Discussion Seminar – Software Product Lines
Summary of "**What is a feature? A Qualitative Study of Features in Industrial Software Product Lines**"
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A definition of **Feature** is varied widely across many IT projects in industrial-scale software product lines. Generally, features are the characteristics of the developed product, which are specified by the requirements needed in the development of the product. Several definitions of what a feature is are presented in this paper through several interviews to several companies, in which they practice SPL within the development environment.

1. A Feature is described as the core functionality, which is an important value to the business. While it can be requested by the customer, it can also arise from the requirements given by analysis of the product
2. A good feature is the one that is popular to the customer, error-free, well-implemented, and satisfies the requirements. Bad features mostly come from rushed development. Duplicate and unused features are also some of the examples of bad features
3. Different companies use different methods to extract features out of the product. Some of it comes from experiences, some from the clients, and some also come from industrial standards.
4. Feature modeling tools have become a standard tool to map and visualize features and their dependencies.
5. Features can be static or dynamic, depending on the variety of products and their evolution.

Strong points about this paper:

1. This paper gives different, real-world standard views from different companies on how features are engineered
2. Many aspects of the features are presented in detail based on the result of the interview

What this paper lacks:

1. Lack of definitions, especially on important terms such as cross-cutting features, architecture, nature, and many more
2. As stated, the result might have been more subjective because interviewers give examples, which might have affected the interviewee's answers to the questions.

Discussion Question: Can the given views about features on the paper be used as a benchmark for a part of the modeling tools, for example, feature reconfiguration?