



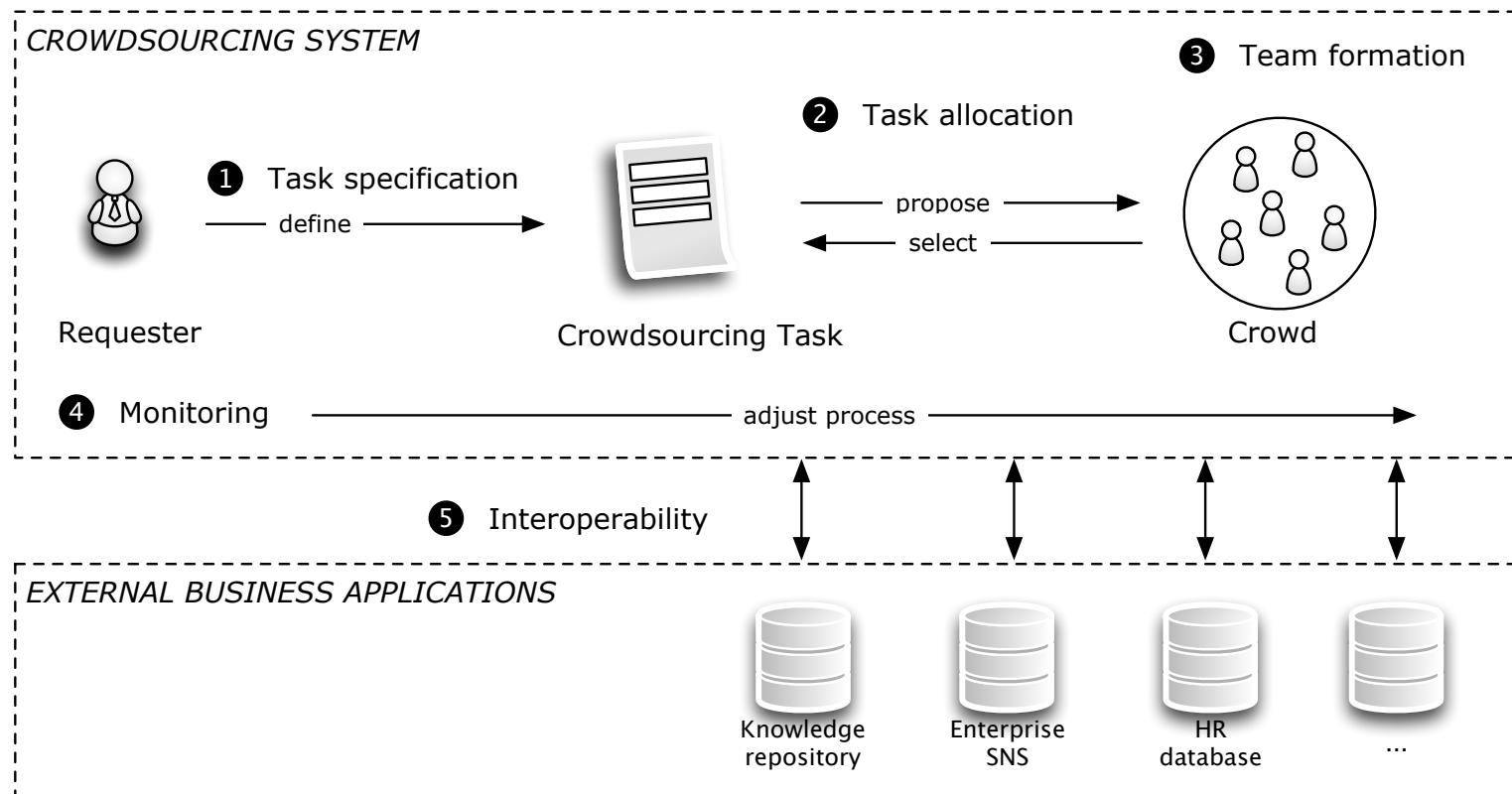
Towards a Semantic Standard for Enterprise Crowdsourcing

A scenario-based evaluation of a conceptual
prototype

MOTIVATION



What are the Challenges for Enterprise Crowdsourcing?



