



## TOWARDS ANALYZING QUALITATIVE DATA : NVIVO

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### *Author's Biography*



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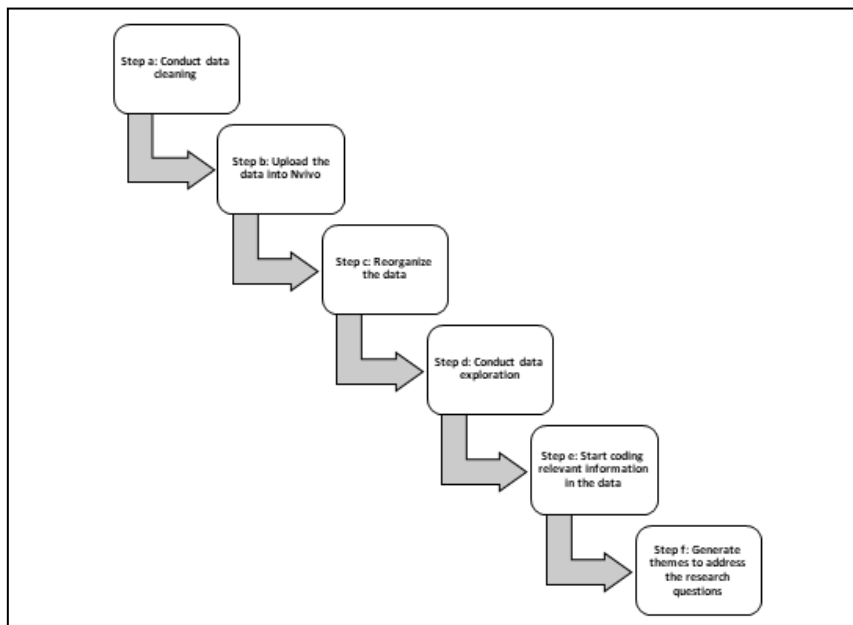


## RESEARCH HIGHLIGHTS

Managing a software project at distributed sites which is called as Global Software Engineering (GSE) are very challenging compared to managing a project at collocated site. There are many contributing factors which makes the coordination as a big challenge in GSE because of the software project is developed across the countries and the team members are segregated all over the world (1). Therefore, projects that are developed in GSE needs more extensive coordination. Many models have been developed to overcome the coordination challenges in GSE. Despite of having numerous models in GSE, to the best of researcher's knowledge there is no model to assess the coordination procedures in GSE projects. Thus, at the end of the research, the researchers proposed an Evaluation Model to assess the coordination procedures effectively in GSE projects. So to formulate this model, one of the research objective is to identify the coordination approaches and related indicators in GSE from the real GSE project practitioners, this is done through qualitative analysis using Nvivo.

## GRAPHICAL ABSTRACT

With the aim of to answer our research question, we have used Nvivo 11 to analyze our interview data. With the intention of to strengthen the transparency of the data analysis process and to strengthen the credibility of the findings, we have followed 6 steps of data analysis process using Nvivo (2) as illustrated in the Figure below.



## RESEARCH OBJECTIVES

This study was conducted to achieve one of our research objective which is to extract the coordination approaches and the related indicators from GSD projects. This was achieved through the qualitative data namely interview data from GSE project practitioners. Hence, this study was conducted to achieve this objective.

## MATERIALS AND METHODS





Qualitative analysis is basically used for summarizing data from interview transcripts, documents, artifacts and field notes(3). For instance, if we have interviewed 10 participants, we have lots of boring data to present to the audience. So we reduce the data by doing a systematic process thru qualitative analysis. In our study, we have interviewed 20 participants. For each interview question, we find a significant findings based on the research question. We have used Nvivo v11(4) software to do our qualitative data analysis. Each step is followed rigorously as illustrated in the graphical diagram till the findings are finalized.

## RESULTS

The primary motivation behind this study is to discover the coordination approaches and related indicators based on the identified coordination procedures from qualitative data which is from real practitioner's perspectives. The practitioners are consultants and project managers from various Information Technology departments in GSE environment. This study answered the determined aim successfully by identifying 27 coordination approaches and 95 related indicators using qualitative data analysis process that is being applied in assessing the coordination procedures in GSE projects.

## FINDINGS

For example, team setup is one of the identified coordination procedure in GSE which is shown in the sample in this paper. The identified coordination approaches are team members' selection and team structure. For these approaches, there are 14 indicators which could be useful for project managers to setup their team members in GSE environment. Indicators like knowledge, Technical Skills, Type of gender, Area of expertise, Ability of working with others and solve problem, Number of years of experience, Trust and Competent and committed developers are few of the significant indicators for setting a team in distributed environment. For instance, team knowledge is labelled as thorough information of team members expertise and their work domain. When comes to GSE environment, this type of information helps the project managers and team members to find the right expertise within the team setup for the project (5).

## ACKNOWLEDGEMENT

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