





#### **Forming Federal Communities**

—Building Research Collaboration Networks—

Mani, Lokamani<sup>1</sup>, Fredo Erxleben<sup>1</sup>, Oliver Knodel<sup>1</sup>, Guido Juckeland<sup>1</sup>

<sup>1</sup>Helmholtz-Zentrum Dresden-Rossendorf, Department of Information Services and Computing, m.lokamani@hzdr.de, https://www.hzdr.de

December 9, 2021

 $\triangleright$ 

#### Introduction

#### **Building Research Collaboration Networks**

- An Interpersonal Perspective for Research Capacity Building

**Jun Song Huang, PhD**National Institute of Education, Singapore

Social Network Theories (SNTs)



#### Introduction

#### **Building Research Collaboration Networks**

- An Interpersonal Perspective for Research Capacity Building

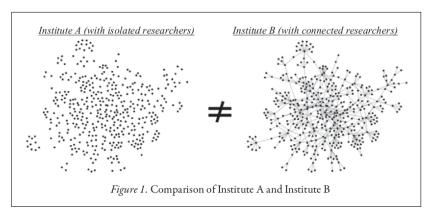
Jun Song Huang, PhD

National Institute of Education, Singapore

- Social Network Theories (SNTs)
- $\blacksquare$  Importance of research collaboration networks  $\to$  knowledge cross-fertilization | enhancement of productivity
- lacktriangle Capacity building ightarrow Individual | Organizational | Inter-Organizational/Federal



# Social Network Theories (SNTs)



- Relevance of SNTs relevant to research management
- Can SNTs help promote research collaboration?
- relational approach | emphasis purely on properties of relations



<sup>&</sup>lt;sup>2</sup>Godley, et al., 2013; Woo, Kang, & Martin, 2013

#### Why are research colaborations necessary?

- caters four needs of researchers
  - $\blacksquare \ \, \text{address complex research} \leftarrow \text{knowledge cross-fertilization}$
  - sustainable development in knowledge creation/economy
  - reduce research costs
  - intellectual companionship

### Why are research colaborations necessary?

- caters four needs of researchers
  - lacktriangle address complex research  $\leftarrow$  knowledge cross-fertilization
  - sustainable development in knowledge creation/economy
  - reduce research costs
  - intellectual companionship
- $lue{}$  suggestions ightarrow research capacity building (RCB) / research collaboration networks (RCN)
  - RCB enhance abilities to mobilize resources achieve objectives on a sustainable basis
  - RCN at Individual | Organizational | Inter-organizational Federal

## Why are research colaborations necessary?

- caters four needs of researchers
  - $\blacksquare \ \, \text{address complex research} \leftarrow \text{knowledge cross-fertilization}$
  - sustainable development in knowledge creation/economy
  - reduce research costs
  - intellectual companionship
- $lue{}$  suggestions ightarrow research capacity building (RCB) / research collaboration networks (RCN)
  - RCB enhance abilities to mobilize resources achieve objectives on a sustainable basis
  - RCN at Individual | Organizational | Inter-organizational Federal
- Collective advantage in knowledge flow







## State of knowledge at HZDR

MT-DMA - IT Ticket System

**HIFIS** – carpentry-style Workshops

HelmholtzAI – Voucher System | Lecture Series

Recurring queries

Workshop series

Collaborations

Key observations in existing capacity building measures





### State of knowledge at HZDR

MT-DMA – IT Ticket System

HIFIS – carpentry-style Workshops

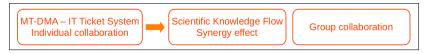
HelmholtzAl – Voucher System | Lecture Series

Recurring queries

Workshop series

Collaborations

Key observations in existing capacity building measures



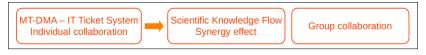
personal experience



### State of knowledge at HZDR



Key observations in existing capacity building measures



personal experience

- $lue{}$  Working Culture ightarrow sustainable knowledge flow
- Intellectual companionship



## **Proposal for RCB** → **Individual** | **Group Level HZDR**

■ MT-DMA initiate "Helmholtz Researcher Network"



## **Proposal for RCB** → **Individual** | **Group Level HZDR**

- MT-DMA initiate "Helmholtz Researcher Network"
- Research Capacity Building (RCB) at Individual | Group Level
  - Workshop Series conducted throughout the Semester
  - Focus on scientific Use-Cases
  - Complement with Hackathon ← User-specific Problems



## **Proposal for RCB** → **Individual** | **Group Level HZDR**

- MT-DMA initiate "Helmholtz Researcher Network"
- Research Capacity Building (RCB) at Individual | Group Level
  - Workshop Series conducted throughout the Semester
  - Focus on scientific Use-Cases
  - $lue{}$  Complement with Hackathon  $\leftarrow$  User-specific Problems
- Midterm Goals
  - Establish Gateway Nodes & Multiplicators at Groups
  - $\blacksquare$  HELIPORT Community Feature  $\to$  RCB at Group | Organizational Level
  - Include existing Clusters like HIFIS, Helmholtz-AI

## **Proposal for RCB** → **Individual**|**Group Level HZDR**

- MT-DMA initiate "Helmholtz Researcher Network"
- Research Capacity Building (RCB) at Individual | Group Level
  - Workshop Series conducted throughout the Semester
  - Focus on scientific Use-Cases
  - Complement with Hackathon ← User-specific Problems
- Midterm Goals
  - Establish Gateway Nodes & Multiplicators at Groups
  - lacktriangle HELIPORT Community Feature ightarrow RCB at Group | Organizational Level
  - Include existing Clusters like HIFIS, Helmholtz-AI
- Longterm Goal
  - $\blacksquare$  Upon positive evaluation  $\to$  other Helmholtz-Centers  $\mid$  Federal Level



#### **Discussion Round**

Join me on the Whiteboard

