

# Leveraging Faceted Search for Project, People, and Socio-Collaborative Experience Discovery

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The MITRE Corporation

Enterprise Search Summit November 2010

### **MITRE**

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### **Overview**

- Introduce you to MITRE's overall information landscape
- Explain why we implemented faceted search
- Describe the process changes we are making in order to enhance the data
- Demonstrate how we are using faceted search to improve enterprise information relationship discovery

# **The MITRE Corporation**

- MITRE is a private, not-for-profit organization chartered to work in the public interest
- Founded in 1958 to provide engineering and technical services to the U.S. Air Force
- Manages Federally Funded Research and Development Centers including:
  - Department of Defense
  - Federal Aviation Administration
  - Internal Revenue Service/Department of Veterans Affairs
  - Department of Homeland Security

### Supports a broad and diverse set of sponsors within the U.S. government, as well as internationally

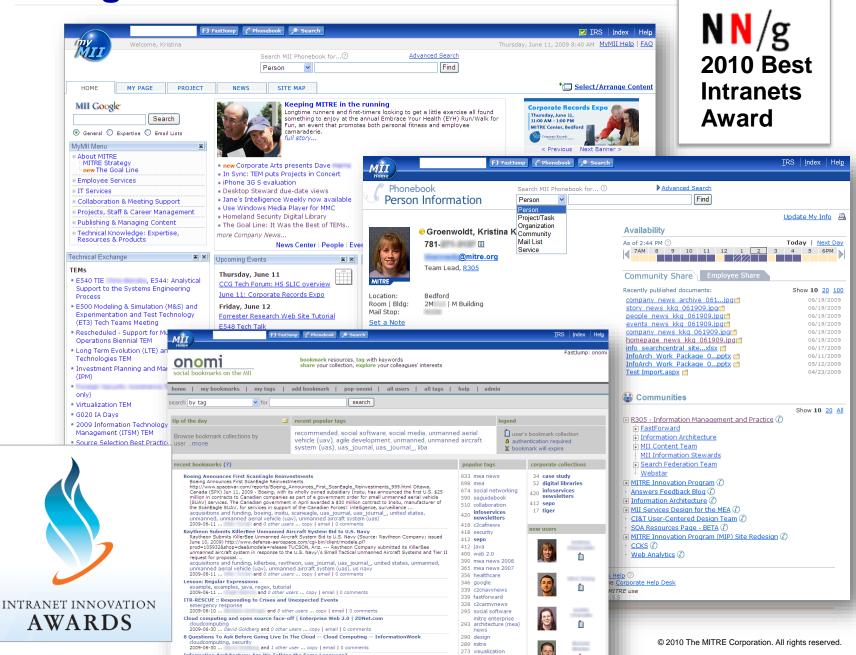


### 7,000 employees worldwide

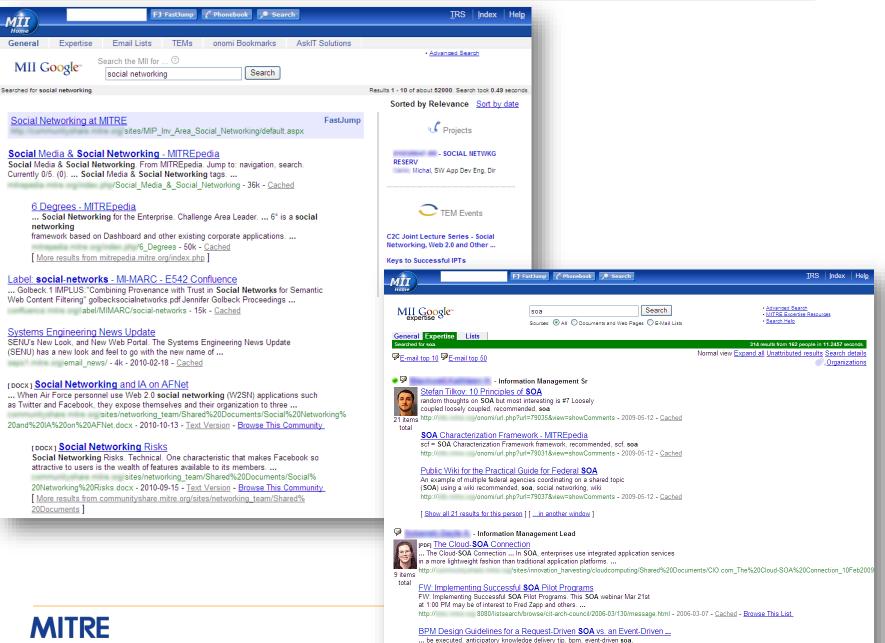


### **MITRE**

### Background



### Background



fes, frontier exploration services, request-driven soa

### Projects, Communities, People, Networks...



# **Answers – Improved Information Finding**

# Projects

Goals, Activities, Impacts, Customer, End Users, Budget, Portfolio, Technology, Outcomes, Recommendations, Products, Metrics

