**How to apply the Viable System Model to get a fast design or diagnosis of an organization (Introduction-Part III)**

**Pathologies related to System 4 (Do I know what is going on outside my organization and what the future will look like?)**

Jose Perez Rios

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As I did mention in my previous posts and to reach a wider audience (outside of some private LinkedIn groups), I continue sharing some ideas taken from the Organizational Cybernetics (OC) field, with particular emphasis on the Viable System Model (VSM) that I think may be useful to any decision-taker in any organization.

The content of the OC approach, the details for its implementation and use can be consulted in the book:

[Design and Diagnosis for Sustainable Organizations. The Viable System Method](https://link.springer.com/book/10.1007/978-3-642-22318-1)

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In this **third general post,** I will continue commenting on some of the most frequent pathologies in organizations. As I mentioned in previous posts, this knowledge is helpful to design them, so they are created free of them (healthy), or for diagnosing an existing organization. Once identified a pathology we can try to eliminate it.

**In previous posts, I shared a short version of the first group of pathologies**

**(I. Structural Pathologies) and started to show some of the pathologies included in the second group: II. Functional Pathologies.**

**As I already mentioned, the denominations used, such as System 5, System 2, etc., are typically used in the Beer's Viable System Model (VSM).**

In the presentation I made for the **Metaphorum Group in May 2022**, I did show **the three global maps** with the more frequent **organizational pathologies.**

<https://youtu.be/62mRBzRDxHI>

**Organizational Pathologies (3)**

**J. Perez Rios**

As I mentioned in previous posts, identifying a pathology is a prerequisite to prescribing any treatment for the diagnosed deficiency. With that aim, I prepared back in 2008 a taxonomy of "**Organizational pathologies**" that I am sharing. I classified the 26 ones I found widespread into three main families or groups.

The first group (I) includes pathologies related to organizations' structural design and how the organization copes with its total environmental complexity by creating the necessary sub-organizations. These I name Structural Pathologies.

The second group (II) includes pathologies related to the adequacy of the organizations (at all recursion levels) to the prescription made by the VSM about functional subsystems and their relations. These I call Functional Pathologies.

The third group (III) subsumes Information System and Communication Channel Pathologies.

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**II. Functional Pathologies (3)**

This group includes 17 pathologies related to each of the organizations that compose the entire organization. In each unit, one must check that all the essential functions (systems) necessary for the organization's viability exist and work adequately.

This group covers the more frequent pathologies affecting each of the VSM functions (systems) and the whole organization (System 5, System 4, System 3, System 3\*, Homeostat 4-3, System 2, and System 1). In this post, I will mention the ones related to System 4.

Concerning the pathologies related to System 4 (in the VSM), there are a couple of fundamental questions:

"Does the organization have a continuous activity concerned with exploring in real time what is going on outside the organization (environment: market/technologies/legislations/ etc.) and also exploring what changes may appear as possible in the future related to the organization identity/purpose/viability)?"

"Does the organization have an active communication/interaction system between this activity of exploring the "outside and future" with the activity of handling the "inside and present."? Obviously, if an organization does not have it, it will not adapt. That means it will die/disappear (at least as an independent organization) when the environment changes! *This organ is the "****ADAPTATION ORGAN****."*

**Pathologies related to System 4.**

The System 4 (in the VSM) is responsible for observing the "OUTSIDE and FUTURE" of the organization. Its continual interaction with System 3 (System 4–System 3 Homeostat) ensures that the novelties of incorporation required by the organization are transmitted, in adequate time and form, for their possible implementation into System 1. Likewise, restrictions arising from the constitution of System 1 are relayed by System 3 to System 4. This joint functioning (System 4-System 3 Homeostat) will make it possible for the modifications needed in System 1 to take place on a continual and gradual basis, thereby ensuring the organization's viability. They constitute the ADAPTATION ORGAN of the organization.

If System 4 either operates inadequately or does not exist, the organization will lack information relating to the current and foreseeable future development of the environment (markets, competitors, technologies, the evolution of the company itself, etc.), consequently jeopardizing its viability.

Some frequent pathologies associated with an inadequate functioning or design of System 4 are the following (II5 and II6):

**II5. "Headless chicken."**

System 4 is missing or, if it does exist, does not work properly.

**II6. Dissociation of System 4 and System 3**.

**The homeostat System 4-**System 3 (Adaptation Organ) does not work properly.

Each component system carries out its function separately.

