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**A RESEARCH ON COMPETENCE MISMATCH IN
CAPABILITY BASED DEFENSE PLANNING**

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Abstract:

Strategic workforce planning, as a significant part of human capital management, helps organizations to have proper staff with the necessary skills and competencies to achieve strategic goals in defense planning. However, it may also turn into a challenging process for many defense organizations when competency mismatch becomes a matter of discussion. In this study, firstly we define basic but transformed concepts of capability based defense planning. And then we try to present applicable solutions for competency mismatch incidents in this highly significant process.

Key words: Competence Mismatch, Capability Based Defense Planning, Defense Planning, Defense Resources Management.

1. Introduction

Today's security environment is very unpredictable, dynamic and complex. In order to endorse national security, defense systems ought to possess certain capabilities to meet challenges and threats.

Capability based planning, which was developed as an alternative to threat based planning, has become highly significant in order to seize, retain and exploit initiative to gain positional relative advantage over an enemy. As the global strategic environment evolves into complexity, ambiguity and uncertainty, competency management is globally accepted as essential. Although the strategic importance of competency management becomes prominent, transformational reform has faced with great resistance by both internal and external stakeholders. In addition, competence mismatches necessitate additional reinforcing change mechanisms.

In this paper, after defining basic concepts of capability based defense planning, we try to present applicable solutions for competency mismatch incidents in this highly significant process.

2. Capability Based Defense Planning

Each nation may its own definitions of capability. In general, the term “capability” can be defined as “to have ability to do something”. In other words, it means integrating resources and methods for an organization and employment – inputs to capability – generating a desired end result or effect. In addition, capability is specific to a context and thus the assessment of capability is different from performance assessment [1].

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On the other hand, defense planning is a specific planning discipline that enables a nation to have essential capabilities and forces to ensure national security. It is a highly significant and complex interdisciplinary process which consists of multiple research fields [2].

Defense planning is also the fundamental phase of defense management. A successful defense management process ought to offer suitable conditions for effective accomplishment of defense missions and tasks, development of defense capabilities properly and efficient usage of defense resources. In the last two decades, capability based planning, which is designed by RAND Corporation at the beginning of XXI century, has become the dominant approach in defense planning in order to provide appropriate response to face with uncertainty, economic constraints and security risks [3].

Capability Based Defense Planning (CBP) is developed in response to threat based planning and it provides a more rational basis for transparency and coherence for planners for making decisions on future acquisitions. In this process, planning becomes more responsive to uncertainty, risk and economic constraints. CBP also enables a framework to facilitate risk management and ensures a more detailed analysis process [4].

Separating requirements and solutions encourages planners to consider alternative solutions. For instance instead of asking the classical questions such as: “Our frigates are getting old, how many new ones should we get and with what technologies on board?”, planners are encouraged to ask “What is our future sea-control capability requirement and how best can we meet it after the frigates are retired?”. This fundamental change in thinking leads planners to more efficient uses of declining resources [5].

Upon the introduction of planning, programming and budgeting (PPBB) system, CBP has been accepted as the most significant change in defense planning process. This new planning system also supports planners to unite separate elements together in strategic transformation process. However, establishing bureaucracies and focusing closely on specific tasks results in impediment of integrated planning. It also hinders rapid decision making when necessary. In order to avoid these problems, a five-task framework is offered by some researchers. These tasks can be summoned as below:

1. “Defense planning scenarios which identifies unknown, plausible and possible adversaries,
2. Strategic capability definition which consider factors as content, capacity, architectures and cost,
3. Measures and metrics which takes into consideration challenges, risks and effects based measures,
4. Capabilities assessment which introduces a transformed analytical process,
5. Risk based, fiscally balanced force trades which result from Task 4’s transformed analytical processes.” [6]

3. Competence Mismatch

The term “competence” is relevant in multiple distinct research fields with several disciplinary roots. Defining competence offers a dilemma because this term generally confused with the term “skill”. According to the *Concise Oxford Dictionary*, competence means the “ability to do something successfully” or “ability for a task” [7]. According to the *Macquarie Concise Dictionary*, competence means “properly qualified” or “capable” [8]. Both dictionaries point out the fact that competent people have ability or capability that will enable the satisfactory completion of assigned tasks. Competency is a relational term and it is accepted as a relation between abilities or capabilities of people and the completion of assigned tasks successfully [9].

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However, the question “whether competence should be measured as separate or combined with skills, knowledge and attitudes” still remains controversial. While competence in broad terms has the obvious advantage of being applicable to many occupational settings, classifying competence as detailed parts has the advantage of being useful for a specific type of job [10].

On the other hand, competence mismatch is not straightforward; it is a broad term that has different interpretations in research literature. Knowledge, abilities, attitudes and skills possessed by workers determine their levels of professional competence. When the level of competence is higher or lower than the necessary level of the work requirements, a competence mismatch occurs. Both overcompetence and undercompetence are undesirable conditions and competence mismatches reduce worker’s job satisfaction [11].

When assessing the level of specialization in defense field, experts point out the following scale for the competences in taxonomy:

- **Low** – Commonly available and used in defense; this is a skill/competence that is widely used in the defense and other sectors; it is fully transferable.
- **Medium** – Widely used by defense; this is a skill/competence that is used widely in defense and to an extent in the civil sector.
- **Medium / High** – Specialized for defense; this is a skill/competence that is used in the defense sector and requires an extensive background in defense engineering.
- **High** – Unique to defense; this is a skill/competence that is only used in the defense sector.

Each defense domain requires its own competencies and RAND Corporation published an exemplary study in which ranking of relevant skills for each defense domain are highlighted. An example ranking of management for air defense could be seen below [12]:

Table 1. Key Skills and Competences for Air Defense - Management

Functional competence group	Occupation	Skills coverage	Specialisation to defence
Programme management	Project manager	Performance management, cost management, risk management, contract management, requirements management, technical management, supply chain management	Low
	Planning and production support engineer	Strategic planning, work flow management	Low
	Cost estimator	Cost modelling, learner rates, three point estimating	Low
	Procurement officer	Market research, market assessment, financial management	Medium

These rankings and classifications offer a detailed guideline for planners. Although the efficiency of CBP heavily depends on foreseeing future, it is not applicable for defense forces to take exact precautions for each scenario. Besides, it may not be possible to use

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these classifications in different countries as the priorities may change according to the type of security threats, cultural structure and defense regulations.

4. Conclusion

In his model of Scientific Revolutions, Thomas Kuhn argues that there must be a paradigm shift when problems cannot be solved. It could be clearly seen that defense planning and management is one of the most affected fields by paradigm shift within the last 25 year. At that point Contingency Theory offers potential to support defense planners in this chaotic and complex environment by underlining the importance of adaptability to rapidly changing conditions.

When asymmetrical threat is accepted as the most significant variable in transformation process, CBP becomes indispensable to do functional analyses of operations. However, competence mismatches within the defense organizations hinder this progress and necessitate additional reinforcing change mechanisms. Especially within the last 10 years, in different countries, several centers for capability development and competence management are established in order to overcome this problem. Some of these centers are integrated into universities to make rapid decisions, organize extensive trainings and pursue technology but when the outcomes are examined, we unfortunately see a completely different picture. Success rates remain relatively low in many cases.

First of all, training programs of these centers ought to be revised according to recent security threats, latest technology, new organizational structures and available resources at hand. In addition, support and participation from the higher defense authorities becomes highly significant. Furthermore, performance measurement techniques also need revision. We previously pointed out the significance of CBP but there is no “one best CBP process” valid for all countries. CBP ought to be conducted according to defense priorities of each country.

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