

International Industry Research Collaborations

The Case of PetaJakarta- Some Lessons Learnt

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A/Prof. Rodney Clarke
Director, Collaboration Laboratory (Co-Lab),
SMART Infrastructure Facility,
University of Wollongong, Australia

co-lab

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Who am I?

A/Prof. Rodney J. Clarke PhD, Docent (KaU, SE)

**Discipline Leader (Operations),
Faculty of Business, University of Wollongong**

**Director, Collaboration Laboratory (Co-Lab)
Head, GeoSocial Intelligence Research Group (GSI4URL)
SMART Infrastructure Facility, University of Wollongong, Australia**

**Manager, Business Research Laboratory (BRL)
Faculty of Business, University of Wollongong**

Fellow, Information Systems, Karlstad University, Sweden

Agenda

- **PetaJakarta Case Study**
- **(Cultural) Socio-Technical Systems**
- **Design Process**
- **Search for Innovation**
- **Projects vs Programs**



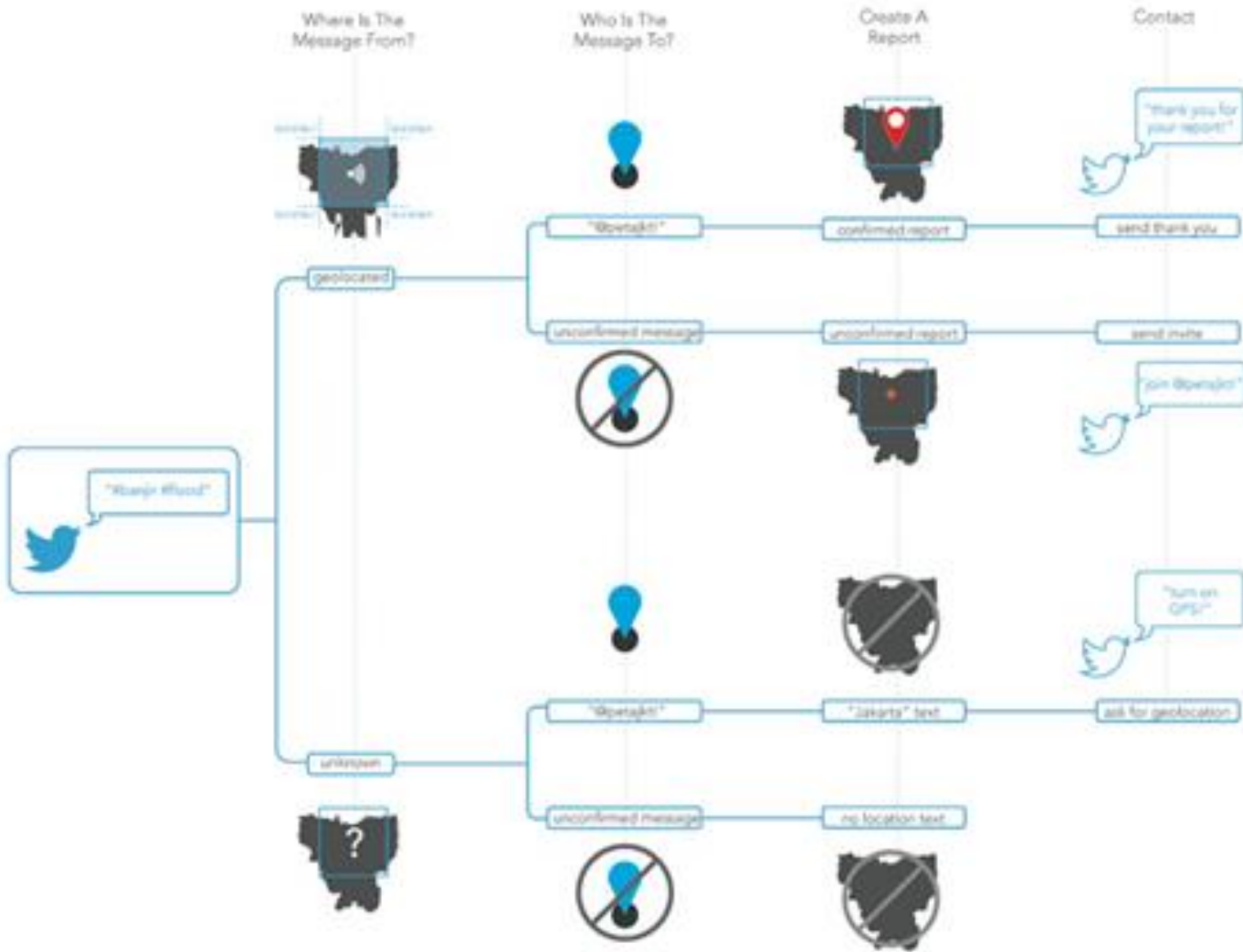
Academics do want to engage with business, but need more support

