



Social Software for the Enterprise

*Increasing Innovation Velocity through
Collaboration and Knowledge Management*

IDC Symposium, London

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6 October 2004



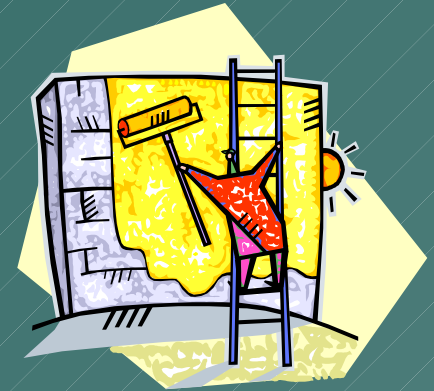
Innovation lag time is measured from an idea is identified to a project is started



Idea



Project
initiated



Innovation
delivered



Innovation lag

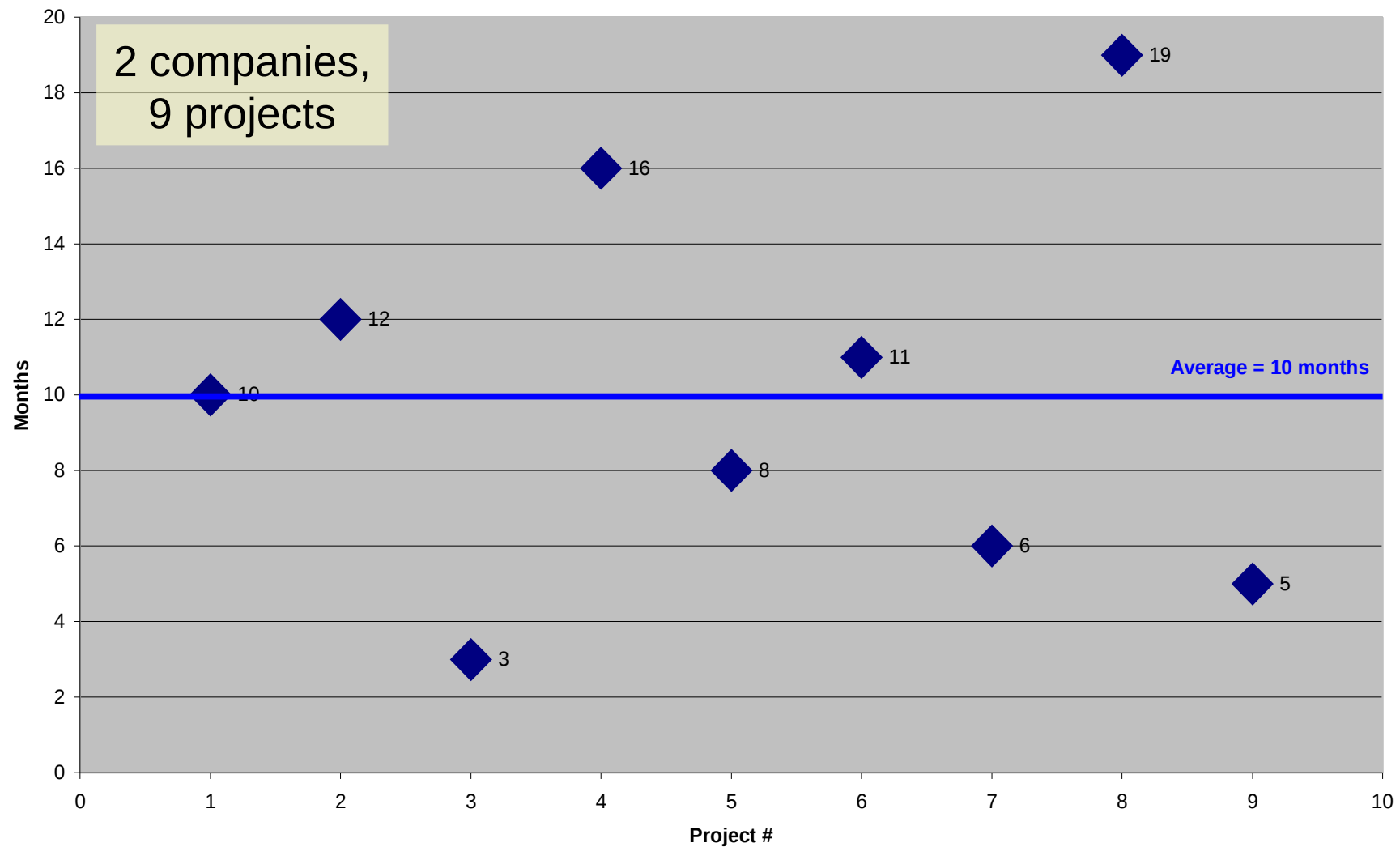


Innovation duration



Innovation velocity

The average innovation lag time is about ten months



Why isn't it working?



