Towards a Definition of Sustainability

in and for Software Engineering

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**Sustainability and Software Engineering?**

**Problem:** Sustainability is not supported by traditional software engineering methods. This lack of support leads to inefficient efforts to address sustainability or complete omission of this important concept in software engineering activities. Defining and developing adequate support requires a commonly accepted definition of what sustainability means in and for software engineering.

**Contribution:** We contribute a description of the aspects of sustainability in software engineering. Furthermore, the application of actions supporting the improvement of these aspects is sketched in exemplary descriptions.

**Relative Definition of Sustainability in SE**

Sustainability: Preserving the *function of a system* over a defined *time span*

**Sustainability in SE**

*System: Product*

*Function:* to produce (assemble) a system with minimized environmental impact and a sufficient economic balance

*Time span:* dependent on the project plan for production, according to the system's size and complexity

**Sustainability for SE**

*System: Company*

*Function:* to perform software development with minimized environmental impact and a sufficient economic balance

*Time span:* dependent on the company size and the general duration of projects, can be estimated with the time horizon of a long-term business plan

**Consequences**

**Stakeholder Identification**

**Sustainability Modelling**

**Further Works**