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From Typewriters to Tablets: A Rapidly Changing Workforce and Workplace

What This Means for Today's YP

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BUILDING A BETTER WORLD

Why Have This Discussion?

“One big challenge I see for the future of engineering is retaining corporate knowledge. A lot of engineers in the Baby Boom Generation have substantial background information in their heads and hands-on experience that will be lost if we don’t make it accessible to future engineers who only know what computer programs tell them.”

~ **Daniel R. Snyder**, recent retiree and advisory-level consultant at **SKF USA**



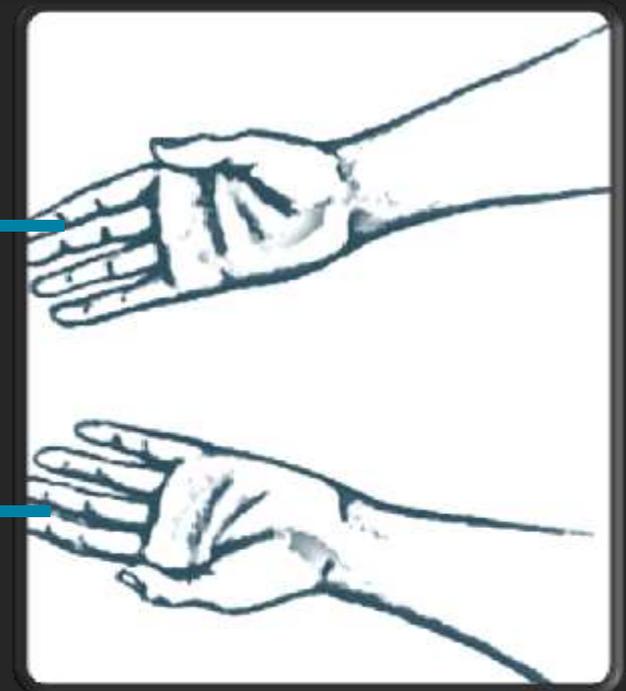
Objectives

- Provide examples and discussion of:
 - How YP's (**Millenials**) can:
 - Utilize technology to aide in knowledge transfer
 - Have ownership in the succession planning process
 - Utilize social skills to capture undocumented knowledge



Some Things to Remember

- There is no one 'silver bullet'
- I'm giving just some suggestions / starting points
- Extensively studied subject – lots of data
- Data specific to 'wet infrastructure' was not found
 - If you have suggestions for the group, please email them to me:
 - Kysa.Cronrath@mwhglobal.com
- I've used examples / data from several industries



Harnessing Technology to Aide in Knowledge Transfer

- Take an inventory of the tools available to you at your organization!



Learning & Sharing Knowledge

e-learning Learning at MWH
One-stop shop for all MWH learning. Contains all

Career, Performance & Learning

MWH Compliance Training 2013-2014

Online Help

MWH Economic Model
Animated Shorts under "Browse for training" in Learning Portal

blog Knowledge Blog
Click here for the latest knowledge blog post, where MWH. Read More ..



mVIPER™
Visually Integrated Planning and Engineering Resources

mVIPER™ is more than a software – it's an approach. It brings together AutoDesk, GIS and mTOOLs into one offering that spans planning through asset management. Use of mViper™ brings clients a 3D view plus time and cost to illustrate planning needs.

- 1
- 2
- 3
- 4
- 5



Career Development Forum
Engaging, personal and content driven forum for development

Employees can engage with others within the forum through the following nodes: Discover Yourself, Create Your Future, Books and Beyond, and Circles Hub. Grow, develop, and inspire others to do the same by embarking on the journey together.

- 1
- 2
- 3
- 4
- 5



Harnessing Technology to Aide in Knowledge Transfer

- Use the web to access educational materials from Universities and trade associations!
- Use apps!

