

LOICZ II Inaugural Open Science Meeting

Method for the design of a participative indicator system as a tool for local integrated coastal management

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Introduction

Study area

Method
Development

Benefits and
constraints

ICM indicator context

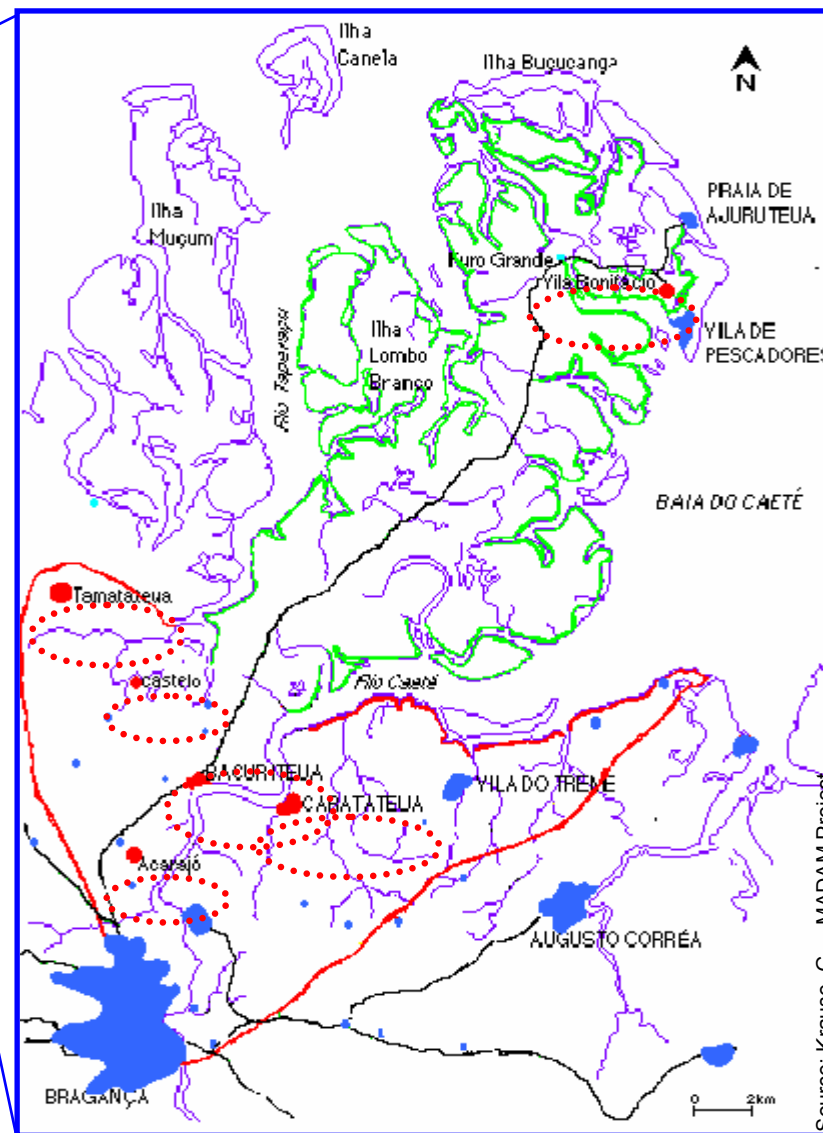
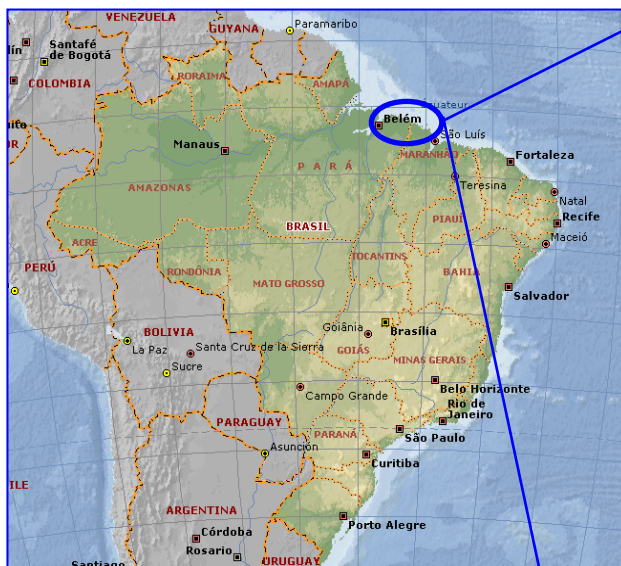
- Programs, projects and strategies *strengthen* the *use* of *indicators*.
- *Thematic indicators* have been performed e.g. forest management, water quality, economic measurements.
- *Coastal management indicator* guideline have been developed e.g. Ottawa Conference (2002)
- Most of the defining processes used a *inform or consult participation* strategy and not an *acting together* approach.

