

MANAGEMENT

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of Innovation and Technology

**Managing knowledge
transfer and development**



Managing knowledge transfer and development

Enhancement of team's ability to absorb new knowledge

The majority of R&D directors have experienced projects where teams involved in knowledge transfer have obtained sharply divergent results in terms of the absorption of new knowledge, despite the similar level of teams' seniority and experience. The question is why and what managers can do to make a difference. In this article I offer a tentative model for management of teams' absorptive capacity, i.e, the ability to understand which knowledge to learn, to learn it and to transfer learned knowledge to commercial benefits

av Adis Murtic

In today's dynamic business world, the effective transfer and development of knowledge has never been more important. The key to making it work lies in efficient knowledge absorption, which is mostly done by multidisciplinary teams within firms and depends for its success on teams' absorptive capacity. Therefore, creating and managing teams is a crucial way to enhance teams' absorptive capacity and, as a result, enhance knowledge transfer and development.

From my research I provide a model for the management of teams' absorptive capacity over time and in multiple dimensions. The model is based on findings from a multi-level and multi-method analysis of absorptive capacity, and focuses on both the composition of the team and the actions of the team manager. The model sets out the crucial characteristics that team members need to possess, and the critical managerial actions that the team manager must be aware of, including variations over time based on different desired dimensions of team absorptive capacity (see Figure 1).

The central cone represents team absorptive capacity, with four dimensions identification, harmonization, integration and consummation of new knowledge. The time axis passing through this cone provides the sequence of dimensions. Above the cone are clustered critical managerial actions; they correspond to the management of different dimensions according to their placement. Below the cone are the crucial characteristics of individuals that should be involved in the team through different phases; again, their position indicates which are most appropriate characteristics for the respective dimensions of absorptive capacity.

Critical managerial actions

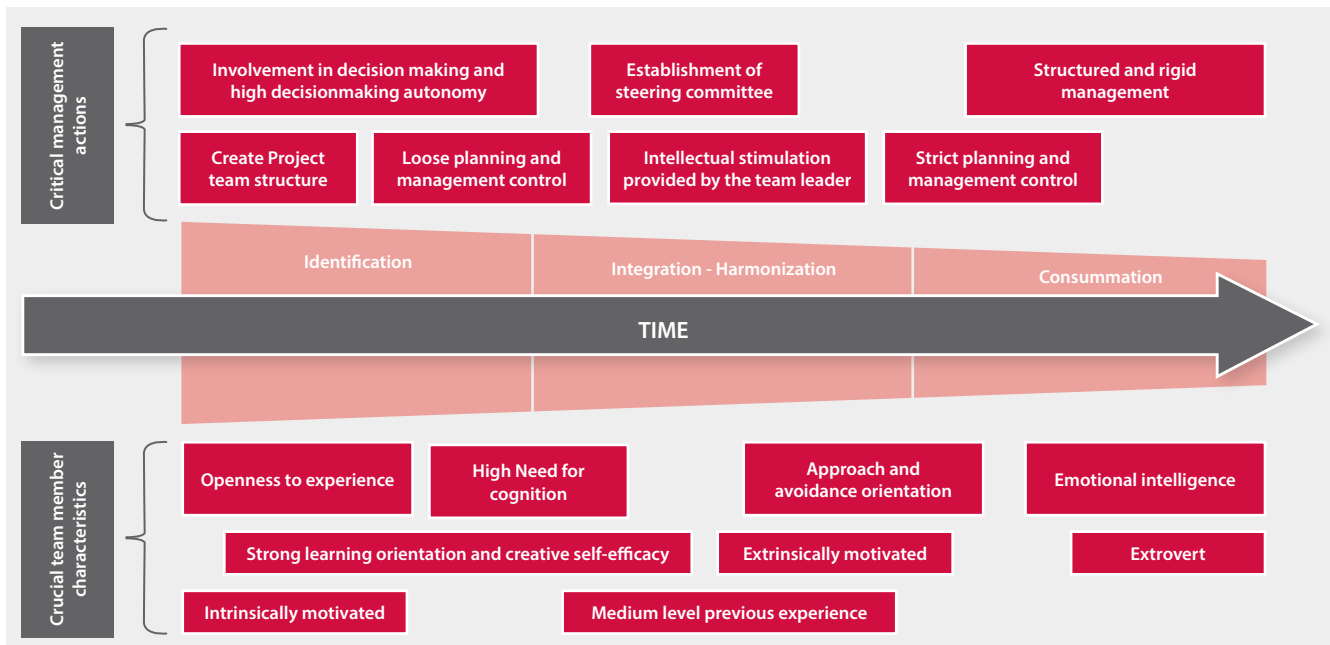
Regarding managerial actions, my findings reveal that laxer management could be better for identification phase of absorptive capacity (potential absorptive capacity), where the team needs to understand new knowledge, identify what they need to absorb, and decide who within the team will absorb different portions of new knowledge. This is applicable for the initial phase of knowledge transfer and development projects. However, findings suggest that management should be tightened up for the later phases, in order to enhance the integration, harmonization and consummation phases of absorptive capacity of the team (realized absorptive capacity).

