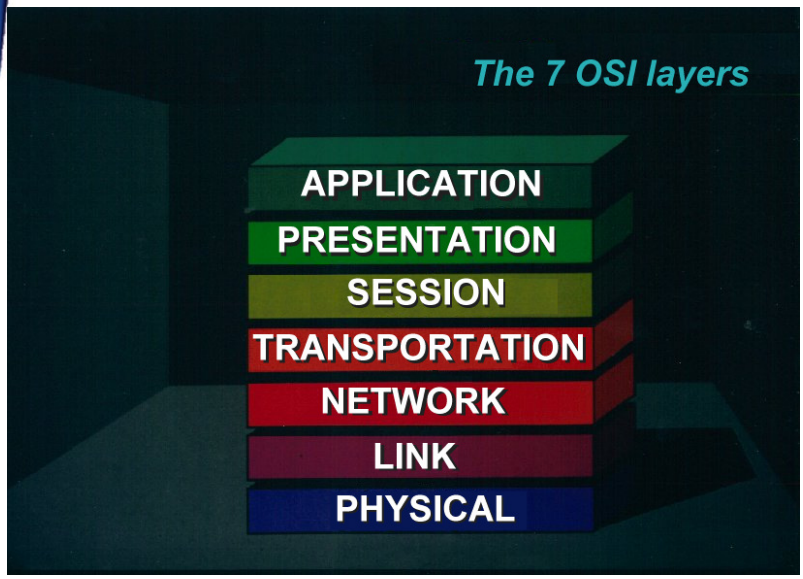
 ©J.-F.David 2012


incoherent files...

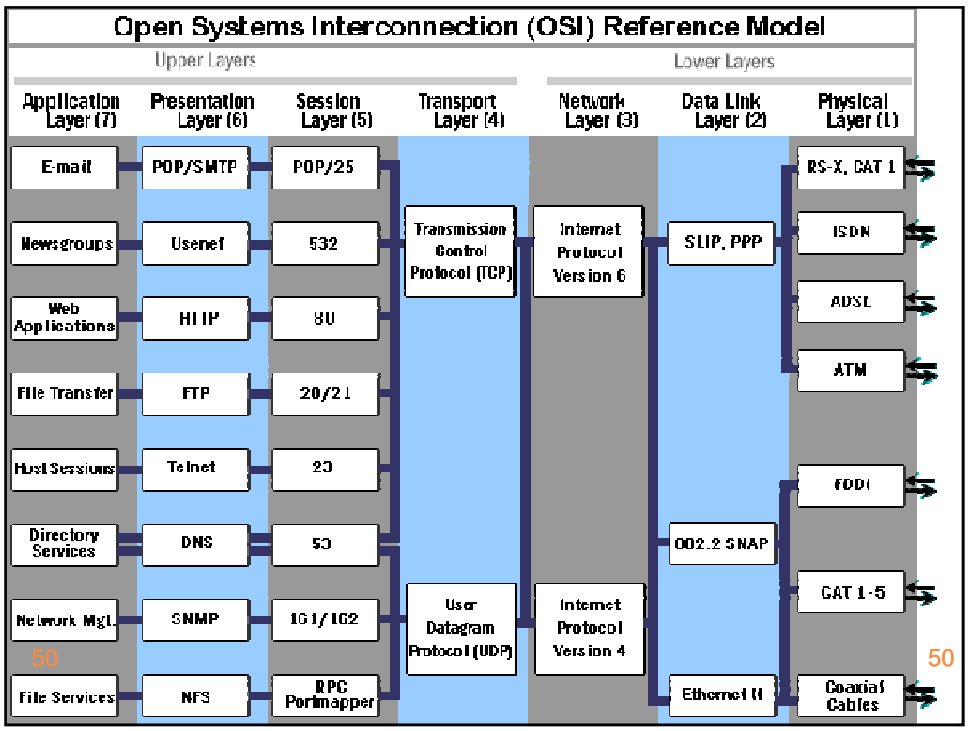

Data bases...
49
116 / 370
©J.-F.David 2012

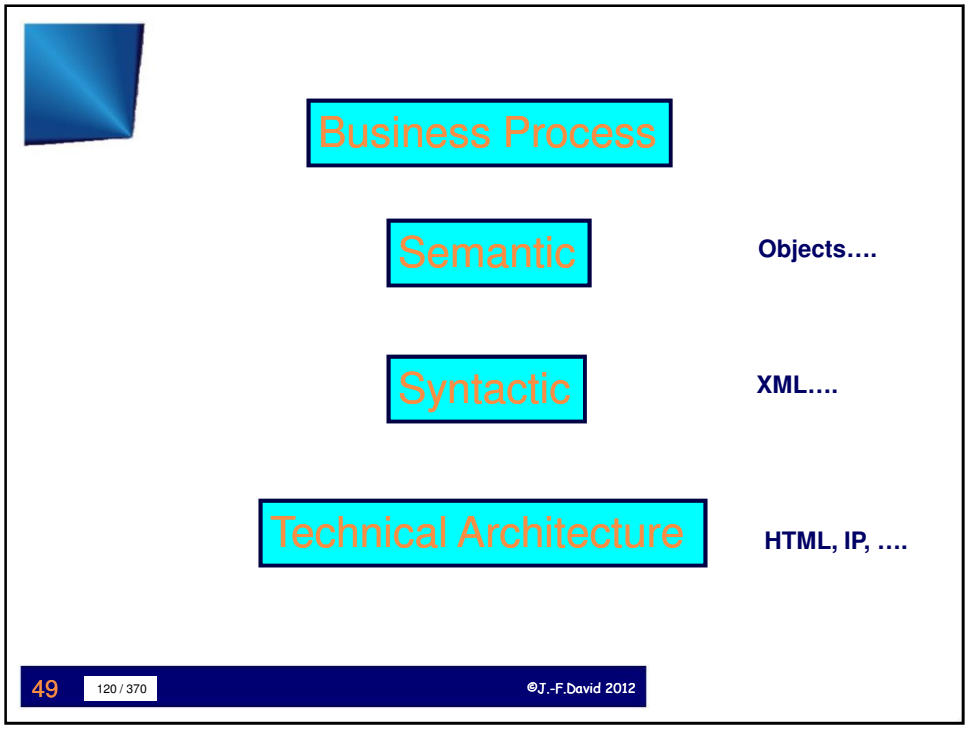


 ©J.-F.David 2012

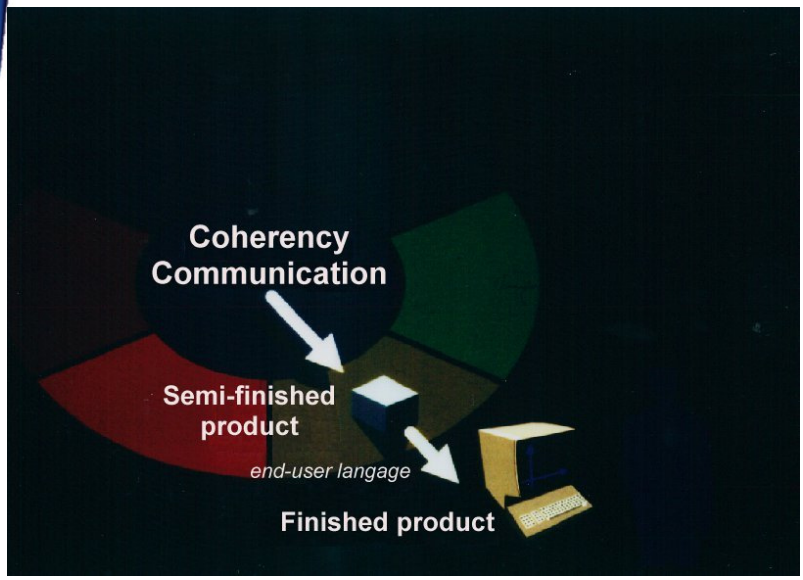


 ©J.-F.David 2012

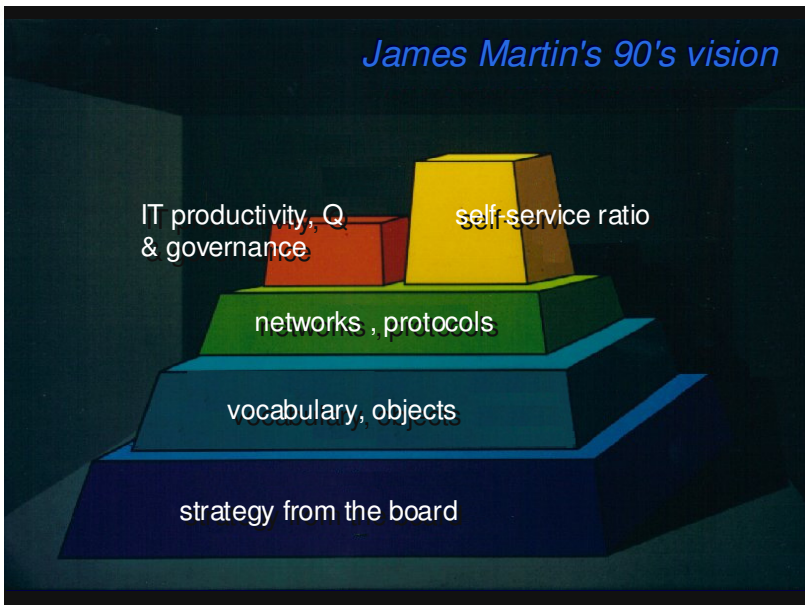

Open Systems Interconnection (OSI) Reference Model
Upper Layers
Lower Layers
Application Layer (7)
Presentation Layer (6)
Session Layer (5)
Transport Layer (4)
Network Layer (3)
Data Link Layer (2)
Physical Layer (1)
E-mail
POP/SMTP
POP/25
Newsgroups
Usenet
532
Web Applications
HTTP
80
File Transfer
FTP
20/21
Host Sessions
Telnet
23
Directory Services
DNS
53
Network Mgt.
SNMP
161/162
File Services
NFS
RPC Portmapper
Transmission Control Protocol (TCP)
User Datagram Protocol (UDP)
Internet Protocol Version 6
Internet Protocol Version 4
SLIP, PPP
802.2 SNAP
Ethernet II
RS-X, CAT 1
ISDN
ADSL
ATM
FDDI
CAT 1-5
Coaxial Cables
50
50


Business Process
Semantic
Objects….
Syntactic
XML….
Technical Architecture
HTML, IP, ….
49
120 / 370
©J.-F.David 2012

©J.-F.David 2012



©J.-F.David 2012



 ©J.-F.David 2012

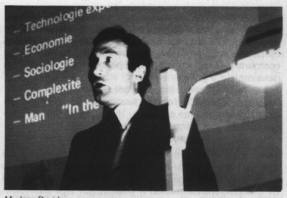
Readers' Forum

the "Meet the Speakers" session later they still failed to get a definition out of him. This was very much an IBM oriented talk, largely dealing with SNA, and the experiences of a user who had actually installed SNA could have been of more interest.

M David described the current status of telecommunications in the area of distributed processing, highlighting the particular aspects which needed attention, as well as the problems which arise. He described in detail the way that SNA tackles the problems and the functional working of SNA in three levels, as well as the limitations of the system.

A measure of the interest which M David's presentation engendered was the discussion and questions which followed. More than one delegate considered that, in SNA, IBM had made a simple thing complicated but, said M David, SNA is really the tip of the iceberg and it indicates the emergence of something which will grow and develop much further later on when the present difficulties, partly due to historical reasons, have been solved. Other questions related to details of IBM's intentions and the design of various parts of the network and although this was certainly a very IBM-angled session, the audience got a great deal more out of it than they would have done from a straightforward IBM marketing presentation, even if, as one delegate put it, they "didn't exactly go overboard about it".

Mr. James Martin



M. Jean David

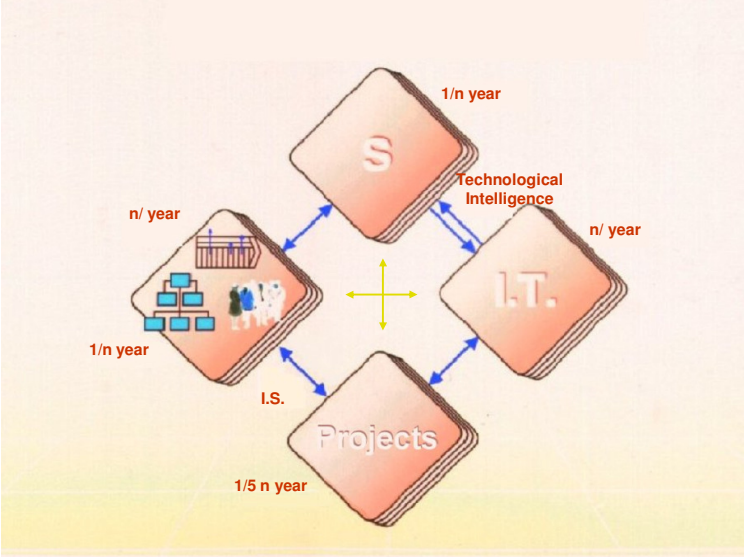
The panel of speakers coordinated by Diebold Deutschland also came under fire – from everyone but the German delegates. Others found that the all-German panel ended up in an all-German debate as the German delegates discussed points with the panel, leaving those from other nationalities looking on from the side-lines. Chauvinism again? Or just how much really does get lost during the translation process? It would certainly appear that there is something of the feeling of "live" interchange missing.

Two presentations in the second half of the conference, however, received almost unqualified praise. The first was that of Dott V Mei, of Societa Assicuratrice Industriale, Italy. His company has carried out a hardware purchasing policy which is remarkable for the rapidity with which it has been implemented, the cost savings it has achieved and the courage and determination behind the policy. Most users would be a great deal more cautious, but SAI's policy has paid dividends in improved throughput and reduced costs.

The problems and benefits of a mixed, plug-compatible system, clearly described by Dott Mei, created a good deal of interest among the audience – "refreshing, stimulating" were among the adjectives used. And Dott Mei hammered home the point that one of the essential features in implementing a policy of this kind is to be completely independent in the decision taking and to have full confidence from the top management, from the board of directors.

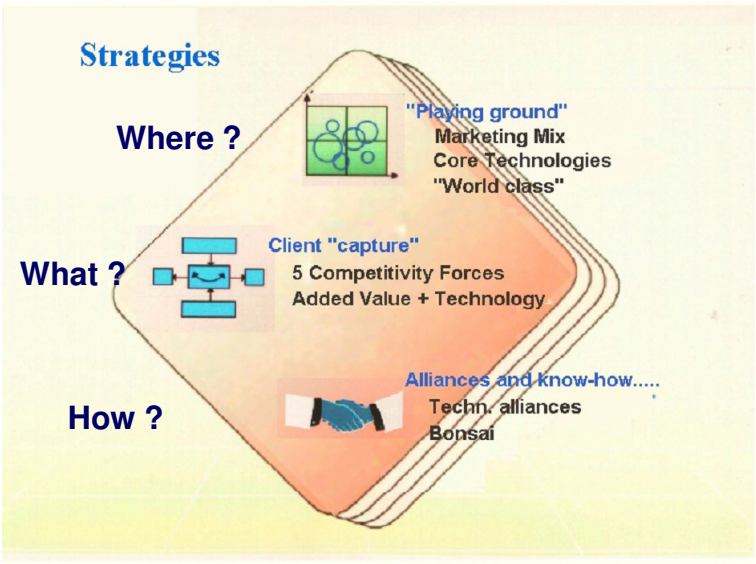
 ©J.-F.David 2012

Strategic Alignment



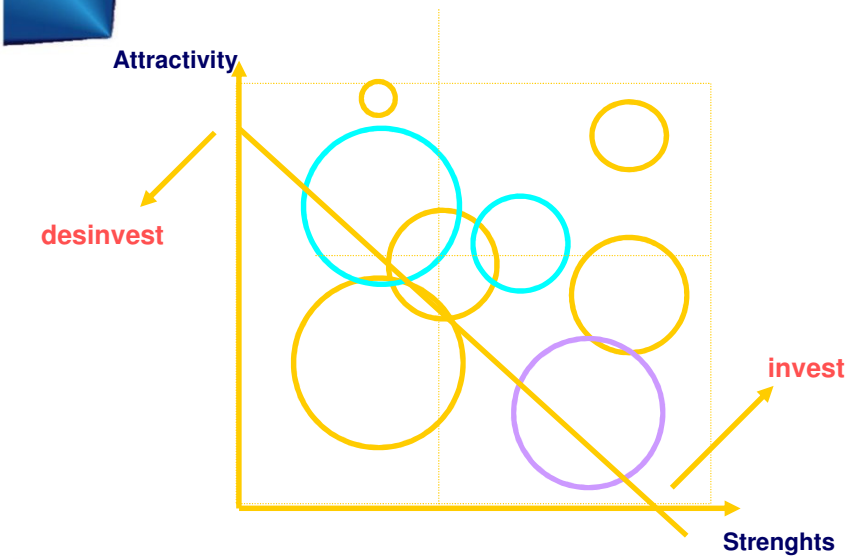
©J.-F.David 2012

Strategies

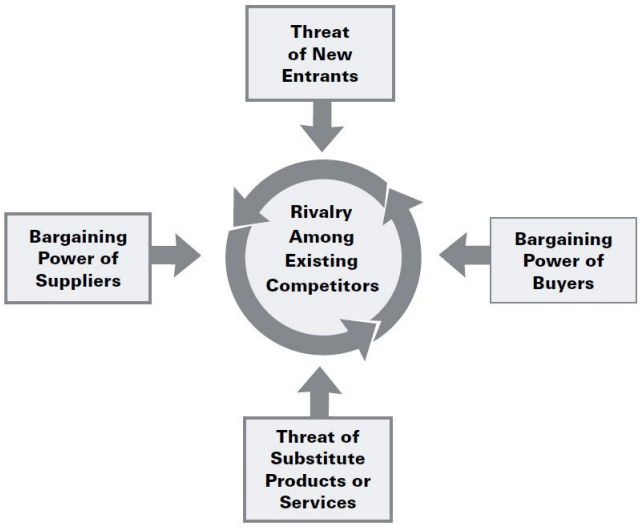


©J.-F.David 2012

Playground: where?

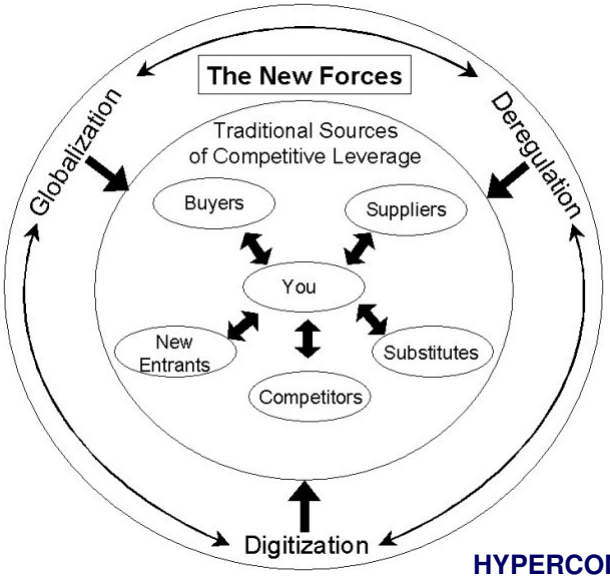


©J.-F.David 2012



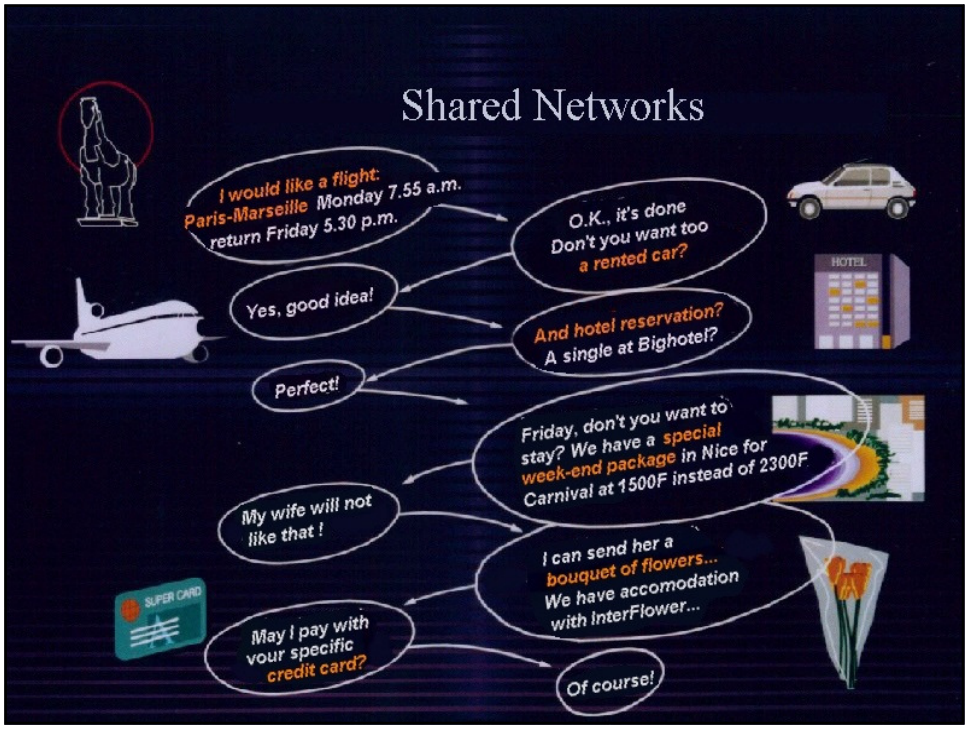
©J.-F.David 2012

Downes and Mui's New Forces Model



HYPERCOMPETION

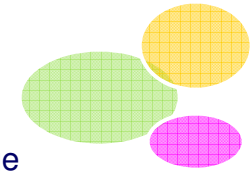
©J.-F.David 2012



Paradigm changes

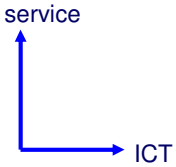
Banks --> Insurance products, Retirement products, ...
Insurance --> Travel, Retirement, Leisure, ...
Credit card --> Luxury, Services, ...
Retail --> Credit, Travel, Insurance, ...
Water distribution -->Wiring, multimedia, TV, ...
Construction --> Wiring, telephon, leisures, ...
Hospital --> Hotel, services, medical devices, ...
Nuclear --> expert systems, software dvpt, ...
Real Estate -->3 rd age services, robotics, ...
Aerospace --> CAD/CAM, ...
Hotels --> health, sport, check-up, ...

Method 1



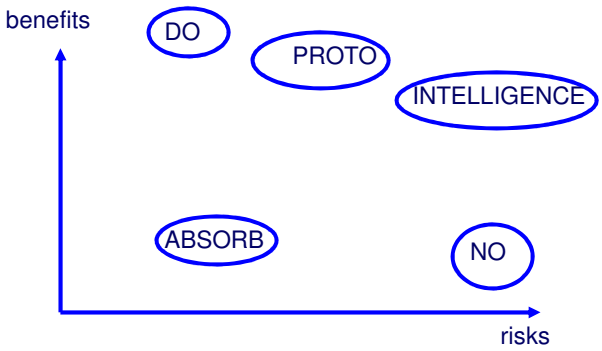
a) Paradigm change, profession slippage
Why do client want this kind of service/product ?
- ♦ New professions, competitors
- ♦ New vision

b) List of product/services
How can we add
- ♦ more customization services
- ♦ more ICT



Method 2

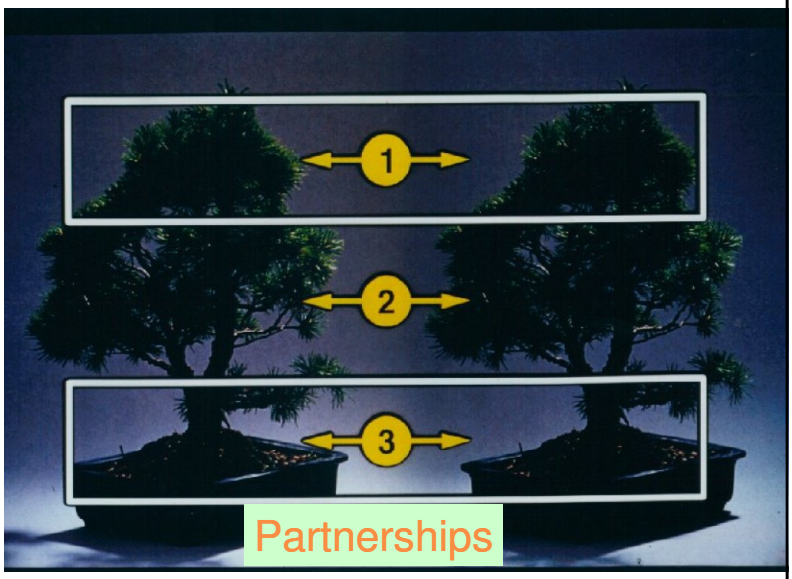
How to decide go/no go ?



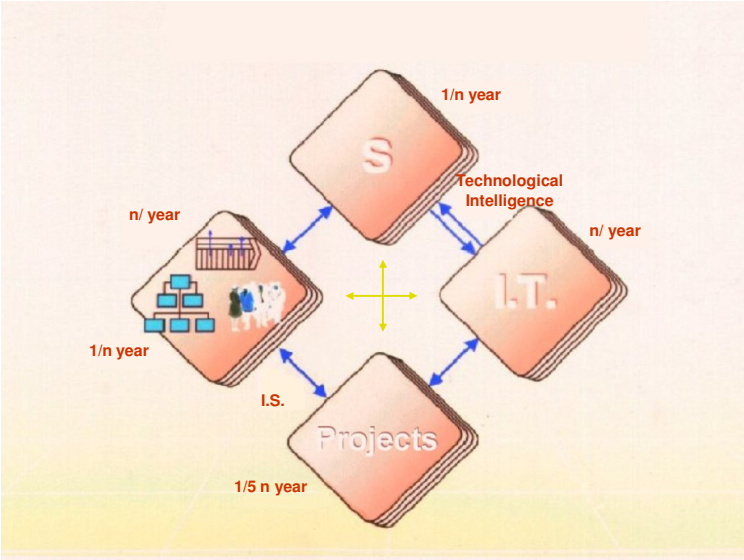
©J.-F.David 2012

Bonzai Strategy

©J.-F.David 2012

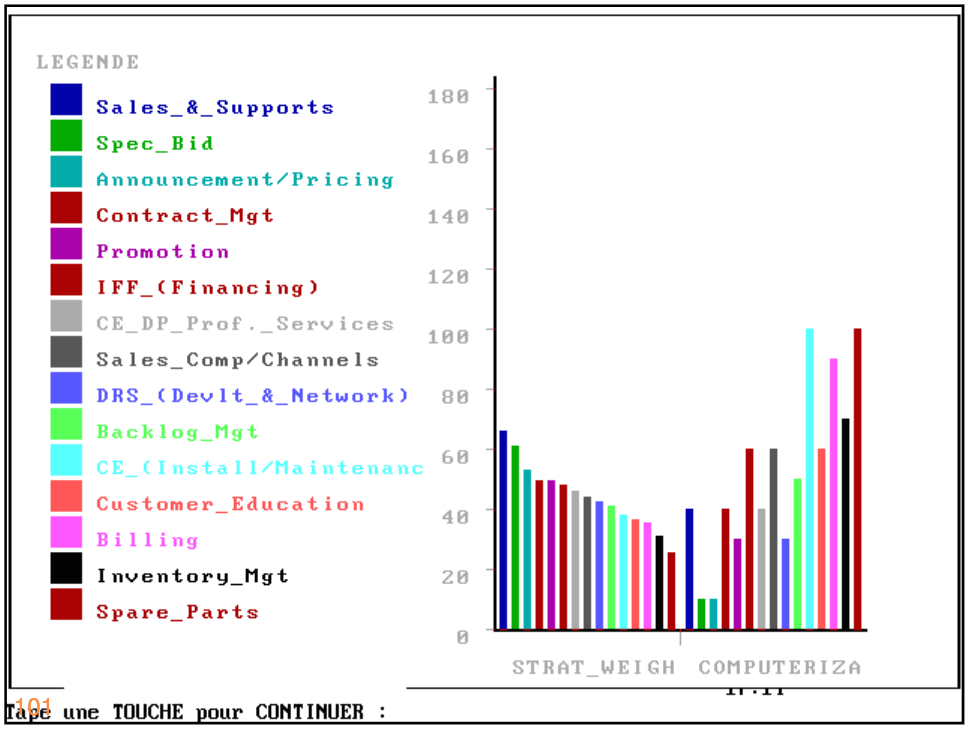


Strategic Alignment



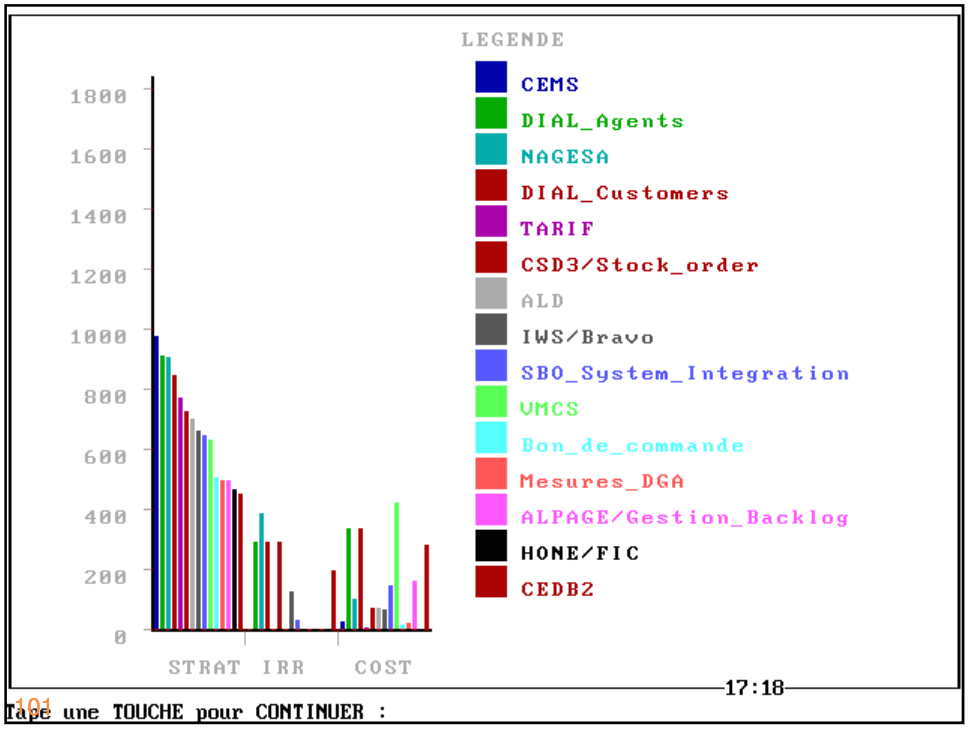
Impact des Processus orientés CLIENT sur les indicateurs stratégiques	Offer	SALES								Fullfilment						CE	
		SpecialBids	Announcement	Promotions	Channels	Sales	IFF Svces	DRS	Educ Achie.	CE/DP	Contract	Order	Backlog	Inventory	Billing	Acc. Receiv.	C.E.	S. Parts
Growth																		
Hard Revenue growth		5	5	5	4	5	4	5	4	5	3	2	2	4	1		5	5
Soft " "		4	5	5	3	5	3	5	5	5	3	2	2	1	1		5	
Services " "		5	4	4	5	5	1	5	2	5	2	1	2	1	2		2	
" ""		4	4	5	4	5	1	3	5	3		2	3		2			
" "		5	4	4	4	5	5	2	2	2	3	2	3	3	2		2	1
" " _		4	4	5	3	5	3	2	3	5	4				2		2	2
Partnership																		
Mk Share/Industry		5	5	5	4	5	3	5	4	5	2	1	1	2	1	1		
" " Soft		5	5	5	4	5	2	5	4	5	2	1	1	1	1	1		
Services/Tot revenue		5	4	4	4	5	4	5	5	5	2	1	1		2	1		
.....		5	5	5	5	5	3	2	3	3	3	1	2	3	2	2		
Productivity																		
Indirect/tot manpower		3	1	1	1	4	1	1	1	3	5	4	4	2	3	4	4	3
Indirects/Revenue		3	1	1	1	4	1	1	1	3	5	4	4	2	3	4	4	3
OP. Expenses/Rev		3	1	1	4	5	2	1	2	1	4	4	4	2	3	4	4	3
Customer Satisfaction																		
Customer sat		5	3	3	1	5	3	5	5	5	5	1	4	5	4	5	5	4
Simplification																		
Workload		5	5	2	3	5	3	1	3	1	5	2	4	4	4	5	5	3
Non opérational time		5	5	3	4	5	5	2	2	1	5		5	2	5	2	2	
React cust req /OE					3	3					5	4				2	2	2
Reac OE/ Shipping					3	4	3	3	3	3	4		5	5	5	3	3	2
Profit																		
Net Result/revenue		5	3	4	3	5	4	4	4	4	3	1	2	2	2	5	5	1
Assets Turnover rate		4	4	4	4	4	3				1	2	4	3		5		3
Morale																		
Morale index		3	4	3	3	4	2	1	1	2	2	2	1	3	1	1	3	2

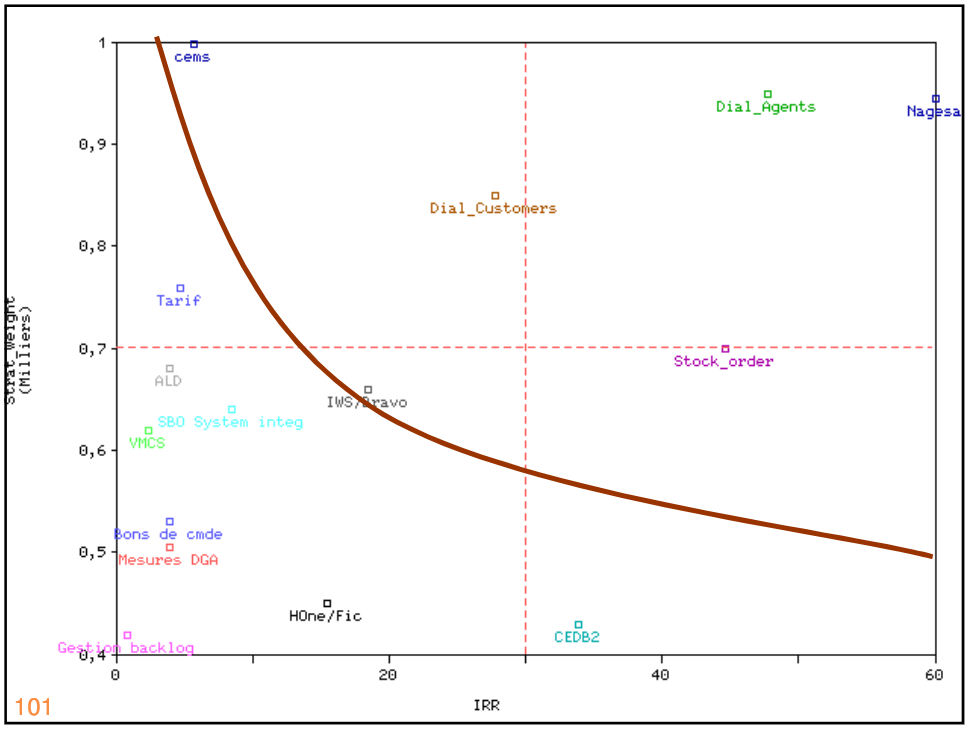
101



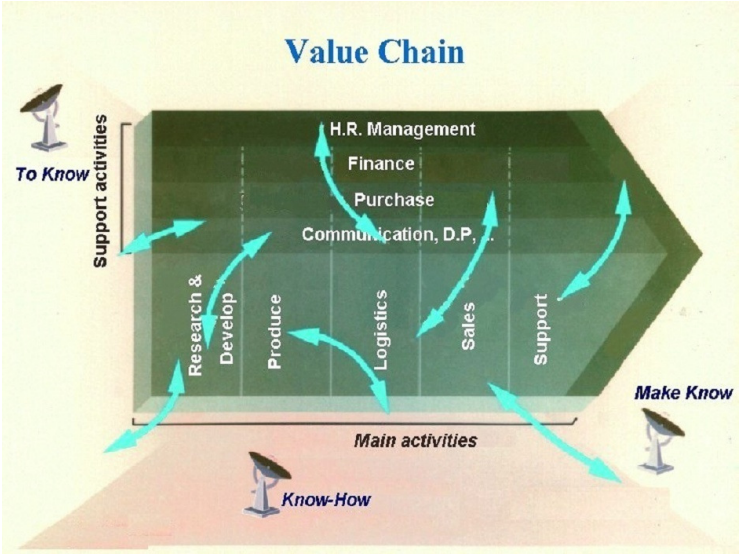
101

Tape une TOUCHE pour CONTINUER :

