



## *Our Purpose*

NSF: Cross the Valley of Death. An innovative service role for NSF.

ISSIP: Our mission is to “promote service innovation for our interconnected world.”

Workshop: Recommend a research agenda for PFI:BIC, grand challenges



## Themes

1. Technology
2. Verticals
3. Human Factors/Effects
4. Business Models
5. Public Policy
  
6. Science and engineering
7. Service Systems and Value Co-Creation

## Technology – its uses

- Moving
- Sensing
- Communicating/Connecting
- Data managing
- Interpreting
- Analyzing/Deciding
  - Predictive
  - Descriptive
  - Prescriptive
- Conversing
- Learning/Adapting/Cognition
- Empathizing
- Creating

## Verticals (obsolete definitions)

1. HEALTH CARE service
2. Consulting service
3. Product support service
4. Education service
5. Financial Service
6. Retail service
  
7. Service ecosystems

## *Human Factors/Effects*

- Education/Training
- T-Shapedness
- Culture shock
- Employment
- Machine-augmented human vs. human-augmented machine
- User models
- Workforce virtualization

## *Business Models*

- Commercialization (Edy's example of drug cabinet)
- Servitization (Prashant's & David's examples of GE and Cisco services)
- 1% process improvement → to disruptive innovation (4 waves of adoption)
- Serverless computing
- Micro services
- Sharing economy
- Virtual workforce
- Value specification and assessment
- Agile design
- Open innovation

## *Public Policy & Economics*

- Socio-technical systems
- Service ecosystems
- Government as a platform
- Industry-Academe collaboration
- Privacy and data ownership (HAT)
- Standardization
- Legal constraints
- Cultural norms
- Sharing economy
- API economy
- Open sourcing
- Technology transfer/adoption
- Rapid application development