

Review Paper on Project Scope Management

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Abstract- When a construction site is being built, the constructor raises a fence on the site defining the boundaries of the construction. This process of building a fence is called scoping. Scope management is the process of defining what work is required and then making sure all of that work – and only that work – is done. Scope management plan should include the detailed process of scope determination, its management, and its control. This needs to be planned in advance. The project manager must seek formal approval on a well-defined and clearly articulated scope. To identify scope, requirements must be gathered from all stakeholders. Gathering requirements from only a few stakeholders or only the sponsor might lead to the incorrect definition of scope. The project scope is the work the project will do to deliver the product of the project (i.e. the product scope). In the software application development example, the project scope is the work that is to be done to develop the software application. This work includes the planning, coordination, and management activities (such as meetings and reports) that ensure the product scope is achieved. These efforts are a part of the project management plan and are further a part of the scope management plan. In this project using Microsoft project (MSP) we are going to schedule a followings projects and study the project scope management regarding the case studies. At the end of the project or the phase, the completed work is compared against the scope baseline in the project management plan to determine if the scope has been successfully completed

Keywords- project scope, management, Microsoft project (MSP) etc

I. INTRODUCTION

The scope of a project can be defined in terms of the functionality which the project is intended to provide, attain, or span. A project scope statement defines, in writing, drawings and price figures, the intended span of work expected and to be provided for in plans for a new facility. The scope statement should also spell out expectations about any eventual extensions, and should include a contingency policy as well. The scope statement should be a clear communication of the extent and functionality of the facility, between the proposers, sponsors, designers, constructors and

the users or purchasers. In order to be explicit as to the meaning or extent of various systems, scope may be further described in terms of cost budget figures. Such budget figures need to be expressed in enough detail to provide the basis for a cost control system and for evaluating any subsequent changes to that scope. According to Fredericka technical scope document is what describes the project's physical characteristics, establishes the design basis, and provides input to civil-structural, architectural, plant design, mechanical, electrical, and control systems disciplines. Elements usually employed to produce this definition include P&IDs⁴, single line diagrams, facility layout sketches, an equipment and instrument list, bulk take offs of mechanical/electrical quantity items, an engineering procurement, instrumentation and construction master schedule, a written controls philosophy, and repair standards expected. Minimum results expected from the production of a project scope statement include a broad description of what is to be covered in the works. The scope of a project can conceptualized to be as shown in Figure 1-1. The overall scope of the project can be thought of as a composition of scope of units which in turn are composed of scope of subunits and so on. The functionality of sub-units determine the functionality of the unit and similarly the combined functionality of the units determine the overall functionality.

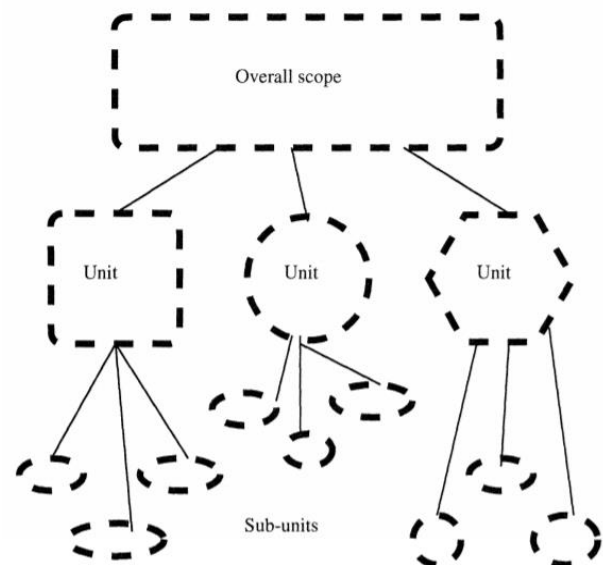


Fig 1 : Scope Definition

II. STATE OF DEVELOPMENT

Shweta Kasnale The owner and contractor companies however share the delusion that it is not economically viable to spend the time or money, required to sufficiently define the scope of work early in a project's life cycle. Sometimes, project participants are unaware about the necessities of a sufficiently defined scope of work. A tool called Project Definition Rating Index (PDRI) was created to address these problems. The PDRI is an easy-to use, checklist of 68 scope definition elements, letting the users to measure and manage the level of scope definition as project planning progresses. It has been found that poor scope definition is one of the principal causes of project failure in the construction industry.