How can local users (stakeholders) could be involve in the definition of indicators?

Introduction

Study area

Bragantian coastal region



- Mangrove ecosystem
- Socio-economic rural area
21 Villages
= 15000 inhabitants
- Main activities Glaser (2003) :
 - Crab collection (64%)
 - Fishery (54%)
 - Farming (42%)

6 villages were involved in the participatory process.

Source: Krause, G. – MADAM Project



Phase 1: Participatory process

Villagers

Future workshop

(Jungk and Muellert 1973).

1st Step: Preliminary contact

Leaders meeting

2nd Step: Defining indicators

Meetings with social groups

3rd Step: Villages meeting

Presentation groups results

Problems / desires priorities



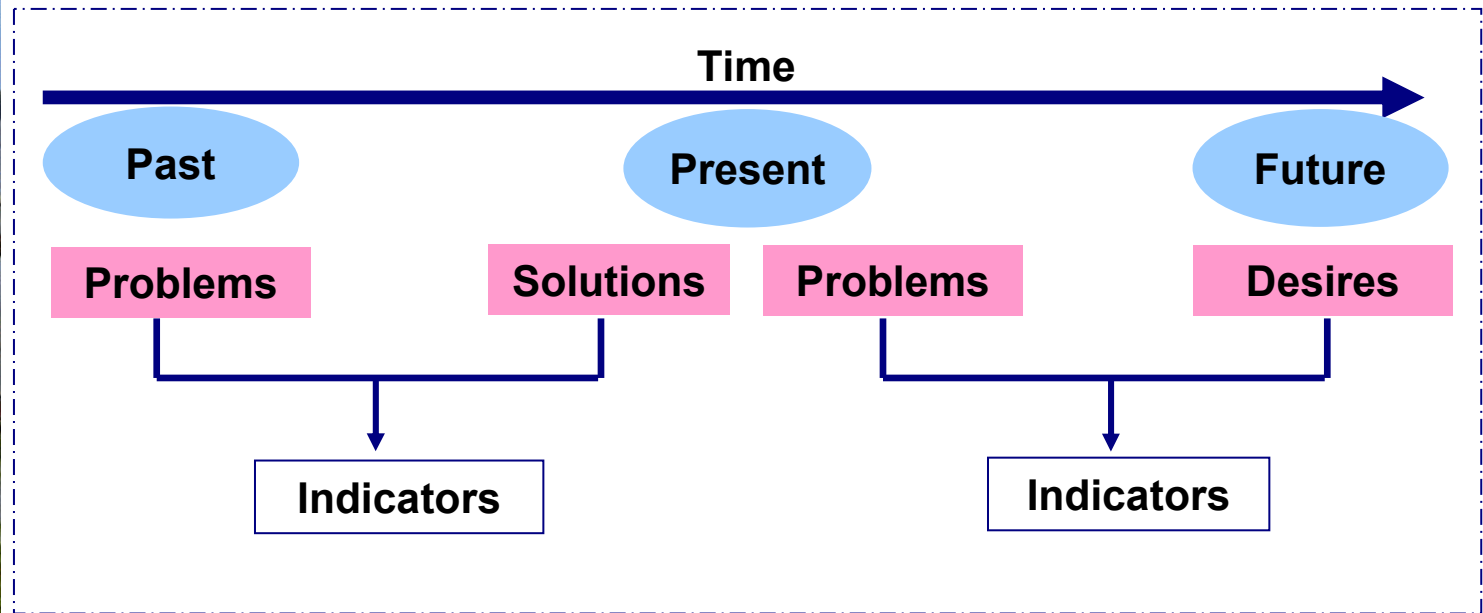


Phase 1: Participatory process

2nd Step: Defining indicators

Meetings with social groups: women, young people, fishermen, crab collectors, farmers, honey producers, teachers, health post people, catholic church groups.

Indicator is a **signal**



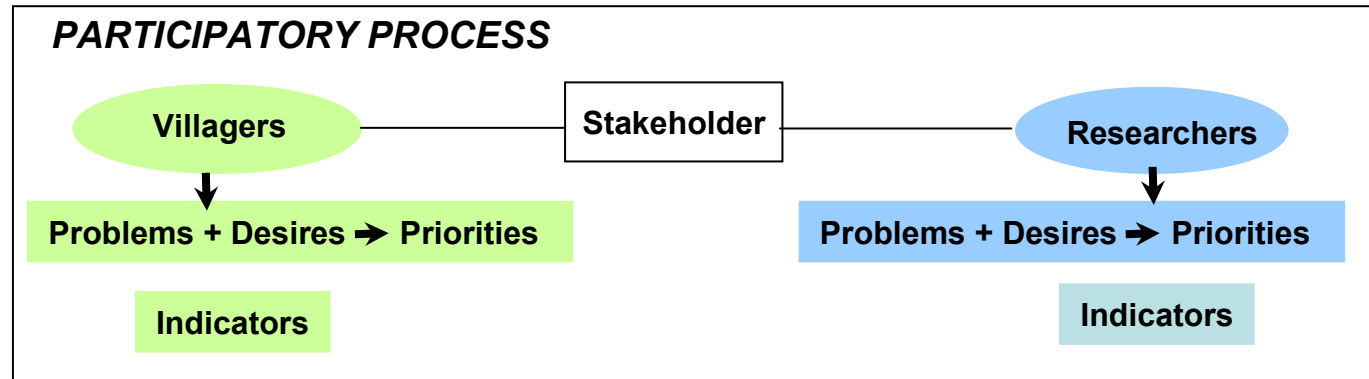


Phase 1: Participatory process

Researchers

Open questionnaire

- Current problems
- Actions for improving management
- Useful indicators for coastal management
 - Economic dimension
 - Social dimension
 - Environmental dimension