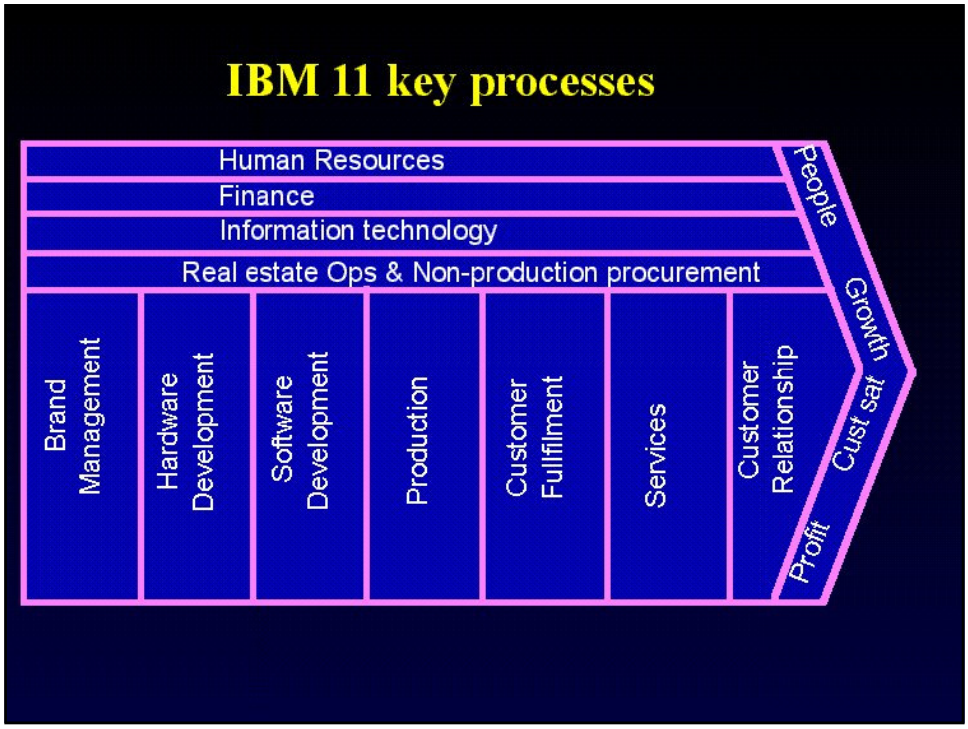

LEGENDE
CEMS
DIAL_Agents
NAGESA
DIAL_Customers
TARIF
CSD3/Stock_order
ALD
IWS/Bravo
SBO_System_Integration
VMCS
Bon_de_commande
Mesures_DGA
ALPAGE/Gestion_Backlog
HONE/FIC
CEDB2
1800
1600
1400
1200
1000
800
600
400
200
0
STRAT
IRR
COST
17:18
101
Tape une TOUCHE pour CONTINUER :

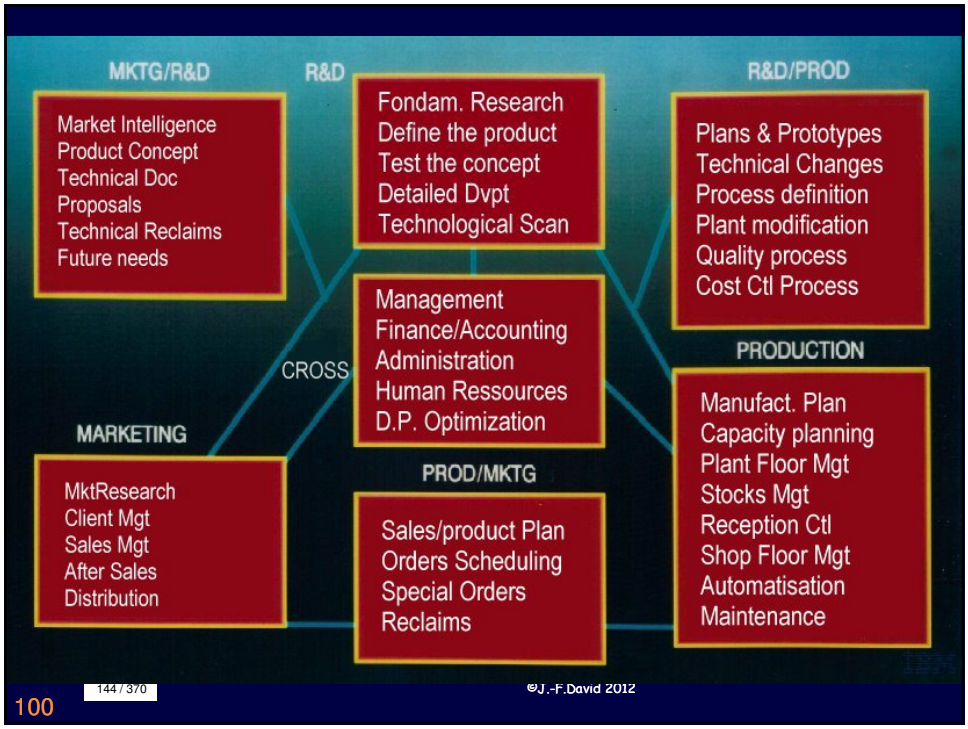

Scat_weight (Milliers)
1
0,9
0,8
0,7
0,6
0,5
0,4
cems
Dial_Agents
Nagesa
Dial_Customers
Tarif
Stock_order
ALD
IWS/Bravo
SBO System integ
VMCS
Bons de cmde
Mesures DGA
HOne/Fic
CEDB2
Gestion backlog
0
20
40
60
IRR
101

©J.-F.David 2012



©J.-F.David 2012


IBM 11 key processes
Human Resources
Finance
Information technology
Real estate Ops & Non-production procurement
Brand Management
Hardware Development
Software Development
Production
Customer Fullfilment
Services
Customer Relationship
People
Growth
Cust sat
Profit


MKTG/R&D
Market Intelligence
Product Concept
Technical Doc
Proposals
Technical Reclaims
Future needs
R&D
Fondam. Research
Define the product
Test the concept
Detailed Dvpt
Technological Scan
R&D/PROD
Plans & Prototypes
Technical Changes
Process definition
Plant modification
Quality process
Cost Ctl Process
CROSS
Management
Finance/Accounting
Administration
Human Ressources
D.P. Optimization
MARKETING
MktResearch
Client Mgt
Sales Mgt
After Sales
Distribution
PROD/MKTG
Sales/product Plan
Orders Scheduling
Special Orders
Reclaims
PRODUCTION
Manufact. Plan
Capacity planning
Plant Floor Mgt
Stocks Mgt
Reception Ctl
Shop Floor Mgt
Automatisation
Maintenance
144 / 370
©J.-F.David 2012
100

Process Management

What is Process Management?

A business process is any broad collection of activities within your company that is involved in the ultimate goal of developing your product or service for the customer.
Business processes are typically evaluated from the customer's viewpoint.
Ensuring a smoothly running business process is critical in maximizing the added value you are providing to your customers.
Managing the key processes efficiently is critical to the success of the company.
But managing the processes is harder than it may seem at first - mostly because these processes don't stand alone, but interact with one another.

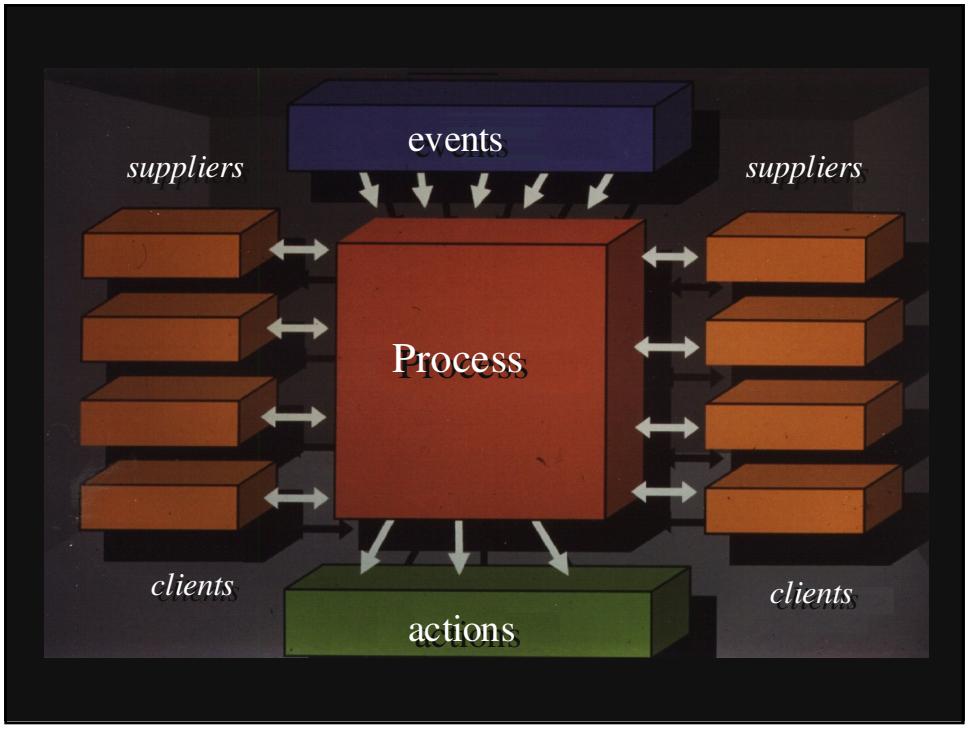
©J.-F.David 2012

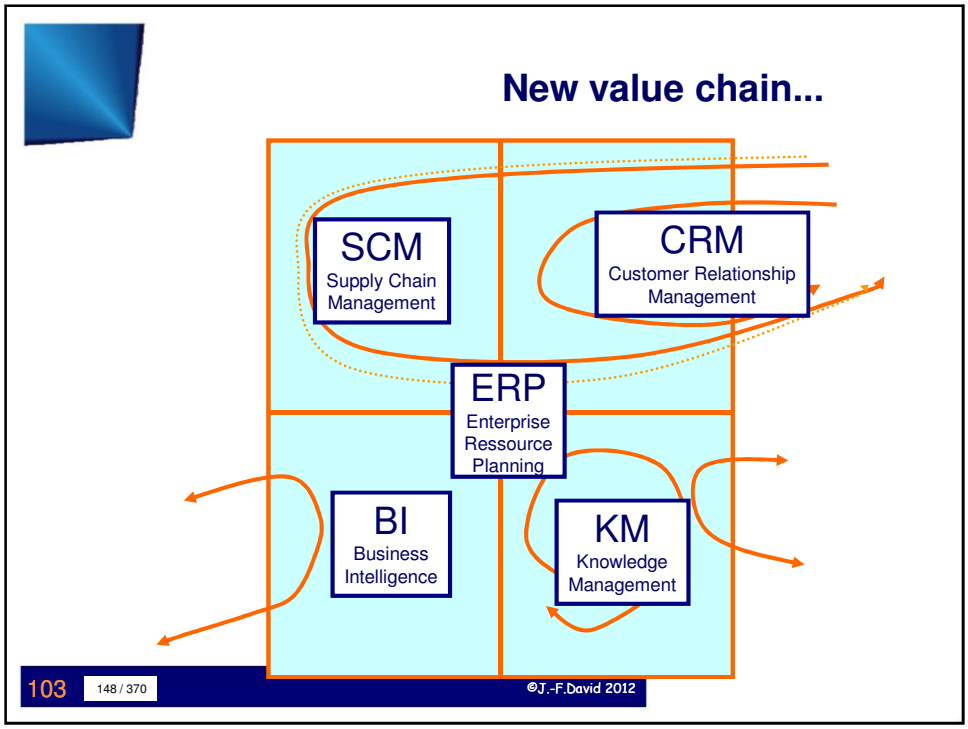
Process Management

There are many types of business processes such as key processes, support processes and sub-processes. Typical business processes include:

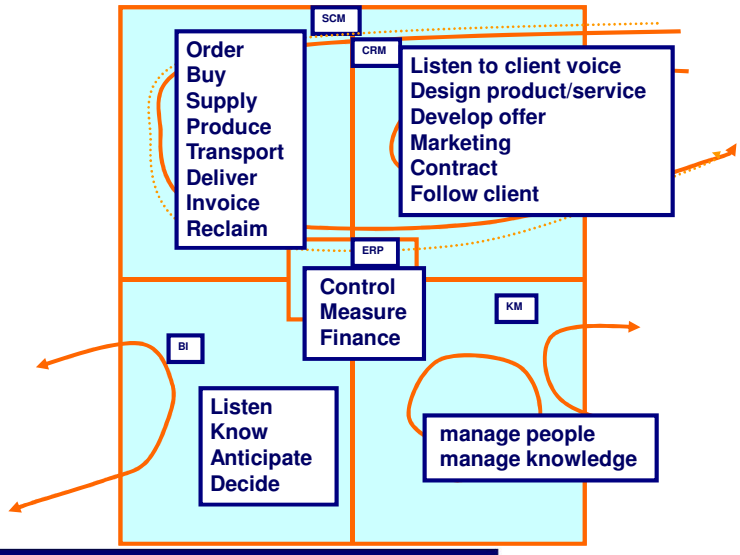
* **Procurement**: Securing the materials and equipment necessary to produce your goods or services.
* **Product development**: Planning new goods or services for your customers or refining existing products.
* **Production**: Creating those goods or services.
* **Order delivery**: Receiving orders from customers and ensuring that those orders are fulfilled.
* **Distribution**: Ensuring smooth distribution of goods to customers.
* **Customer support**: Providing assistance to customers after they've bought your product or service.

©J.-F.David 2012


events
suppliers
suppliers
Process
clients
clients
actions

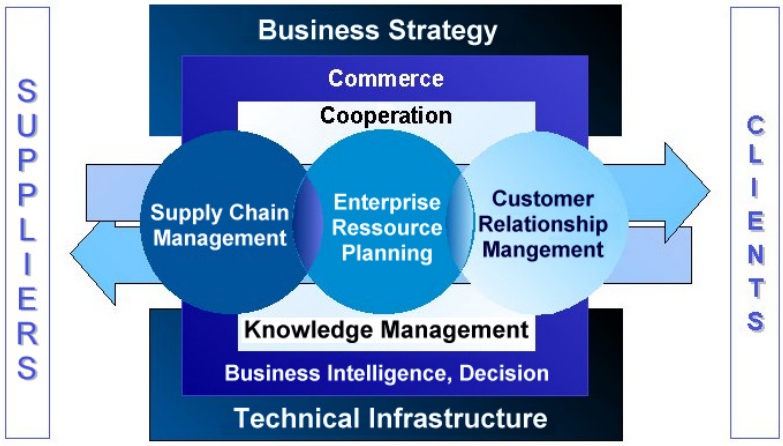

New value chain...
SCM
Supply Chain Management
CRM
Customer Relationship Management
ERP
Enterprise Ressource Planning
BI
Business Intelligence
KM
Knowledge Management
103
148 / 370
©J.-F.David 2012

Main processes

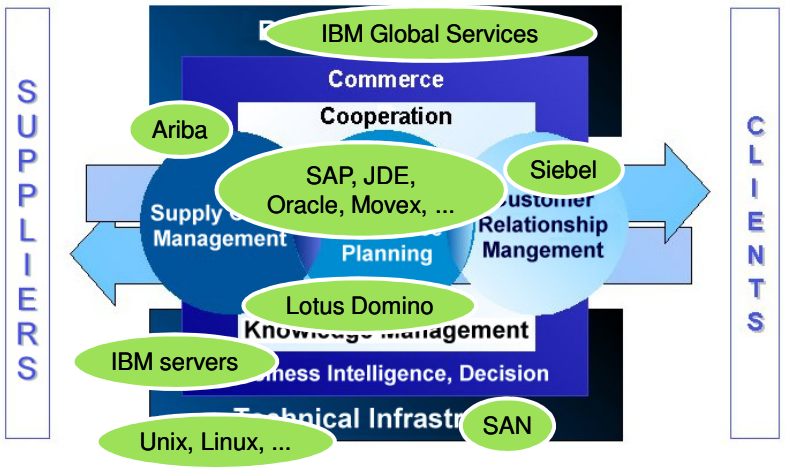


©J.-F.David 2012

PROCESSES or SOFTWARES ???



©J.-F.David 2012



IBM strategy partial view

 ©J.-F.David 2012

Investigate, amazement reports, ...
Moments of Truth
Client intelligence
Claims analysis

CRM

Process zoom

Listen to client voice
Design product/service
Develop offer
Marketing
Contract
Follow client

Manage opportunities
Manage territories
Forecast sales
Answer RFP/RFQ, bids
Negotiate
Quotations
Issue / Manage contracts
Sell
Take the orders

Invent product/service
Analyse/test the needs
Design the system
Define processes
Prototype
Design subsystems
Industrialize
Negotiate sub-contracting
Integrate
Test
Deploy/Control Q
Document
Annonce

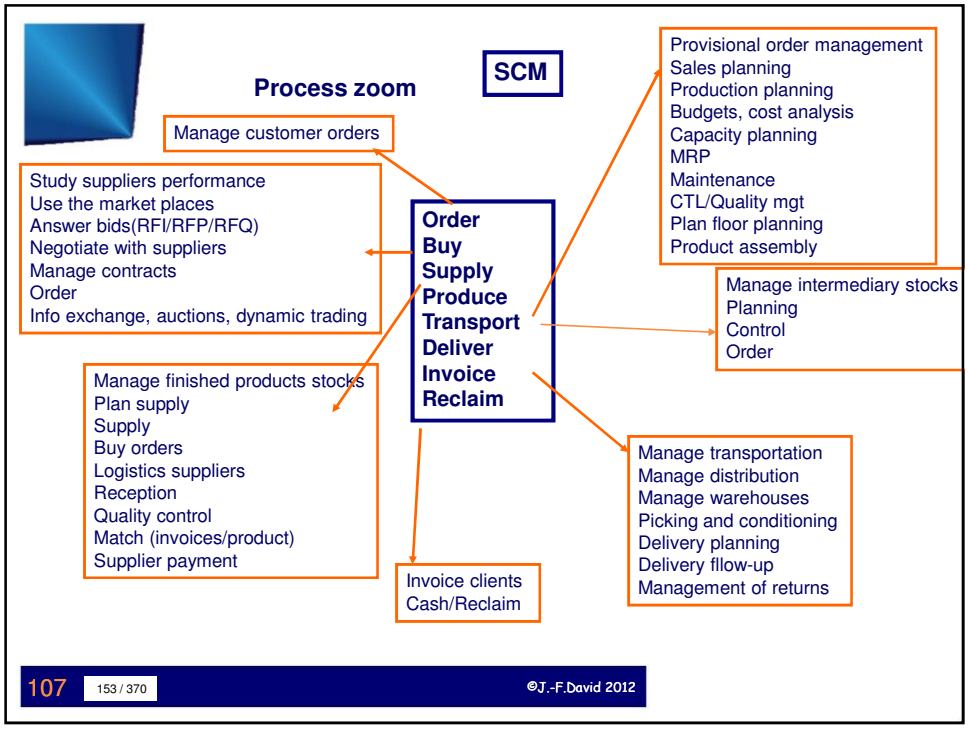
Manage service demands
Claims management
Provide support
Manage real time services/mails
Manage call centers

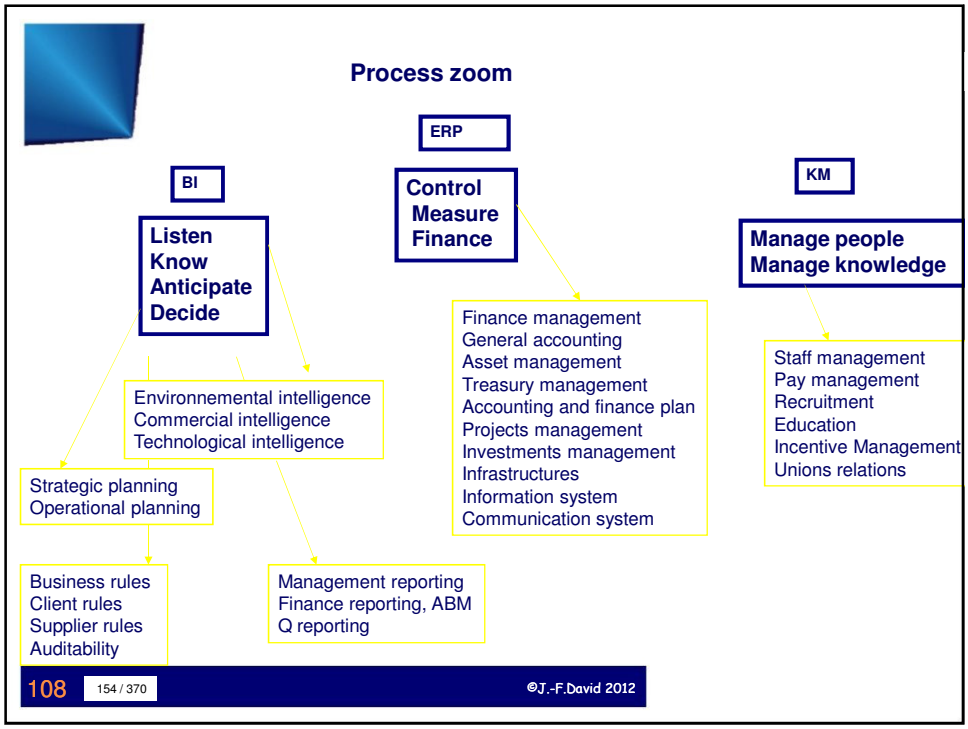
Constitute the offer
Fix the price
Manage the accounts
Follow-up profit/products
Promotion campaigns
Manage catalogs

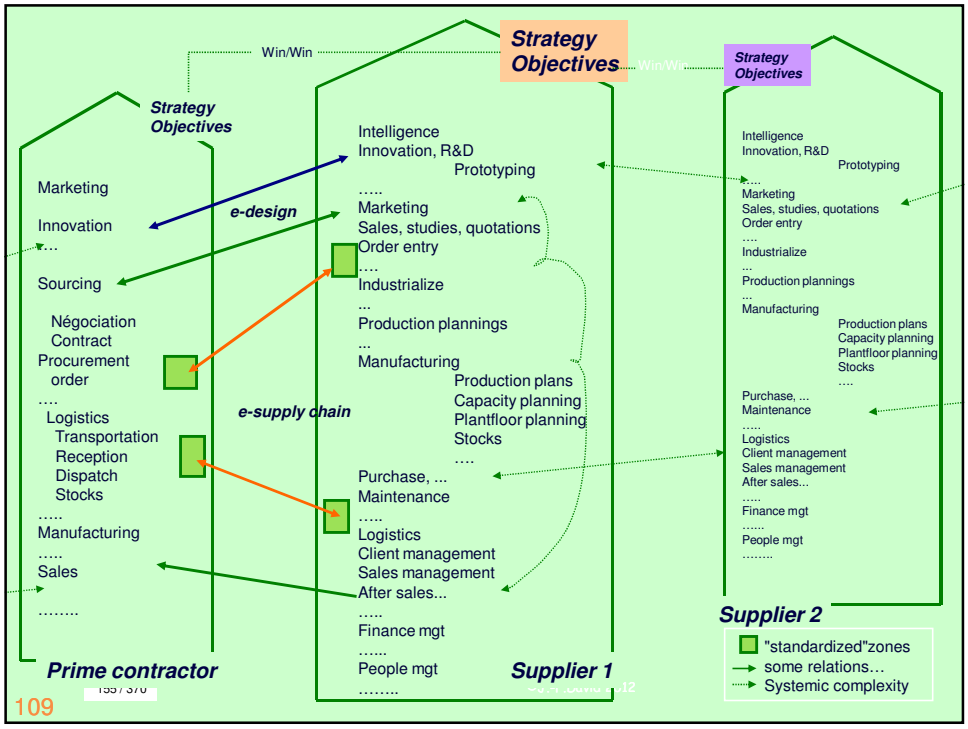
Campaign management
Customer segmentation
Customer value management
Analyze the markets
Analyze customers
Analyze competition
Route to markets
Visits/Contact management

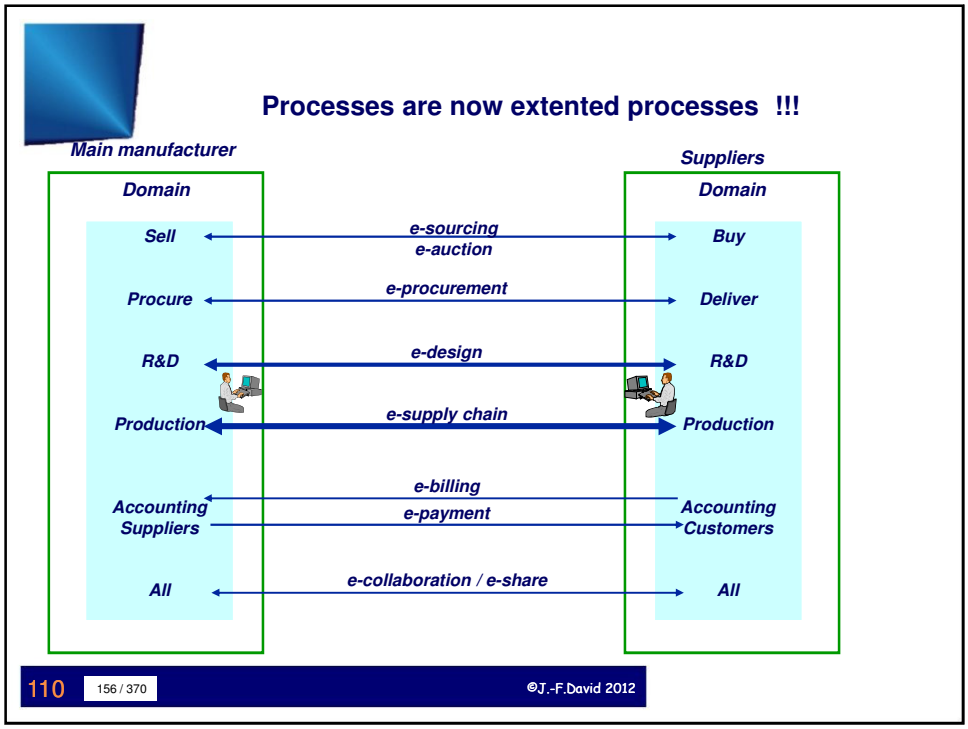
Fax, Email
Phone/Call centers
Face to face
Internet
Dealers
Agents

 ©J.-F.David 2012


Process zoom
SCM
Manage customer orders
Study suppliers performance
Use the market places
Answer bids(RFI/RFP/RFQ)
Negotiate with suppliers
Manage contracts
Order
Info exchange, auctions, dynamic trading
Order
Buy
Supply
Produce
Transport
Deliver
Invoice
Reclaim
Provisional order management
Sales planning
Production planning
Budgets, cost analysis
Capacity planning
MRP
Maintenance
CTL/Quality mgt
Plan floor planning
Product assembly
Manage intermediary stocks
Planning
Control
Order
Manage finished products stocks
Plan supply
Supply
Buy orders
Logistics suppliers
Reception
Quality control
Match (invoices/product)
Supplier payment
Invoice clients
Cash/Reclaim
Manage transportation
Manage distribution
Manage warehouses
Picking and conditioning
Delivery planning
Delivery fllow-up
Management of returns
107
153 / 370
©J.-F.David 2012


Process zoom
ERP
BI
Control
Measure
Finance
KM
Listen
Know
Anticipate
Decide
Manage people
Manage knowledge
Environnemental intelligence
Commercial intelligence
Technological intelligence
Finance management
General accounting
Asset management
Treasury management
Accounting and finance plan
Projects management
Investments management
Infrastructures
Information system
Communication system
Staff management
Pay management
Recruitment
Education
Incentive Management
Unions relations
Strategic planning
Operational planning
Business rules
Client rules
Supplier rules
Auditability
Management reporting
Finance reporting, ABM
Q reporting
108
154 / 370
©J.-F.David 2012


Win/Win
Strategy Objectives
Win/Win
Strategy Objectives
Strategy Objectives
Marketing
Innovation
...
Sourcing
Négociation
Contract
Procurement
order
....
Logistics
Transportation
Reception
Dispatch
Stocks
.....
Manufacturing
.....
Sales
.....
e-design
e-supply chain
Intelligence
Innovation, R&D
Prototyping
.....
Marketing
Sales, studies, quotations
Order entry
....
Industrialize
...
Production plannings
...
Manufacturing
Production plans
Capacity planning
Plantfloor planning
Stocks
....
Purchase, ...
Maintenance
.....
Logistics
Client management
Sales management
After sales...
.....
Finance mgt
.....
People mgt
.....
Intelligence
Innovation, R&D
Prototyping
....
Marketing
Sales, studies, quotations
Order entry
....
Industrialize
...
Production plannings
...
Manufacturing
Production plans
Capacity planning
Plantfloor planning
Stocks
....
Purchase, ...
Maintenance
.....
Logistics
Client management
Sales management
After sales...
.....
Finance mgt
.....
People mgt
.....
Prime contractor
Supplier 1
Supplier 2
"standardized"zones
some relations...
Systemic complexity
109


Processes are now extented processes !!!
Main manufacturer
Suppliers
Domain
Domain
Sell
Buy
e-sourcing
e-auction
Procure
Deliver
e-procurement
R&D
R&D
e-design
Production
Production
e-supply chain
e-billing
Accounting
Suppliers
e-payment
Accounting
Customers
All
All
e-collaboration / e-share
110
156 / 370
©J.-F.David 2012

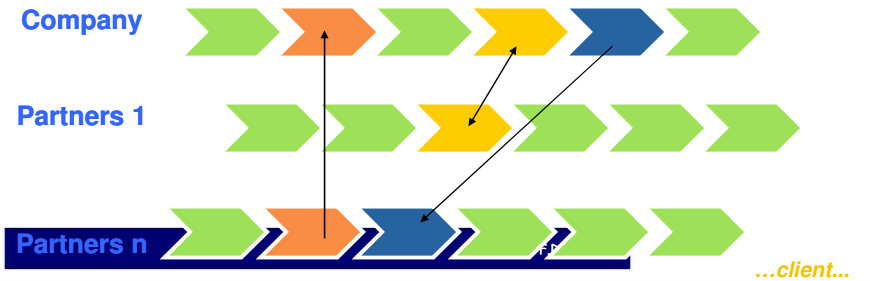
routes to market

Who does what?

By product?
By market?

Call centers
Face to face
Marketing
Production

Transaction cost...



Hoshin Kanri

- Measuring the business system as a whole
- Setting core objectives of the business
- Understanding the environmental situation in which the business operates
- Defining processes that make up the system, and their activities, goals, and metrics
- Providing resources to perform activities to achieve business objectives.

方針

Hoshin = a course, a policy, a plan, an aim

管理

Kanri = administration, management, control, charge of, care for

Hoshin = Policy Deployment

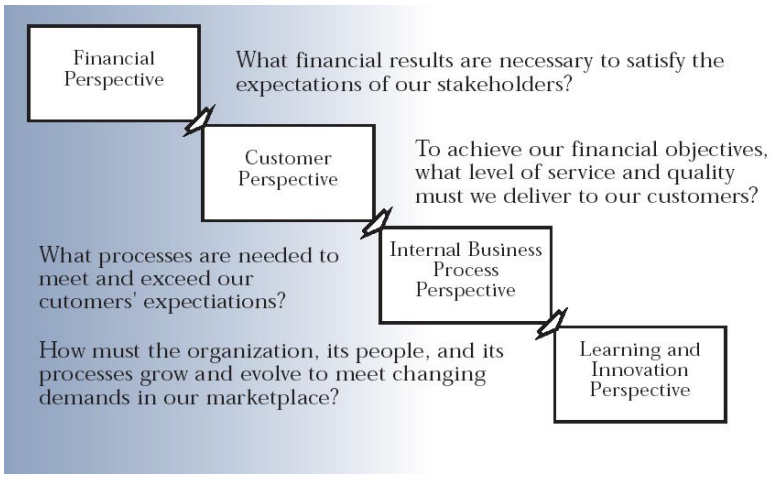
©J.-F.David 2012

Management ScoreCard (insurance sector)

Strategic Objectives	*KPI's, indicators*	*Relative weight*
Profitability	Damages/Suscriptions	7
	Liquidation provisions	
	Financial income/turnover	
	Reinsurance	
Growth	Volume +/-, Contracts +/-	5
	Coverage ratio	
	Penetration ratio	
	Turnover new contracts	
Customer satisfaction	Client satisfaction survey	6
	Demanded cancelations	
	Reclaims	
Simplification	Non operational time	4
	Demand/contact delays	
	Dammages payment delays	
People competence	Absenteism	3
	Education days	
	Error ratio	
Europe extension	Nb new partnerships	4
Leadership, Image	Image survey	3

©J.-F.David 2012

Balanced Score Card



©J.-F.David 2012

Value Chain, list of Business Processes

01-Study the market (Competitive intelligence, Marketing strat, ..)
02-Design products (New contracts , Mking, Techn Dept,)
03-Sales sector management (prospect, update client/prospect file)
04-Sell (informations, pricing, conclusion)
05-Contracts management (create docs, modifications,)
06-Maintain clients (informations,garanties adaptation, follow-up)
07-Invoice payment actions (computation, letters, cashing, reclaim,..)
08-Damagesrefund and payment (open files, inquiries, payment, ...)
09-Client follow-up (follow results, negotiation modifications, ...)

10S-People management (enroll,education,management,...)
11S-Finance management / Control (budget, controls, measurements, ...)
12S-Experts structure management
13S-Reinsurance management
14S-Communicate (internal, external)
15S-Infrastructure supply (IS, facilities,...)

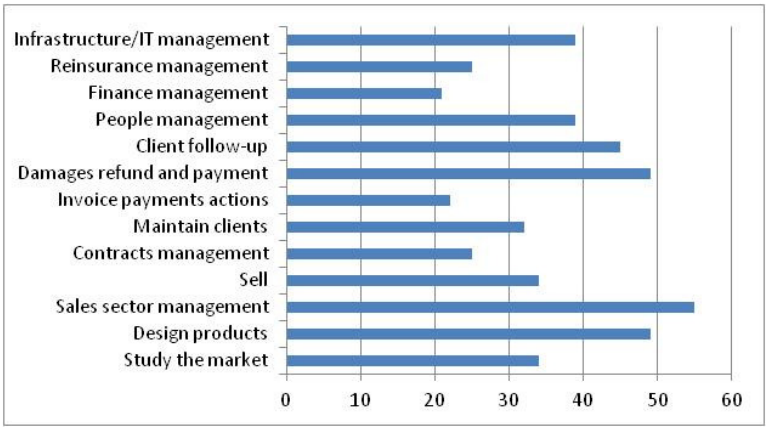
©J.-F.David 2012

Leverage effect of processes on strategic objectives

	7	5	6	4	3	4	3
	Profit	Growth	Cust.sat	Simpli	People	Europe	Image
poids>>	7	5	6	4	3	4	3
Study the market		2	2			3	
Design products	1	3	2	1		2	1
Sales sector management	3	1	2	2	2		1
Sell	1	4			1	1	
Contracts management			1	4	1		
Maintain clients	1	3				1	2
Invoice payments actions	2			2			
Damages refund and payment		1	4	2	1		3
Client follow-up	2	2	1	2	1	1	
People management	1		1	2	4		2
Finance management	1			2			2
Reinsurance management	2					2	1
Infrastructure/IT management	3		1		3		1

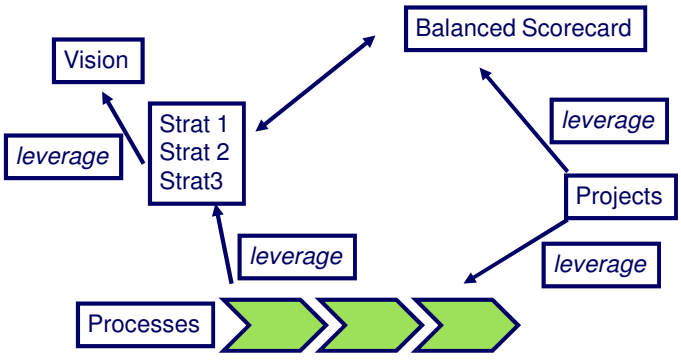
© Jean-François DAVID 1995

©J.-F.David 2012



©J.-F.David 2012

Hoshin Kanri *Method 4*



©J.-F.David 2012

Motricity / Independence of processes

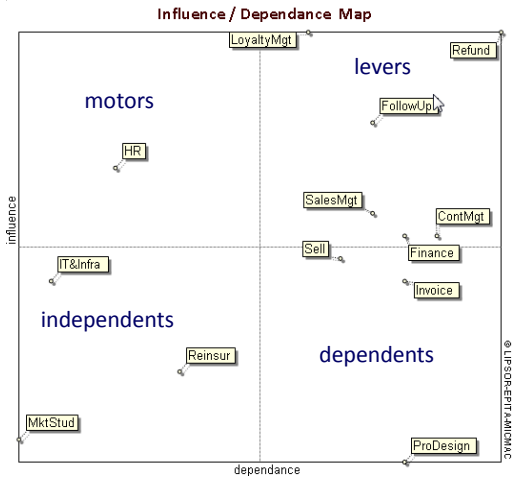
1	Study the market
2	Design products
3	Sales sector management
4	Sell
5	Contracts management
6	Maintain clients
7	Invoice payments actions
8	Damages refund and payment
9	Client follow-up
10	People management
11	Finance management
12	Reinsurance management
13	Infrastructure/IT management

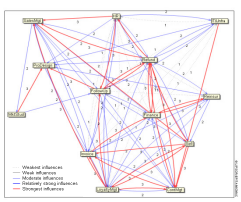
Influences range from 0 to 3
0: No influence
1: Weak
2: Moderate influence
3: Strong influence

.	1 :	2 :	3 :	4 :	5 :	6 :	7 : I	8 :	9 :	10 :	11 :	12 :	13 :
1 : MktStud	0	3	0	1	0	1	0	0	2	0	0	0	0
2 : ProDesi	0	0	1	1	0	2	1	0	0	0	1	0	0
3 : SalesM	2	1	0	3	1	2	2	2	2	1	0	0	1
4 : Sell	1	0	0	0	3	3	3	3	0	0	1	1	0
5 : ContMg	0	1	2	0	0	2	3	3	1	0	2	1	1
6 : Loyalty	1	1	3	3	3	0	3	2	3	2	2	2	0
7 : Invoice	0	1	2	1	2	0	0	1	1	1	3	2	0
8 : Refund	1	2	3	2	3	1	0	0	3	3	3	2	2
9 : FollowU	1	3	1	2	2	2	2	3	0	1	2	1	1
10 : HR	0	2	3	2	1	1	2	2	3	0	1	0	2
11 : Financ	0	1	2	0	2	0	2	3	1	1	0	3	1
12 : Reinsu	0	2	0	2	0	2	0	1	0	0	3	0	0
13 : IT&Infr	1	2	1	0	3	0	1	2	2	1	1	0	0

©J.-F.David 2012

Motricity / Independence of processes





©J.-F.David 2012

In "my" use of words, lever in "hoshin kanri" approach, is used when something plays on something different (projects on processes processes on strategies, strategies on vision, ...)

