

ERDT – ICT Track

Goals for the next four years

ERDT R&D Summit
7 December 2012
Diamond Hotel

What the ICT track did

1. Meeting with government sector

Round table discussion

October 9, 2012

15 government agencies were invited

Four attended

PAGASA

CHED

DND

Philhealth

What the ICT track did

2. Meeting with private sector

One-on-one interview with different sectors:
financial, utility, and consultancy companies

Association interview with product & service
management companies

Meralco

Canon

Maersk

HP

Deutsche Bank

P&G

Telus

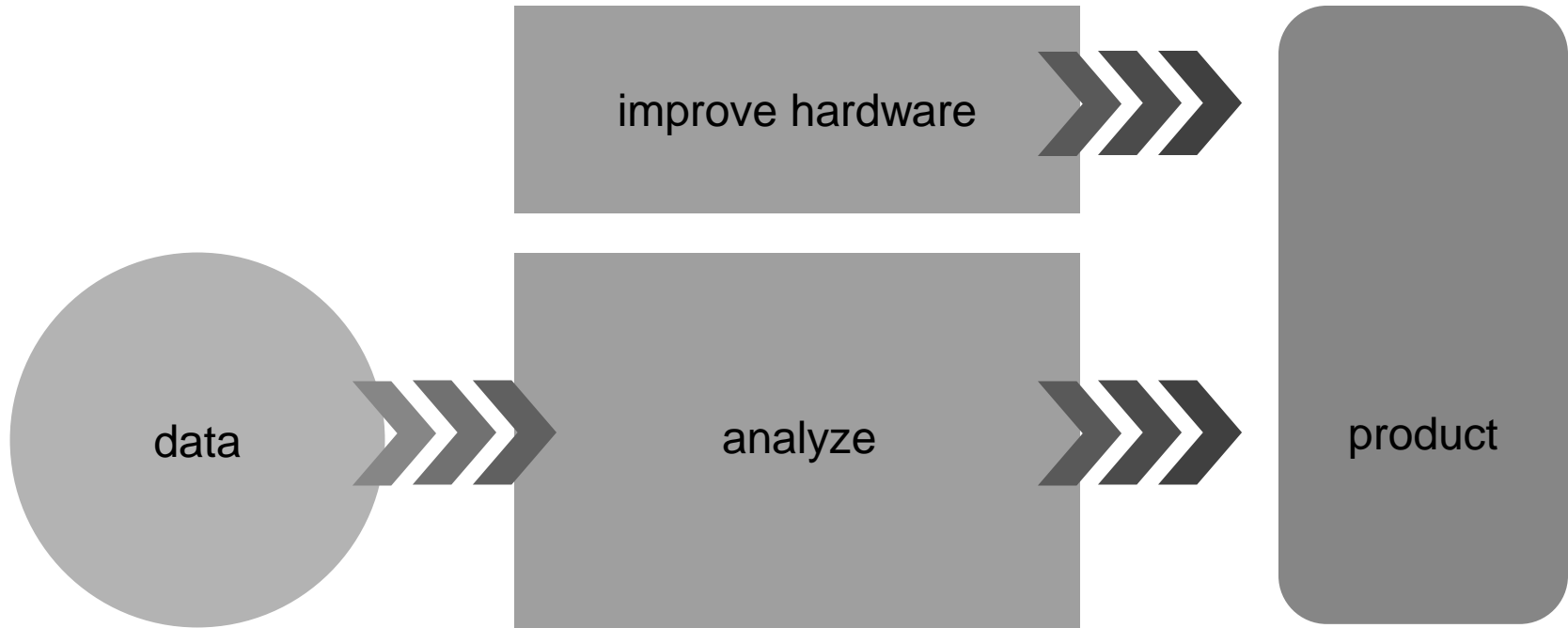
ECCI

Research and Development Agenda

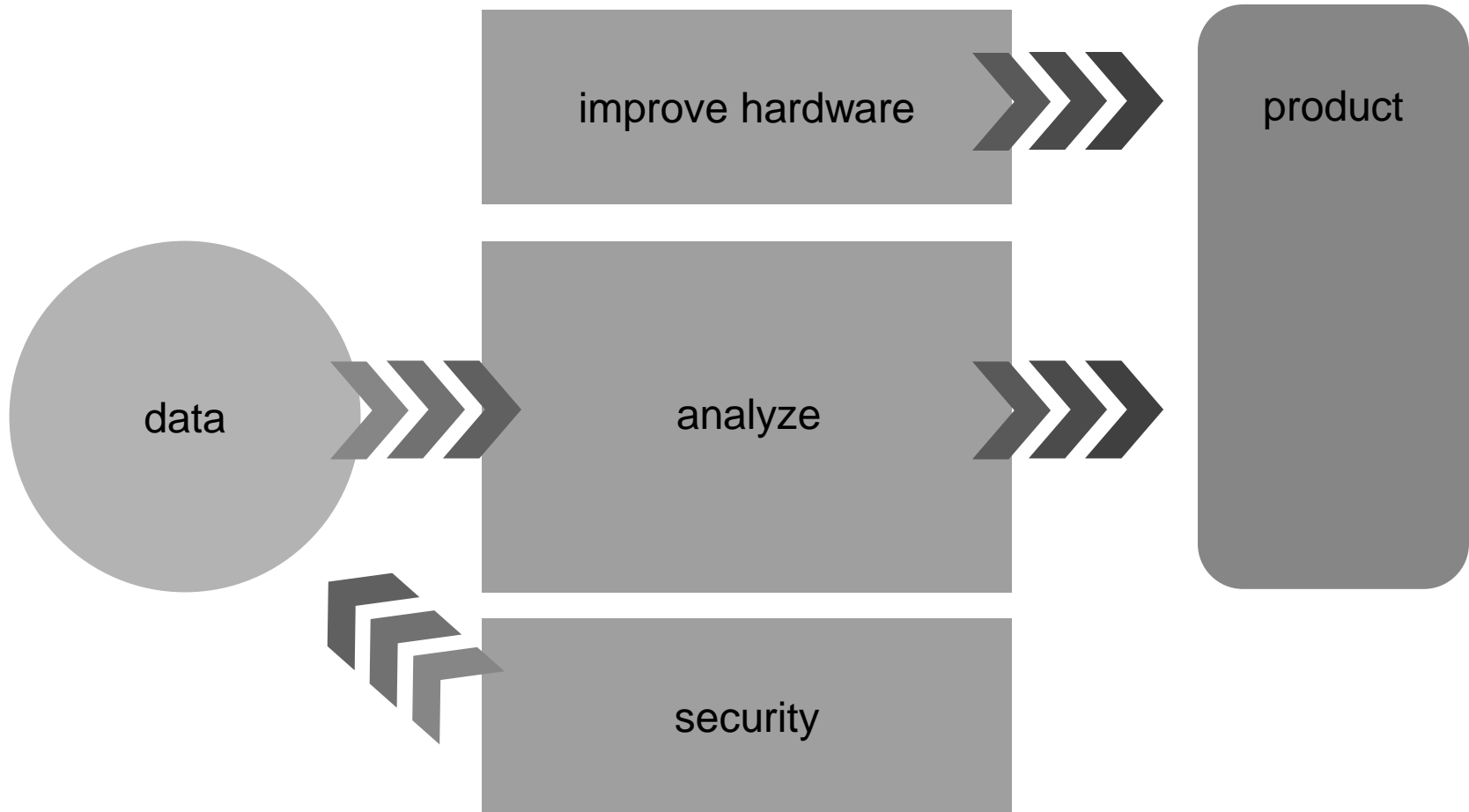
Research and Development Agenda



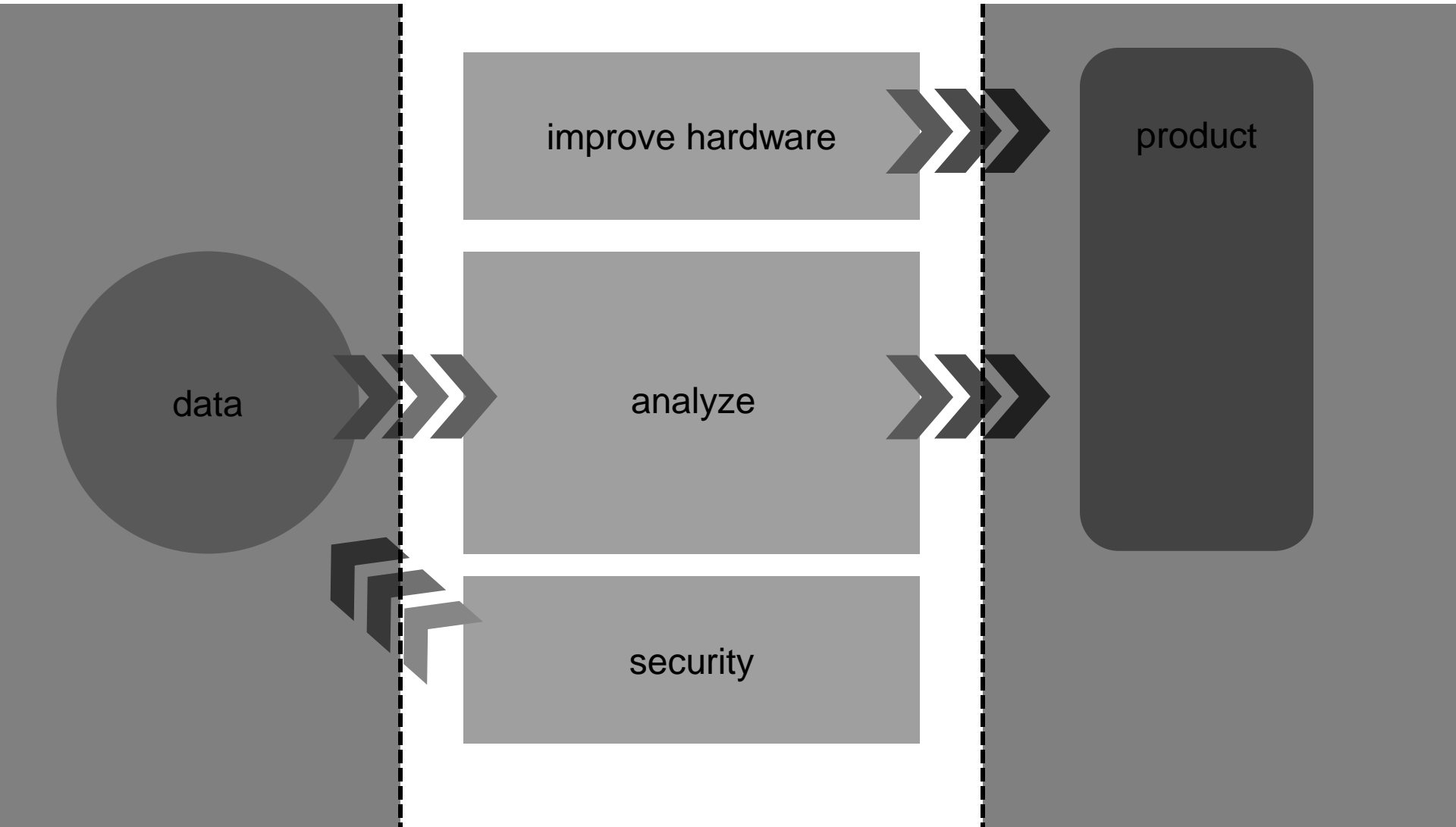
Research and Development Agenda