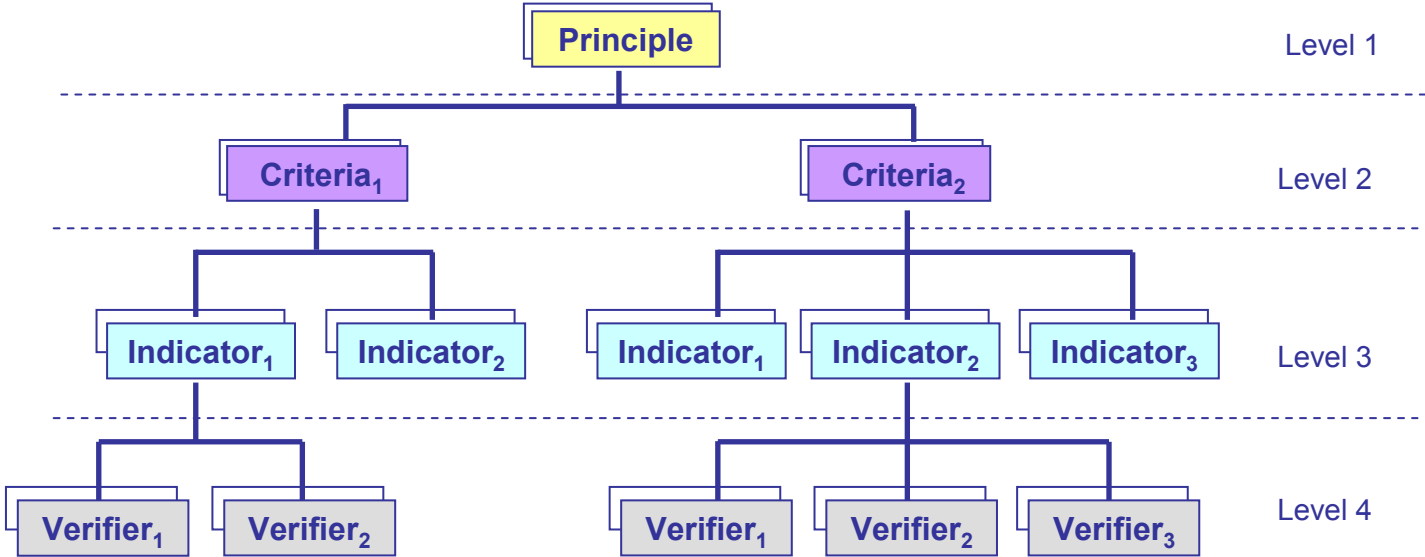




Phase 2: Indicator system structure

Criteria & Indicators

