

# Getting (and Sharing!) the FACTS: Factors, Analogies, CER's & Tools/Studies

Presented to the International Cost  
Estimating and Analysis Association

June 12, 2014

Ruth Dorr and Daniel Harper



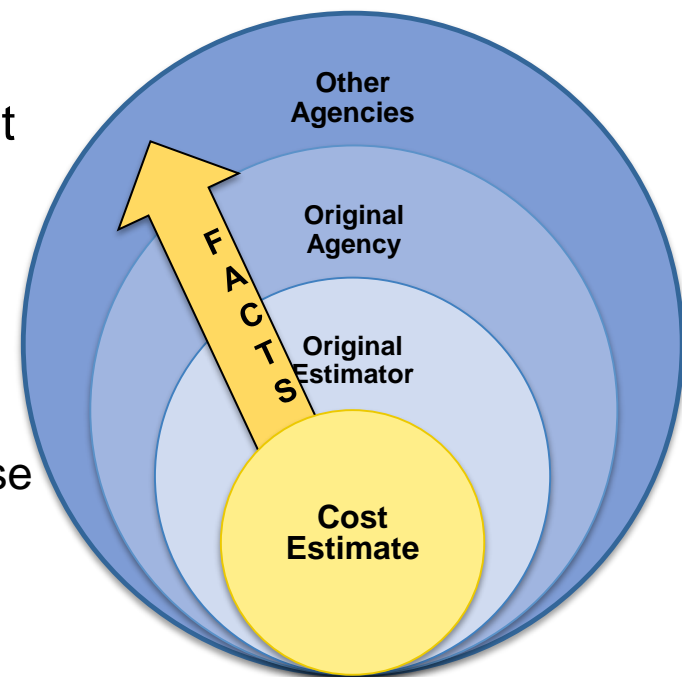
# What is Cost FACTS?

- A community/network centered around sharing Cost-related FACTS  
Factors, Analogies, CER's & Techniques/Studies (FACTS)



# Challenges to Sharing Cost Data

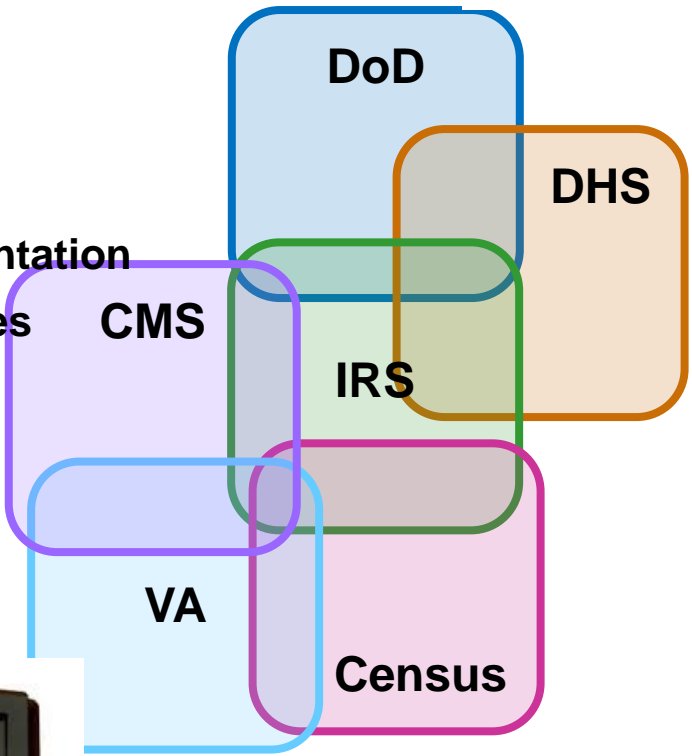
- **Even internally, there are barriers to sharing cost data on a project**
  - We cannot always freely share all data on cost estimates, even within our own organizations!
    - DHS requires all personnel who discuss or view DHS data to have current suitability (i.e., clearance) for each DHS Component
    - IRS requires all personnel to have current MBI
    - Classified programs can only be shared with those who hold appropriate clearance level and have need to know.



