



# Multiple Roles of Middle Managers in Agile Project Governance: An Activity Theory Perspective

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**Abstract.** Project governance (PG) is an important activity in agile software development (ASD) projects. Middle managers (MMs) are part of the governance structure in ASD projects. PG and middle management phenomena in ASD projects are under-researched and not fully understood. This ongoing study aims to fill a gap by investigating the roles of MMs in agile PG through the lens of Activity Theory. The study adopts a qualitative and interpretive case study approach. To date, the study has identified 24 roles that MMs perform during agile PG.

**Keywords:** Agile project governance · Middle managers · Agile software development · Activity Theory · Case study

## 1 Purpose

Project governance (PG) is an important but complex activity performed during agile software development (ASD) projects, and encompasses the necessary oversight, processes, tools, manpower, and support for project accomplishment. It is the “framework, functions, and processes that guide project management activities in order to create a unique product, service, or result to meet organizational strategic and operational goals” [14, p. 4]. In relation to agile projects, PG is under-researched and not fully understood [7, 11].

Middle managers (MMs) occupy the middle-level position in an organisation’s governing structure and they link senior management (SM) with the lower-level workforce [2]. In ASD projects, MMs function within agile teams [6]. The MMs are expected to work alongside agile teams and play their role to ensure delivery of ASD projects, hence they are part of the project governance structure therein. However, there is evidence that the role of MMs in ASD projects is not clearly defined and not fully understood [3, 6, 12]. Agile projects are considered lightweight, self-organising, and flexible, therefore practitioners question how ‘management’ and ‘governance’ fit in. Middle management role uncertainty is one of the top ranked challenges affecting agile teams [3]. Such uncertainty provokes tensions within agile teams during task execution [6], thereby threatening team stability and project congruity.

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This ongoing study (part of a wider PhD study) seeks to answer the question: **What are the roles of middle managers in agile project governance?** The study is investigating the PG activity in an ASD project in order to determine the roles of MMs in agile PG within a selected organisation. Presentation of the organisation's agile PG practices is not within the scope of this article.

## 2 Research Design

This research employs a qualitative and interpretive case study design, which is well-suited because it puts the researcher in the world of the participants living the PG and middle management experience, thereby allowing him to interpret their views and experiences [16].

Due to the complex and multifaceted nature of agile PG, given that it involves multiple actors, processes, mechanisms, tools, and socio-technical interactions [11], the research demanded a flexible socio-technical theoretical framework with expansive analytical and interpretive power to aid analysis of agile PG and mid-management. Activity Theory (AT) lends itself to these demands [4, 8, 9].

According to AT [9], an activity is comprised of six main components, viz., *subject, tools, object, rules and norms, community of significant others, and division of labour*. By considering these components, AT enables analysis of activities in breadth and depth [4]. In the present study, AT was used as the principal theory to develop an Activity-oriented Project Governance (APGov) theoretical framework to support the research (Fig. 1). The APGov framework<sup>1</sup>, which also incorporates other theories and studies [5, 10, 11, 13, 15], was developed to aid case study data collection, analysis, and interpretation of findings. The unit of analysis for this study is the PG activity, which has ASD project as the main governance object, and middle management as one of the activity actors.

A single case study (a research limitation) involving a Nigerian fintech holding company (HOLDCOY) was undertaken. Data was collected between February and March 2020, comprising nine semi-structured interviews, three team meeting observations, company documentation, and questionnaires for collection of company and project profile information. The company and its participants were selected using convenience and stratified sampling. The company was selected because (a) it is a technology-enabled organisation that practices PG, (b) it has used agile methods to execute and govern software development projects for eight years, and (c) its organisational structure includes middle management. Participants included SM, MMs, and lower-level workforce, with agile methods experiences ranging from 8 months to 11–12 years<sup>2</sup>. The researcher limited the study to analysis of the PG activity and middle management in one of HOLDCOY's divisions; TECHCOY division, which is the agile team executing the ASD project under examination.

Six interviews out of the nine transcribed interviews in HOLDCOY, as well as organisational structure document, email and instant messaging correspondence,

<sup>1</sup> Description of framework components is available at <https://bit.ly/3ijFCcx>.

<sup>2</sup> For more sample population and data sources details, visit <https://bit.ly/3ijFCcx>.

