1305: Effect of Researcher's Attitude on Project Outcome

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NEDO: Funding Agency under the Ministry of Economy, Trade and Industry

Missions: **"Innovation Accelerator "**

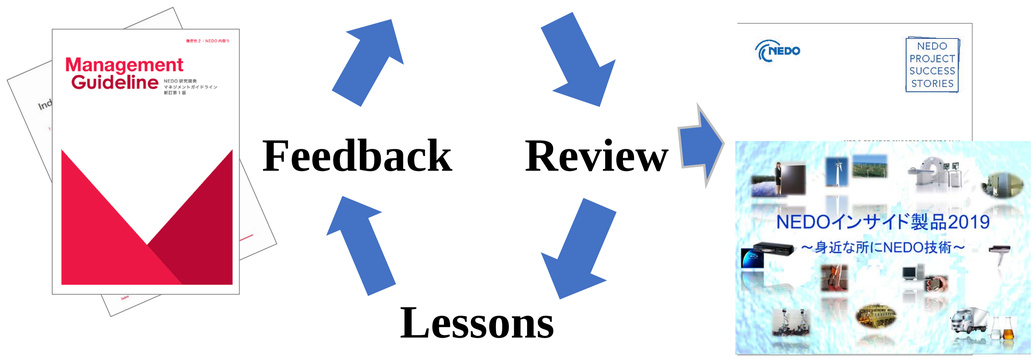
●Addressing energy and global environmental problems ●Enhancing industrial technology

Overview of the Follow-up Survey

Objective: To monitor the post-project activities of the project participants and gain feedback to improve NEDO's R&D management.

NEDO Project 5 Years → Follow-up Survey **6 Years**

Budgets (million$): Mdn=16.4 No. of targets: Ave=537 companies / year
Participants (Unit project): Mdn=5.0 Response rate: Ave=99%



Publication of the outcomes (※)

※NEDO PROJECT SUCCESS STORIES :
https://www.nedo.go.jp/library/pamphlets/ZZ_pamphlets_00002.html

This Study's Objective

In order to know **the effects of expecting collaboration with other organizations**, analyze the following items from the results of follow-up monitoring.

1) **The attitude of project participants** belonging to private companies toward NEDO project.
2) **The effect of participant's attitude on the project.**

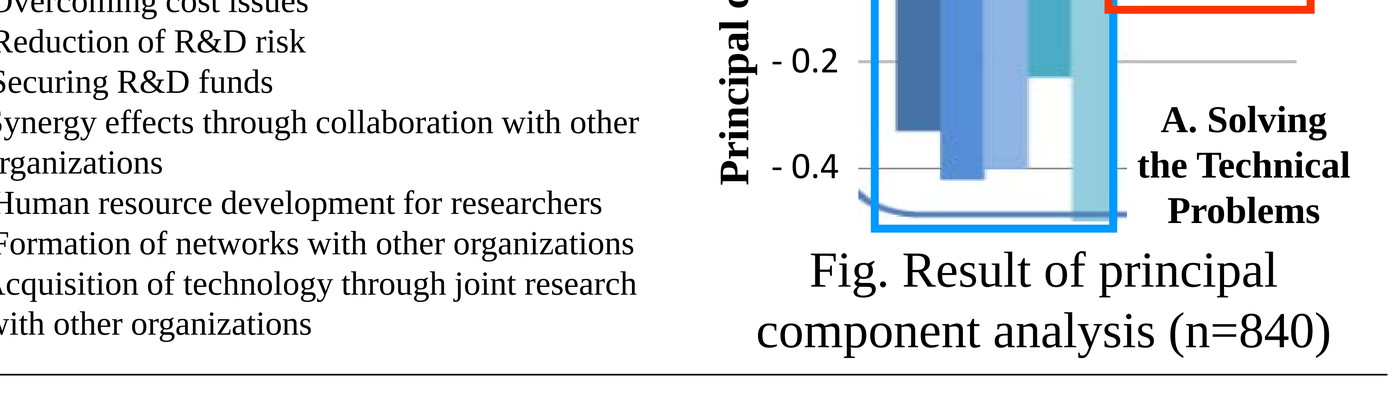


Fig. Analytical model

Researcher's Attitude

Result of analyzing participant's expectation, project participants are divided into two groups, one group (A. Solving the Technical Problems) **prefers to solve technical problems rather than establishing collaboration with other organizations** that participate in the same NEDO project, the other group (B. Establishing Collaboration with Other organizations) **likes the opposite.**

< How much are your expectations for the following items when participating in the NEDO project? >

Select expectations for each item
"Very High, High, Middle, Low, Very Low"

- a. Speed up of technology and product development
- b. Overcoming technical issues
- c. Overcoming cost issues
- d. Reduction of R&D risk
- e. Securing R&D funds
- f. Synergy effects through collaboration with other organizations
- g. Human resource development for researchers
- h. Formation of networks with other organizations
- i. Acquisition of technology through joint research with other organizations