July 26, 2016 5.44am AEST

PetaJakarta Case Study



- the PetaJakarta social informatics research program
 - harvest social media → build flood maps
- is the result of use?
- does PetaJakarta provide the best way of doing it?
- is there a 'best' way?



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ands
AUSTRALIAN NATIONAL DATA SERVICE

GLOBAL
CHALLENGES

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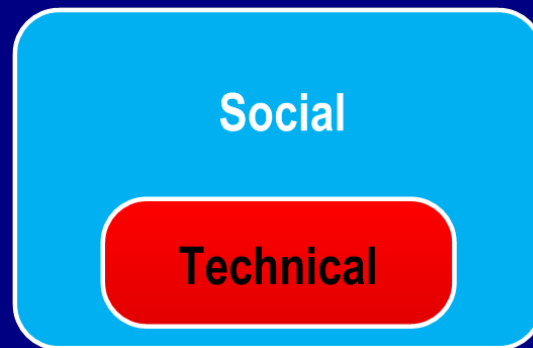


PetaJakarta Case Study

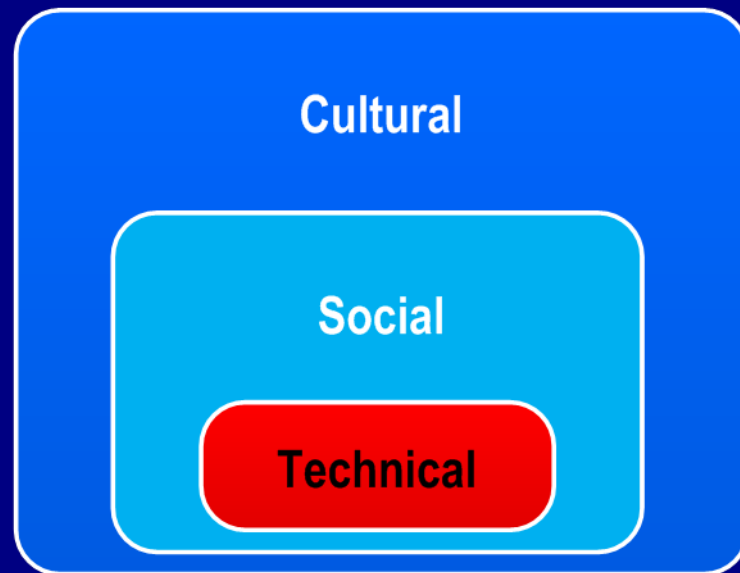
- social media commentators lauded this system as the exemplar of social media emergency system
- recently the FCC has held up PetaJakarta as the best example of citizen communication
- the system has been showcased in Red Cross's Global Report 2015
- it has been consistently advocated as a defining Global Challenges Program- its actually used as advertising on the sides of local buses