- **While we cannot always share an entire cost estimate – frequently we can share the *building blocks* of the estimates.**
- **Cost FACTS works to overcome these challenges by providing a platform for shareable Cost FACTS**

# Many Government Agencies have Similar Elements in Cost Estimates

- Software Dev and licenses/ IT Hardware/
- Help Desk Support
- Facilities
- Cloud Computing
- Biometrics
- PIV/CAC Card Implementation
- Unmanned Arial Vehicles





# The Case for Change in 3 Acts



Image Copyright © 2013 <http://www.businessandsoftwarestrategyforglobalisation.com/choosing-a-social-media-platform-how-to-find-the-most-effective/>

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# Act 1: The Wisdom of Crowds



# Crowdsourcing\*

- The crowdsourcing model [taps] the collective knowledge of the community to harness the crowd to directly produce goods and services.
- [...] the crowdsourcing model *actively involves the community in the process of online production activity.* [emp. mine]
- Metcalfe's law states that the value of a network is proportional to the square of the number of connected users of the system



\*"Rules of Crowdsourcing: Models, Issues, and Systems of Control," Author: Gregory D. Saxton, Onook Oh, Rajiv Kishore, Source:

# Act 2: Open Government and Open Source





# The Open Government Initiative and the Open Source Movement

- In 2009 President Obama's signed the Memorandum on Transparency and Open Government
  - Government should be transparent, participatory, Government should be collaborative
- Open Source:
  - “Open source refers to a program in which the source code is available to the general public for use and/or modification from its original design.”
  - “Open source code is typically created as a collaborative effort in which programmers improve upon the code and share the changes within the community. “ -*Wikipedia*



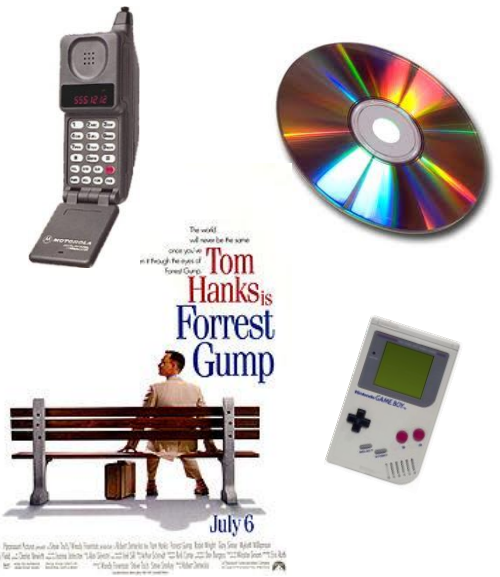
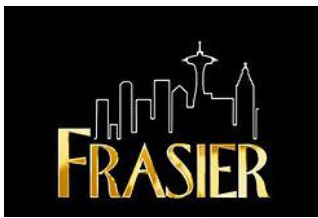
# Act 3: Social Networking vs. Traditional Knowledge Management



Image Copyright © 2013 <http://www.businessandsoftwarestrategyforglobalisation.com/choosing-a-social-media-platform-how-to-find-the-most-effective/>

# 1995 vs 2014 Technology

## ■ E-mail lists: so 1995



## ■ Social Networking and KM tools: so 2014!!!





# The 1995 Way To Get Answers...

Does anyone have an IGCE checklist I can forward to Jim?

Thanks,

Herb

**From:** Leigh, Jim  
**Sent:** Friday, November 19, 2011 10:52 AM  
**To:** Kaylor, Herbert W.  
**Subject:** IGCE Checklist

**From:** Chau, Hieu T.  
**Sent:** Friday, November 19, 2011 10:52 AM  
**To:** Leigh, Jim

**From:** owner-k  
**Sent:** Tuesday, November 22, 2011 10:52 AM  
**To:** k461 Dept k  
**Subject:** Risk M

All,

I'm trying to get cost estimation (Price TruePlanning/S/H, ACE-IT, SEER...etc). These are the types of tools that would be of considerable use to me in the near future. If you can provide guidance on what is being used currently and how to obtain a license, it would be greatly appreciated.

