

Action Research: A Trinidad & Tobago Case Study of ICT Interventions in Small Scale Fisheries

Kim Mallalieu On behalf of the Caribbean ICT Research Programme Department of Electrical and Computer Engineering The University of the West Indies

> Symposium on Research Enterprise & Impact St. Augustine Campus 2 October 2013

### **UWI** Mission

Inclusive Caribbean development through:

Teaching Research Innovation Public service Intellectual leadership Outreach

### **Action Research**

 Improves subject of study and
 generates knowledge - Kock 2011
 Applied
 Collaborative university

collaborative universitycommunity interventions - Worthington et al 2011

Combines systematic research with development of a practical intervention

- Dold & Chapman 2012

#### Caribbean ICT Research Programme

- Multi-stakeholder knowledge exchange & dialogue re ICTs for Caribbean social & economic development
- CIRPTT (Trinidad and Tobago)
  - Action research on mobile ICTs for poor Caribbean citizens and communities
  - Focus: safety and empowerment of small scale fisherfolk





- Identification of strategic objectives
- Identification of key metrics \_\_\_\_\_
- Functional and performance measurement Evaluation

Appraisal
Needs Assessment
Opportunities Assessment
Wireless & m.
Communication
Marine R

CIRP Action

Research

Deployment

- Beneficiary engagement
- Boundary interface design
- Boundary partner relationship building & mgt
- Iterative testing & solution review

Development

• Open data pilots

• Wireless & marine communications

• Communications for Development

Marine Resource Management

• ICT for Development

• Policy & regulation

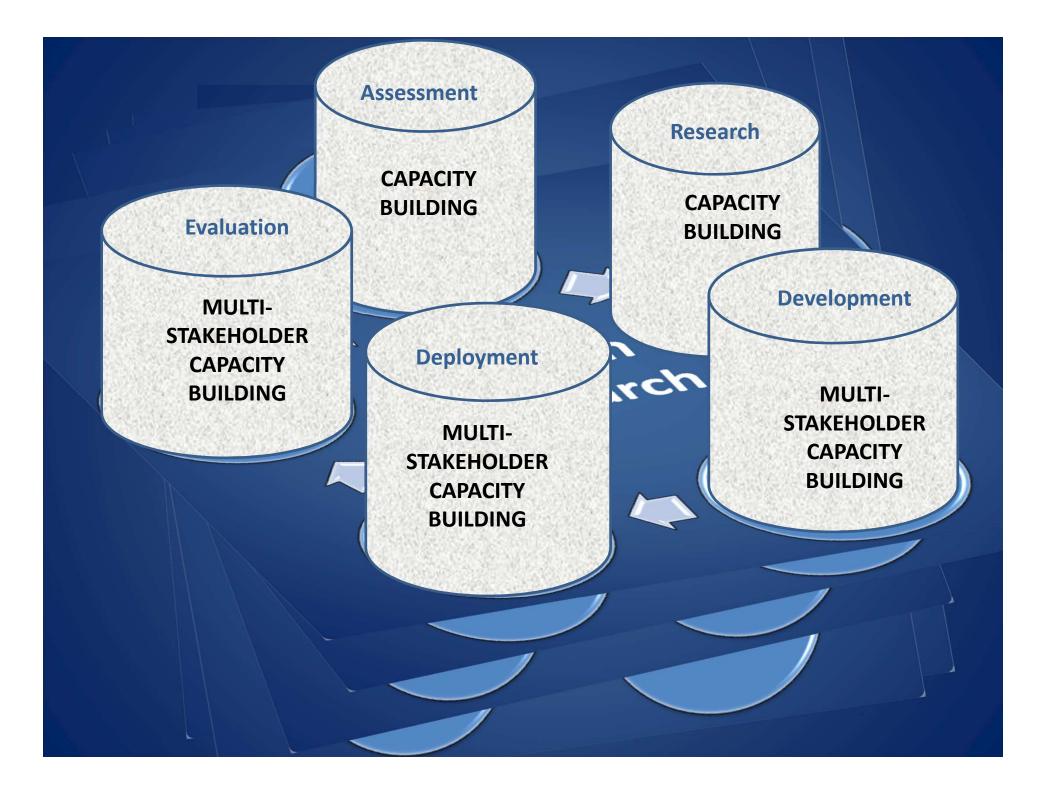
• Digital literacy

Research

Mobile & Web app
 frameworks

Mobile & Web apps

Web service architecture





Code Jam



Caribbean Innovators Challenge: Mobile Apps 4 Dev

Caribbean Open Data Code Sprint



Startup Weekend TT

Open-ended s/w competition

Developmentfocussed s/w competition Open data, developmentfocussed s/w competition Multidisciplinary, whole-business competition





#### Caribbean economic, social, political and cultural development

Outcomes Outputs

Impact

main

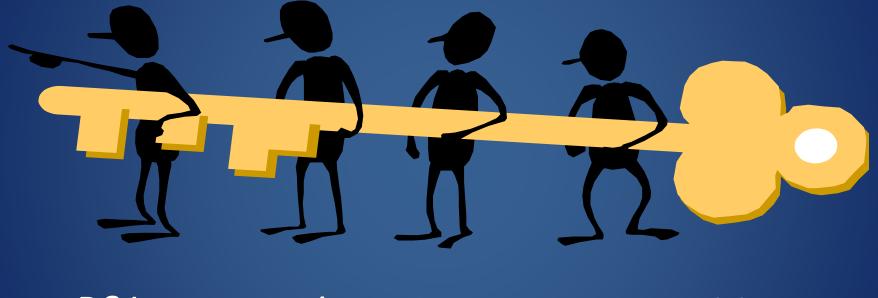
Teaching
Research & Innovation
Individual empowerment
National development

- Policy and regulatory influence
- Community knowledge
- Built institutional & personal capacity
- Relationships

Intervention & engagement

- Data, Information, Knowledge
- Literature

"Shared value creation ... new and heightened forms of collaboration" Porter & Kramer



R&I Gov't Private Communities Institutions Sector

## Thank You



# Acknowledgments

This work was conducted with the support of the International Development Research Centre, IDRC, Canada. Kind thanks are also due to our many partners and donors including:

- Distance Learning Secretariat, DLS
- Caribbean Fisheries Training and Development Institute, CFTDI
- NAMDEVCO
- The Trinidad and Tobago Coast Guard
- BGTT
- Digicel Trinidad and Tobago
- Seafood Industry Development Company Itd, SIDC
- Trinidad and Tobago Network Information Centre, TTNIC
- MIT NextLab
- MIT mSurvey
- Fisheries Division, GoRTT