MY RESEARCH



Methodology

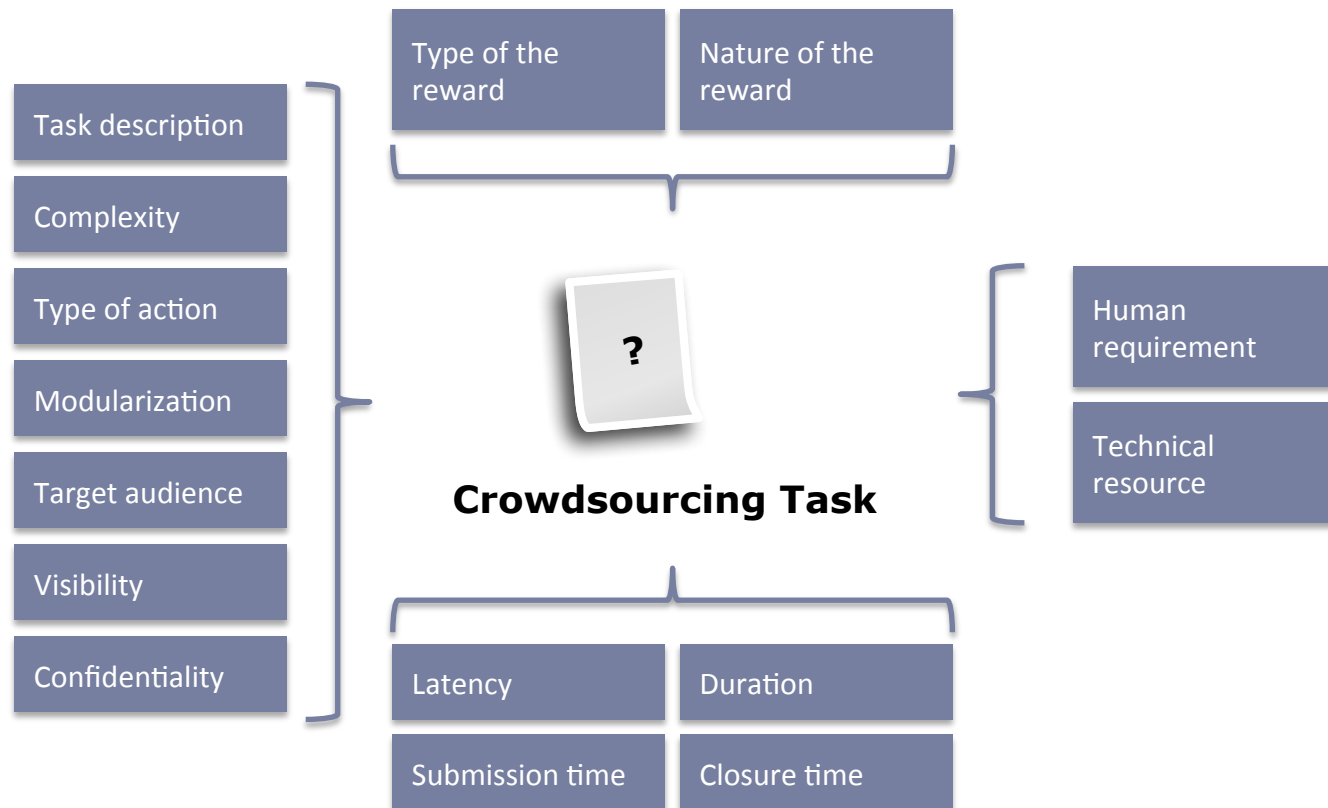
- Design-science research approach (Hevner et al., 2004)
- Based on a systematic literature review on crowdsourcing systems (Hetmank, 2013)

