

# VALUE-DRIVEN APPROACH FOR REQUIREMENTS ENGINEERING IN PEOPLE-ORIENTED SOFTWARE

## Problem Statement

The challenge of requirements engineering in software design and application, such as mobile apps and social networks, lies in the fact that potential users are unknown. Further, these potential users come with different kinds of personality, culture, goals, age, income and needs. Although they are not obligated to use the software, the goals of the system's owners are attained if people use the software and its capabilities to its full potential. In this research, we call this kind of software, *People-Oriented Software (POS)*.

There are some differences between POS and typical business applications as stated below:

- In typical business applications, users are usually known but in POS they are unknown;
- In typical business applications, users are usually obliged to employ the software, but not in POS.
- In typical business applications, software systems support a well-defined business workflow with well-defined roles, whereas in POS, the workflows are often ill-defined and varied.

The research question in this study is:

**“What is an appropriate approach for eliciting and modeling stakeholders’ requirements in the process of designing POS?”**

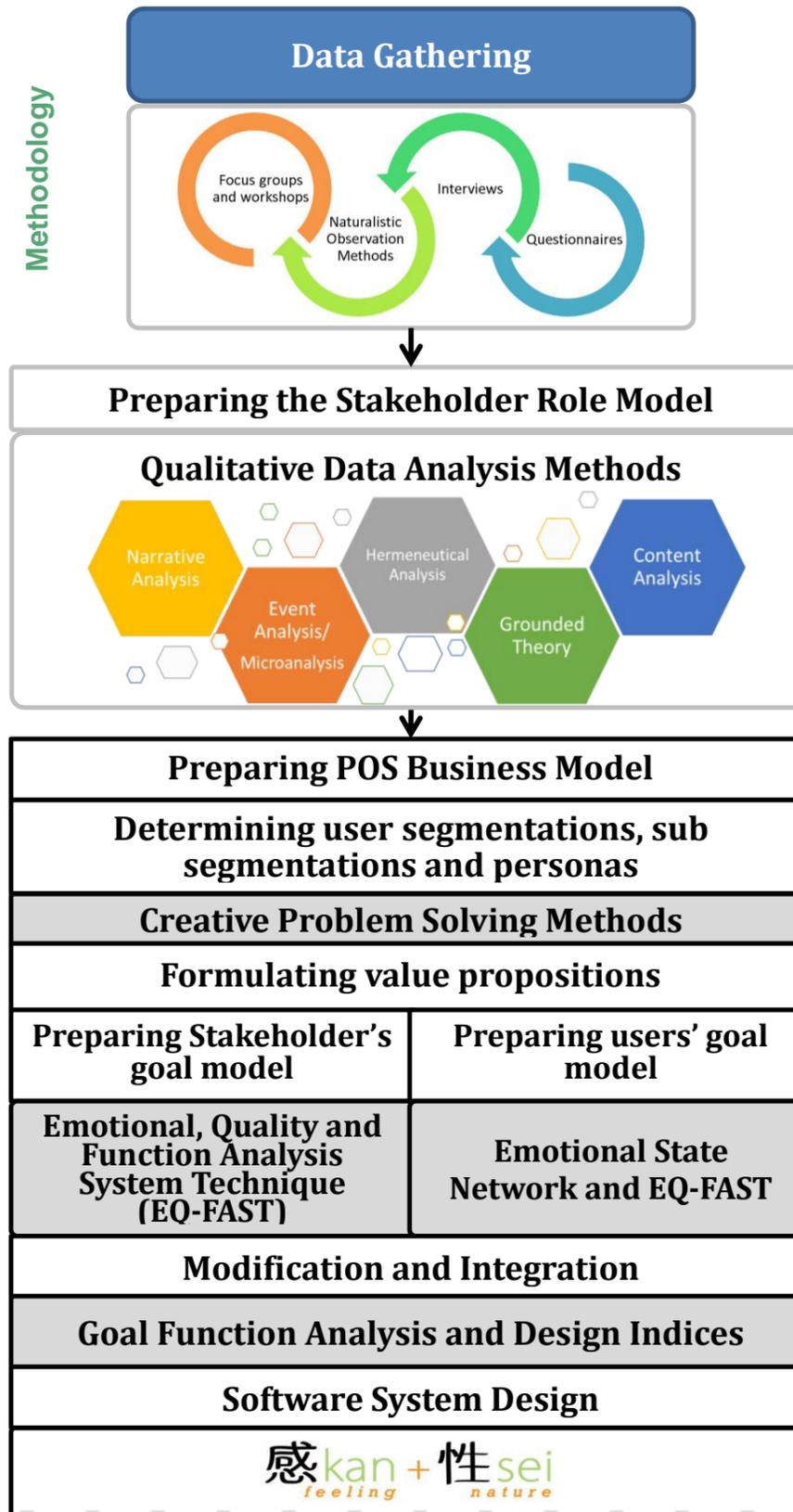


Figure 1: The schematic view of the proposed methodology

## Case Study

We propose to use our novel approach to analyse, design and develop a mobile app to increasing knowledge and motivating collaborative action on Low Carbon Living (LCL) between professionals, tradespeople and consumers to uptake of LCL products and services and to work collaboratively to maximize LCL-outcomes in the built environment. Based on what has been mentioned in the problem statement, this application is a POS since the lack of engagement in low carbon programs and for motivating the potential users, it is necessary to consider their emotional and quality goals in along with their functional requirements.

This project is in partnership with Swinburne of Technology, Victorian Building Authority, Master Builders Association, Sydney Coastal Councils, Build Smart Australia and UNE.

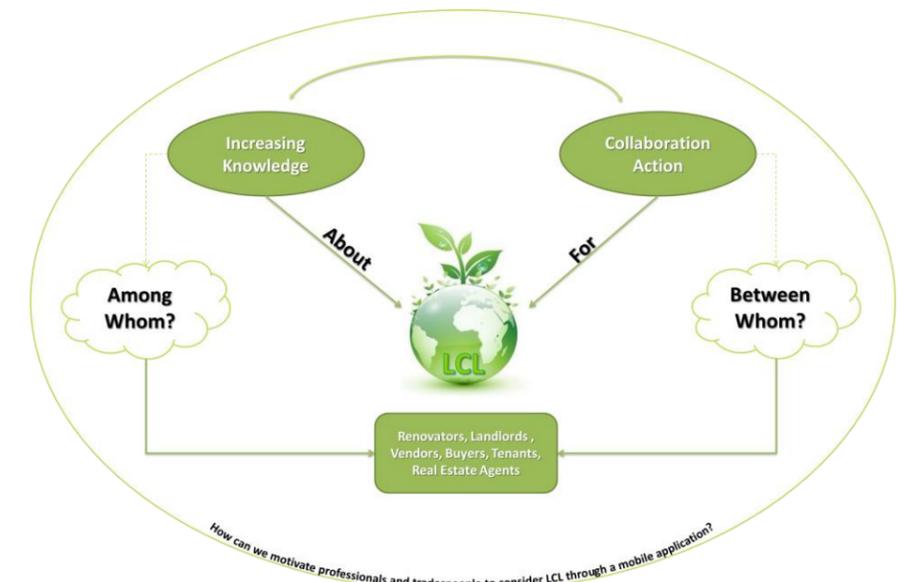


Figure 2: The schematic view of high level goals in the case study

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