- But we have invested in knowledge management...?
- But we have collaboration tools...?
- But surely people just share and collaborate as part of their daily work...?

Anatomy of social software



- Individual – my space, me sharing my information relevant to my work
- Local – bottom-up, emergent, not top-down corporate imposed
- Social – the purpose is to connect people to make things happen
- The components include
 - Web log (blogs): Personal or group publishing through online journals or diaries.
 - Wikis: Group or project publishing through shared editable web pages.
 - Aggregators (XML, RDF, RSS): Knowledge sharing and discovery; re-discovering the top-down view from the emergent data.
 - as well as traditional groupware and other tools.

The difference is in the approach more than in the looks



The screenshot shows the NIMHE Knowledge Community website. At the top, there is a banner with a 3D cube graphic and the NHS logo. Below the banner is a navigation bar with links: Home :: Help :: Login. A search bar is located on the right side of the navigation bar. Below the navigation bar is a row of icons representing different categories: people, groups, organisations, resources, news, and events. The main content area is divided into several sections. On the left, there is a 'Welcome' section with a 'directory' link and a list of links: A-Z, NIMHE Development Centres, NIMHE Programmes, Mental Health Services, Service Perspectives, Regional Information, Help Manual, and General Themes. Below this is a 'log in' section with fields for email and password, a 'Login' button, and a 'Forgotten password?' link. The central part of the page features a large heading: 'Joined up knowledge sharing for mental health service improvement'. Below this heading is a paragraph describing the community and a list of bullet points: improve services for people who experience mental distress, and influence how people with mental health problems are treated as part of their everyday lives. To the right of the central text are six categories, each with an icon and a description: People (find friends and colleagues and build networks), Groups (join up with others to collaborate and share ideas), Organisations (find out who does what, both nationally and locally), Resources (web sites, documents, reports and a wealth of other resources), News (current mental health news to your desktop), and Events (Find out about national and regional events and conferences).

NHS
National Institute for
Mental Health in England

NIMHE Knowledge Community Home :: Help :: Login

people groups organisations resources news events search Go

Advanced Search

Welcome 06 October 2004

directory

- A-Z
- NIMHE Development Centres
- NIMHE Programmes
- Mental Health Services
- Service Perspectives
- Regional Information
- Help Manual
- General Themes

log in

email:

password:

Login

Forgotten password?

Joined up knowledge sharing for mental health service improvement

NIMHE's online knowledge community is a shared space where people can exchange knowledge, information and experiences relating to any aspect of mental health to:

- improve services for people who experience mental distress
- influence how people with mental health problems are treated as part of their everyday lives (in work, education and social situations, for example).

The knowledge community is aimed at anyone with an interest or responsibility in mental health, including those who use mental health services, their family and friends. If you would like to request membership, please [apply here](#), or [contact us](#) for more details.

People
find friends and colleagues and build networks

Groups
join up with others to collaborate and share ideas

Organisations
find out who does what, both nationally and locally

Resources
web sites, documents, reports and a wealth of other resources

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current mental health news to your desktop

Events
Find out about national and regional events and conferences



Henry Mintzberg: *The Manager's Job: Folklore and Fact*, HBR 1975

- “Let us take a look at three specific areas of concern. For the most part, managerial logjams ... revolve around the **verbal nature of the manager's information**. ”

The manager is challenged to find systematic ways to share privileged information:

- “A regular debriefing session with key subordinates, a weekly memory dump on the dictating machine, **maintaining a diary** for limited circulation, or other similar methods may ease the logjams considerably.”
- “**The time spent** disseminating the information **will be more than regained** when decisions must be made.”



