



Boeing Knowledge Management

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History

- Founded in 1916 in Puget Sound, Washington
- Became a leading producer of military and commercial aircraft
- Undertook a series of strategic mergers and acquisitions to become the world's largest, most diversified aerospace company
 - Aerospace pioneers now part of the Boeing enterprise include:
 - North American Aviation
 - McDonnell Douglas
 - Rockwell International (space and defense business)
 - Hughes Space & Communications
 - Jeppesen

A heritage that mirrors the history of flight

Global Boeing

- Customers in more than 90 countries
 - Total revenue in 2007: \$66.4 billion (41 percent from international sales)
 - 70 percent of commercial airplane revenue historically from customers outside the United States
- Manufacturing, service and technology partnerships with companies around the world
 - Contracts with 22,000 suppliers and partners globally
- Research, design and technology-development centers and programs in multiple countries
- Headquartered in Chicago, Boeing employs more than 160,000 people across the United States (49 states) and in 70 countries.
 - More than 83,800 of our people hold college degrees--including nearly 29,000 advanced degrees--in virtually every business and technical field from approximately 2,800 colleges and universities worldwide.

Partnering worldwide for mutual growth and prosperity

Vision 2016

People working together as a global enterprise for aerospace leadership



Strategies

Run healthy core businesses
Leverage strengths into new products and services
Open new frontiers

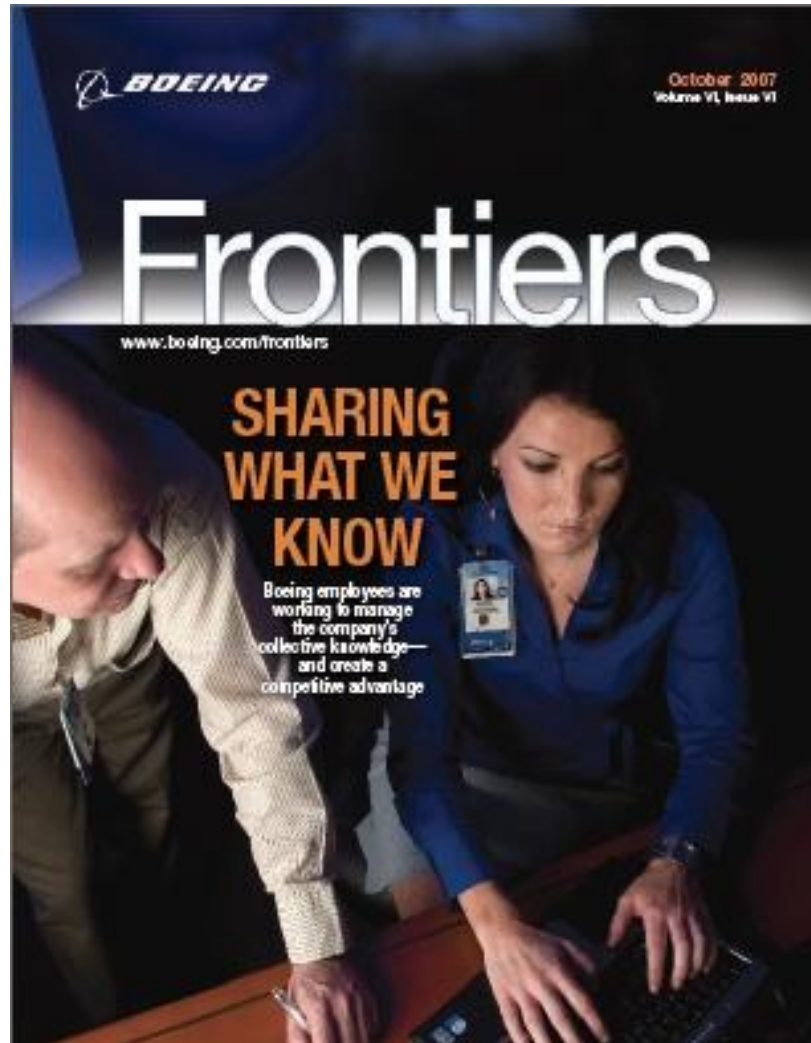
Core competencies

Detailed customer knowledge and focus
Large-scale systems integration
Lean enterprise