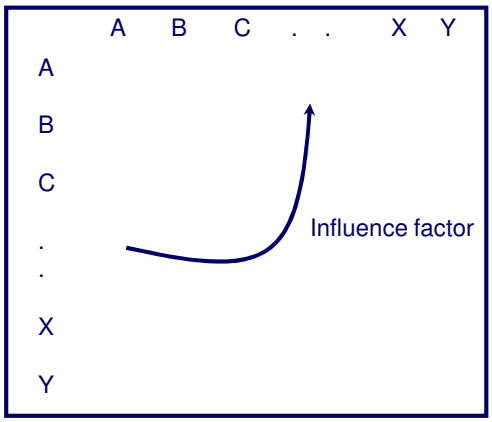
In the other method, where people try to disentangle a complex problem of interference of objects of the same category (people on people, processes on processes, strategies on strategies, ...) and try to detect where is the "hen" and where is the "egg" and where to start, motricity means action of something on the others, dependence means the contrary.

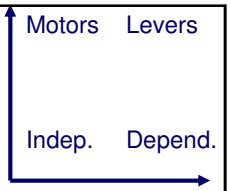
Any factor has a certain level of motricity on the others, and a certain level of dependency.
If motricity ++ and dependency -- elements are called MOTORS
If motricity -- and dependency -- , elements are called INDEPENDENTS
If motricity -- and dependency ++, elements are called DEPENDENTS
If motricity ++ and dependency ++, elements are called LEVERS

This use of word lever is not the same than within Hoshin Kanri.

Method 5

MicMac (motricity / dependency)
http://www.3ie.fr/lipsor/lipsor_uk/plan_uk.htm





+ matrix multiplication

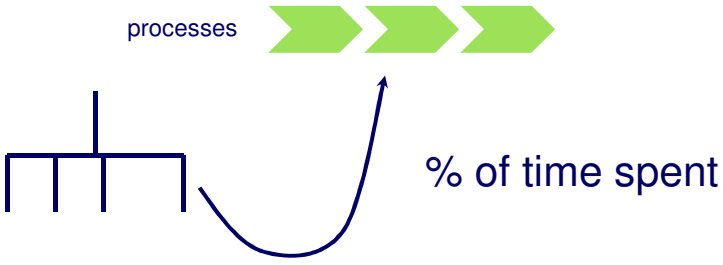
Process vs Structures (ABM/ABC Prototype)

	SalesDir	SalesMgt	Salesmen	SalesPlanning	AdminMgt	SinistersMgt	GM	HR	IT	GenSec	TechSvces	
Study the market	6	7	7								9	
Design products	6	5	4				13				45	
Sales sector management	2	2	22	13	8				8		2	<--
Sell	2	8	30	7	17						9	<--
Contracts management		2	4	13	42		25		16		9	<--
Maintain clients	2	9	15	33	17		13		8		9	<--
Invoice payments actions	2	5	7	7	4		6		8			
Damages refund and payment	18	13		7		90	25		16		9	<--
Client follow-up	6	9	16	20	8		6					<--
People management	24	28	5	5		5	6	95				<--
Finance management	24	5										
Reinsurance management	2	2			4	5	6		2		9	
Infrastructure/IT management	2							5	41	100		

©J.-F.David 2012

Method 6

ABC prototype



©J.-F.David 2012

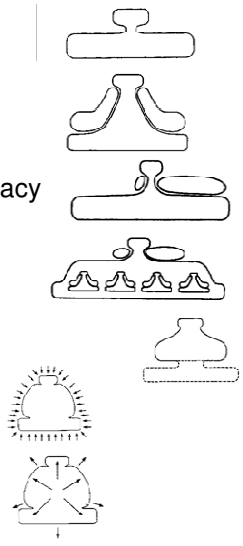
Henry Mintzberg

- Cleghorn Professor of Management Studies, Faculty of Management, McGill University, Canada
- Ph.D. Sloan School of Management, M.I.T., 1968.
- Current Work : focuses on the development of a family of programs for educating practicing managers, as well as a book entitled Developing Managers, not MBAs, and a pamphlet called Getting Past Smith and Marx… toward a Balanced Society.
- http://www.henrymintzberg.com/

©J.-F.David 2012

Organization and Structures (Mintzberg)

- Simple Structure
- Machine Bureaucracy
- Professional Bureaucracy
- Divisionalized Form
- Adhocracy
  - +… Missionnary
  - +…Political



Organizations

Direct supervision
One person gives direct orders to others

Standardization of work processes
One person designs the general work procedures of others to ensure that these are all coordinated.

Standardization of output
One person specifies the general outputs of the work of another.

Standardization of skills
A person is trained in a certain way so that he or she coordinates automatically with others.

Mutual adjustment
Two or more people communicate informally among themselves to coordinate their work.

- Operating core
  - The basic work of producing the organization's products and services gets done.
- Strategic apex
  - The home of top management
- Middle line
  - Managers who stand in a direct line relationship between the strategic apex and the operating core.
- Techostructure
  - The staff analysts who design the systems by which work processes and outputs are standardized in the organization.
- Support staff
  - The specialists who provide support to the organization outside of its operating workflow.

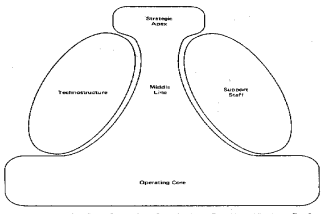


FIGURE 3-1 **The Five Basic Parts of the Organization.** From Henry Mintzberg, *The Structuring of Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979).

Organizations

Direct supervision
One person gives direct orders to others

Standardization of work processes
One person designs the general work procedures of others to ensure that these are all coordinated.

Standardization of output
One person specifies the general outputs of the work of another.

Standardization of skills
A person is trained in a certain way so that he or she coordinates automatically with others.

Mutual adjustment
Two or more people communicate informally among themselves to coordinate their work.

- Operating core
  - The basic work of producing the organization's products and services gets done.
- Strategic apex
  - The home of top management
- Middle line
  - Managers who stand in a direct line relationship between the strategic apex and the operating core.
- Techostructure
  - The staff analysts who design the systems by which work processes and outputs are standardized in the organization.
- Support staff
  - The specialists who provide support to the organization outside of its operating workflow.

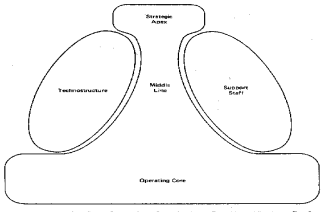
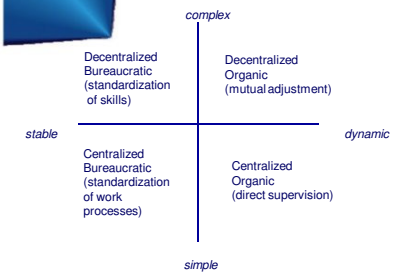
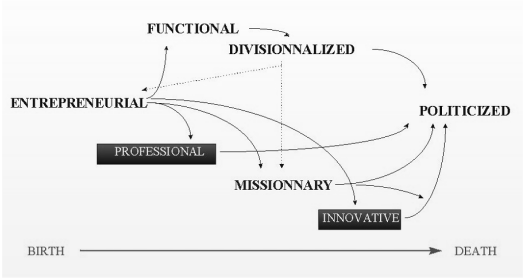


FIGURE 3-1 **The Five Basic Parts of the Organization.** From Henry Mintzberg, *The Structuring of Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979).

Mechanic vs Organic, Life Cycle

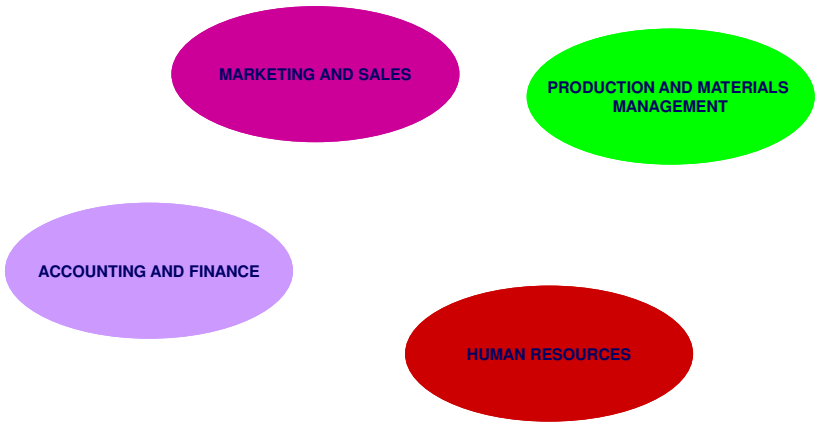


Structural Configuration	*Prime Co-ordinating mechanism*	*Key Part of Organization*	*Type of Decentralization*
Simple Structure	Direct supervision	Strategic apex	Vertical and horizontal centralization
Machine Bureaucracy	Standardization of work processes	Technostructure	Limited horizontal de-centralization
Professional Bureaucracy	Standardization of skills	Operating core	Vertical and horizontal de-centralization
Divisionalized Form	Standardization of outputs	Middle line	Limited vertical decentralization
Adhocracy	Mutual adjustment	Support staff	Selective de-centralization



 ©J.-F.David 2012

Business Functions



 ©J.-F.David 2012

Business Function – Accounting & Finance

- Vendor payments
- Receipting of cash from customers
- Accounts receivable function
- Recording of raw materials purchases
- Recording of Sales
- Generating financials statements
- Asset register maintenance

©J.-F.David 2012

Business Function – Human Resource

- Organisation Development
  - Performance Management
  - Training
- HR Information Systems
  - -Payroll
  - -Personnel Administration
  - Employee Self Service
- HR Communication
- Labour Relations
- Employee Assistance Programmes

©J.-F.David 2012

Business Function – Prod & Materials Mgmt

- Making the product
- Purchasing raw materials for making the product
- Production planning used to develop orders for raw materials
- Raw material orders are based on the production plans, so that sufficient raw materials are available to support the production plan, but excessive inventory that might spoil is not carried
- Inventory management

©J.-F.David 2012

Business Function – Marketing and Sales

- Developing products
- Determining pricing
- Promoting products to customers
- Taking customer orders
- Create sales forecasts
- Market research in relation to products

©J.-F.David 2012

ERP Systems

- Early 1990s first fully integrated software system
- Current ERP systems evolved as a result of development of hardware and software technology needed to support systems
- Developments of vision of integrated systems
- Release of personal productivity software (word-processing)
- 1979 Introduction of first spreadsheet software (complex business analysis without programming) hence need to connect individual users' PCs
- Telecommunications allowed sharing of data (server to client)
- ERP began on a factory floor (inventory tracking system – Materials Requirements Planning)

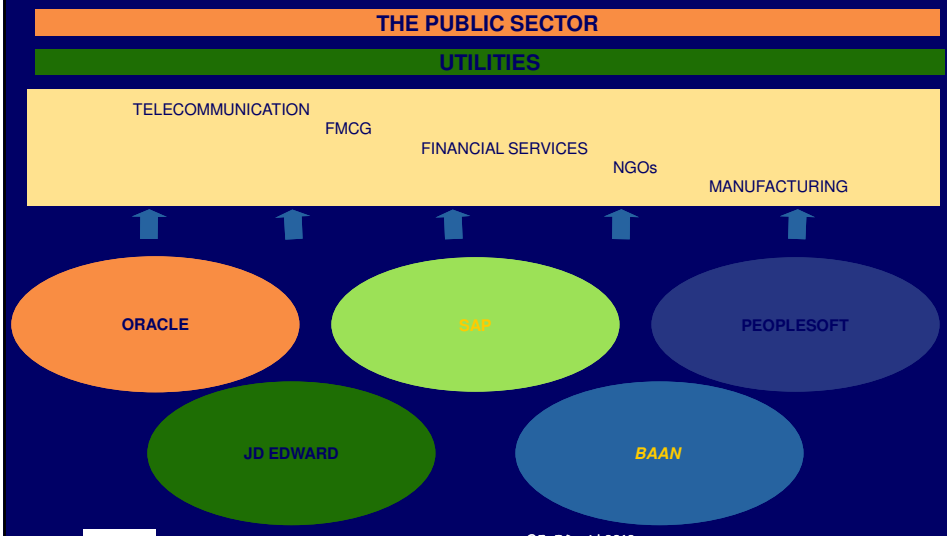
©J.-F.David 2012

ERP Systems

- An ERP system is defined by Markus *et al*. (2000: 245) as a software package which makes possible the sharing of business information stored on a common database among targeted business units in the entire organisation.
- Enterprise Resource Planning is a way of making internal processes in an organisation to work in harmony. In an ERP software all components of an organisation functions are supported therefore data or information is shared across the entire organisation.
- The purpose served by an ERP system is of organising, codifying and standardisation of the business processes and information or data. Furthermore ERP systems provide an enterprise with a common language and a common pool of data (Norris *et al*. 2000: 12-13; Adam and O'Doherty, 2000: 306)

©J.-F.David 2012

Overview of major ERP systems



135 183 / 370 ©J.-F.David 2012

SAP

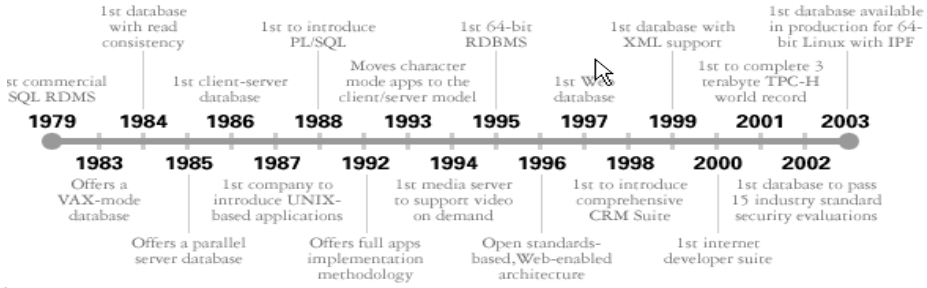
- Founded in 1972
- Based in Walldorf, Germany
- World´s largest inter-enterprise software company
- Third largest independent software supplier
- 13,000+ customers in 120+ countries
- Employs a workforce of over 22,900 (June ‘00)
- Offices in more than 50 countries

136 184 / 370 ©J.-F.David 2012

Oracle firsts

This timeline summarizes Oracle's technological advances over the past 25 years.

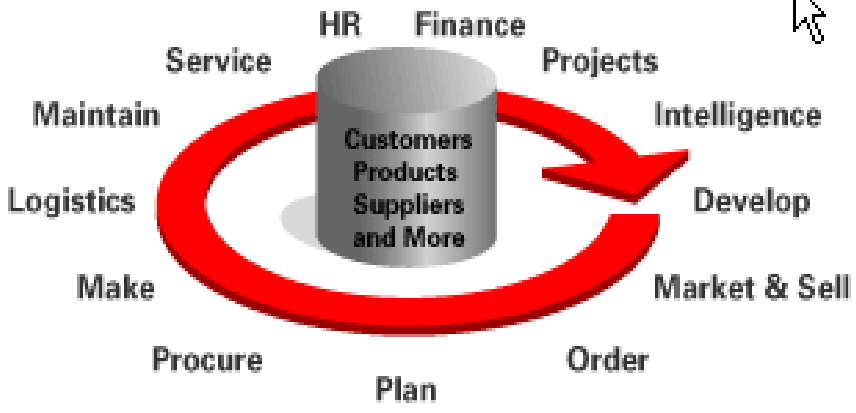
Since the launch of the world's first relational database in 1977, Oracle has been an essential part of a technology revolution that has irrevocably changed modern business. Oracle innovation has always lead by example; whether by adopting open source technologies, integrating its software across all product lines or embracing Internet-based business practices, Oracle has set a high standard for sofware ingenuity.



©J.-F.David 2012

Overview Oracle

Know More. Do More. Spend Less.



©J.-F.David 2012

Overview PeopleSoft

Product Lines

Get information on the business product lines available profitability.

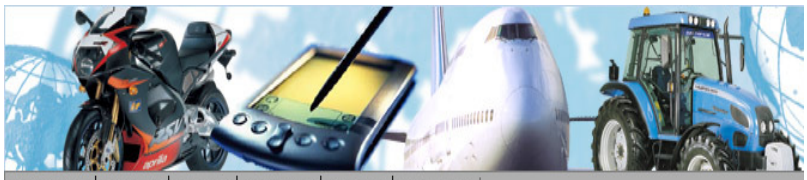
AppConnect
Application Integration
Customer Relationship Management
Enterprise Performance Management
Enterprise Service Automation
Financial Management Solutions
Human Capital Management
Human Resources Management Solutions
Manufacturing (formerly Supply Chain Management)
Supplier Relationship Management

©J.-F.David 2012

Overview J.D. Edwards
Now part of PeopleSoft

©J.-F.David 2012

Overview *BAAN*



iBaan Industry Solutions

Dedicated solutions based on 'knowledge'

Baan has been working with a range of industries for 25 years and with its industry domain expertise, continues to successfully provide reliable and effective solutions to industries such as Aerospace & Defense, Automotive, Electronics, Industrial Machinery & Equipment as well as a select number of other industries.

©J.-F.David 2012

Benefits of ERP systems

Benefits of implementing ERP system

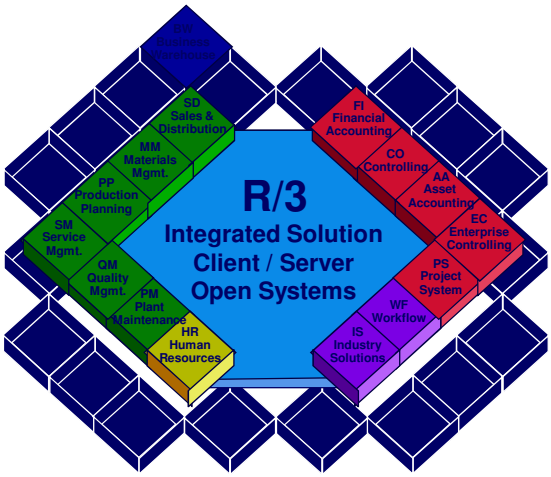
Benefit type	Organisational benefits
Operational	• Process cost reduction, cycle time reduction and productivity improvement
Managerial	• Better resource management • Improved decision making
Strategic	• Supporting business growth • Building cost leadership, product differentiation • Linkage to customers and suppliers
Information Technology	• Business flexibility • IT cost reduction e.g. software maintenance
Organisational	• Supporting organisational change, facilitating organisational learning, empowering of staff • Building common vision

(Source: Adapted from JIT 2000d, editorial comment: 243-244)

©J.-F.David 2012

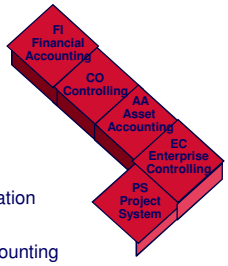
Introduction to SAP R/3 - the System

- The R/3 System
  - Over 1000 predefined transactions
  - Possibility of 30 different languages
  - 14 different modules



©J.-F.David 2012

R/3 Financial Applications



FI
- General ledger
- Accounts Receivable/ Payable
- Special Ledgers
- Fixed Asset Accounting

EC
- Executive Information System
- Profit Center Accounting

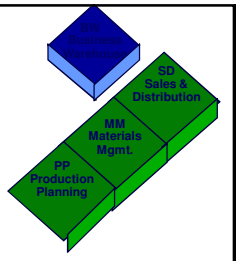
CO
- Overhead Management
- Activity Based Costing
- Product Cost Accounting
- Profitability Analysis

PS
- Work Breakdown Structure
- Costs and budgeting
- Time scheduling
- Orders in the project

AM
- Investment Planning/ Budgeting/Controlling
- Depreciation Forecast/ Simulation/Calculation

©J.-F.David 2012

R/3 Logistics Applications (1/2)



SD

- Sales Promotion/Sales Activities
- Inquiries/Quotations/Order
- Contracts and scheduling agreements
- Shipping/Transportation/ Foreign trade
- Billing

MM

- Materials requirements planning
- Purchasing
- Goods movement
- Invoice verification
- Inventory management Simulation/Calculation

PP

- Sales/Production planning
- Material requirements planning
- Forecasting
- Capacity planning
- Shop Floor Information System

BW

- Management reporting
- Data collection from various sources stored in a central repository
- "Slice and Dice"

©J.-F.David 2012

R/3 Logistics Applications (2/2)
R/3 Human Resources

SM

- Service planning
- Processing service orders
- Service Information System

QM

- Quality planning
- Quality inspection
- Quality Management Information System

PM

- Maintenance planning
- Processing maintenance orders
- Maintenance Information System

HR

- Recruitment management
- Personnel Capacity and Shift Planning
- Payroll accounting

©J.-F.David 2012

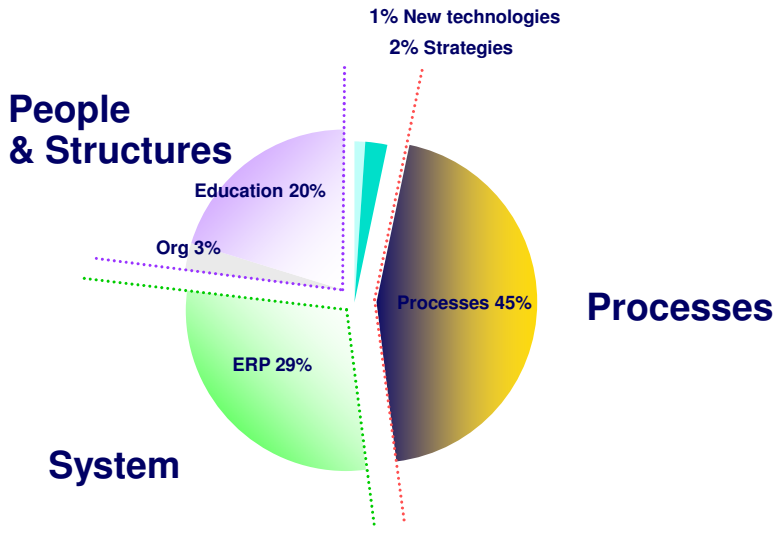
Table 1: Five Success Factors for ERP Projects

Brown Vessey "lessons learned from ERP"

1. Top management is engaged in the project, not just involved
2. Project leaders are veterans, and team members are decision makers
3. Third parties fill gaps in expertise and transfer their knowledge
4. Change management goes hand-in-hand with project management
5. A satisficing mindset prevails

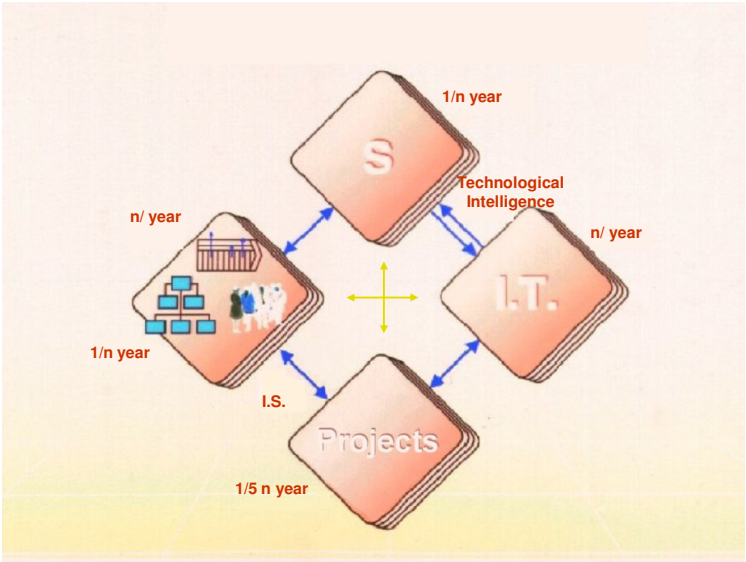
©J.-F.David 2012

Optimisation is done through processes, organizations and ERP systems evolution



© 2001 Cap Gemini Ernst & Young - All right reserve
CAP GEMINI ERNST & YOUNG

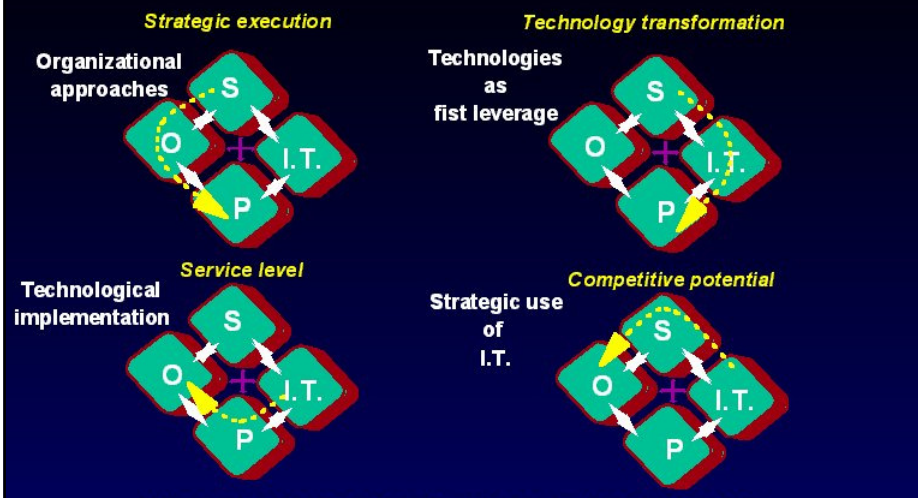
Strategic Alignment



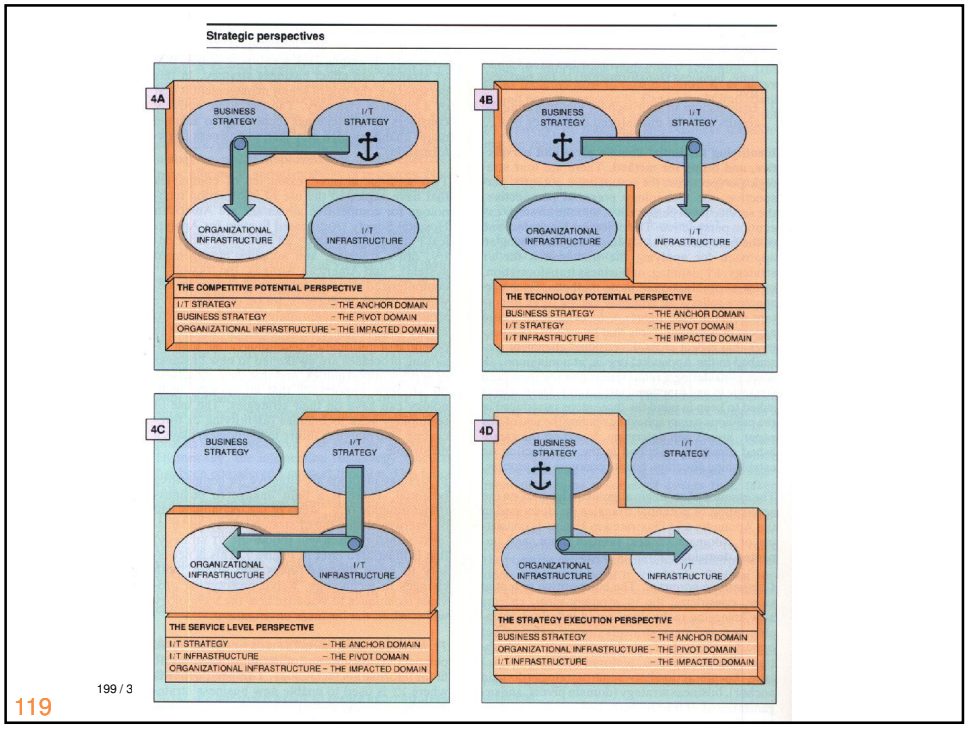
©J.-F.David 2012

Where to start alignment?

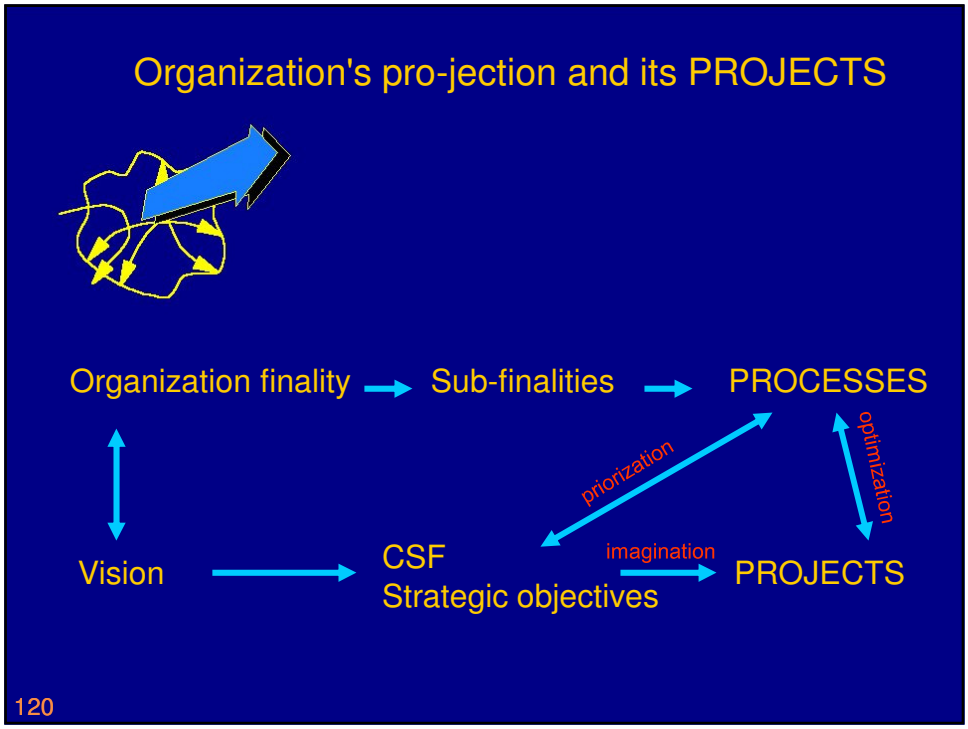
ref: Henderson / Venkatraman



Where is the "anchor", where is the "driver"?


Strategic perspectives
4A
BUSINESS STRATEGY
I/T STRATEGY
ORGANIZATIONAL INFRASTRUCTURE
I/T INFRASTRUCTURE
THE COMPETITIVE POTENTIAL PERSPECTIVE
I/T STRATEGY – THE ANCHOR DOMAIN
BUSINESS STRATEGY – THE PIVOT DOMAIN
ORGANIZATIONAL INFRASTRUCTURE – THE IMPACTED DOMAIN
4B
BUSINESS STRATEGY
I/T STRATEGY
ORGANIZATIONAL INFRASTRUCTURE
I/T INFRASTRUCTURE
THE TECHNOLOGY POTENTIAL PERSPECTIVE
BUSINESS STRATEGY – THE ANCHOR DOMAIN
I/T STRATEGY – THE PIVOT DOMAIN
I/T INFRASTRUCTURE – THE IMPACTED DOMAIN
4C
BUSINESS STRATEGY
I/T STRATEGY
ORGANIZATIONAL INFRASTRUCTURE
I/T INFRASTRUCTURE
THE SERVICE LEVEL PERSPECTIVE
I/T STRATEGY – THE ANCHOR DOMAIN
I/T INFRASTRUCTURE – THE PIVOT DOMAIN
ORGANIZATIONAL INFRASTRUCTURE – THE IMPACTED DOMAIN
4D
BUSINESS STRATEGY
I/T STRATEGY
ORGANIZATIONAL INFRASTRUCTURE
I/T INFRASTRUCTURE
THE STRATEGY EXECUTION PERSPECTIVE
BUSINESS STRATEGY – THE ANCHOR DOMAIN
ORGANIZATIONAL INFRASTRUCTURE – THE PIVOT DOMAIN
I/T INFRASTRUCTURE – THE IMPACTED DOMAIN
199 / 3

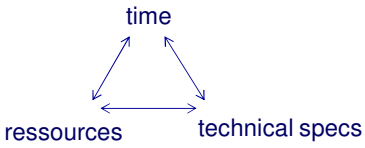
119


Organization's pro-jection and its PROJECTS
Organization finality
Sub-finalities
PROCESSES
priorization
optimization
Vision
CSF
Strategic objectives
imagination
PROJECTS

120

The Pharaoh and the pyramids
time, short delay
limited human resources
technical specifications

Project triangle



X50-105 Afnor standard: « a specific approach which enable methodically and gradually to structure a reality to come … »

« ... a project is implemented to work out a response to the need of one user, one customer or one market. It implies an objective, actions to be undertaken with given resources … »

©J.-F.David 2012

PROJECT definition

A project is

- a coordinated set of works,
- accomplished by people
- using means and supports
- in order to equip a company with a product, a service or a system
- to deal with anticipated situation aimed
- at the slightest cost

the cost can be financial, social, human, technical

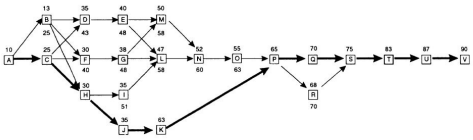
©J.-F.David 2012

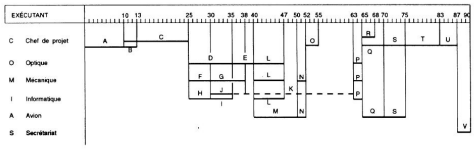
Basic tools for projects

pert,
gannt
…..

CODE	TÂCHE	EXÉC.	DURÉE	DÉB.	FIN	MARGE
A	Pré-étude	C	10	0	10	-
B	Organisation	C	3	10	13	12
C	Cadrage financement	C	15	10	25	-
D	Étude optique	O	10	25	35	8
E	Réalisation optique	O	5	35	40	8
F	Étude mécanique	M	5	25	30	10
G	Réalisation table	M	8	30	38	10
H	Étude informatique	I	5	25	30	-
I	Rassemblement matériel	I	5	30	35	16
J	Spécification logiciel	I	5	30	35	-
K	Réalisation logiciel	E	28	35	63	-

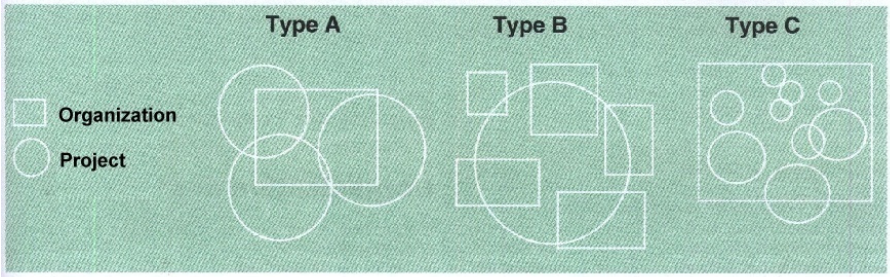
CODE	TÂCHE	EXÉC.	DURÉE	DÉB.	FIN	MARGE
L	Assemblage	OMI	7	40	47	11
M	Aménagement avion	A	10	40	50	8
N	Installation	MA	2	50	52	8
O	Réception	C	3	52	55	8
P	Tests fonctionnels	OMI	2	63	65	-
Q	Essais au sol	CA	5	65	70	-
R	Plan d'expérimentation	C	3	65	68	2
S	Essais en vol	CA	5	70	75	-
T	Dépouillement	C	8	75	83	-
U	Rédaction rapport	C	4	83	87	-
V	Edition	S	3	87	90	-





 ©J.-F.David 2012

Project typology by economic importance for organizations

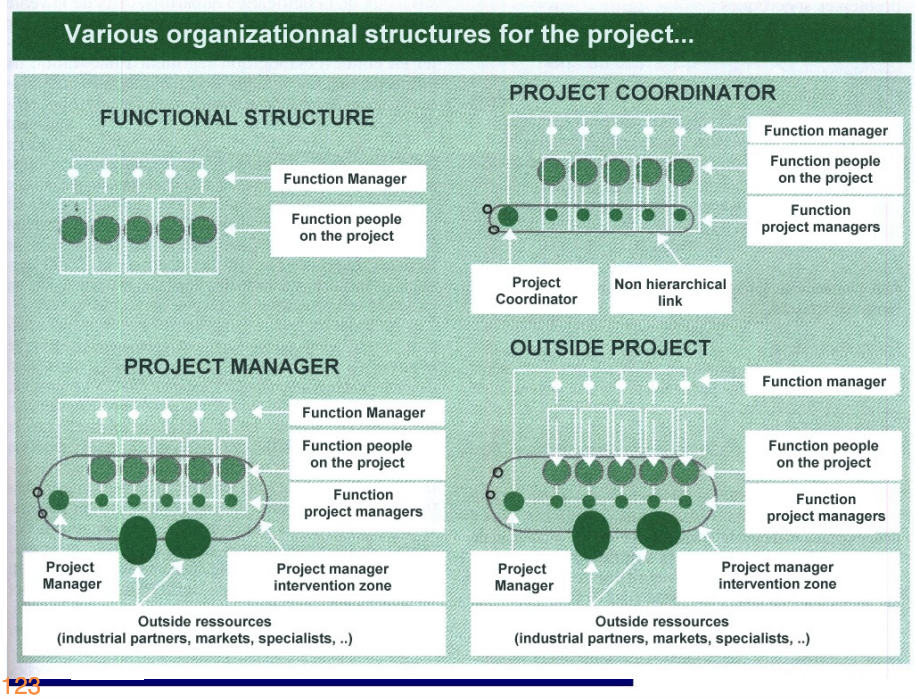


A Type: Some big, strategic, important projects, split into sub-projects
ex: automotive industry
pb: company regulation vs projects autonomy

B Type: Project in the center of regulation, enterprise project

C type: small projects, reduced autonomy
ex: pharmaceutical, ….