(Cultural) Socio-technical Systems

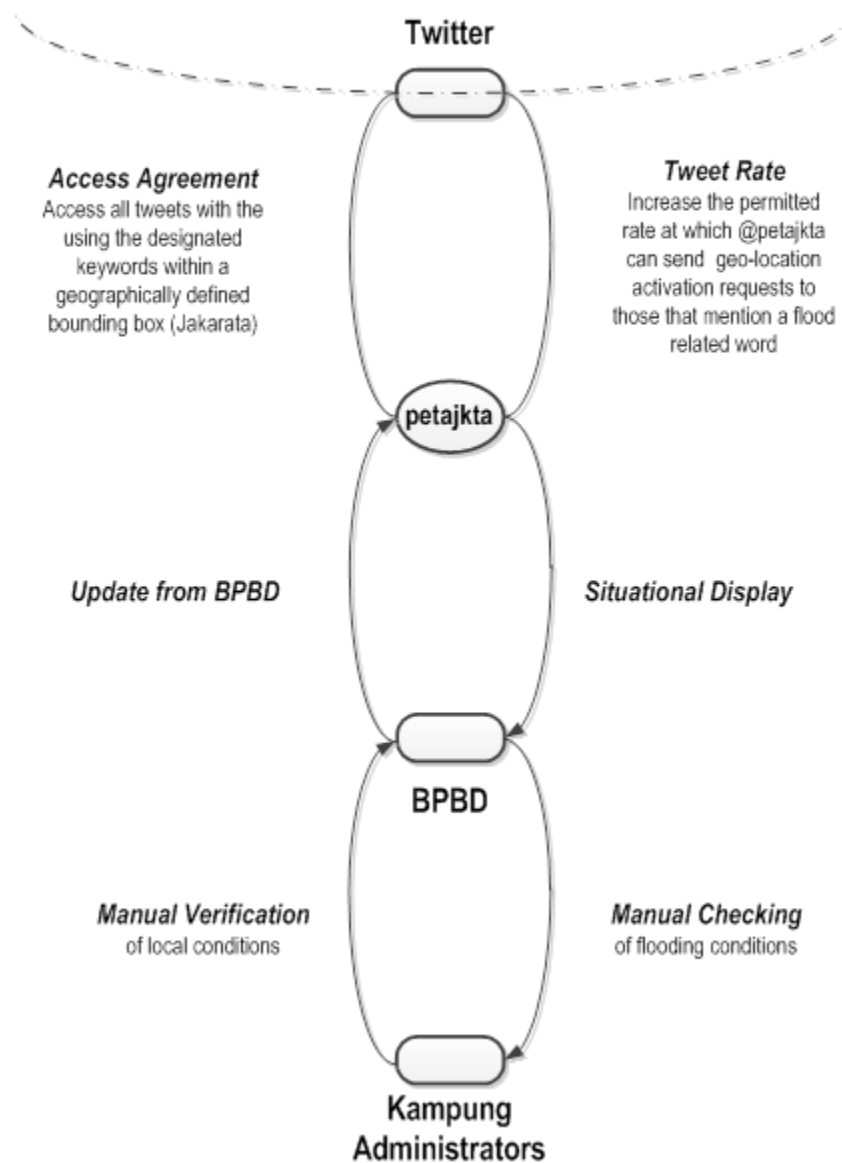
(Cultural) Socio-technical Systems



(Cultural) Socio-technical Systems



technical ecosystem



(Cultural) Socio-technical Systems

Flip Perspectives- From Technical to Social

- *It is the broader social context in which the technical system is embedded that determines the success or failure of the socio-technical system as a whole*
- **Recognising the Social: Agreements with Platform Providers**
- **Social Structures Support Technical Operations**
- **Socio-technical Ecosystem**

(Cultural) Socio-technical Systems

Technologies have Ecosystems

- *Be mindful of the broader technical ecosystem: it may provide opportunities and fixes for systems*
- **Elaborate the 'Incremental' Technologies**
- **'Appropriate' Technologies can lead to *Radical* Innovation**

(Cultural) Socio-technical Systems

Social and Cultural Dimensions

- *Nothing kills a project quicker than a change in policy*
- recent shifts in the Australian Government's aid policy means that effectively there will be no aid money flowing into emergency services applications in Jakarta
- recent expansion into Asia means that the US will this funding vacuum

Design Process

Design Process

- **iterative Design**
- **agile but not Extreme**
- **seek out the Implications and Opportunities of a (Cultural) Socio-technical Design**
- **search for innovation**
- **search for reusable solution patterns**

