

# **What are the advantages and disadvantages of a scrum philosophy vs. a waterfall philosophy when making role-playing games?**

**COMP150 - Agile Development Practice**

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This paper will be detailing the different advantages and disadvantages between a waterfall philosophy and a scrum philosophy in the creation and development of role playing games. I have found, when looking at different peoples opinions on different philosophies, that many universally accept that a scrum philosophy is the best way to make role-playing games. However, there are times a waterfall philosophy could potentially be just as good as scrum depending on what team you are working with and what project you are working on. Some of the main points I will consider are when a waterfall philosophy could potentially be better and more efficient when creating role-playing games and when a scrum philosophy would be more suitable.

# **1 Introduction**

The first part of this essay will look at the advantages of using a scrum philosophy throughout a project and how it helps different types of people when working in groups. The second part will consider the disadvantages of the scrum philosophy and how it can potentially hinder teams in their progress, degrading their efficiency. The third and fourth will consider the advantages and the disadvantages of a waterfall philosophy and how this can affect different types of people. The fifth will consider how the advantages and disadvantages of both philosophies affect the creation and development of role playing games in the industry and which is more widely used and preferred to work on bigger projects. The sources I will be using throughout this essay are 'Agile methods in European embedded software development organisations: a survey on the actual use and usefulness of Extreme Programming and Scrum' [1] 'Exploring Agile' [2] 'Moving back to scrum and scaling to scrum of scrums in less than one year' [3] 'Comparing extreme programming and Waterfall project results' [4] and 'Iterative MMO Development at Scale' [5] The end of this paper should ascertain which philosophy is the most effective within the industry.

# **2 Advantages to Scrum**

Within an agile philosophy scrum can have many different advantages when making video games. One example of this is throughout multiple different methods it has been shown that using scrum can save time when testing the overall product of the game development throughout different iterations, this allows for a greater volume of feedback.[5](Slide 12) Another way scrum can be useful is that when creating, developing and implimenting new fetures into

a game it can be checked quickly and any mistakes can be easily rectified.  
[5]

### **3 Disadvantages to Scrum**

### **4 Advantages to Waterfall**

### **5 Disadvantages to Waterfall**

### **6 How this affects role-playing games in the industry**

### **7 Conclusion**

Write your conclusion here. The conclusion should do more than summarise the essay, making clear the contribution of the work and highlighting key points, limitations, and outstanding questions. It should not introduce any new content or information.

### **References**

- [1] O. Salo and P. Abrahamsson, “Agile methods in European embedded software development organisations: a survey on the actual use and usefulness of Extreme Programming and Scrum,” *Software, IET*, vol. 2, no. 1, pp. 58–64, 2008. [Online]. Available: [http://ieeexplore.ieee.org/xpls/abs/\\_all.jsp?arnumber=4460895](http://ieeexplore.ieee.org/xpls/abs/_all.jsp?arnumber=4460895)
- [2] D. Gelperin, “Exploring agile,” *Proceedings of the 2008 international workshop on Scrutinizing agile practices or shoot-out at the agile corral - APOS '08*, pp. 1–3, 2008. [Online]. Available: <http://portal.acm.org/citation.cfm?doid=1370143.1370144>

- [3] R. P. Maranzato, M. Neubert, and P. Herculano, “Moving back to scrum and scaling to scrum of scrums in less than one year,” *SPLASH ’11: Proceedings of the ACM international conference companion on Object oriented programming systems languages and applications companion*, pp. 125–130, 2011. [Online]. Available: <http://dl.acm.org/citation.cfm?doid=2048147.2048186&delimiter=026E30F&npapers3://publication/doi/10.1145/2048147.2048186>
- [4] F. Ji and T. Sedano, “Comparing extreme programming and Waterfall project results,” *2011 24th IEEE-CS Conference on Software Engineering Education and Training, CSEE and T 2011 - Proceedings*, pp. 482–486, 2011.
- [5] W. Producers, A. Liu, and S. Wolfram, “Iterative MMO Development at Scale,” *Game Developers Conference 30th Edition*, pp. 1–45, 2016.