

# RUI: VOSS: Computational Tools, Virtual Organizing, and Dynamic Innovation Diffusion

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# How would you categorize yourself?

## A Scientist-Developer

A domain scientist who develops his/her own computational tool.

## A Technologist

A computer/computational scientist who develops a tool for domain scientists.

## A Co-Producer

A domain scientist who works with a technologist to co-develop a tool.

## An Administrator

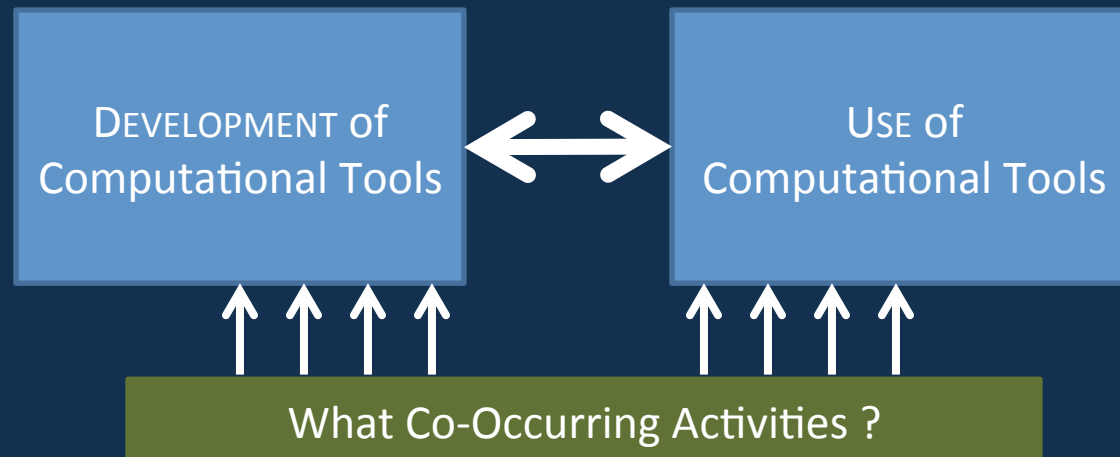
Provides leadership and management for a center, institute, and/or national laboratory.

## An Adopter of Existing Tools

A domain scientist who simply adopts an existing tool.

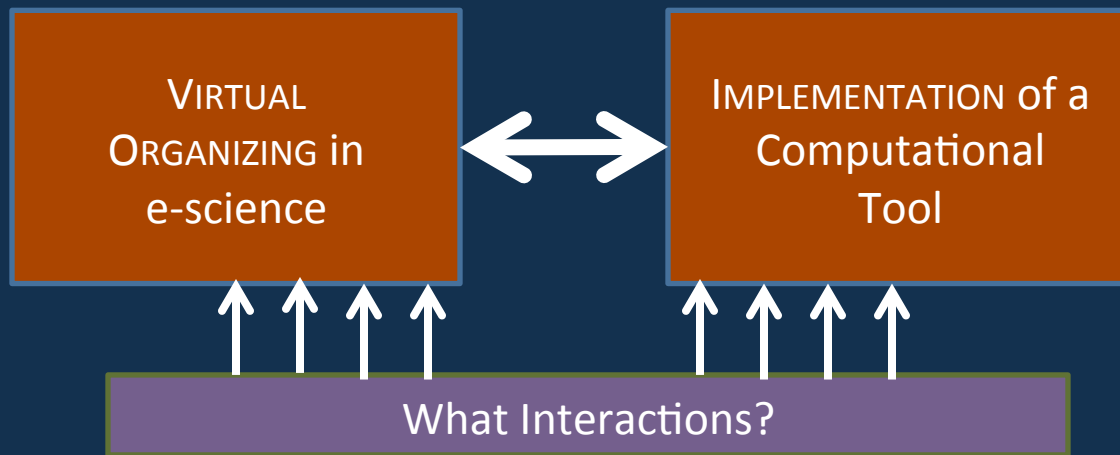
Other / Multiple Roles  
(please explain)

A Cyberinfrastructure-Enabled Virtual Organization  
that brings dispersed scientists, technologists, computational  
tools, big data, remote instruments, etc. together  
in an e-science project



RQ1: In e-science, what activities constitute the iterative and co-occurring development and use of computational tools in virtual organizations?