(CIFOR 1999)

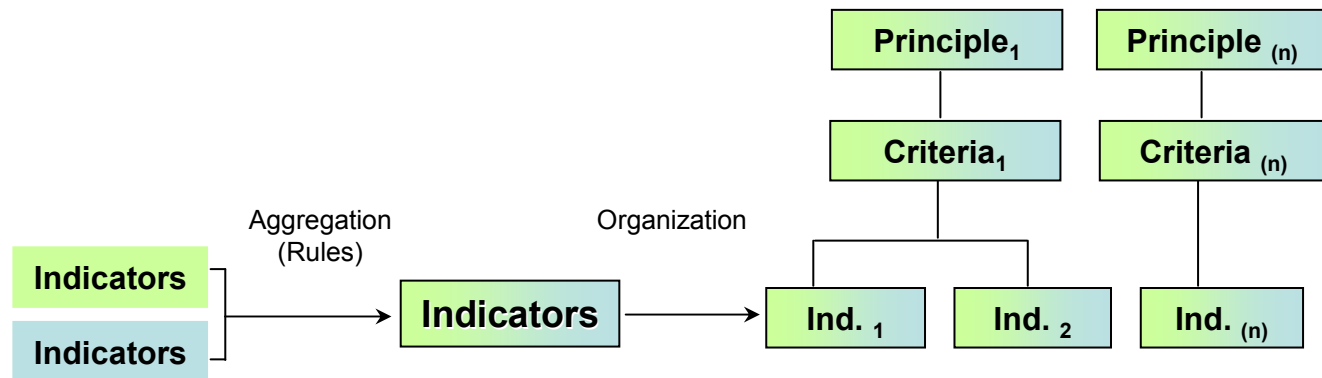
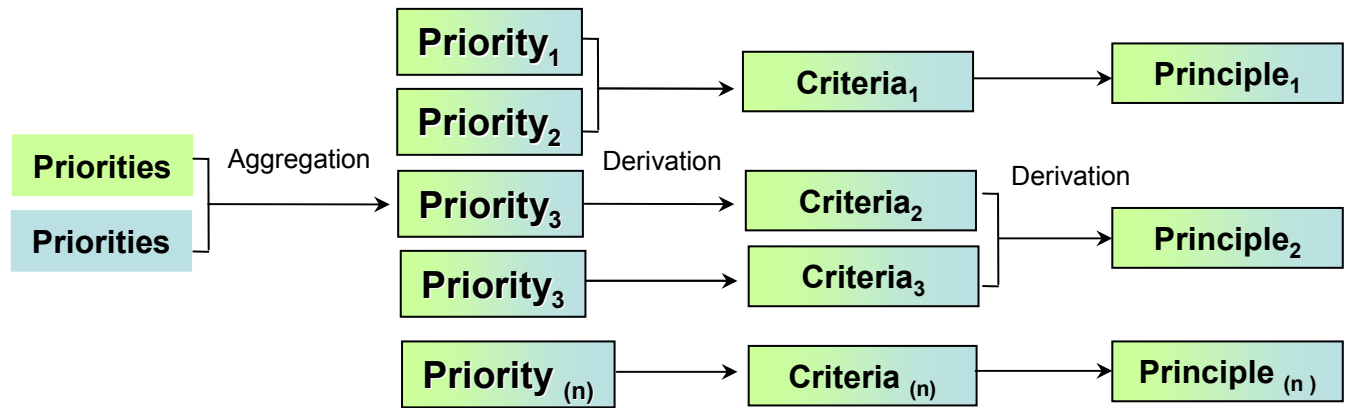




