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Lean Enterprise 2.0

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Operae Partners
Operational Excellence

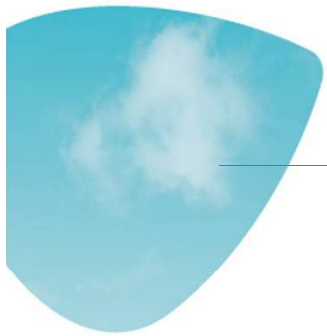
Lean Enterprise 2.0

A Paradigm Shift in Management &
An Answer to the Complexities of the 21st Century



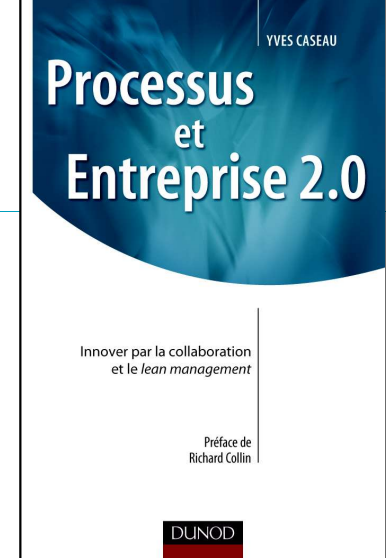
October 13th, 2011

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Outline

- 1 ▪ **The Paradigm Shift of the 21st Century**
Complexity, Agility and Communication
- 2 ▪ **Lean Enterprise 2.0**
Common foundations for lean and 2.0 as solutions
- 3 ▪ **A Systemic Reconstruction of « Enterprise 2.0 »**
Efficient Communication + Communities + Collaboration
- 4 ▪ **Lean Management for Knowledge Workers**
lean for IT, Services & Innovation
- **Conclusion**



Companies are Facing a Complex World

A Complex World:

- Hyper-competition, globalization, time is shrinking
- The power has shifted to the consumers (F. Dupuy)
- T. Friedman : « All that is easy has been done, what's left is the hard stuff »

Complicated problems require specialists,
Complex problems require everyone

- Diversity of skills and viewpoints ...
- ... organized into teams

Complex problems are solved “on the *gemba*”,
where they occur, one at a time

- Abstractions hide too much, decomposition does not work !
- “Reproducible conditions” ... do not always exist (isolation is impossible)
- Communication is hard (*cf. IT when specifying is harder than coding*)





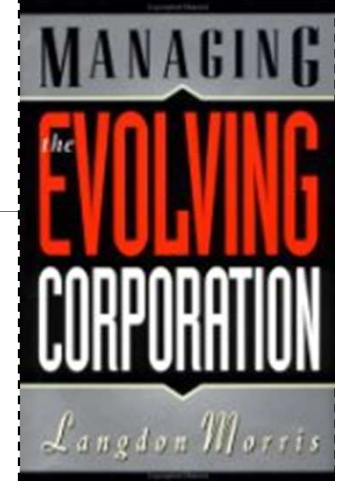
- ## Mid-term (following customers)

- ## Long-term (learning to evolve)

- Learning (developing new skills)
- Team work
- Develop people



Networked Enterprise: Mimicking Biology to Adapt to Complexity



Organization & Management need to evolve:

- Control & command → recognition & response (L. Morris)
- domain-centered dynamic organization, self-organization (C. Shirky)

Strength of Weak Ties (M. Granovetter)

- To innovate or to react to a crisis, one must enroll her/his “distant” acquaintances (“weak ties” : people you see rarely)
- Homophily : “the tendency of individuals to associate and bond with similar others”
why we cannot rely on “strong ties” only ☺

« Chinese Strategy » = develop « situation potential » (F. Jullien)

- From detailed planning to opportunistic reaction
- Benefits of exercises, practical training and “serious games”
- Build-up “reflexes” (A.N. Whitehead, N. Taleb)

Collaboration & Cooperation : A « New Scientific Management »



F. Taylor's scientific management has reached its limits :

- Decomposition & specialization is a « projection » of a collective goal onto a set of individuals, who may work independently ...
- Complex domains require to work together, as a team
- We are moving from « complicated » (many parts) to « complex » (inter-related)

Complex work requires orchestration

- Multiple information flows (one needs to say what s/he is doing)
- The more we breakdown and specialize, the more we need to talk !

