

Essay Proposal

COMP150 - Agile Philosophy Essay

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Topic

If there is a correlation between a preference for agile methods, openness and extraversion, how can other personality types best adapt to the agile development process?

Paper 1

Title: 'Toward an Understanding of Preference for Agile Software Development Methods from a Personality Theory Perspective'

Citation: [1]

Abstract: 'This paper presents the results of an exploratory research study that investigates factors contributing to preference for the agile software development approaches. The initial exploration revolves around the Five Factor Model of personality and the premise that these personality factors provide a partial explanation of preference for an agile approach. A survey instrument for measuring the preference for agile methods was developed and validated. The results from the quantitative data collected from the survey study indicate that three out of the five personality factors from the Five Factor Model show a correlation with above average preference for agile methods. These factors are extra version, openness and neuroticism. The first two have a positive relationship with agile preference while neuroticism (emotional instability) has a negative relationship with agile methodology preference. To further investigate the results, an exploratory factor analysis was performed on the data, which identified three factors that may also contribute to a preference for agile methods.'

Web link: <http://ieeexplore.ieee.org/document/6759185/>

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Comments:

Paper 2

Title: Agile Practices: The Impact on Trust in Software Project Teams

Citation: [2]

Abstract: Agile software development involves self-managing teams that are empowered and responsible for meeting project goals in whatever way they deem suitable. Managers must place more trust in such teams than they do in teams following more traditional development methodologies. The authors highlight how the use of agile practices can enhance trust amongst agile team members. They also present challenges that agile teams can face as a result of using agile practices. Their results are based on the findings from three case studies of agile software development teams.

Web link: <http://ieeexplore.ieee.org/document/6007124/>

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Comments: Write a few sentences on how you found the article and why you believe it is relevant and/or important.

Paper 3

Title: Supporting agile team composition: A prototype tool for identifying personality (In)compatibilities

Citation: [3]

Abstract: Extensive work in the behavioral sciences tells us that team composition is a complex activity in many disciplines, given the variations inherent across individuals' personalities. The composition of teams to undertake software development is subject to this same complexity. Furthermore, the building of a team to undertake agile software development may be particularly challenging, given the inclusive yet fluid nature of teams in this context. We describe here the development and preliminary evaluation of a prototype tool intended to assist software engineers and project managers in forming agile teams, utilizing information concerning members' personalities as input to this process. Initial assessment of the tool's capabilities by agile development practitioners suggests that it would be of value in supporting the team composition activity in real projects.

Web link: <http://ieeexplore.ieee.org.ezproxy.falmouth.ac.uk/document/5071413/>

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Comments: Write a few sentences on how you found the article and why you believe it is relevant and/or important.

Paper 4

Title: Critical personality traits in successful pair programming

Citation: [4]

Abstract: Pair programming (PP) is a common practice in Extreme programming, in which two programmers work together using a single computer. The close interaction required by PP makes it difficult to apply. The hypothesis is that certain personality traits are crucial for the success of PP, and PP partners should be chosen based on these personality traits. In this research, we first survey the programmers in industry to identify the perceived important personality traits for PP, and then conduct experiments to determine the significance of these personality traits in successful PP.

Web link: <http://ieeexplore.ieee.org.ezproxy.falmouth.ac.uk/document/1667566/>

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Comments: Write a few sentences on how you found the article and why you believe it is relevant and/or important.

Paper 5

Title: Title of paper

Citation: [?]

Abstract: Copy and paste the abstract here

Web link: Give the URL of the paper in IEEE Xplore, ACM Digital Library, or similar

Full text link: Give the URL of a downloadable PDF of the paper, if you can find one

Comments: Write a few sentences on how you found the article and why you believe it is relevant and/or important.

References

- [1] D. Bishop and A. Deokar, "Toward an understanding of preference for agile software development methods from a personality theory perspective," in *47th Hawaii International Conference on System Sciences*. Waikoloa, HI: IEEE, Jan 2014, pp. 4749–4758.
- [2] O. McHugh, K. Conboy, and M. Lang, "Agile practices: The impact on trust in software project teams," in *IEEE Software*, ser. 3, vol. 29. IEEE, Jun 2012, pp. 71 – 76.

- [3] S. Licorish, A. Philpott, and S. MacDonell, “Supporting agile team composition: A prototype tool for identifying personality (in)compatibilities,” in *Cooperative and Human Aspects on Software Engineering, 2009. CHASE '09. ICSE Workshop on*. Vancouver, BC: IEEE, May 2009, pp. 66 – 73.
- [4] J. Chao and G. Atli, “Critical personality traits in successful pair programming,” in *Agile Conference, 2006*. Minneapolis, MN: IEEE, July 2006, pp. 5 – 93.