 ©J.-F.David 2012



123

For instance, the Standish Group's research on IT project failure found that:

- 16.2 percent of software projects completed on time and on budget;
- 31 percent of projects were cancelled before completion; and
- 53 percent of projects would cost over 189 percent of their original estimates.

There hasn't been a significant improvement since then. A Conference Board survey in 2001 found that:

- 40 percent of projects failed to achieve their business case within one year of 'live';
- Where benefits came through, it was six months later than expected;
- Implementation costs were, on average, 125 percent of budget;
- Support costs were, on average, 120 percent of budget.

But it's not only about project failure. 80 percent of corporate assets today are digital and, as shareholders and boards focus on the extent to which information and intellectual capital are fundamental to their competitive position and long term survival, so they recognize the fiduciary nature of their responsibility to shareholders in respect of the organization's information assets and IT.

124

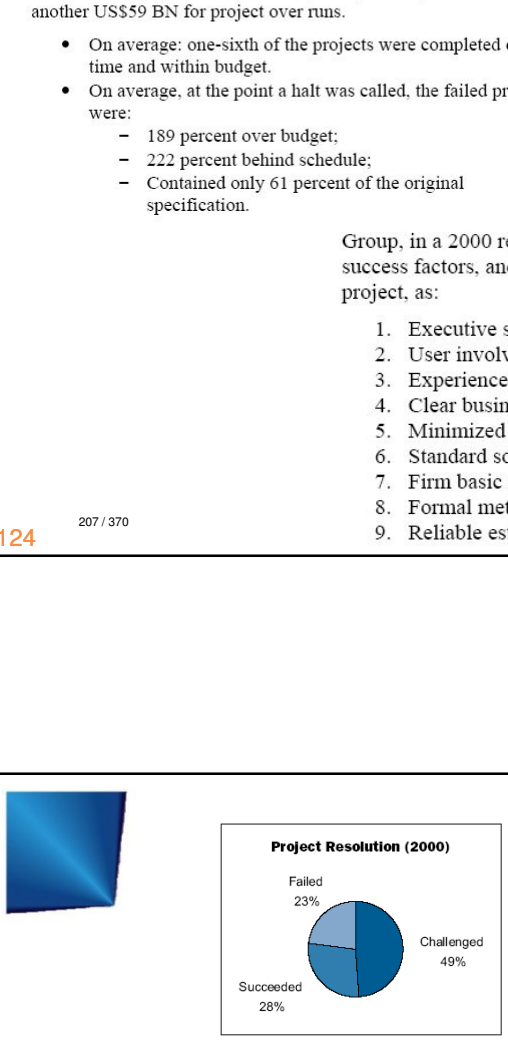
Project failure

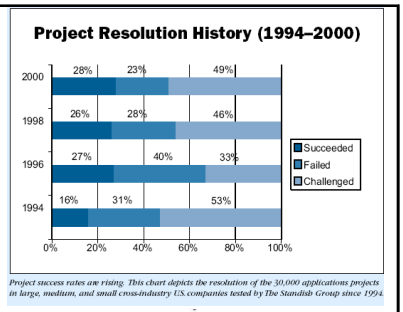
The strategic vision must be translated into operational systems and organizations don't have much of a track record of successful execution. According to research ('the Chaos Report') by the Standish Group, the US Govt and businesses together spent US$81 BN on failed projects in 1995 alone; on top of that, there was another US$59 BN for project over runs.

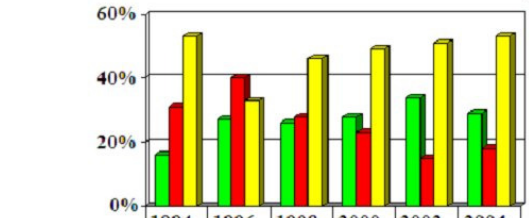
- On average: one-sixth of the projects were completed on time and within budget.
- On average, at the point a halt was called, the failed projects were:
  - 189 percent over budget;
  - 222 percent behind schedule;
  - Contained only 61 percent of the original specification.

The Standish Group, in a 2000 repeat of its earlier survey, identified project success factors, and their average contribution to the success of the project, as:

1. Executive support (18 percent)
2. User involvement (16 percent)
3. Experienced project manager (14 percent)
4. Clear business objectives (12 percent)
5. Minimized scope (10 percent)
6. Standard software infrastructure (8 percent)
7. Firm basic requirements (6 percent)
8. Formal methodology (5 percent)
9. Reliable estimates (5 percent)







	1994	1996	1998	2000	2002	2004	2009
Succeeded	16%	27%	26%	28%	34%	29%	32%
Failed	31%	40%	28%	23%	15%	18%	24%
Challenged	53%	33%	46%	49%	51%	53%	44%

CHAOS Summary 2009

©J.-F.David 2012

Some IT project typical diseases….

Intellectual temptation
or … perfection pursuit

Creeping specs
or … inability to say no

Cavalry
or … therapeutic obstinacy

Enforced project
or … go after others happiness without their consent

Project arthritis
or … insidious paralysis

The monster
or … uncontrollable gigantism

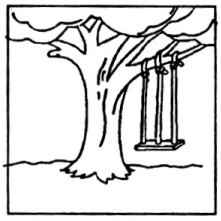
Degeneracy
or … memento mori

©J.-F.David 2012

Project Management

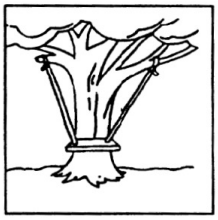
Quality plan, garanty of success

1 - What was client's demand...



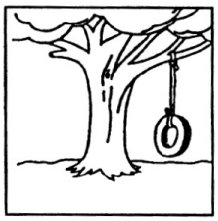
2 - What has been proposed by IT & Organization group...

3 - What has been designed by project team...

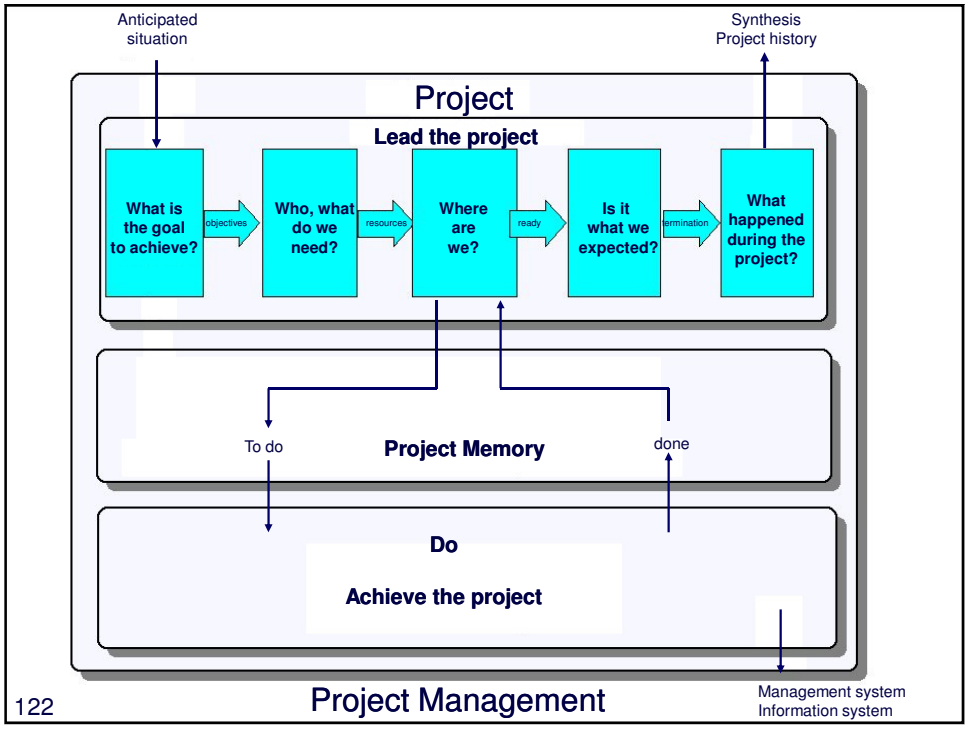


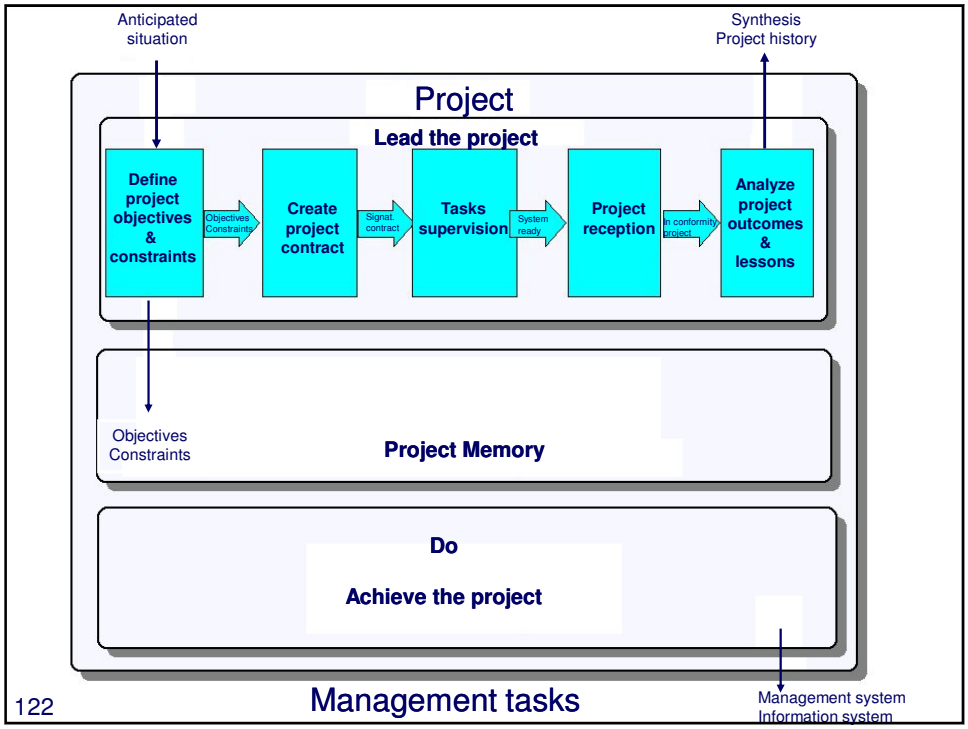
4 - What has been really implemented...

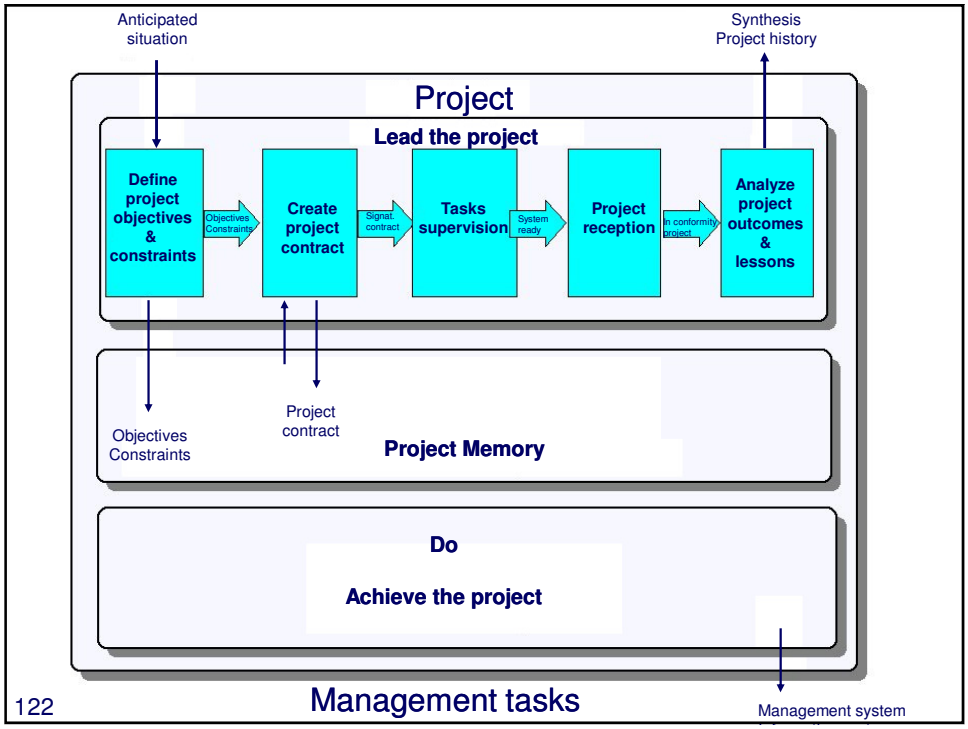
5 - After some final adjustments by the end user...

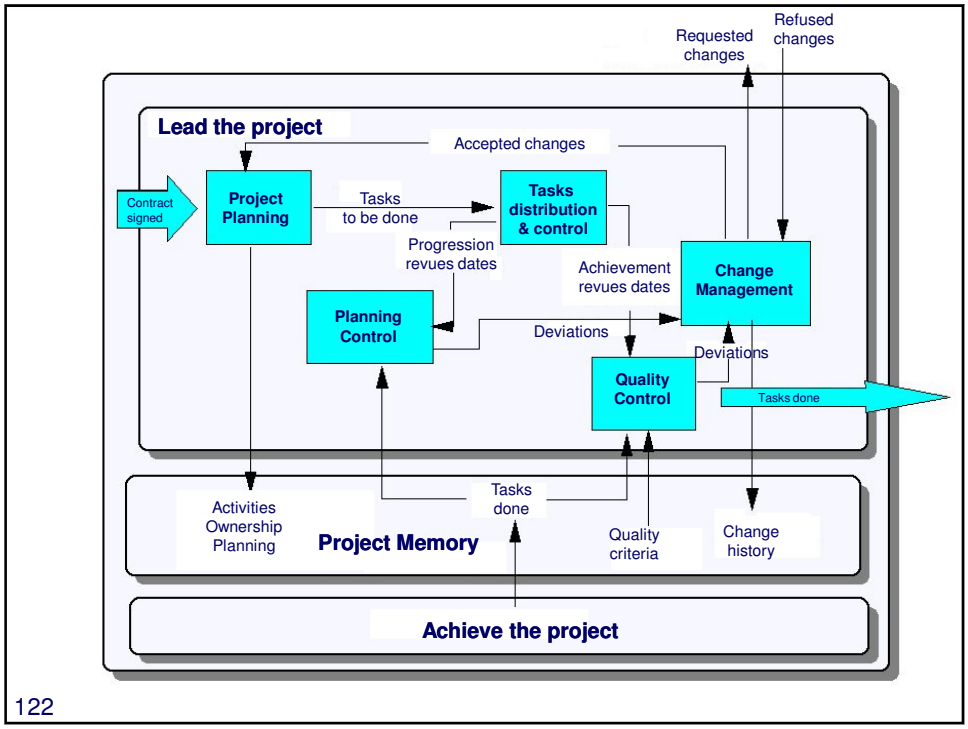


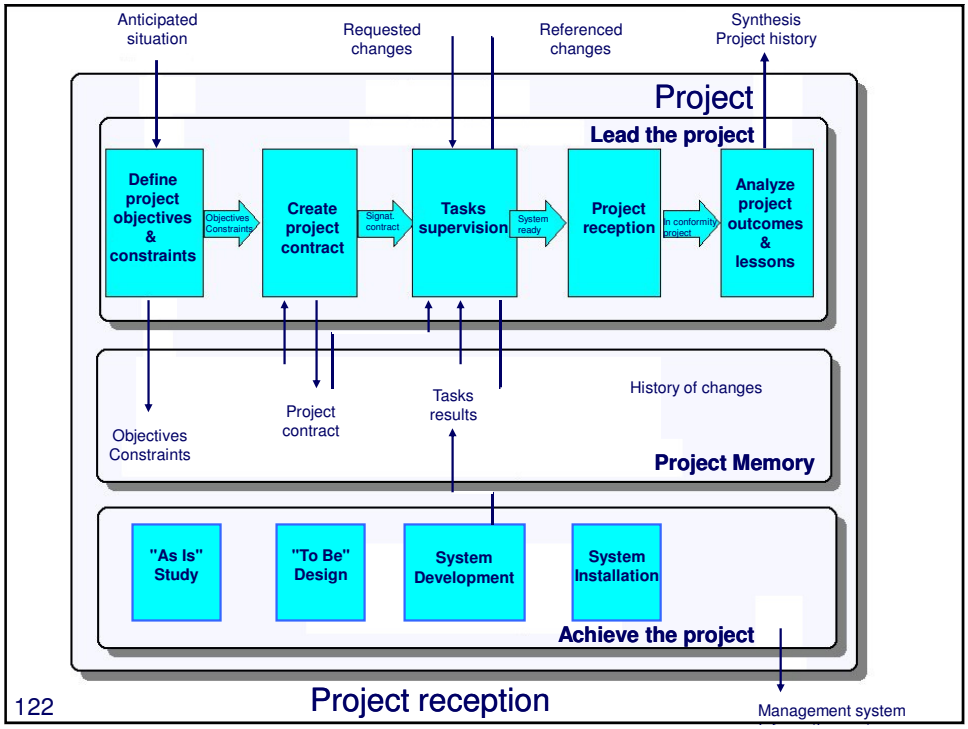
6 - Client's real need...

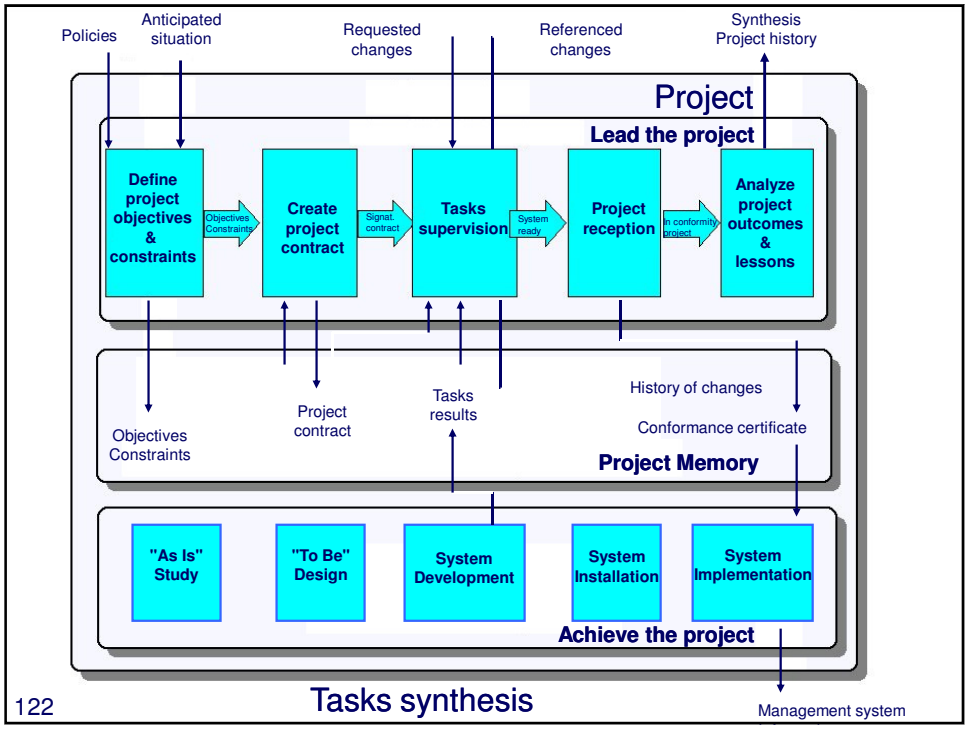

Anticipated situation
Synthesis Project history
Project
Lead the project
What is the goal to achieve?
objectives
Who, what do we need?
resources
Where are we?
ready
Is it what we expected?
termination
What happened during the project?
To do
Project Memory
done
Do
Achieve the project
Management system
Information system
122
Project Management


Anticipated situation
Synthesis Project history
Project
Lead the project
Define project objectives & constraints
Objectives Constraints
Create project contract
Signat. contract
Tasks supervision
System ready
Project reception
In conformity project
Analyze project outcomes & lessons
Objectives Constraints
Project Memory
Do
Achieve the project
Management system
Information system
122
Management tasks

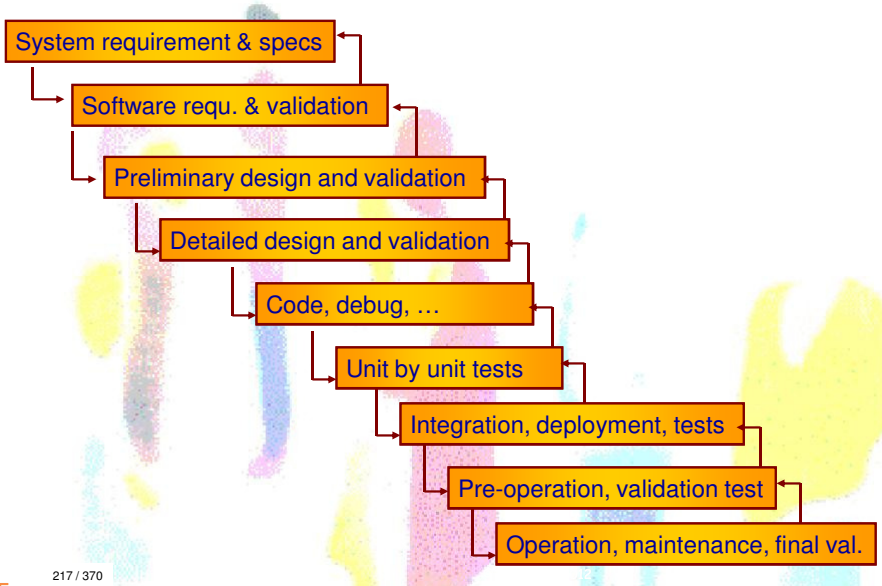

Anticipated situation
Synthesis Project history
Project
Lead the project
Define project objectives & constraints
Objectives Constraints
Create project contract
Signat. contract
Tasks supervision
System ready
Project reception
In conformity project
Analyze project outcomes & lessons
Objectives Constraints
Project contract
Project Memory
Do
Achieve the project
Management system
122
Management tasks


Requested changes
Refused changes
Lead the project
Accepted changes
Contract signed
Project Planning
Tasks to be done
Tasks distribution & control
Progression revues dates
Achievement revues dates
Change Management
Planning Control
Deviations
Deviations
Quality Control
Tasks done
Activities Ownership Planning
Tasks done
Project Memory
Quality criteria
Change history
Achieve the project
122


Anticipated situation
Requested changes
Referenced changes
Synthesis Project history
Project
Lead the project
Define project objectives & constraints
Objectives Constraints
Create project contract
Signat. contract
Tasks supervision
System ready
Project reception
In conformity project
Analyze project outcomes & lessons
Objectives Constraints
Project contract
Tasks results
History of changes
Project Memory
"As Is" Study
"To Be" Design
System Development
System Installation
Achieve the project
Management system
122
Project reception


Policies
Anticipated situation
Requested changes
Referenced changes
Synthesis Project history
Project
Lead the project
Define project objectives & constraints
Objectives Constraints
Create project contract
Signat. contract
Tasks supervision
System ready
Project reception
In conformity project
Analyze project outcomes & lessons
Objectives Constraints
Project contract
Tasks results
History of changes
Conformance certificate
Project Memory
"As Is" Study
"To Be" Design
System Development
System Installation
System Implementation
Achieve the project
Management system
122
Tasks synthesis

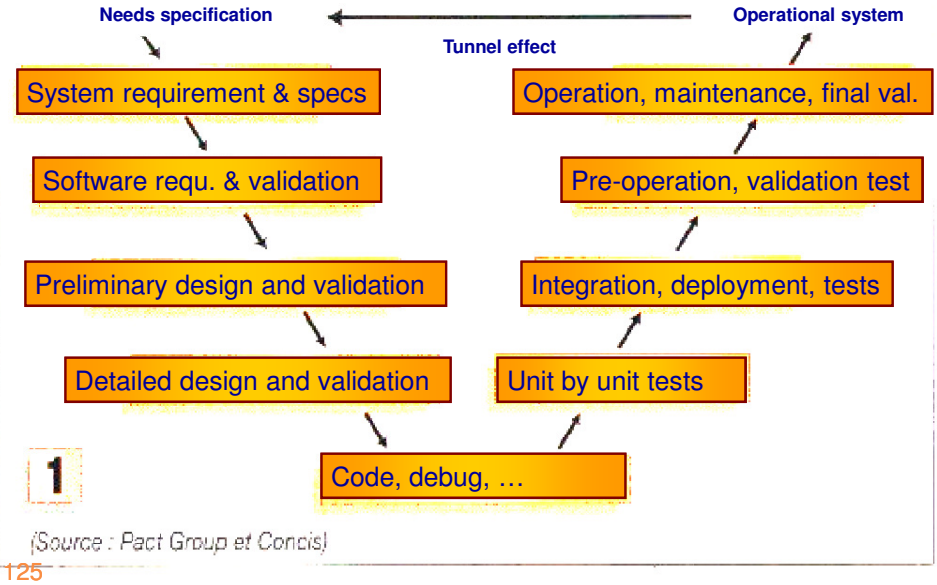
Traditional "Waterfall" methodology



217 / 370

125

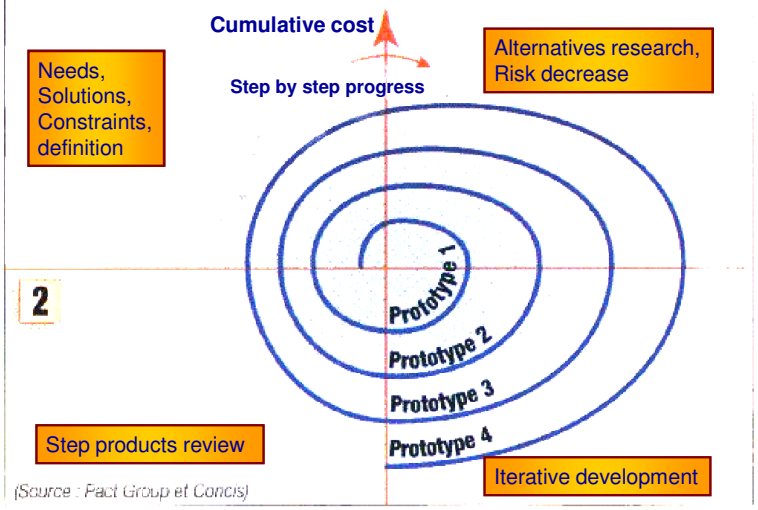
V-cycle: risk of forgetting needs, weak delays mastership...



(Source : Pact Group et Concis)

125

Spiral cycle : a better adequation to needs



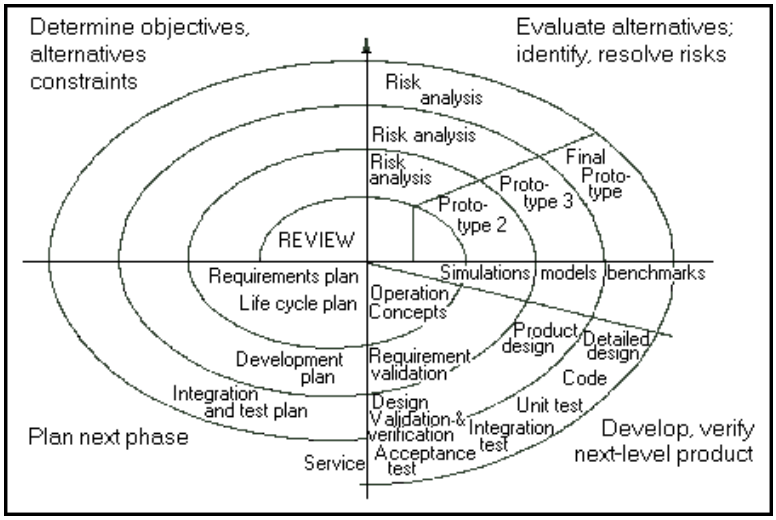
©J.-F.David 2012

In 1986, Dr. Barry Boehm created the Spiral Method which he recognized and incorporated the factor of **"project risk"** into a life cycle model. The aim of the new model ways to incorporate shifting the management emphasis to risk evaluation and resolution.

The spiral model illustrated one strength, in which the system size grows but the resources can be held constant. This sometimes known as **"project risk"**. The spiral model is an attempt to provide a disciplined framework for software development that both overcomes deficiencies in the waterfall model, and accommodates activities such as prototyping, reuse, and automatic coding as a part of the process.

©J.-F.David 2012

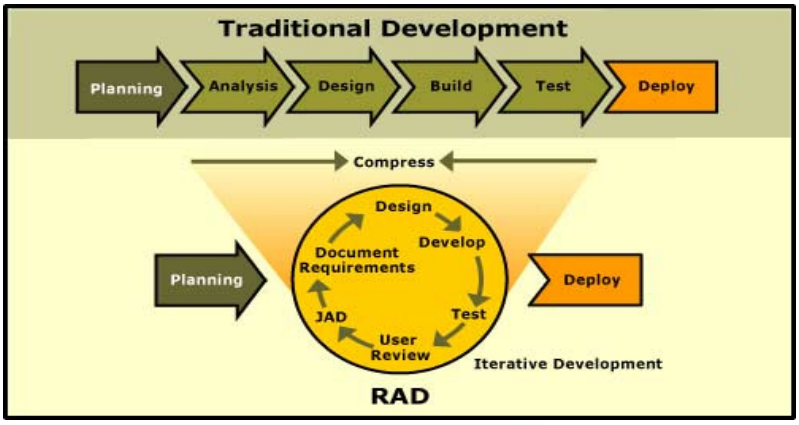
The Spiral Model



©J.-F.David 2012

Methodology

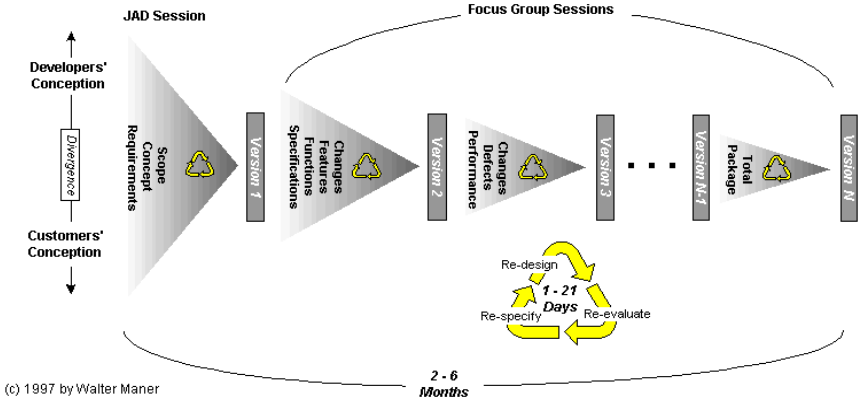
- Rapid Application Development
  - Iterative Process vs. Linear (Traditional Development)



©J.-F.David 2012

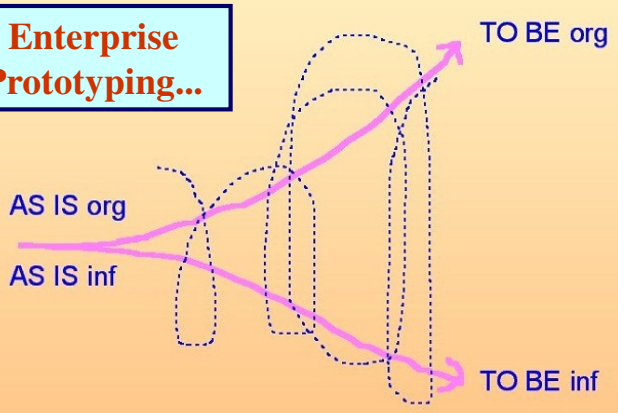
RAD

RAPID APPLICATION DEVELOPMENT USING ITERATIVE PROTOTYPING



©J.-F.David 2012

Enterprise Prototyping...



and CHANGE MANAGEMENT...

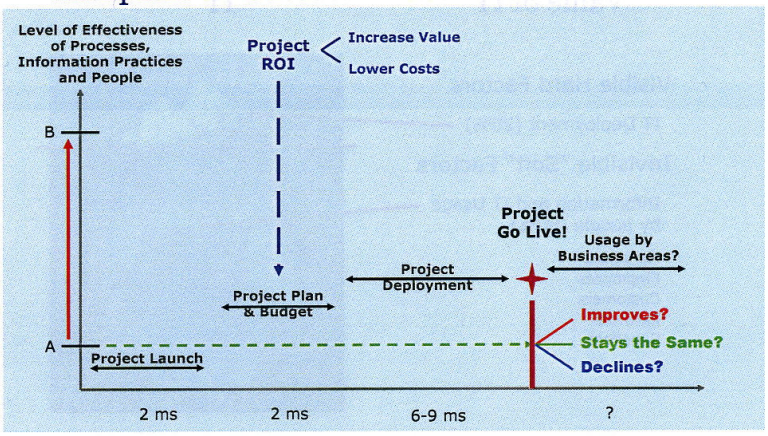
©J.-F.David 2012

Adapt my organization, processes, cultures ?

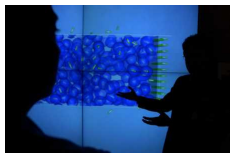
Tailor the ERP, adapt, program

©J.-F.David 2012

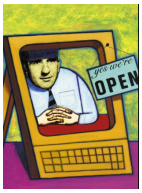
The Current IT Deployment Paradigm: The birthplace of "Successful Failures"

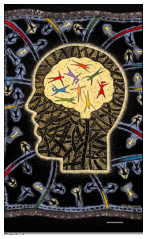


©J.-F.David 2012



IT / IS governance





15 227 / 370 ©J.-F.David 2012

IT Governance: What is it?

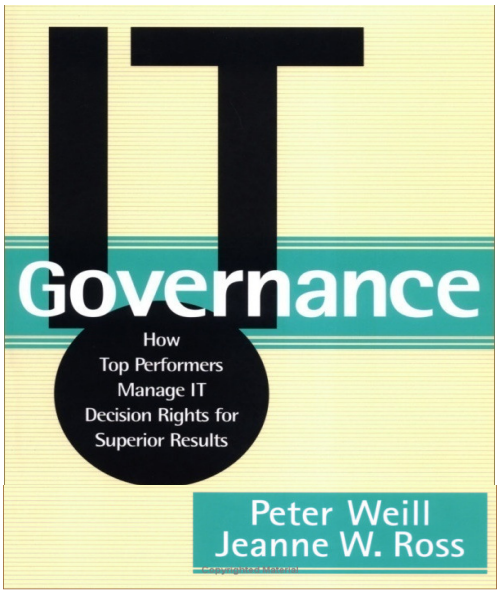
Corporate Governance:

A system by which companies are directed and controlled, incorporating both legislative regulations and corporate policies and procedures designed to ensure accuracy in reporting on the financial activities of an entity for use by interested parties.

IT GOVERNANCE

A structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes.

16 228 / 370 ©J.-F.David 2012



©J.-F.David 2012

IT Governance Defined

Definition

- "IT GOVERNANCE, like other governance subjects, is the responsibility of executives and shareholders (represented by the board of directors).
- It consists of:
  - the leadership,
  - organisational structures and
  - processes that ensure that the organisation's IT sustains and extends the organisation's strategies and objectives".

GOVERNANCE INSTITUTE

©J.-F.David 2012

IT Governance: What is it?