Collaboration vs. Cooperation: both are necessary

- Collaboration: a common result, a shared goal, indistinct responsibility
- Cooperation: common result, but goals and responsibilities are distinct



Part II

- **The Paradigm Shift of the 21st Century**

Complexity, Agility and Communication

2

- **Lean Enterprise 2.0**

Common foundations for lean and 2.0 as solutions

- **A Systemic Reconstruction of « Enterprise 2.0 »**

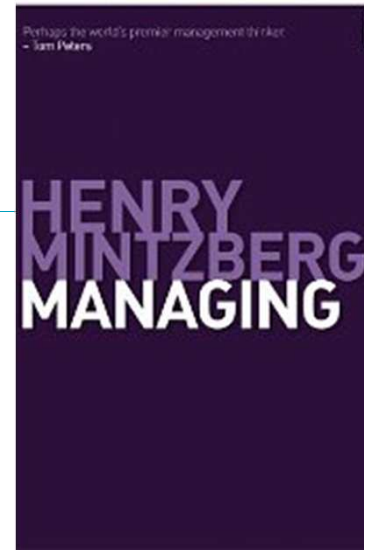
Efficient Communication + Communities + Collaboration

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lean for IT, Services & Innovation

- **Conclusion**

Complex Problems Solutions are found where the Problem Occurs



Go and See (*Genchi Genbutsu*)

- Embracing the reality, the facts and the environment
- You must go the problem, not wait for the problem to come to you
- H. Mintzberg : not everything is measured, you need judgment

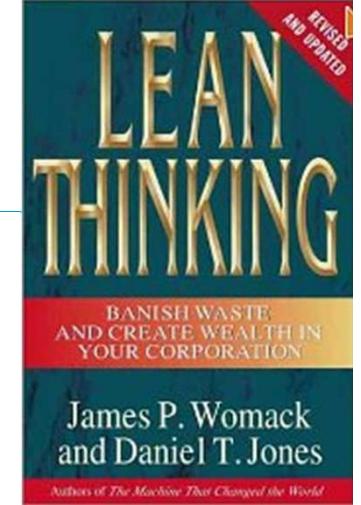
Listen to « operators » / developers / ...

- Those « who do » have the solution (if you listen 😊) ...
- ... not the experts nor the managers

Management Paradigm Shift

- **MBWA : managers must go and visit the *gemba* (true for IT !)**
- **More facts, fewer concepts**
- **Experimentations over analysis**

Complex Problems Require Team Work and Collaboration



Team Work (Kaizen)

- A hard problem requires the contribution of multiple viewpoints
- Not simply a collection of contributions, but real team work (collaboration)
- *Kaizen* is mostly a way to learn how to work as a team by solving problems
cf. M. Ballé: « Problem solving as a management tool »

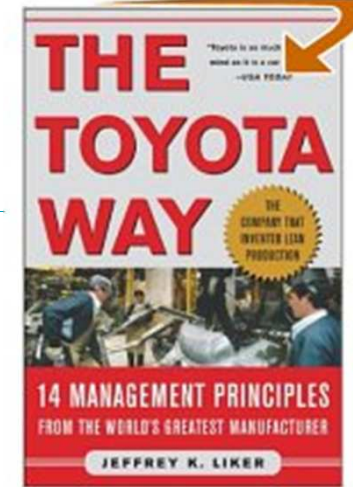
Collaborative methods

- Collaboration is hard, it must be learned and practice is required
- All stakeholders (of the process) must be involved

Management Paradigm Shift

- **Autonomy is required → true empowerment**
- **Recognition is the fuel of collaboration**

Need for Innovation and « Everyone's Brain »



Complex problems require continuous improvement

- Never “solved”- solutions are approximate
- Change constantly – because the customer world changes constantly

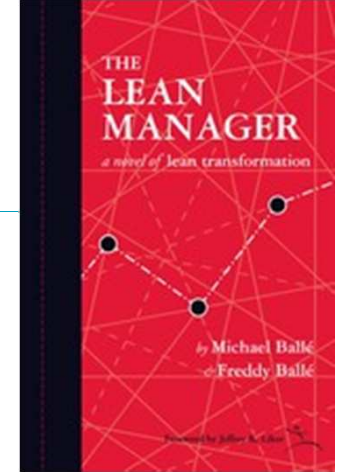
Continuous improvement require innovation

- External pressure from competitors
- Internal pressure to continuously improve the standard
- “Innovation requires everyone’s brain” (E. Toyoda) / M. Granovetter

Management Paradigm Shift

- the manager does not have the solution
- The “way things are done” needs constant revisions
- « un-hierarchical vision » : leverage all contributions

Complexity Requires Continuous Skill Learning



Complex problems require skills:

- Cf. lean : emphasize product and technical skills
- The more complex, the more skills matter
- Cf. « The Mythical Man Month » ☺

Skill set is not static

- Human capital : process to acquire skills
- “Double loop learning” (C. Agyris)
cf. M. Ballé : The lean managers does not teach how to solve, but how to learn



Assumption:
all that is not
complex is
automated or
de-localized

Management Paradigm Shift

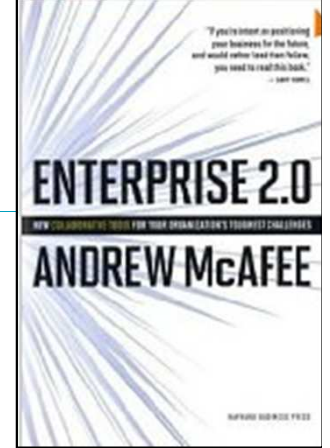
- **Coach (and not teacher !)** → humility
- **Learn – by oneself, from pairs, from *sensei***



Part III

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Enterprise 2.0 as a Cure for « Common Congestion »



E2.0 solves « 1.0 problems » for today's companies
(consequence of scale + complexity)

- Congestion of information flows, “workable time”
- Problems that plague large companies / increasingly

E2.0 = communication + communities + collaboration

- tools, but mostly behavior and culture
- methods that require learning and practice

E2.0 is geared towards “knowledge workers”

- suited for services, IT, innovation, product development, ...
- ... domains where complexity abounds and where lean management is also welcome

**Companies who adopt
2.0 the fastest are those
who need it the least ☺**



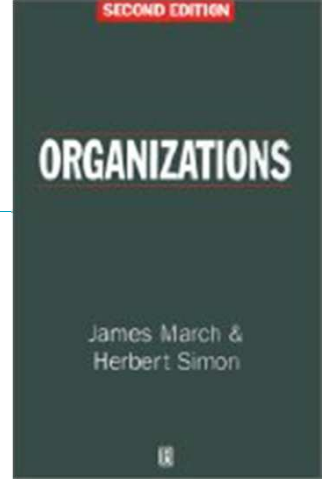
Efficient Communication (1) : Faster

Managing information flows efficiently is a key part of organization design (March & Simon)

- Ever-increasing : consequence of 21st century “Post-Taylorism” complex → need to share context, to explain one’s work to co-workers
- Communicating takes time, it is not “information transfer” but a process (D. Wolton)

Enterprise 2.0 practices (& tools) improve flow efficiency

- Short messages (micro-blogging)
- Woven in the fabric of work
(interstice – recycle “crumbs of time”)
 - Instant messaging
- “Self semantic organization” (relevant pieces are linked together)
 - The pieces arrive where they should be ☺
 - Less sorting !



Efficient Communication (2): Reaching your Target !



Most tools are designed to communicate with “those whom you know”

- Telephone, email, ...
- Hence the « club effect » (well documented)

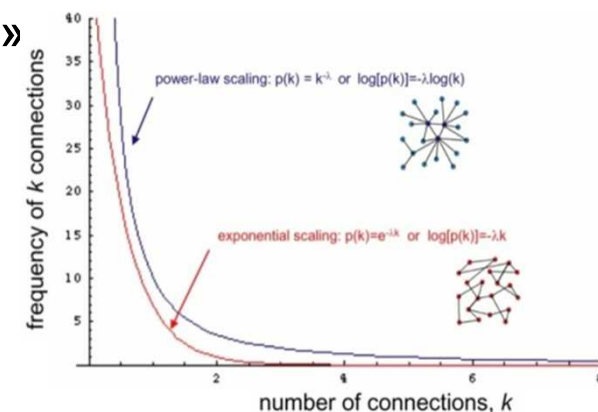
Enterprise 2.0 tools to help reach a « new audience »

- Project-based, topic-based, community-based
- Address people through their functions
- Discover who knows/does/is-responsible-for what



This may sound worrisome to lean practitioners ... it is ☺

- (Virtual) Stigmergy : attach information to « spaces »
- Blog / RSS = Publish / Subscribe
- Enterprise 2.0 is a multi-scale proposition
 - Cf. Science from Social Networks (Power laws, ...)
- Information overload needs to be addressed