### 🗞 Communities

Owners, Subject taxonomy terms, TAT terms, Type, Activity Metrics, Date, Center, Division, Status

# 🍕 People

Tech Stature, Education, Publications, Open Source, Awards, Patents, Languages, Handshake Profile Data



Leverages the Endeca Information Discovery Platform

### **Common Data Model, Structured Data, Entity Extraction, Clustering, Analytics**

### **Strategy**

- Better capture and describe key "business assets"
  - What is the view of our technical work program?
    - What has our technical work program accomplished?
  - What is the view of our technical staff?
    - What has our technical staff accomplished?
- Identify where we have information but it is not in re-usable form
  - Restructure business systems and processes to collect this information and make it accessible, do not recollect
- Put the information into a discovery system
- Deploy a social networking platform for partner networking, profile management, and social graphs/relationship capture
  - Internal and partner (external) social business networking
  - Improved situational awareness to motivate collection
- Integrate these new elements into existing and planned intranet and partnership network capabilities





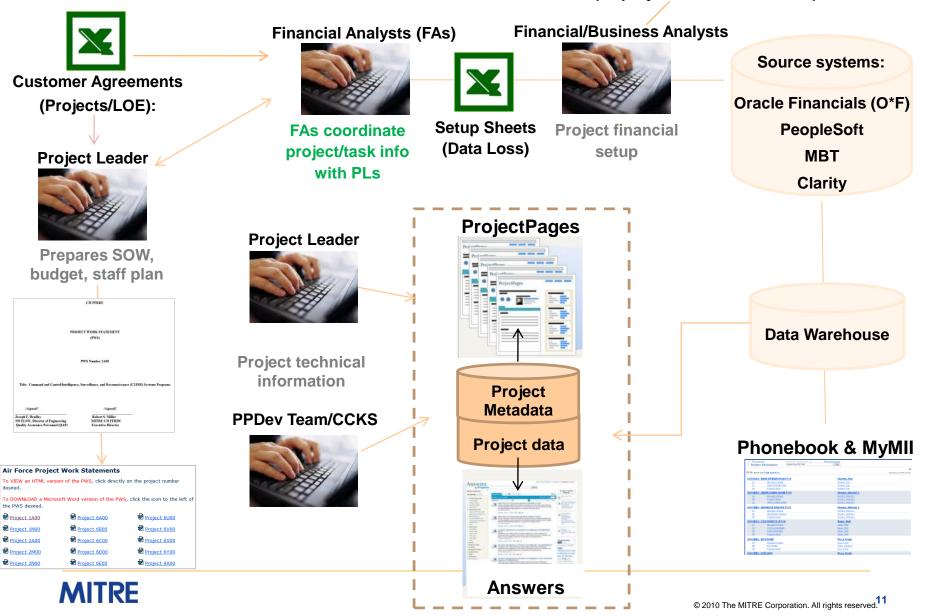
### **Portfolio View**

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	Outcome 2 - Communica	ations Modernization			Systems Engineering (5) Comprehensive Screening (5)		Army Proble MOIE	ding Chemical Production Processes to Address H ems	
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	Outcome 4 - En Route E	Evolution							
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	Outcome 13 - Broadcast and     analyses of NextGen concept and architecture is								
	Outcome 14 - Special S	tudies, Laboratory and	d Data Enhance	ments					
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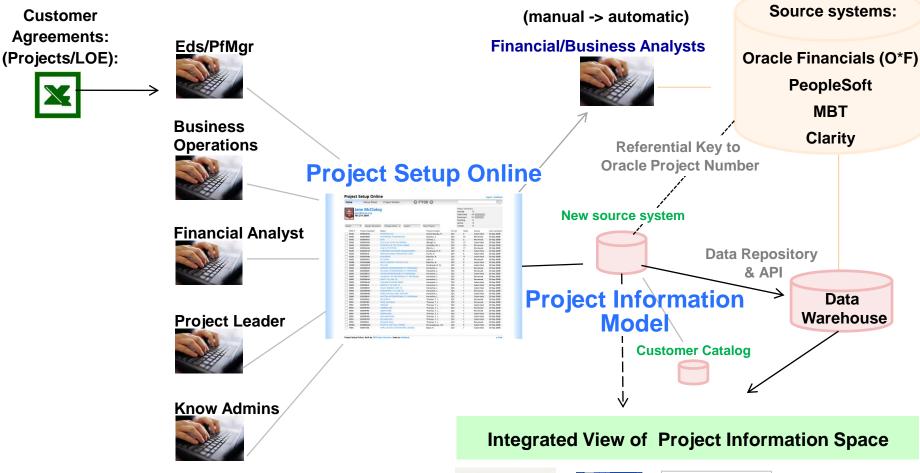
### **Conceptual "As Is" Process**



C3I Validity Files (all projects entered into O\*F)



### "To Be" Process: Data Collected in Source Systems

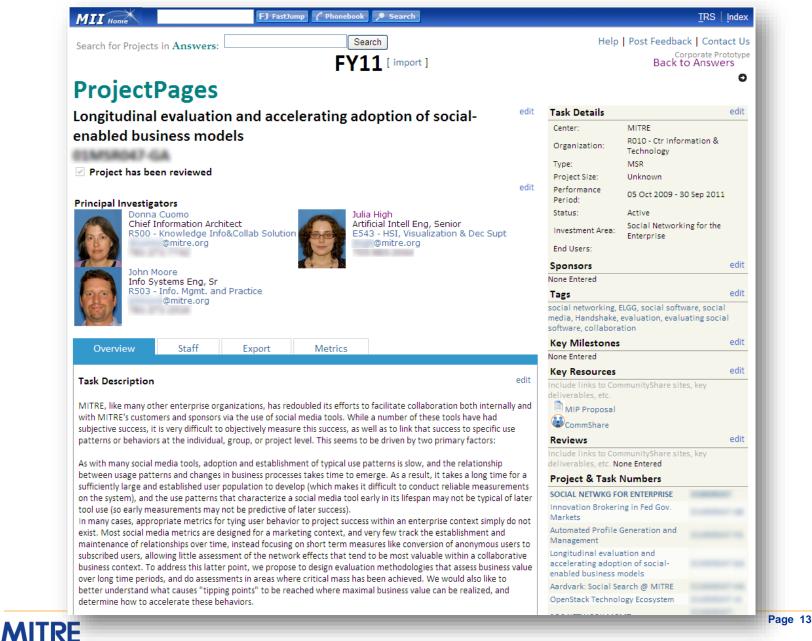


- Capture Work Program details at time of Project Setup (augment existing process)
- Bring all "actors" together collaboratively by creating Online Project Setup application
- Major step toward & foundation for OHIO

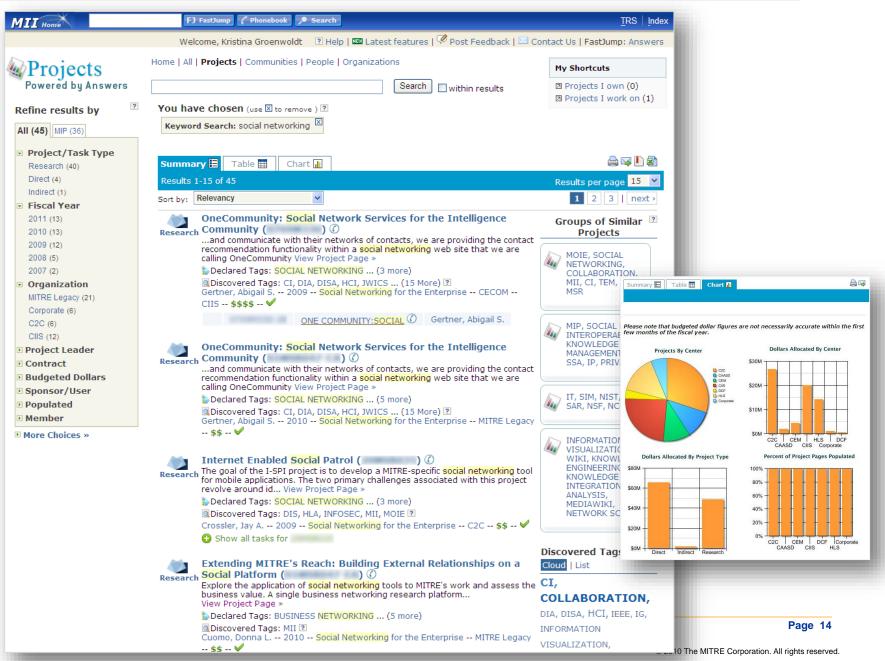
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And other downstream business apps: MRT, Workplan, etc.