Values

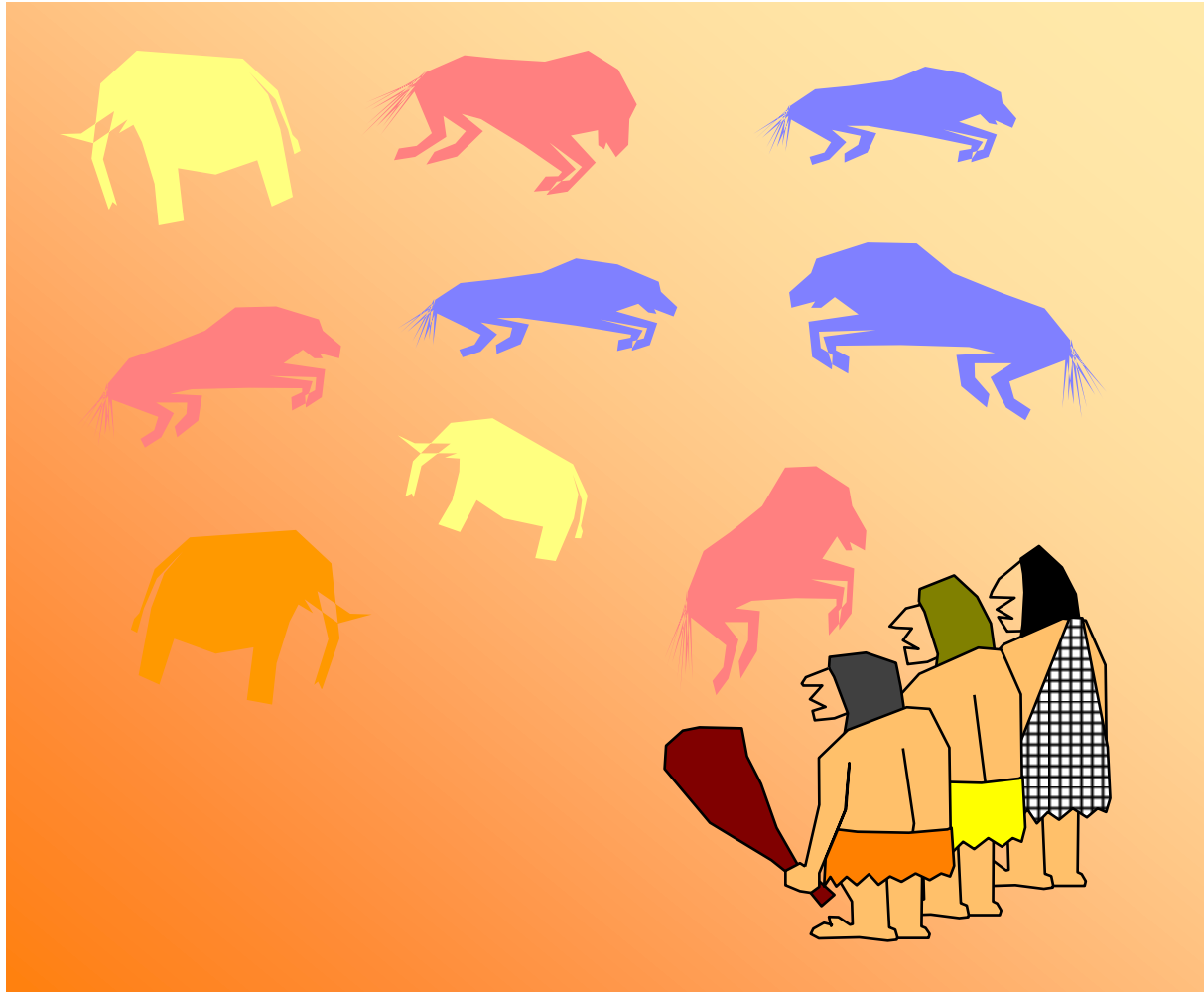
Leadership
Integrity
Quality
Customer satisfaction
People working together
A diverse and involved team
Good corporate citizenship
Enhancing shareholder value