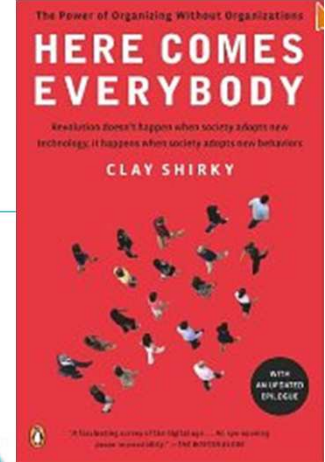
The Power of Communities

SWT (Strength of Weak Ties)

- Create networks of people from different organizations and different localization who share an interest
- This network breaks the « silos » and opens communication channels that favors innovation and speed

Self-organization

- Usual project organization for an emerging topic: approve topic / select project leader + team / create committees
 - 6 weeks to 6 months ☺
- ESSP (Emergent Social Software Platform – Mc Affee) promote self-organization
 - A few days down to a few hours





Sharing & co-editing artifacts

- Wikis, documents,...
- Maps, 3D Models, ...



Knowing what's on your colleague's minds

- Micro-blogging
- Comments, votes, one-click sharing

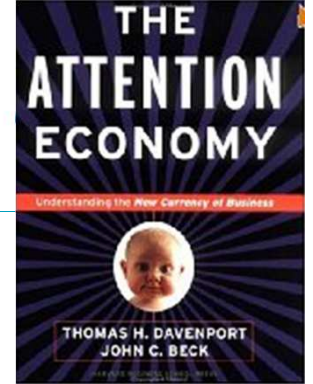


Collaboration requires more than sharing (*Push* vs. *Pull*):

- Bernard Charles - Dassault Systèmes – :
 « *Collaboration requires to share what one doesn't know – with respect to a common goal – trust and truthfulness are required* »
- Honesty and Truthfulness (cf. E. Deming or J. Collins)
 - “Great companies confront continually with the brutal facts of reality”



A Lean Perspective on Information Overload



« WIP (work in process) » : how to avoid information overload

- The scarce resource is not information, it's the reader's attention
- Multiple sources show that the quality of a decision does not necessarily improve with additional information

Eliminate waste: redundant efforts

- Redundancy occurs when everyone shares the same information(E2.0 ☹)

A systemic (lean) approach:

- A formal role map (who does what) : KW need well-defined processes
- Visual Management: who needs what ? (E2.0 ☺)
- Higher standards for documents/messages : push the constraint upstream !
 - E.g., guidelines for « proper usage » of email
 - Makes the reader's life easier and the writer's harder ☺



