



Business Consulting Services

# How Information Technology (IT) Can Support Knowledge-Sharing and Collaboration

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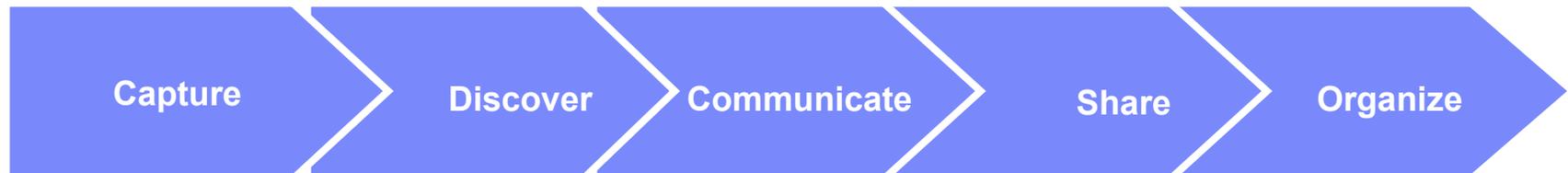
## Agenda

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- What is collaborative software?
- What are some of the common features?
- What products are available?
- How do I determine which package is best for me?

## Collaborative Software supports the five major areas of knowledge sharing activities.

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**Knowledge capture/  
collection:**

The gathering, compilation, and storage of knowledge in a repository

**Knowledge discovery/  
creation:**

The uncovering of patterns and analysing of data that results in new knowledge

**Knowledge communication:**

Disseminating knowledge to targeted teams and individuals

**Knowledge sharing:**

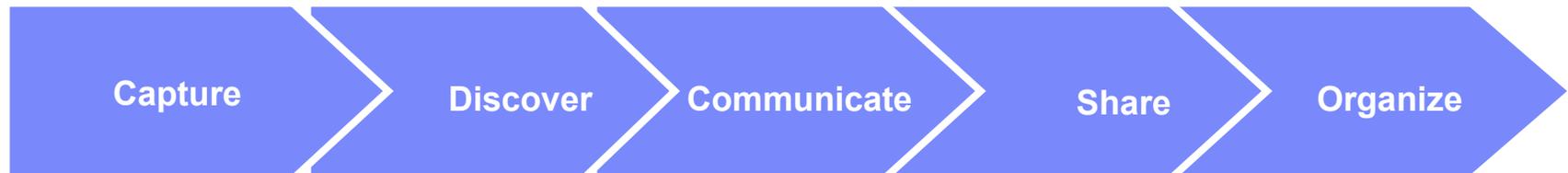
Transferring and communication of meaningful knowledge between teams and individuals

**Knowledge organization:**

The classification and categorization of knowledge into meaningful groups that permit easy discovery, retrieval, and analysis

Collaborative software represents various combinations of features seen in other products that supports the knowledge sharing process.

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- Document Management
- Collaboration
- Conferencing/ White Boarding

- Data Mining
- Expertise skills/location
- Visualization

- Information Push
- Group Communication
- Distance Learning
- Messaging
- Natural language querying
- Personalization

- Collaboration
- Conferencing/White Boarding
- Online Communities

- Data Warehousing
- Linguistic/ Semantic Analysis
- Meta-data Management
- Workflow Management

## Common Collaborative Software Functional Requirements

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- **Document and Content Management**
- **Collaboration**
- **Expertise Management**
- **Personalization**
- **Training**
- **Events, Scheduling & Tasks Management**
- **Global Search, Taxonomy & Data Management**
- **Technology Integration & Flexibility**
- **Implementation Costs & Scalability**

# Document and Content Management

## Typical Features:

- Storage facilities
- Security and access control
- Knowledge object types
- Organization of objects according to a taxonomy of content areas
- Document check-out
- Version control
- Search across document types
- Indexing
- Cataloging
- Summary document previews
- Creation and use of meta-data
- Recovery of deleted information
- Integration of disparate data sources
- Document conversion
- Subscription
- Administration facilities (e.g., account management, usage reports, etc.)

