Applications of Storytelling in Knowledge Management

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STORYTELLING

- Stories have been used to pass along knowledge for thousands of years
- Every culture has a history of storytelling
- Stories can take many forms - Written, Oral, Paintings, Architectural.
STORIES - WHAT ARE THEY GOOD FOR?

- Sole and Wilson (2002)*:
  - Sharing Knowledge
  - Sharing Values
  - Developing Trust & Commitment
  - Generating Emotional Connection

* D. Sole and D. G. Wilson, “Storytelling in Organizations: The power and traps of using stories to share knowledge in organizations,” Harvard Graduate School of Education, 2002.
SHARING KNOWLEDGE

- Stories allow tacit knowledge to be shared more easily
- Stories provide context and focus
- A good story will provide laser-like focus on issues relevant to the listener
- **Example**: Xerox field engineers gathering to swap stories of their experiences*

*J. S. Brown and E. S. Gray, "The People Are the Company" in Fast Company, 1995.*
SHARING VALUES

- Stories help convey values, ethics and morals

**Example:** Many people equate the Boy Scouts to being helpful

- Most have heard the story of a Scout helping the old lady across the street

- Storytelling can change the perception of values by describing what future values should be
DEVELOPING TRUST & COMMITMENT

- Stories help describe organizational competencies and/or commitments.

- Stories can highlight the good (and bad) things that people/organizations do

- By building trust, you can address issues

- **Example:** The Public Conversations Project help people/organizations address issues of conflict through stories.
GENERATE EMOTIONAL CONNECTION

- Stories have the ability to connect with our emotions

- Unexpected twists and turns can grab a person’s attention and generate connection

- Emotional connection can generate ‘stickiness’

- **Example:** Daniel “Rudy” Ruettiger is well known by football players in the US. Rudy is small but has more ‘heart’ than most.
Explicit knowledge is the ‘know-what’ of an organization

Explicit knowledge is the ‘visible’ knowledge

Explicit knowledge has been defined by Polanyi (1967) as:

- knowledge that can be communicated using formalized language

Tacit Knowledge is the ‘know-how’ of an organization.

Tacit Knowledge is the ‘invisible’ knowledge.

According to Takeuchi (1998)* tacit knowledge is:

- deeply rooted in an individuals actions and experiences as well as in the ideals, values or emotions that the person embraces.

Current technology is perfect for capturing explicit knowledge

Tacit knowledge must be transformed to explicit knowledge

Tacit knowledge can be shared using informal social processes

Through storytelling, tacit knowledge can be embedded in narratives and shared
TACIT KNOWLEDGE THEMES

- Literature review performed by Bhardwaj & Monin suggest four themes in the field:
  - Overall tacit knowledge management
  - Mobilization of organization tacit knowledge
  - Role of tacit knowledge in problem solving
  - Tacit knowledge and decision making

- These four themes were used as the basis for research by Bhardwaj & Monin
Bhardwaj & Monin interviewed 8 HR Professionals in 8 different knowledge intensive organizations.

Interviews were performed using open ended questions to encourage the use of narratives by the interviewee’s

The resulting narratives were deconstructed to gather information on how the four themes are addressed
RESULTS

- Bhardwaj & Monin found that tacit knowledge interacts with six important subsystems of an organization.

- These subsystems are:
  - Psychological
  - Intellectual
  - Knowledge
  - Functional
  - Social
  - Cultural
The management of tacit knowledge can be severely hampered by individuals and attitudes.

Narcissism and self-aggrandizement were noticed in the research results.

The attitude of top-management plays a key role in how well tacit knowledge is mobilized.
FUTURE RESEARCH

- How can an organization reduce the risk of dependency on tacit knowledge ‘maintained’ by a few employees?

- How can an organization activate tacit knowledge that resides within employees for the betterment of the organization?
We live in a knowledge based economy.

Knowledge accrues through experience.

