

An Ontology for Case-based Project Management

Masterstudium:
Software Engineering & Internet Computing

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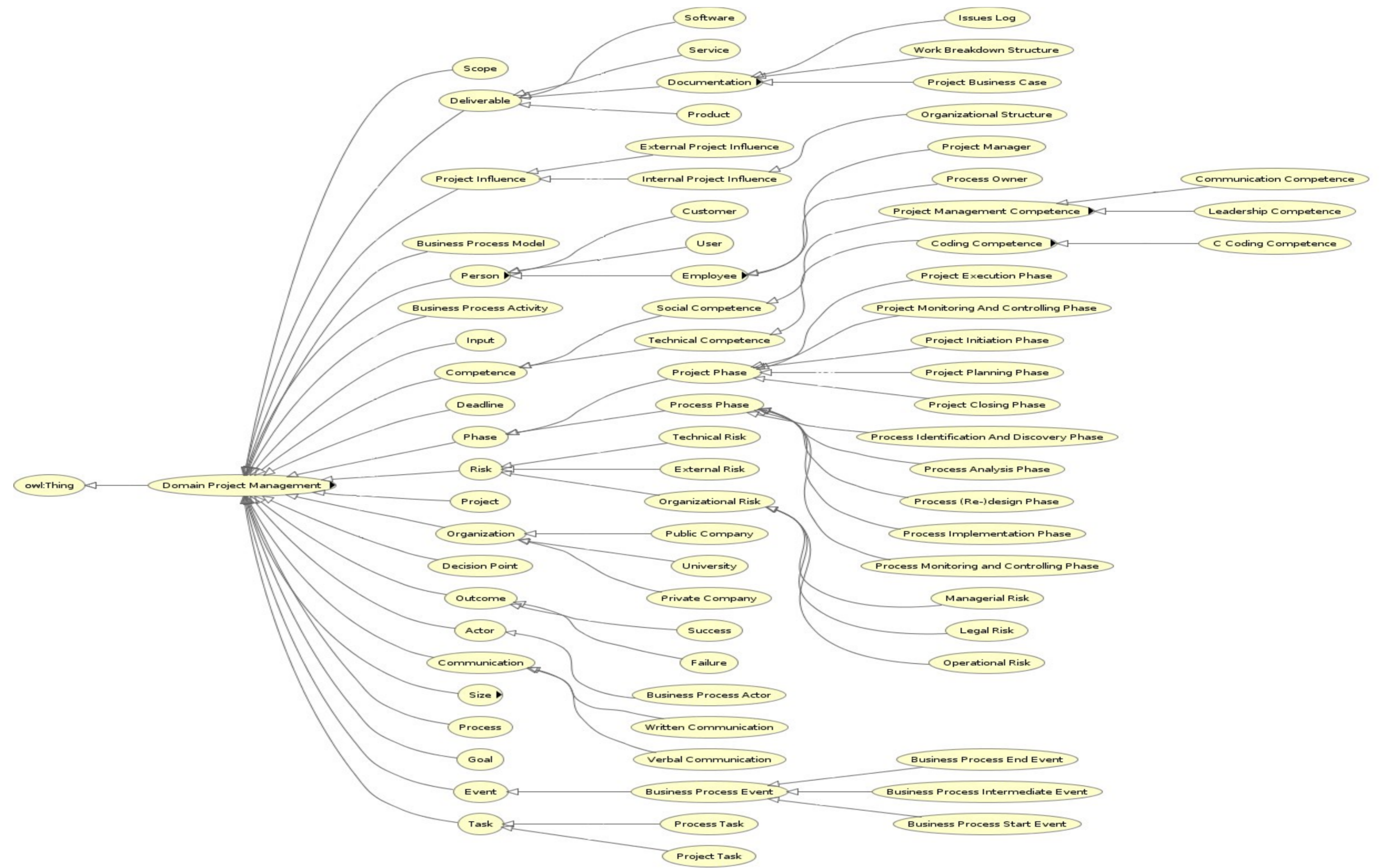
Context

- Project Management - applying different techniques, tools and best practices for guaranteeing that projects have fulfilled their objectives and are done in the predefined time and budget
- Case-based Reasoning (CBR) applied in the context of Project Management for learning from experiences of past projects while making decisions for new projects

