



Supporting Flexibility and Awareness in Localisation Workflow

25th Sept 2009

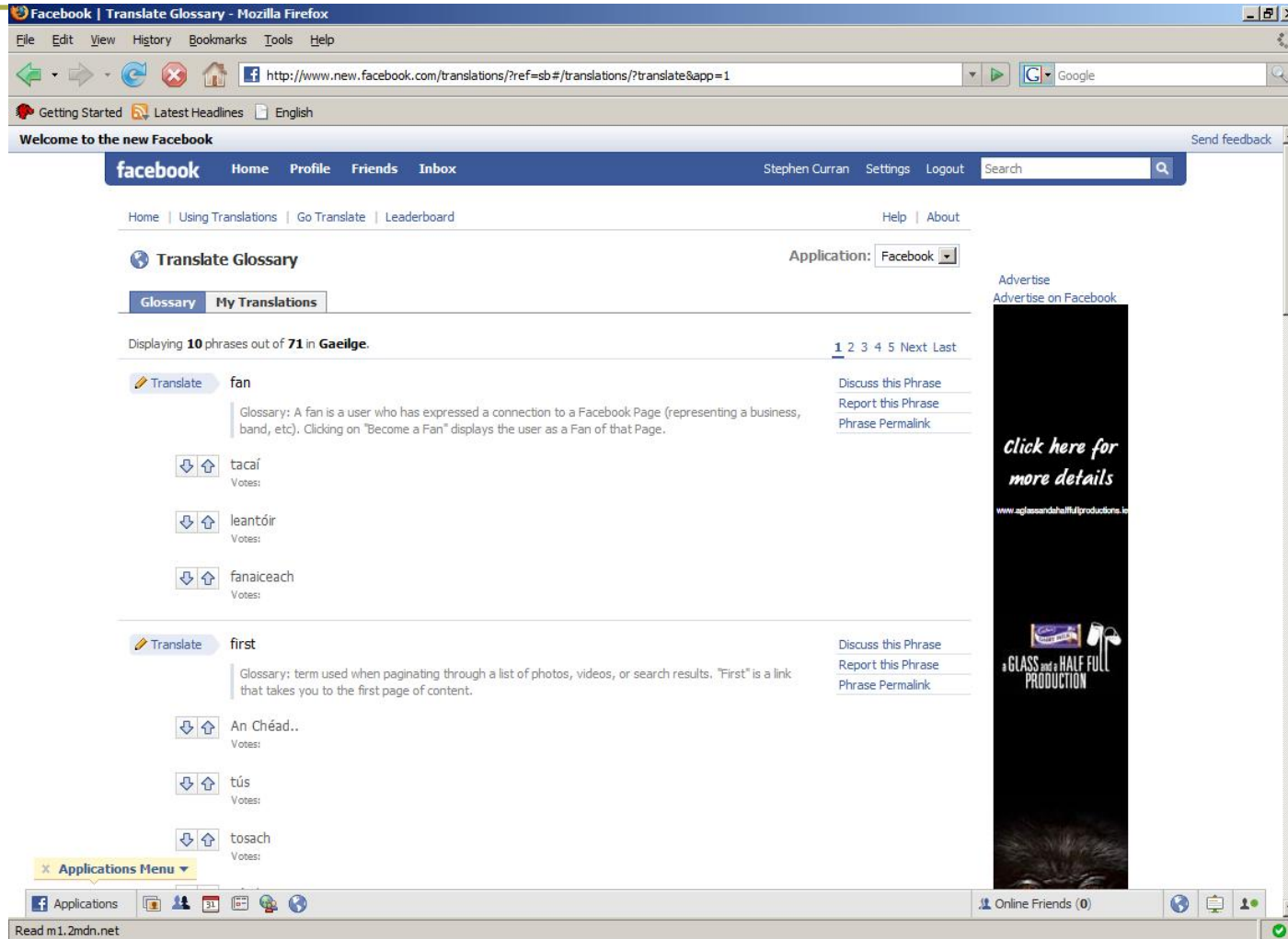
Situation Awareness in Workflow

- Applying workflow modelling to Localisation processes needed for:
 - Monitoring and management of process execution
 - Quality tracking and cost control
 - Basis for process improvement
- Problems with workflow modelling
 - Visibility restricted to boundaries of defined tasks
 - Difficult to make ad hoc modifications to workflow model
- Workflow participants often develop **informal communication channels** outside of formal data/control flow to deal with problems that arise, e.g. via email, IM
 - Such ad hoc channels not visible to workflow monitoring, hence difficult to leverage in workflow management and process improvement
 - Establishing direct communication with others far up or down stream can be difficult – often need to cross closely-guarded organisational boundaries

Decentralising Trends

- Business agility is increasingly associated with more decentralised autonomy of decision-making and more open internal communications in companies
 - Email, IM, tagging, message forum, wiki being increasingly deployed within and between enterprises
- Companies are increasingly deepening relationships with customers including integration into traditionally internal business processes, e.g. translation and terminology crowd sourcing
- Where the benefits of centralised workflow management are sought there is a tension with this trend to facilitate open communications within and beyond company boundaries

Situation Awareness in Crowdsourcing



Facebook | Translate Glossary - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.new.facebook.com/translations/?ref=sb#/translations/?translate&app=1

Welcome to the new Facebook

facebook Home Profile Friends Inbox Stephen Curran Settings Logout Search

Home | Using Translations | Go Translate | Leaderboard Help | About

Translate Glossary Application: Facebook

Glossary My Translations

Displaying 10 phrases out of 71 in Gaelge. 1 2 3 4 5 Next Last

Translate fan

Glossary: A fan is a user who has expressed a connection to a Facebook Page (representing a business, band, etc). Clicking on "Become a Fan" displays the user as a Fan of that Page.

Discuss this Phrase Report this Phrase Phrase Permalink

tacaí Votes:

leantóir Votes:

fanaiceach Votes:

Translate first

Glossary: term used when paginating through a list of photos, videos, or search results. "First" is a link that takes you to the first page of content.

Discuss this Phrase Report this Phrase Phrase Permalink

An Chéad.. Votes:

tús Votes:

tosach Votes:

Applications Menu

Applications Online Friends (0)