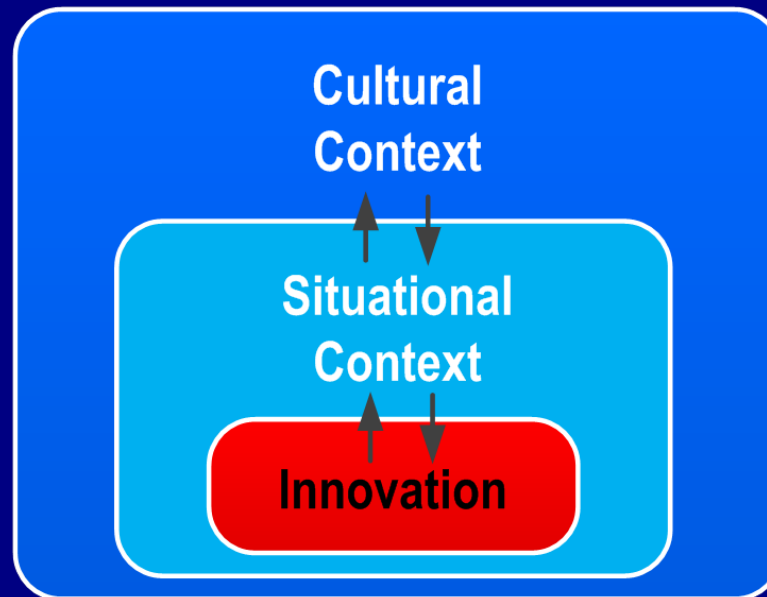
Design Process

Search for Innovation ...

- “An innovation is the implementation of a new or significantly improved product (good or service), a new process, a new marketing method, or a new organizational method in business practices, workplace organization, or external relations”
- *Oslo Manual* developed by the European Communities and the Organisation for Economic Co-operation and Development (OECD)

Design Process

Search for Innovation



Design Process


Search for Reusable Solution Patterns- Petjakarta to MTR



Banjir?



<http://tinyurl.com/banjir001>

PETA  JAKARTA

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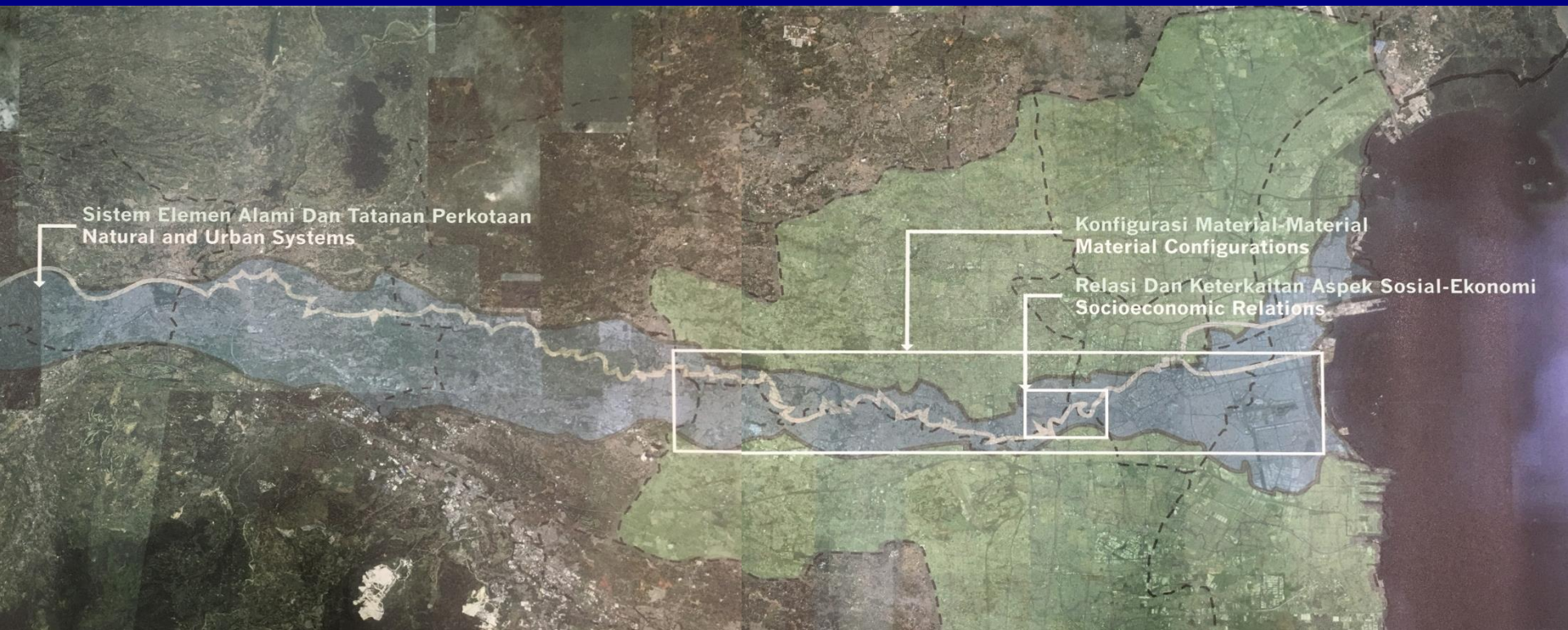
Projects vs Programs