IT GOVERNANCE

A structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes.

and its dimensions:

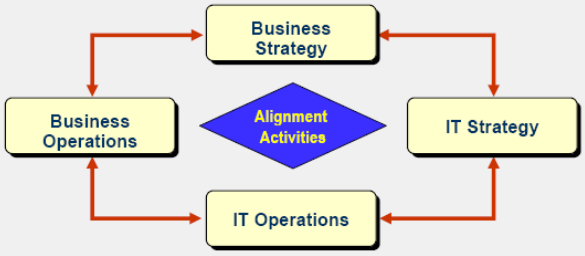
Strategic Alignment
Operational Efficiency
Risk Management
Security
Business Continuity
Change Management
System Integrity
Cost Management
Regulatory Compliance
Value Delivery

©J.-F.David 2012

IT Governance = CIO priorities

1. **Strategic Alignment**
   "aligning with the business and providing collaborative solutions"
2. **Value Delivery**
   "focus on IT expenses and proof of value"
3. **IT Asset Management**
   "knowledge, infrastructure and partners"
4. **Risk Management**
   "safeguarding assets and disaster recovery"
5. **Performance Measurement**

Enhancing business performance through the application of technology



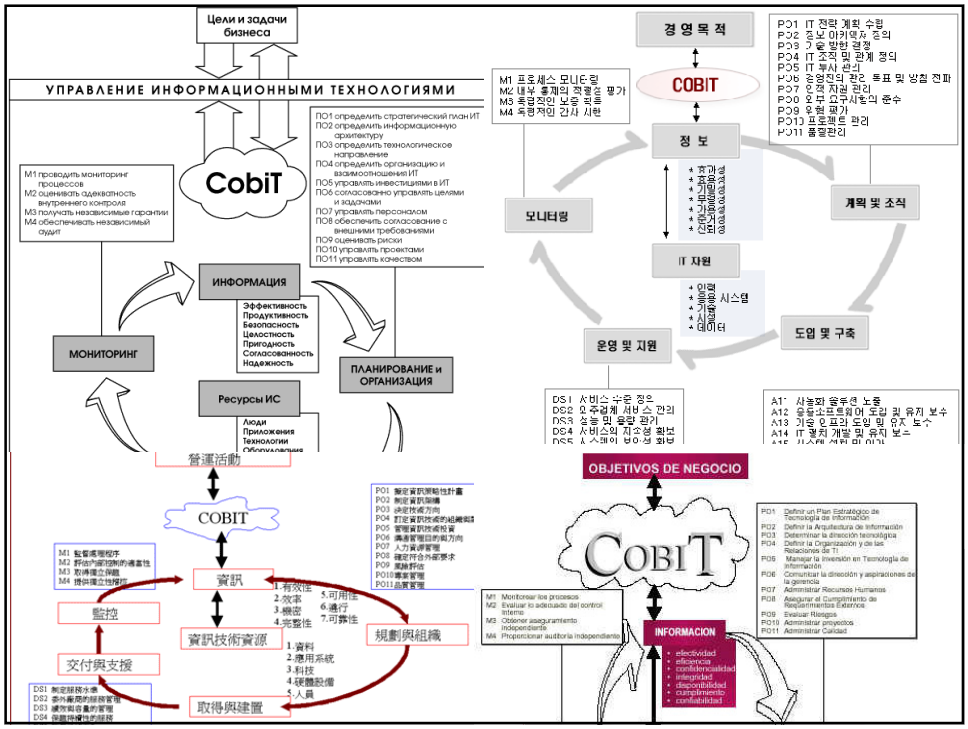
©J.-F.David 2012

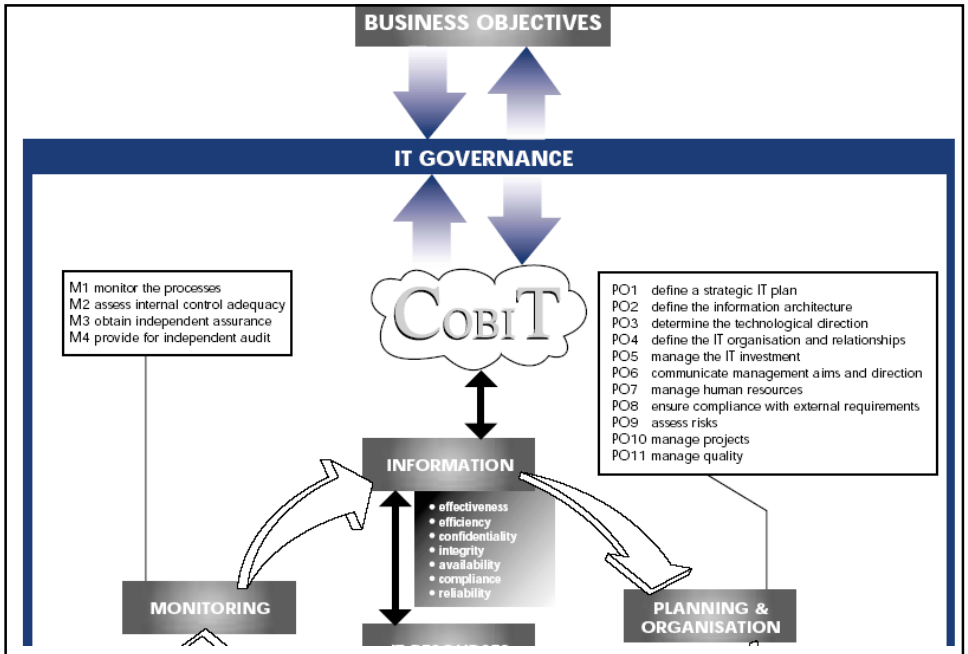
COBIT: An IT Control Framework

- Starts from the premise that IT needs to deliver the information that the enterprise needs to achieve its objectives.
- Promotes process focus and process ownership
- Divides IT into 34 processes belonging to four domains and provides a high level control objective for each
- Looks at ***fiduciary, quality and security*** needs of enterprises,providing seven information criteria that can be used to generically define what the business requires from IT
- Is supported by a set of over 300 detailed control objectives

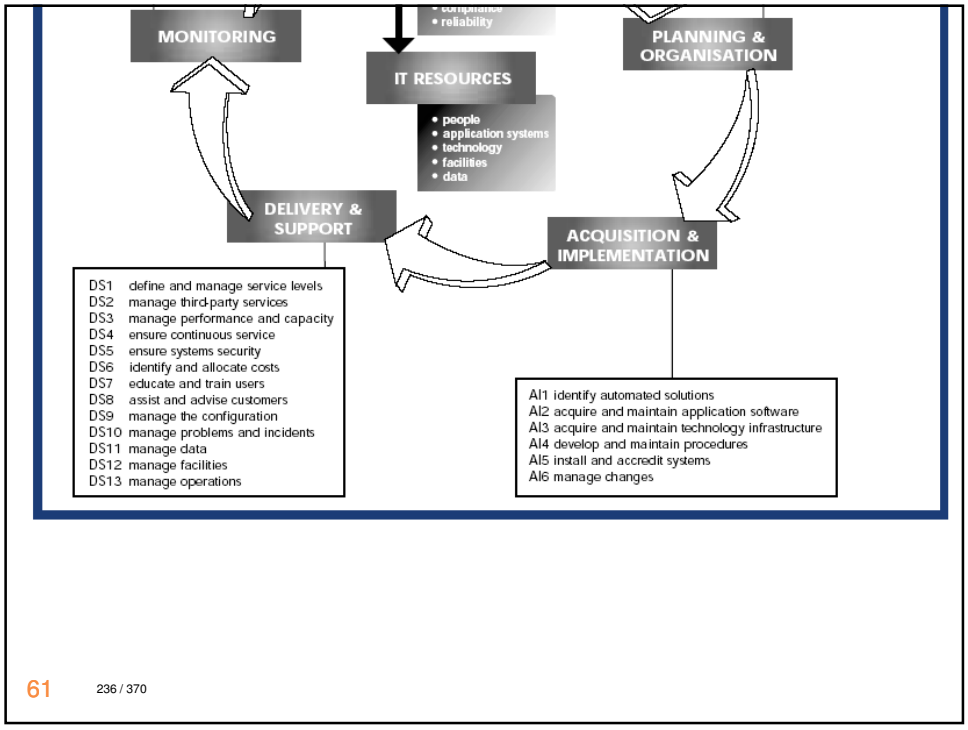
- Planning
- Acquiring & Implementing
- Delivery & Support
- Monitoring

- Effectiveness
- Efficiency
- Availability
- Integrity
- Confidentiality
- Reliability
- Compliance





61 235 / 370



61 236 / 370

IT Governance

Objectives

- IT is aligned with the business, enables the business and maximises benefits
- IT resources are used responsibly
- IT related risks are managed appropriately

DIRECT

CONTROL

PLAN
DO
CHECK
CORRECT

REPORT

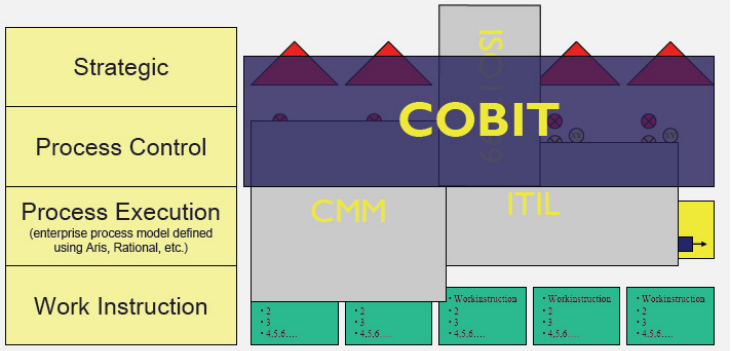
IT Activities

Planning and Organisation
Acquisition and Implementation
Delivery and Support
Monitoring

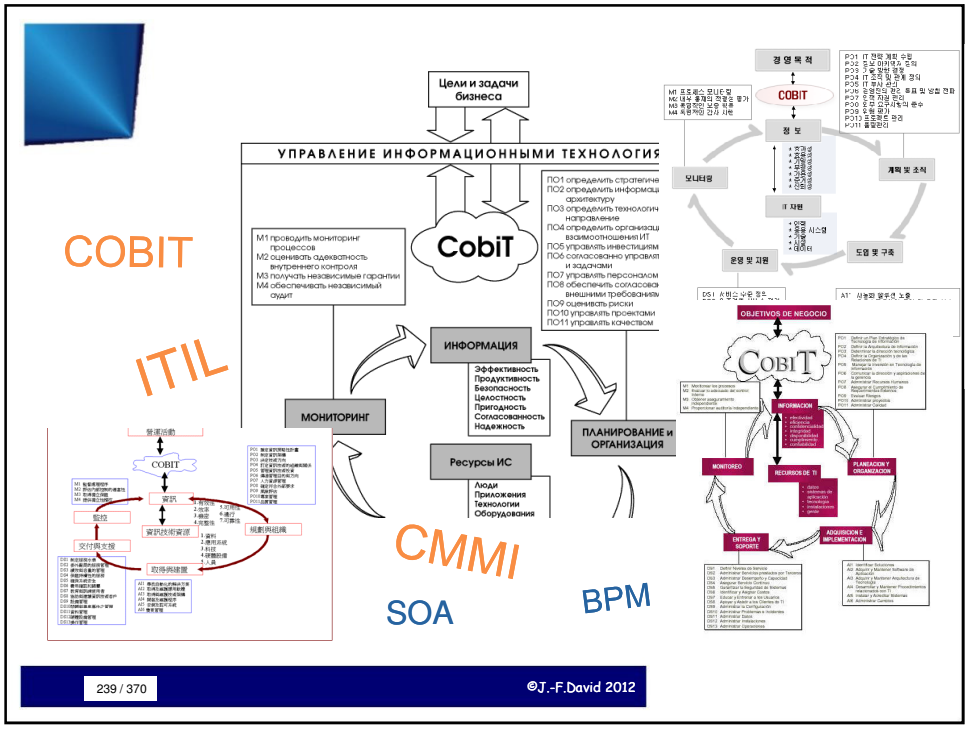
Manage risks	Realise Benefits	
• security • reliability • compliance	Increase Automation - be effective	Decrease Costs - be efficient

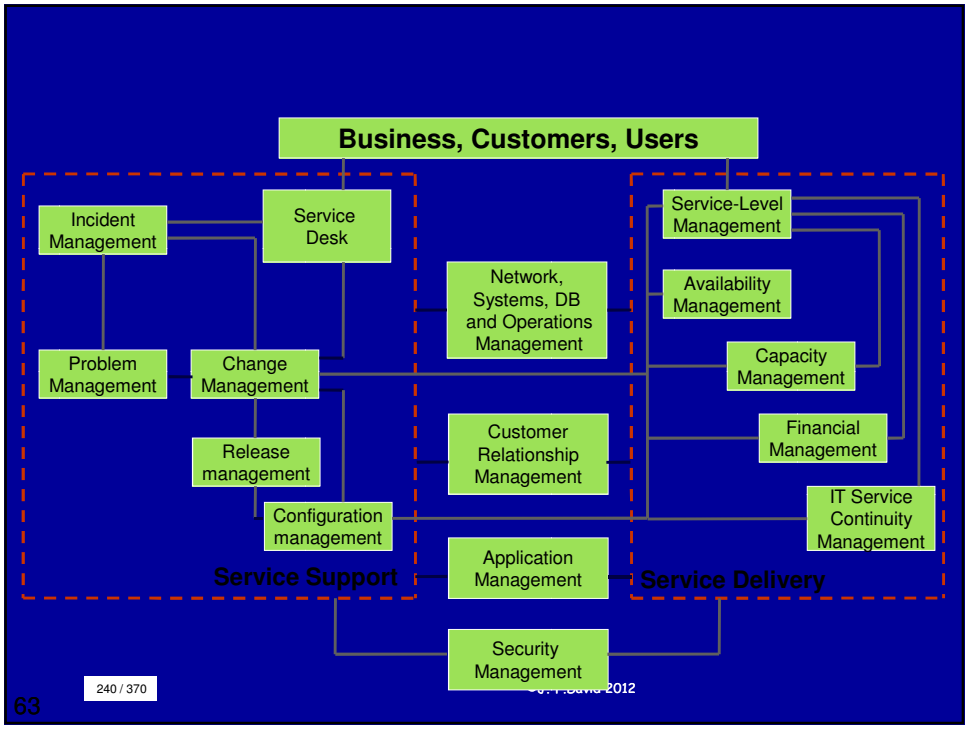
©J.-F.David 2012

COBIT Positioning Model



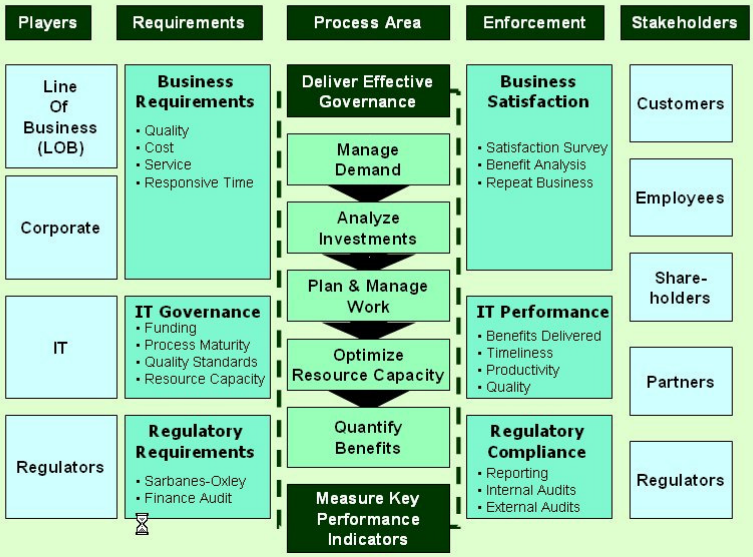
CoBiT= Control Objectives for Information and Related technology (IT Governance Institute; www.itgi.org)
ITIL = Information Technology Library (UK Government; www.ogc.gov.uk)
CMM = Capability Maturity Model (Carnegie Mellon; www.sei.cmu.edu/cmm/)
ISO 17799 = ISO IT Security Best Practice Standard (www.iso.ch)


COBIT
ITIL
CMMI
SOA
BPM
Цели и задачи бизнеса
УПРАВЛЕНИЕ ИНФОРМАЦИОННЫМИ ТЕХНОЛОГИЯ
CobiT
ИНФОРМАЦИЯ
Эффективность
Продуктивность
Безопасность
Целостность
Пригодность
Согласованность
Надежность
МОНИТОРИНГ
ПЛАНИРОВАНИЕ и ОРГАНИЗАЦИЯ
Ресурсы ИС
Люди
Приложения
Технологии
Оборудования
239 / 370
©J.-F.David 2012


Business, Customers, Users
Incident Management
Service Desk
Problem Management
Change Management
Release management
Configuration management
Service Support
Network, Systems, DB and Operations Management
Customer Relationship Management
Application Management
Security Management
Service-Level Management
Availability Management
Capacity Management
Financial Management
IT Service Continuity Management
Service Delivery
240 / 370
63

How to Improve your IT Governance & Resource Mgmt

Define **- Are your IT Processes up to PAR?**



64

Example IT Governance Maturity Scoring

Assessment Framework

Process Area	Informal	Defined	Repeatable	Measurable	Outstanding
Deliver Effective Governance		C		*T*	
Manage Demand	C			*T*	
Analyze Investments	C		*T*		
Plan & Manage Work			C	*T*	
Optimize Resource Capacity		C		*T*	
Quantify Benefits		C		*T*	
Measure Key Performance Indicators		C		*T*	

C = Current

T = Target

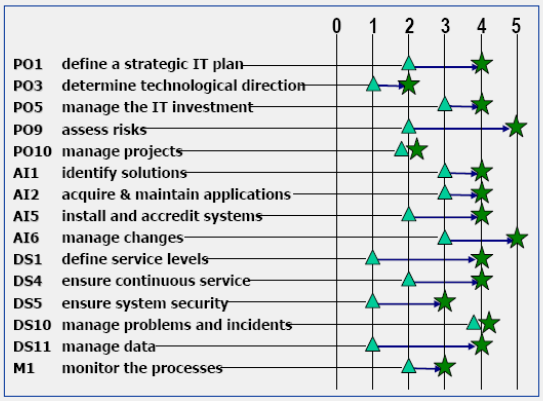
65

Your It Governance Maturity Level?

65

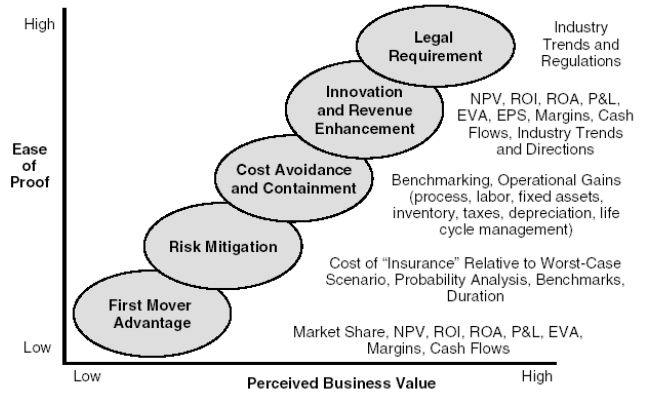
Control Implementation Guide

Control Status ➡ Gap Analysis



65 244 / 370 ©J.-F.David 2012

Figure 8-2: Five Methods for Justifying IT Investments



EPS earnings per share
EVA economic value add
NPV net present value
P&L profit and loss
ROA return on assets
ROI return on investment

Source: Gartner

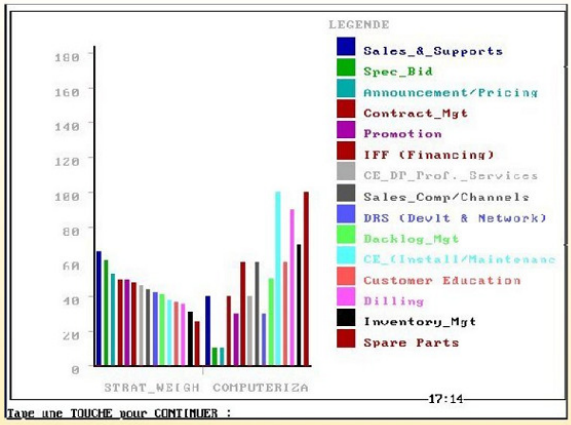
©J.-F.David 2012

Alignement (89) IBM France

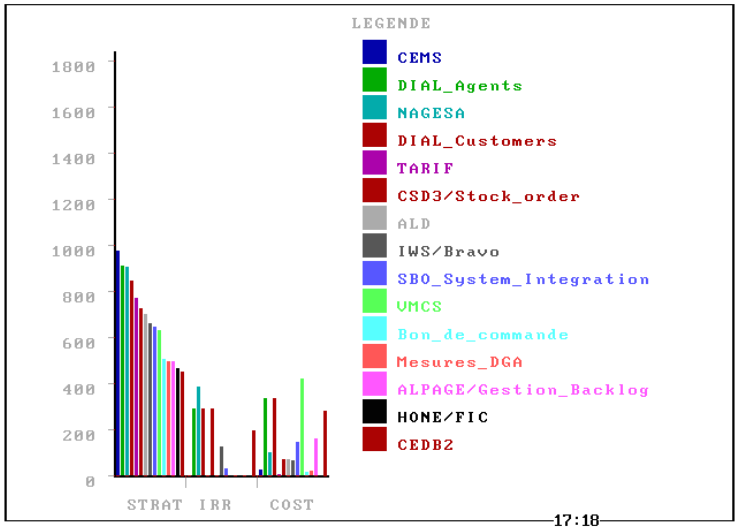
Impact des Processus orientés CLIENT sur les indicateurs stratégiques	Direction	SALES								Fullfilment					CE	
		Specific Bids	Announcement	Promotions	Channels	Sales	IFF Svces	DRS Achie.	Educ	CE/DP	Contract	Order	Backlog	Inventory	Billing	Acc. Receiv.	C.E.	S. Parts
Growth																		
Hard Revenue growth	5	5	5	4	5	4	5	4	5	3	2	2	4	1		5	5
Soft " "	4	5	5	3	5	3	5	5	5	2	2	1	1			5	
Services " "	5	4	4	5	5	1	5	2	5	2	1	2	1	2		2	
" " ,,,,	4	1	5	1	5	1	2	5	0		2	2		2			
" "	5	4	4	4	5	5	2	2	2	3	2	3	3	2		2	1
" "	4	4	5	0	5	0	2	0	0	4				2		2	2
Partnership																		
ME Share/Industry	3	3	3	4	3	3	3	4	0	2	1	1	2	1	1			
" " Soft	2	3	3	4	2	2	2	4	5	2	1	1	1	1	1			
Services/Tot revenue	2	3	4	4	2	4	2	2	5	2	1	1		2	1			
.....	3	3	3	3	3	3	3	3	3	3	1	2	3	2	2			
Productivity																		
Indirect/tot manpower	3	1	1	1	4	1	1	1	3	5	4	4	2	3	4	4	3	
Indirects/Revenue	3	1	1	1	4	1	1	1	3	5	4	4	2	3	4	4	3	
AP. Expenses/Rev	3	1	1	4	5	2	1	2	1	4	4	4	2	3	4	4	3	
Customer Satisfaction																		
Customer sat	5	3	3	1	5	3	5	5	5	5	1	4	5	4	5	5	4	
Simplification																		
Workload	5	5	2	0	5	0	1	0	1	5	2	4	4	4	0	3	3	
Non opérational time	5	5	3	4	5	0	2	2	1	5		3	2	5	N	2		
React cust req /OE				3	3					3	4				N	N		
Reac OE/ Shipping				3	4	3	3	3	3	4		5	5	5	3	3	2	
Profit																		
Net Result/revenue	5	3	4	3	5	4	4	4	4	3	1	2	2	2	5	5	1	
Assets Turnover rate	4	4	4	4	4	3				1	2	4	3		5		3	
Morale																		
Morale index	3	4	3	3	4	2	1	1	2	3	3	1	3	1	1	3	2	

©J.-F.David 2012

Alignement (89) IBM France



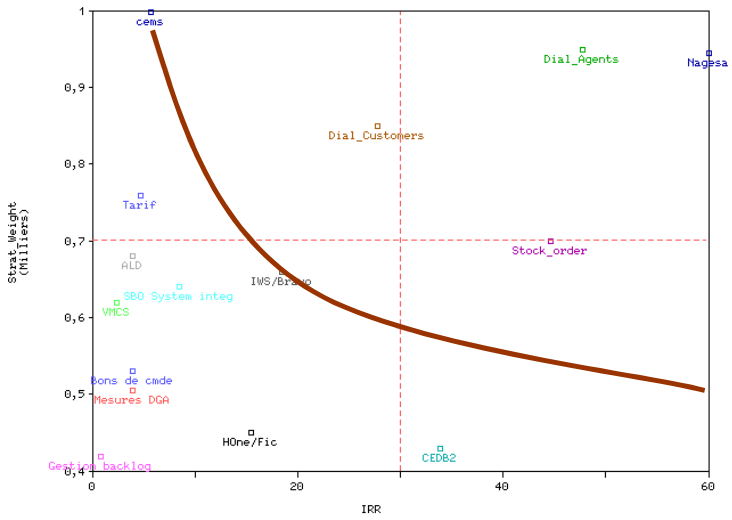
©J.-F.David 2012



Tape une TOUCHE pour CONTINUER :

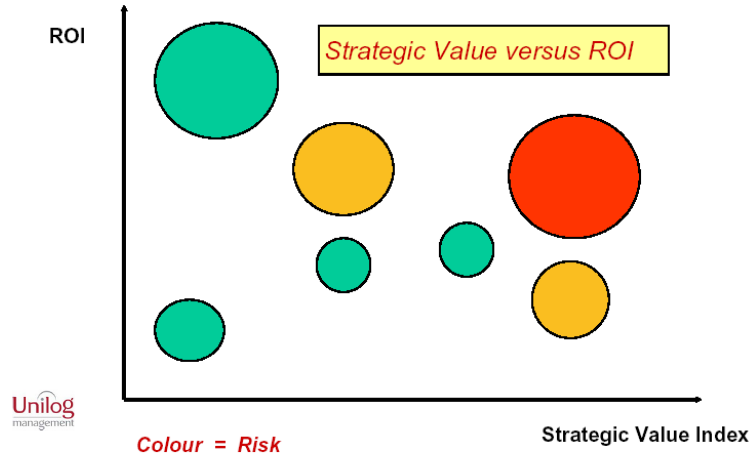
©J.-F.David 2012

Projects priorization



©J.-F.David 2012

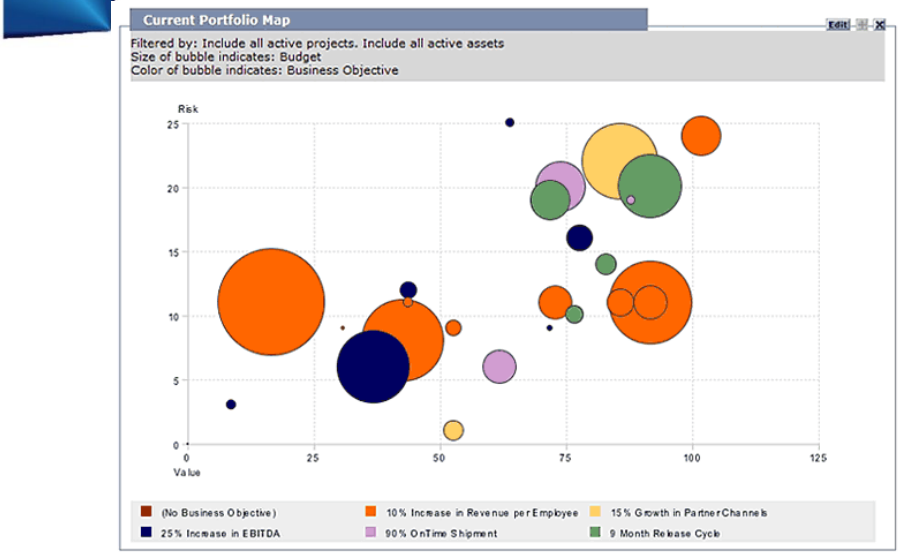
Portofolio Mgt



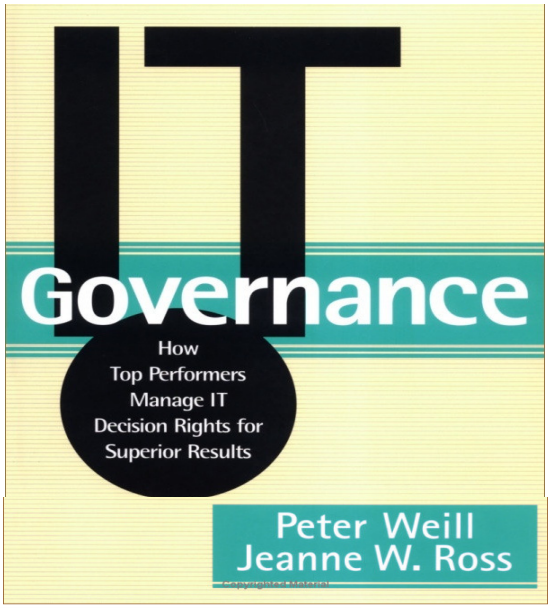
Unilog management

Colour = Risk
Size of Bubble = Cost

©J.-F.David 2012



©J.-F.David 2012



©J.-F.David 2012

AUGUST 30, 2004 (COMPUTERWORLD) -
IT Governance: How Top Performers Manage IT Decision Rights for Superior Results, by Peter Weill and Jeanne W. Ross (Harvard Business School Press, 2004; 269 pages, $35).

IT governance is a pressing issue these days, particularly since technology spending accounts for up to half of all capital expenditures at many companies. But few managers can accurately describe IT governance within their companies, much less quantify the impact of good governance on their bottom lines.

Weill and Ross, research scientists at the Center for Information Systems Research at MIT's Sloan School of Management, do just that and more. For instance, a CISR study of 256 global companies reveals that the profits of companies with top-notch IT governance practices are 20% higher than those of companies with poor IT governance.

More important, the authors thoroughly describe what IT governance is, classify the approaches used to govern IT and offer advice on how to set up an IT governance committee.

While the authors acknowledge that there is no one-size-fits-all approach to effective IT governance, their research finds that companies that are focused on either profits or growth tend to have similar governance models.

The book is aimed at for-profit companies, but it has a chapter devoted to government agencies and not-for-profits. This is highly recommended reading for anyone who's struggling with these issues.

©J.-F.David 2012

Five major IT decisions need to be made

IT principles	High level statements about how IT is used in the business
IT architecture	An integrated set of technical choices to guide the organization in satisfying business needs. The architecture is a set of policies and rules that govern the use of IT and plot a migration path to the way business will be done (includes data, technology, and applications)
IT infrastructure strategies	Strategies for the base foundation of budgeted-for IT capability (both technical and human), shared throughout the firm as reliable services, and centrally coordinated (e.g., network, help desk, shared data)
Business application needs	Specifying the business need for purchased or internally developed IT applications
IT investment and prioritization	Decisions about how much and where to invest in IT including project approvals and justification techniques

© MIT Sloan Center for Information Systems Research 2003 - Weill
Center for Information Systems Research

66

©J.-F.David 2012

IT Governance Archetypes

Decision rights or inputs to decisions for a particular IT domain are held by:

 **Business Monarchy**	A group of, or individual business executives (i.e., CxOs). Includes committees comprised of senior business executives (may include CIO). Excludes IT executives acting independently.
 **IT Monarchy**	Individuals or groups of IT executives
 **Feudal**	Business unit leaders, key process owners or their delegates
 **Federal**	Shared by C level executives and at least one other business group (e.g., CxO and BU leaders) – may also include IT executives. Equivalent of the center and states working together.
 **IT Duopoly**	IT executives and one other group (e.g., CxO or BU leaders)
 **Anarchy**	Each individual user

Note: Some governance styles inspired by Tom Davenport, *Information Ecology*." Oxford University Press, 1997.

© MIT Sloan Center for Information Systems Research 2003 - Weill

Center for Information Systems Research

How do enterprises govern?

Governance Archetype	Decision Domain: IT Principles Input	IT Principles Decision	IT Architecture Input	IT Architecture Decision	IT Infrastructure Strategies Input	IT Infrastructure Strategies Decision	Business Application Needs Input	Business Application Needs Decision	IT Investment Input	IT Investment Decision
Business Monarchy	0	27	0	6	0	7	1	12	1	30
IT Monarchy	1	18	20	73	10	59	0	8	0	9
Feudal	0	3	0	0	1	2	1	18	0	3
Federal	83	14	46	4	59	6	81	30	93	27
Duopoly	15	36	34	15	30	23	17	27	6	30
Anarchy	0	0	0	1	0	1	0	3	0	1
No Data or Don't Know	1	2	0	1	0	2	0	2	0	0

Most common pattern for all firms.

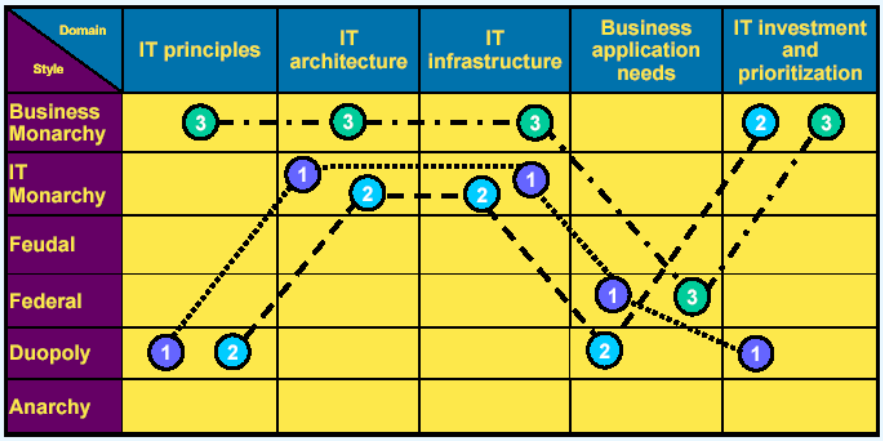
The numbers in each cell are percentages of the 256 enterprises studied in 23 countries. The columns add to 100%.

© 2003 MIT Sloan CISR – Weill. This framework is adapted from Weill & Woodham's work originally published and copyrighted by the MIT Sloan CISR as Working Paper No. 326, "Don't Just Lead, Govern: Implementing Effective IT Governance," April 2002.

Center for Information Systems Research

Top Three Governance Performers

(in general without considering other factors)



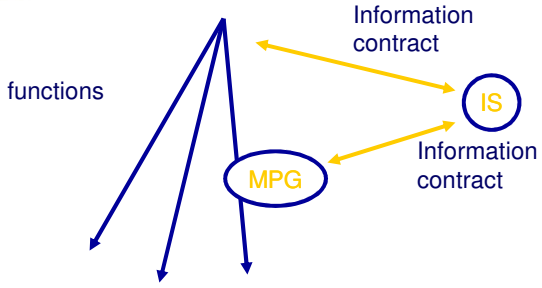
1 2 3 **Top Three Performers –**

Governance performance is the effectiveness of governance assessed by the CIO to deliver four IT objectives weighted by importance: cost effective use of IT & effective use of IT for asset utilization, revenue growth & business flexibility. Governance performance has statistically significant positive relationship with several measures of financial performance (i.e. ROA, ROE, market cap growth).

© 2003 MIT Sloan Center for Information Systems Research (Weill) and Gartner, Inc., drawing on the framework of Weill and Woodham, 2002.

Center for Information Systems Research

Structures



Method & Projects Group:

Mixed professionals & IS
Detect needs
Stimulate the function
Both IS and Organisation

©J.-F.David 2012

Contracts

Service contract
- signed for any project
- part of project
  - Application definition and objectives
  - Project owner (function) responsibilities
  - IS responsibilities
  - Revision conditions
  - Service level
  - Education
  - Implementation rules
  - Indicators
- signed by operations and managers
- same for internal and external

©J.-F.David 2012

Q indicators

Usually around 30...

