# Introduction

The following case study is of a share portfolio management software, released in 2004. Currently it is used only in New Zealand by 11 companies all belonging to a sole investment management franchise. The large body of code making up the software has deteriorated and does not support mobile platforms with only 3 people to maintain and support it.

The software is due for redevelopment by an in-house development team of 15 but the franchise group are looking to expand this to 18 by the end of 2017.

The purpose of this report is to identify and look into any beneficial practices/approaches with regard to these five areas: collaboration and communication, requirement engineering, project planning and tracking, managing change and lastly quality assurance. We will be looking at practices under the agile methodology.

While agile is most suited for teams 4-9 it has been found to have observed benefits when used within larger teams and projects, Lagerberg found that regardless of should they choose to scale up the project and development team [1]. The mid-size nature of the end development team also means that they can be split into 2 teams of 9 to better align with the general recommendation of the ideal agile team size.

Agile has also been shown to perform better on average in comparison to traditional methodologies (i.e. Waterfall, sequential and well defined approach) [2].

# Recommended Practices

## Collaboration and Communication

## Requirements Engineering

## Project Planning and Tracking

Although sprint backlogs are a practice of scrum, being that scrum is under the agile umbrella I feel it is still a relevant and beneficial practice to this case study.

From my research I was unable to find any empirical papers to support the benefits of specific scrum/agile practices again more traditional methodologies, however what I found was [2].

## Managing Change

## Quality Assurance

# References

1. **Lagerberg, L., Skude, T., Emanuelsson, P., Sandahl, K., & Stahl, D. (2013). The Impact of Agile Principles and Practices on Large-Scale Software Development Projects: A Multiple-Case Study of Two Projects at Ericsson. *2013 ACM / IEEE International Symposium on Empirical Software Engineering and Measurement*. doi:10.1109/esem.2013.53**
2. **Serrador, P., & Pinto, J. K. (2015). Does Agile work? — A quantitative analysis of agile project success. *International Journal of Project Management,* *33*(5), 1040-1051. doi:10.1016/j.ijproman.2015.01.006**