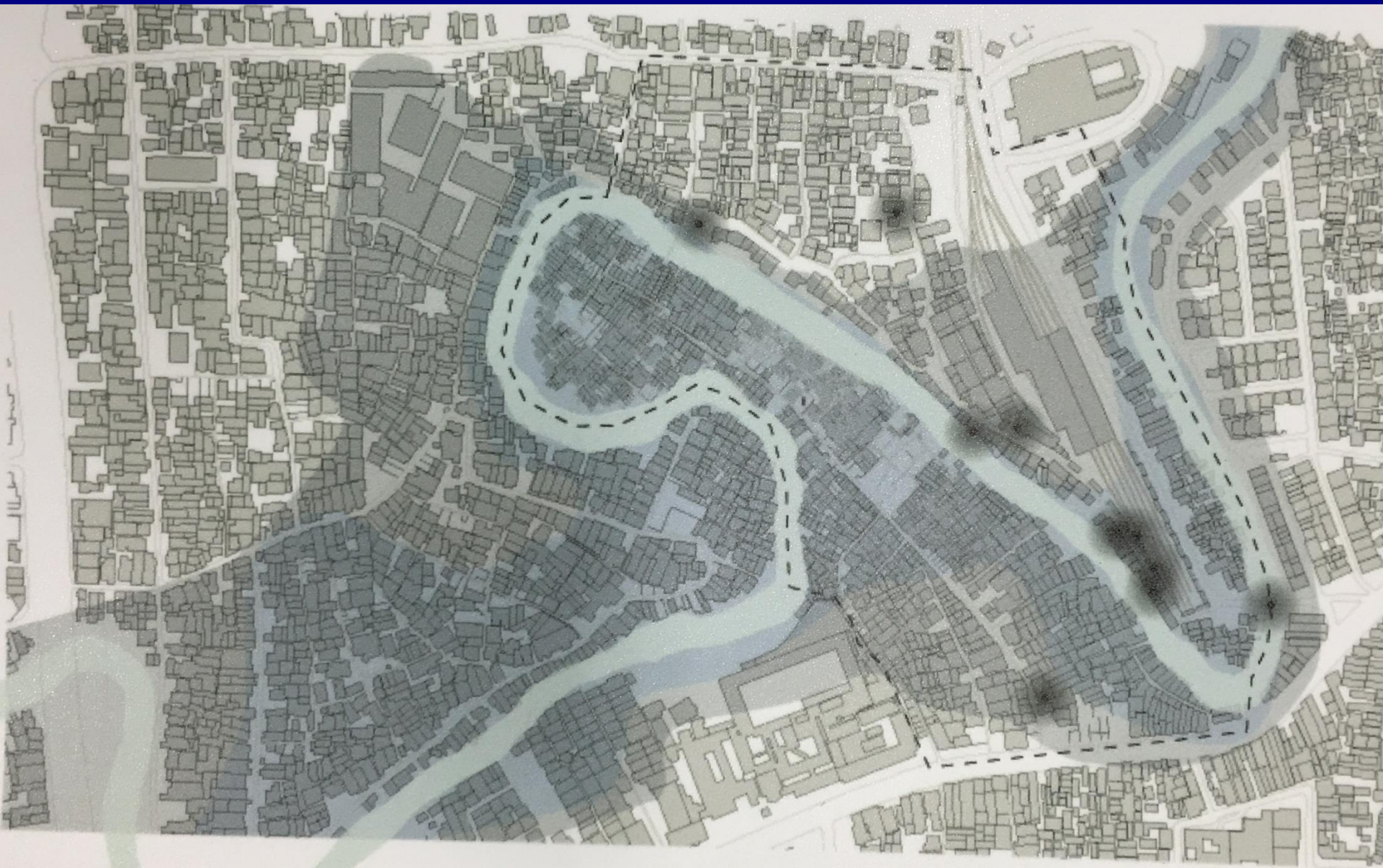
Projects vs Programs

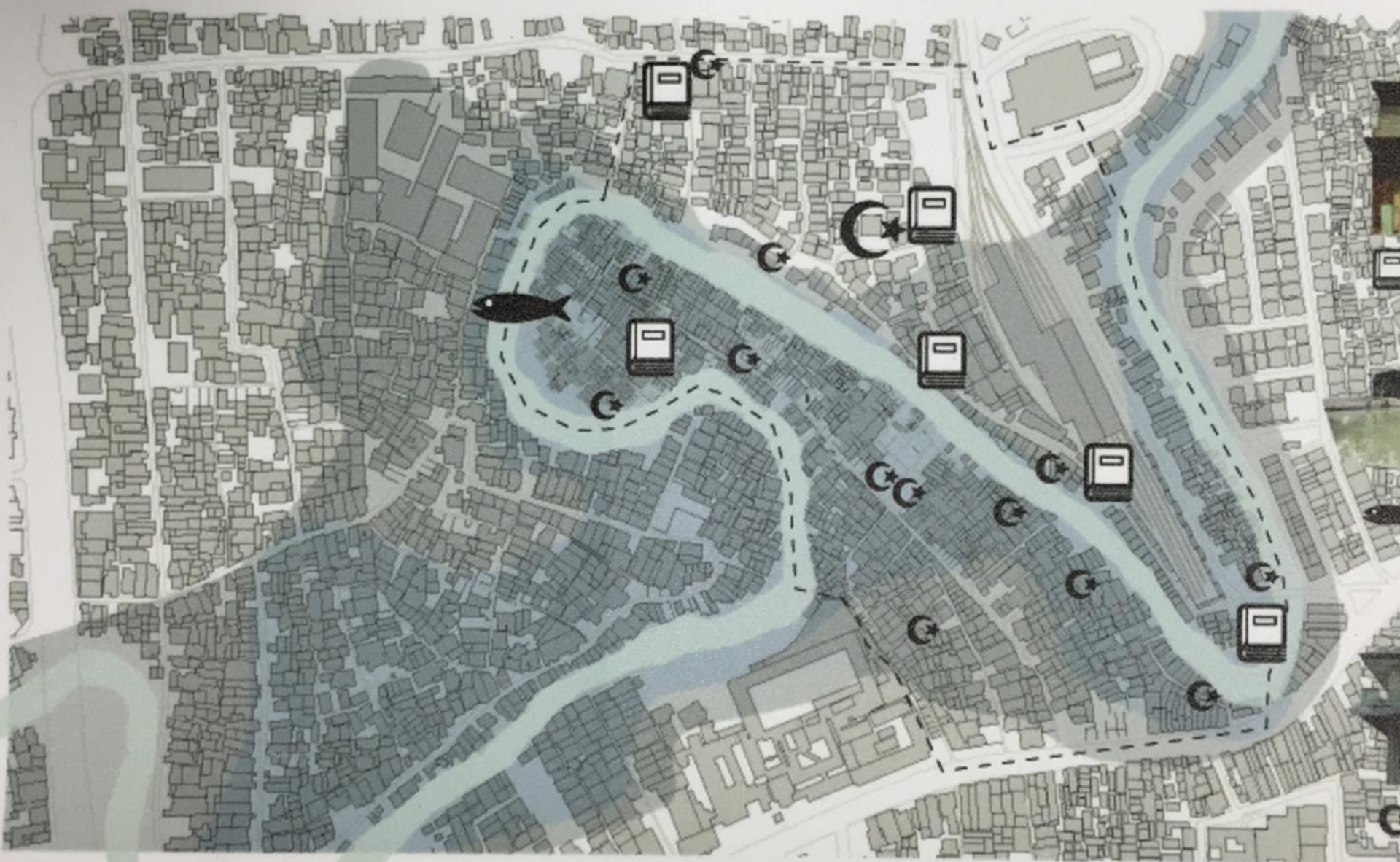
- *It's important to recognise that some research projects are actually research programs. Efforts need to be made to exploit the range of potential research activities.*
- Scope Creep
- The threat of NOT Recognising Programs
- Manage Programs and their Projects
- Actually Evaluate Projects: Be Honest, Act Ethically
- What are the real Questions? Don't lose sight of the big picture!

