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A VISUALIZATION ANALYSIS METHOD IN PROJECT COMMUNICATION STRUCTURE USING
THE HUMAN MODEL

Abstract

One difficulty in space project management is communication management. Communications between members, leaders, and stakeholders are all extremely important, although there are many ways to communicate with others. Therefore, the field lacks an established evaluation method. Even now, it is difficult to determine the problem in communications to judge whether the team has good relations. I propose a new technique, called the human model, as a means to express communications explicitly. This technique is a spin-off from ISS Japanese robotics software design methods. I show an example of a project that was simplified to have one stakeholder. Then, I show the effectiveness of the communication definitions and the usability of the model by analyzing and interpreting a simulation of the model. Furthermore, it shows the similarity with NASA's flight director team model and its extensibility to the International Space Station Human Behavior Performance Competency Model Table of contents: 1. Actor model and human model 1.1 Explain the actor model as a prerequisite 1.2 Extension to human model-Bird's eye view of project communication- 2. Base human model-Best pattern for project teams with recursive structure- 2.1 Example of sample project structure 2.2 Description of each type 2.3 Consideration of division of roles 2.4 Similarity to NASA flight director model 2.5 The reason why each type is mandatory 2.6 Preliminary study of inspiring 3D visualization of other communication models such as ISS HBP model Like and dislike Model of attraction and repulsion

Key Words Phrases: Actor Model, Communication Management, Visualization Analysis, Customer Communication, Communication Visualization