### **Sample Project Page**



### **Project Finding**







### **Re-Architect the People Model and Capture Process**

<b>External Activities</b>		
Academic appointments		
Awards		
Certifications		
Citations		
Collaborative relationships		
Conferences	0.	
Courses taught	ວເ	Jg
Education	1	Ac
Government advisory boards	2.	Av
Government appointments		
High impact prototypes	3.	Ci
Industry appointments	4.	Co
Industry outreach	5.	Go
Licenses		
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Professional societies	9.	Pr
Product evaluations		
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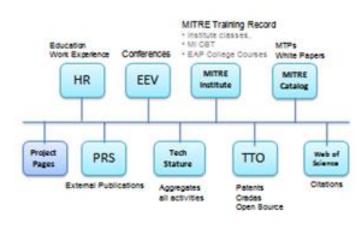
Standards committees

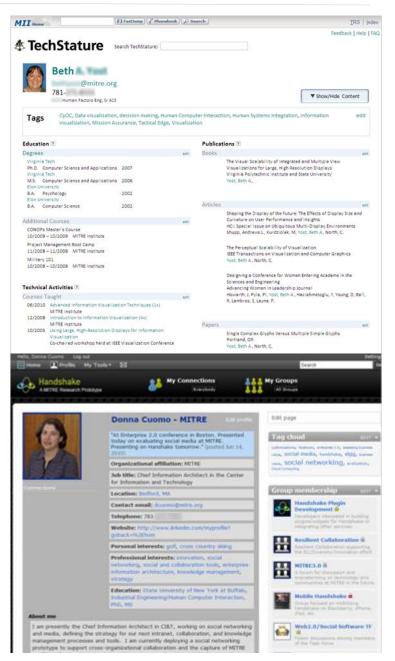
### Internal Activities Awards Core Competencies Courses taught High impact prototypes

# IP disclosures

- 1. Academic appointments
- 2. Awards/Honors
- . Citations
- Conference Papers/Presentations
- 5. Government advisory boards
- . Patents
- 7. Publications
- Standards/Technical Committees
- Professional Societies

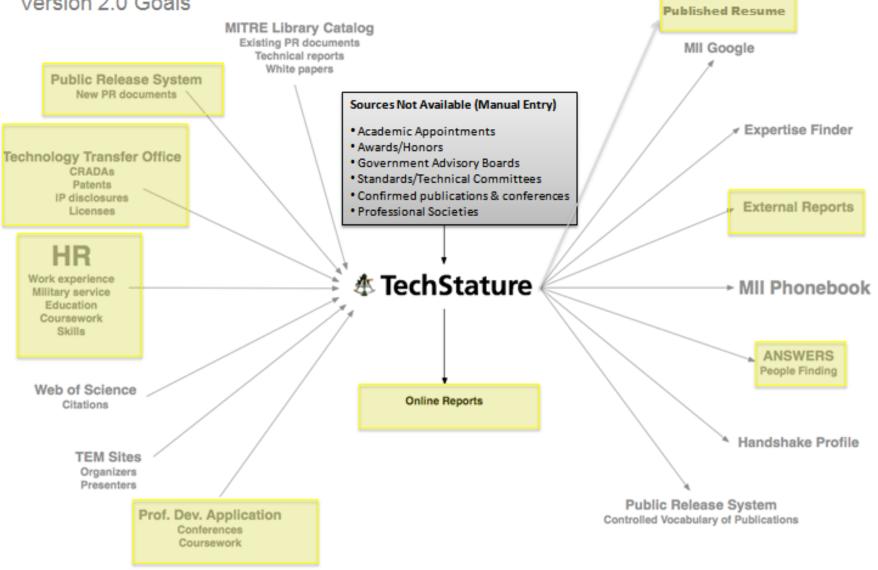
Objective: Clean capture for these data elements for measurement & reporting.





