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Fundamentals of Codifying National Competency Standard for Project Managers in Iran: Necessity of a Paradigm Change in Strategies

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ABSTRACT: Compared to the foundation of developing international standards in developed countries, the difference in competencies due to the different environmental settings of developing countries is one of the necessities of developing national competency standards. The necessity, however, triggered the study of the theoretical foundations of developing the national competency standard of project managers in Iran as a grounded theory. Moreover, the impact of macro-environmental factors and particular conditions of the country on project management is perceptible in causal condition contexts. As a result of these causal conditions, an environment of complete change, unprincipled projects, behaviors with low predictability, and laws with individual interpretability have been formed. Accordingly, to perform the project, the impact of behavioral competencies on environmental conditions and the importance of behavioral and ecological competencies compared to technical competencies are important issues in changing the management model towards the second order of project management. Altogether, the requirement to change the pattern of technical competencies with methods based on agility is a strategic concept. In these circumstances, it seems necessary to leave the following items aside for successful projects: typical linear programming structures and focus on competencies such as holism, persistent troubleshooting, instantaneous management, creativity and problem-solving capability, high mental preparedness, flexibility, commitment, and result orientation.

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1- Introduction

This paper studies the explanation of the concept of competence and different approaches to competence in project management. The term “competence” holds various interpretations, and it is considered one of the most ambiguous terms in the field of occupational and organizational literature” [1]. The following explains two main approaches to competence based on the literature review. The first approach is more adapted to individual characteristics and exists in the more general definition of competencies in universal project management standards. However, the second one, the performance-based approach (PBA), is applied to define more practical competencies appropriate for national environments. Accordingly, the fundamentals of codifying national competency standards for project managers in Iran are illustrated as consistent with the PBA and through reviewing the practical experiences of applying the competencies.

2- Theoretical Foundations and Background Research

2- 1- Competency Codifying Approaches

Two distinct views are developed in merit systems: the attribute-based approach (ABA) introduced competence as an individual trait and a reference standard for superior job performance [2]. However, PBAs have been the basis for developing national standards and qualification frameworks, including in England (National Vocational Qualification [NVQ]), Australia (Australian Qualification Framework [AQF]), South Africa, and New Zealand.

2- 2- The PM-1 and PM-2

Traditional project management - the first project management order, defined by the Project Management Body of Knowledge (PMBOK), is mainly based on a mechanical, single-cause, non-dynamic (static), and linear structure. Furthermore, this comprehensive conventional understanding is called the First-order Project Management (PM-1). However, four Worlds are considered the main elements in Second-order Project Management (PM-2).

World I is the conventional project management approach based on control logic. **World II** is a world of management complexity. **World III** is the world related to human behavior. Thinking methods, systematic views of thinking, and networking are important aspects of **World IV** [3].

2- 3- Research Question

The main question is, “In the current situation governing the country, what are the distinguishing features of project managers’ competencies?”. The answer is an introduction to codifying a competency standard in project management.

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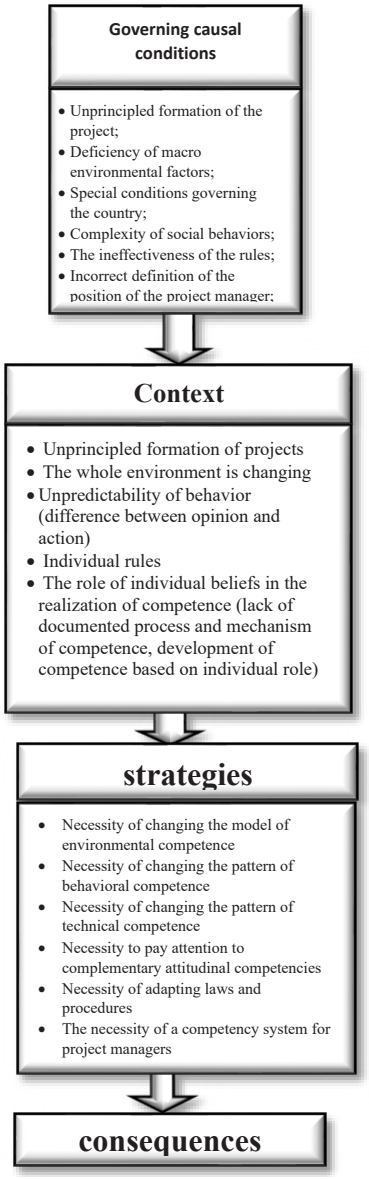

