

## Perceived Benefits and Barriers of Agile Working

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**Abstract.** The multi-strategy method integrated findings from two rounds of interviews, a questionnaire and a literature review to identify changes necessary to create an agile and beneficial work environment. The data was analysed using quantitative, qualitative and triangulation methods. Agile implementation through consistent management style, changes to the office environment and mind-set are factors for successful agile work.

**Keywords** Agile working, benefits, barriers, office

### 1. Introduction

The benefits of agile working practices for employees and organizations have been recognized in industries such as software development and property and infrastructure. A literature review verifies that corporate culture and consistent agile management styles are main drivers for a successful implementation of agile office structures. Lend Lease, a property and infrastructure company, has variations in duration, numbers of employees and team members according to stage and dimension of a project. Perceived benefits, barriers and factors for success of employees are investigated. The implementation of an agile office structure can offer flexibility for transient work processes. Other perceived benefits are increased productivity, quality of work and employee well being. The results of the literature review are corroborated by a multi-strategy study.

### 2. Aim

The aims of the study are to gain a deeper understanding of the implementation of aspects of agile work at Lend Lease. It identifies necessary changes to create a more agile, beneficial work environment that can overcome barriers. Furthermore the expected benefits of an agile office are investigated.

### 3. Method

As part of the data collection, a literature review, observations, interviews and a questionnaire were conducted to assess benefits, barriers, current working conditions and the implementation of agile aspects. Seven interviews were conducted using a semi-structured approach.

A web-based questionnaire was comprised of eleven questions and was completed by 209 employees of the Lend Lease RP office. Dropdown menus of various categories per question were rated on a five-point Likert scale to assess attitude towards agile work. An exploratory observation collected data to gain insight into desk occupancy, disruption of working processes and IT equipment.

The data collected in the questionnaire and from the observation was assessed using the quantitative data analysis tool SPSS. Qualitative data collected from seven interviews and comments from the questionnaire were analysed and interpreted using NVivo. The data sets were joined and triangulated to produce the results.

#### **4. Limitations**

Time constraints and scope of the study prevented a larger sample size of interviewees as well as a more in-depth analysis of quantitative data of correlations between barriers, benefits and factors for success are recommended. As part of the triangulation of the data, a self-developed rating tool was constructed. The validity of this tool to compare the relative importance of the data points from the various sources is unsubstantiated and should be evaluated and developed further to sufficiently compare the results. It is however effective in comparing and quantifying the importance from the different sources of data. The question remains whether results from the literature review are weighted as heavily as the ones from the quantitative or qualitative analysis. The relevance to Lend Lease will be strongest with data collected within the Lend Lease community. Further investigation on more suitable weighing techniques should be conducted.

#### **5. Results**

The appraised literature suggests that corporate culture and consistent agile management style are key factors in a successful agile approach to work. This was supported through the triangulation of qualitative and quantitative data analysis. It revealed that the strongest barriers of agile work are mind-set and lack of management involvement. Other consistent barriers are lack of decision-making, visibility and information sharing. The strongest factor for success is mind-set when themed with societal culture. Co-location and communication are of significant importance to a successful implementation of agile office structures. Changes supported by two sources with moderate significance are additional areas for collaboration and concentration, standing desks, employee's role and competences, corporate culture, customer involvement, team work, layout, comfortable seating, flexibility around furniture and personal storage space.

Various benefits are identified through the method of data collection and analysis. Beneficial aspects observed on all levels are increased flexibility, quality and cost reduction. Additionally, healthier office and improved employee wellbeing are deemed significant benefits. 13 other benefits are of lower significance and are only identified by one research method.

#### **6. Conclusions**

The management style impacts others factors such as communication and productivity and ensures suitable co-location and composition of the team. Even though agility is a self-managing method of work, the role of the management is of vital importance to the success of an agile team.

Most of the established barriers result either from insufficient support from the management, but can also be caused by the incompatibility of the project with agile working practices.

To evaluate the suitability of agile methods and the expected benefits for a project, a consultation with an experienced expert may be helpful to ensure successful implementation of agility into a company.