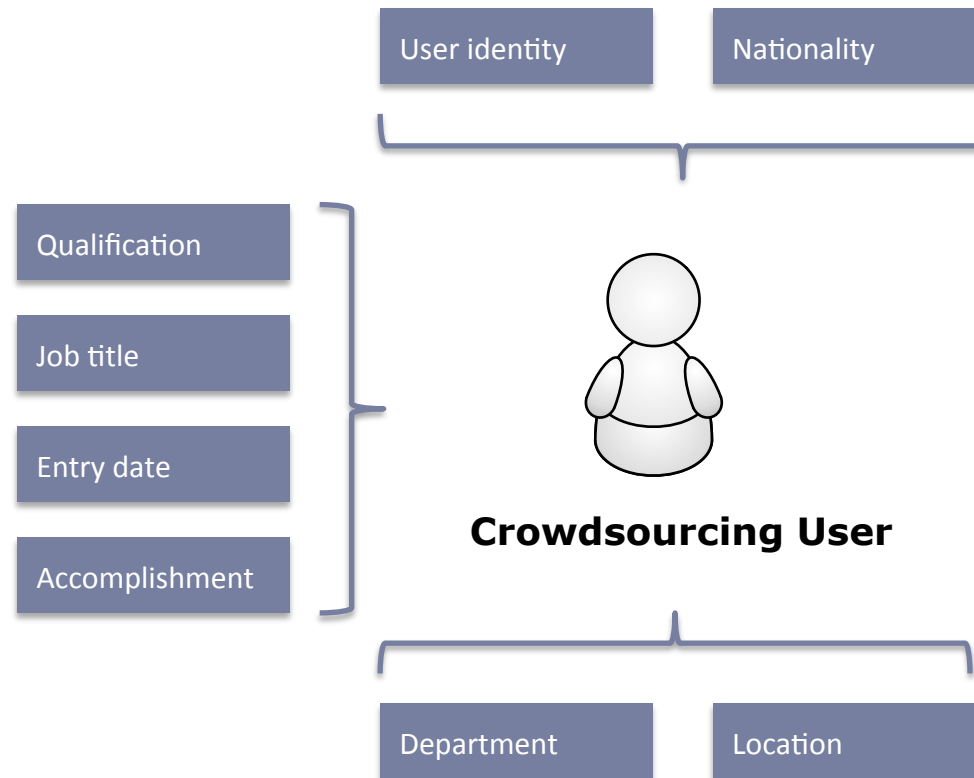
Design as an Artifact	Problem Relevance	Research Contribution	Design Evaluation	Research Rigor	Search Process	Research Communication
Semantic standard Enterprise Crowdsourcing Metadata Schema	Automation and interoperability	First proof-of-concept	Scenario building	Based on previous studies on crowdsourcing	First step in the development process	Technical-oriented and management-oriented audience Conferences, Journals, and Prototypes

Application of design-science research (DSR) guidelines according to Hevner et al., 2004

DEVELOPMENT OF A CONCEPTUAL PROTOTYPE







EVALUATION



Evaluation and 1st Proof-of-concept

Three scenarios that may occur in real business environments:

1. Evaluate product design proposals
2. Translate technical specification
3. Build company-wide virtual library

Four users as a subset of an example crowd

Element	Scenario 1	Element	User 1	User 2
Task description	Evaluate product design	User identity	Alan Coulter	Adèle Girard
Target audience	Hybrid	Location	Cork	Lyon
Complexity	Simple	Nationality	Irish	French
Type of action	Evaluate	Job title	Chief product designer	Junior product engineer
Modularization	10 subtasks (bundled)	Entry date	1993-04-01	2010-02-09
Latency	Immediate	Department	Product development	Product engineering
Nature of the reward	Fixed and performance-based	Qualification	Master of Product Design and Development	Bachelor of Engineering
Type of the reward	15 reputation points plus bonus or discount of 5	Accomplishment	http://example-company.com/cs/task/3241	<none>
Submission time	After release	Human requirement	Job tenure of more than two years OR master in engineering, product design, marketing OR sales	
Closure time	After 20 reviews for each product design	Technical resource	http://www.flickr.com/photos/new-product-xyz	
Duration	1 minute			
Confidentiality	Low			
Visibility	Hidden			

NEXT STEPS



Future Improvements and Research

- some elements are currently oversimplified and require further **refinement** in their level of detail
- facilitate the definition of **conditional expressions**
- create **additional concepts** (contribution, evaluation and reward mechanism)
- **reuse of existing standards**, such as FOAF, schema.org, Dublin Core, activitystrea.ms, SIOC, Proton, HR XML, WS-BPEL Extension for People (BPEL4People), or XMP Process Definition Language

Conclusion

- foster the standardization in the domain of enterprise crowdsourcing
- 5 current challenges
- design-science research approach
- 1st conceptual prototype
 - crowdsourcing task (15 metadata elements)
 - crowdsourcing user (8 metadata elements)

DISCUSSION



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