Knowledge is a social construct
not just content to be managed



Knowledge management has failed to deliver promised business benefits

- Traditional knowledge management has largely failed to deliver the promised business benefits.
- The cause of this often turns out to be related to sustainability and scalability
 - After the initial effort to deliver the systems, the content is not updated to reflect new or updated best practices: who owns content maintenance?
 - New content is not added in a timely manner and the knowledge systems increasingly reflect yesterday's business: who owns content creation?
 - Workarounds and ad-hoc content systems (notes, spreadsheets, ...) appear at individual and departmental levels: what is the incentive to share knowledge?
- The root causes are systems and processes that focus on content creation

Barriers to knowledge management and knowledge sharing



1. **Knowledge is a social construct** – what is important is how knowledge is applied in the daily business
 - But traditional tools focus on **knowledge as content to be managed**
1. At an individual level, created **knowledge is ad-hoc and informal**
 - But traditional implementations deliver **formal and rigid** processes, tools, and systems
1. **Knowledge must be relevant** to the user and the user's view
 - But a imposed metadata model often represents a **top-down view** that is less relevant to the user's daily job

Barriers to knowledge management and knowledge sharing



- 4. Learning **organizations are flexible and encourage sharing** at all levels – the “knowledge ecology” and “systems thinking”
 - But traditional tools lock organizations into **command and control** structures
- 4. Knowledge sharing and management is **not a separate process** but part of the organization’s way of working
 - And yet traditional solutions have very **divergent models** for communication, e-learning, knowledge management and other systems
- 4. **Knowledge is not a single thing but a network** – the “knowledge ecosystem”
 - And while some traditional tools allow a **complex representation within the single tool** of the links between content, in practice this is often too difficult to maintain compared with cut-and-paste (content duplication) and doesn’t integrate other business systems and processes

Lessons from social software



1. **Simple conceptual models** for personal publishing and information sharing ensures timeliness and relevance
2. **Informality of systems and processes** encourages user participation
3. **Bottom-up emergent metadata** encourages expression and user involvement in categorization
4. **Distributed responsibility** works and encourages ownership of knowledge
5. **Aggregation** and the management of feeds integrates knowledge management with business processes and systems
6. A **loosely coupled knowledge culture** promoted through linking and markup prevents content re-creation

Traditional knowledge management and social software approach compared



Traditional Knowledge Management

- Knowledge as content to be managed
- Formal and rigid processes and systems
- Top-down metadata view
- Command and control structures
- Divergent models for systems and business functions
- Complex representation of network within single tool

Social Software Approach

- Simple conceptual models for publishing and collaboration
- Informal processes and systems encourages user participation
- Bottom-up emergent metadata encourages expression
- Distributed responsibility works and encourages ownership
- Aggregation and feed management enables enterprise integration
- A loosely coupled knowledge culture promoted through linking and markup

Social software tool examples



Examples of supporting tools

- Weblogs (blogs), p-logs, wikis
- Wikis and blogs
- K-collector, Urchin and search tools
- The wiki editing model
- RSS, Atom, RDF
K-collector
- Hyperlinks (HTML and XLink) in
content and feeds

Social Software Approach

- Simple conceptual models for
publishing and collaboration
- Informal processes and systems
encourages user participation
- Bottom-up emergent metadata
encourages expression
- Distributed responsibility works and
encourages ownership
- Aggregation and feed management
enables enterprise integration
- A loosely coupled knowledge
culture promoted through linking
and markup



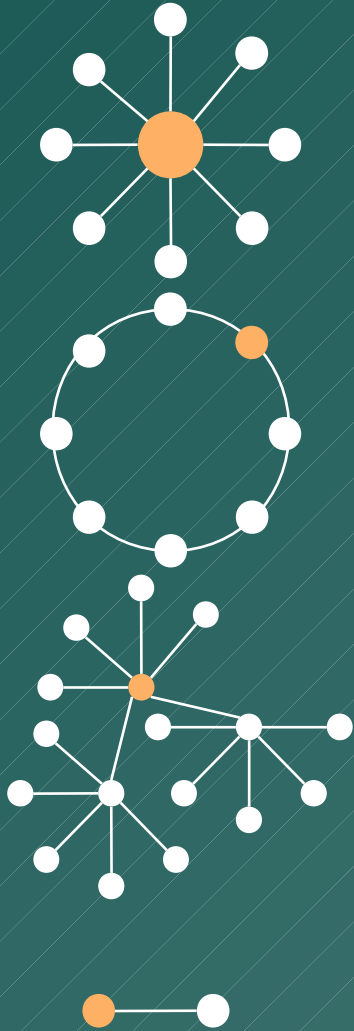
Collaboration is not natural

The collaboration challenge



- Collaboration is not natural
 - Social, organizational, and systems barriers
- Yet, collaboration is what drives business innovation
 - Content doesn't change organizations
 - Knowledge doesn't change organizations
 - Systems do not change organizations
 - People working together change organizations
- Connecting people and providing the appropriate structures for their interactions is the challenge for sustained business benefits from knowledge management

