We are pleased to share our insights on Knowledge Transfer Across Generations with you today

Susan McCabe is global program manager for Unisys Knowledge and Collaboration Initiatives. She is responsible for implementing Unisys Knowledge and Collaboration strategic vision and road map which focuses on exploiting social computing technologies to improve employee connection, knowledge sharing, repurposing and reuse and collaboration practices.

Susan’s areas of expertise include business consulting, IT infrastructure, solution design, business process redesign, and culture/adoPTION change initiatives.

Susan holds a patent for a method of enabling knowledge communities that is being used at Unisys today. In addition to being published in Leading with Knowledge, Knowledge Management in Global InfoTech Companies, she serves on the company’s Knowledge and Collaboration Stakeholders Council.

Susan’s 30 year career in the technology industry spans numerous positions in sales, sales support, business development, product marketing, and business operations. She is a subject matter expert and industry presenter on Social Collaboration Initiatives and Culture Transformation.
About Unisys

- Unisys is a worldwide information technology company with a rich history that spans 140 years.

- We provide a portfolio of IT services, software, and technology that solves critical problems for our clients, focused on:
  - securing their operations
  - increasing the efficiency and utilization of their data centers
  - enhancing support to their end users and constituents
  - modernizing their enterprise infrastructures and applications
  - deriving maximum value from social technologies

- With approximately 23,500 employees, Unisys serves commercial organizations and government agencies throughout the world.
Agenda

• Workforce Challenges

• Unisys Case:
  • Workforce Renewal Initiative
  • Unisys Engineering Solution

• Key Takeaways

• Q&A
Despite a looming retirement crisis, few companies are effectively managing the transition...and although most recognize the problem, few are doing anything about it

- 66% of companies do not have an age profile of their workforce
- 63% do not have an inventory of available skills
- 23% of companies educate managers in managing skills transfer
- 13% of companies evaluate skills gaps and incorporate them into knowledge transfer processes
- 41% of companies allow individual business sectors to manage knowledge transfer

Source: 2010 United States Census, Institute for Corporate Productivity, Unisys analysis
Companies are facing common Knowledge Transfer Challenges

- Knowledge is transferred only upon employee exit
- Steep and difficult learning curve for new hires
- Limited understanding of which knowledge is critical
- Multiple, conflicting platforms inhibit usage and adoption
- Cost of individual mentoring and coaching is prohibitive
- Inability to find and interact with subject matter experts – knowledge siloes
The business case for Critical Knowledge Transfer is based on reducing turnover productivity loss.

**Employee Replacement Costs**
- Exit/recruitment costs
- Orientation costs
- Training costs
- Wages and salaries while training
- Lost productivity
- Quality problems
- Temporary replacement costs
- Customer dissatisfaction

**Employee Turnover Costs as % of Salary**
- Clerical/Administrative: 50-80%
- Skilled Hourly: 75-100%
- Professional: 75 – 125%
- Technical: 100 – 150%
- **Engineers: 200 – 300%**
- Supervisor/Team Leaders: 100 – 150%
- Middle Managers: 125 – 200%

Bold – costs impacted by critical knowledge transfer

Source: Coaching as Talent Retention Solution, Jack J. Phillips, 2013
Success is dependent on capturing knowledge throughout the Employee Knowledge Lifecycle

1. Recruit
   - Educate on potential opportunities
   - Leverage recruit and company networks to inform

2. Onboard
   - Build a network of colleagues
   - Join organizational and role-specific communities
   - Utilize training capabilities

3. Develop Expertise
   - Build and share expertise through participation in communities and newsfeeds
   - Capture explicit IP through knowledge capture processes

4. Transfer Knowledge
   - Support current role through continued SME participation
   - Expand and transition network to new role
   - Leverage video and wikis to capture tacit IP and enhance discoverability through enterprise search

5. Exit
   - Identify and remediate potential gaps through communities and SME networks.
   - Enable and maintain dialogue through alumni network.
Unisys Case: Engineering Workforce Renewal Initiative
Our workforce situation

Unisys Workforce Age Demographic - 2008

- 31% of our engineering base was 55+ at the end of 2008
- The average age was expected to continue to rise
Unisys Workforce Renewal Framework

Assess & Analyze
- Business Strategy (future state)
- Workforce Analysis (current state)
- Demand Planning (gaps)

