Project Failure Study

From analysing the paper by Lehtinen et al (2014), I have concluded that the three main reasons for project failure in relation to software engineering are managerial issues, problems arising during implementation and problems arising during software testing phases. This is supported by the data that is displayed within Table 4 of the paper.

Managerial issues leading to failure can be seen in the FBI VCF (Virtual Case File) system upgrade, as described by Eggen & Witte (2006). The project was scrapped after $170 million had been spent on it due to consistent issues with the contractors who were developing it. When asked, the then Director of the FBI stated that he "didn't do the things he should have done to make it a success". On the end of the contractor, SAIC, there was a reluctance to inform the FBI of the issues that were arising. From both parties, there was a lack of leadership communication regards the deliverables.

An example of testing and implementation issues leading to project failure can be found with the European Space Agency Ariane 5 disaster. The project was under development for 10 years at a cost of $7 billion, which all came to a disastrous end when the rocket self-destructed shortly after launch (Gleick, 1996). This was due to the programmers not testing for a particular velocity figure, believe that this figure would not cause any issue with the rocket. To further add to the failure of this, the calculation that contained the bug in question (a simple bit conversion) wasn't essential to the launch, highlighting further issues with testing in this case.

Both of the aforementioned scenarios cost the organisations and their customers a considerable amount of money, as well as reputational damage and wasted staffing resources. This highlights how important the SDLC is and the weight that all steps should be given, regardless of how insignificant they may initially seem.

References

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