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Procedia Computer Science 55 (2015) 196 – 202

Information Technology and Quantitative Management (ITQM 2015)

Problem Structuring Methods recommendation for a public organization of the Rio de Janeiro State

Mario Tinoco da Silva Filho^{a,*}

^aSecretaria de Estado de Planejamento e Gestão/RJ, Av. Erasmo Braga, 118, 20020-000, Rio de Janeiro, RJ, Brazil

Abstract

This paper presents an application of a model that mixes Soft Systems Methodology with Simple Additive Weighting in order to recommend a problem structuring method for a public organization of the Rio de Janeiro State. The aim of the recommendation originates from the perception that the public organization has shortcomings related to a lack of shared view and comprehension of wicked problems that disrupts decision-making and the carry out of action plans. It is proposed that the methodological approaches for the problem structuring interventions can be chosen by multi-criteria analysis in order to select the most adequate approaches for the organization's needs.

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Peer-review under responsibility of the Organizing Committee of ITQM 2015

Keywords: Problem Structuring Mehtods; Multi-Criteria Decision Analysis; Soft Systems Methodology; Simple Additive Weighting

1. Introduction

By one side, rigid bureaucracy and, in the opposite, strong commerce of political commodities inside corporative or personalist structures. Lima [1] considers that these elements have the biggest contribution to Brazilian's Public Administration state of art. Jun [2] indicates that traditional public administration paradigms, as they are taught, reinforces control mechanisms and difficult shared view and collaborative solutions. A solid presence of those characteristics in a public organization of the State of Rio de Janeiro leads to severe shortcomings when it tries to deal with complex problems and in the carry out of action plans.

The research problem presented in this paper therefore consists of structuring a recommendation of a problem structure methodology for the mentioned public organization.

^{*} Corresponding author. Tel.: +55-021-2333-1880 . *E-mail address*: mtinoco@planejamento.rj.gov.br .

For that, it is presented a model that integrates Soft Systems Methodology (SSM) as described in [3] and Simple Additive Weighting (SAW) as described in [4].

$$v(a) = \sum_{j=1}^{n} w_j v_j(a)$$
 (1)

In this paper we argue that the methodological approaches for the problem structuring interventions can be chosen by multi-criteria analysis in order to select the most adequate approaches for the organization's needs.

2. Application case study

2.1. Problem definition

The case study is the recommendation of problem structuring methodology for a public organization of the Rio de Janeiro State. The structure of the problematic was achieved through an application of [3]. The first three analysis (intervention, social and political) indicated that there are cultural and political elements that wanes the organization's capability to construct and coordinate a shared view of complex problems. There are many divergent roles, no stimulus towards dialogue between the departments and a lack of (in many cases) legitimate decision maker. This reflection supports the understanding of the necessity of a specific problem structuring methodology for this public organization. In that sense, the methodology needs to be both:

- Focused at stimulating dialogue and constructing a shared view of complex problems
- Informed by well-established Problem Structuring Methods (PSM) in terms of practical application Therefore, the systems generated by this application of [3] considered these two characteristics. Figure 1 presents the system's purposeful activities models.

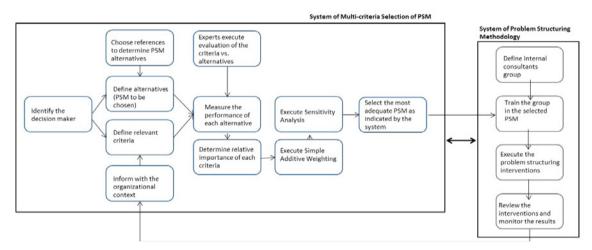


Fig. 1. purposeful activities model

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