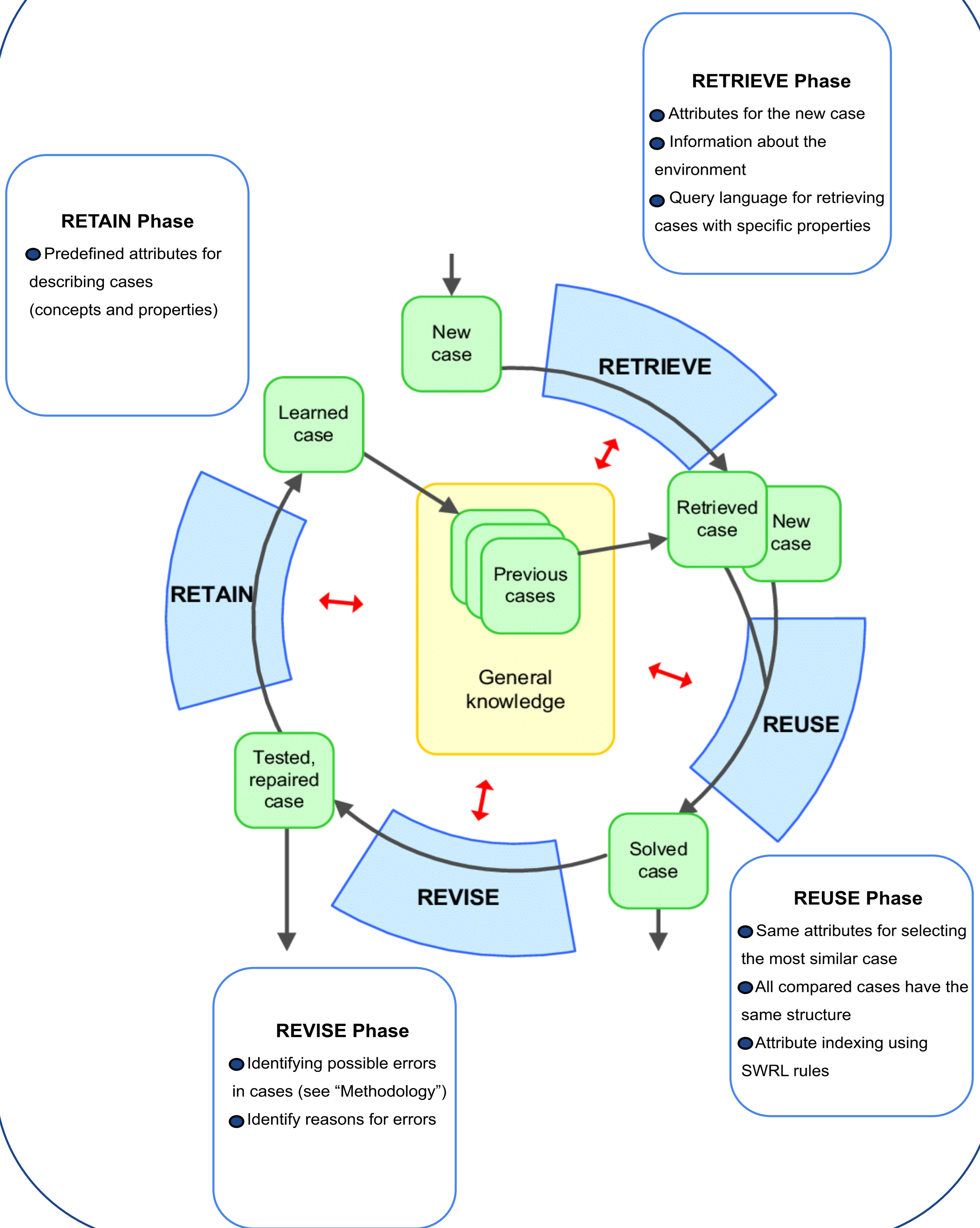
Aim of the thesis:

- Creation of an ontology for the Project Management domain
- Extending the ontology to cover specific types of projects - Business Process Management projects
- Extending the domain theory with typical reasons for project failure
- What improvements brings the ontology for the different CBR phases and the PM in general?

Ontology



Results



Methodology

Example conclusion:

“Projects, where the Project Manager lacks the needed Project Management competences, have higher chances to fail.”

Deriving the conclusion:

Defining a Project Manager:

$$pm:Person(?p) \wedge pm:manages(?p, ?x) \wedge pm:Project(?x) \rightarrow pm:ProjectManager(?p)$$

Deriving the outcome:

$$pm:Person(?p) \wedge pm:Project(?x) \wedge pm:manages(?p, ?x) \wedge pm:hasProjectManagementCompetenceLevel(?p, ?m) \wedge swrlb:lessThan(?m, 4) \wedge pm:hasProjectOutcome(?x, ?o) \rightarrow pm:OutcomeFailure(?o)$$

References

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 [3] Mathew, A., Ma, L., Narasimhan, L. (2006). *Case-based reasoning for data warehouse schema design*. 36th International Conference on Computers and Industrial Engineering, ICC and IE 2006
 [4] Project Management Institute (2008). *A guide to the project management body of knowledge: (PMBOK guide); an American National Standard ANSI/PMI 99-001-2008*. Newtown Square, Pa: PMI, Project Management Inst.