Experience is earned by doing and takes time.

How can an organization use the knowledge of their experienced employees to help inexperienced employees?
EXPERTISE AND KNOWLEDGE TRANSFER

- Expertise is developed through learning by doing

- Experts use their long years of experience to apply their knowledge to problems.

- Many researchers report that someone must practice 10 years before reaching the ‘expert’ stage

- Experts recognize patterns and can easily call on their knowledge for that pattern
EXPERTISE AND KNOWLEDGE TRANSFER

- The two characteristics of expertise:
  - Pattern recognition - patterns are used to know when/how to use knowledge.
  - 10 year rule - to be an ‘expert’, you must practice for 10 years (10,000 hours).
- Both characteristics are intrinsic and difficult to share explicitly
Two methods of sharing tacit knowledge (Nonaka & Takeuchi - 1995)*:

1. **Internalization - Learning by Doing.** Defined as: “a process of embodying explicit knowledge into tacit knowledge”

2. **Socialization - Learning by Sharing.** Defined as “a process of sharing experiences and thereby creating tacit knowledge”

METHODS

- Formal teaching methods cannot be used for tacit knowledge without first transforming tacit knowledge to explicit knowledge

- Informal methods are a better fit for tacit knowledge (Nonaka & Takeuchi - 1995)

- Internalization and Socialization can be addressed with mentoring and storytelling
Swap et al. define a mentor as “a person who draws upon a deep knowledge-base to teach and guide”

Mentors serve as informal teachers

The use of mentoring has grown significantly over the last few decades
MENTORING

- Swap et al.’s literature review shows evidence that mentoring provides:
  - Skills transfer
  - Managerial Systems transfer
  - Values transfer

- Mentoring has been shown to play a role in building up an organization’s capabilities

- Mentoring process provides both the socialization and internalization aspect of tacit knowledge transfer
Swap et al. use the term ‘Organizational Story’.

An organizational story is defined as:

- a narrative of past management actions, employee interactions or other events that are communicated informally within the organization.
Organizational stories are generated internally and reflect the organizations values and culture.

- Stories must have **context** and **focus**.
- Stories must be **memorable** to be effective.
Stories are better used to share values, managerial systems and tacit knowledge.

Stories are not good methods of sharing critical skills

You wouldn’t want your doctor or pilot learning their job by listening to or reading stories.
LEARNING VIA STORIES

- Stories make knowledge more memorable via the ‘availability heuristic’

- Swap et al. provide the following example:
  - Which animal, Grizzly Bear or Moose, is more likely to kill a hiker?
LEARNING VIA STORIES

- Stories make knowledge more memorable via the ‘availability heuristic’

- Swap et al. provide the following example:
  
  - Which animal, Grizzly Bear or Moose, is more likely to kill a hiker?
  
  - Statistically, a hiker is more likely to die from a moose than a grizzly bear
LEARNING VIA STORIES

- Stories help people remember knowledge via elaboration.
- People remember things easier if they can build a vivid image from their own experience.
- Stories can be memorable by being clear or dramatic and by providing context that the listener understands and relates to.
LEARNING VIA STORIES

- If developed and shared correctly, stories can tap into the **episodic memory** of individuals.

- Episodic memory is memory gained from direct experience and is more easily accessed for retrieval.

- If the story and storyteller can create a vivid account so that the listener can experience the story, research suggests that this will be stored in episodic memory.
SUMMARY

- Organizations can use mentoring and storytelling to share values, transfer skills and share tacit knowledge

- Calling someone a ‘mentor’ isn’t enough...formal mentoring programs must be implemented

- Stories must be memorable, be focused and have relevant context to be useful
Organizations & Managers must be careful to not devalue the concept of ‘water-cooler talk’.

What may look like gossip to one person may be co-workers sharing extremely important organizational knowledge through the use of stories.
USING STORYTELLING TO REFLECT ON IT PROJECTS

L. NIELSEN AND S. MADSEN
Paper provides a model that uses storytelling to capture tacit knowledge upon the completion of an IT Project.