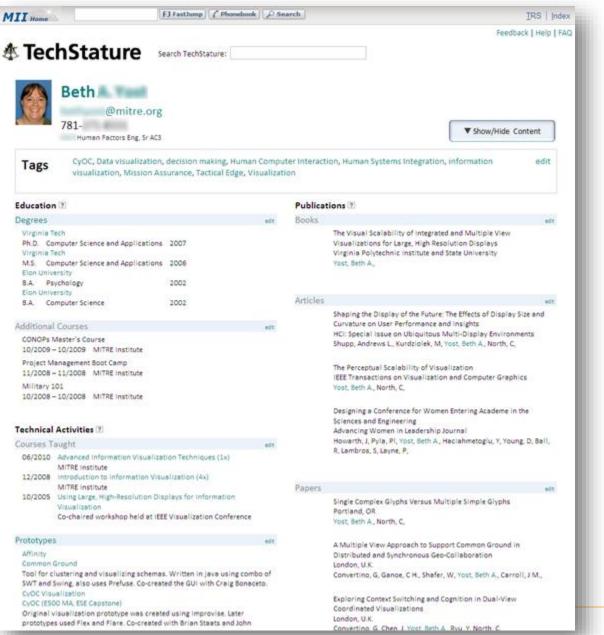
### **TechStature Business Integration**

