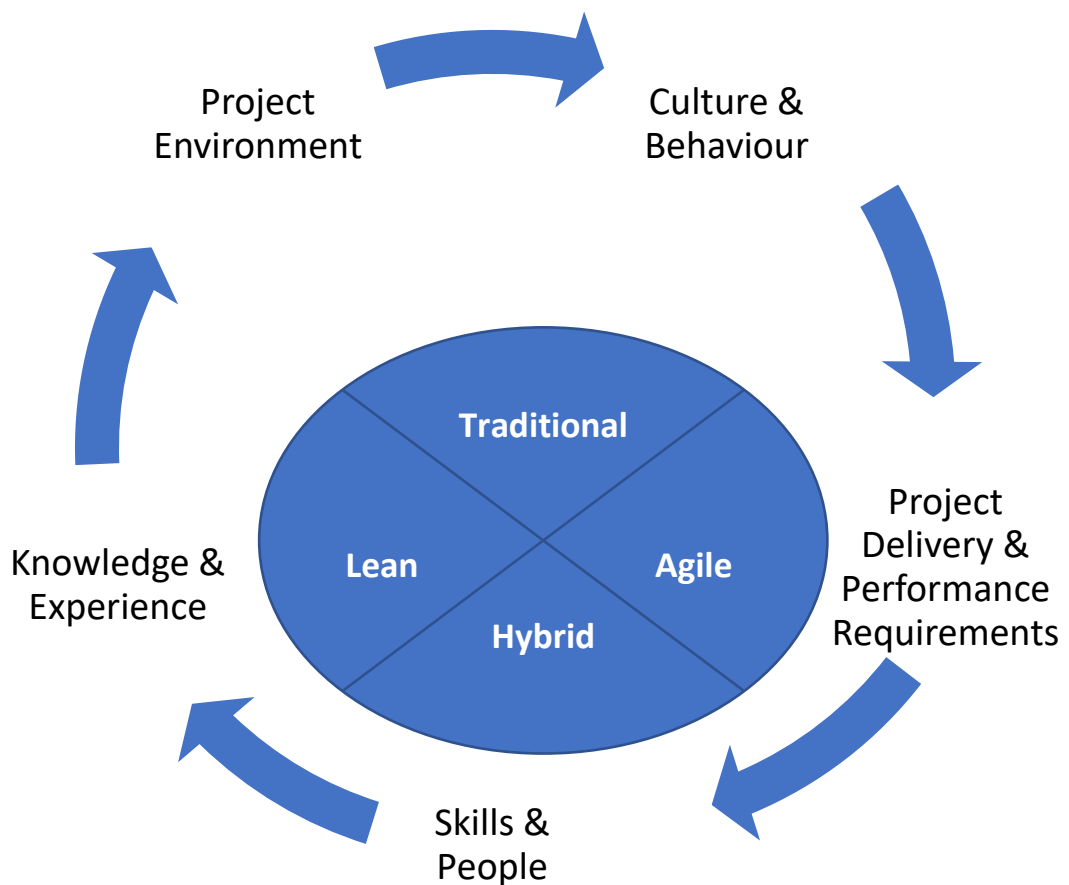


Eight focus groups were held across the UK, Germany, Switzerland and Malaysia between November 2019 and December 2021, with the aim to develop an innovative project delivery model that can be applied across different industries informed by lean and agile based approaches. Experienced (minimum of five years) project managers participated from IT, Technology, Engineering, Construction, Estates & Facilities Management, Oil and Gas, Pharmaceutical and Nuclear industries. Focus Groups took place face to face and online and participants discussed the extent to which three initial factors (Knowledge, Experience & Skills, Project Environment, Culture & Behaviours) might influence their decision to implement specific delivery approaches. Each focus group also outlined any specific methods, tools and techniques for specific factors, or specific delivery approaches based on their experience.