Similar to project postmortems but includes non-project team members from areas throughout the organization.
SHARING KNOWLEDGE IN PROJECTS

- Systems development literature suggests two methods of learning from, and sharing one’s own and other’s project experiences:

  - **Learning Experience** - learn by doing. Great way to gain tacit knowledge

  - **Written Documentation** - lessons learned, postmortems
The use of formal, written documentation is a wonderful way to capture explicit knowledge.

- Does not capture tacit knowledge
- Examples: Lessons Learned Documents, Project Postmortems
Organizational knowledge is actionable knowledge

Individual knowledge is internal knowledge

Individual knowledge is required to create organizational knowledge

We must find a way to shift from individual (tacit) to organizational (explicit).
Three mechanisms for learning

- **Experience accumulation** - learning by doing
- **Verbal knowledge articulation** - describing to others
- **Written Knowledge codification** - converting tacit knowledge to explicit knowledge

An organization’s (or individual’s) knowledge is only useful if a base level of shared knowledge exists
Storytelling is suggested as a means to build a shared knowledge-base for organizations.

- Storytelling can be used to:
  - Build a shared understanding
  - Make sense of past actions
  - Provide for future vision
RESEARCH

- Nielsen & Madsen worked with AstraZeneca
- Held a project reflection workshop to interview employees on the outcomes of IT projects
- Goal was to develop methods to “improve AstraZeneca’s IT development practices and avoid future failure of IT Projects”.
WORKSHOP

- Purpose of the workshop:
  - Create a shared understanding of what might go wrong in IT projects,
  - Create a shared understanding of when and why projects succeed
  - Collect experiences into a manual for use on future IT Projects

- Ten employees were interviewed. Interviews were filmed and transcribed
The workshop used oral storytelling to tell different versions of project stories.

These different versions of the story provided different outlooks on the project.

The stories that resonated the most with people were the ones with context, detail and provided methods for the listener to ‘feel’ the story.
The research provides a model for using the workshop for Project knowledge sharing.

There are four steps in this model:

- Conversion of experience into stories - Crafting the Story
- Articulation of stories - Telling the Story
- Collective understanding of stories - Internalizing the Story
- Codification of Explanations - Documenting the Story
CRAFTING THE STORY

- In order to develop a story about a project, the storyteller must convert their experience into a story.

- This conversion forces the storyteller to look at their project experience as a connected experience.

- Project purpose, stakeholders, and events are weaved into a story.
TELLING THE STORY

- Presenting the story to others provides examples of project issues/outcomes
- Provides listeners with insight that only the storyteller has
- Provides an opportunity for questions from listener to storyteller & vice versa
INTERNALIZING THE STORY

- Storyteller’s must be sure that the listeners understand and internalize the story.

- The workshop attendees reported that they liked the oral stories but needed help to internalizing the stories.

- Workshop attendees played a ‘game’ - this game helped to internalize the knowledge in the story.
DOCUMENTING THE STORY

- After internalizing the story, workshop attendees need to document the lessons learned from the story.

- A written document is created that contains the workshop attendee’s thoughts on:
  - project outcomes
  - how to incorporate knowledge into other projects
  - best practices
USING THE WORKSHOP MODEL

- The workshop model helps convert tacit knowledge to explicit knowledge
- Oral storytelling is the foundation for sharing knowledge
- Workshop attendees should be project team members from various projects and different parts of the organization
USING THE WORKSHOP MODEL

The result of the workshop is:

- Documented stories about projects
- Best Practices for use in future projects
- Knowledge sharing about past, current and future projects
ADDITIONAL RESOURCES

D. Sole and D. G. Wilson, "Storytelling in Organizations: The power and traps of using stories to share knowledge in organizations," Harvard Graduate School of Education, 2002.