Forms of collaborative environments: Basic Forms



Lecturing (one to many)

- Teaching
- Exams
- Peer reviews

Exploration (roundtable)

- Conversation
- Brain-storming
- Problem solving

Socializing (network)

- Meeting people
- Testing ideas
- Dialog

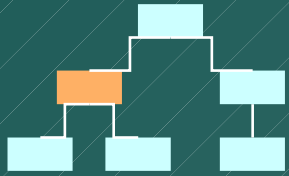
Transaction (two peers)

- Notification
- Discussion

Structured Group

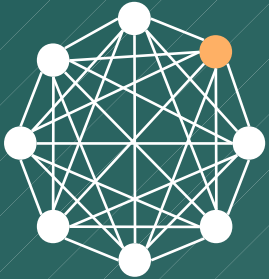
Open-Ended

Forms of collaborative environments: Elaborate Forms



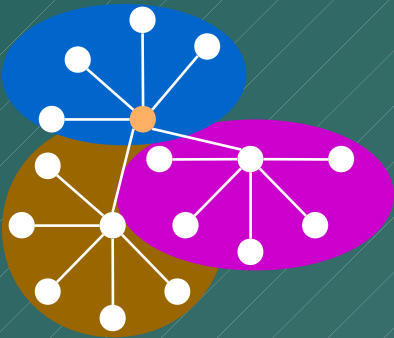
Functional (organisational chart)

- Attract talent
- Attract investment
- Allocate resources



Project (team)