Boeing Knowledge Management



Communication and knowledge sharing

35,000+ years ago



What animals are in the area that we can eat?

What animals are in the area that will eat us?

Why is it important to us?

- Knowledge management matters to Boeing for many reasons. Among them:
 - Retains expertise of employees who leave the company
 - Shares expertise, best practices and lessons learned across the enterprise
 - Avoids reinvention and accelerates innovation

KM Answers Many Questions

- Who has it?
- Where do they keep it?
- How do we encourage them to share it?
- How is it created?
- Who else needs it?
- How is it communicated?
- How is it kept up to date?
- How and where is it stored?
- Which knowledge is relevant, now and in the future?
- How much is it collectively worth?
- Which is the most valuable?
- Is it used in the appropriate areas/situations?
- Is knowledge shared between dissimilar domains to be applied in a different way which results in revolutionary improvements.
- What additional revenue streams can be created using existing knowledge?
- Where are areas of potential knowledge loss and how can you mitigate that loss?

Approximately 10% of what a corporation knows resides in corporate repositories.....the rest walks out the door every day.

This is knowledge contained in “gray matter” and the social networks. We refer to it as tacit knowledge.

The demand for knowledge management will only accelerate as the post–World War II “baby boom” generation looks toward retirement. The oldest members of the U.S. baby-boom generation are in their early 60s. Indeed, today 18 percent of Boeing employees are eligible to retire, while another 19 percent will be eligible in five years, and another 40 percent in 10 years, according to Boeing Human Resources.

Boeing Frontiers Magazine, October 2007

Knowledge Management

Vision

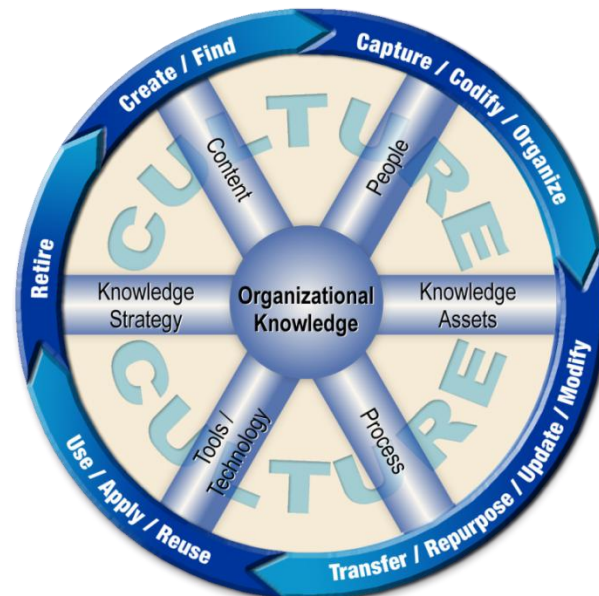
“Knowledge without Borders”

We are a borderless environment where knowledge is instantly leveraged for innovation, competitive advantage, sustainable performance, and enhanced productivity. This environment empowers an adaptable and agile workforce to rapidly respond to market drivers and anticipate customer needs.