Examples:
1A: What is your feeling about the service given by the recently installed application? (excellent, good, average, bad)

For every question, subsidiary questions on :
response time, screen design, education, doc, availability, …

1B: During the development, judge your relation with IS dpt

(understanding the need, planning, relation with project mgr, …)

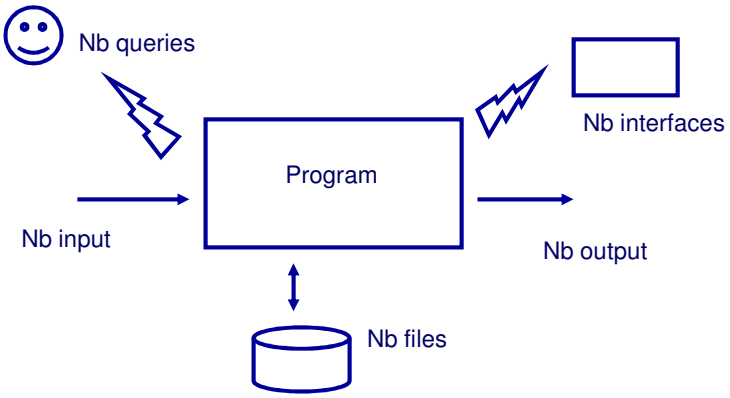
2: Modifications ratio
nb of function point modified/ nb of function point

3: Nb validated bugs/function point

©J.-F.David 2012

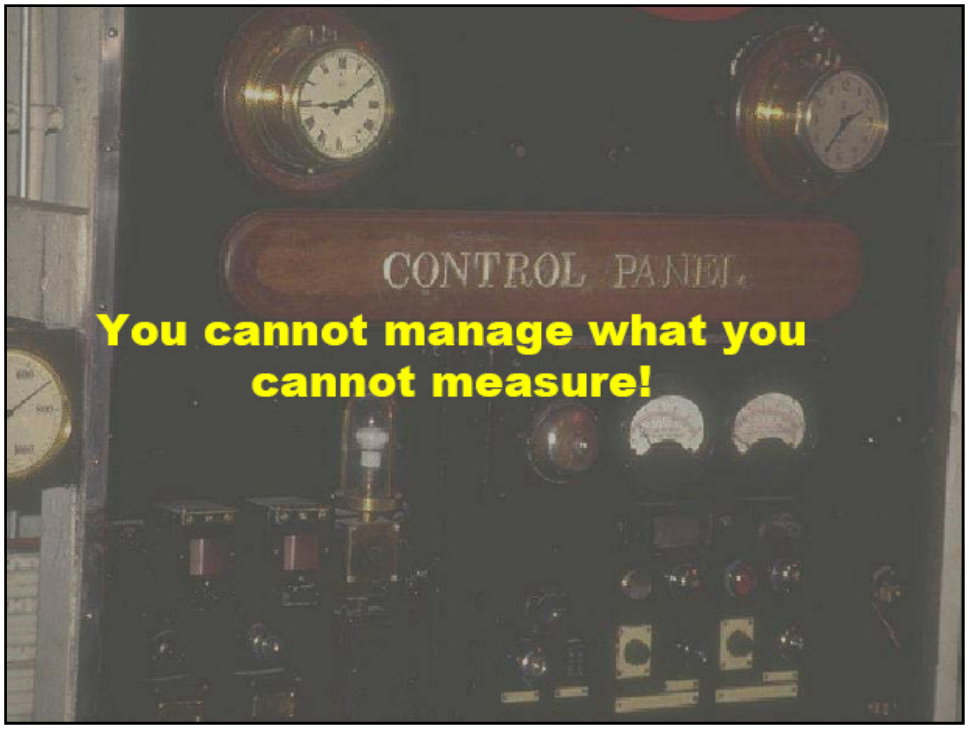
Function Points

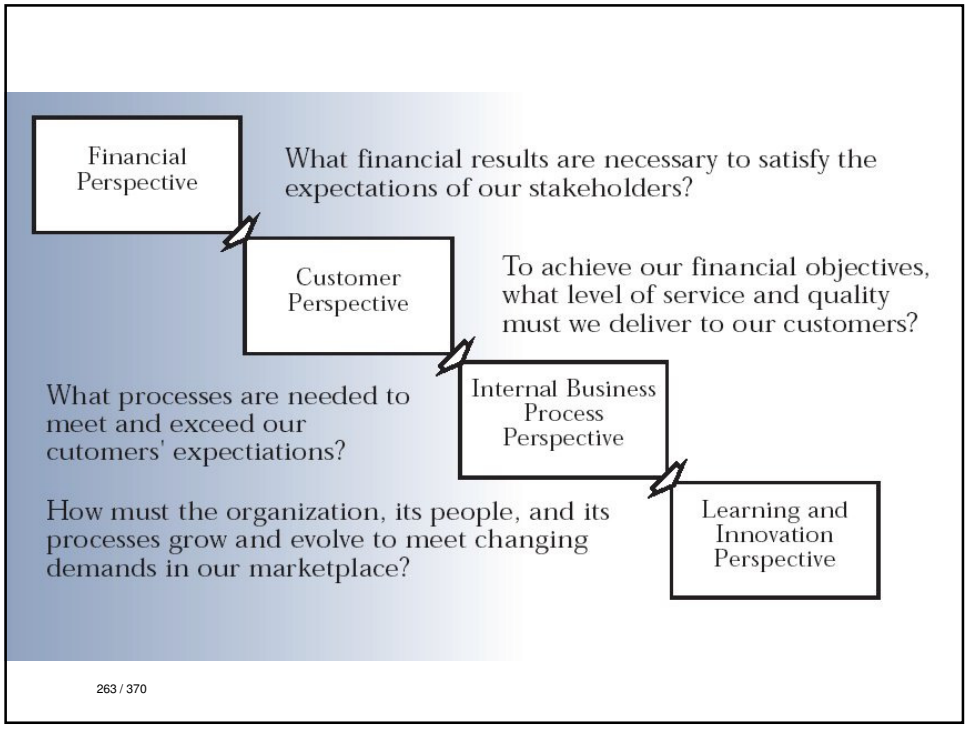
Systemic approach of programming

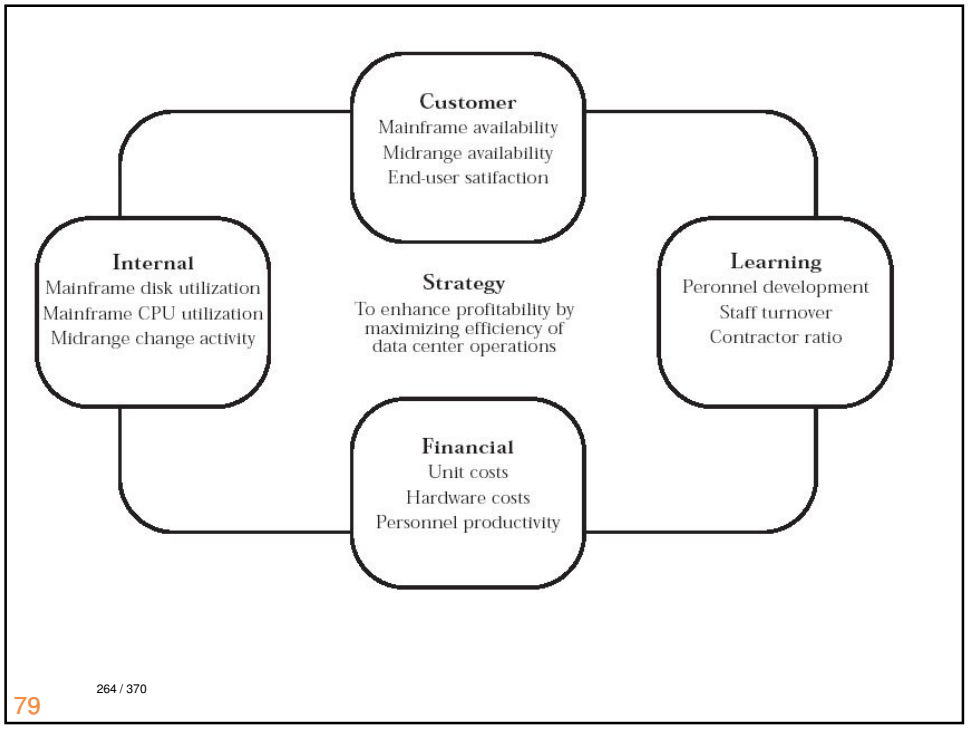


+ adjustment by complexity factor for each
+ global adjustment by general factors (technique employed, ..)
Modified every year, additions, suppressions, modifications...

©J.-F.David 2012

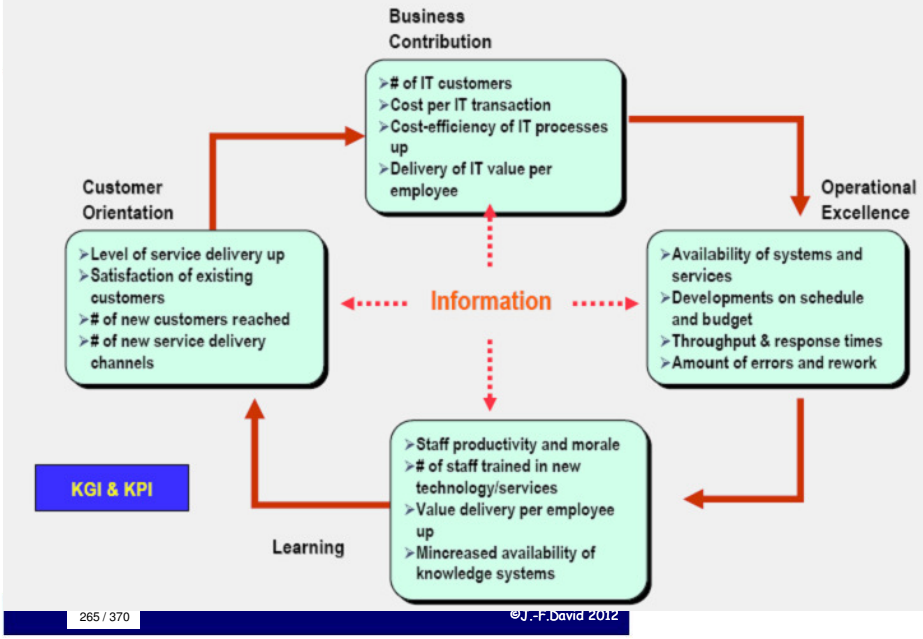



Financial Perspective
What financial results are necessary to satisfy the expectations of our stakeholders?
Customer Perspective
To achieve our financial objectives, what level of service and quality must we deliver to our customers?
Internal Business Process Perspective
What processes are needed to meet and exceed our cutomers' expectiations?
Learning and Innovation Perspective
How must the organization, its people, and its processes grow and evolve to meet changing demands in our marketplace?
263 / 370


Customer
Mainframe availability
Midrange availability
End-user satifaction
Internal
Mainframe disk utilization
Mainframe CPU utilization
Midrange change activity
Strategy
To enhance profitability by maximizing efficiency of data center operations
Learning
Peronnel development
Staff turnover
Contractor ratio
Financial
Unit costs
Hardware costs
Personnel productivity
264 / 370

79

Goals: IT Balanced Scorecard



©J.-F.David 2012

For internal IT development group, a sample scorecard…

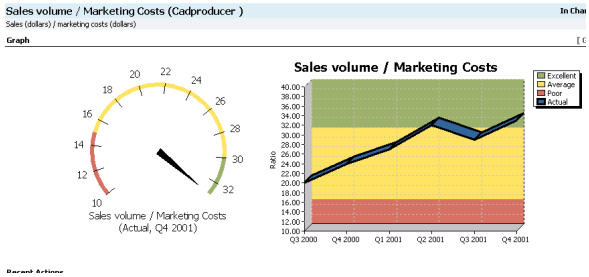
Organization Agility	7	Nb of reengineered processes/year
Image	2	Image indicator
People	5	Morale index Absenteeism
Innovation	4	% innov vs existing
Speed	7	Time / function point Delay demand/delivery
Client satisfaction	9	Ratio treated vs demanded Claims nb Engagement observance (pts, t)
Product Q	8	Bugs / function points Fulfillment delay
Production cost	5	$ / function point

©J.-F.David 2012
79

For internal IT development group, a sample value chain (processes) ...

01- Client's needs knowledge
02- Study/complement specifications
03- Study demands impacts (estimation, points)
04- Develop formal contract
05- Studies, production, quality planning
06- Project launching and follow-up
07- Development management
08- Software objects production
09- Prepare middleware and data structures
10- Integrate versions
11- Implement versions
12- Correct bugs
13- Documentation production
14- Educate users
15- Educate production centers
16- Problems management (hot line)
17- Corrections distribution
18- Assist users for new versions
19- Define/maintain dvpt methods (guides, reviews, Q, ..)
20- Define/maintain application architecture (principles, urbanization, ...)
21- Developers assistance (hot-line)
22- Dvpt information system
23- Control/measure applications
24- Data/ Application directory
25- Dvpt process control
26- Pilot / Control dvpt center, scorecard
27- Prepare plans, budget, ...
28- Negotiate plans, budget
29- People management
30- Resources management
31- Finance management
32- Internal/external communication mgt
33- Technological scan & intelligence

©J.-F.David 2012



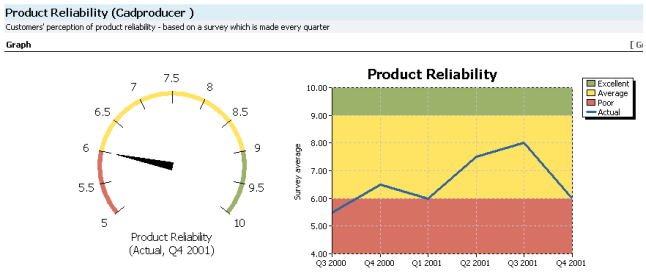
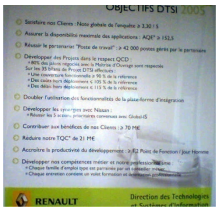
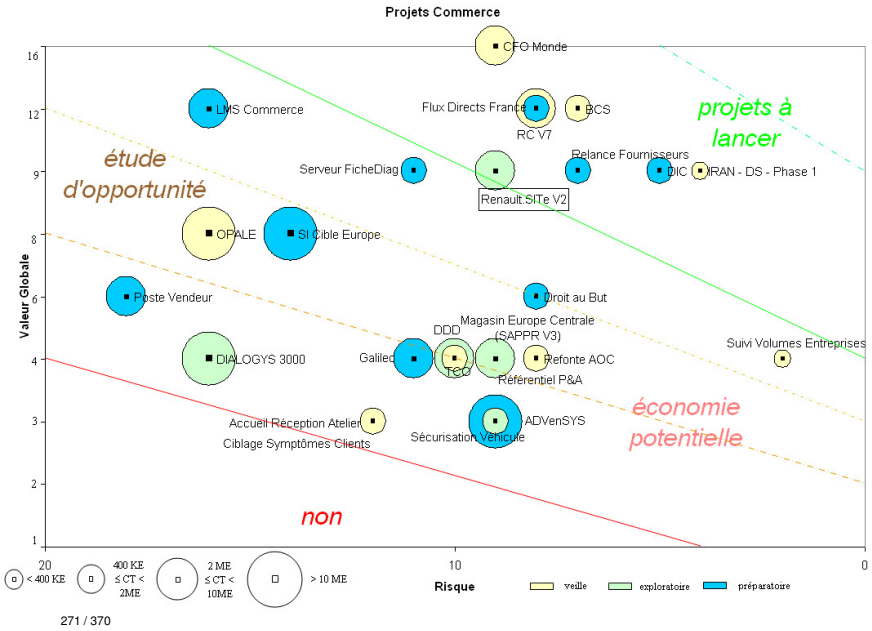


Tableau de bord DTSI

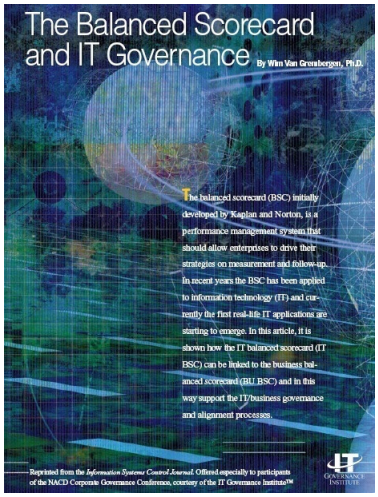


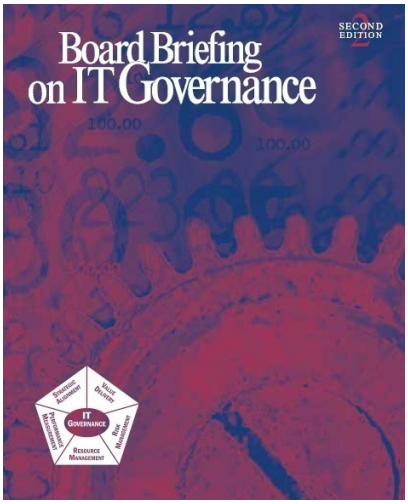
- satisfaire nos clients:
  note globale de l'enquête >3,3/5
- assurer la disponibilité maximale des applications
  AQE(Action Qualité Exploitation) >152,5
- réussir le partenariat (HP) postes de travail
  + de 42000 postes gérés par le partenaire
- développer les projets dans l'esprit QCD (Qualité Coûts Délais)
  - 80% jalons négociés avec MOA(Maître d'ouvrage) respectés sur les 35 bilans de projets effectués
    - couverture fonctionnelle à 90% de la référence
    - coûts hors déploiement < 105% de la référence
    - délais hors déploiement < 115% de la référence
- doubler l'utilisation des fonctionnalités de la plate forme d'intégration
- développer les synergies avec Nissan
  réussir les 5 actions prioritaires reconnues
- contribuer au bénéfices de nos clients
  >70M€
- réduire notre coût applicatif TQC(*)
  de 21M€
- accroître la productivité du développement
  + de 1,2 point de fonction / jour homme
- développer nos compétences métiers et notre professionnalisme
  Chaque famille d'emploi type est parrainée par un conseiller métier
  Chaque entretien contient un volant formation et orientation professionnelle

(*) TQC = tel que construit, les applications anciennes sans amélioration majeures en cours (les autres sont MQC mieux que construit et AQC autre que construit)



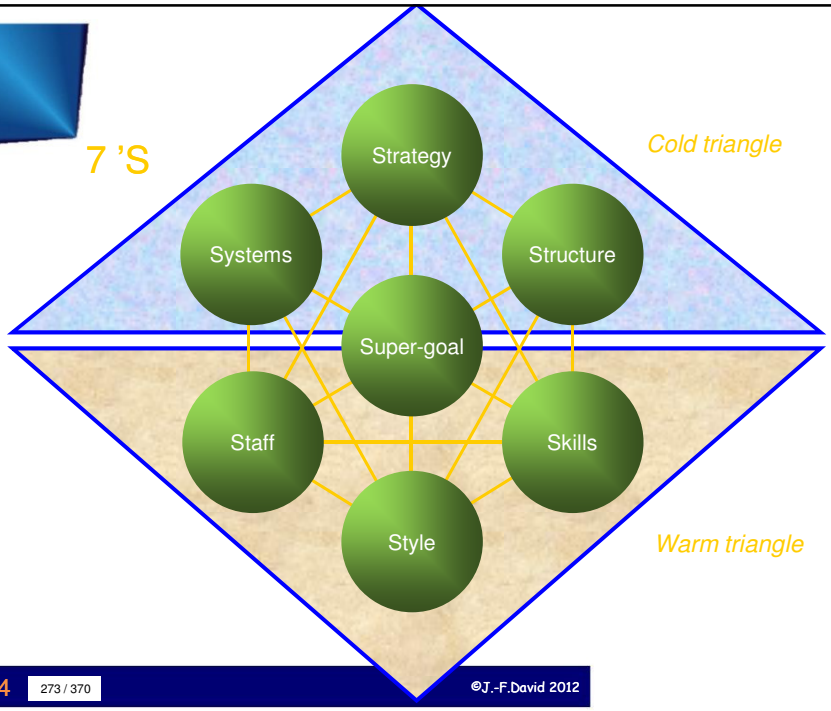
271 / 370



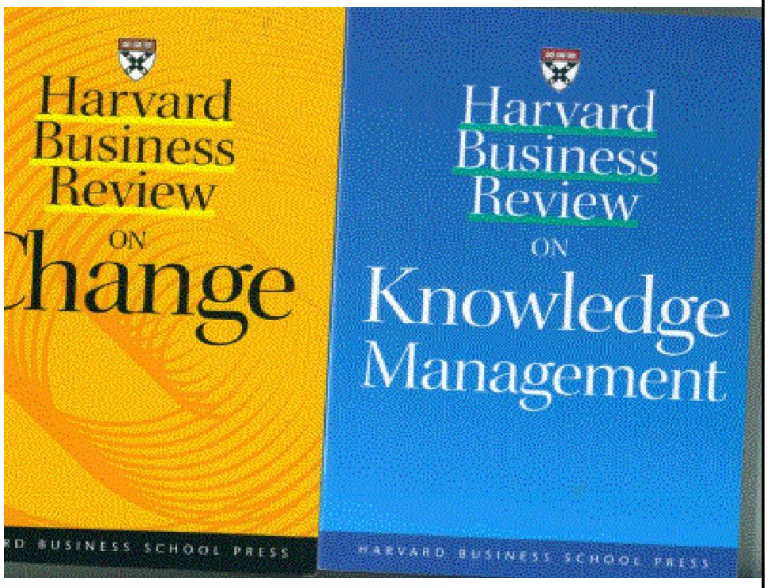


272 / 370 ©J.-F.David 2012

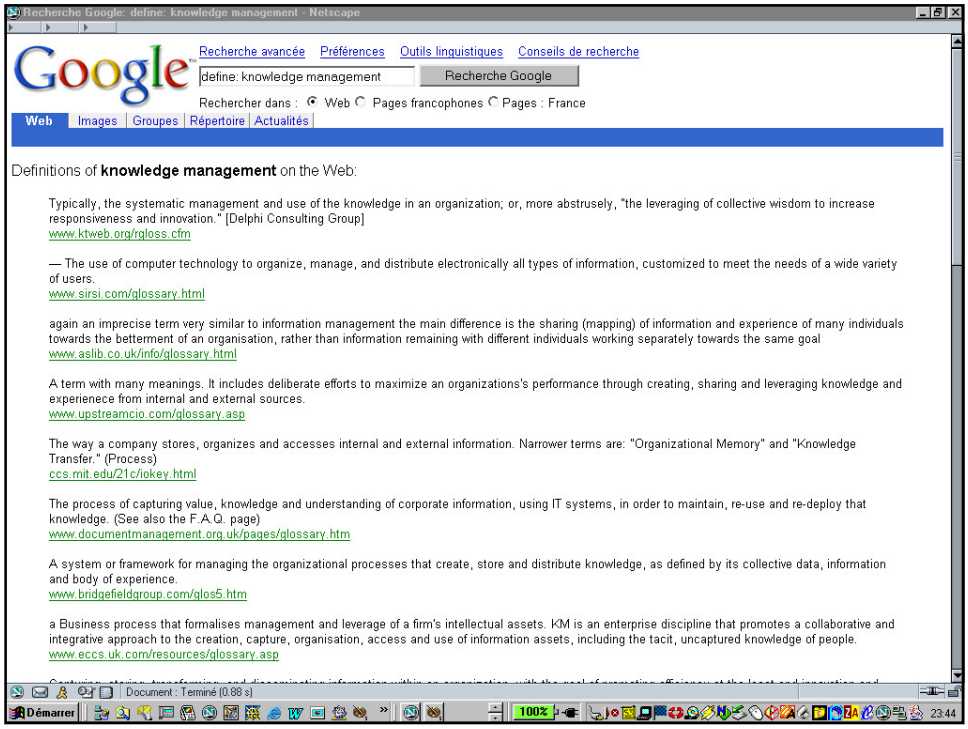
7 ’S

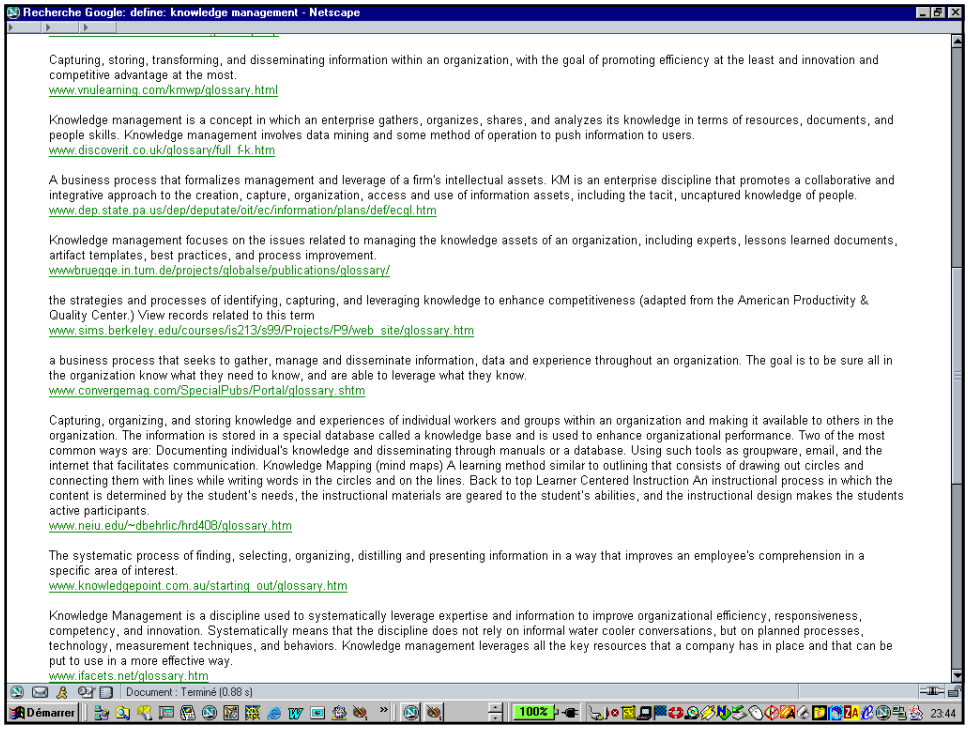


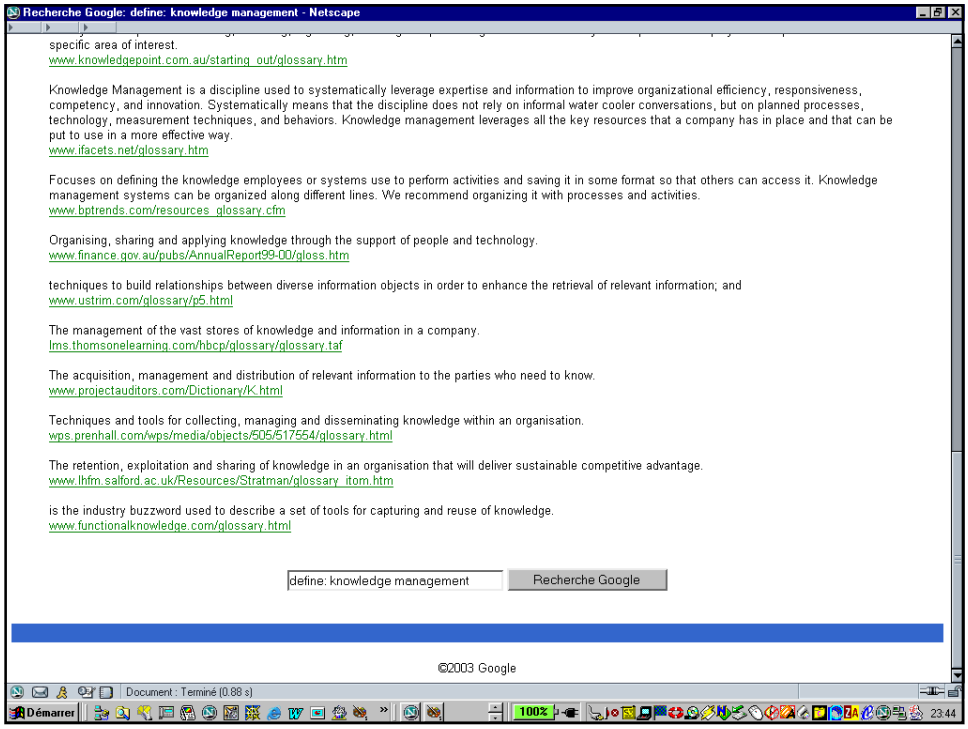
©J.-F.David 2012



©J.-F.David 2012


Recherche Google: define: knowledge management - Netscape
Google
Recherche avancée
Préférences
Outils linguistiques
Conseils de recherche
define: knowledge management
Recherche Google
Rechercher dans : Web Pages francophones Pages : France
Web
Images
Groupes
Répertoire
Actualités
Definitions of knowledge management on the Web:
Typically, the systematic management and use of the knowledge in an organization; or, more abstrusely, "the leveraging of collective wisdom to increase responsiveness and innovation." [Delphi Consulting Group]
www.ktweb.org/rqloss.cfm
— The use of computer technology to organize, manage, and distribute electronically all types of information, customized to meet the needs of a wide variety of users.
www.sirsi.com/glossary.html
again an imprecise term very similar to information management the main difference is the sharing (mapping) of information and experience of many individuals towards the betterment of an organisation, rather than information remaining with different individuals working separately towards the same goal
www.aslib.co.uk/info/glossary.html
A term with many meanings. It includes deliberate efforts to maximize an organizations's performance through creating, sharing and leveraging knowledge and experienece from internal and external sources.
www.upstreamcio.com/glossary.asp
The way a company stores, organizes and accesses internal and external information. Narrower terms are: "Organizational Memory" and "Knowledge Transfer." (Process)
ccs.mit.edu/21c/iokey.html
The process of capturing value, knowledge and understanding of corporate information, using IT systems, in order to maintain, re-use and re-deploy that knowledge. (See also the F.A.Q. page)
www.documentmanagement.org.uk/pages/glossary.htm
A system or framework for managing the organizational processes that create, store and distribute knowledge, as defined by its collective data, information and body of experience.
www.bridgefieldgroup.com/glos5.htm
a Business process that formalises management and leverage of a firm's intellectual assets. KM is an enterprise discipline that promotes a collaborative and integrative approach to the creation, capture, organisation, access and use of information assets, including the tacit, uncaptured knowledge of people.
www.eccs.uk.com/resources/glossary.asp
Document : Terminé (0.88 s)
Démarrer
100%
23:44


Recherche Google: define: knowledge management - Netscape
Capturing, storing, transforming, and disseminating information within an organization, with the goal of promoting efficiency at the least and innovation and competitive advantage at the most.
www.vnulearning.com/kmwp/glossary.html
Knowledge management is a concept in which an enterprise gathers, organizes, shares, and analyzes its knowledge in terms of resources, documents, and people skills. Knowledge management involves data mining and some method of operation to push information to users.
www.discoverit.co.uk/glossary/full_f-k.htm
A business process that formalizes management and leverage of a firm's intellectual assets. KM is an enterprise discipline that promotes a collaborative and integrative approach to the creation, capture, organization, access and use of information assets, including the tacit, uncaptured knowledge of people.
www.dep.state.pa.us/dep/deputate/oit/ec/information/plans/def/ecgl.htm
Knowledge management focuses on the issues related to managing the knowledge assets of an organization, including experts, lessons learned documents, artifact templates, best practices, and process improvement.
wwwbruegge.in.tum.de/projects/globalse/publications/glossary/
the strategies and processes of identifying, capturing, and leveraging knowledge to enhance competitiveness (adapted from the American Productivity & Quality Center.) View records related to this term
www.sims.berkeley.edu/courses/is213/s99/Projects/P9/web_site/glossary.htm
a business process that seeks to gather, manage and disseminate information, data and experience throughout an organization. The goal is to be sure all in the organization know what they need to know, and are able to leverage what they know.
www.convergemag.com/SpecialPubs/Portal/glossary.shtm
Capturing, organizing, and storing knowledge and experiences of individual workers and groups within an organization and making it available to others in the organization. The information is stored in a special database called a knowledge base and is used to enhance organizational performance. Two of the most common ways are: Documenting individual's knowledge and disseminating through manuals or a database. Using such tools as groupware, email, and the internet that facilitates communication. Knowledge Mapping (mind maps) A learning method similar to outlining that consists of drawing out circles and connecting them with lines while writing words in the circles and on the lines. Back to top Learner Centered Instruction An instructional process in which the content is determined by the student's needs, the instructional materials are geared to the student's abilities, and the instructional design makes the students active participants.
www.neiu.edu/~dbehrlic/hrd408/glossary.htm
The systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee's comprehension in a specific area of interest.
www.knowledgepoint.com.au/starting_out/glossary.htm
Knowledge Management is a discipline used to systematically leverage expertise and information to improve organizational efficiency, responsiveness, competency, and innovation. Systematically means that the discipline does not rely on informal water cooler conversations, but on planned processes, technology, measurement techniques, and behaviors. Knowledge management leverages all the key resources that a company has in place and that can be put to use in a more effective way.
www.ifacets.net/glossary.htm
Document : Terminé (0.88 s)
Démarrer
100%
23:44



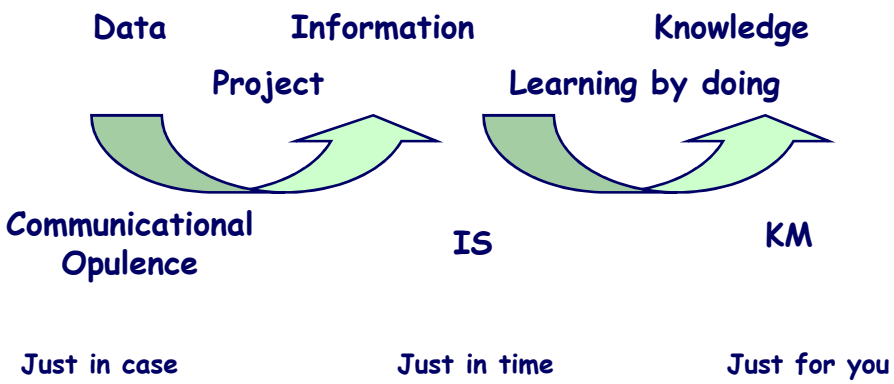
Knowledge Management caters to the critical issues of organizational adaptation, survival and competence in face of increasingly discontinuous environmental change....

Essentially, it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings.

www.brint.com

©J.-F.David 2012

KM, basic concepts...



 ©J.-F.David 2012

DATA, INFORMATION, KNOWLEDGE

Data

- Objective observed facts about organizational events.
- Source of error - measurement related

Information

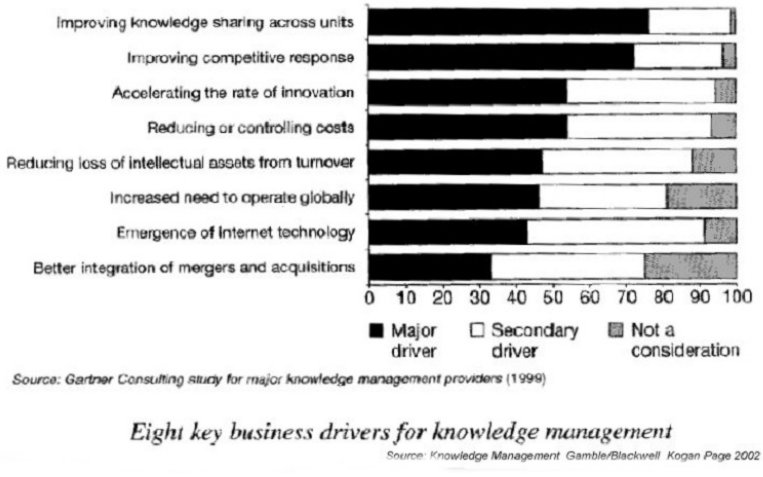
- A communication carrying a *message*.
- Can be found from data by adding relevance and purpose.
- Source of error - interpretation related

Knowledge

- Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides *a framework for evaluating and incorporating new experiences and information*.
- It originates and applied in the minds of knowers.
- Closest to "Action."
- Various forms: Experience, Judgement, Intuition, Value and Beliefs,
- Source of error - validity related.
  - Internal validity - is this knowledge sound?
  - External validity - is this knowledge sound elsewhere?

 ©J.-F.David 2012

©J.-F.David 2012

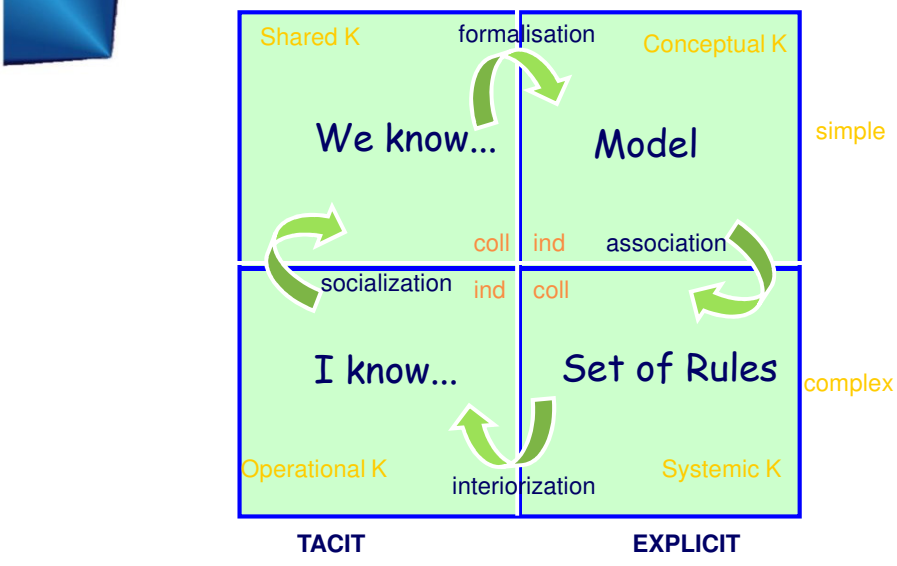


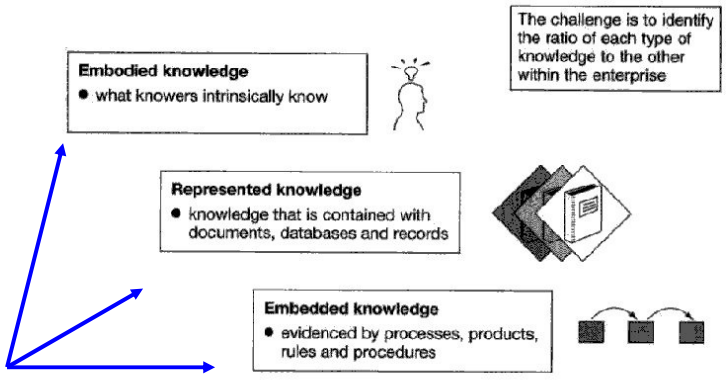
Source: Gartner Consulting study for major knowledge management providers (1999)

Eight key business drivers for knowledge management

Source: Knowledge Management Gamble/Blackwell Kogan Page 2002

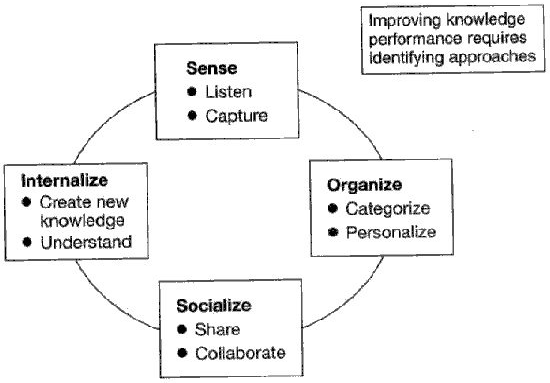
©J.-F.David 2012





The types of knowledge that exist in and around every organization...