Thanks,

Dan Won

**From:** Pegnato, Joe  
**Sent:** Thursday, June 09, 2011 3:48 PM  
**To:** Miller, Lynne E.; Nam, Haeme; Garrett, Ellen K.  
**Subject:** BOE Template

Chris Thomas needs a good BOE template. Can one of you help him?

**From:** Perreca, Chris  
**Sent:** Wednesday, May 23, 2012 10:52 AM  
**To:** Chau, Hieu T.  
**Subject:** Can you direct me to a good example a 'Cost Template' ?

Hieu -

Good morning. Can you direct me to a good example a 'Cost Template' ?

Thank you - [Chris Perreca](#)

[Infrastructure, Operations, & IT Service Management](#)

ll...etc) and cost

**Given the nature of these frequent, often similar, requests, it simply made sense to expedite practitioners' response time by posting templates, studies, and other resources**

# Enterprise Social Networking vs. Traditional KM

- Much simpler, 90% of functionality, minimal training
- Bottoms up, employing wisdom-of-crowds vs. top-down “single moderator” approach
- No license required-just a web browser
- “SharePoint lite” allowing for collaboration and file sharing *without the need for a SharePoint administrator!*
  - Ease of use: If you can upload or find a video on YouTube, you can use Handshake
- Provide feedback on artifacts via comment or simply “Like” it
  - Adds an aspect akin to Amazon.com *User Reviews* where practitioners can post evaluation of artifacts
- Limited networks to draw from: Many companies have fairly small cost shops



# The *Handshake* Solution



- E-mail dialogue preserved for future members (vs. sitting in e-mail inboxes, inaccessible to new employees or non-MITRE partners)
- Handshake groups can be opened up to partners!
- Interface w/ variety of SMEs (vs. only cost SMEs sign up for cost-focused e-mail list serves, (i.e., e-mail discussion lists))
- Scalability: growth over 2 years from four to over 200 members
- Offers a simple Calendar feature, “WIKI” pages
- See site [here](#) (MITRE Fast Jump “FACTS”) or contact [djharper@mitre.org](mailto:djharper@mitre.org), [rdorr@mitre.org](mailto:rdorr@mitre.org)
- See [McKinsey](#) and [CEB](#) for additional articles related to social networking for the enterprise

“Email is where knowledge goes to die” – Bill French.

	TOTAL	PAST 7 DAYS	TREND
Discussions	63 67	2 6	
Files	129 45	1	
Pages	9 3	-	—
Blog posts	3 4	-	—
Albums	1	-	—

Contributing members: 22%

# The Handshake Solution

- Click [here](#) for a two-minute *Handshake* primer (accessible to non-MITRE Partners)

## MITRE's "Handshake" Lets Users Meet and Collaborate in the Virtual World

September 2010

Handshake, a new social networking tool developed by MITRE, enables an organization to seamlessly collaborate with partners and customers while still keeping proprietary information protected and secure.

[in Share](#)
[g+ Share](#)
[TweeT](#)
[f SHARF](#)
[PRINT](#)

**Handshake • MITRE Partnership Network**

**Log in**

Username

Password

**Log in**

Remember me

**Latest activity**

Bookmarked: IBM Research | Joan Morris DiMico  
Laurie Damanos 3 days ago

Bookmarked: MyMI  
Donna 4 days ago

Test file  
Donna 4 days ago

MIT Group


**MITRE** [CONTACT US](#)

ABOUT CENTERS CAPABILITIES RESEARCH CAREERS PUBLICATIONS NEW

Advanced Technologies

Social Software and Collaboration

MITRE's role is to help sponsors use the power of communication and connection for improved outcomes.



Our sponsors are connecting like never before—agency to agency, civilian to military, and everything in between. Social networking is a game-changing factor, but the challenge is to use these tools in a trusted environment.

