

# Information Systems for an effective management of Marine Protected Areas

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Н. Дубовский  
1900

N. Dubovskoy  
Sea Sailers (1900)

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# Outline

- ◆ Goals
- ◆ Background
- ◆ Research objectives
- ◆ Planning
- ◆ Collaboration partners

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# Goals

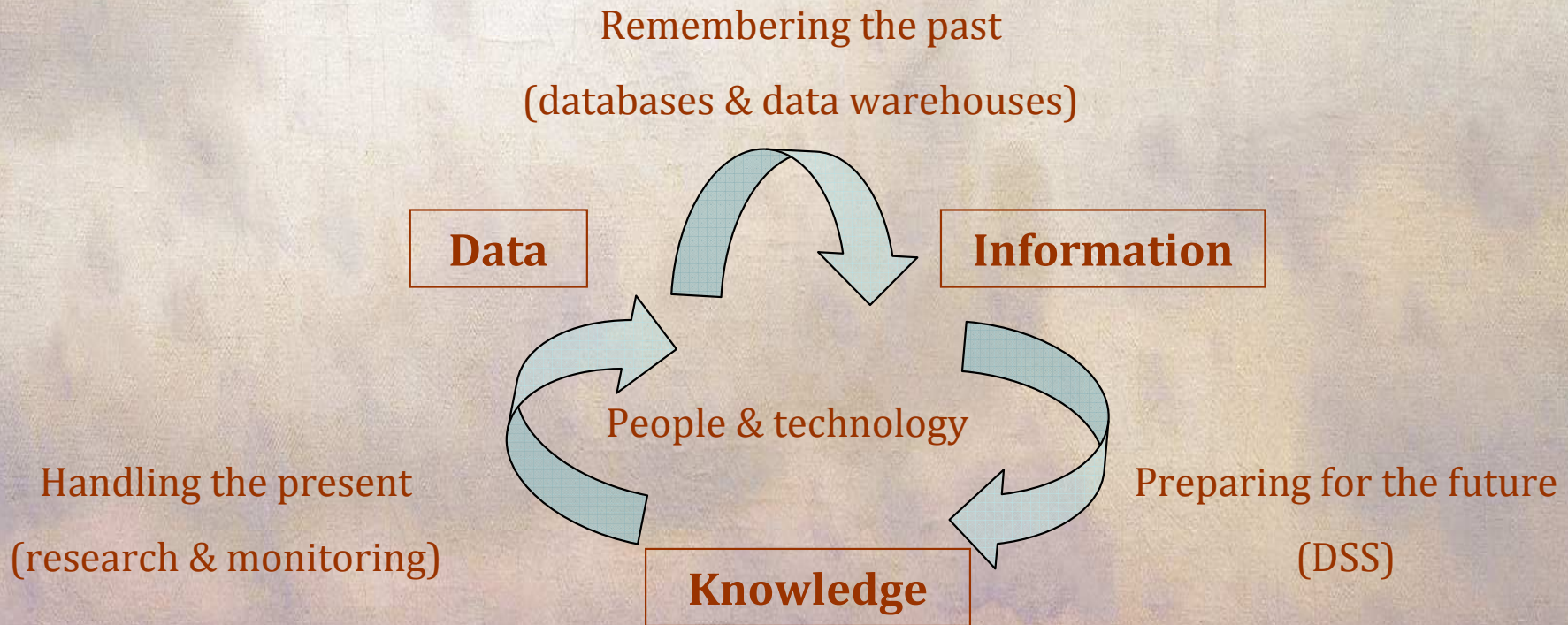
- ◆ To integrate natural & social sciences in studying marine environmental protection at global level
- ◆ To understand the role of data and information systems (IS) in marine environmental governance



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# Background

- ◆ Data = raw material
- Information = processed data
- Knowledge = interpreted information