Figure 1: Proposed Delivery Model for lean and agile project management



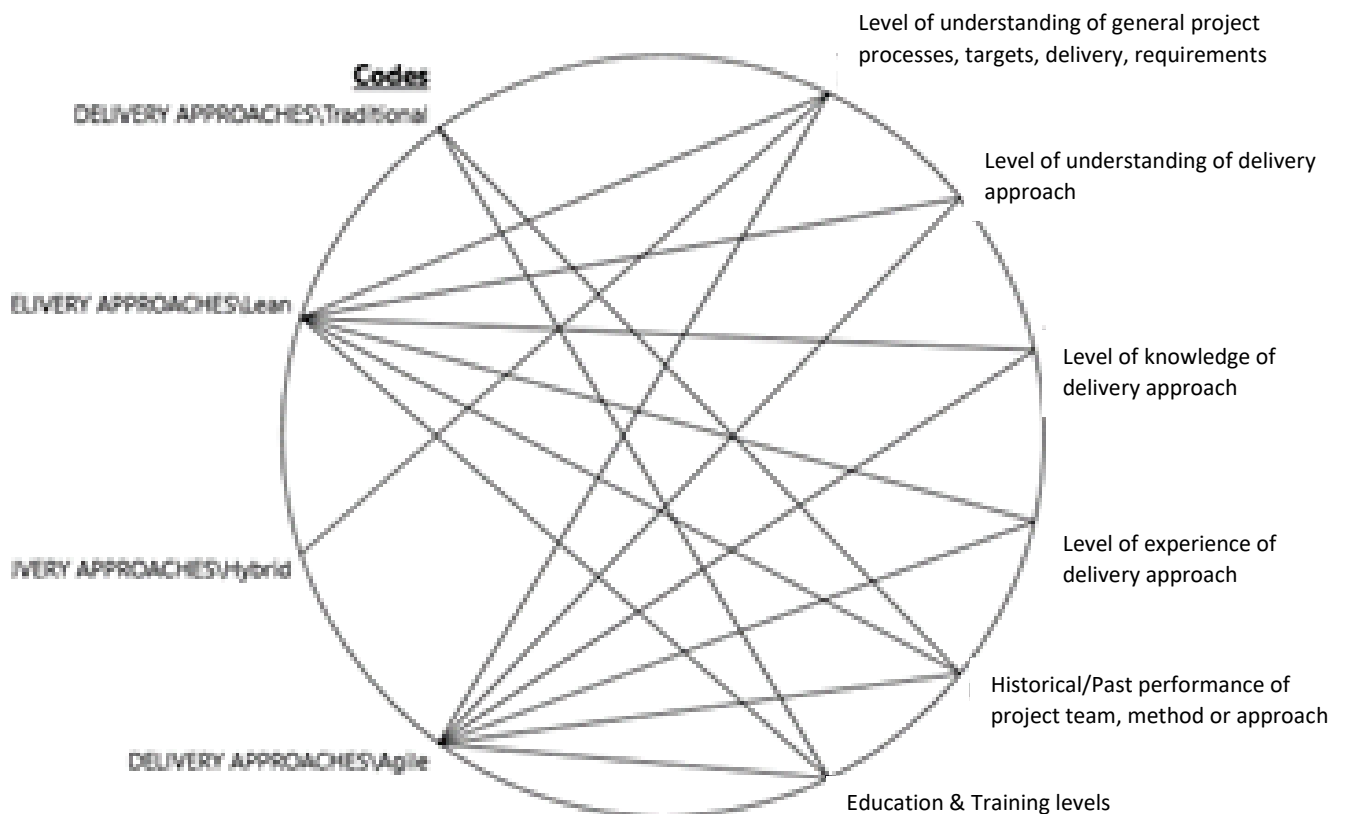


Analysis demonstrates that although the lean and agile approaches are preferable, the decisions surrounding the factors differ slightly. In terms of **Culture & Behaviour**, 21 sub-factors were found:

1. Ability to see benefits of the project delivery approach
2. Adaptability of teams to implement project delivery approach
3. Client driven project delivery approach
4. Client opposition to project delivery approach
5. Individual Mindset
6. Level of acceptance of specific tools, techniques and methods of approach
7. Level of collaboration and co-operation
8. Level of commitment
9. Level of communication between stakeholders
10. Level of leadership from senior managers
11. Level of motivation
12. Level of support from senior managers
13. Level of vision
14. Level of willingness to change
15. Level of willingness to make mistakes
16. Management-driven project delivery approach
17. Negative perception of project delivery approach
18. Personal familiarity with project delivery approach
19. Prevailing practice
20. Problem-solving abilities of individuals, teams
21. Team-driven project delivery approach

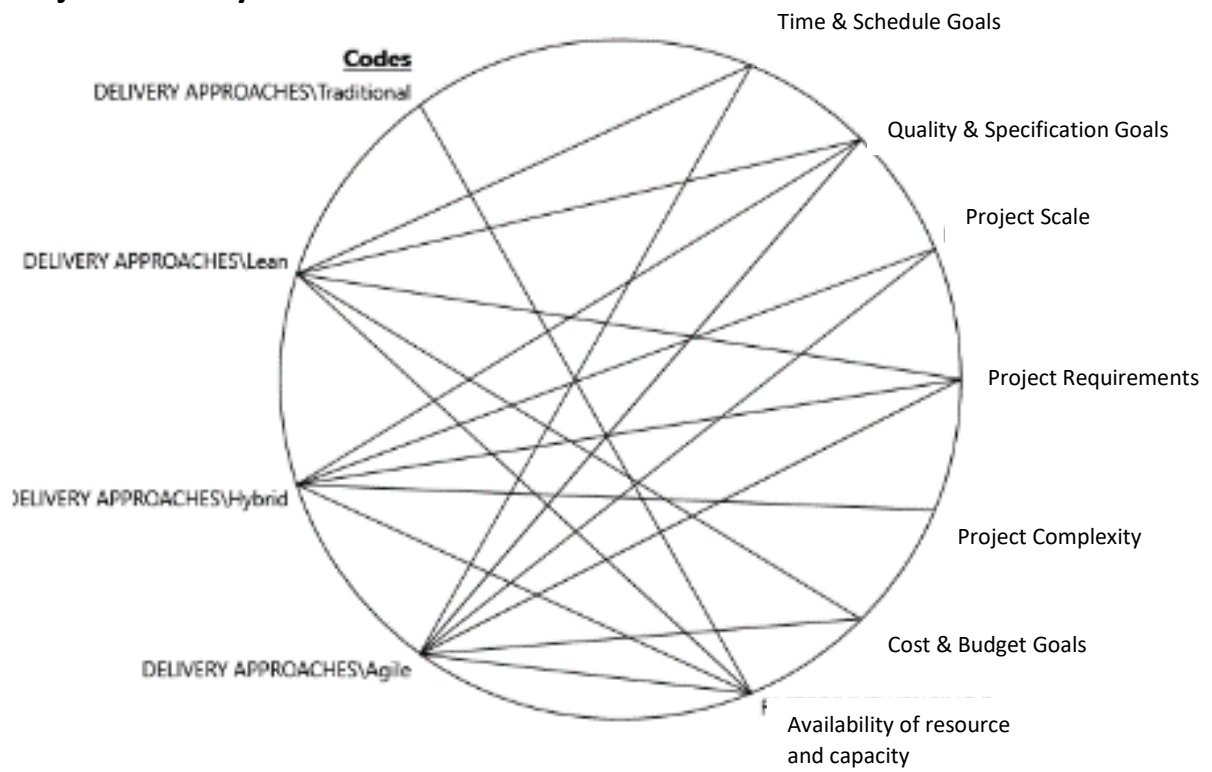
All approaches indicated that the **ability to see benefits of the project delivery approach** was important. Of the 21 sub-factors, 18 were prevalent for both agile and lean, with 1 additional sub-factor of importance to lean.