MITRE's role is to help sponsors use the power of communication and connection for improved outcomes. Researchers throughout the company are working to develop breakthrough technology, processes, and methods for enhancing connection, securely. Our social scientists actively research how social networking tools, such as Twitter and Facebook, can provide valuable insights into sentiment and opinion in countries around the world. This concept, called "social radar" may prove pivotal in how the U.S. and its allies prepare for and react to global political change.

A Handshake to Enhance Partnership

To understand our sponsors' challenges better, we also created Handshake, our own social-business networking platform. Handshake allows us to cultivate and support relationships among current and former employees, customers, sponsors, industry, vendors, academia, and

Capabilities

- Overview
- Systems Enginee
- Cybersecurity
- Advanced Techn
- Overview
- Information S
- Cloud Cor
- Privacy
- Service-O
- Social Sof
- Signal Proces
- Mobile Techn
- Acquisition Effic

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# Metrics and Stats

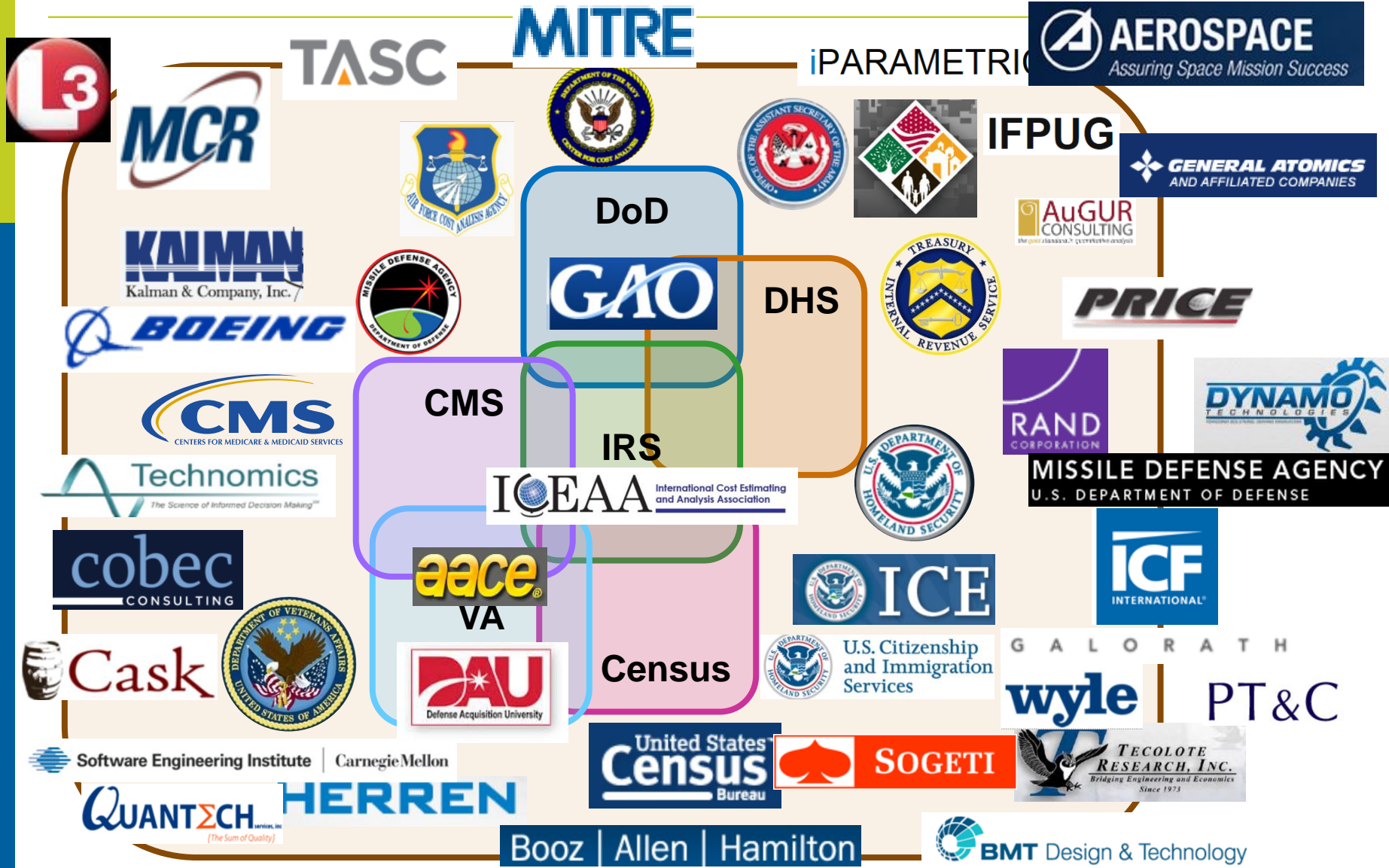


# Groups Represented

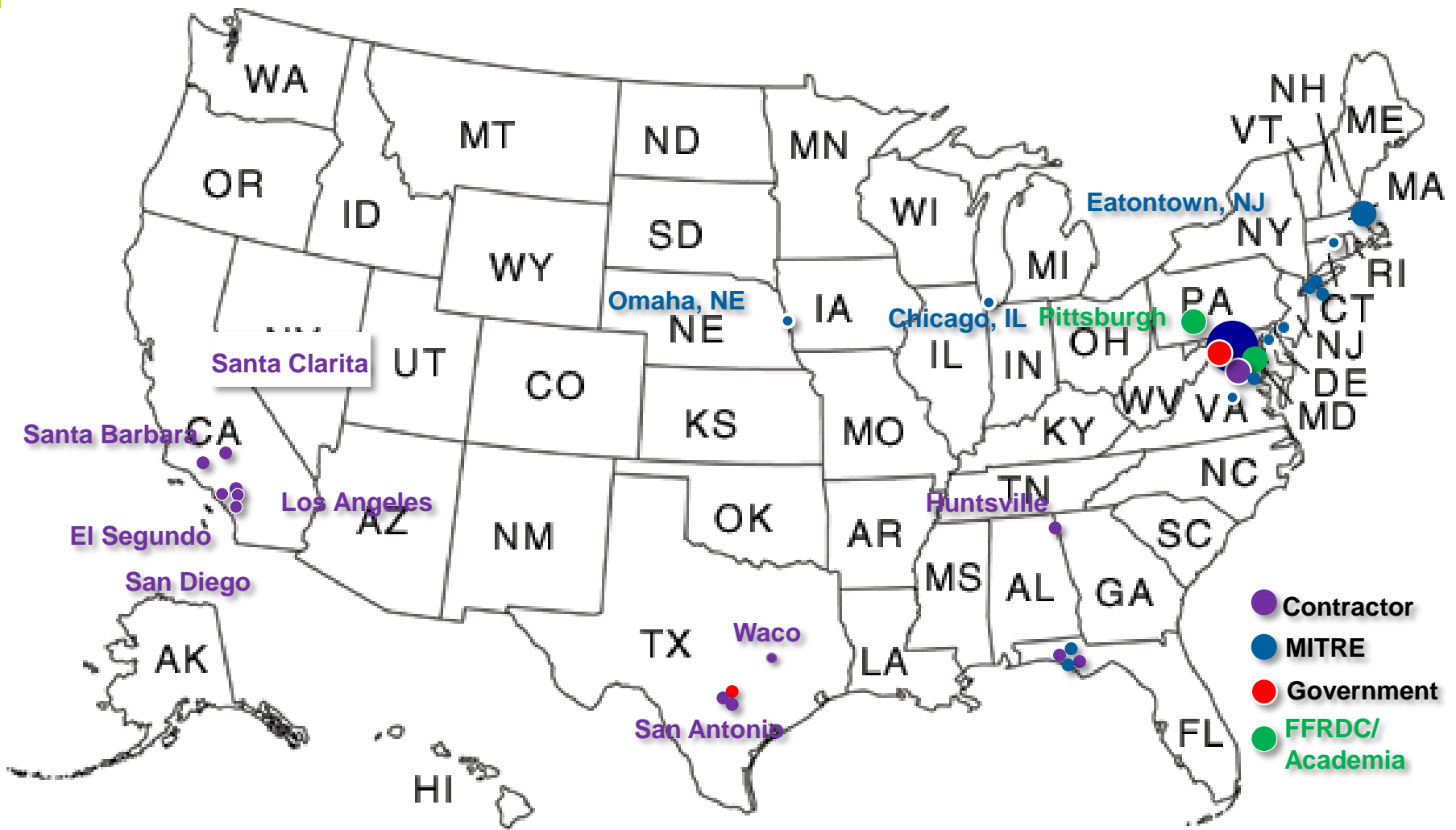