Phase 2: Indicator system structure

Villagers

Researchers





Phase 3: Filtering

A: Cross check between *indicators* and stakeholders *priorities*.

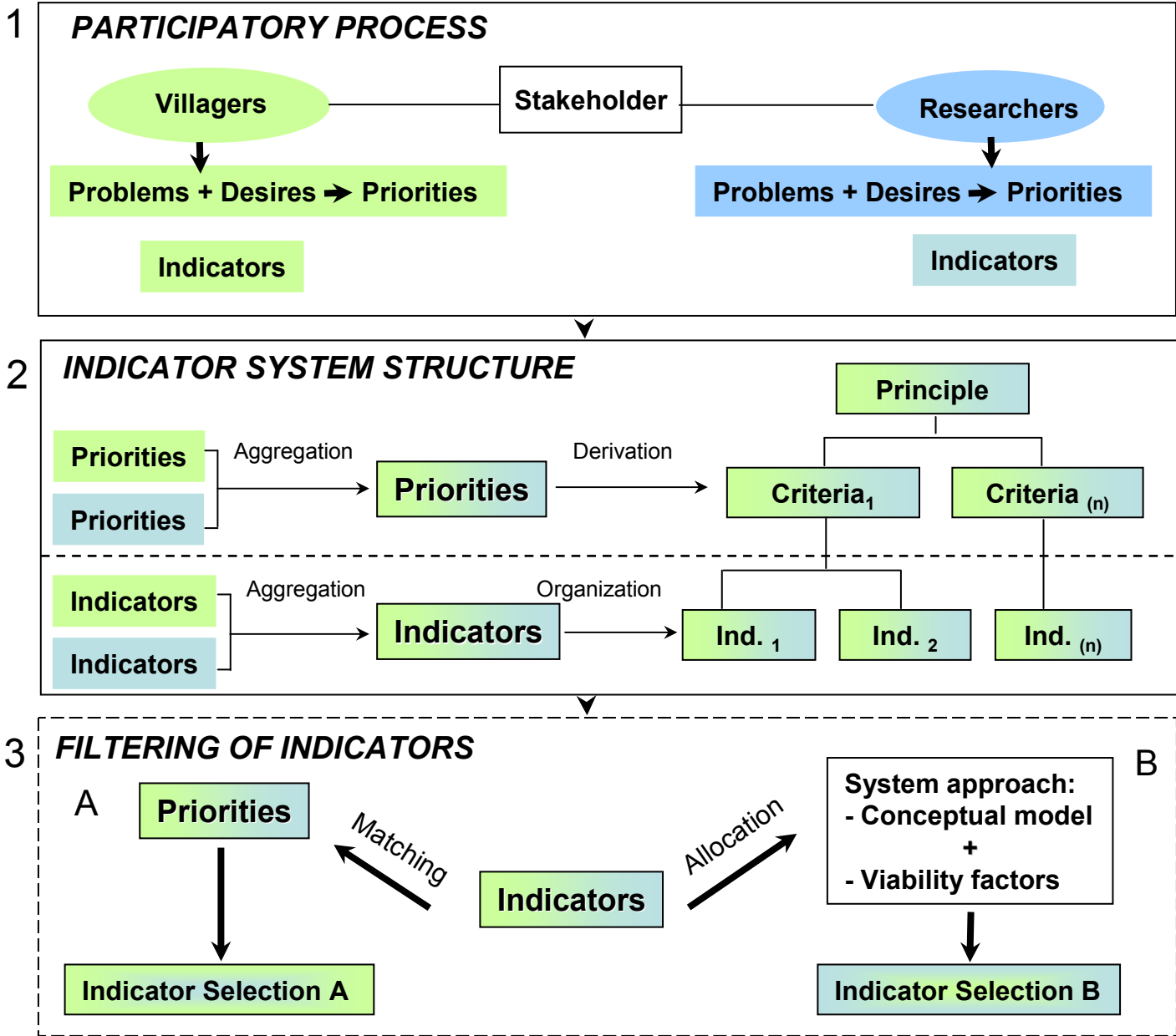
B: **System-based approach** (Bossel 1999)