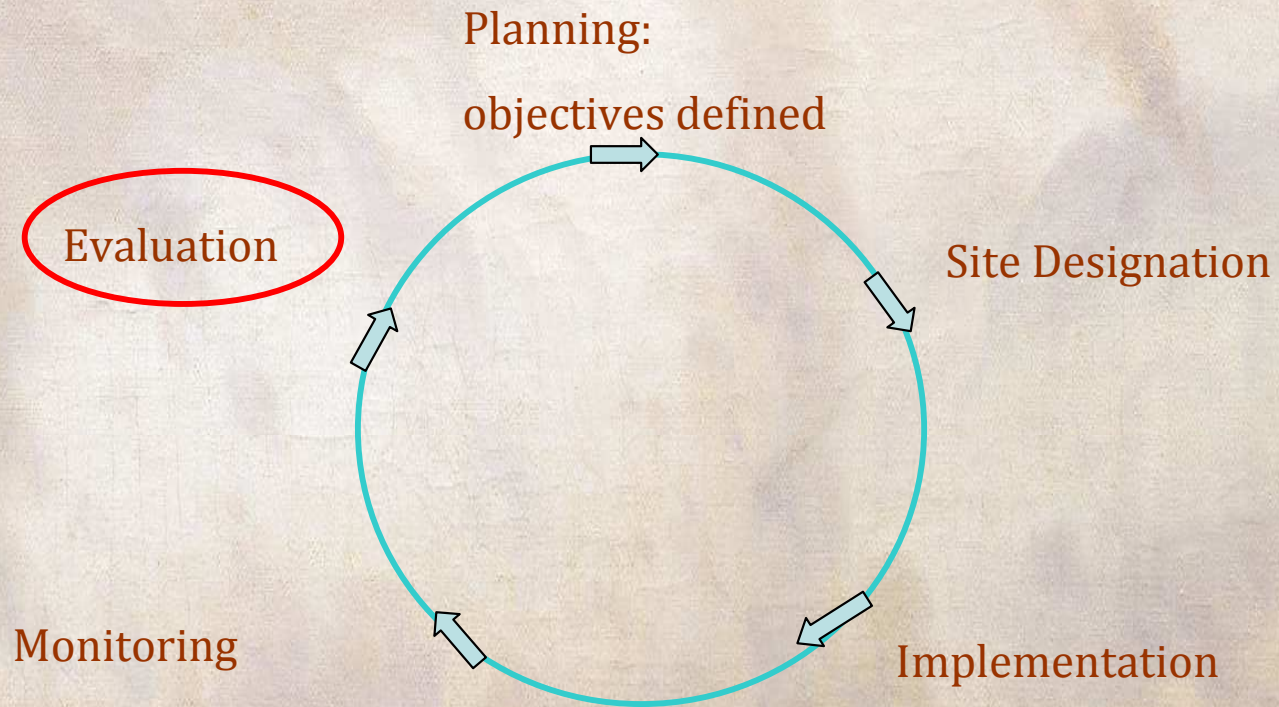
**The Information Systems Cycle**

# Marine Protected Areas (MPAs)

- ◆ Compared to Terrestrial PAs, Marine PAs lag behind
- ◆ Marine IS underdeveloped compared to terrestrial IS
- ◆ Natural resource management is a social science
- ◆ Different MPAs have different objectives



# MPA process



FRANCOIS PERON NATIONAL PARK WESTERN AUSTRALIA  
PHOTO: NICK RAINS



# Research Objective

- ◆ To contribute to the development of a data model that encompasses ecological and social data for an enhanced management effectiveness of MPAs

## Sub-objectives:

- 1) To obtain knowledge about existing IS for MPAs
- 2) To fill research gaps in data needed for evaluation of their management effectiveness

# Planning

- ◆ Systematic review to assess the structure, quality, completeness and usefulness of existing global and regional IS related to MPAs
- ◆ Focus on data needed for effectiveness evaluation, i.e. enforcement indicators, social impact indicators
- ◆ Design a data model (relational database) linking ecological and social data
- ◆ Carry out one or two case studies to test data model

Possibilities: North Sea; North American MPA network; W&C Pacific Islands...

# Collaboration partners

- ◆ Sea Around Us Project

<http://www.seaaroundus.org/>

- ◆ Exploring possibilities with World Database on Protected Areas- marine from UNEP-WCMC



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A painting of a seascape under a vast, cloudy sky. The sky is filled with soft, textured clouds in shades of white, grey, and pale yellow. The sea is a deep, muted purple-blue, with a white sailboat on the left and several smaller, darker sailboats on the horizon. Two white seagulls are flying in the lower part of the sea. The overall mood is serene and atmospheric.

Thank you!

И. Дубовкин / 2011