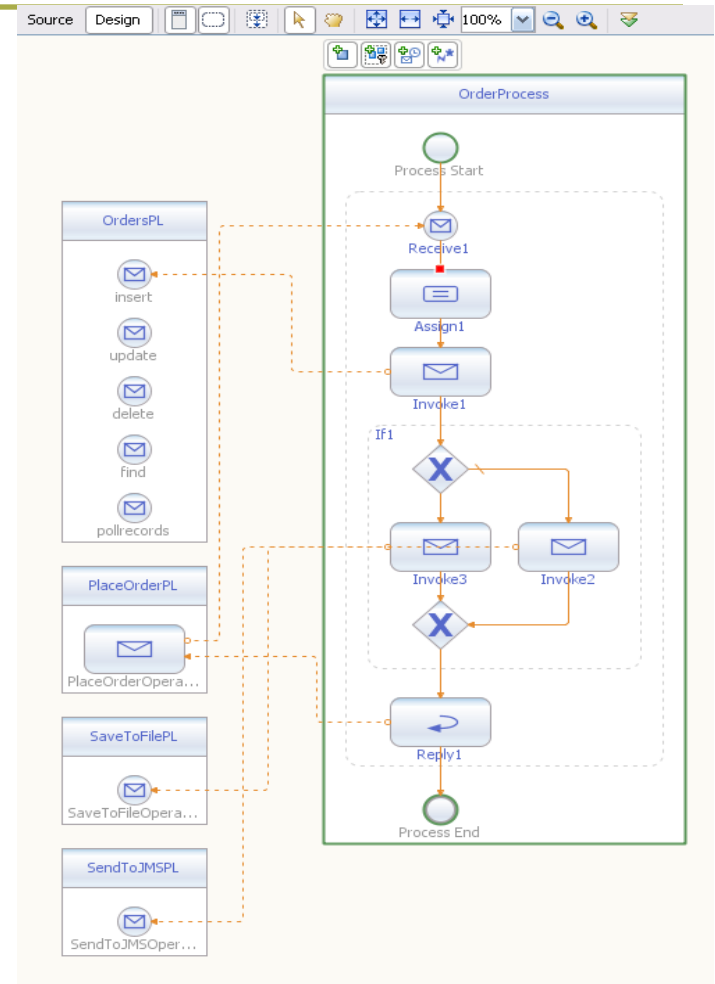
Read m1.2mdn.net

Situation Awareness in Crowdsourcing

- Communication with peer-translators is essential to this model
 - Reputation building, competitiveness
 - Help and knowledge sharing
 - Community building – sense of belonging to peer group
- Communication with localisation staff in the hosting firm still carefully mediated
 - Activities of crowdsourcers is highly transparent to hosting firm
 - Professional portion of workflow typically not visible to crowd translators

Flexible Localisation Workflows

- Workflow management systems based on **open standards** are to flexible, low cost integration of workflows across organisational boundaries
 - Existing localisation standards provide support for the downstream flow TMX, XLIFF
 - Explicit workflow models can be exchanged using standards such as BPNM and BPEL
 - BPEL and WSDL allow elements of the workflow to be distributed as services across the cloud and across organisations
 - Standards emerging for human activity management, WS-Human, BPEL4People
- Is this sufficient given the need for informal communications?



Field Study

- Thirteen participants across a large content producing company and an associated multi-language service provider
- Structured interviews
- Observation of tool use
- Studied of communication both within and external to the formal workflow