## Knowledge & Experience

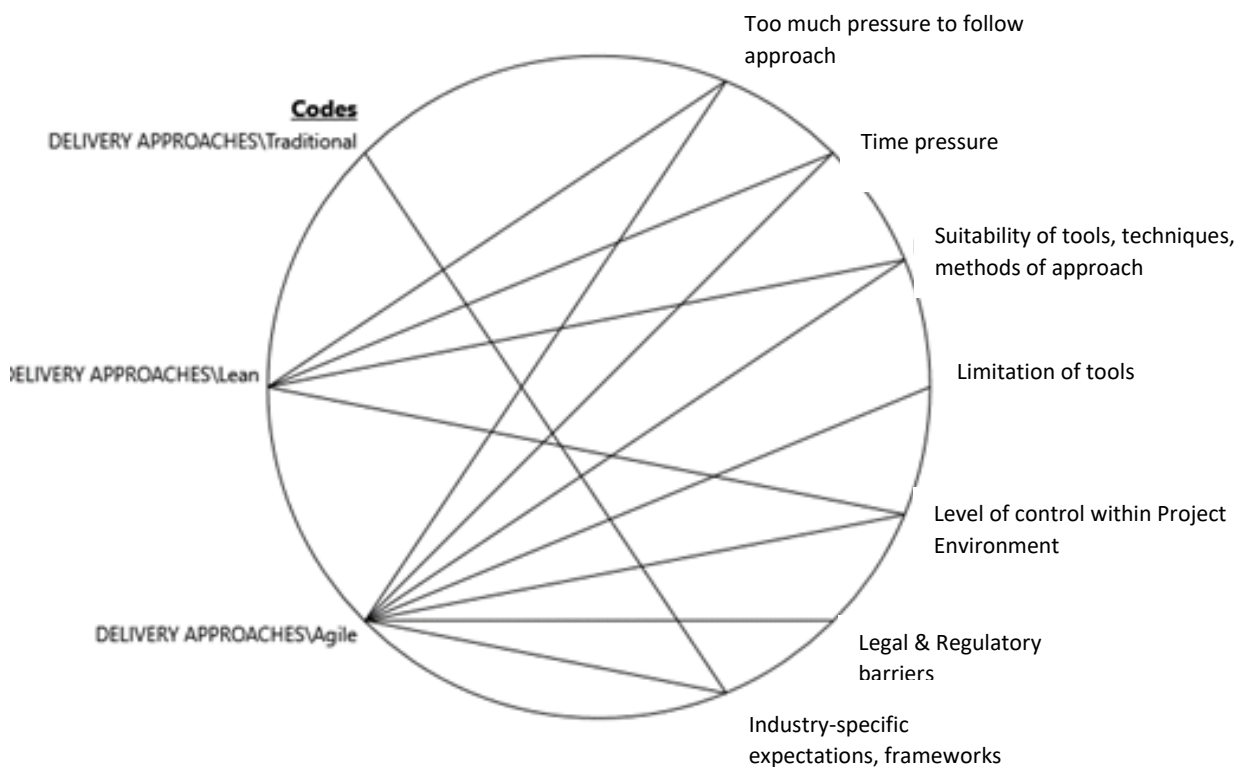


Lean requires less knowledge and experience prior to project delivery that can be developed as the approach is implemented, whereas if there is no prior experience of Agile, project managers are less likely to select this approach for delivery. This is particularly prevalent for time-critical projects, where a traditional approach may be chosen. Where there is uncertainty or early stages of design, Agile is more likely to be chosen over traditional or lean. Further, project manager's perception of the likelihood of sharing knowledge and experience suggests that less well-established members of project teams appear to be more willing to share new and existing knowledge and experience rather than those who are more experienced. Similarly, project managers and their teams appear to be willing to devote time and effort to learning about lean prior to and during implementation of projects. Agile delivery approaches prefer to use existing knowledge and experience prior to project delivery.

## Project Delivery



## Project Environment



# Skills & People