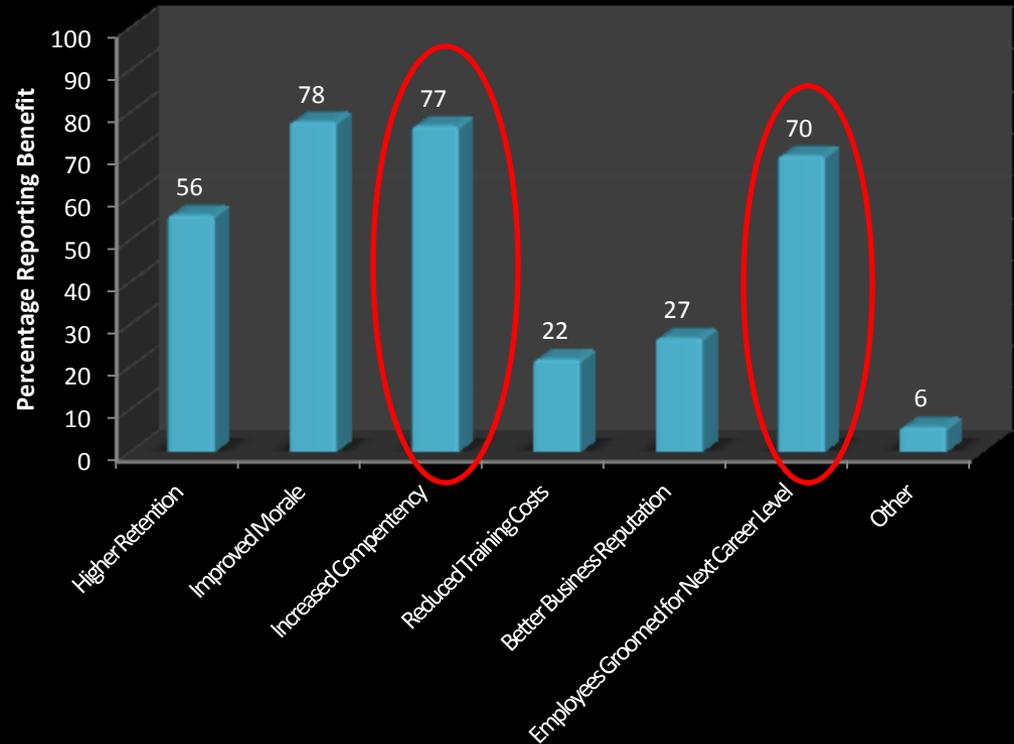


Take Ownership in Succession Planning

- Find a mentor.
- Be a mentor.



Benefits of Workplace Mentoring



Capturing Undocumented Knowledge

- Electric Power Research Institute (EPRI)
 - “Capturing Undocumented Worker Job-Knowledge”
 - Identify Experts Whose Knowledge is Needed/Desired
 - Develop Plan to Elicit/Retrieve Information
 - Select Method to Draw Out Information
 - Store, Present, and Share the Information



Capturing Undocumented Knowledge

- EPRI Case Study Continued
 - Responses to Their Knowledge Harvest:
 - Codify and document (procedures, checklists, inventories, etc.)
 - Engineer it out (change process, update equipment, use smart tools and technology, eliminate task)
 - Educate and train (classroom, simulations, coaching and mentoring)
 - Establish alternative resources (external consultants, retirees as advisors, professional networks, shared staff)



Acknowledgements

- Photo Credits:

- Slide 3: MWH mTools™
- Slide 4:
<https://virulentwordofmouse.files.wordpress.com/2012/09/on-the-one-hand.jpg>
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http://www.imore.com/sites/imore.com/files/styles/xlarge_wm_brw/public/field/image/2015/01/itunes_u_standford_swift_hero.jpg?itok=N YomUNdk
- Slide 7: <http://tnsatlanta.org/news/mentors-meaningful-work-and-diversity-new-research/>, [http://www.management-mentors.com/Portals/41809/images//Blog%20Post%20April_27_mentoring%20chart_\(Rene\).jpg](http://www.management-mentors.com/Portals/41809/images//Blog%20Post%20April_27_mentoring%20chart_(Rene).jpg),
- Slide 8:
https://inlportal.inl.gov/portal/server.pt/gateway/PTARGS_0_2_810_257_0_43/http%3B/exps3.inl.gov%3B7087/publishedcontent/publish/communities/inl_gov/newsroom/home_page_feature_stories/archives/2009/stories/epri_inl_report_outlines_nuclear_energy_strategy_7.gif
- Last Slide: <http://library.sasaustin.org/images/question.jpg>

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Questions?

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