Brian Murrow | Sign Out

**Contents**

- Go Up
- Strategy Team Home
- Strategy Library
- Workplan
- Room Index
- Room Options
- Room Security

**Tools**

- Advanced Search
- What's New
- Room Map
- Work Offline | Notify | Print | Help

**New Library Form** **Cleanup** **Folder Options**

### - Strategy Library

Title	Author	Modified
<b>Revised Results Frameworks for Goals 1, 2, 3</b>	<b>jmalick</b>	10/10/2003
<b>KfD Strategy Outline</b>	<b>jmalick</b>	10/10/2003
<b>USAID Strategy Focus Group Results</b>	<b>Brian Murrow</b>	10/08/2003
<b>Re: USAID Strategy Focus Group Results</b> Thanks, Brian. Definitely helpful ... also as input into/support for the narrative discussion of our strategy. I need to download this and print it ... unless anyone has a hard copy I could borrow/get copyied while we're meeting?	<b>JLight</b>	10/10/2003
<b>Value Proposition Notes</b>	<b>Brian Murrow</b>	10/08/2003
<b>Re: Value Proposition Notes</b> Great job - thanks Brian.	<b>phobby</b>	10/08/2003
<b>Re: Value Proposition Notes</b> Or ... rather, it was the Value Prop that you were showing me today (Friday) at the MD Con. See my comment reacting to the FF Analysis, re: sending Jeff the new version by fax. It's the Value Prop that will help inform the elements of the strategy (SOs, IRs, and we were...	<b>JLight</b>	10/10/2003
<b>KM Force Field Analysis v2.0</b>	<b>Brian Murrow</b>	10/08/2003
<b>Re: KM Force Field Analysis v2.0</b> Thanks, Brian. As mentioned when I saw you, at the MD Conference Thursday afternoon Je and I were mapping this against the Strategic Objectives, Intermediate Results, and indicative Actions/Activities he's been working on for our Results Framework. Once your email is running...	<b>JLight</b>	10/10/2003
<b>1 Year Communications Plan Draft</b>	<b>gvaughan</b>	10/02/2003
<b>Draft KfD Strategy Outline</b>	<b>jmalick</b>	10/02/2003

# Collaboration

## Typical Features:

- Asynchronous conversation spaces
- Threaded and/or streaming discussion
- Indication of “new” entries
- Bookmark for messages
- Subcommunities for subtopics
- Public user profiles
- User preferences for viewing and selecting postings
- Navigation facilities among topics
- File upload with postings
- Search mechanisms for discussion postings, but not for uploaded files
- Some e-mail support
- Simple authentication capabilities
- Posting management facilities: editing, clean-up, archive
- Monitoring and administration facilities, such as traffic analysis, setting privileges
- Customizable user privileges such as opening new topics
- Customizable look and feel

The screenshot shows a Microsoft Internet Explorer browser window displaying a web page titled "Community Circle" under the heading "CoP Winter 2001". The page has a yellow background and features a navigation sidebar on the left and a main content area on the right.

**Navigation Sidebar:**

- Logo: A sun-like icon with rays.
- Text: [Etienne Wenger's Space Backroom](#)
- Form: "Jump to..." dropdown menu.
- Form: "Go visit..." dropdown menu.
- Text: [Index](#)
- Text: [Workshop evaluation](#)
- Text: [Send a live message](#)
- Text: "Who's here? Etienne Wenger"
- Text: [Community Chat](#)
- Text: [Workshop Wiki](#)
- Text: [Community Directory](#)
- Text: [Schedule](#)
- Text: [Tech Support ... About the Nav Bar](#)
- Text: [Logout](#)

**Main Content Area:**

CoP Winter 2001 >

## Community Circle

### Being Together

Hear the news. Meet people.  
Reflect on our experience.  
*Join in. Be a member.*

Mark Edit Delete Move

- >> [Opening Circle \(63 messages\)](#)
- >> [Sandbox \(4 discussions\)](#)
- > [What is Happening? \(45 messages\)](#)
- > [Personal Message Board \(7 messages\)](#)
- > [Yellow Pages \(4 discussions\)](#)
- > [Community Management Facilities \(2 discussions\)](#)
- > [Chat facilities & resources \(3 discussions\)](#)
- > [Synchronous events \(26 messages\)](#)
- > [Show and tell grand finale \(3 messages\)](#)
- > [Closing circle \(18 messages\)](#)
- > [... about the Community Circle](#)