Communication Matrix

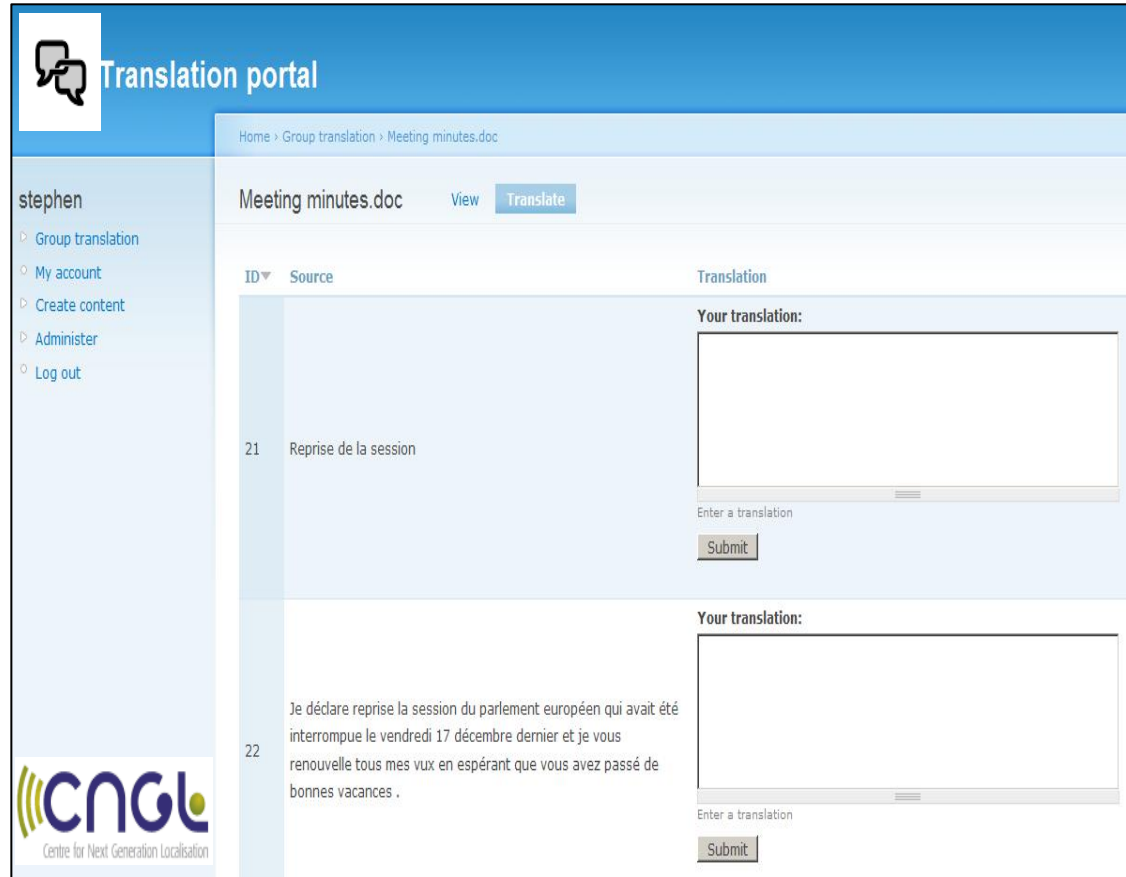
From:/To:	Terminology Manager	Content Author	Linguist	Project Manager	Translator / Posteditors
Terminology Manager	Share term bases and techniques for achieving high compliance to controlled language guidelines (N)	Detail problems encountered with applying the term base and controlled language guidelines (I)	Relate language-specific problems in translating specific terms from term base (I); propose changes to controlled language guidelines to improve efficiency of translation to a specific language (I)	Relate problems with conformance to controlled language and missing terminology (via linguist) (I)	Relate problems with conformance to controlled language and missing terminology (via project manager) (I)
Content Author	Term-base and controlled language guidelines (W)	Share notes about complying with controlled language guidelines and appropriate terminology (I)	Specify the job target level for controlled language compliance (I)	Relate translation problems with provided content and its context (I)	Errors in source content and missing contextual information (I)
Linguist	Termbased and controlled language guidelines (W) Response to stated translation problems with specific terms (I)	not applicable	Share problems in translating term base to different languages (I)	Quote for job (W); Relate problems with using terminology translations (I); Problems with use of translation guidelines (I)	Suggest different terminology translations (N)
Project Manager	Term base and its context (W)	Content and its context (W)	Translation dictionary and guidelines (W)	Share problems with translating jobs into parallel languages, handling specific content, performance of specific TM, MT and translators (I)	Progress in translation job (W); Problems in translating content, erroneous content, terminology or term translation (I)
Translator/ Post-editors	Term base and its context (via project manager) (W)	Content and its context (via project manager) (W)	Translation dictionary and guidelines (via project manager) (W); Responses to translation problems with terminology (I)	Job allocation and quality targets (W)	Share problems with use of terminology translations and lack of terminology definition/translation; queries to more experienced translators; Feedback on quality of TM and MT translations (I)

Implication for Open Localisation Workflow Platforms

- Need to integrate informal web communication channels
- Resistance to open communications due to business sensitivities and complexity of administration
- Need to be able to easily tune openness of informal communication across virtual localisation teams, e.g. high for crowds, more controlled when spanning contractual relationships and a spectrum in between

Open Localisation Portal

- Apply collaborative web platform for human interaction within the workflow, e.g. Drupal, Joomla
- Use plug-in architecture for localisation-specific activities
- Existing message forum, feeds, comments to communicate workflow activities and problems
- Need administration console to unify human workflow access and informal communication – tied to a single model of workflow stakeholders



The screenshot shows a web interface for a translation portal. At the top, there is a blue header with the text "Translation portal" and a speech bubble icon. Below the header, a breadcrumb trail reads "Home > Group translation > Meeting minutes.doc". The main content area is titled "Meeting minutes.doc" and includes "View" and "Translate" buttons. A table lists translation items with columns for "ID", "Source", and "Translation".

