

# Concepts of Agency and Situation in Cognitive Engineering

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## ABSTRACT

**Motivation** – Highly adaptive technologies are becoming common use: Mobile applications are situation-aware, web applications are personalized, search engines follow individual needs etc. Behind all the implementations certain models of cognitive processes are applied.

**Research approach** – How do those models look like. how do user profiles or functional roles come into being? How can situation awareness be achieved? Looking across disciplines and applications might help to find common grounds or modelling guidelines.

**Findings/Design** – The workshop should shed light on conceptual cornerstones, basic assumptions, and design patterns arising from these constituents.

**Research limitations/Implications** – Designers learn about possible models of agency and situation, their disciplinary ground and application context.

**Originality/Value** – It might be the first interdisciplinary discourse on that topic inducing further research, e.g. ontology-based design.

**Take away message** – Agency and situation are constructs influencing design, either implicitly or in a transparent or traceable way.

## KEYWORDS

Agency, situation, design patterns, role modelling, situation awareness, epistemological analysis, elicitation and acquisition.

## CALL FOR CONTRIBUTIONS

We are looking for contributions that starting from the current state of the art are able to:

- a) explore the concepts of agency and situation being applicable in cognitive engineering
- b) induce a fruitful encounter between disciplines, to the benefit of the centrality of the two concepts and of the expectations of explicitly modeling and/or processing them

Some themes that inspire stakeholder-oriented and situation-sensitive cognitive engineering:

- Modeling dimensions, construct categories, processes, meta-models, reference models, multi-facet modeling frameworks
- Theories enlightening agency and situation in work and education contexts
- Method support for acquiring and representing role models
- Ecological monitoring of complex behaviour patterns
- Technologies for multi-perspective modeling support
- Situation-awareness in cognitive engineering domains
- Impact of contextualization, glocalities, identities,

## WORKSHOP CONTRIBUTIONS

Workshop papers should be 2 pages long (including authors' information, abstract - no more than 200 words -, all tables, figures, references, etc.) and should be written conform to the ECCE 2011 template – see <http://ecce2011.eace.net>.

## Authors

Contributors should be able to reflect models of agency and/or situational context. They should be willing to listen actively and enter a discourse on several levels of abstraction.

## Structure of the paper

The paper should allow a structured discussion on the semiotic aspects, notational elements for (re)presentation, and processing of models. An application would be helpful detailing some aspects, such as explicitness of role models in a subject-oriented Business Process Modeling approach.

## PARTICIPANT SELECTION

Participants are invited based on the acceptance of position statements. All papers will be blindly peer-reviewed by two (2) reviewers.

### **FORMAT OF WORKSHOP**

There will be a short input talk about the workshop theme itself, then 2-3 rounds of a Knowledge Café, each table concerned with a particular aspect, e.g., constituents of agency models, design patterns arising from basic assumptions. A final scientific barcamp for urgent issues might pop up.

### **INTENDED PUBLICATION**

Accepted papers are invited to present their contribution during the workshop and as a poster during the conference. Papers are published as poster papers in the proceedings and the ACM digital library.

### **IMPORTANT DATES**

|                |  |
|----------------|--|
| 30 May 2011    | Submission of workshop contribution                  |
| 13 June 2011   | Notification of acceptance                           |
| 30 June 2011   | Submission of camera-ready paper<br>and release form |
| 23 August 2011 | Workshop   |

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