Definition

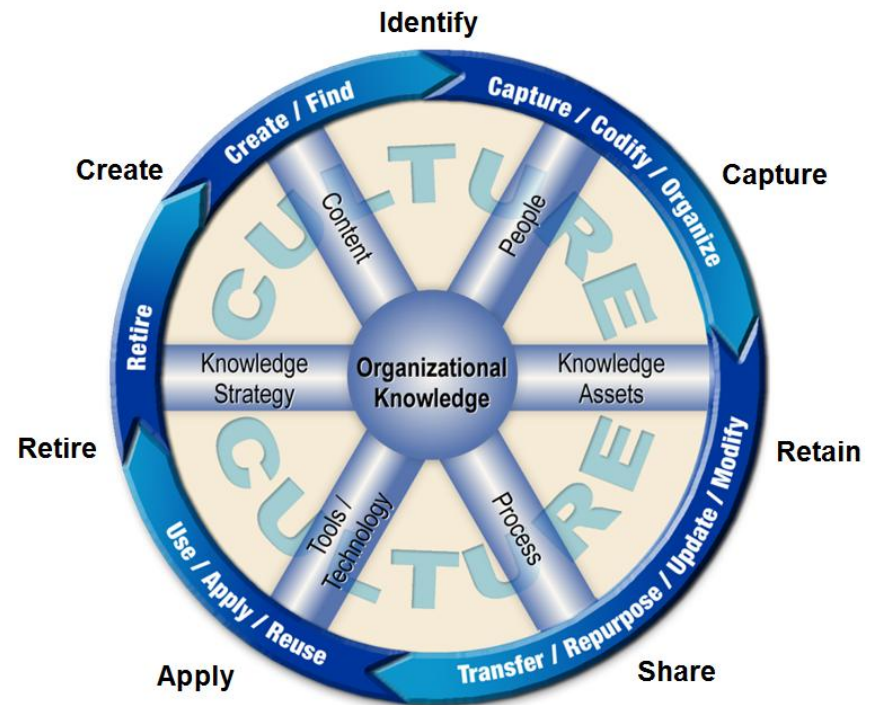
Knowledge Management is a disciplined holistic approach to effectively utilize expertise for competitive advantage.