ID	Source	Translation
21	Reprise de la session	<p>Your translation:</p> <input type="text"/> <small>Enter a translation</small> <input type="submit" value="Submit"/>
22	Je déclare reprise la session du parlement européen qui avait été interrompue le vendredi 17 décembre dernier et je vous renouvelle tous mes vœux en espérant que vous avez passé de bonnes vacances .	<p>Your translation:</p> <input type="text"/> <small>Enter a translation</small> <input type="submit" value="Submit"/>

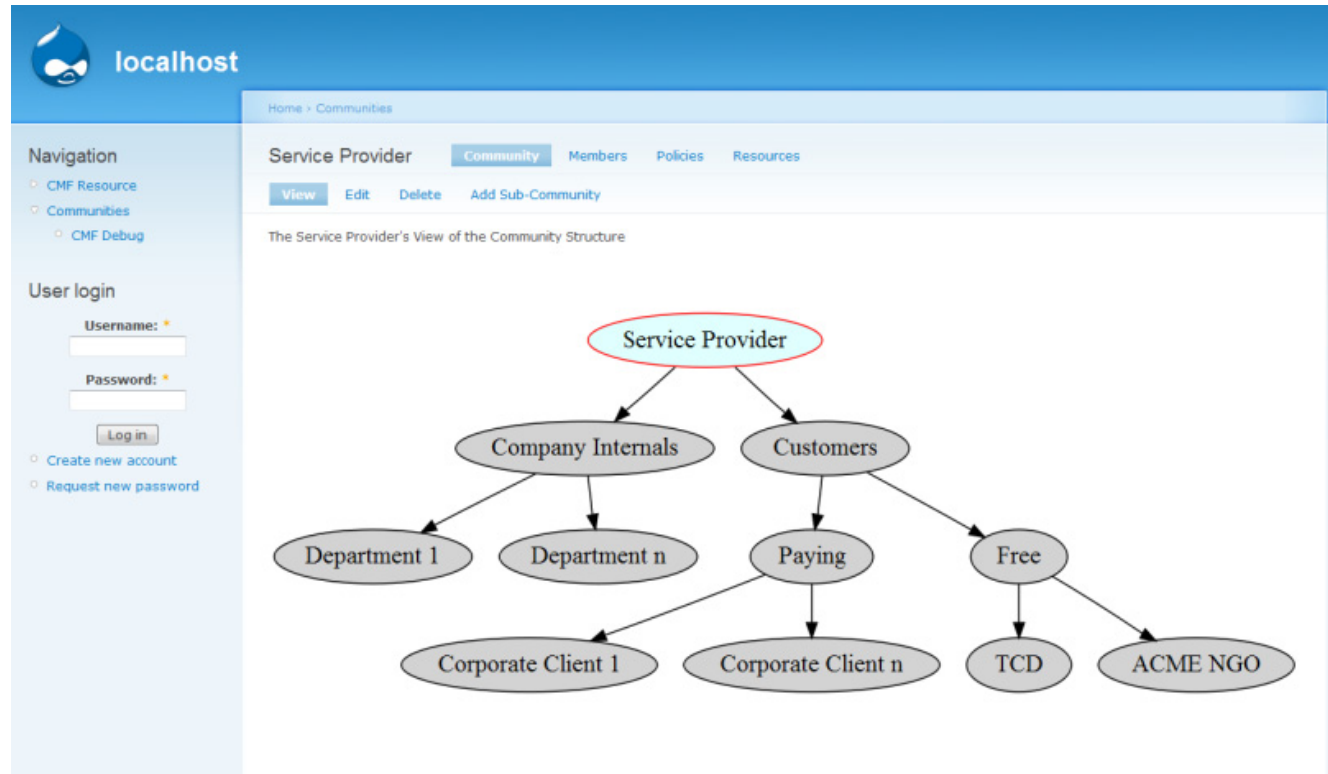
The interface also features a user profile sidebar for "stephen" with links for "Group translation", "My account", "Create content", "Administer", and "Log out". The CNGL logo and name are visible in the bottom left corner of the interface.