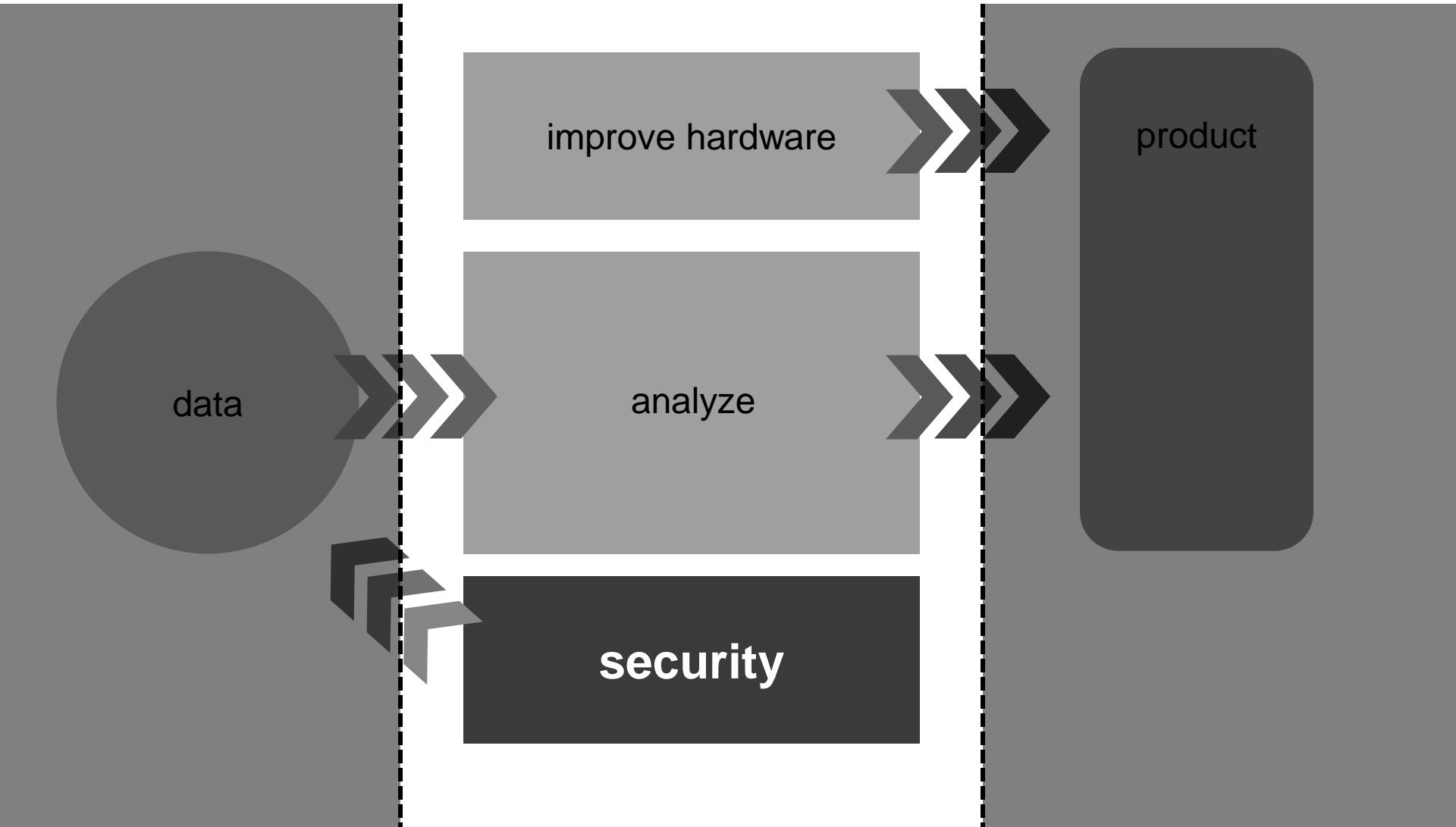
Research and Development Agenda



Research and Development Agenda



Research and Development Agenda



Information Management

Research

Data security

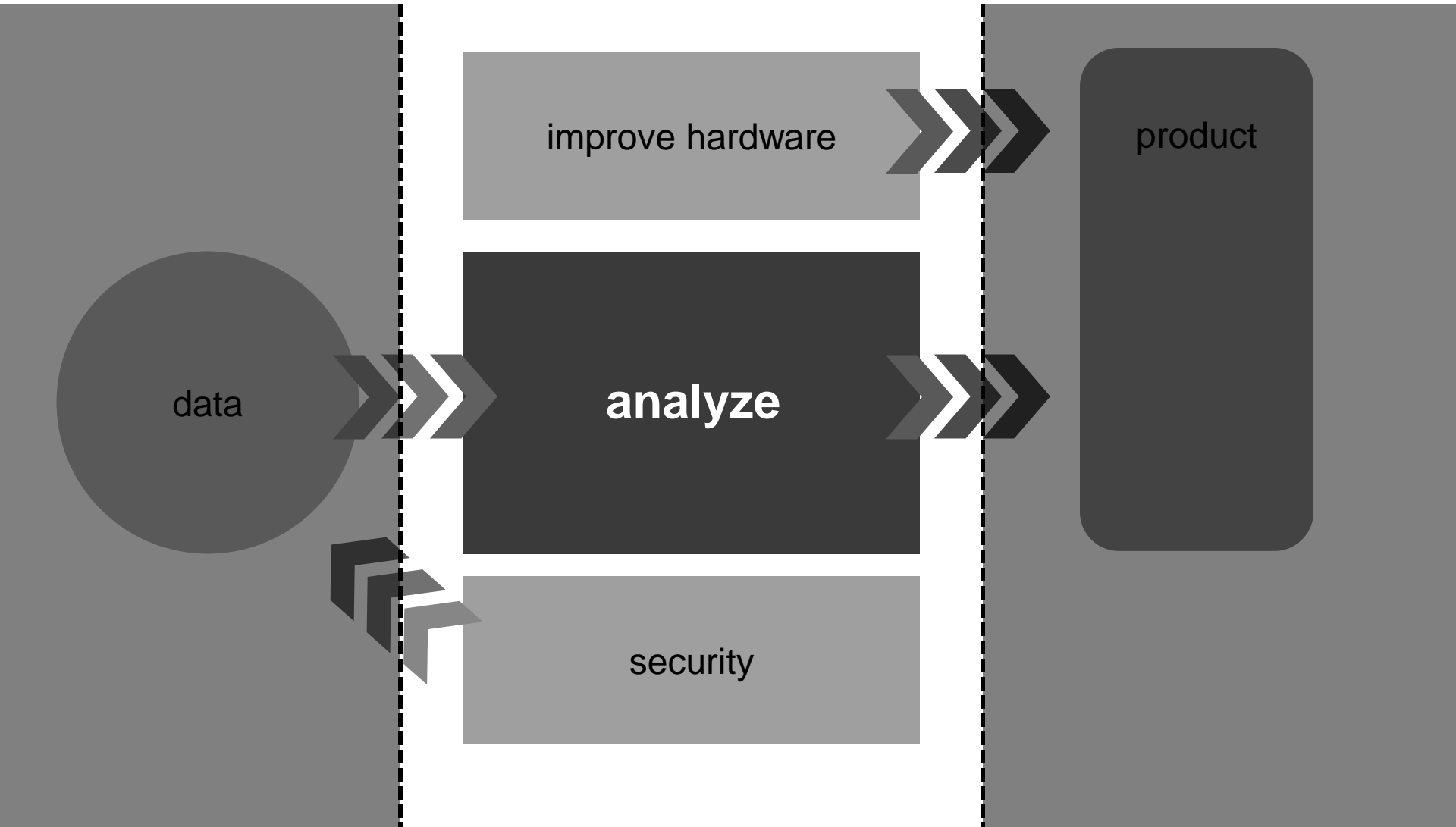
Product

Resource management system, document tracker, online library

Government – central database system for government agencies

Industry – more efficient information gathering and management