KM Model

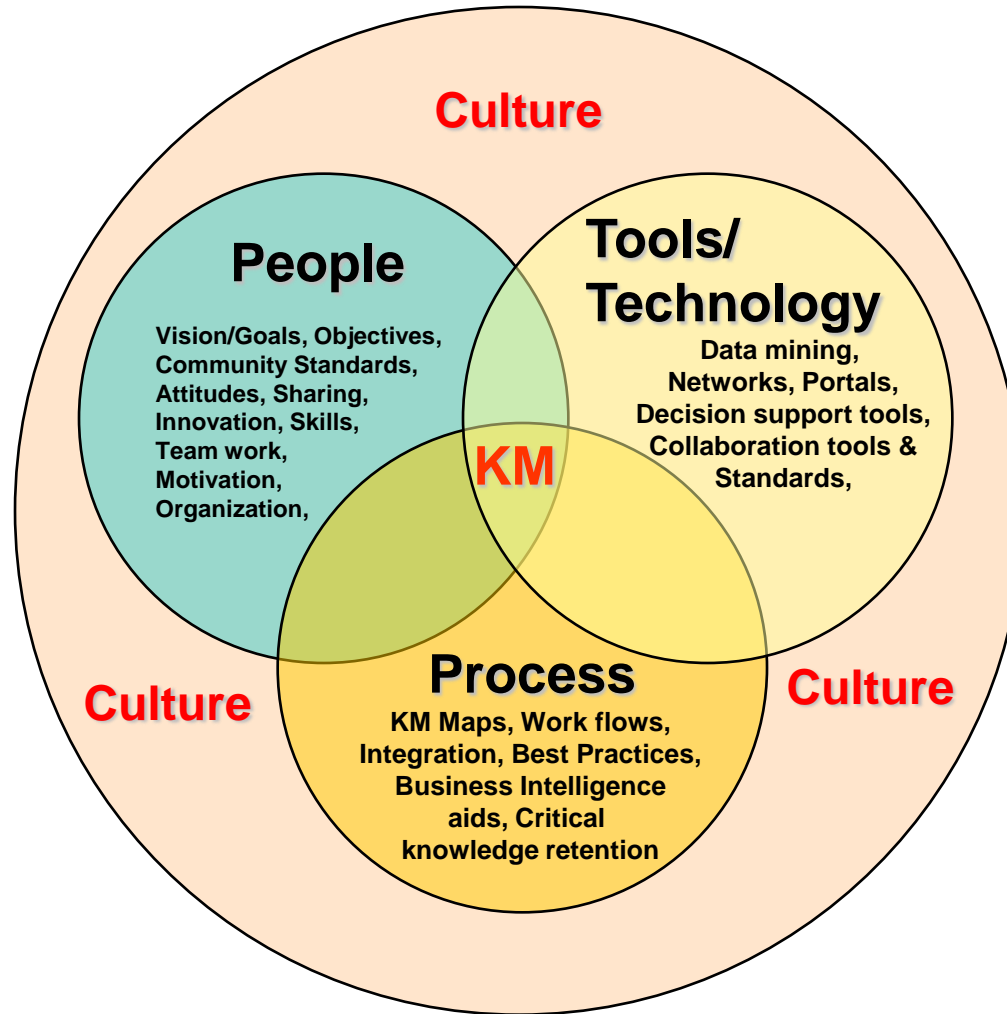


KM Wheel

- Knowledge Management at Boeing takes a holistic approach to use knowledge for competitive advantage.
- The knowledge management model, shared by Commercial Airplanes and Integrated Defense Systems, depicts the “life cycle” of knowledge management, from knowledge creation through retirement.
- Knowledge and learning are part of a continuous cycle: The retirement of some knowledge can lead to the creation or discovery of newer, more up-to-date information.
- Organizational knowledge and culture are at the heart of a system of processes, tools, methods and techniques designed to identify, capture, retain and otherwise manage knowledge through its life cycle.