Maja-Marija Nahod et al Projects need to be performed and delivered under certain constraints. Traditionally, these constraints are scope, time and cost. The Scope Control process influences the factors that lead to project scope changes and control the impact of those changes, which a key issue for project success. It ensures that all requested changes and recommended corrective actions are processed and that changes are reduced or eliminated if they result in negative impact on projects. The scope control is considered from the investor's point of view, as achieving the project goals is of primary importance for the investor. The theoretical basis for the research is Dynamic Planning and Control Methodology Findings include reasons for and consequences of changes from the point of view of various stakeholders in the project, as well as recommended procedures for objective and practical management of the changes Practical implications and adjustments are obtained, to result in an efficient system for managing changes throughout a project. Research was conducted through questionnaire and interviews.

Robert T. Hans et al Software project scope verification is a very important process in project scope management and it needs to be performed properly and thoroughly so as to avoid project rework and scope creep. Moreover, software scope verification is crucial in the process of delivering exactly what the customer requested and minimizing project scope changes. Well defined software scope eases the process of scope verification and contributes to project success. Furthermore, a deliverable-oriented WBS provides a road map to a well-defined software scope of work. This paper argues that a deliverable-oriented WBS is a tool for software scope verification. It is on the basis of this that this paper extends the use of deliverable oriented WBS to that of scope verification process.

Davy B. et al Software project management (SPM) has increasingly become an essential task in many organizations, especially with the increase in size, complexity of current software systems. However, software projects often change during development time and there is a lack of models and supporting tools to support the SPM process, especially when it comes to simulations that can assess scenarios involving software project dimensions such as scope, time, cost and quality. In this paper we present our work on a multi-agent based simulation approach to decision making in software project management, with a focus on the scope management processes. In the context of these processes, we will present an instance of our approach in which we provide two essential outcomes to support the human interface aspects, namely (i) the representation of the scope processes; and (ii) visualization techniques using a Work Breakdown Structure (WBS) to show the dynamics of activity flow sequences. To evaluate our approach, we have implemented the representations in Ja- CaMo, an agent-based framework, and, in terms of coverage, we have shown how it can be mapped to some processes of the SCRUM project management method and to the PMBOK Guide (Project Management Body of Knowledge) scope management process. Based on an exploratory study and our experience, we believe these results help to advance the research area involving the intersection of agents and project management. Especially in terms of modelling and simulation complex and dynamics under conditions pertaining agents, organizations and their environment.

A. O. Ogunberu et al Data collected were analysed using both descriptive and inferential statistics. Findings revealed that Competitive Advantage, Organizational Process Assets, Expert Judgment, Complex Activity List, Complex Project Scope Statement, Limited Resources, Fast Tracking, Project Delays, Client Demand, Technical Skills Required, Dynamism of Technology and Return on Investment were adopted factors influencing the choice of project scope management practices among construction organizations. This study examined the factors influencing the choice of scope management practices on ICT projects implementation among construction organizations in Cool homes. Data were obtained through the use of questionnaire and interview to a total of three hundred and seventy five (375) respondents which include one hundred and twenty five (125) project sponsors, one hundred and twenty five (125) project managers/coordinators and one hundred and twenty five project team members on ICT projects.

III. CONCLUSION

This paper focuses only on the literature review of previously published studies. The findings of This paper argues that a deliverable-oriented WBS is a tool for software scope verification. It is on the basis of this that this paper extends the use of deliverable oriented WBS to that of scope verification process. Practical implications and adjustments are obtained, to result in an efficient system for managing changes throughout a project. Research was conducted through questionnaire and interviews. It has been found that poor scope definition is one of the principal causes of project failure in the construction industry. Especially in terms of modelling and simulation complex and dynamics under conditions pertaining agents, organizations and their environment.

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