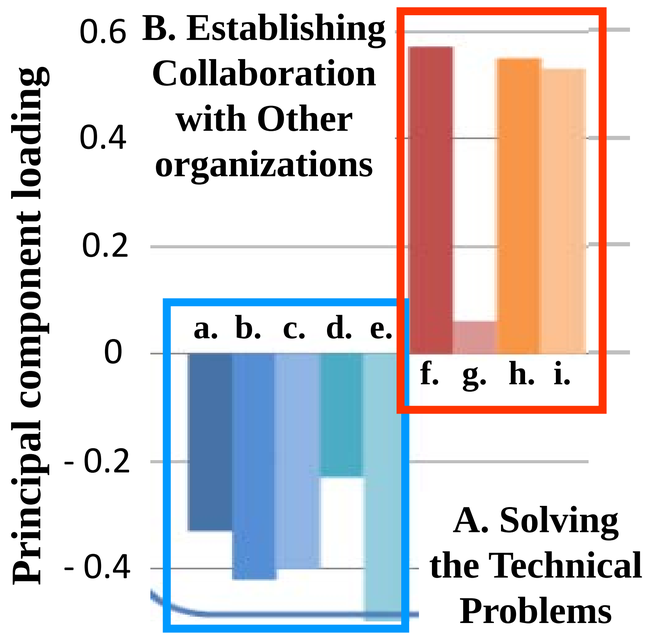


Fig. Result of principal component analysis (n=840)

Effect of Researcher's Attitude on Project Outcome

Result of statistical analyzing the relationship between researcher's attitude, output and short-term outcome, "A. Solving the Technical Problems" **had the positive effects on short-term outcome**. However, "B. Establishing Collaboration with Other organizations" **had no positive effects on short-term outcome**.

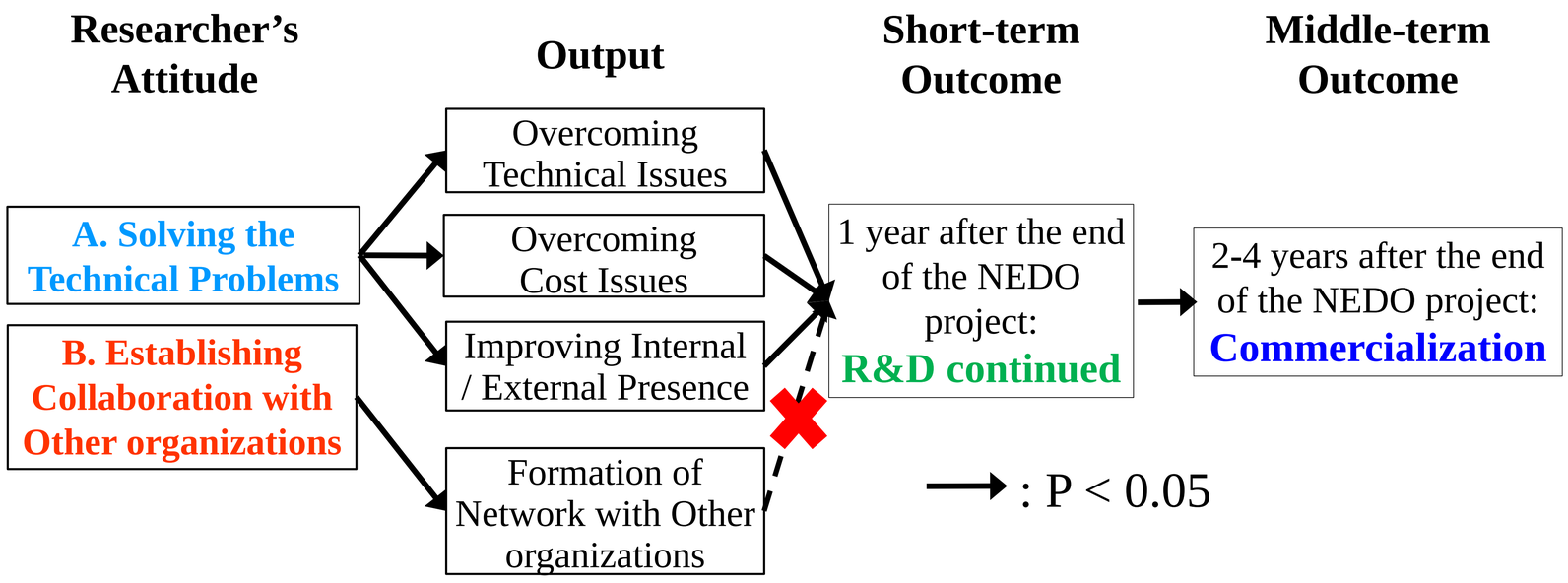


Fig. Effect of Researcher's Attitude on Project Outcome

Scope for Discussion

NEDO community → **Promoting R&D** → **Commercialization**

- **How does collaboration with others in project affect R&D outcome?**
- **How to measure collaboration with others.**

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[References]
[1] Aldrich, H., Bolton, M., Baker, T., Sasaki, T., 1998. Information exchange and governance structures in US and Japanese R&D consortia: institutional and organizational influences. IEEE Transactions on Engineering Management 45 (3) , 263–275