Part IV

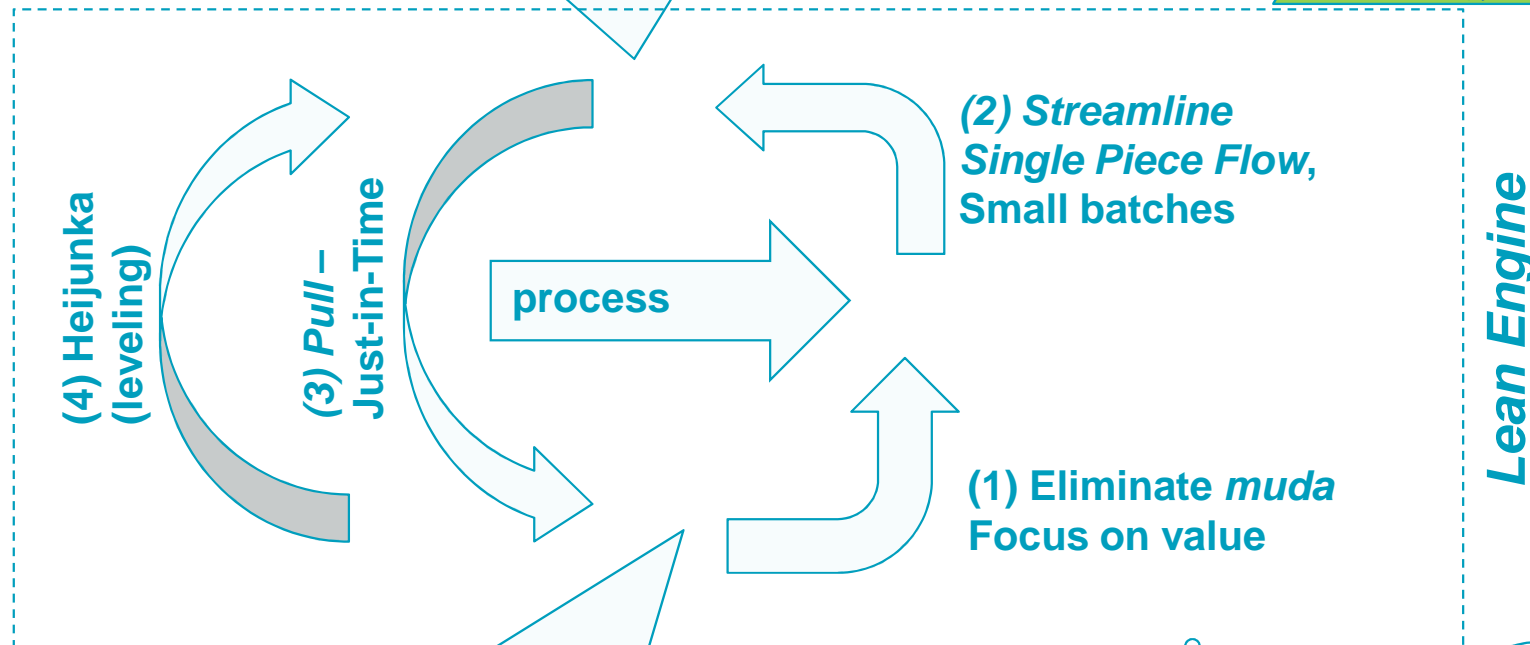
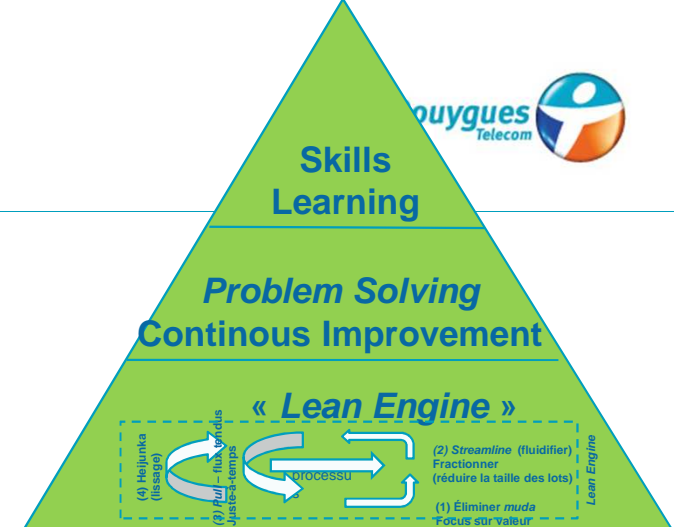
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Lean Schematic Vision ☺

How ?

Lean « Work Philosophy »

- Go and see the *gemba*
- Search for deep causes
- Continuous improvement
- Teamwork



Why ?
(meaning)

Customer focus:

- value analysis
- done right on the first time
- reduce *lead time*
- increase flexibility

Subtle
interaction ☺
between all
factors

Lean Knowledge Worker

Pull (just in time)

- Avoid pushing information (and fill up mailboxes)
- Know your (internal) customer
- Produce the information/memo/ email/ ... at the right moment

Visual Management

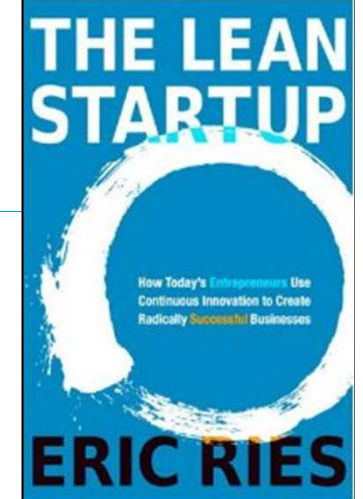
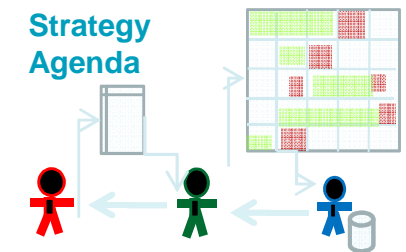
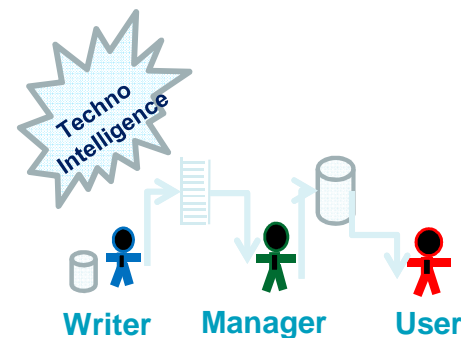
- Project rooms,
Shared plannings, ...