Plan & Design
- Attrition / Performance Management
- Knowledge Management
- Career & Development Planning
- Hiring Strategy / Campus Recruiting

Apply & Implement
- Set the Vision and Strategy
- Define and implement architecture
- Identify and Develop Capabilities
- Develop and implement change management and communications plans
We developed a holistic approach to Critical Knowledge Capture

In today’s world, employee knowledge must be managed as a critical asset

**Asset Prioritization**
Identification and prioritization of knowledge assets - used to focus the initiative on the highest value information

**Knowledge Management and Information Architecture**
Defining the structure and classification system for information

**Search Architecture and Optimization**
Defining the search architecture and processes required to ensure that the most relevant information is returned to end-users

**Tacit IP Capture and Reuse**
Use of social technologies, such as wikis and video to capture and reuse tacit IP

**Communities and Crowdsourcing**
Development of role based knowledge communities to share best practices, evolve skillsets and expertise, and crowd source ideas that lead to new and refined innovations

**Workflow Applications and Processes**
Development of knowledge capture, reuse, and transfer applications and processes, integrated into your existing workflow

**Change Management and Employee Engagement**
Development and execution of a robust change management and employee engagement campaign to drive awareness, adoption, usage, and benefit capture

**Search Architecture and Optimization**
Defining the search architecture and processes required to ensure that the most relevant information is returned to end-users
Unisys Case Example
Engineering Knowledge Transfer

Business Challenge
• Loss of critical engineering knowledge from retiring employees
• Many of the systems developed by these engineers are still in use
• Published documentation does not always include subtleties of design

Solution
• Wiki-based repository for knowledge retention and dissemination

Results and Benefits
• Current repository contains 2.9 Gb of critical knowledge articles
• Repository continually grows and evolves
• Improved access to critical engineering knowledge
• Retiring employees feel a sense of pride for leaving a legacy

Tacit Knowledge Capture & Transfer Framework

Key Themes
• Align tacit IP with evolving business needs
• Periodic identification and replenishment of SMEs
• Periodic content assessment for authoritativeness and completeness
• Embed knowledge sharing in daily routine

Approach
• Align tacit knowledge with evolving business needs
• Identification of subject matter experts and candidates
• Every topic has a content owner, typically a subject matter expert
• Periodic content assessment and refresh for authoritativeness and completeness
• Embed knowledge sharing and reuse in work routines
• Use of a wiki to organize and exploit knowledge in existing documents
Example: Explicit Knowledge Transfer

Engineering Knowledge Center

CodeVault

Recent

$OMIT in ALGOL, #IF in C#
You might find Algol code that contain something like
$SET DEBUG
$SET OMIT = DEBUG
<some code>
$POP OMIT

This provides a way to make it so it's easy to remove several <some code> segments before compilation, just by including/excluding "$SET DEBUG" at the beginning of the code...

Dennis Benson, 2014-02-19 12:56:59 AM UTC - Code Snippet - 60 views - 0 comments

Display a number in ALGOL
There are different methods of printing to a terminal, but this code uses the DISPLAY function.
In this example, the REAL is converted to a string and concatenated to a previous string using the || operator.
Example: Unisys “Unipedia” Enterprise Wiki

**Business Challenge**
At Unisys we have a constantly evolving vernacular and are also guilty of acronym abuse. While separate individuals over time have stepped up to maintain a glossary of terms, we found a number of shortcomings:

- The list of terms and acronyms were never comprehensive enough and required digging through multiple different glossaries.
- Some of these glossaries are not easily accessible.
- Most of these terms and acronyms didn’t have explanations.
- Even if these terms had explanations, they were not always accurate, relevant, or up-to-date.
- When the people who maintain these glossaries eventually leave the company, nobody takes responsibility.

**Solution**
Realizing this problem affects all our employees and not just specific business units or departments, we decided to consolidate all existing glossaries into inter-connected wikis and crowdsource contributions from all employees. We named this tool “Unipedia” after its similarity with Wikipedia, with some modifications to the editorial process to ensure content ownership and relevance.

**Results**
Unipedia is another step in our social collaboration journey. It offers more ways for employees, including new hires, to connect, collaborate and help each other. Now when a new employee joins Unisys and faces the barrage of acronyms and terms that are peculiar to our company, they can turn to this simple tool for ready answers.