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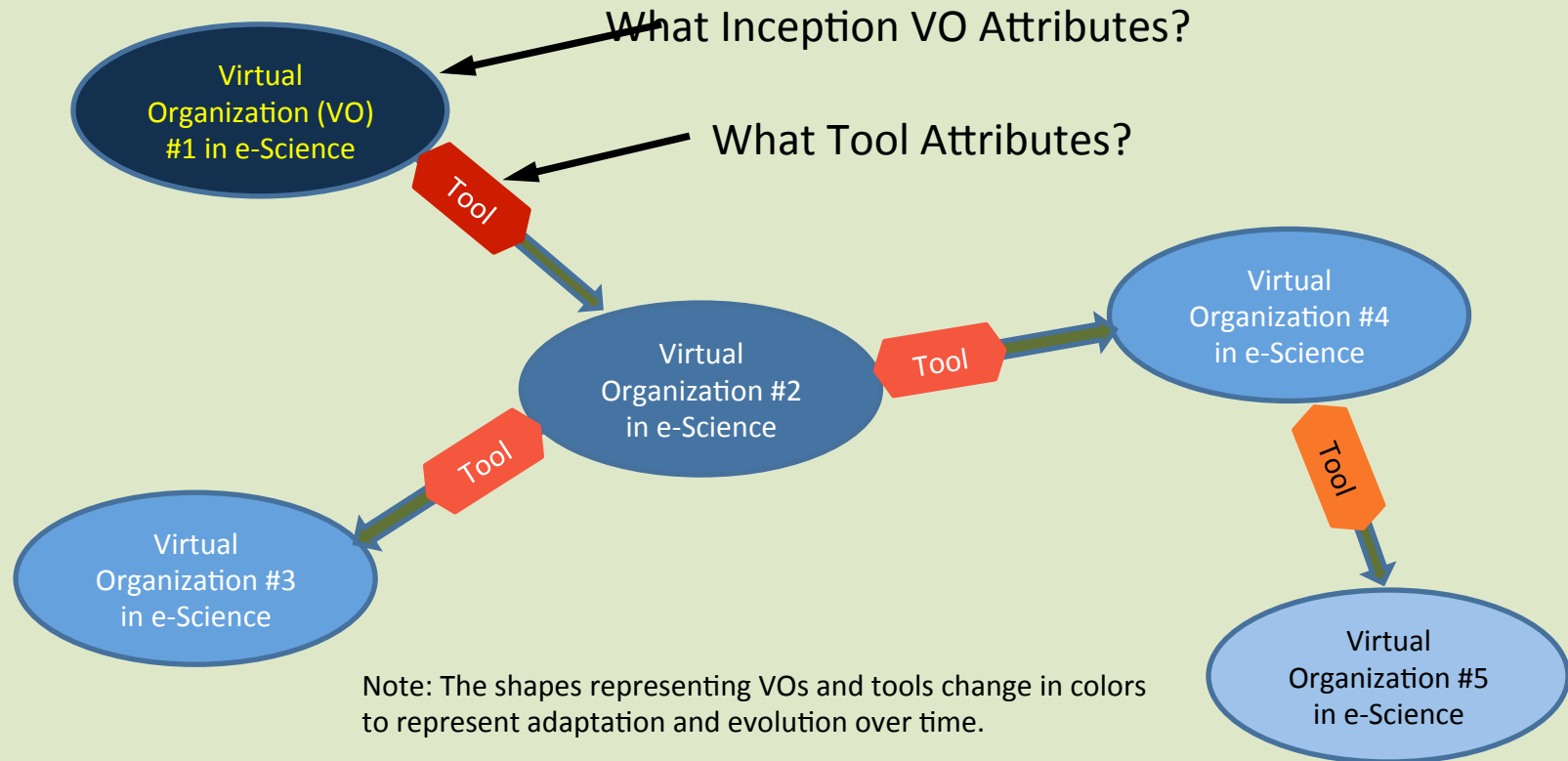


RQ2: What interactions (linking people-people, object-object, & people-object) mutually constitute the co-occurrence of tool implementation and virtual organizing in e-science?

Examples: People (e.g., PIs, technologists, funders, students, etc.), Objects (e.g., data, tools, HPC, etc.), Interactions (e.g., connections, collaboration, communication, etc.)

## What Macro Conditions in the Scientific Community?

(conditions can be, for example, social, organizational, community, economic, technological, political, cultural, etc.)



RQ3: What macro conditions affect the attributes of a computational tool and the attributes of the inception virtual organization (VO), which, in turn, influence whether a tool successfully gets adopted and/or diffuses from one VO to another?