- Project delivery
- Resource utilisation

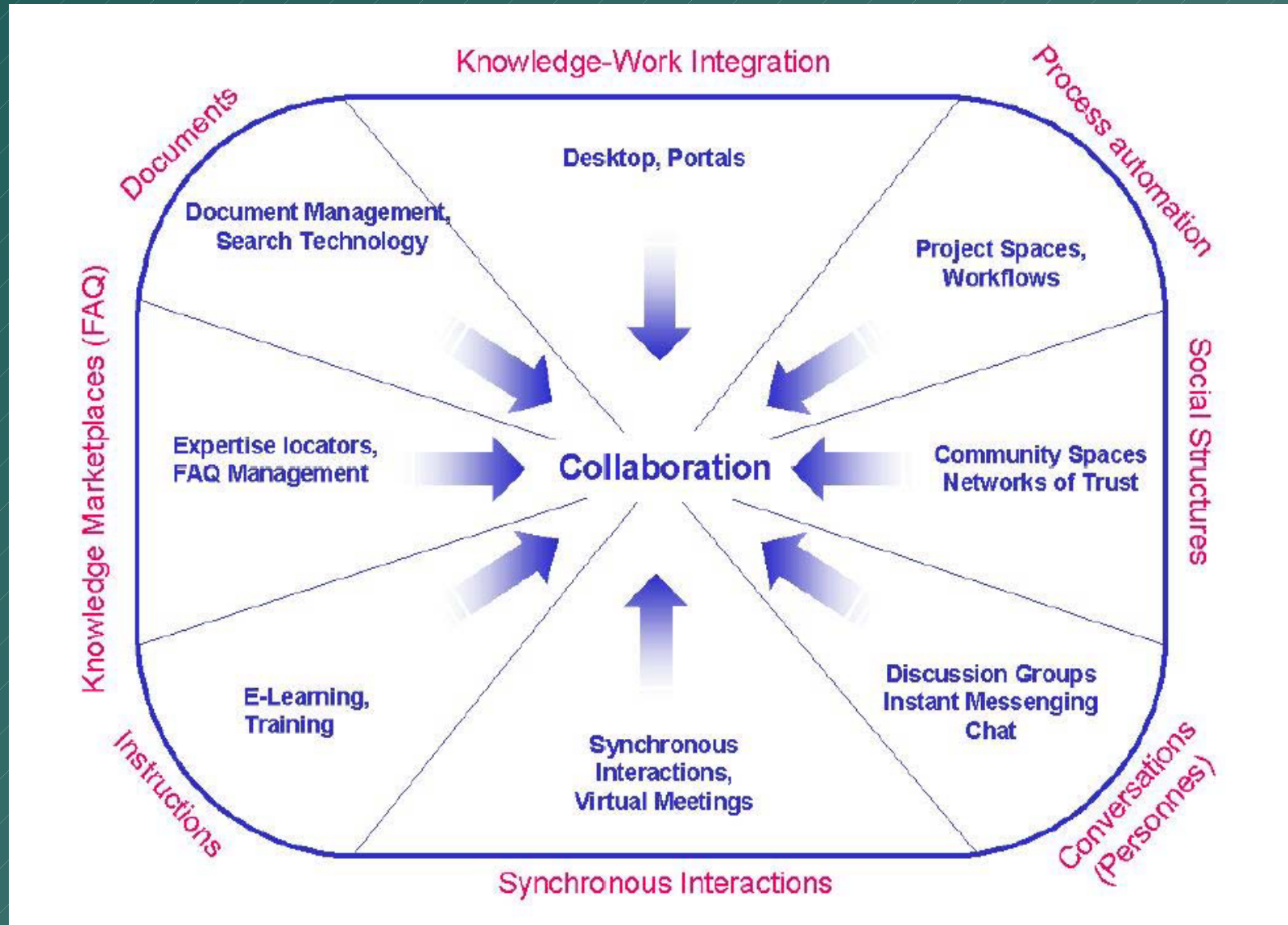


Learning (communities)