Government

FFRDC/ Non-profit/Academia

Contractor/Industry



# Geographic Diversity



35% non-MITRE, and ratio will increase, since MITRE “ceiling” just about reached)

# Internationally Diverse

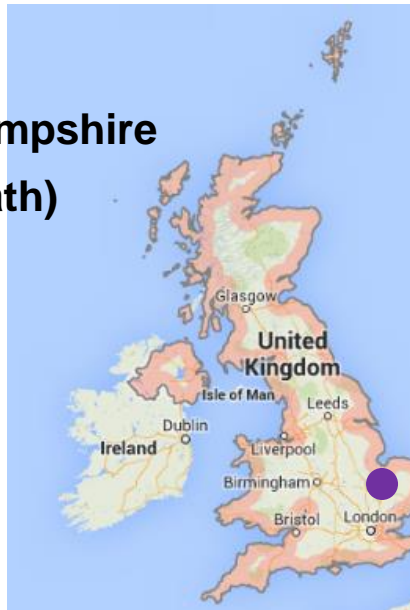
**Ottawa, Canada  
(Invited)**



**The Netherlands (SOGETI, SW  
measuring tool COSMIC)**



**Andover, Hampshire  
(Galorath)**



**Melbourne, Australia  
(BMT Design & Technology)**



- Contractor
- MITRE
- Government
- FFRDC/  
Academia

# Cost FACTS compared to other Handshake Groups

- As of May 14 2014
- 31<sup>st</sup> most popular Handshake Group in terms of # of members (of 652 total groups)
- One of the *highest* in terms of activity

## Group metrics

	TOTAL	PAST 7 DAYS	TREND
Discussions	<b>79</b> 95	<b>1</b>	
Files	<b>142</b> 53	<b>1</b>	—
Pages	<b>9</b> 3	-	—
Blog posts	<b>3</b> 4	-	—
Albums	<b>1</b>	-	—

Contributing members: 26%

[Create a new group](#)

Newest | A-Z | Popular

« Previous | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | ... | End | Next » 652 total

**The Cost FACTS: Factors, Analogies, CER's & Tools/Studies** Open group 204 members  
This group is a forum for dialogue and knowledge sharing amongst MITRE and partners across the cost community (including academia, government and industry)

**Sitting is Killing Me!** Open group 202 members [Leave group](#)  
People tired of sitting all day who want the option to work standing up

**Fusion Center Integration Laboratory** Moderated group 200 members [Request membership](#)  
Fusion Center Integration Laboratory

**DoD Mobility Group** Modi  
DoD focused mobile computing

**Visual Display of Comple Data**  
We focus on creative ways to c

**Diversity Discussion Gr**  
CDAC Discussion group to heig

**Agile Collaboration Gro (ACG)**  
Collaboration on agile methods

**iPhone Users**  
iPhone/iPod Touch Users

**Microsoft Office 2013**  
MS Office 2013 discussion area

**Strategic Management**  
This group exists to connect th strategic planning, performanc practitioners as well as those v to past your opinions, because position.

[Edit](#)

**Group members**

204 members (131 MITRE, 73 Partners, 9 new this week)

# Even Watson and Bell wrestled with these issues (i.e., risks are not exclusive to “social media”)

Look, Watson! I've invented the telephone!

People will be able to talk to one another whenever they like, without traveling!

People working on a project can speak directly to one another!

Information and decisions will be much easier to obtain!