Check Subscrips	Subscribe	Message Center	Email	Calendar	Search	
Add Discussion	Add Link	Add Folder	Add Chat	Import	Edit Folder	Delete Folder
Email to Sysop	Preferences	Export	Access List	Check Moderated	Guide	

CoP Winter 2001 > Community Circle

# Expertise Listings

## Typical Features:

- Question-asking facilities
- Profiles of experts
- Feedback mechanisms
- Reputation builder
- Automated ranking of experts
- Automated ranking of responses
- Automated access to databases of frequently asked questions

**Search Results**

Bluepages | w3 | **Persona** | Forums | News | ibm.com

Search For:   [ADVANCED SEARCH](#)  
[HELP](#)

Persona results for: **quickplace**

338 results found  
 Top 338 sorted by relevance [Show Details](#) 1 2 3 4 5 6 7 8 ... 34 | [Next](#)

Sort by: [Name](#) [Job Responsibility](#) [Organization](#) [Country](#) Score

[CREATE E-MAIL](#)

<input type="checkbox"/>	<a href="#">SESHASAI, SATWIKSAI</a>	Staff Software Engineer (Team Workplaces)	Software Group	USA	<a href="#">✉</a>	79%
<input type="checkbox"/>	<a href="#">Clark, T (Timothy)</a>	Advisory IT Specialist	Software Group	United Kingdom	<a href="#">✉</a>	79%
<input type="checkbox"/>	<a href="#">Stephens, David W.</a>	Sr. IT Specialist	Software Group	USA	<a href="#">✉</a>	79%
<input type="checkbox"/>	<a href="#">James, Kimberly D.</a>	SOFTWARE FTSS SPCL. (LOTUS)	Sales & Distribution Group	USA	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">Börjesson, Lars-Göran</a>	Knowledge Management (check the persona page)		Sweden	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">Shalabi, Sami M.</a>	LWP Named Collaborative Spaces Architect	Software Group	USA	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">Mastriano, Gloria J.</a>	Assistant to: P.Evangelista/R.Farquhar/J.Kent/D.Kroll/B.Noonan/V.Phelps	Sales & Distribution Group	USA	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">Quinn, William M. (Bill)</a>	QuickPlace QE	Software Group	USA	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">BALDERAS, MANUEL A.</a>	Lotus Workplace Software Engineer	Software Group	USA	<a href="#">✉</a>	78%
<input type="checkbox"/>	<a href="#">Kolb, Branden N.</a>	QuickPlace for iSeries	Server Group	USA	<a href="#">✉</a>	78%

# Personalized Knowledge Portals

## Typical Features:

- Customizable desktop
- Management of multiple views onto relevant sources of information
- Full-text, full-index search engines
- Subscription and notification
- Conversation spaces
- Project management capabilities
- Underlying ontology

**Collaborate in-context:** each document has its own rating, discussion forum & FAQ.

**Navigate to Topics easily.** A document may be linked to many relevant Topics.

**Search the Simplify Knowledge Store,** a XML database of user's business cards, documents & books, websites, multimedia files, & other data in any format.

**Embed headlines from Topics in your personalized portal page.** Each headline is a rich link to an article or event. Mix with hundreds of world channels to create an up-to-the-minute overview of critical news that can scanned each day in 5 minutes.

**Choose from a library of color schemes.** Make your own with the **Theme Wizard**.

**Decentralize website management: delegate quality control** of Topics to subject-matter experts instead of "webmasters".

**Control access** to sensitive information on a group-by-group basis (SSL encryption).

**Get automatic email or ICQ updates** of what's new in important Topics.

**Control access** to sensitive information on a group-by-group basis (SSL encryption).

**Community**

**Editor(s)**

**Bookmarks**

**Topic Explorer**

**one fish**

**Fish-borne parasites**

**topic:** Fish-borne parasites of human health concern such as nematodes and trematodes

**book**

- **Control of Foodborne Trematodes**  
Report of WHO Study Group. The WHO (1995) draws attention to the problem posed by foodborne trematodes.
- **Guide to the parasites of fishes**  
Guide to more than 220 species of fishes.
- **Medical Helminthology**  
Book: Medical Helminthology contains information on worms (helminths) which infect men.
- **Food safety and public health**  
Paper: Working paper: Food safety and public health related to South Africa.
- **Fish and Fishery Product Parasitology**  
Book chapter: Chapter 16 of the book: Parasitology of fish and fishery products.
- **Improvement of community health through the control of liver-fluke infections**  
Report: Project report: Improvement of community health through the control of liver-fluke infections.