### Version 2.0 Goals



**MITRE** 

### **Tech Stature/People Profile**

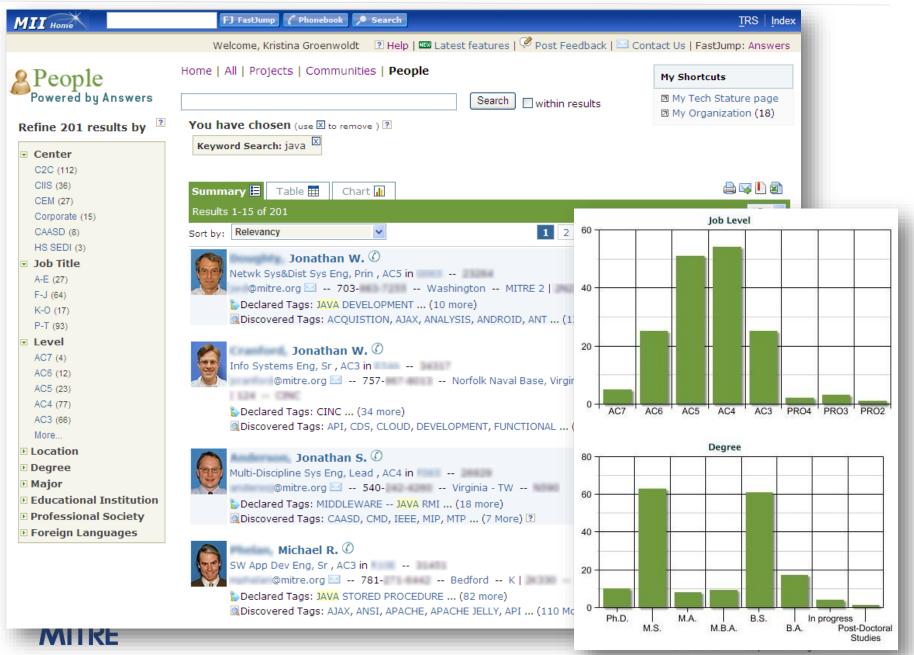


**MITRE** 

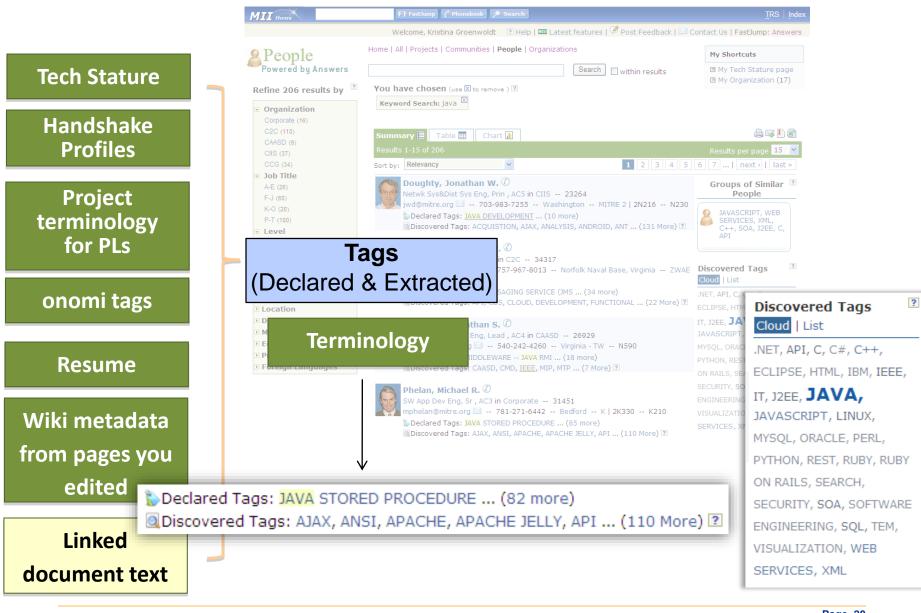
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### **People Finding**



### **Initial People Finding Sources**



MITRE

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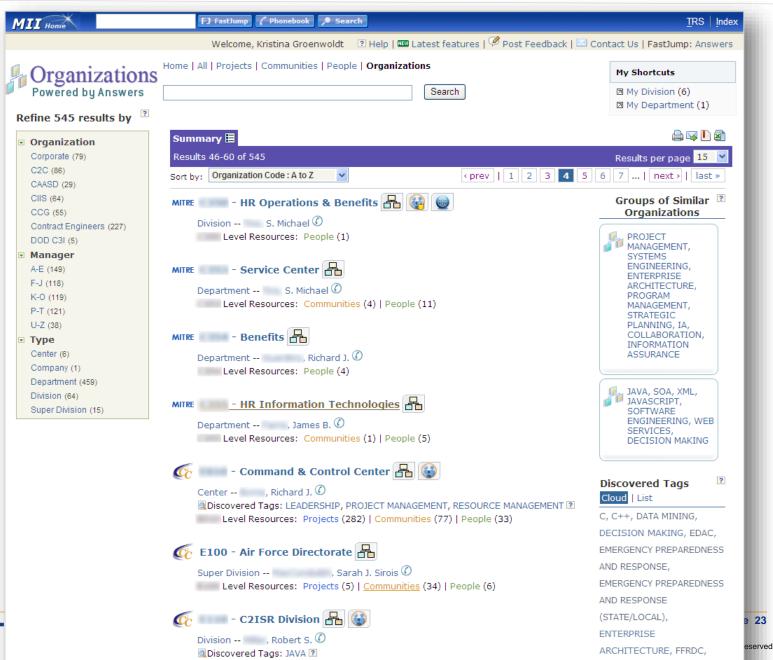
### **Additional Capabilities**



# **Community Finding**

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### **Organization Finding**



### "The Buzz"

Browse for answers



Views made for you Projects I own (0)

Projects I work on (1)

Communities I Own (15)

My Community <u>s</u> Memberships (28)

	Featured Views					
		Current MIP Projects (200)				
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### Tell us what you think

We're testing out Answers for glitches and opportunities for improvement, but we need your help. Compliments and ideas are also welcome! Give Feedback »

### Also highlights recent activity:

- Updated projects
- Active Communities
- Updated Profiles
- Most visited SharePoint sites
- **Popular languages**
- Popular professional societies



What are we partnering with Lincoln Lab on?

Where are the deliverables for this project?

I need to talk to SMEs in emergency preparedness.

Who knows people in the State Dept?

What communities exist around SOA?

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Is MITRE working on any other projects for this sponsor?

How do I find projects focusing on similar technologies?

At what conferences did MITRE present papers this year?