Source: Knowledge Management Gamble/Blackwell Kogan Page 2002



Approaches for managing knowledge processes

Source: Knowledge Management Gamble/Blackwell Kogan Page 2002

 ©J.-F.David 2012

Approach \ Type	Embodied	Represented	Embedded
Sense	Observe	Gather	Hypothesize
Organize	Contextualize	Categorize	Map
Socialize	Share	Disseminate	Simulate
Internalize	Apply – Decide – Act		

A Strategy for Knowledge

Mapping approaches to types of knowledge – a systematic method for improving business performance

Source: Knowledge Management Gamble/Blackwell Kogan Page 2002

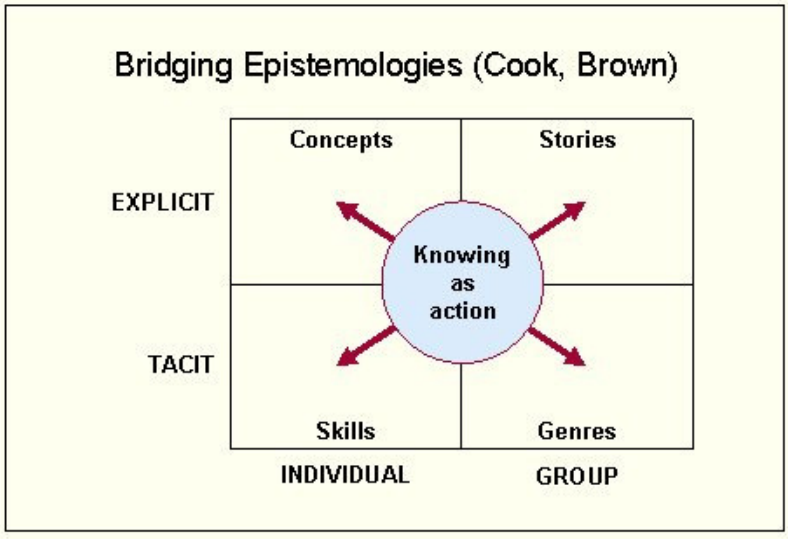
Approach \ Type	Embodied	Represented	Embedded
Sense	**Observe** • Knowledge surveys • Workshops/interviews • Network analysis	**Gather** • Business intelligence • Text and data mining • Intelligent agents	**Hypothesize** • Market/customer/ competitor analysis • Modelling/reasoning tools • Reverse engineering
Organize	**Contextualize** • Focus groups • Expertise guides • Knowledge coordinators	**Categorize** • Knowledge taxonomies • Libraries • Data marts	**Map** • Job/workplace design • Workflow analysis • Performance measures
Socialize	**Share** • Mentoring/coaching • Communities of practice • Conferencing tools/ groupware	**Disseminate** • Broadcast tools/Internet/ Intranet/e-mail • Distance learning • Application systems	**Simulate** • Scenario planning • After-action reviews • Training/competency management
Internalize	Apply – Decide – Act		

The KM Matrix

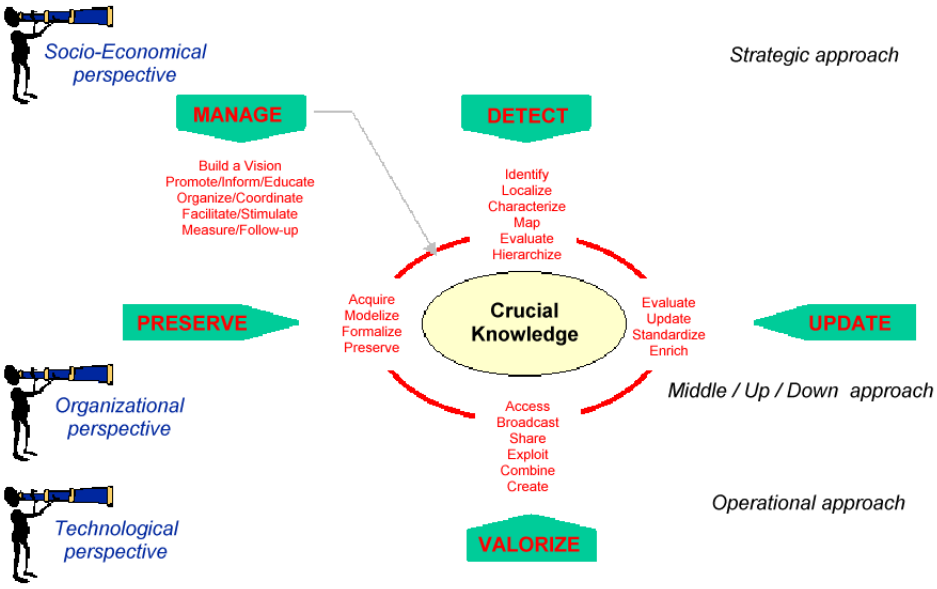
Range of tools used in approaches to knowledge management

Source: Knowledge Management Gamble/Blackwell Kogan Page 2002

©J.-F.David 2012



©J.-F.David 2012



289 / 370

150

KM and the learning Mix (Moingeon, HEC France)

KM is the explicit and rigorous management of the Learning mix

=

Technology + K Portfolio + Structure + Identity

Technology is an important enabler for KM, but it is only one component of the L mix.

'The medium should not be the message' (K portfolio>Technology)

The vision must set the priorities, not the technology.

K Portfolio = K Capital + New K

Management of K Capital:

- To identify K (Danger = presbyopia, wasting knowledge by not using it)
- To codify K
- To re-use K ("don't reinvent the wheel")

Objective = K sharing

New K:

"Knowledge is aware of what it does not know"

- To explore new alternatives (danger = "competency trap")
- To learn new K (danger = myopia, "not invented here" syndrome)

Objective = K acquisition

Corporate level

Chief Knowledge Officer

Chief Learning Officer

Knowledge Director

Director of Intellectual Capital

BU level

Knowledge Manager

Knowledge Champion

Knowledge Finder

Knowledge Editor

Emergence of Communities of Practice

Self-managed Learning teams

People share K because they share the same passion

Trust and Intrinsic motivation

Need to have a learning identity

- Promotes K sharing and K creation
- High level of trust
- People can productively confront their views
- People can make the "real" issues discussible

Obstacles to overcome:

"Not invented here" syndrome

Hoarding: "K is Power"

Lack of time to share K or learn

Leaders who are not role models

Challenge :

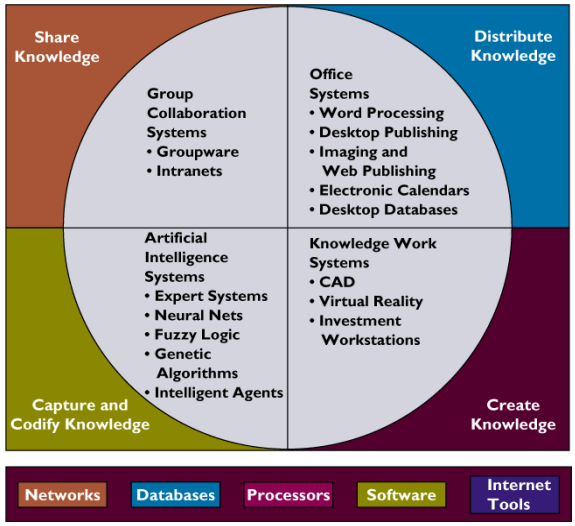
From "K is power"

to "Shared K is more power"

290 / 370

151

KM and ICT (Processes and Tools mapping)



©J.-F.David 2012

„If we spend more that 1/3 of KM budget on IT it is no longer a KM project but IT project"

Laurance Prusak, Thomas Davenport

©J.-F.David 2012

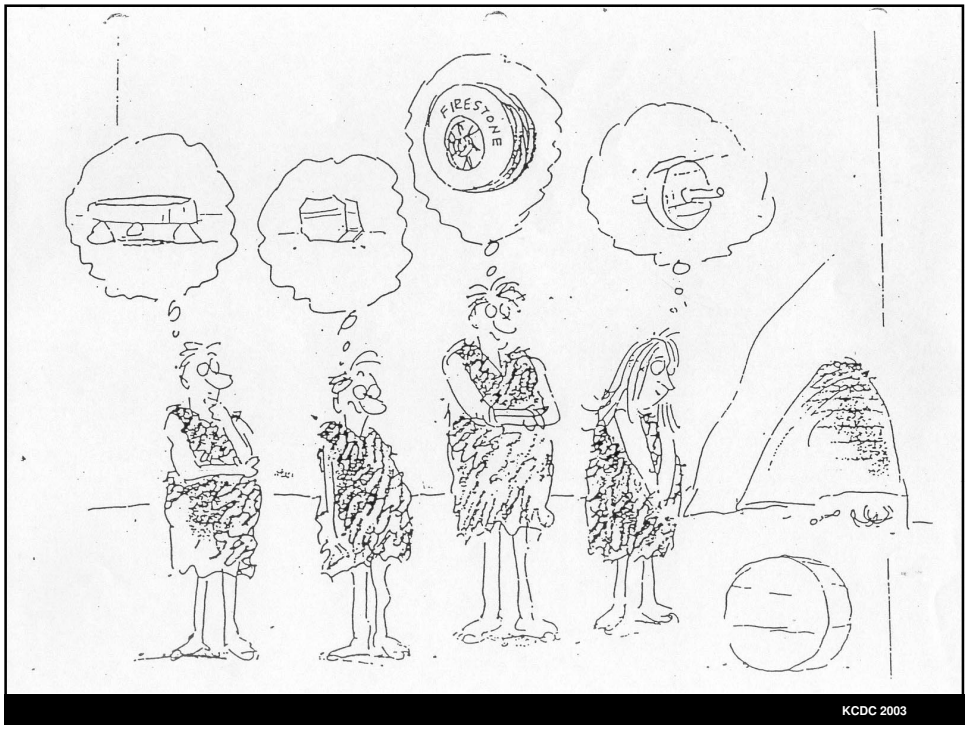
KM and cognitive styles

"Cognitive style may be defined as individual variations in modes of perceiving, remembering and thinking, or as distinctive ways of apprehending, storing, transforming and utilizing information." (Kogan, 1971)

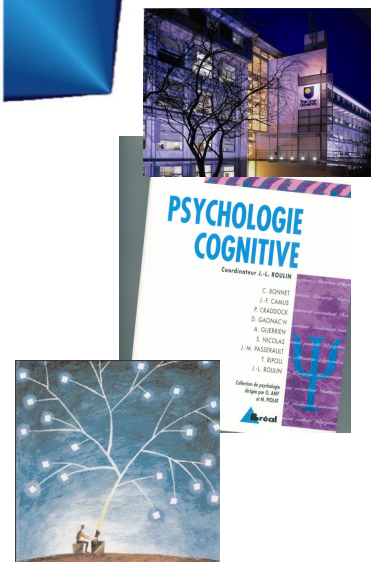
"Learning is any relatively permanent change in behavior that occurs as a result of experience." "Learning styles are cognitive, affective, and physiological traits that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment." (James W. Keefe)

EX: *Serialist/Analytic –*
Wholist/Global
Verbal/Linguistic –
Visual/Spatial
Field Dependent - Field Independent
Impulsive - Reflective

©J.-F.David 2012



e-learning



Illumination

Deepening, informations

Project definition

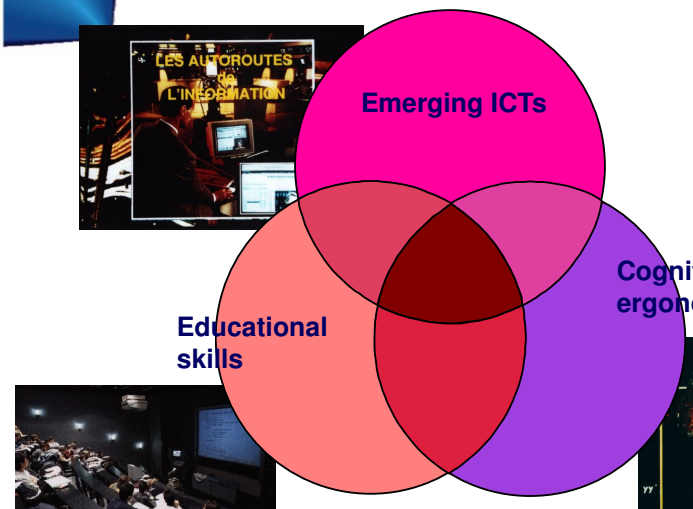
Project

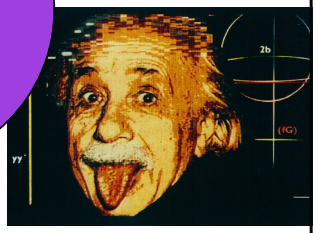
Capitalization for next steps

Towards a media mix...

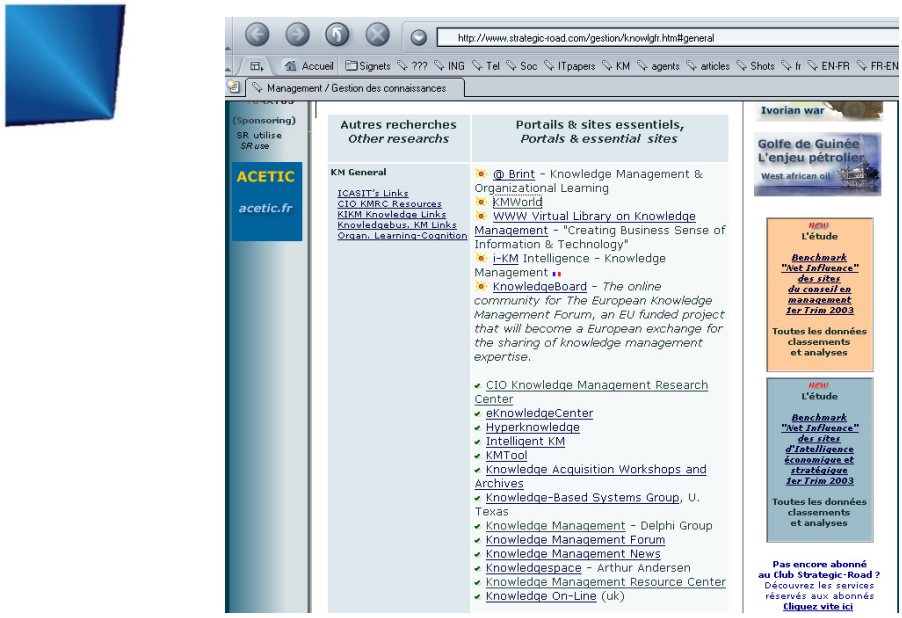
©J.-F.David 2012

A necessary cross-fertilization

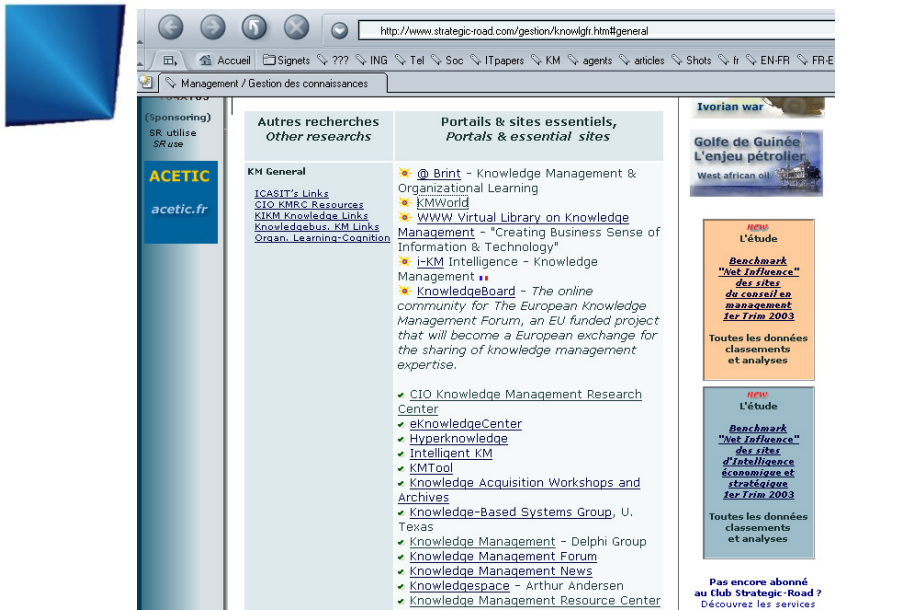




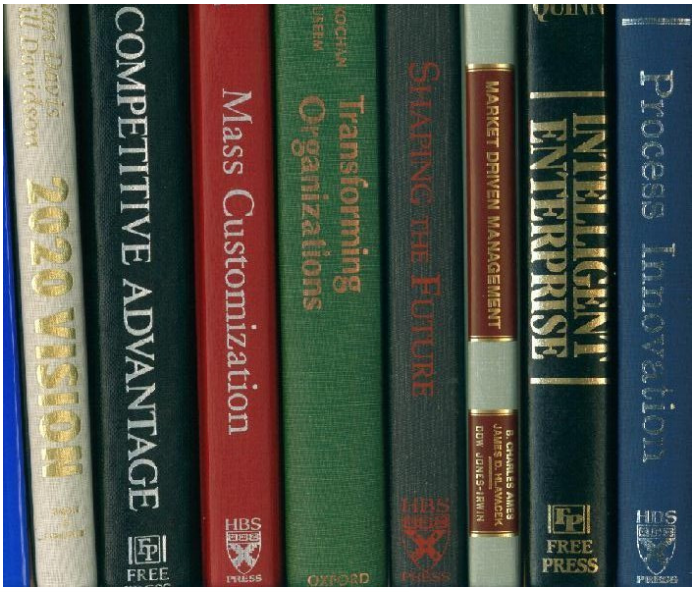
©J.-F.David 2012



©J.-F.David 2012

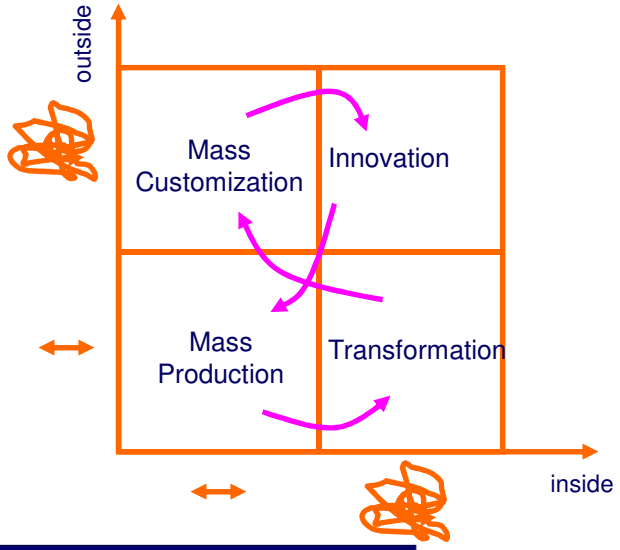


©J.-F.David 2012

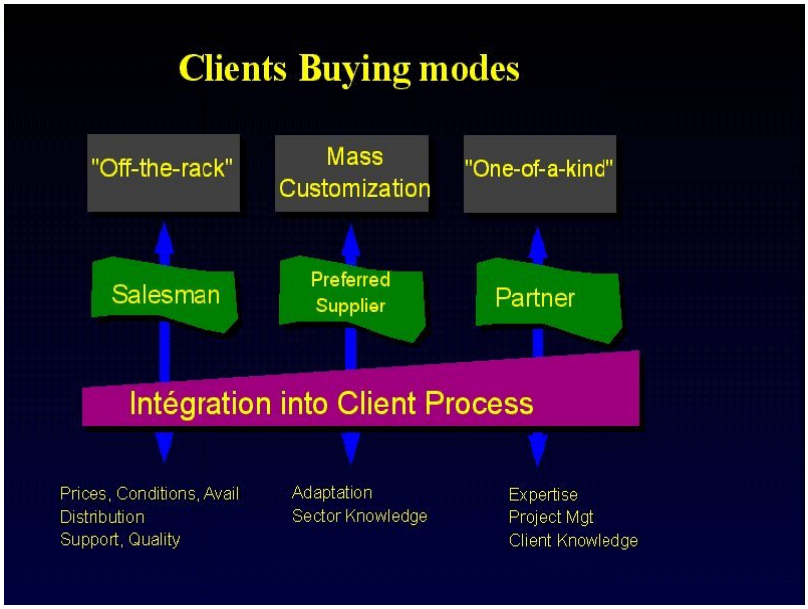


©J.-F.David 2012

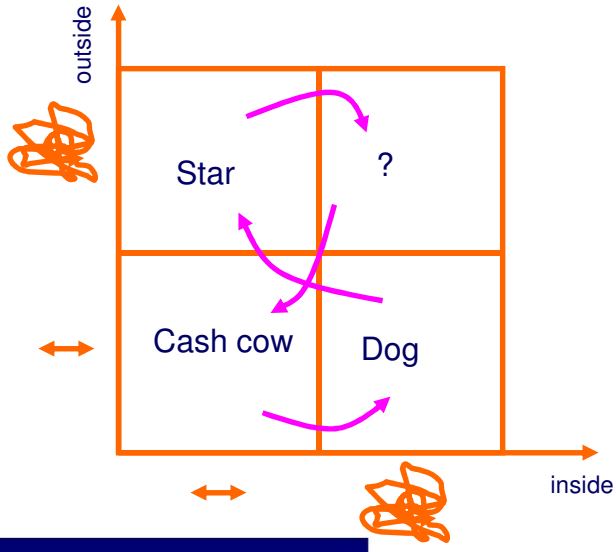
Inside / Outside



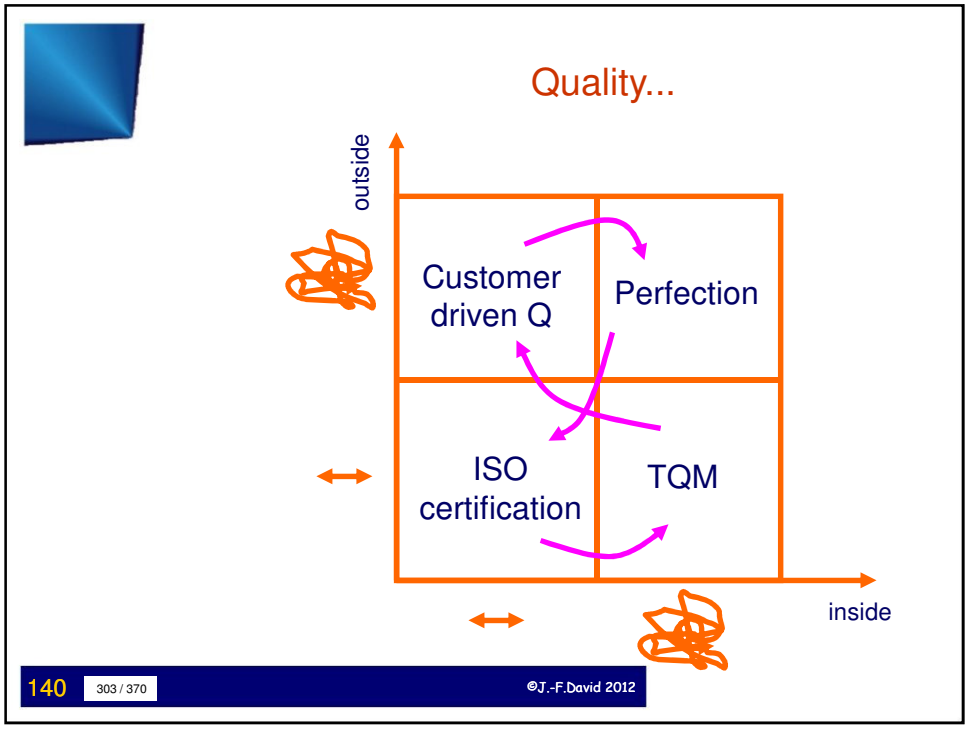
©J.-F.David 2012

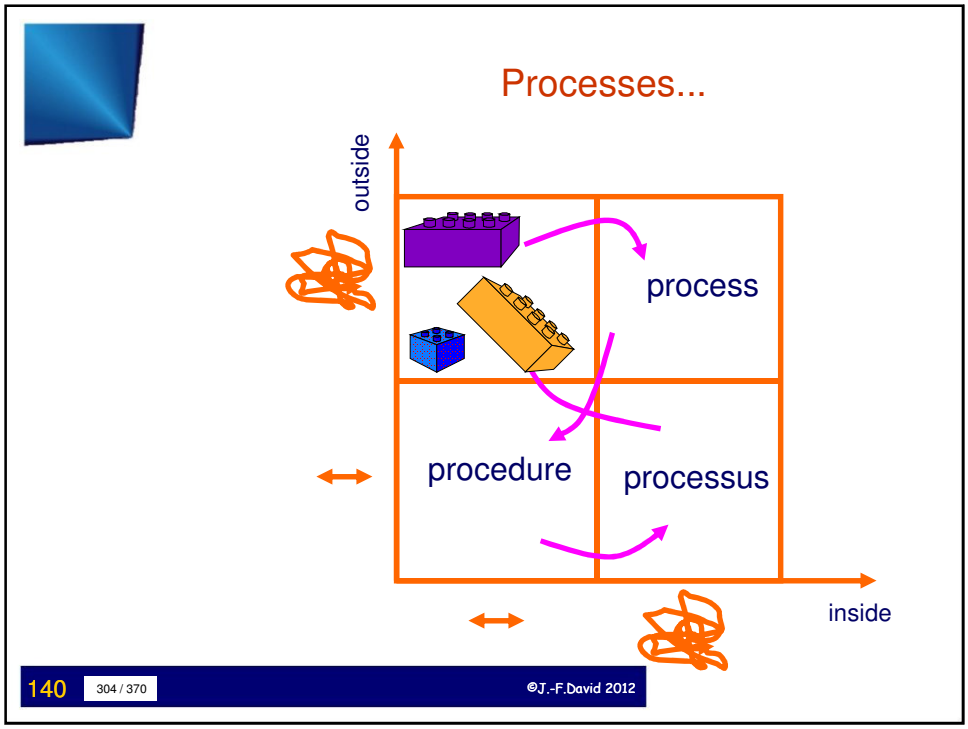


©J.-F.David 2012

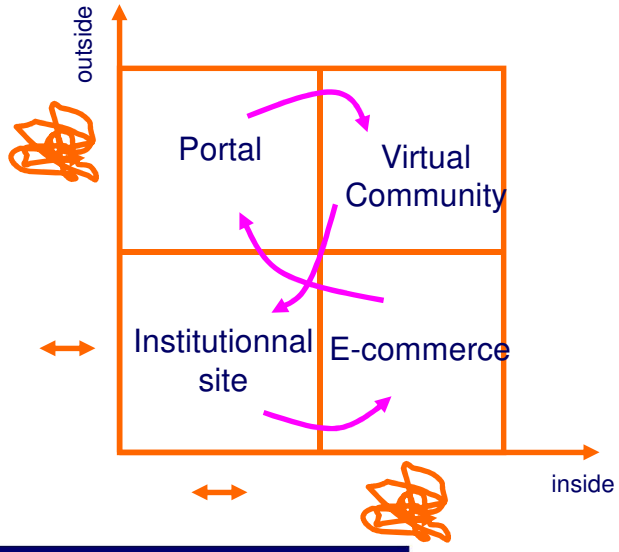


©J.-F.David 2012


Quality...
outside
Customer driven Q
Perfection
ISO certification
TQM
inside
140
303 / 370
©J.-F.David 2012


Processes...
outside
process
procedure
processus
inside
140
304 / 370
©J.-F.David 2012

web sites...

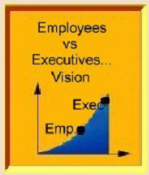


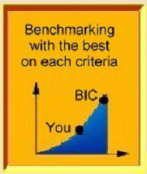
©J.-F.David 2012

70% of TRANSFORMATION experiences ar inhibited by HUMAN FACTOR.....

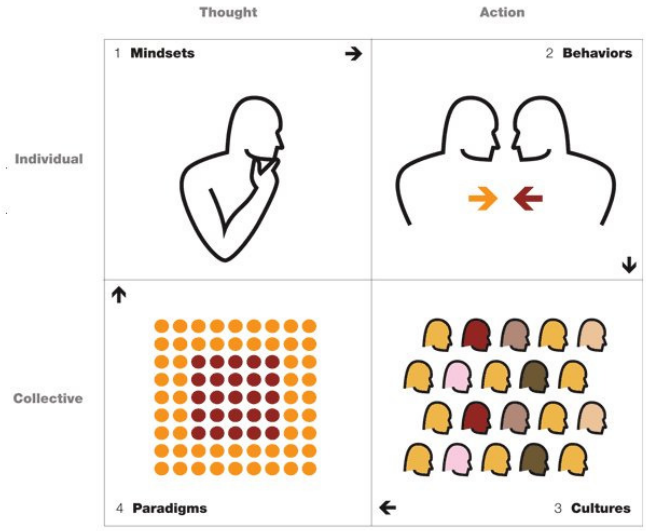
What criterias to appreciate human factor?

- Vision
- Values
- Culture
- Structure
- Communications
- Decision making
- Employment relationship
- Performance evaluation
- Compensation
- HR programs
- Org capabilities
- Individual competencies
- Leadership
- Morale
- Tolerance for change





©J.-F.David 2012

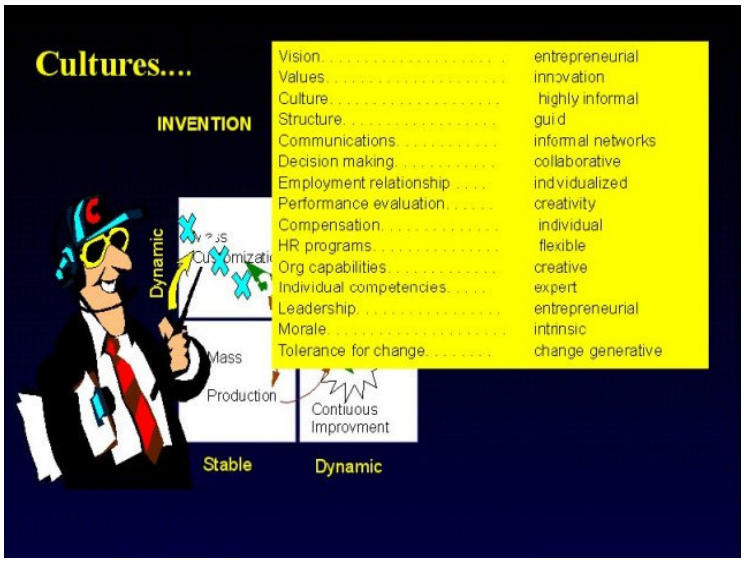


©J.-F.David 2012

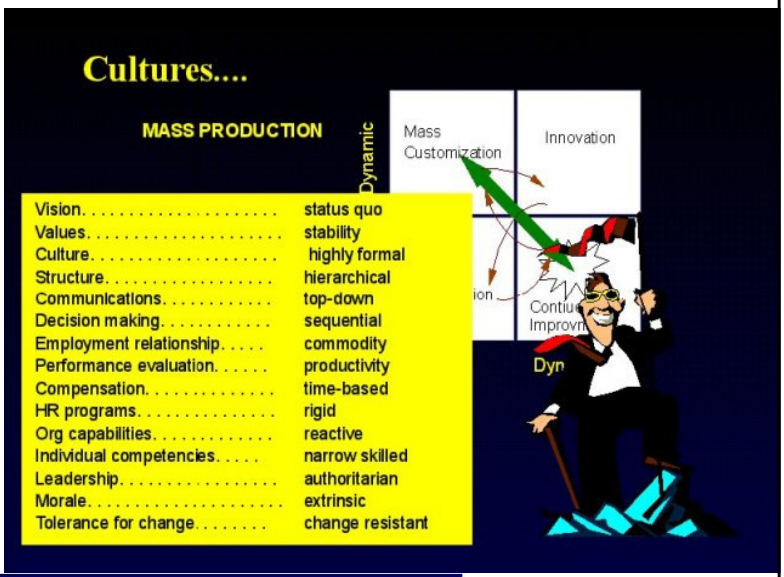
15 Carnegie-Mellon criterias

Vision	shared stimulating view of the company in the future
Values	common basic believes
Culture	ways to act, based on myths, taboos, rituals, ...
Structure	work organization style
Communications	how the organization share information
Decision making	how are decisions taken
Employment relationship	company/employee contract
Performance evaluation	what is valuated, rewarded
Compensation	compensation system
HR programs	style of educ., promotion, social, ...HR pgms
Org capabilities	learning abilities of organization
Individual competencies	archetype of the perfect competence
Leadership	recognized type of leader
Morale	employees' satisfaction motor
Tolerance for change	flexibility in front of changing world

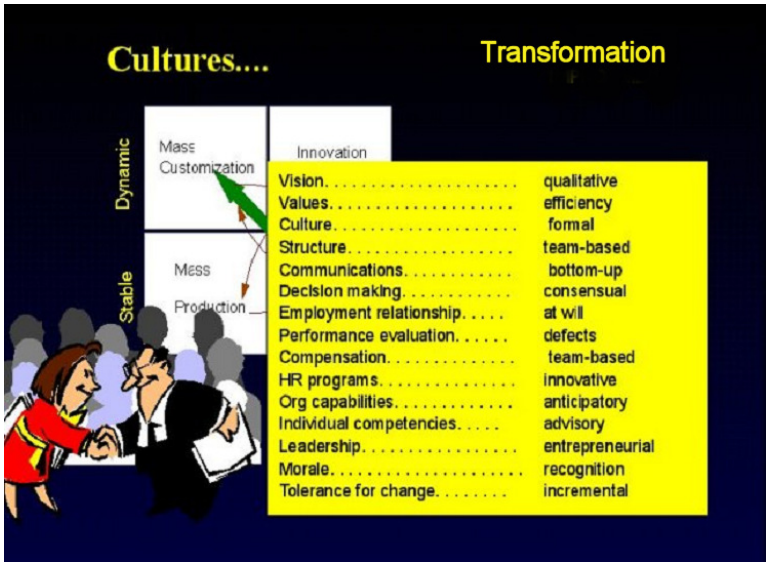
©J.-F.David 2012



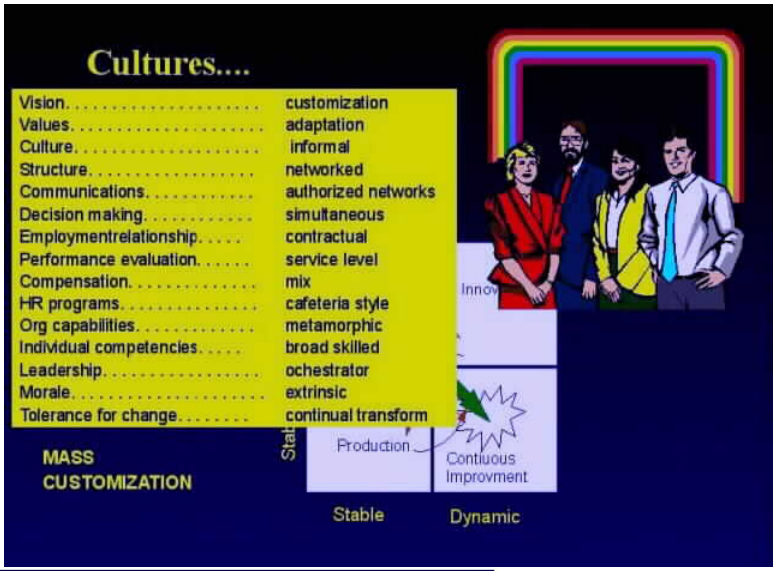
©J.-F.David 2012



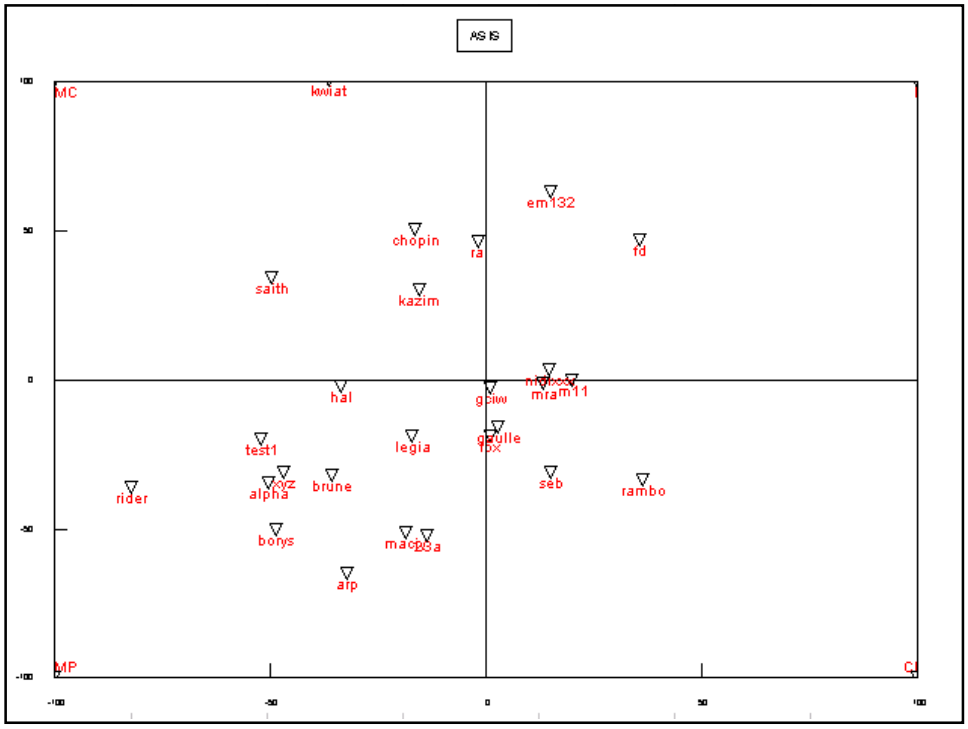
©J.-F.David 2012

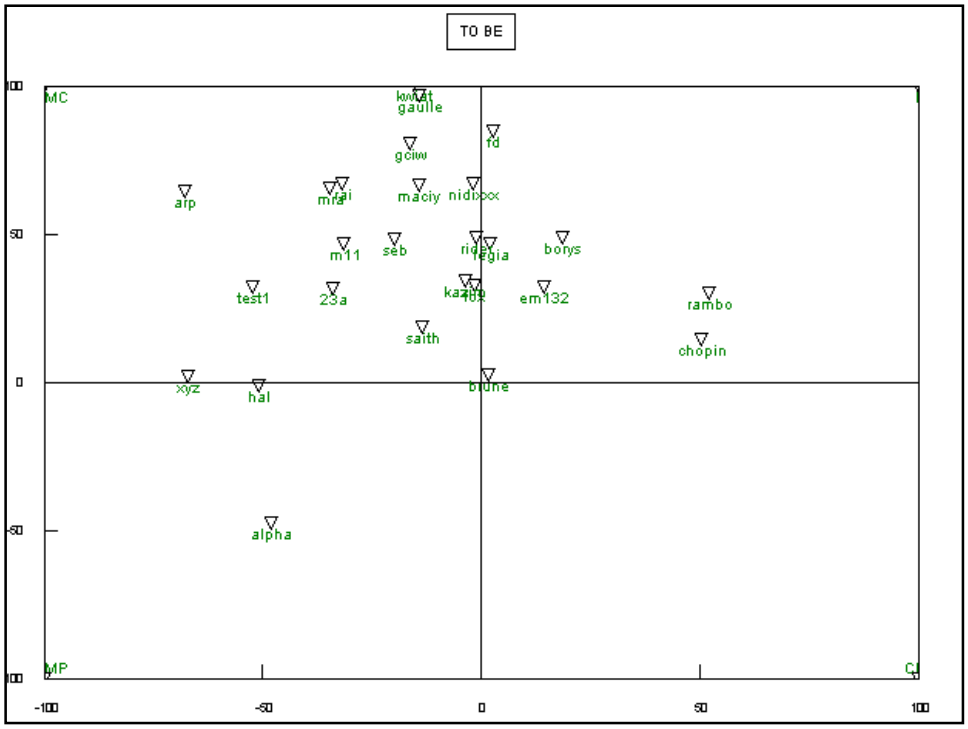


©J.-F.David 2012



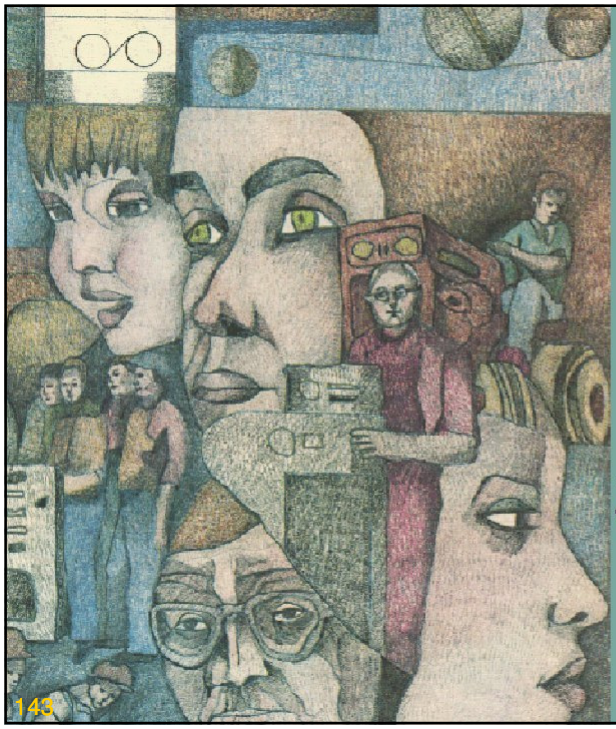
©J.-F.David 2012


AS IS
MC
kwiat
em132
chopin
ra
fd
saith
kazim
hal
gciw
mram11
test1
legia
gaulle
fox
seb
rambo
rider
alpha
xyz
brune
borys
macjy
23a
arp
MP
CI

