



# Knowledge Management: Hard Won Lessons: Or What NOT to do

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# In the Beginning at NRC



Historically stable workforce



Increased retirements

# Organizational Challenges

Changing workforce dynamics



Increased public scrutiny

# KM Challenges



Skeptical Management



No money



Overworked Staff



# What is the VALUE to the Agency?

- Collaborate and communicate across organizational boundaries
- Capture knowledge before it is lost to create organizational memory
- Facilitate decision making
- Improve productivity – decrease time to competency

# What is the VALUE to Me?

- Locate knowledge and experts when needed
- Capture knowledge through interactions and discussions and make it widely available
- Streamline training
- Enhance professional development



# The Path Forward



# The KM Business Case

Capture SME knowledge



Connect generations

# Business Case, cont.

Improve and streamline training



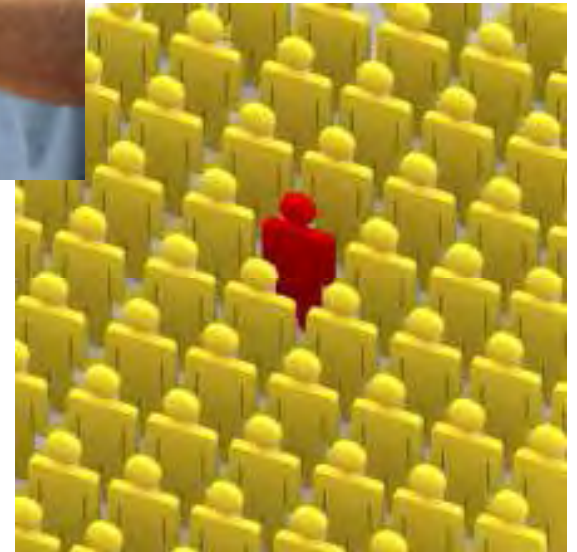
Maintain technical excellence

# Tactics

Gather complaints



Identify high risk areas & SMEs





# Tactics, cont.

Inclusive problem solving



Enhance existing tools;  
use new ones

# First Initiatives



Created KM Web Page

KM Dashboard:  
Who is doing What?