Flexible Administration

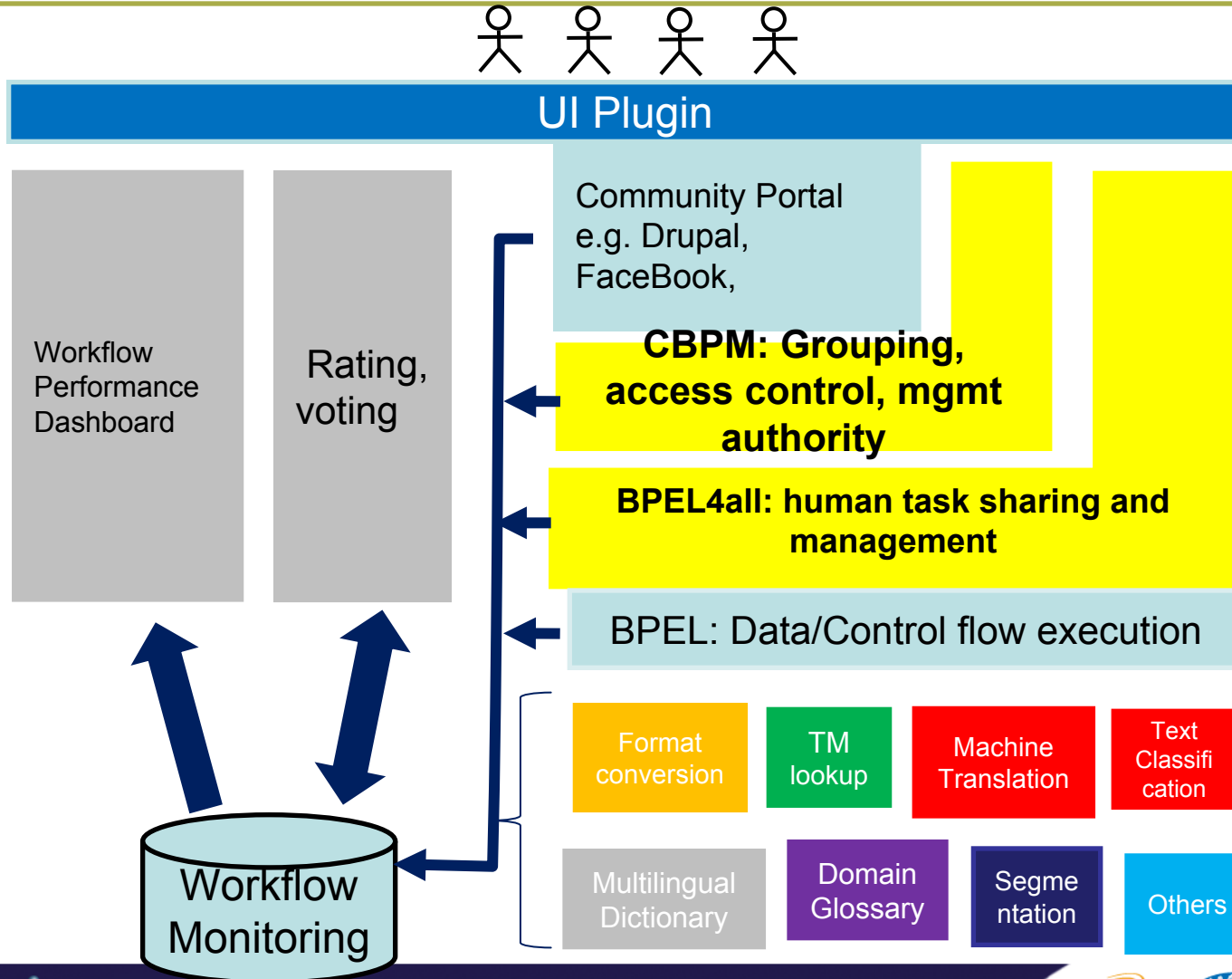
- Integrated Community Based Policy Management System (CBPMS) distributed policy service.

- Proof of concept – can be easily integrated with other systems

- Extensible resource model



Future System Architecture



Next Steps

- Return to study group with UI mock-ups and iterate the interaction design of this using underlying open platform
- Integration of admin control over both BPEL execution with that of media for informal communication, e.g. message forum, blogs, feeds
- Examine flexibility across different workflow case studies
- Examine the more open exchange of workflow monitoring data
 - use of explicit meta data – triple stores
- Reusable widgets for integrating voting and rating and dashboard features into workflow