- Learn while doing
- Creating shared values
- Creating shared meaning

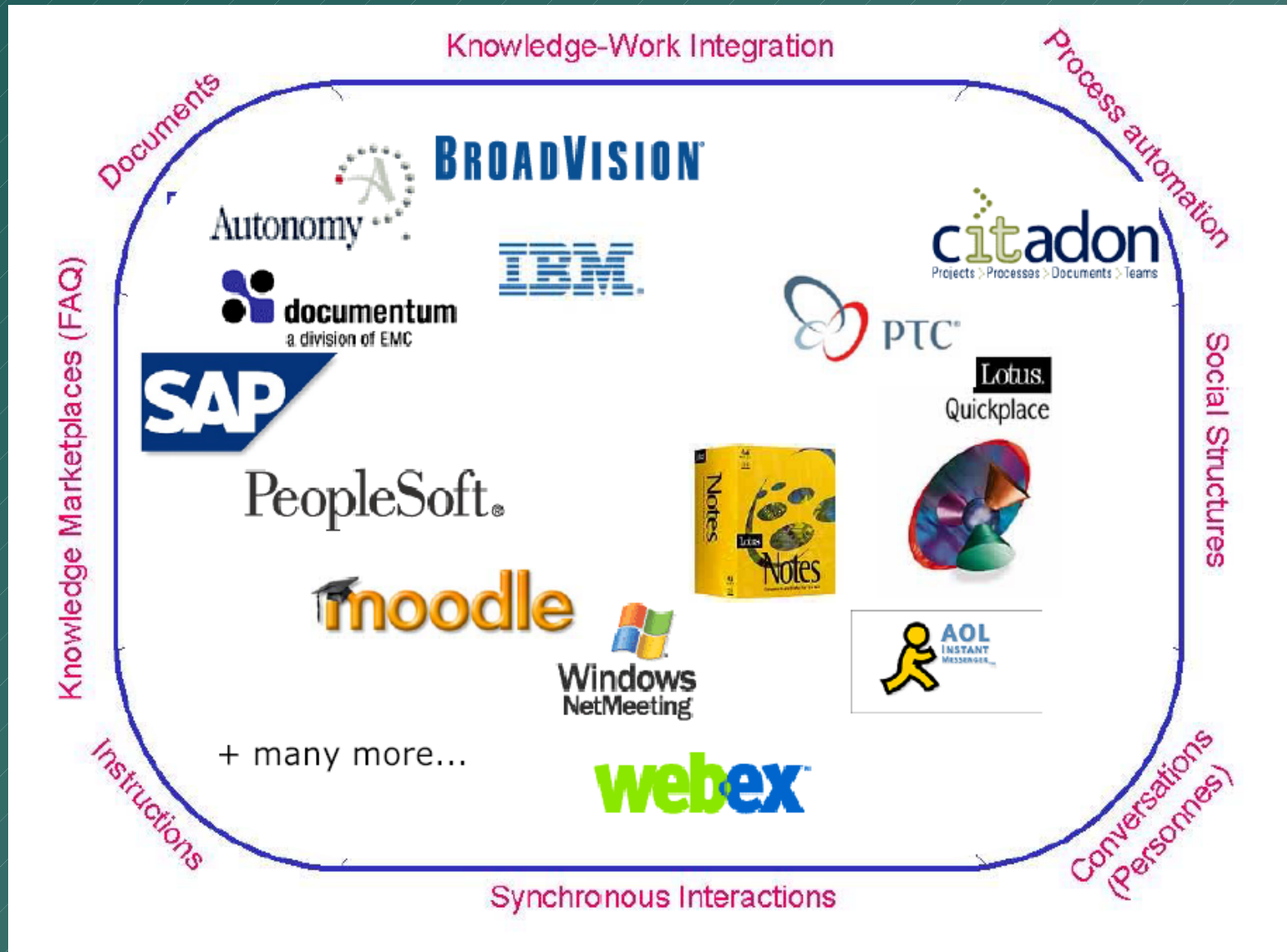
Your organization

Collaboration across narrow systems is the challenge



Source: Martin R. Dugage (Schneider Electric)

Traditional knowledge management consists of many isolated systems



Source: Martin R. Dugage (Schneider Electric)

Social tools address the collaboration challenge



- Publishing content is not the same as sharing content
- Sharing content does not automatically lead to collaboration
- Social tools support a wide variety of social structures, thereby enabling the appropriate collaborative form
- Social tools were designed for this!
 - Social Software is not just online social networks, wikis and weblogs, but loosely coupled software that is
 - Social in the way it is conceived
 - Social in its purpose
 - Social in the way it behaves

Aggregation and feed management enables enterprise integration



- Distributed, bottom-up knowledge management presents enterprise challenges
 - Sharing of knowledge across the enterprise
 - Gaining enterprise insights (e.g. enterprise wide ontology)
 - Measurement (e.g. who contributes where?)
 - Systems integration (e.g. search across e-mail, e-learning, blogs, wikis, ...)
- Enabling principle: **Everything is a feed**
 - Every blog, wiki, group e-mail, person, group, community, classification node, search, etc has an XML feed
 - These feeds can be combined into aggregated feeds at any level and used outside the system
 - Sharing is now trivial.
 - Global classifications are now possible (e.g. using K-collector style techniques), as is discovery (e.g. using Feedster and Technorati style technology)



Keep it local, keep it simple, keep it real:
A delivery approach



Delivery approach

Starting

- Start local
 - Keep it real and relevant to the job at hand
 - Prove benefits of sharing and open dialog
 - Much lower barrier to sharing knowledge when it is local teams
 - Aggregate upwards when they are ready - don't scare them!
- Seed knowledge
 - Use external feeds (e.g. industry news from Reuters, Topix and others)
 - Use internal information (news, existing information, ...)
- Make it personal
 - The “about me” page. My space. My blog.
- Identify mavens
 - Train and encourage staff
 - You win them over one at a time, no en masse

Delivery approach

Growing



- For each group or collaboration network, identify
 - Individual and collective needs: content, navigation, collaboration
 - Which collaboration environment is most appropriate?
 - Do we need to support multiple environment types? If so, then we can probably usefully split the network into parts
- Work with the group to define it (and seed the content)
 - Group Statement
 - Group weblog and project space (wiki)
 - Group directory
 - Aggregator: external content
 - Categories and other metadata
 - Events, calendar and diary
 - Syndication and content sharing, including security
 - Admin (Groups are public or private; by invitation or request only)