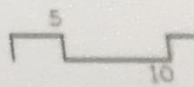
Projects vs Programs

Community/University Projects









Melatih

train, practice, coach, drill, form, ground

- double loop learning in hazard assessment
- systems thinking applied to field preparedness

Bahaya

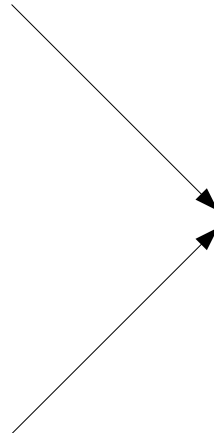
danger, hazard, peril, risk, jeopardy, menace

- rapid ethnography through communication design

Kaji

crowdsourced knowledge

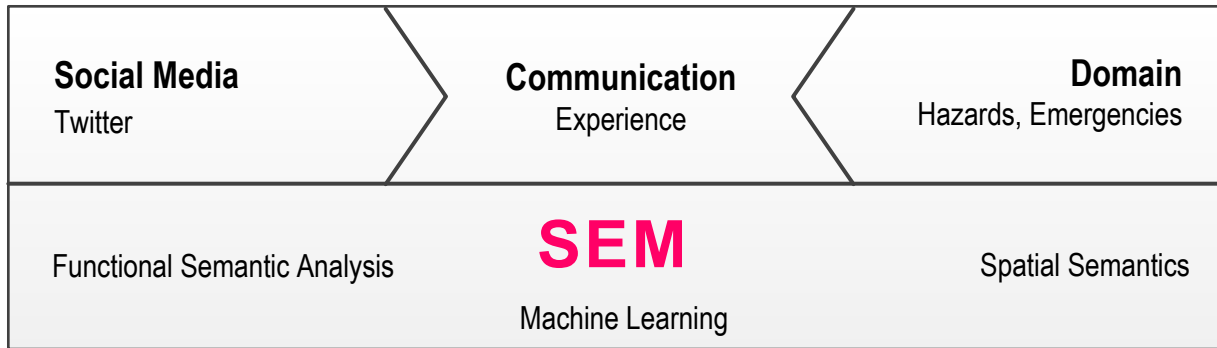
- communication resources applied to tweet corpus- nominal groups organised into system networks
- inductively developed hazard taxonomies



Bahaya-Kaji

hazard knowledge

- communication resources applied to rapid ethnographic interviews





RJClarke @clarke_rj · now

@petajkta It's flooding around here. I'm not going to leave #banjir



Clause 1

Clause 2

Word Class

Pro. | Verb | Preposition Phrase | ProCont | Adv | Adj | Prep | Verb

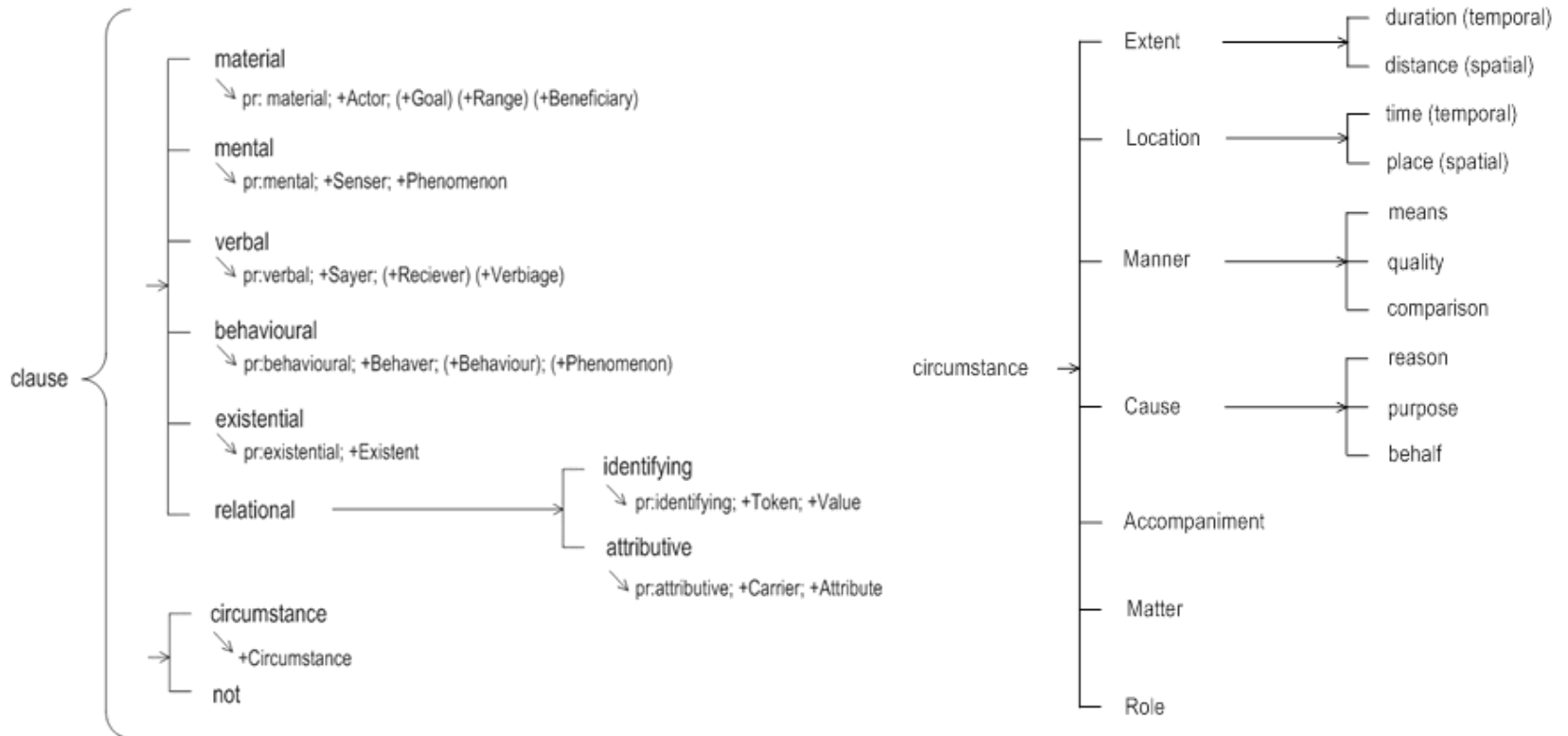
@petajkta It's flooding around here. I'm not going to leave #banjir