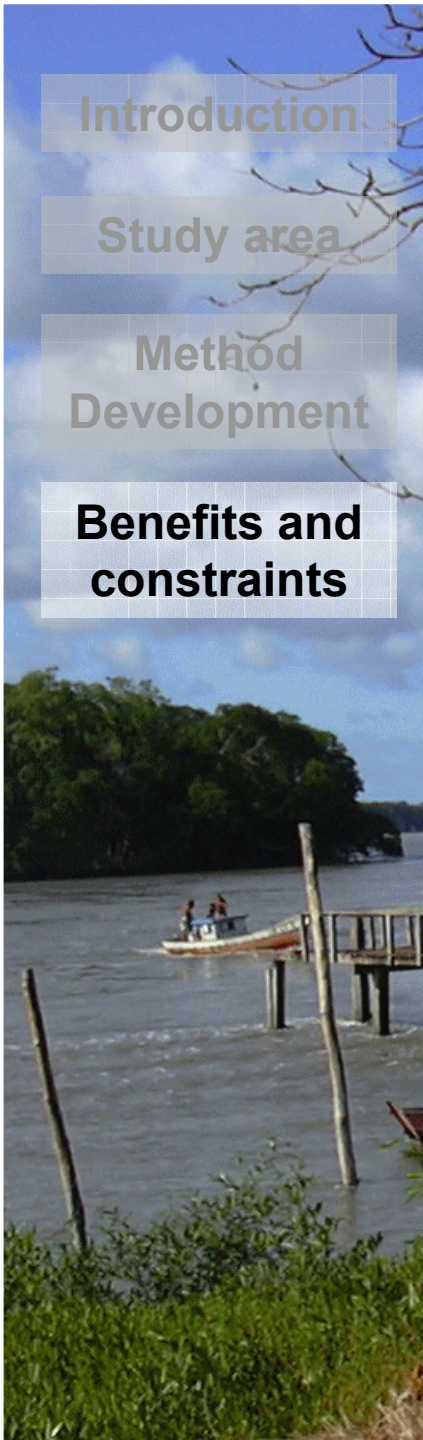
Developed with the aim of determine which indicators defined by the stakeholders give information about the viability and performance of the system components

- Expert criteria
- Conceptual model
- Define viability and performance factors
- Allocation and selection of indicators



Method flow chart





... as discussion points

Benefits:

- Allow (facilitate) the definition of indicators by stakeholders.
- Better understandability and manageability due to its focus on local problems and desires.
- The hierarchical structure help to the establishment of a clear framework for monitoring coastal changes.

Constraints:

- Problem on translating technical terms to local people (indicator, coastal zone, etc).
- Left out important issues due to priorities focus
- Difficulty in involving and handle several stakeholder groups
- Not all problems / desires could be translated into indicators

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