**Community**

- Add your knowledge
- Subscribe to this Topic
- See who's online
- Rate this page (3 votes)
- Email this page to a friend

**Editor(s)**

Janet Smith

admin menu | edit this Topic

# Distance Learning and Training

## Typical Features:

- Storage of content material
- Open and directed ways for students to discuss content
- Synchronous and/or asynchronous delivery process
- Multimedia presentations
- Recording and broadcasting of classroom sessions

**National Culture Profiler - Microsoft Internet Explorer**

**DUKE The Duke MBA**  
THE DUKE SCHOOL OF BUSINESS  
Cross Continent

Help | Preferences | Log Off **PENSARE**  
Currently logged on as: CCOMBA Student 1

Home | Learning | Discussion | Resources | People | Preferences

Cross-Continent MBA Program 2002 : Virtual Teams : What's Different About Virtual Teams :

### View Profile Results

Dimension	Power Distance Score
Power Duration	~65
University Analysis	~75
Institution Consultation	~55
Task Orientation	~45

#### Power Distance Analysis

The two profiles are different in this area. There's likely to be confusion, misunderstanding, or conflict in authority relations. A high-scoring manager is likely to find a low-scoring subordinate insubordinate, always questioning decisions and doubting his or her competence. A low-scoring manager is likely to find high-scoring subordinates unquestioning and unresponsive.

#### Recommendations

You need to negotiate clear authority relationships and to work out operational methods that satisfy everyone's need. Low-scoring subordinates shouldn't question high-scoring managers in front of others, but instead find a more private situation in which to raise their concerns. Low-scoring managers should finish every

**Scoring:**  
0-33 = Low 34-66 = Medium 67-100 = High

**Power-Distance:**  
Low = Little distance between superiors and subordinates  
High = Large distance

**Uncertainty Avoidance:**  
Low = More willing to accept uncertainty and risk  
High = Risk averse

**National Culture Profiler**  
*See how people from different cultures interact in the workplace, and discover how to facilitate interactions between them. Take a survey and compare your responses graphically with those of others... in real time!*

# Events, Scheduling & Tasks Management

## Typical Features:

- Group calendars
- Outlook/Corporate calendar integration
- Room scheduling
- Reminders
- Tasking
- Progress reporting
- Executive summaries

USAID  
Brian Murrow | Sign Out

New Calendar Page New... Folder Options

Contents

- KM4KM Home
- Calendar
- Library:
- Action Issues Log
- Book Reviews
- Discussion
- Members
- Team Rooms
- K-Fair Room:
- Strategy Room:
- Doc Mgt Room:
- Collaboration Tool Room:
- Index
- Customize
- Survey

Tools

Advanced Search  
What's New  
Room Map

Work Offline | Notify | Print | Help

- Calendar  
October 2003

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30 01:00 PM KM Fair Planning Meeting 06:30 PM The Future of Electronic Government Brian Murrow	1 02:00 AM KM/KS Sub-Committee meeting 09:00 AM Organize a "Community of Practice" Brian Murrow	2	3	4
6	7 01:00 PM KM Fair Planning Meeting Brian Murrow	8 02:00 AM BTEC Meeting 02:00 PM BTEC Meeting Brian Murrow	9 02:00 PM How IT Can Support Knowledge-Sharing and Collaboration Mission Directors conference Brian Murrow	10 -All Mission Day-Directors conference Brian Murrow	11 -All Mission Day-Directors conference Brian Murrow
13	14 09:00 AM "How IT Can Support Knowledge Sharing and Collaboration" 01:00 PM KM Fair Planning Meeting smithell Brian Murrow	15 02:00 PM KM/KS Sub-Committee meeting Brian Murrow	16	17	18
20 -All USAID Day-Knowledge Fair Brian Murrow	21 -All USAID Day-Knowledge Fair Brian Murrow	22 -All USAID Day-Knowledge Fair Brian Murrow	23	24	25

# Global Search, Taxonomy & Data Management

## Typical Features:

- Spidering to multiple data sources
- Automatic taxonomy generation and refinement
- Consistent corporate taxonomy
- Artificial intelligence
- Aggregate and trend analysis
- Integration of expert directory with document repository
- Automatic relevance ranking

The screenshot displays the Knowledge Map interface. The top navigation bar includes 'Knowledge Map', 'Browse & Search', and 'Search Results'. The search bar contains 'documents about'. The left sidebar shows a 'Browse:' section with a hierarchical taxonomy of categories related to HIV & AIDS, such as 'child, people, population', 'HIV & AIDS - Behavior Change', and 'HIV & AIDS - Care & Treatment'.