In terms of the enhancement of potential absorptive capacity, the following findings could be applied. The team leader could involve team members in decision-making and provide space for them to explore new ideas. Another finding shows it could be worth creating a project team structure in which the team leader isolates the team from the rest of the organization and provides the necessary space for identification phase of absorptive capacity to flourish. Furthermore high decision autonomy could be given to the team members in order to facilitate their ability to identify what should be learned in the beginning of knowledge transfer and development projects. The proposed managerial actions could be combined with more relaxed planning in the initial phase in order to benefit the team's potential absorptive capacity. Finally, findings also show that, during the initial phase of absorptive capacity, a steering committee could be established to provide general direction for the team; this will facilitate both potential and realized absorptive capacity.

Turning to guidance on realized absorptive capacity alone, findings suggest that strict planning and management control in the later phases of knowledge transfer and development projects could boost the team's realized absorptive capacity. Moreover I find that the team leader could intellectually stimulate team members to enhance their realized absorptive capacity. Finally my findings suggest that the team leader should apply structured and rigid management in the later phases in order to facilitate the team's realized absorptive capacity.

Critical characteristics of team members

Regarding the crucial characteristics of team members (shown on the lower side of the model), my findings suggest a possible team composition that will facilitate the team's absorptive capacity. For potential absorptive capacity, findings reveal that the team could be staffed with intrinsically motivated members, who will have high learning orientation and creative self-efficacy. Moreover, I find that the team should be staffed with people that are open for experience and with a high need for cognition, in order to bring in members with high potential absorptive capacity into



A tentative model for management of teams' absorptive capacity.

the team. In order to maximize the absorption of new knowledge the team should be staffed with employees who have medium level of experience in knowledge transfer and development projects, since such a background is beneficial for both potential and realized absorptive capacity. Furthermore, the team should include extrinsically motivated individuals, who have high approach and avoidance orientation; because they could have higher realized absorptive capacity. Another set of findings reveal that the team should be staffed with people who are extroverts and have high emotional intelligence, in order to involve individuals with high realized absorptive capacity.

Issues with the tentative model

Creating a tentative model for the management of team absorptive capacity based on my research brings many benefits for project managers responsible for knowledge transfer and development projects as it will help them increase the absorptive capacity of their teams so they can efficiently absorb and consume new knowledge. However, the tentative model is not a panacea; it should be applied and adapted to each project individually. No doubt executive managers will have questions and thoughts about the model; here, I discuss some of the issues that are most readily apparent at this stage.

Looking at the characteristics positioned on the lower part of the model, one question that could be raised is: Should we have two different configurations of team members, one more cognitively driven and the other more reward-driven? One possible solution would be to have a stable core including both types of people present throughout the process, but involve more cognitively driven people in the early stages and more reward-driven people later on.

Another issue is the links between dimensions, and how to recognize when the team is passing from one dimension to another. Here, the project manager could identify a number of milestones that clearly symbolize the point of transition between different dimensions, and adapt their management style according to those milestones. Example of milestones could be gate reviews for each dimension where the team is questioned and tested by gate keepers making the check whether the team has control over absorption process. ●

” *The model sets out the crucial characteristics that team members need to possess, and the critical managerial actions that the team manager must be aware of, including variations over time based on different desired dimensions of team absorptive capacity* ”

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Adis försvarade nyligen sin doktorsavhandling med titeln "Soaking up Knowledge: A Multi-Level Analysis and Conceptualization of Absorptive Capacity" vid Handelshögskolan och arbetar sedan tolv år tillbaka på Siemens Industrial Turbomachinery AB med ansvar för kunskaps- och tekniköverföring program.

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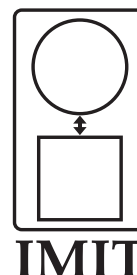
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