An Extended Case Study in Automotive Aftermarket Software Development

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Project Title Effective Requirements Practices in the Distributed Development of Automotive Aftermarket Software

The literature to date has struggled to find measures of effectiveness and success of requirements practices. The relationship between effective practices and the situation in which they are used has not been explored enough.

Analysis
Systematic coding using Qualitative Data Analysis Software ATLAS.ti

1. Assign Primary Documents
2. Select Quotations
3. Select Codes
   - Open Coding
   - Code in Vivo
   - Code by List
4. Write Theoretical Memos

The discovery of grounded theory is done through a process of three parallel activities
1. Data collection
2. Coding
3. Writing of theoretical memos

“A qualitative research approach is used in order to ensure a thorough and detailed study of all the factors that may be influencing the requirements engineering practices in a particular situation.

A case study was deemed to be the best approach because it can support the development of a holistic understanding of the situation and relies on multiple sources of evidence such as interviews, semi-structured interviews, field notes, direct observation, demonstration and documentation.

Research Method
- Case study research involves ongoing examination and interpretation of a vast amount of data.

Grounded theory is being used as it provides a systematic method of discovering categories and relationships in empirically collected data and building theories based on them, which are, in turn, grounded in the data.

Research Strategy
- “Let the data speak for themselves” Glaser and Strauss, 1967

Projects vary enormously. Updates are easier to manage than defining new products which need to have a market developed.

There are usually two categories of project identified here. I will refer to these categories as "Greenfield" and "Updates" as two new codes going forward.

As part of the BTOs small cross-functional teams were put together. The teams consisted of minimum 5 people and they cover from the following areas:
1. Engineering (client)
2. Operations (client)