When a subject matter expert spots a new concept or trend developing in the industry and wants to share this quickly and simply with fellow employees, he or she can quickly create a new page. When a department deems a specific set of information authoritative, they can lock those pages so others can’t change them, but still can comment on the content.

In summary, Unipedia simplifies information access and takes inventory of our bodies of knowledge via social collaboration.
Example: Tacit Knowledge Transfer

Unisys “My Site” Employee Profile

Example Programs and Activities

• Community Webinars
• Tech Talks
• Patent Review Process
• Mentoring Program

Example Programs and Activities

• Expertise Discovery
• Transparency sharing of knowledge and information
• Targeted Q & A
Key Takeaways

• Clearly articulate the objectives and goals of your knowledge transfer initiative

• Prioritize knowledge assets and focus on the most critical first

• Leverage social capabilities such as communities to allow knowledge transfer one-to-many instead of one-to-one

• Make knowledge management an integrated part of the employee lifecycle

• Support knowledge management with a robust change management and communications effort

• Align incentives and recognition programs to drive adoption and acceptance
Thank you!

To learn more about how Unisys can help jumpstart or reinvigorate your Critical Knowledge Transfer or Social Business Transformation initiative please visit our website at:  www.unisys.com/usb
Knowledge Transfer Across Generations

Slides not covered during presentation
KMWorld 2014 Presentation
November 5, 2014

Susan McCabe, Enterprise Collaboration Consultant
Unisys Unified Social Business Practice
Our key challenge was the lack of a pragmatic, cost effective approach to transfer knowledge

<table>
<thead>
<tr>
<th>Knowledge Transfer Challenges</th>
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Assess and Analyze

**Business Strategy**
- Where are we in relation to the market? How do we stand against our competitors?
- What are we trying to build and grow?
- Do we need to be a market leader? Are we already a market leader and need to stabilize?
- What labor requirements do we need to support the key growth areas of our company?
- What types of talent do we need to bring in to support your strategy?

**Workforce Analysis**
- What is our organizational design and pyramid structure? What roles exist?
- What skills do our people possess?
- Where are our people located and what is the price point for them?
- Have we identified the key and critical roles of our organization?
- What is the risk of attrition and impact of loss within our key roles?

**Demand Planning**
- Do you have a pipeline of talent to backfill key positions, based on the gaps identified during workforce planning?
- Have we identified our skill shortages?
- Do we have a plan to hire, retain, develop, and/or restructure to match supply and demand?

Analysis as the Basis for Prioritization
Plan and Design

**Hiring Strategy**

Does our talent acquisition strategy fill our priority gaps and upgrade the talent level in the organization?

**Attrition / Performance Management**

Are we achieving a good balance between Attrition and Performance Management to enable the churn in our organization, but also retain key and critical people?

**Career & Development Planning**

Do we have a defined organizational structure with a career path and learning & development program?

**Knowledge Management**

What intellectual property exists in our organization today and how do we plan to manage that knowledge?
Apply & Implement

1. Set Vision and Strategy
   - Identify and prioritize knowledge assets and define employee scope

2. Define Architecture
   - Define the structure and classification system for information

3. Identify and Develop Capabilities
   - Define required knowledge transfer and social capabilities

4. Develop Change Management and Communications Plan
   - Develop plan to ensure adoption, usage, and benefit capture
Set Vision and Strategy

Key Activities

- Define vision and key objectives
- Identify and prioritize knowledge assets
- Identify impacted employee groups

Key Deliverables

- Agreed upon and measurable initiative objectives
- Prioritized list of critical knowledge assets
- Employee population impacted by each critical knowledge asset
Define Architecture

Key Activities

• Develop knowledge and information architecture
• Define search architecture and optimization approach

Key Deliverables

• Knowledge and information architecture for highest priority information assets
• Search and retrieval architecture
Identify and Develop Capabilities

Key Activities

- Define and implement required knowledge communities
- Define and develop tacit IP collection and sharing capabilities
- Review and refine existing knowledge capture workflow processes

Key Deliverables

- Executing knowledge communities focused on impacted employee groups
- IP collection and sharing capabilities (e.g. wikis, videos)
- Refined knowledge capture workflow processes
Develop Change Management and Communications Plan

Key Activities

- Develop and execute awareness plan
- Develop and execute communications and roll-out plan
- Define, develop, and deploy education and training plan

Key Deliverables

- Awareness and communications artifacts
- Training and education materials