# TOOLS





# NRC KM Web Page

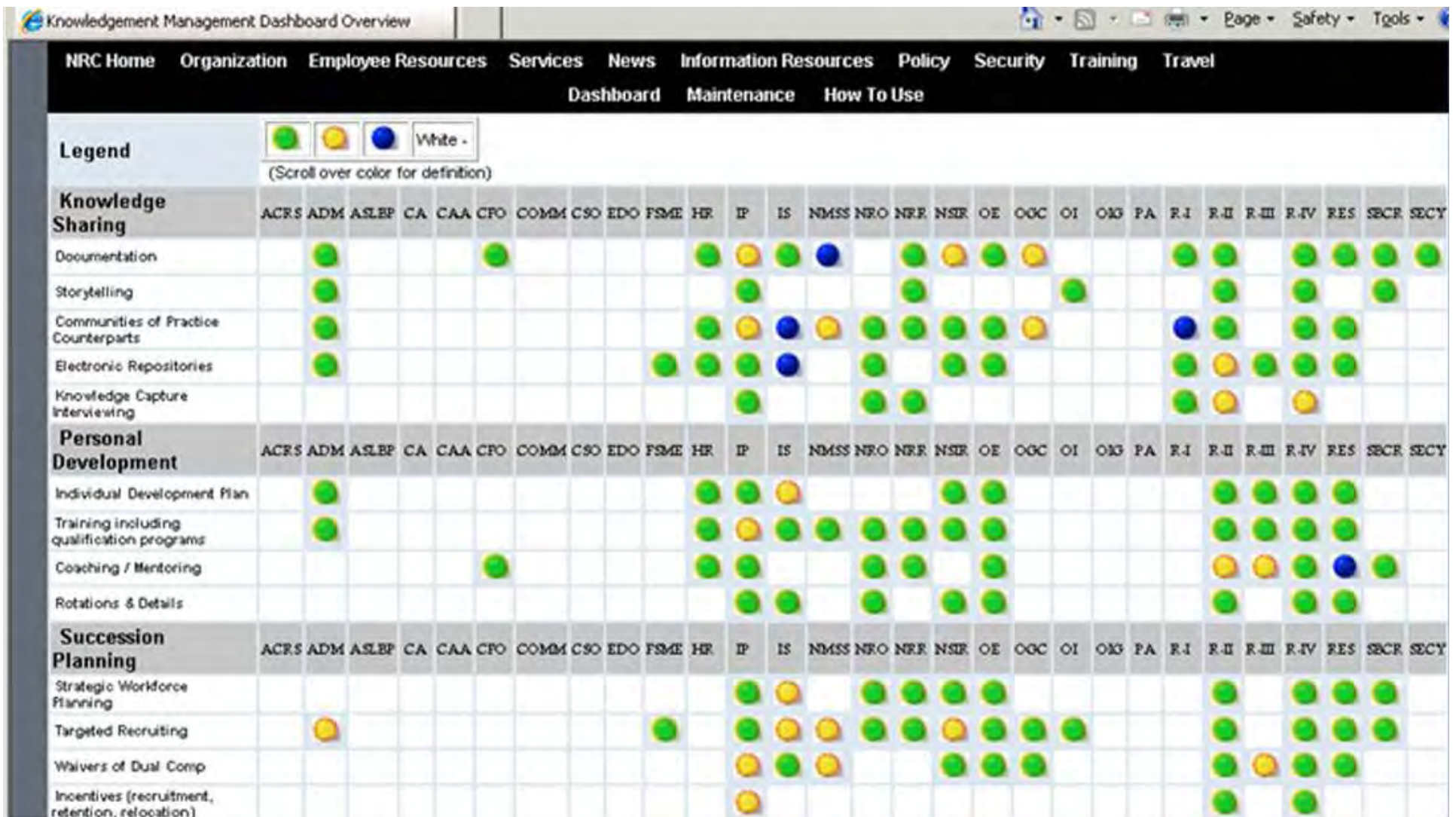
The screenshot shows a Microsoft Internet Explorer browser window displaying the NRC Knowledge Management website. The browser's address bar shows the URL <http://papaya.nrc.gov/09/home/index.cfm>. The page features a dark green header with the text "KNOWLEDGE MANAGEMENT" and the tagline "Collaborate, Capture, and Share Knowledge to Build Organizational Memory". A navigation menu includes links for "NRC Home", "Organization", "Employee Resources", "Services", "News", "Information Resources", "Policy", "Security", "Training", "Travel", and "SharePoint".

The main content area is titled "Knowledge Management At The NRC" and is organized into three columns:

- Left Column (Navigation):**
  - Knowledge Management (KM) Home
  - KM Resources**
  - KM Documents
  - KM Calendar
  - Knowledge Center Resources
  - Enter the Knowledge Center
- Middle Column (Internal/External Resources):**
  - Dashboard
  - KM Office Contacts
  - Internal Sites
  - External Sites
  - Supervisor's Toolbox
  - Strategic Workforce Planning
  - KM Glossary
  - NRC Glossary of Nuclear Terms
  - The NRC Rulemaker
  - KM TAC- ZG0028
  - Preventing Brain Drain
  - Talking the Talk
  - Eleven Deadliest Sins of Knowledge Management
- Right Column (Regional and Technical Resources):**
  - DWMEP (FSME)
  - NMSS KM Site
  - NRC's Technical Library
  - NRO KM site
  - NRR @InspectorCommunity
  - NRR @OperatingExperienceCommunity
  - NRR KM Site
  - Region I E-Library
  - Region I KM Site
  - Region I Streaming Media
  - Region II KM Site
  - Region III KM Site
  - Region IV KM Site
  - RES KM Portal
  - RES Seminars

At the bottom of the browser window, the taskbar shows the Start button, open applications (Cambasia Studio, Knowledge Managem, Recording...), and system tray icons. The system clock indicates the time is 2:29 PM. A video player control bar is visible at the very bottom of the image, showing a play button and a progress bar.