Working with traditional knowledge management

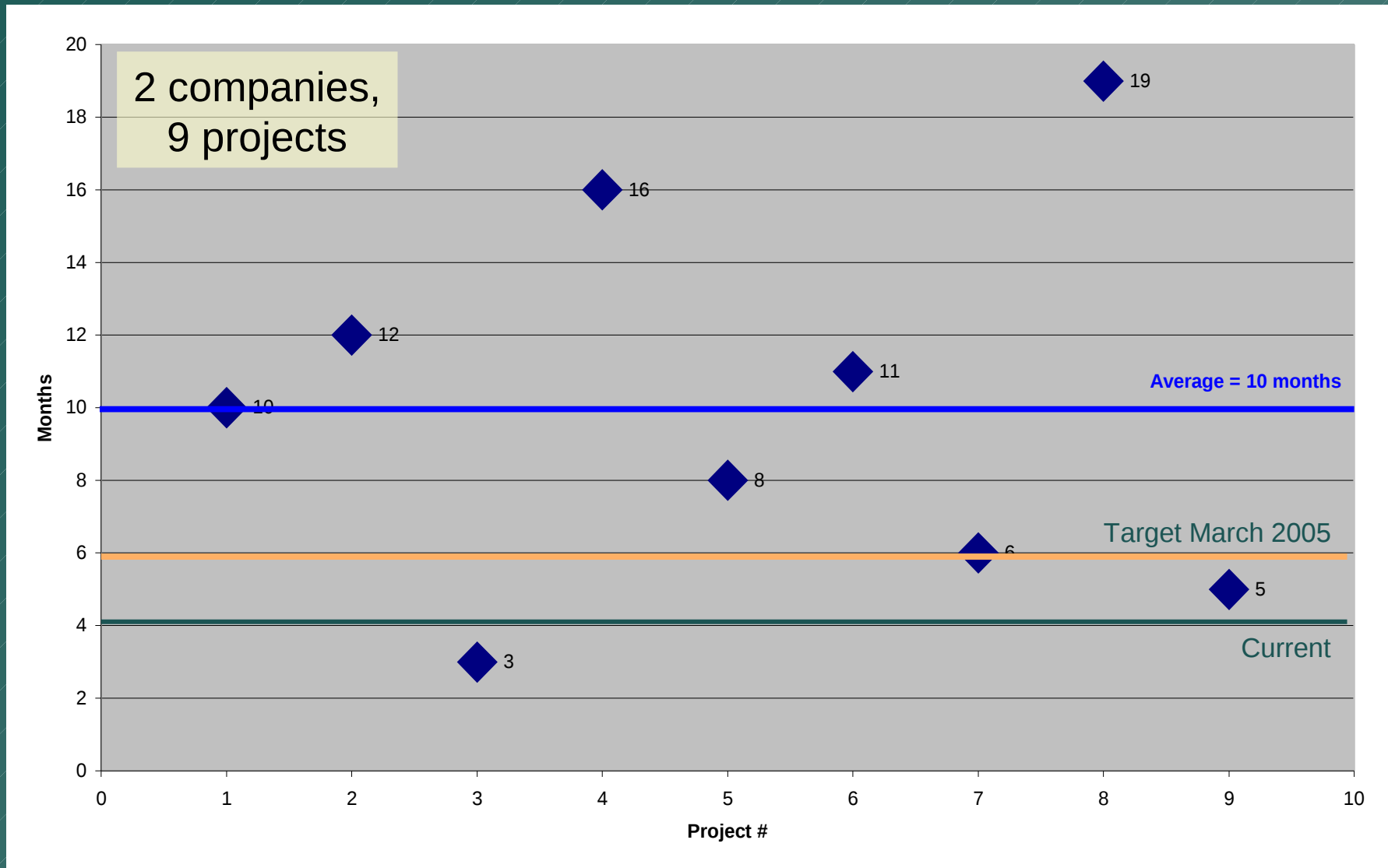


- A social software approach is not incompatible with a traditional top-down KM project
 - Run the two in parallel, but understand “who does what”
 - Do not force top-down approach but use it to support, encourage, and structure local work
- In reality, most organizations will have a mixture of environments, and integration, both systems and process, will be required
 - Everything is a feed
 - Everything can be searched
 - Everything can be categorized in multiple ways



Surprisingly, it works!

The results



Challenges



Technology is easy, business change is hard.

- Is there an identifiable business owner?
 - Even if social software is addressing real problems in the enterprise, are these problems that anybody wake up at night worrying about?
- Can you deliver benefits fast enough?
 - Can only stay “under the radar” for so long.
- What are the metrics for success?
 - What should we measure?
 - What is the probability that anybody will actually measure it?
- Can it really make connections between people?
 - <http://www.cybaea.net/Journal/Unsupervised%20text%20clustering.html>
 - Not just another water cooler?



CYBAEA

<http://www.cybaea.net/>