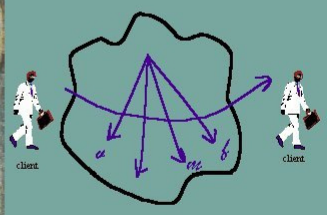

TO BE
MC
kwiat
gaulle
fd
gciw
arp
mra
maciy
nidxxx
m11
seb
legia
borys
test1
23a
em132
rambo
saith
chopin
xyz
hal
brune
alpha
MP
CI

AS IS	maclym11	gciw	23a	arp	em13	fox	rai	hal	rambo	kazim	nidix	kwiat	test1	borys	legia	mra	seb	xyz	rider	brune	chopin	alpha	fd	gaulle	saith
Vision	MP	T	MC	MP	I	I	T	I	T	I	MP	I	I	MP	T	T	T	T	T	MP	I	MC	MP	I	MP	T
Values	MP	I	I	T	MP	I	I	T	MP	T	MP	MP	MC	MP	MC	MC	MP	T	T	MC	MP	MC	MP	T	T	MC
OrgCult	MC	I	I	T	MP	MC	I	MC	I	MP	I	I	MC	I	MP	I	I	T	MC	MC	MP	MC	MC	MC	I	I
Struct	T	MP	MP	MP	MP	MC	MC	MC	MP	T	MC	T	MC	MC	MP	MP	MC	T	MP	MP	T	MC	I	MP	T	MC
Comm	T	MC	I	MC	MP	MC	MC	MC	MC	T	MC	T	MC	MC	MP	MC	I	MP	MP	MP	MC	MC	MP	MC	MC	MP
Decis	MP	MP	MP	I	MP	I	T	MC	MP	MP	T	I	I	MC	MP	MP	T	MP	MP	MC	MP	I	MP	I	I	MP
Perf	MC	MC	MP	I	MC	MC	I	MC	MC	I	T	MC	MC	I	MC	T	MP	I	MC	I	MP	I	MP	I	MP	MP
Learn	MP	T	T	MP	T	T	T	T	MP	T	I	T	MC	T	I	MP	T	MC	MP	MP	I	T	I	MC	MP	I
Skill	I	MC	MC	T	MP	MC	MP	T	I	MC	MC	MC	MC	MP	MP	MC	MC	I	MC	MP	I	MC	MP	I	MC	MC
Lead	T	T	T	MP	MP	T	MP	MC	MC	MC	I	MP	MC	MP	MP	MP	T	MP	MP	MP	MP	T	MP	I	MP	MC
Moral	MP	I	I	MP	T	I	MP	I	MC	T	MC	I	I	MP	MP	I	MC	I	MC	MP	MP	MC	I	I	I	MC
Change	T	T	MP	MP	T	I	MP	I	T	T	MC	MP	I	MP	T	T	I	MP	T	MP	MP	T	MP	T	T	MC
TO BE	maclym11	gciw	23a	arp	em13	fox	rai	hal	rambo	kazim	nidix	kwiat	test1	borys	legia	mra	seb	xyz	rider	brune	chopin	alpha	fd	gaulle	saith
Vision	I	MP	I	I	T	I	T	I	T	I	I	MP	I	T	I	I	T	I	MP	T	MC	I	MC	I	I	MP
Values	T	MC	T	MC	MC	I	I	MC	MP	I	I	MC	MC	MC	I	I	MC	MC	T	T	T	T	MP	I	I	T
OrgCult	I	MC	I	MP	MC	MC	MC	I	MC	T	MP	MC	I	MC	MC	MP	MC	MC	MC	MC	MC	MC	MP	MC	I	MC
Struct	MC	MC	MC	MC	MC	MC	MC	MC	MP	MC	T	MC	MC	MC	T	MC	MC	T	MP	T	MC	MC	MC	MP	MC	MC
Comm	MC	MC	MC	MC	MC	MP	MC	MC	MC	T	MC	MC	MC	MP	MC	MC	MC	MP	MP	MC	MC	MP	MP	MC	MC	MP
Decis	MC	T	MC	MC	MC	I	T	MC	MP	MC	T	T	I	MP	MC	MC	MC	T	MP	MC	MC	I	MP	MC	I	T
Perf	I	MC	MC	MC	MC	I	I	MC	MC	I	MC	I	MC	MC	I	MC	MC	I	MC	I	I	I	MP	I	MC	MP
Learn	MC	MP	MC	T	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	T	MC	MC	MC	MC	MP	T	I	MC	MC	T	
Skill	MC	T	MC	I	MC	MP	I	T	MP	T	MC	I	MC	I	T	I	T	MC	MC	I	Q	I	Q	I	MC	I
Lead	MC	MC	I	MP	T	T	MP	MC	I	I	I	I	MC	MC	I	I	I	MC	MP	I	T	T	MP	I	MC	MC
Moral	T	I	I	MC	MC	T	T	T	MC	T	T	T	I	T	T	T	I	I	MC	MC	I	T	I	I	I	MC
Change	MC	I	MC	T	MC	I	MC	MC	T	I	MC	I	I	MC	MC	MC	MC	MC	T	MC	T	I	MP	MC	MC	I
	maclym11	gciw	23a	arp	em13	fox	rai	hal	rambo	kazim	nidix	kwiat	test1	borys	legia	mra	seb	xyz	rider	brune	chopin	alpha	fd	gaulle	saith

315 / 370

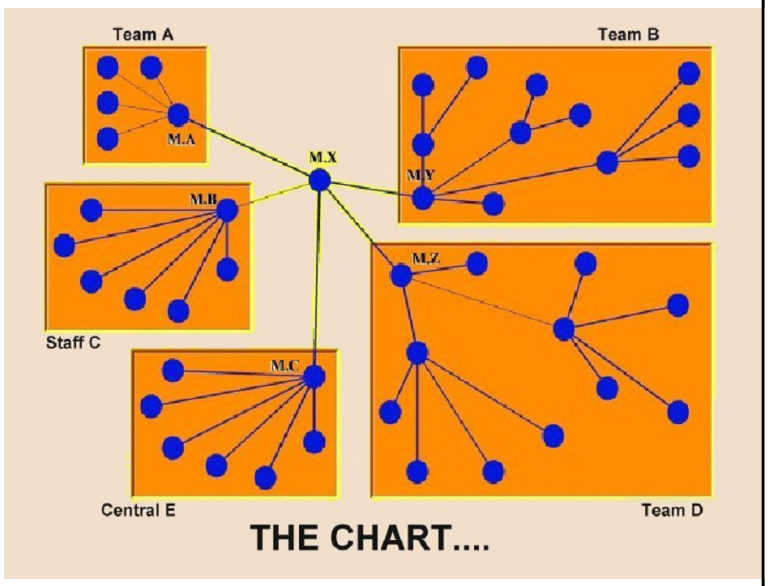


A LA RECHERCHE DE P.G.C.C.

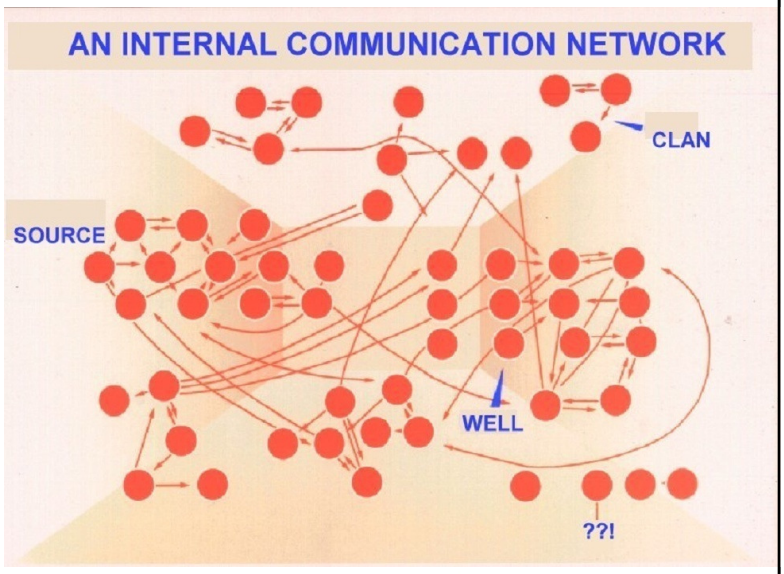


Plus Grande Commune Culture

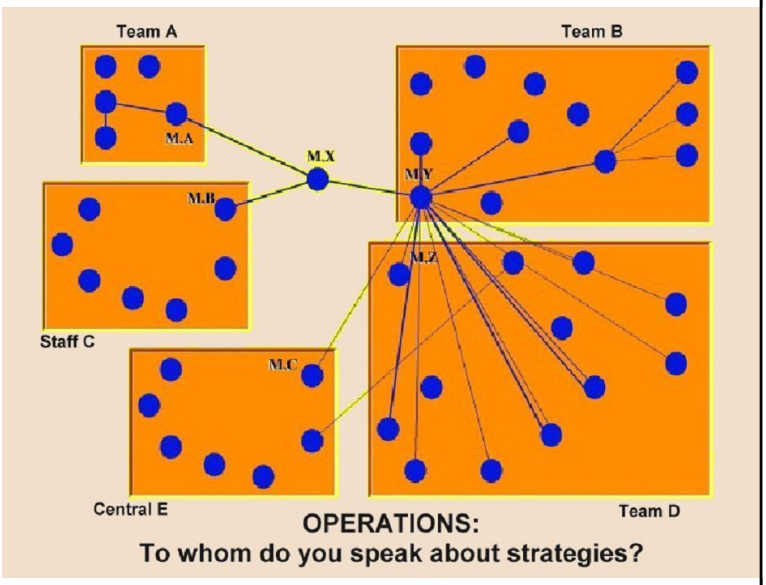
143



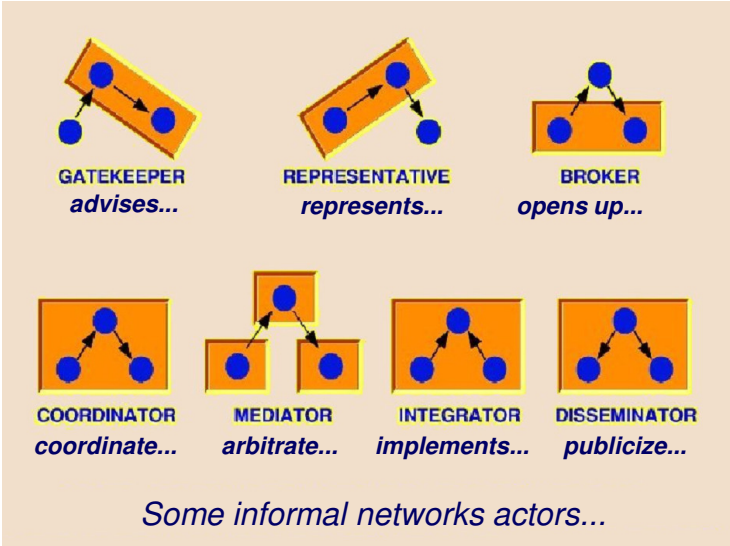
 ©J.-F.David 2012



 ©J.-F.David 2012

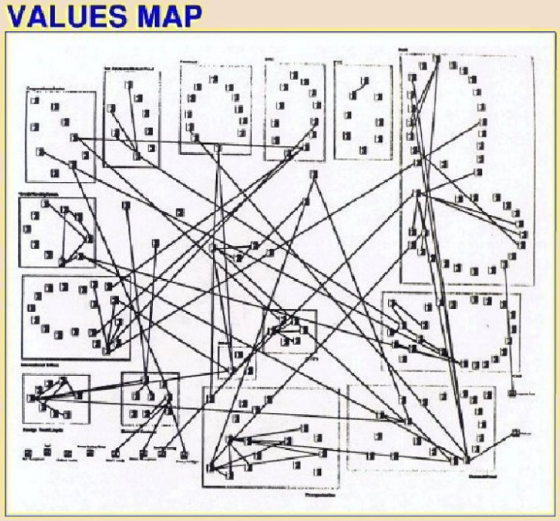


 ©J.-F.David 2012



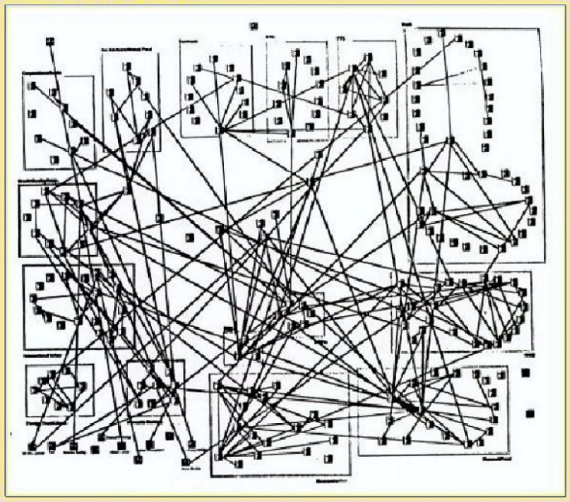
 ©J.-F.David 2012

VALUES MAP



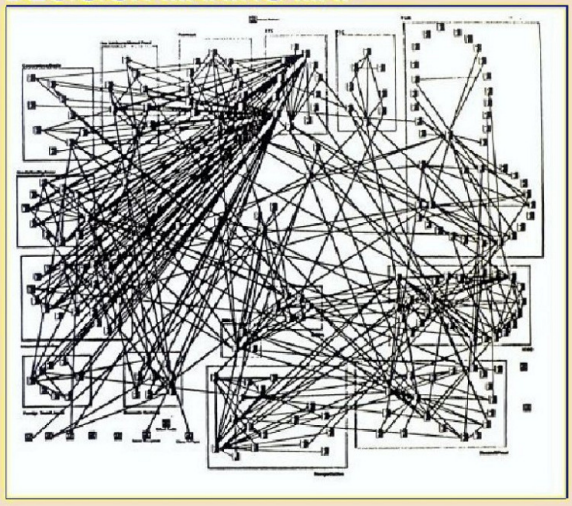
©J.-F.David 2012

EXPERT MAP

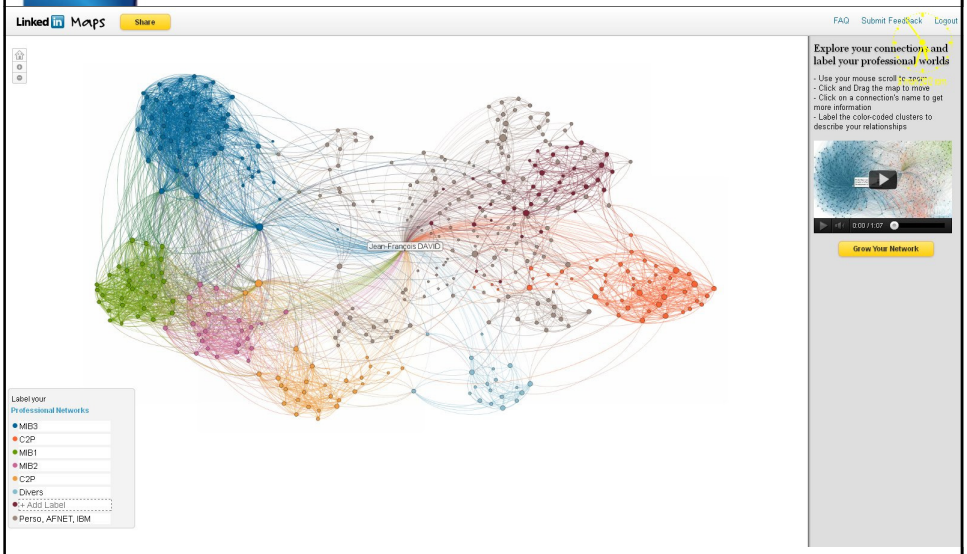


©J.-F.David 2012

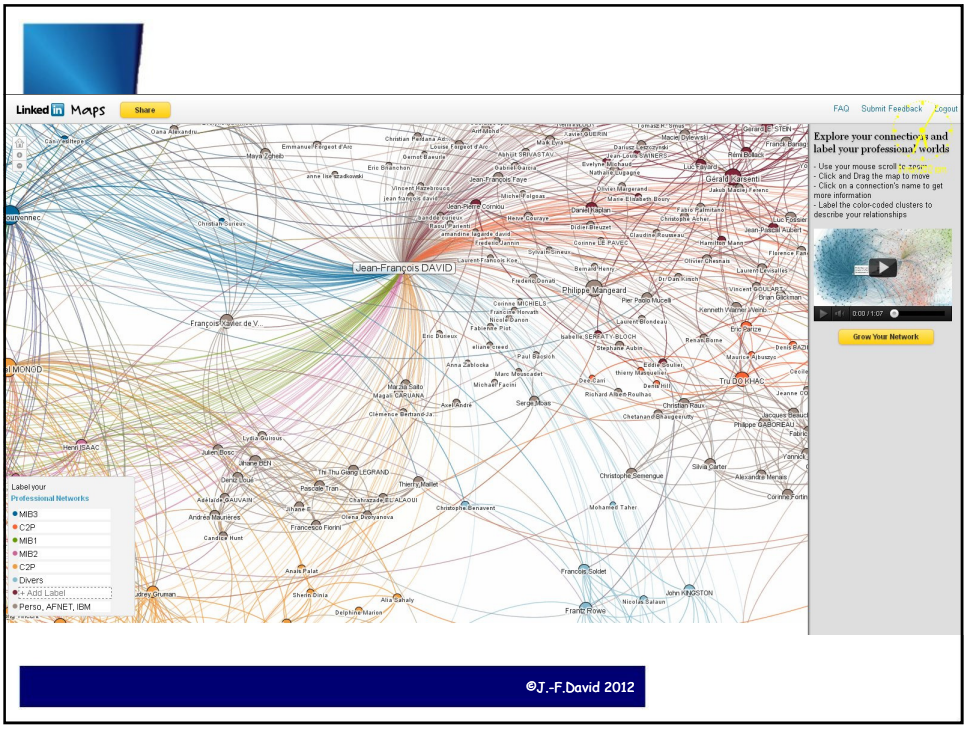
DECISION MAKING MAP



©J.-F.David 2012



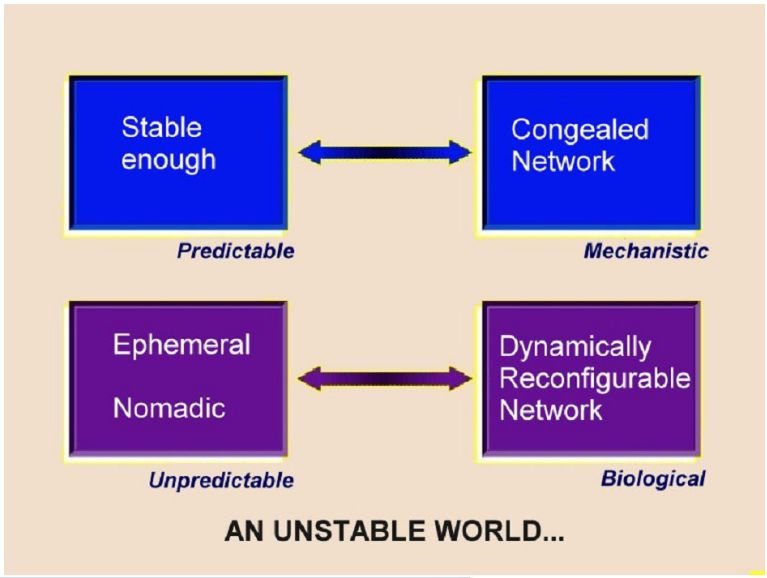
©J.-F.David 2012



©J.-F.David 2012

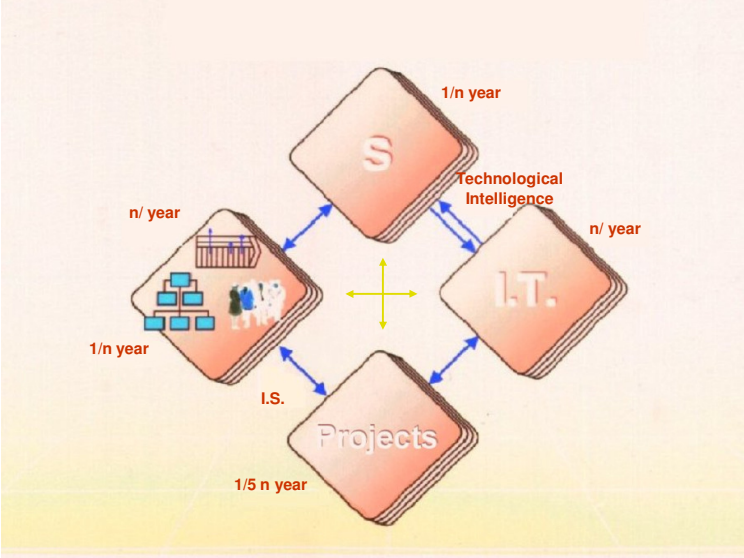
COPs

©J.-F.David 2012



 ©J.-F.David 2012

Strategic Alignment



 ©J.-F.David 2012

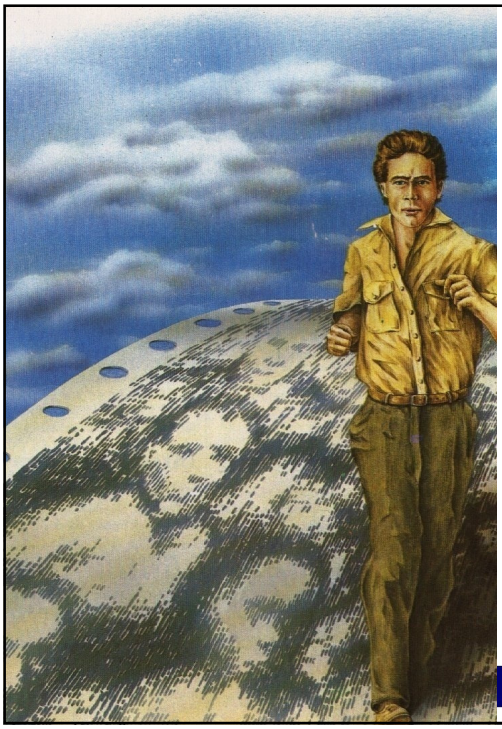
…decoding grids,

useful to executive, to understand and behave, within permanent creative mess generated by galloping technologies…

and

…the clear need to generate your own personal ideas and methods on these matters, capitalizing on acquired past and present knowledge.

©J.-F.David 2012

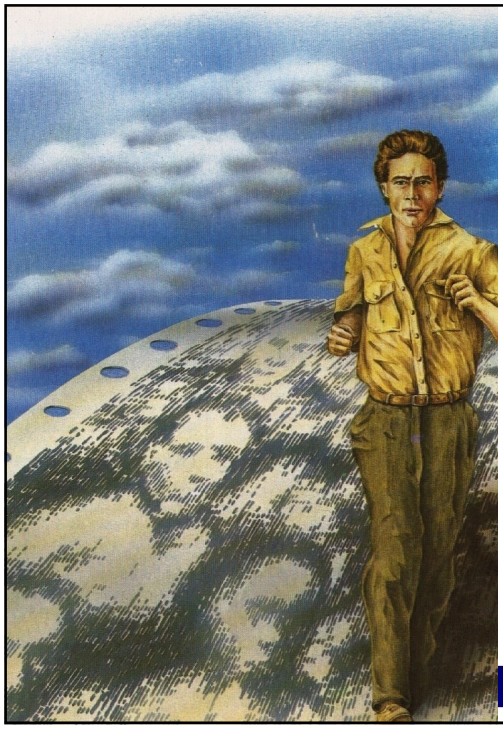


10 basic TRICKY TOOLS

inside a

FUZZY WORLD

©J.-F.David 2012



"all the tools are equal, but some are more equal than the others…"

©J.-F.David 2012

Method 1

a) Paradigm change, profession slippage

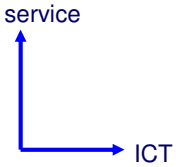
Why do client want this kind of service/product ?

- ♦ New professions, competitors
- ♦ New vision

b) List of product/services

How can we add

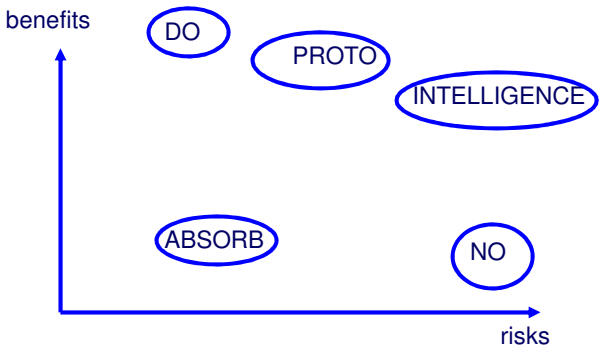
- ♦ more customization services
- ♦ more ICT



©J.-F.David 2012

Method 2

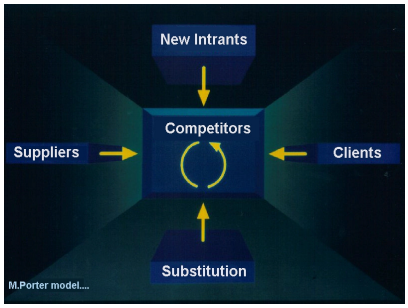
How to decide go/no go ?

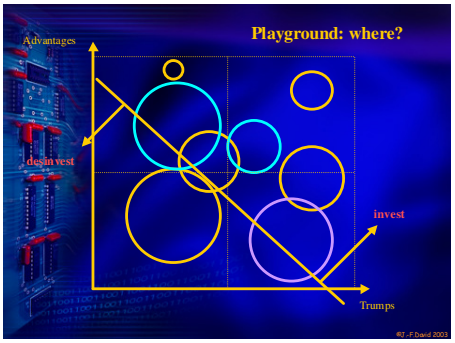


©J.-F.David 2012

Method 3 (old, but still valid tricks)

Strategies

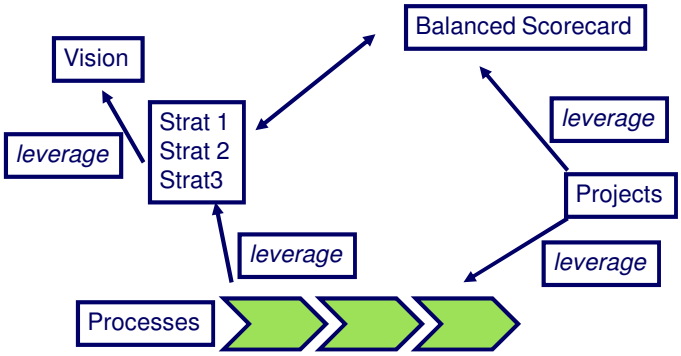




©J.-F.David 2012

Hoshin Kanri

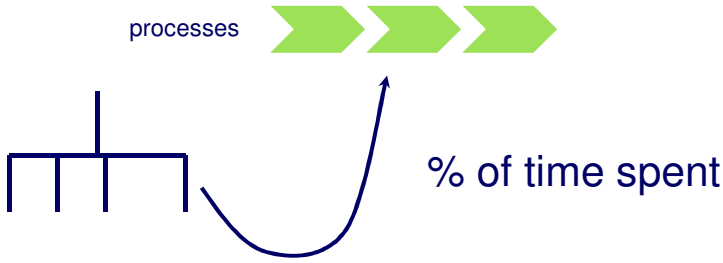
Method 4



©J.-F.David 2012

Method 6

ABC prototype

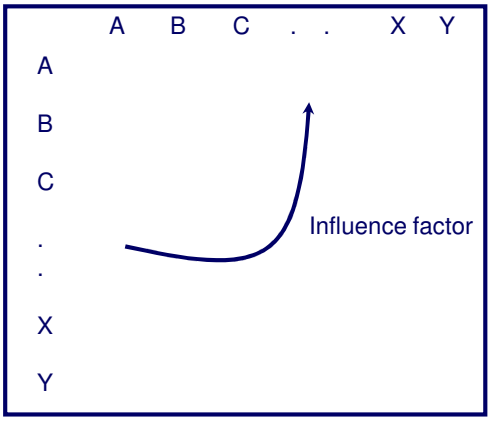


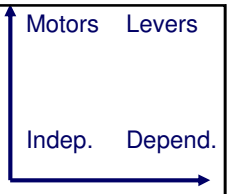
©J.-F.David 2012

Method 5

MicMac (motricity / dependency)

http://www.3ie.fr/lipsor/lipsor_uk/plan_uk.htm





+ matrix multiplication

©J.-F.David 2012

+: .....

Factorial Analysis

Mindmapping

Informal Networks tools

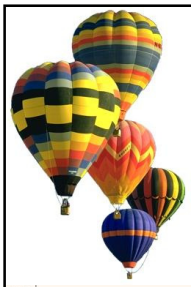
Linguistic analysis

.....

©J.-F.David 2012

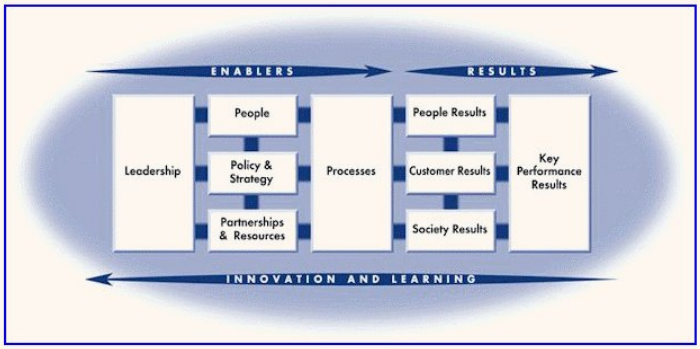
Method 7: TQM tools...

QUALITY METHODS & TOOLS



Method 8: EFQM like...

The EFQM Excellence Model



©J.-F.David 2012

Method 9: Culture benchmarks...

15 Carnegie-Mellon criterias

Vision	shared stimulating view of the company in the future
Values	common basic believes
Culture	ways to act, based on myths, taboos, rituals, ...
Structure	work organization style
Communications	how the organization share information
Decision making	how are decisions taken
Employment relationship	company/employee contract
Performance evaluation	what is valuated, rewarded
Compensation	compensation system
HR programs	style of educ., promotion, social, ...HR pgms
Org capabilities	learning abilities of organization
Individual competencies	archetype of the perfect competence
Leadership	recognized type of leader
Morale	employees' satisfaction motor
Tolerance for change	flexibility in front of changing world

©J.-F.David 2012

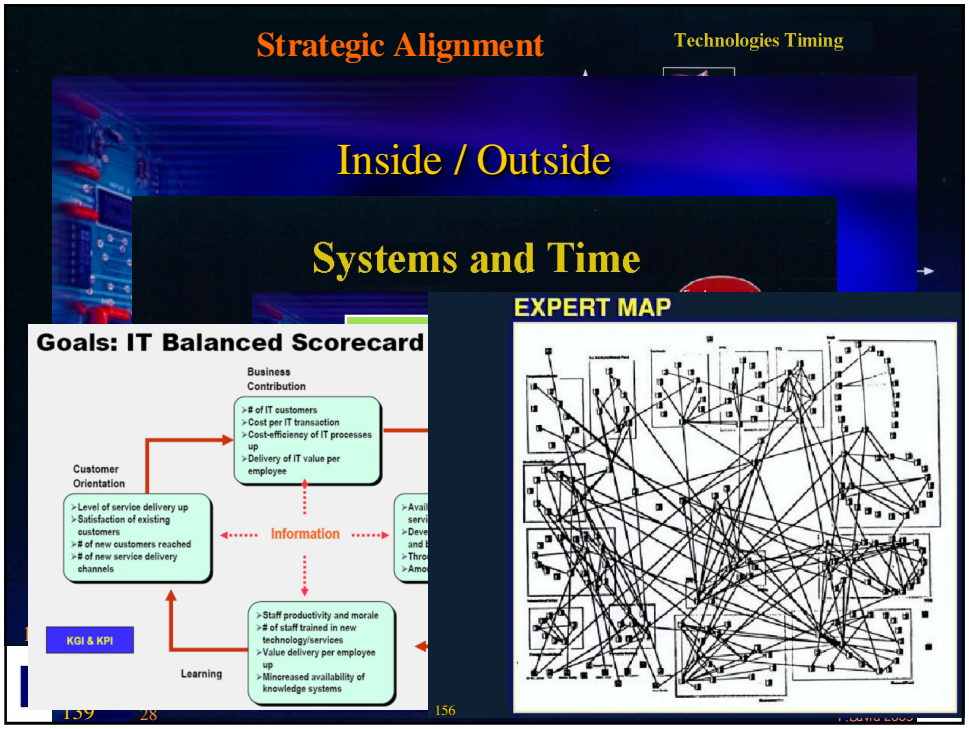
Short "Culture" test based on IBM Consulting Group expertise

1) Which of these sentences describes in closer the "vision" of your entity
a) We focus on the value creation thanks to our innovations and to our know-how
b) We focus on the rise of the customer satisfaction thanks to the improvement of our processes
c) We focus on the increase of the variety and the level of adaptation of our products / services offers thanks to the flexibility of our processes and the decrease of the response times
d) We focus on the efficiency through our objectives and our controls
2) What of these various approaches is the most valued in your entity?
a) Be capable of adapting itself quickly to changeable needs
b) Make things for the way they must be made
c) Find new innovative manners to make things
d) Always look for the most effective way of making things
3) What of these sentences describes best your organization?
a) We have habits and some main rules and we are flexible
b) We have clear and described rules and they must be respected and followed
c) We have habits and some main rules, but we are strict on their application
d) We have clear and described rules, but we are flexible
4) What describes best the way people work in your entity?
a) The work is mostly made in cooperation between people of different structures
b) People work mainly only
c) People work mostly in cooperation, in multi-professions teams formed in a informal way according to the task to be made
d) People work mostly with colleagues of their specific profession
5) What describes best the way people communicate professionally?
a) People rely mainly on informal information
b) The information rises permanently towards the hierarchy (bottom / up)
c) The information navigates freely in all the directions, in a formal and informal way
d) The information comes mainly from the hierarchy (top / down)
6) What describes best the way the decisions are taken in your entity?
a) In a collective way
b) Hierarchical
c) In a transverse, inter-functional way
d) Delegation, empowerment

.....

7) What reflects in closer the way the performance is estimated?
a) By the individual contribution to new and\or better manners to do
b) By the level of supplied service
c) By the weak number of defects or errors
d) By the amount of work supplied
8) What reflects best the capacity of your entity to learn and to innovate?
a) The entity learns in a progressive way
b) The capacity of the entity to learn is weak
c) The organization learns after the implementation of specific programs
d) The entity is endowed with an integrated system for permanent learning
9) What describes in closer what is professionally asked to the actors of your entity?
a) Competence and wide, inter-functional knowledge
b) Competence and knowledge defined in a precise way
c) A high level specialized competence and knowledge
d) Competence and knowledge complementing those the others in the teams
10) What describes best the style of "leadership" in your entity?
A) Orchestrator
B) Decision-maker
C) Participative
D) Entrepreneur
11) What influences most strongly the morale of the actors in your entity?
a) Satisfy every customer
b) The "rewards" and the "penalties"
c) Personal auto-motivation
d) The shared values
12) What is the level of acceptance of the change in your entity?
a) The persons generate the change
b) The persons resist to the change
c) The persons accept the progressive change
d) The persons manage the permanent change

©J.-F.David 2012




Site: www.davidjf.com
Blog: freejfd@blogspot.com