# KM Dashboard







## Details for NRO Training including qualification programs

[History link](#)

**What does the office need to accomplish?**  
Training and associated webtool to teach technical reviewers the steps of producing a high-quality safety review.

**What was the procedure or process?**  
IDEAS is a web-based job aid for Technical Reviewers. The tool walks an individual through the review steps required to reach a sound safety finding. IDEAS is also an interactive web-based integratio

**Lessons learned - what worked, what didn't**  
The class has been piloted and will be periodically taught at the PDC starting in February, 2010. NRO is currently integrating associated qualification requirements with the web-based tool.

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Website Maintenance

# Initial Results – 2008/9

Reduced Time to Competency  
by 6 months (\$37 million)



Expert Locator

# Then things went south

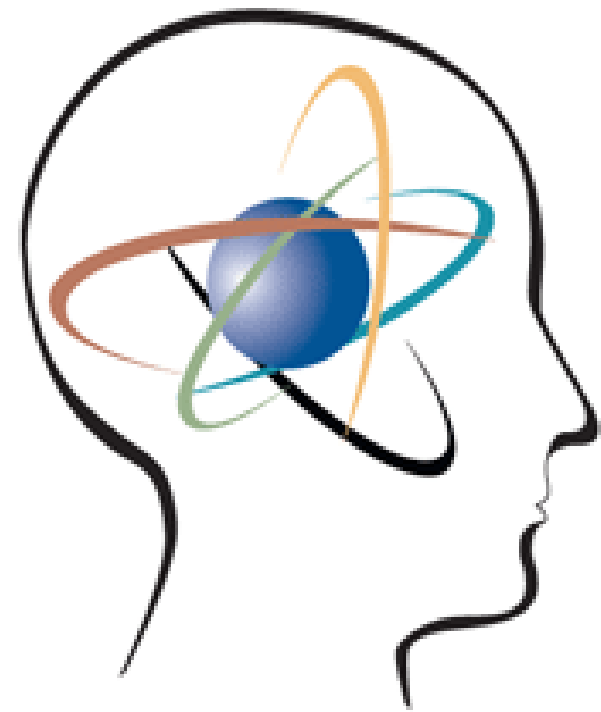
- Executive Champion left 2010
- New Champion: “KM is running itself”
- New Chief Learning Officer: hammer and nail
- Push to cross train managers and staff – 3 - 4 month assignments
- Interest and involvement in KM declined



# The KNOWvember Initiative

Management agreed to KNOWvember marketing campaign:

- Exec Director Message
- Mgrs endorsed KM program
- Update SME lists
- Create & display posters
- Discuss KM at staff meetings
- Highlight KM in newsletters
- Update KM materials
- Create and Show KM videos