TELEPHONE!!

People might give out company information!

People might say bad things about the company!

People will be wasting time!

We can't afford to give everyone their own telephones!

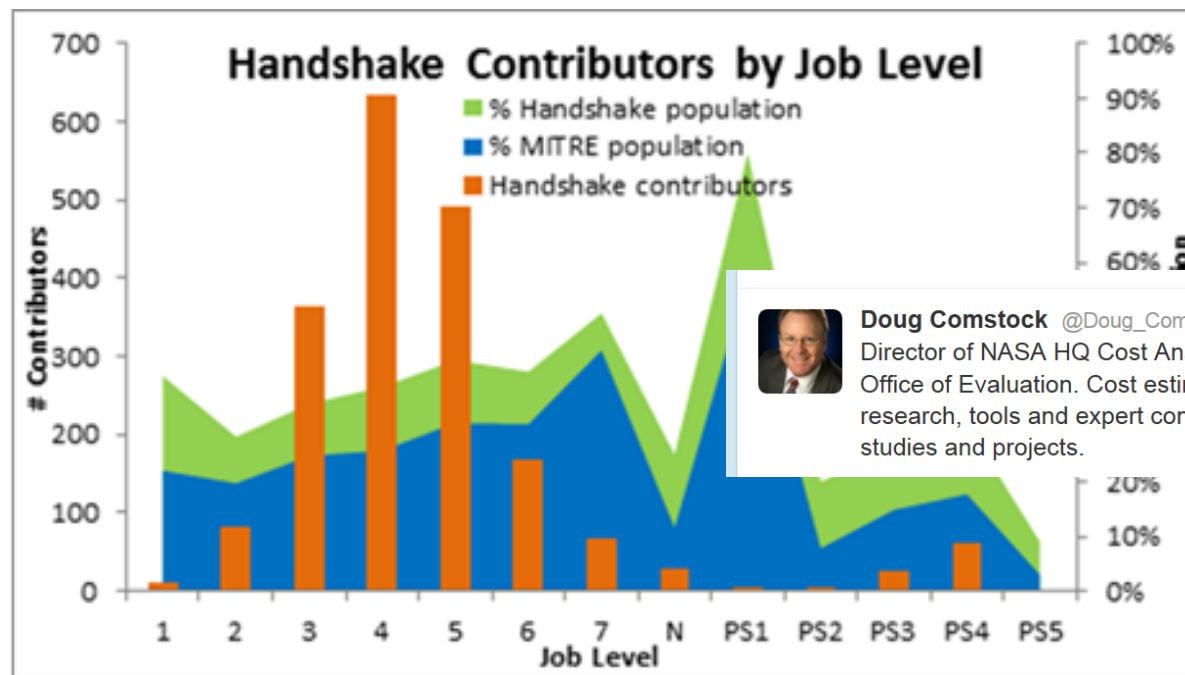
Our people are not tech-savvy. They won't be able to use such as thing as a telephone!

How will we control it!?! !

Bozarth, *Social Media for Trainers*

# Enterprise Social Networking: not just for “Gen Y”

- **Social networking is not only for the “under 40” set**
  - At MITRE, most handshake contributors (approximately 70%) are more senior (mid-level manager to principal)
  - Even on Facebook, nearly half of the user population is over 45.



**Doug Comstock** @Doug\_Comstock

Director of NASA HQ Cost Analysis Division in Office of Evaluation. Cost estimating policy, research, tools and expert consulting to NASA studies and projects.



