Paper Review

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Citation

Phillip A. Laplante, Colin J. Neill, "The Demise of the Waterfall Model Is Imminent' and Other Urban Myths", ACM Queue, vol. 1, issue 10, February 24, 2004. ACM Queue.

Summary

This paper examined three urban myths about current software engineering practices based on a survey conducted in 2002.

Key Concepts

It appears that urban myths exist in the software engineer industry because people want to believe them and, because no data exists to refute them. There are three myths mentioned in the paper.

First myth is the demise of the waterfall life-cycle model is imminent. The waterfall model was built in 1970 when the computer system was monolithic, number-crunching entities with rudimentary front ends and users' needs were filtered through the partisan minds of the computer Illuminati building the systems. There are not too many stakeholders involved. The model assumes development progresses linearly and each step is conducted separately. Later, people found the flaws and there is a number of alternative process models came out. However, through the data collected, it appears that the waterfall model still keeps its domain position, although it's not perfect, people still at ease in doing the wrong thin than doing the right things.

Second myth is we throw away our first attempt. People well recognized that prototypes are great, and developers unwilling to throw away the prototype instead of building a new one. However, defer structural and architectural concerns and to give scant consideration to fundamental practices is common in prototypes. The results from the survey indicated that half of the time evolutionary prototyping is used. Evolutionary prototyping can successfully in some situation, but there is more to software quality than these operational properties. Developers requires more forethought and a wider perspective.

The third myth is the industry has recognized the value of best practices. The survey exposed that object-oriented techniques were used less than 50% of the time, and the most dominant practice was none at all. Unless best practices are followed and promoted, the industry will not be able to reboots.

Several ways to debunking myths:

- Fight complacency. Question inappropriate or outdated things.
- Became an agent of change. Adopt appropriate methodologies.
- Enlightenment. Continue to learn, absorb knowledge, adapt practices all the time.

Assessment

The paper clearly explains what uber myths are, and questions about perception versus reality with respect to the nature of software engineers, software engineering practice, and the industry. The analysis of the article is based on convinced survey data, combined with the actual situation, and gave pertinent suggestions for the development of the industry.