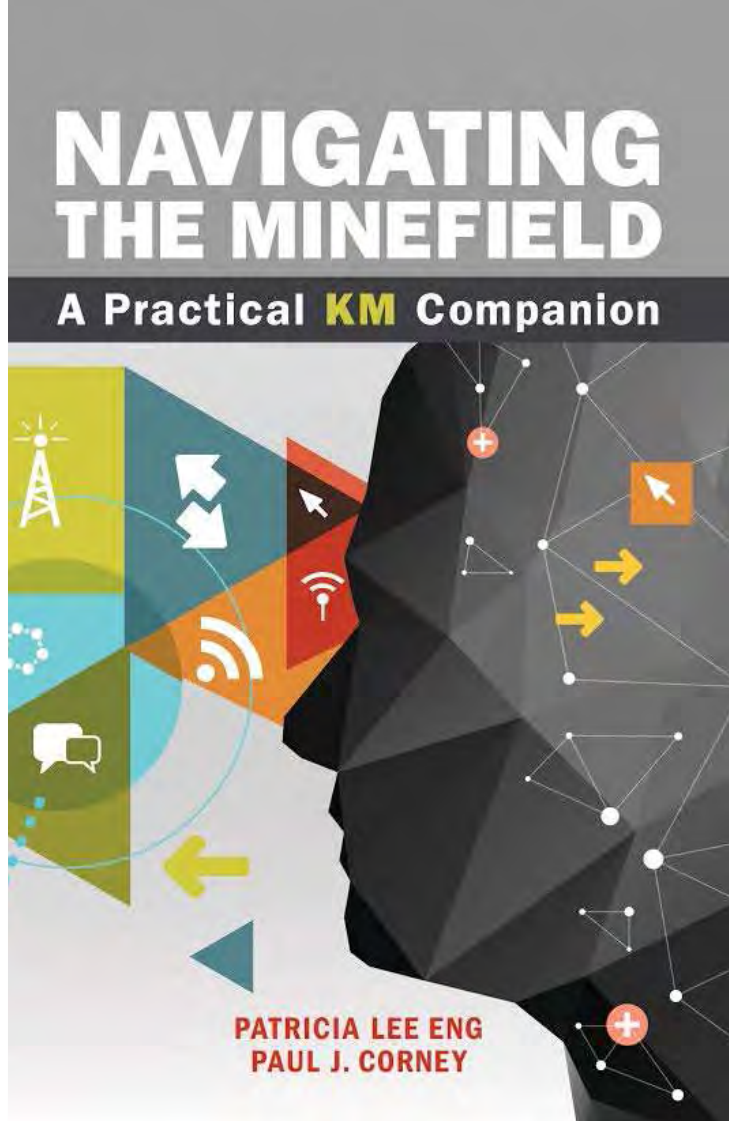


# KNOWvember Results

- Renewed interest in KM
- KM to be mentioned at future conferences
- KNOWvember will be annual
- New document series for KM established







# Observations from 19 KM Project Managers:

- Common KM program Drivers
- Killing KM
- Making a successful KM program

# Interviewee selection criteria

- Built their organization's KM program - not a consultant
- Spent 2 years or more on the programme
- Primary person responsible for the KM programme – interfaces with executives
- Can point to a clear ROI, e.g., productivity or monetary
- Can speak to the ROI

# Interviewee list

Airbus, Antwerp Port Authority, ARUP, BP, Cadbury Schweppes, Defense Acquisition University, Hewlett Packard (HP), the International Center for Tropical Agriculture, (CIAT), Intellectual Property Office Singapore, Lloyds Register Marine, NASA, MPM PETRONAS, Ontario Workplace & Safety Board, U.K. National Health Service Digital, Sellafield, Shell Oil, the U.S. Army and Nuclear Regulatory Commission

Nb. others were interviewed but chose to retain anonymity



# Common KM Program Drivers

1. Risk, real or anticipated
2. Desire to improve operations
3. Leader vision and innovation
4. Regulations or direction from above

# Killing KM: observations

- KM Failure is not uncommon
  - NHS
  - U.S. NRC
- Interviews revealed commonalities
  - BP
  - HP/Digital
  - Large international engineering firm
  - US Army

# Killing KM: patterns from Interviews

- NEW CEOs, acquisition or merger.
  - Focus on the bottom line; not what made company successful.
- Little done to identify critical knowledge
- Tacit knowledge not considered
- KM success stories out of date or misaligned
- KM Program Manager blind sighted or ignored

# Major Finding from “Navigating”

*“KM is all about people and the networks. You always go to your trusted source, you always want to talk to somebody for reassurance”*

Rafi Oghoubian



# Making a Successful KM Program

## 1. Identify and understand Stakeholders

- a. Most important
- b. Don't Assume
- c. Listen carefully



**"What if, and I know this sounds kooky, we communicated with the employees."**

# Making a Successful KM Program cont

## 2. Identify and Prioritize Painpoints

- a. Painpoints vary by level
- b. Pay attention to middle management
- c. Answer WIIFM



# Making a Successful KM Program cont

## 3. Define a Baseline and Metrics

### a. Gather anecdotal data

- i. How long to do something?
- ii. Where are the bottlenecks?
- iii. How many supplies are needed?

### b. Trend changes, monetize if possible



Remember – It is ALL about the People