Fig. 1. Proposed competency model of project managers

3- Methodology

The paper is derived from qualitative research with an inductive approach. Moreover, it is a grounded theory and emphasizes the formation of the conceptual framework for compiling the national standard of competencies of project managers in Iran. As the leading method, Grounded Theory seeks to discover experts' tacit knowledge, i.e., project managers. Furthermore, one of the most significant origins of the paper is the application of grounded theory in identifying competencies at the national level.

4- Findings and Discussion

The most critical competencies were identified by interviewing project managers and coding the interviews in *ATLAS. ti* through open, axial, and selective coding stages. According to the logic of the grounded theory, the fundamentals of codifying the national competency standard for project managers in Iran are summarized as follows.

Consistent with the systematic design of grounded theory, Causal Conditions, Context, Strategies, and Consequences are identified in four distinguished sections. Generally, the techniques are likely to follow the PM-2 principles, and accordingly, the role of individual behavior and attitude is emphasized.

The ever-changing environment has made "environmental and behavioral competencies more significant" than technical competencies. Moreover, among various qualifications, the following have become essential: "Holism and Problem-solving," "Instantaneous management," "Decision-making Power," "Appropriate Communication," "Persuasion," "Creating a Collaborating Environment," "Commitment," and "Result-orientation." Additionally, benefitting from a specific type of these competencies has become more significant among technical competencies. The most important of these competencies are " Instantaneous and Short-term Management," "Dynamic Risk Management," "Information Management Systems," and "Flexible Contractual Clauses."

Accordingly, it is necessary to consider a series of principles as theoretical foundations for redefining competencies in Iran:

Emphasizing the "environment of total change" as a main component of the project implementation platform;

Highlighting different levels of competence because of problems at the macro level of the organization (including at the level of project definition);

Changing the planning and control approach from "traditional planning" to "flexible and dynamic planning";

The greater role of behavioral and environmental competencies compared to purely technical competencies;

The essential role of the project manager's attitude and emphasizing the attitude rather than holism, as well as the mastery of the surrounding environment of the project;

Emphasizing the perspective of networking and cyclical processes rather than a linear structure;

Changing the approach of developing competency from first-order to second-order project management;

From a holistic perspective, the outline prompts us to change the competency model from PM-1 to PM-2.

5- Conclusions and Future Suggestions

Among public sector project managers, as the data shows, the interviewees emphasized the importance of behavioral and environmental competencies rather than technical aspects. Furthermore, the competencies inter-affect each other; accordingly, the environmental competencies affect the behavioral and technical, and the behavioral competencies affect the technical and may lead to a change in the pattern of technical competencies and the requirement for a particular type of competencies. However, the changing environment and the unpredictable background governing the country's business environment were identified as the key reasons for the conditions. In such a context, it is practically essential to emphasize more on the following key competencies:

"Troubleshooting and Reviewing," "Appropriate Communication," "Creating a Collaborating Environment," "Instantaneous Management," "Creativity and Problem-solving," "Courage and Risk-taking," "Mental Preparedness and Distress Tolerance," "Flexibility," " result-orientation."

References

[1] D. Robotham, R. Jubb, Competences: measuring the immeasurable. Manag, Dev. Rev, 9 (1996).

[2] L.M. Spencer, P.S.M. Spencer, Competence at Work models for superior performance, John Wiley & Sons, 2008.

[3] M. Saynisch, Mastering complexity, and changes in projects, economy, and society via project management second order (PM-2), Project Management Journal, 41(5) (2010) 4-20.

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