Paper Reviews.

Why SPI Initiative Failed: Contextual Factors and Changing Software Development Environment

Paper Citation

P. Virtanen, S. Pekkola and T. Päivärinta, "Why SPI Initiative Failed: Contextual Factors and Changing Software Development Environment," *System Sciences (HICSS), 2013 46th Hawaii International Conference on*, Wailea, HI, USA, 2013, pp. 4606-4615.

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URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6480398&isnum ber=6479821

Summary

This paper mainly talking about when the SPI meet different organization context, it has to be modified according to the case-specific contextual demands. This paper highlight the importance of contextual demands in SPI. The paper also gives a framework to prove the necessary of changing the Personal Software Process due to the contextual demands.

Strengths

This paper not only just give an point with some theory talking but also give some real study and a framework to proof and explain the idea the author want to state. On the other hand, the author not just follow the main idea that the PSP is important but found some disadvantage of PSP.

Weaknesses

This paper only depend on the industry and experience software developer, but never consider about the new software development learner. At the first the PSP have more advantage than disadvantage. The author should consider about this

Other comments

Author have a good point and I am agreed with that. PSP is a good way to get a good habit of programming but is just a learning process to me now. After reading this paper I am more concerned about the changing of PSP will affect the self-programming efficiency or not

Toward a consistent IDE: Eclipse Platform/IDE

Paper Citation

Toward a consistent IDE: Eclipse Platform/IDE

B.J. Fesq

New Architect. 7.9 (Sept. 2002): p48.

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http://ubmtechnology.com/

Summary

This paper is just a general introduction of one of the most famous IDE using today ----eclipse. It talked about what the eclipse can do and what is the advantage of using eclipse. Give the main things that we can let IDE do for us and have no concern about it. This paper can be use to describe what the IDE can do and compare with the SPI what we should do on our own.

Strengths

Give a really good description about what an IDE is like. The things IDE can do for us. And what we can get from it. For example, combined coding, compiling, debugging together. Have chart and image to give a clearly view about what IDE is like.

Weaknesses

Never compare with the situation without IDE. Haven't talk about the disadvantage about IDE and what we have lost after using it. Should talk about the different IDEs and have a comparison.

Other comments

Can be used as a background in the essay. Give an example of what IDE is. But can be use just like this. Need more information about what does the IDE change the programming habit.

SPI agility: How to navigate improvement projects

Paper Citation

Aaen I, Börjesson A, Mathiassen L. SPI agility: How to navigate improvement projects. Software Process: Improvement & Practice [serial on the Internet]. (2007, May), [cited March 31, 2016]; 12(3): 267-281. Available from: Computers & Applied Sciences Complete.

Summary

By using the one experiment on SPI agility to give an opinion that how to navigate improvement projects. This paper have given a general background about SPI. After this give an example that in a famous company Ericsson and then give two tactics. The author highlight the importance of agility mindset in SPI in an environment that the technology and market change is so quick. The author give a clearly description about the research method and draw a discussion between the two different implementation tactics which are supertanker and motorboat.

Strengths

The article is with well support and state the opinion clearly. With 18 different SPI initiatives that have done, the author can strongly prove what he state is true. This paper has taken the two tactics into critical thinking, not only just the good part but also talk about how different situation have affect the result. Just like the hight sense of urgency make it more successful on both tactics.

Weaknesses

Compare with the whole paper, the background is not enough. People have no idea what the author is talking about if they are not someone knowing IT and PSP.

How are Java software developers using the Eclipse IDE?,

Paper Citation

G. C. Murphy, M. Kersten and L. Findlater, "How are Java software developers using the Elipse IDE?," in *IEEE Software*, vol. 23, no. 4, pp. 76-83, July-Aug. 2006.

doi: 10.1109/MS.2006.105

URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=165794 4&isnumber=34708

Summary

This paper give a research about how does the java software developer using different function that provide by the Eclipse IDE. The research is mainly focus on JDT. Give a background of who take part in the study and analysis the usage of different function in details. Just like which view does the user use most, which command does the user most used and what percentage of this command and what else the command the user used and what percentage are they.

Strengths

Use graph, chart to show how the using of the Eclipse and really in details and in a good structure. From the graph we can clearly know about what the user do with eclipse and in what degree. Give some suspect about why these data is like this and what does the user do so these data show like this.

Weaknesses

Too focus on details and don't have a good conclusion about it. The paper end up too quick after giving so much information. We only know the information but we didn't see enough analysis about the information.

Other comments

This paper can be used to tell IDE help software developer in what area. Just like checking the spell and have a clear view of the whole structure. And from the chart we can see the most mistake we got is the wrong name and this will side proof that the SPI is useful.

Improving software developer's competence: Is the Personal Software Process Working?

Paper Citation

Abrahamsson, P., Kautz, K., Sieppi, H., & Lappalainen, J. (2002) Improving software developer's competence: Is the Personal Software Process Working? Presented at Workshop on Empirical

Cite as: <u>arXiv:1311.0228</u> [cs.SE]

Summary

The article give some useful opinion: 1) The PSP is an well know technique to improve software process in individual and will secure the quality. 2) PSP aim to make the software engineering project more predictable and in good quality. The article give a research about 58 students in 3 different university studying PSP. And result shows that only compile is significant improved. Author conclude this result as PSP can't significant increase the software engineer's size and time estimation skills but can improve the quality of the product.

Strengths

This article use the real research and data to conclude a result that can make people convinced. Using graph and chart to support its opinion make the result can be clearly seen.

Weaknesses

The research data is too small, 58 students is not an appropriate data source even though the students are from three different universities.

• Other comments (optional)

This article's result can be partly believed, even though the data source is in a small volume but still got some evident to proof that the PSP have benefit to the Software Engineer but not so significant.