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**On Building Software Process Models Under the Lamppost Summary**

**Important Points from Article**

* “The findings of this study are re- viewed for their implications on modeling the process of designing large software systems.” [96]
* “The purpose of process models is to help make software development a more reliable and productive activity. Their focus has been on the management aspects of development: what should be available and when.” [96]
* “Three important alternatives to the waterfall model have been described in a tutorial by Agresti (1986a) as I) prototyping, 2) operational specification, and 3) transformational implementation.” [97]
* “The fundamental problem is that the techniques and tools that underlie alternate approaches to the development process must be substantially more powerful to offload from project personnel the burden of managing the complexity of large systems development.” [97]
* “First, management will be deceived by the simplicity of the prescribed process and will not under- stand what pitfalls are likely to await them.” [97]
* “If software process models are to offer more than illusory com- fort to managers that the project really is under control, then we must focus them on something other than phase-ending events and activity descriptions that are useful when there is little uncertainty.” [98]
* “Although we structured the interviews to cover certain topics, we asked open-ended questions that allowed participants to formulate answers in their own terms. We encouraged participants to discuss what they thought were important events and challenges during development.” [99]
* “Most of the projects had one or two people who were the primary conceptualizers behind the design of the application system. Usually, they were the senior systems engineers who communicated with the customers and made the earliest design decisions.” [99]
* “Project and division general managers consistently commented on how these differences related to project performance.” [99]
* “As a result, software development contains a large commitment of time dedicated to learning.” [100]
* “This "knowledge integration" task could be accomplished by either a team or an individual, depending on the size of the system and the number of areas to be integrated.” [100]
* “The time required
* for learning application-specific information is buried under the traditional life cycle phase structure of most projects and is often unaccounted for.” [100]
* “Although customers are able to describe the rudiments of the behavior they desire in the end product, they often have difficulty envisioning the interactions of various parts of the system or of the system with its environment.” [101]
* “It is tempting to conclude that the best prototype is a failed development project. We observed several highly productive projects that had risen from the ashes of a failed project.” [101]
* “Internal company environments change due to new organizations, technologies, personnel, policies, procedures, etc. External environments change due to economic factors, market conditions, political events, etc.” [101]
* “However, these models are often based on advances in technology that we believe are still in their adolescence.” [102]
* “The communication model suggested by existing models of software development is one to support management accountability. It identifies who provides what formal deliverables, reports, etc. to whom.” [103]

**Things I Didn't Agree With**

“The major shortcoming of the waterfall model was that it failed to treat software development as a problem solving process.” [96]

I disagree with this statement by the author because it is not the model which fails to treat software development as a problem solving process, but merely the people who are developing the software. The software model is just the steps we take to develop the software. It does not outline how we should treat different aspects. Instead, it is the developers who treat the software as something. If the developers fail to see software development as a problem solving process, it is most likely because of their attitude towards the situation, not the Waterfall model.

**Things I Did Not Understand**

I understood the entire article.