Following

# What's in it for Me & My Organization?

- Why should I “give it away” for free?
- It'll help you (you scratch my back...). The customer or colleague you help today could become your employer if you demonstrate value!
- Technology has changed many industries' business models. Think of these examples:
  - Developers gives away apps and charge for additional features
  - MP3s have changed the music industry-Some bands give away the album and charge for concerts
  - A cheeky upstart “*someecards.com*”
- **The Golden Rule (do unto others...)**
- **Customer recognition**
- For more see HBR: [article](#) “Get Your Team to Work Across Organizational Boundaries,” [“Bridging Software Communities through Social Networking”](#)



Image Copyright © 2012, someecards.com

# What's in it for Me & My Organization?

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- **Knowledge retention due to attrition or retirement**
  - We even had a MITRE employee go to the government who is still a member of the group
  - One member who had been “downsized” connected with a colleague he saw on the site and ended up being hired by that organization



# Facilitating Discussion Across Government

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- In one case, a customer from the *Intelligence* community posted a question about estimating the cost of outfitting a test and evaluation facility.
- That question was answered within 48 hours by a member from the *DoD* world, who was able to provide total cost, including a breakdown by elements such as rent, government, labor, hardware, etc.
- Perhaps most importantly, this information is now available to other members as they come across this question in the future. **Absent the Cost FACTS platform, these two very different customers would not have had any forum in which to interact.**
  - This example also proved a great success case for our contention that even though customers may be very different, they often have similar challenges and can learn from each other.

# A Picture is Worth a Thousand FACTS

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# Handshake 101

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- Click [here](#) for a two-minute handshake primer (accessible to non-MITRE Partners)
- Everything you need to know about Handshake you can learn watching this recorded [webinar](#) during lunch (accessible to non-MITRE Partners, but you must be a Handshake member)



# User Guide and Best Practices

- Don't simply think of it as a marketing channel
- Do not post anything marked FOUO (For Official Use Only), Proprietary or Sensitive
  - E.g., no Gartner Studies without permission (They frown on posting those to SharePoint OR Handshake)
- **Hyperlinks** to public proprietary sources okay (e.g. RAND studies)
- If you are unsure, simply ask
- If you make a mistake, it's okay, we'll fix it. No hand-slaps!
- Handshake User Guide [here](#)



IMAGE Copyright © Oxiclean

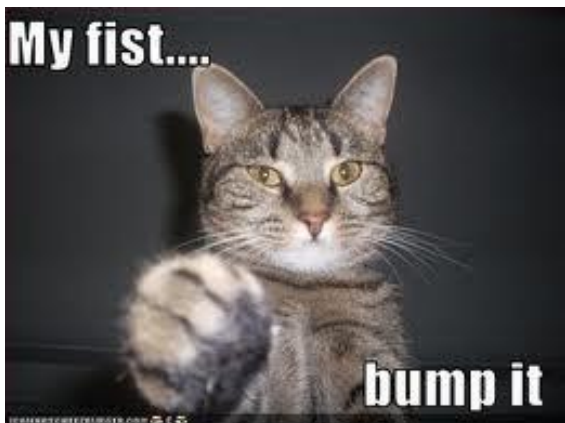
Image Copyright © [http://creaturafanzine.blogspot.com/2013\\_04\\_01\\_archive.html](http://creaturafanzine.blogspot.com/2013_04_01_archive.html)



I thought you loved me-How could you post proprietary data?

# I want to Join!

- You cannot come in unless you are first invited!
- After that you have free reign to comment, post, etc...or simply peruse the conversations and artifacts
  - FYI we are looking for non-MITRE community leaders (Bruce Reynolds from Tecolote is one)
- Send an e-mail to [costfacts@mitre.org](mailto:costfacts@mitre.org) so we can add you as a member (or scan QR code below with your smart phone)
  - You will receive an e-mail invitation with basic registration steps
  - Please provide a work e-mail (i.e., not gmail.com, yahoo)



# What your invitation will look like

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## MITRE Partnership Accounts Invitation for Handshake

You have been invited to access Handshake, MITRE's business networking system.

Follow the link below to start the registration process by establishing a security question, an answer and a password. Please note that you have 10 days to complete this process.

<https://partnership.mitre.org/MCAP/mcapInvitationSecQA.do?cmd=addSecQA&uniqueParam=1383166188571&email=danieljharper2002@gmail.com&invitationId=45859&invitorEmailAddress=djharper@mitre.org>

The following message was included...

Hello, I want to invite you to join my group The Cost FACTS: Factors, Analogies, CER's & Tools/Studies, and my network on Handshake.