KM is Holistic



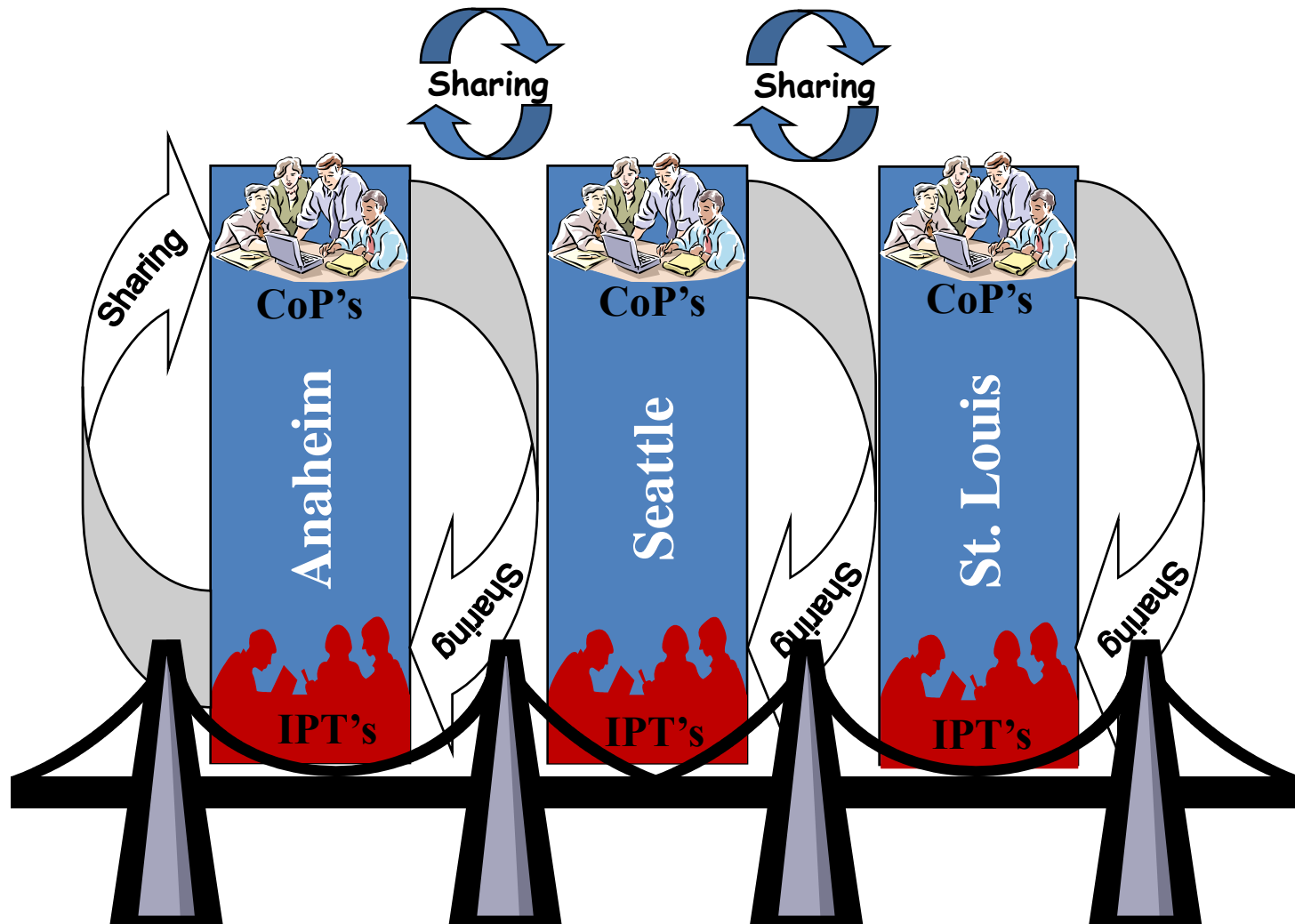
How We Share

- Internal Conferences
- Share fairs
- Lunch time learning
- Storytelling
- Roundtables
- After Action Review
- Non-Advocate Reviews
- Program Reviews
- Mentoring
- Coaching
- Processes
- Job rotations
- Technical Fellowship
- White papers
- Structured knowledge capture and transfer activities
- Newsletters
- New employee orientation process
- Communities of Practice
- Expertise locator
- One on one training
- Shared work assignments – hands on
- Succession planning
- Employee involvement/KM Teams
- Embedding KM

Sharing Your Forgotten Treasures

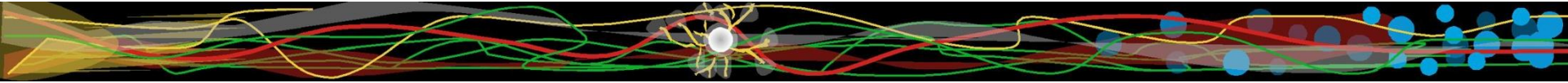
White Papers	Illustrations	Tutorials
Engineering notebook	Processes you use	Checklists
Process trees	Tip Sheets	Presentations
Acronym lists	Flowcharts	Policies & procedures
Stories	Notes	How-To's
Drawings/Diagrams	Tools (personal favorites)	Emails you kept
Product history	Contact lists	Training Guides
Job Aids/Cheat Sheets	Document trees	Photos
Paper training material	Lessons learned	

Bridging organizational, cultural, geographical, and generational boundaries – leveraging our combined intelligence to reach new heights




CoP Deliverables: Tacit Knowledge

(how things are really done, who knows what, etc.)