Functional

Actor | Pr:material | C:location: Place (spatial) | Behavior | Behaviour

Material Process

Behavioural Process



Teams and People

- Adaptive Team Structures
- Local Brokers to Facilitate Institutional/Industry Engagement
- Multidisciplinary Team Perspectives
- Respect, Recognition, Reward

- *Everyone that works on a project is invested in it. Making 'stars' undermines research projects and destroys research teams.*









Conclusions and Further Research

- **Emphasis on the Micro-level**
- **Limitations**
- **Studying Industry-Research Collaboration: One Multidisciplinary Perspective**
- **Call to Action: Capturing Innovation Stories from Knowledge Creators**

co-lab

Collaboration Laboratory (Co-Lab)

SMART Infrastructure Facility, Building 6 Room 207
University of Wollongong NSW 2522 Australia
+ 61 2 4221 3752; +61 2 4221 3218

Web: <http://smart.uow.edu.au/uow-collaborators/co-lab.html>



WordPress: blogs.uow.edu.au/colab

Vimeo: [co-labAU](https://vimeo.com/co-labAU)

Director, A/Prof Rodney J. Clarke

School of Management and Marketing
University of Wollongong NSW 2522 Australia
T + 61 2 4221 5818; F +61 2 4221 4154

Web 1: <http://www.uow.edu.au/commerce/smm/mgmt/mgmtstaff/UOW010750.html>

Faculty of Economic Sciences, Communication and IT
Karlstad University, SE-651 88 Karlstad, Sweden
T +46 54 700 18 40

Web 2: https://www.kau.se/forskning/forskdb?to_do=show_researcher&id=3236



LinkedIn: <http://au.linkedin.com/in/rodneyjclarke>

Twitter: [clarke_rj](https://twitter.com/clarke_rj)

Skype: [rodney-j-clarke](https://www.skype.com/people/rodney-j-clarke)

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- “Academics do want to engage with business, but need more support” *The Conversation* July 26, 2016

Credits

Inundation 3 Studio

- **Scott Sørli:** Department of Agricultural Science, Ryerson University
- **Etienne Turpin:** SMART Infrastructure Facility, UoW
- **Sara Dean:** anexact office, PetaJakarta
- **Tomas Holderness:** SMART Infrastructure Facility, UoW

Research Assistants

- **Yantri Komala Dewi**
- **Muhammad Kamil**
- **Ariel Shepard**

Images Credits

- **Satellite Imagery:** TerraMetrics (2014)
- **Map Data:** Google (2014)