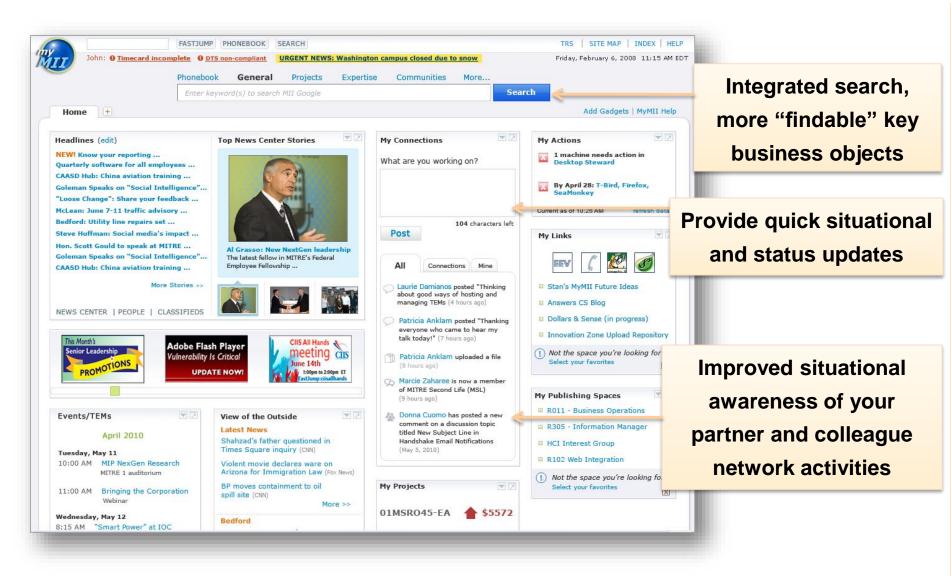
Who else would know about this?

What research are we doing in CCOD?

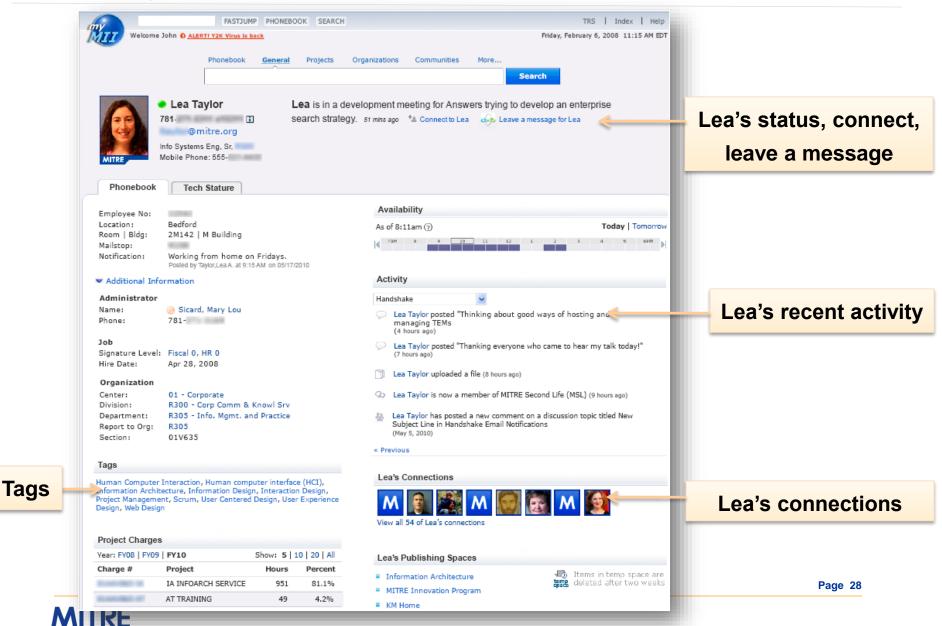
Who has experience leading cloud computing efforts?

### **Future Search Landscape**

# Next MyMII: Connect, Collaborate, Awareness



### **Next MyMII: Social-Enabled Phonebook**



### Next MyMII: People, Technical Accomplishments/ Profile Info in Phonebook

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Education	2008	REACT Online Resources for Early and Agile Capability Testing (REACT)	PI	- sharable in MPN
Degrees Bentley University M.B.A., Human Factors in Information Design 2010	add 2006	Dynamic UAV Synchronization with the Combat Airspace	PI	
Villanova University B.S., Computer Science 2005	Profes	sional Activities		
	Confe	rences Attended	ad	id
Experience	2009	Information Architecture Summit Information Architecture Summit	Attendee Attendee	
2008 - 2010 MITRE Innovation Program Information A	add 2007	UX Intensive	Attendee	
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External	Techni	cal Transfer		



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add

# **Questions?**

For additional information, contact:

Dr. Donna Cuomo (<u>dcuomo@mitre.org</u>) Krista Kennedy Groenwoldt (<u>kkennedy@mitre.org</u>)