- Location of knowledge
 - where it is (link)
 - who knows it (expert))
- Intent
 - Its intended purpose
- Usefulness
 - What it's actually good for
- Usability
 - Who can use it successfully and what other things are required for successful use
- Deployment
 - How you use it
 - How specifically/generally should it be taken
- Availability
 - When it was/will be available
 - Why will it be available at that time
- Knowledge gaps
 - What's missing
 - What could be recycled, reformatted, rewritten to fill the gap
 - Who could do that; why would they

Boeing KM Community of Practice

Address  http://kmcop.web.boeing.com/

 Go

 search.boeing.com

 Links

[\[Introduction to KM\]](#) | [\[Current Meeting\]](#) | [\[Previous Meetings\]](#) | [\[Topic Tracks\]](#)



KM Community of Practice

Overview

- [Introduction](#)
- [Community of Practice](#)
- [Pitches & Defn](#)
- [Readings](#)
- [Conferences](#)
- [Projects](#)
- [Minutes](#)

Degrees/Certs

- [KM Education](#)

Discussion Groups

- [Knowledge Management](#)

Sub-Teams

- [Frameworks](#)
- [KM Seminars](#)
- [K.Transfer](#)
- [Tech Clubs](#)
- [Tools](#)
- [KM Roadmap](#)

Finding

The Boeing Knowledge Management Community of Practice

The KM Community of Practice - sharing and exploiting knowledge for the benefit of the Boeing Company



Click  to be kept up to date on changes.

Objectives

The Boeing Knowledge Management Community of Practice is a voluntary group of [people involved in KM](#). This site documents our findings and materials used.

- We are a voluntary group, a community of practice, focused on sharing our knowledge with each other so that we can take lessons back to apply to our own projects.
- We seek to increase understanding of, and promote interest in, knowledge management.
 - Long-term strategy for KM.
 - Benefits and approaches
 - Visibility, buy-in, and understanding at upper levels.
- Share with KM practitioners lessons-learned and best practices and seek to improve our skills

Meetings are held

- **Dates:** **Non-payweek Wednesdays**
(every other week, beginning January 19, 2005)
- **Time:** **11:30-1:00 Pacific Time**
- **Locations: (unless otherwise noted below)**
 - **Physical:** Virtual meetings
 - **Webex** meeting # [824 152 240](#)
 - **Password:** **See meeting notice or email Jim Coogan**
 - **Telecon:** **206-655-4990 or 800-764-2497**
Passcode: **See meeting notice or email Jim Coogan**

Note: You may hear music first. Problems? 206-655-2254

If you are interested in this community of practice or want to know more about [knowledge management](#), contact: [Jim Coogan](#)

Current Year Meetings (and see [2004](#), [2003](#), [2002](#), [2001](#), [2000](#), [1999](#), [1998](#))

Date	Topic / Presenter	Materials to Study
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Leveraging Existing Tools

- Wiki
- Blog
- Instant Messenger
- Email
- Distribution Lists
- SharePoint
- Discussion Groups
- Listservs
- TeamCenter

A New World



- In the past, Boeing wrote detailed specifications for each part and asked suppliers to build to plan
- Today, suppliers co-design airplanes from scratch and deliver complete sub-assemblies to Boeing's factory, where a single plane can be snapped together like Lego blocks, in as little as 3 days