Mixed single-purpose Teams

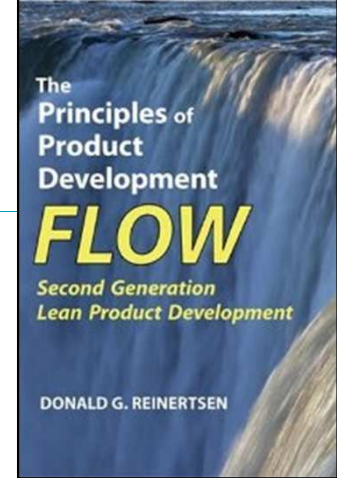
- Favor team efficiency (no waiting) over resource management (utilization rate of skilled workers)

« Validated Learning » → Minimal Viable Product (MVP)

- MVP: expose to feedback as early as possible (cf. extreme programming)
- Validation requires hard facts (measures), measures require a model



Lean Project Development

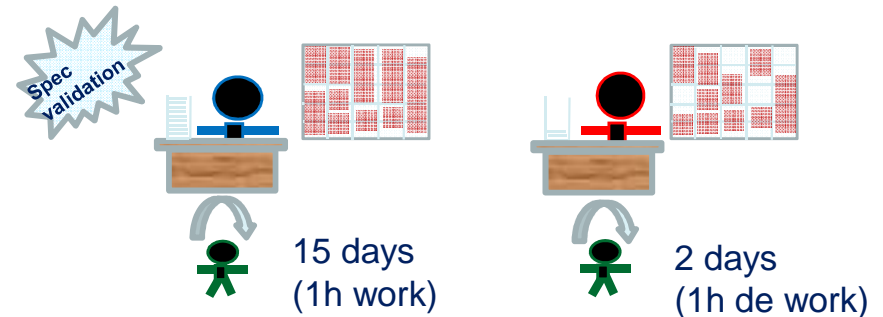


Reduce WIP (... and accelerate lead time)

- Fewer projects, shorter roadmaps, less details over 6 months ☺

Reduce Unanswered Mailbox, Reduce overload

- Lean & Systemic rule : response time grows very fast when utilization rate gets close to one
- Cf. extreme programming: leveling of effort (avoid bursts)
- Collective efficiency over individual efficiency



Small batch

- Small increments, delivered faster, time & resource constraints
- Commit, deliver and re-evaluate (versus stop&go that plagues large companies)

Power of calendars and synchronization

- One-day workshop to produce project briefs

Problem solving (in addition to kaizen)

- Asynchronous / de-localized problem solving still works ...
- Blogs, wiki, co-edition, ...

Team work

- Microblogging strengthens the “contextual connection”
- Creates a sense of community for large (process-wide) communities

Electronic Visual Management

- *Anywhere, any time* access to shared information
- Not a substitute, but a complement !

Learning and Capitalization

- Self-organized community sites

Information Management « 5S »

- « folksonomy » (tags), wikis, ...

Creativity and Innovation May Benefit from Tools & Methods, too !

2.0 Tools which may facilitate problem solving:

- Network weaving (leveraging weak ties 😊)
self-organization (“communities of practice”)
- Co-design (Wiki, shared documents, ...)
- Content weaving: creaking links and paths between documents (2.0 : dynamic, community-based and valued)

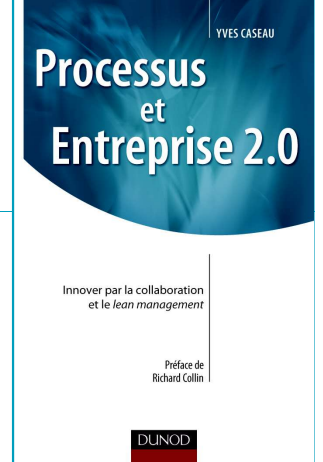
Creativity Methods (beyond 2.0)

- Same as for lean, there exist methods to develop/increase creativity
- CPS, ASIT, Triz, ToC, Bono’s Hats,
- A strong potential that is underutilized today





Conclusion



- **« Scientific Management » from F. Taylor has reached its limits in the 21st century** – it is time for an overhaul
- **« Enterprise 2.0 » and « Lean management » approaches differ,** but share interesting common grounds and both rely on culture transformation, including management 😊
- **These common grounds are an answer to the ever-increasing complexity of the enterprise and its environment:**
 - Both rely on collaboration and teamwork, with a claim on « everyone's brain »
 - Both propose methods to grow skills and promote learning
 - Both favor « ground work » and « facing hard facts » æ opposed to delegating analysis to experts and managers, or working on abstract/aggregated models.