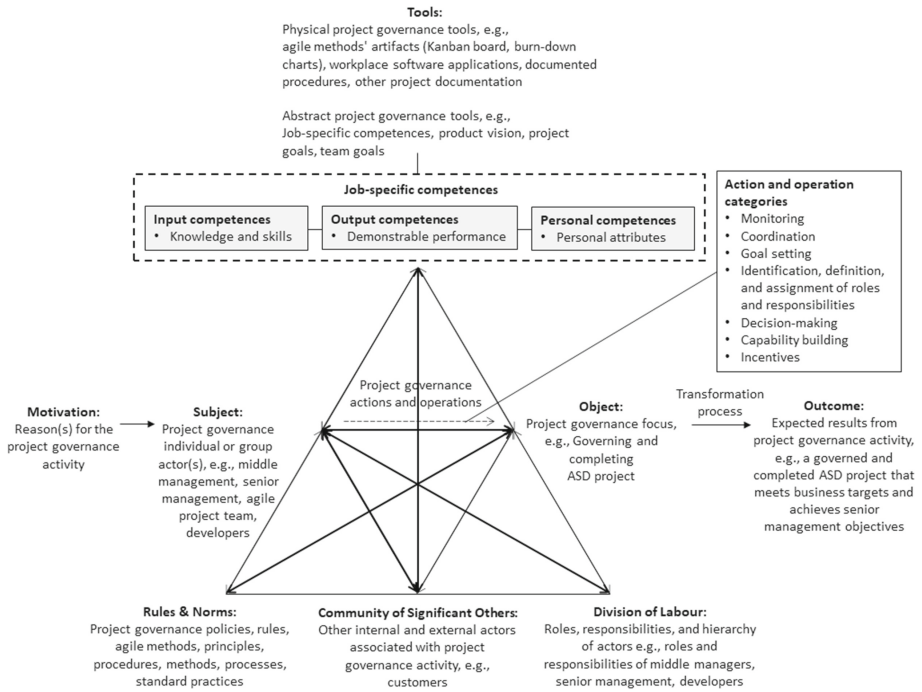
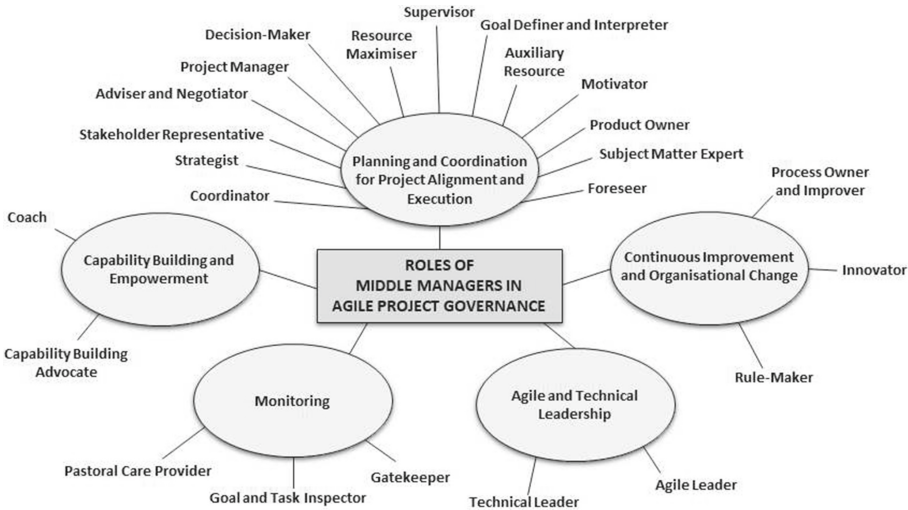


Fig. 1. APGov framework

and profile questionnaire responses, have been analysed thus far using thematic network analysis (TNA) for thematic analysis [1]. The six interviews produced 192 pages of transcripts, which were read several times and coded by applying a coding framework in line with the TNA process [1]. NVivo software was used to organise text segments into codes, which later formed themes for the construction of a thematic network interpreting various roles of MMs in agile PG.

### 3 Findings

Preliminary findings are presented as a thematic network (Fig. 2) comprised of (a) basic themes, which are the lowest-order premises contained in the data, (b) organising themes, which are higher-order themes (categories of grouped basic themes) summarising main discoveries contained in the data [1], and (c) global theme, which is the superordinate theme that encapsulates “the principal metaphors in the data as a whole” [1, p. 389]. In the thematic network, 24 basic themes, which represent MM roles in the agile PG activity’s division of labour, are grouped into five organising themes (role categories), which are linked to the global theme - *Roles of middle managers in agile project governance*. Participants affirm that MMs play pivotal roles in agile PG practice, thereby helping to accomplish their project. Findings will be of benefit to agile teams with MMs.



**Examples of Interview Quotes:**  
**Motivator role:** "...So those are things I try putting in place as incentives for, so even apart from promotion, these are just things that within our division we're trying to do to ensure that yes the team is always happy, and the team is always motivated week in, week out to achieve results" (MM).  
**Coordinator role:** "...their role is actually very critical...the project middle managers are responsible to work closely with all the internal teams and the contacts at the external team to ensure that every single deliverable as stated in the business requirement documentation...are completed, tested and delivered" (SM).  
**Strategist role:** "...I find every strategic way to ensure that we achieve this go live at the shortest time possible through incremental delivery...which the agile methodology gives us the permission to do" (MM).

Fig. 2. Thematic network of MM roles in agile PG and interview quote examples

## 4 Research and Practice Implications

This research exemplifies and advances the use of AT in agile research, and adds to studies on agile PG and MMs in ASD projects, which are limited. Organisations that use agile methods and have MMs can use the model of MMs' roles as a tool for (a) creating job descriptions and person specifications for recruitment of MMs, (b) education and training, and (c) ensuring MMs maintain acceptable levels of job performance when governing and delivering ASD projects.

## 5 Contributions

This study introduces an APGov theoretical framework by applying AT to agile PG and middle management. The study is also developing a model of MMs' roles in agile PG. The model will describe multiple roles that MMs perform when working alongside agile teams and governing ASD projects. The model will help SM, MMs, aspiring MMs, agile teams, and researchers to better understand the roles of MMs in agile PG practice, which may lead to stronger organisation-project strategic connections and project success, better working relationships between MMs and teammates in agile teams, and further research.

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