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## Leadership Strategy Selection in Construction Industry

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### Abstract

When facing a strategic leadership problem, a decision maker must choose an appropriate reasoning strategy for a given situation. Complex strategic choices sets focus upon providing deliberate and methodical support for decision-makers engaged in strategic decision making. The increasing interest in the subject of leadership reflects the considerable importance of this phenomenon. This study in short presents methods of strategic leadership selection in construction. There could to be separated five levels of a decision maker: novice, advanced beginner, competent, proficient and expert. Each of them acts in different way. While working in complex environments, the human decision makers can always face situations where time constraints, high stakes, multiple players, ill-structured problems and situations are presenting strategic decision making the information is used to make high-risk decisions. There exists wide range of methods, which could to be applied to the leadership strategy selection. Based on literature overview, a LEVI 3.0 program based strategy selection model is presented.

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*Keywords:* leadership; strategy, construction; multi-criteria decision making.

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## 1. Introduction

When facing a strategic leadership problem, a decision maker must choose an appropriate reasoning strategy for a given situation. Complex Strategic Choices sets focus upon providing deliberate and methodical support for decision-makers engaged in strategic decision making. The increasing interest in the subject of leadership reflects the considerable importance of this phenomenon. The part in conventional construction project management costs (about 13 percent) and reworks (about 12 percent) in construction seeks about  $\frac{1}{4}$  of construction costs. Leadership is one of the most widely researched topics in the civil engineering and management literatures. There are rarely introduced various formal mathematical descriptive models of leader and/or follower behaviour. Strategic thinking is grounded on a strong understanding of the complex relationship between the organization and its environment.

## 2. The model of leadership in civil engineering and management

Civil engineering broadly concerns about five main aspects:

- urban planning,
- architectural solutions,
- building design,
- construction processes, and
- facility management.

Each building is built once. In other words, there not exist exactly the same situation in construction of building.

So, the decision-making problems in construction are unique.

By considering the role and importance, civil engineering and management (CE&M) processes the leadership strategy is faced with many challenges and problems. The leaders may implement specific types of leadership to enhance the intended ethical climate. A decision making model for CE&M issues, however, a review of theoretical issues in this field, indicates that personal skills of the members, building life cycle conditions and enterprise and management relations matters of interest to researchers in this field.

A competitive leader is responsible for project success.

Typically, leaders have responsibilities encompassing authority and leadership, which lays within contexts that could be characterized (at the minimum) by the existence of three conditions:

- 1) There is a leader;
- 2) The leader has at least one follower;
- 3) The project has a shared goal.

Ahluquist and Levi [1] presented five necessary conditions for leadership:

- Interpersonal relations (at least one follower must exist);
- Asymmetry (potential non-reciprocity of attention, obedience, etc.);
- Saliency (subordinates pay attention);
- Domain specificity (the leadership occurs in some contexts, but not necessarily others (although leaders with high saliency may transcend contexts);
- Instrumentality (there is a motivating purpose or a goal communicated by the leader).

In analysis of the criteria affecting construction labour productivity are classified under the following four primary groups:

- 1) Management;
- 2) Technological;
- 3) Human/labour;
- 4) External.

## 3. Research process, methodology & assumptions

The main concept of game theory is originated by mathematical researchers. Then, this mixed field of science found its applications in economy and industry and also other practical sciences [2]. In terms of strategic tasks, the most suitable calculation method is the game theory [3, 4]. The game theory usually analyses decision-making processes

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