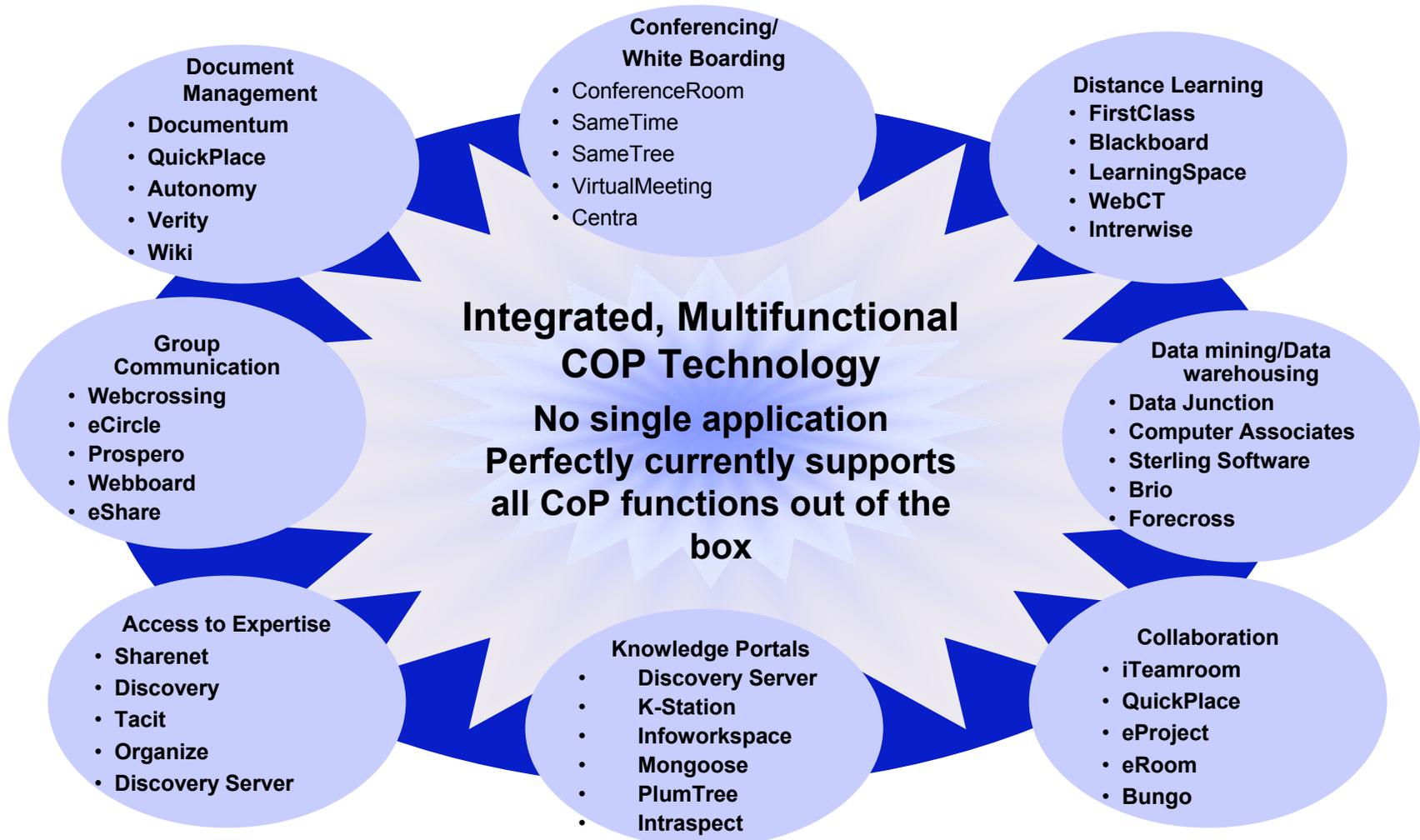
The main content area shows the search results for 'documents about'. The 'Browse:' path is 'Home > HIV & AIDS - Behavior Change'. Below this, there are two tables:

Subcategories	Documents About (16)	Value	Author
HIV & AIDS - Care & Treatment	USAID Global Health: HIV/AIDS, Technical Areas, Behavior Change	0	Gabrielle Bushman, global health/office of HIV/AIDS
	USAID Global Health: HIV/AIDS, Technical Areas, Behavior Change	0	Gabrielle Bushman, global health/office of HIV/AIDS
	USAID Global Health: HIV/AIDS Technical Areas, Behavior Change, USAID Communication Programs	0	Gabrielle Bushman, global health/office of HIV/AIDS
	August 2003	0	mback
	FHI - Behavioral Data Collection	0	
	FHI - Stigma and HIV	0	
	FHI - Behavior Change Communication and Reproductive Health	0	
	FHI - Linking Behavioural Data	0	

People Who Know About (2)	Affinity	Job Title
Gabrielle Bushman, global health/office of HIV/AIDS	100	
Administrator/USAID	9	

# The Collaborative Software Marketplace



# Evaluation Approach: The Collaborative Software Functional Requirements “Placemat Matrix”

MAJOR FUNCTIONAL REQUIREMENT AREA	SCOPE	CoP PRIORITY	WebBoard	eRoom	SharePoint	Package X	Package Y	Package Z
<b>Content Management</b>	<p><b>Scope</b> = Size of the function – Small, Medium or Large</p> <p><b>CoP Priority</b> = How Important the Function is to USAID CoPs (high, med, low)</p> <p>Major Functional Requirements and Categories</p>	<b>Evaluation Approach</b>						
Submit Raw Data and Upload Documents		<ul style="list-style-type: none"> <li>Each category should be scored on whether or not it is met by each package on a scale of 1 to 5.</li> <li>A summary score should then be given to each Major Functional Area based on category score (can also be weighted based on priority).</li> <li>Each package should receive a total raw score.</li> <li>Each package should also receive a “weighted-priority” score that includes CoP priority as a variable in the final weighted score.</li> <li>After the results of this matrix are tallied, each package must be vetted against the nonfunctional areas.</li> </ul>						
Search and Retrieve Content and Documents								
Archive Content								
Manage Content Workflow								
<b>Collaboration</b>								
Discussion Boards								
Instant Messaging and Chat								
E-mail Push								
Web Conferencing/White Boarding								
<b>Expertise Management</b>								
Expert Directory Linked to User Profiles								
Searchable Expert Directory								
Resource Matching Capabilities								
<b>Personalization</b>								
User Can Create "myCoP" Page								
Functionality and Taxonomy Personalization								
User Profile Management								
<b>Events, Scheduling &amp; Tasks Management</b>								
Events Calendar (submit and read)								
E-mail Reminders and Integration								
Task Management								
<b>Global Search, Taxonomy &amp; Data Management</b>								
Global Site Search of all Modules and Content								
Simple and Advanced Search Capabilities								
Customizeable Taxonomy/Metadata Attributes								
Data Mining and Warehousing								
Linguistic/Semantic Analysis								
<b>Technology Integration &amp; Flexibility</b>								
Integration with MS Outlook								
Distance Learning (offline from internet and network)								
Technology is 508 Compliant / Accessible								
Technology is Easy to Use								
Customizeable to CoP Brand								

## More questions ??? [www.knowledge.usaid.gov](http://www.knowledge.usaid.gov)

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- Online Resources:
  - [knowledge.usaid.gov](http://knowledge.usaid.gov)
  - [knowledge.usaid.gov/communityhome.html](http://knowledge.usaid.gov/communityhome.html)
    - Copy of Presentation
- Research and best practices on:
  - Communities of Practice and Knowledge Management
  - Collaborative Software Analysis and Tools
  - More real-life examples and best practices
- USAID Knowledge Fair: October 20, 21, and 22
- Contact information
  - [BDMurrow@us.ibm.com](mailto:BDMurrow@us.ibm.com)