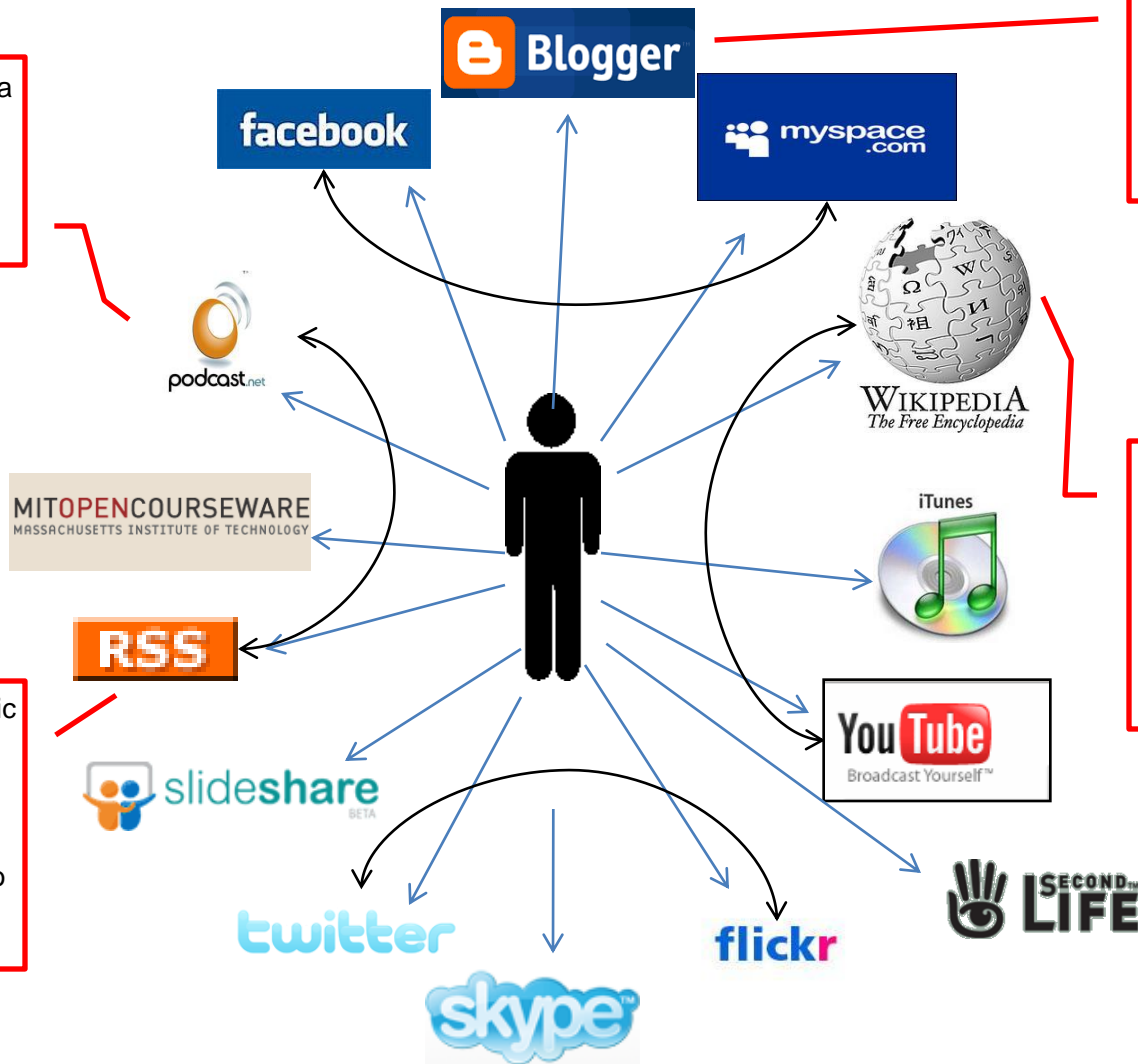
How Millennials Communicate



New Employees (and Jim)

A **podcast** is a multimedia (MP3) file that can be easily downloaded for playback on a computer or mobile device

Blogs provide content in journal like form and have become an information distribution tool that lends itself to an informal and chronological based format.



RSS provides an automatic distribution of blogs or other media to an individual. Individuals can ask for aggregations of specific types of content to be fed to them through RSS.

Wikis, while somewhat similar to blogs provide a more classification-centric way to distribute information. But unlike blogs, wikis provide a collaborative environment that enhances a community of users.

**We live in a world with fewer borders,
more information,
working with global partners, and
leveraging knowledge on a global scale**



Boeing KM Today

- Knowledge Centric
- 10 years after the merger
- Accidental collisions
- KM on teams
- Learning Management and KM
- Process Based KM
- KM as a Risk Management Strategy
- Web 2.0

