Developing Sustainable Organizations for New Nuclear Power Countries Through Knowledge Management

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Countries with small or emerging nuclear power programs typically lack the resources to effect the types of large institutional initiatives frequently exemplified as knowledge management (KM) success stories.
Disadvantages

• Lack of history
• Lack of individual experience / early in the training cycle
• Minimal resources
• Potential for high turnover
• Relationships with internal and external stakeholders not fully developed/matured
Advantages

• Lack of history

• Not necessarily bound by entrenched cultures or technologies

• Young/untrained staff may be more open to change and new ideas

• Regional centers and/or the International Atomic Energy Agency (IAEA) are available to assist
KM Programs do not need to be large or resource-intensive to be effective

The best KM programs:

• Are fully integrated into the organization

• Improve the effectiveness and efficiency of individual processes

• Improve the effectiveness and efficiency of the organization as a whole

• Capture knowledge as close as possible to its time of creation
Mentor/Protégé Programs

• Examples of successful mentor/protégé programs are plentiful

• An effective way to orient new employees
  – Organizational history
  – Relationships
  – Insights
  – Resources

• An organization’s human resource group can assist in developing and implementing a formal program
Policy/Procedure Documentation

• One of the most beneficial, but often absent, practices available

• Promotes consistency, reliability, and auditability

• Quality improves over time

• Can be used as a learning tool for beginners

• Can be hard to initiate for organizations with small staff and limited resources, but these are the conditions when it is most necessary
Content Management

• Content Management is different from Document Management
  – Retrievability
  – Workflow
  – Templates

• It is important for an organization to have a good understanding of how the tool will be used before selecting a product, as transitioning from one system to another can be difficult and/or limiting
Capturing knowledge near the point of creation

• This is where integration of KM with the business workflows is most important. KM activities that occur “outside” organizational processes are likely to fail
  – Trip reports
  – After action briefs
  – Lessons learned

• Content Management Systems can streamline procedures and improve quality and consistency of content
Collaborative Problem Solving

- Commonly referred to as brainstorming sessions or knowledge cafes
- Brings together groups of individuals to address a single issue or problem
- Can help distribute explicit and implicit knowledge
- Include a mix of experienced and beginner staff
- Can shorten the time between identifying and implementing a solution
- Not the best method for solving some problems
Expertise List

• Useful for organizations with high turnover rates or are geographically diverse
• Ranking levels of expertise are important to avoid individuals who are experts in everything
• Must be easily available to be useful
• Must be kept current
Summary

• The techniques presented here are all low-cost or no-cost (except the Content Management System)

• All provide immediate and long-term benefits
  – Individual
  – Organization

• Serve as examples of the value of a KM program

• Smaller/Newer organizations are more nimble and can effect change more efficiently than larger ones

The most important thing is to begin!