Research and Development Agenda



Data Analytics

Research

Profiling and analysis of big and/or high frequency data

Modelling and simulation of physical, social, and market phenomena

Image and signal processing

Artificial intelligence

Other mathematical and statistical methods

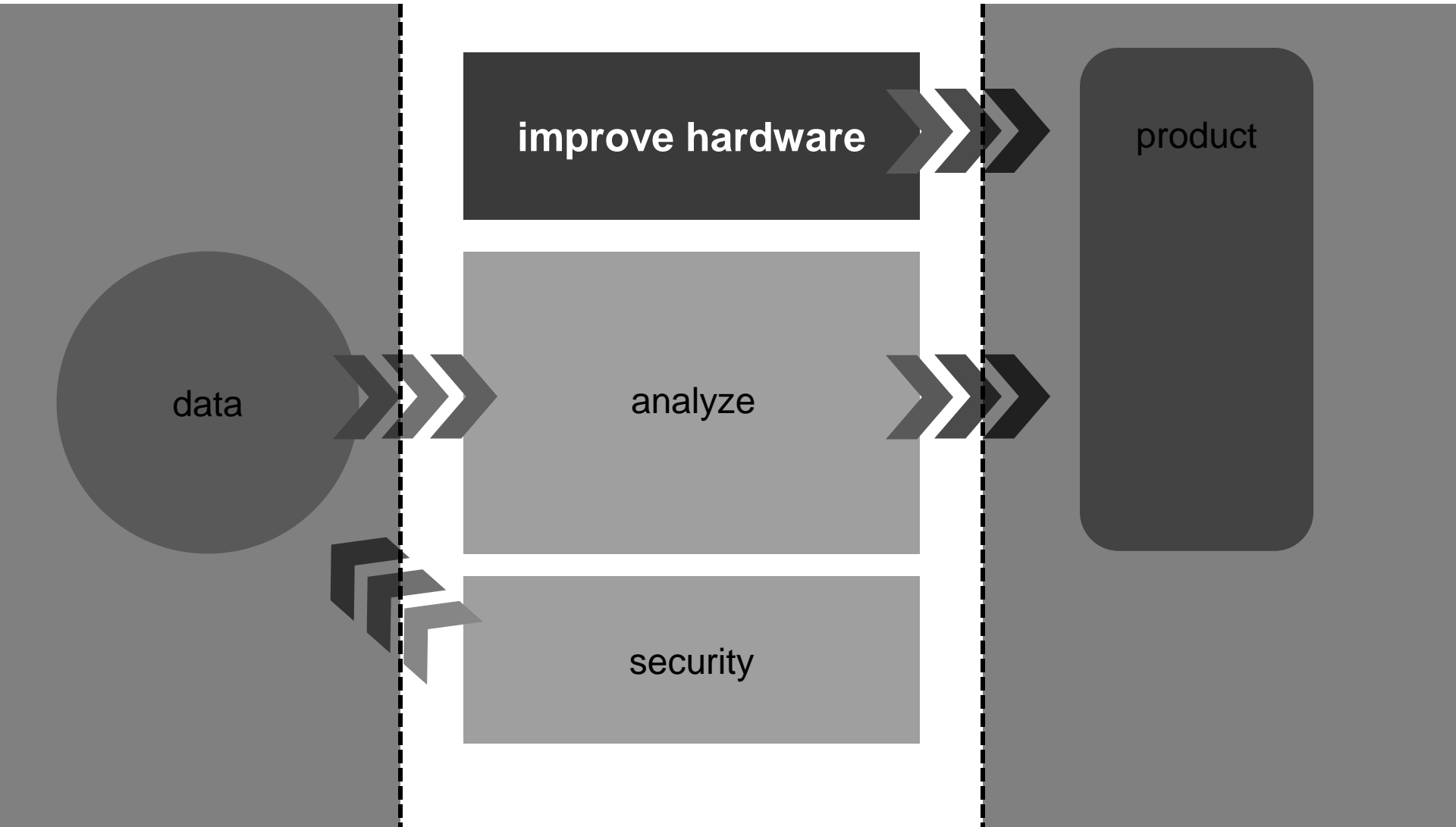
Product

Decision support systems

Government – policy formulation

Industry – business decisions

Research and Development Agenda



Cloud Computing

Research

Optimizing ways of handling data using the cloud infrastructure

Service Product

Software as a service

Security as a service

- Authentication scheme
- Intrusion detection
- Security event management
- Access control

Cloud Computing

Research

Optimizing ways of handling data using the cloud infrastructure

Service Product

Infrastructure as a service

- Virtual machines
- Firewalls
- File-based storage

High-performance Computing

Research

Addressing latency issues and maximizing the utilization of parallelized processes and infrastructures

Invisible Computing

Research

Taps different computing devices including mobile, in the completion of a workload

Embedded Systems

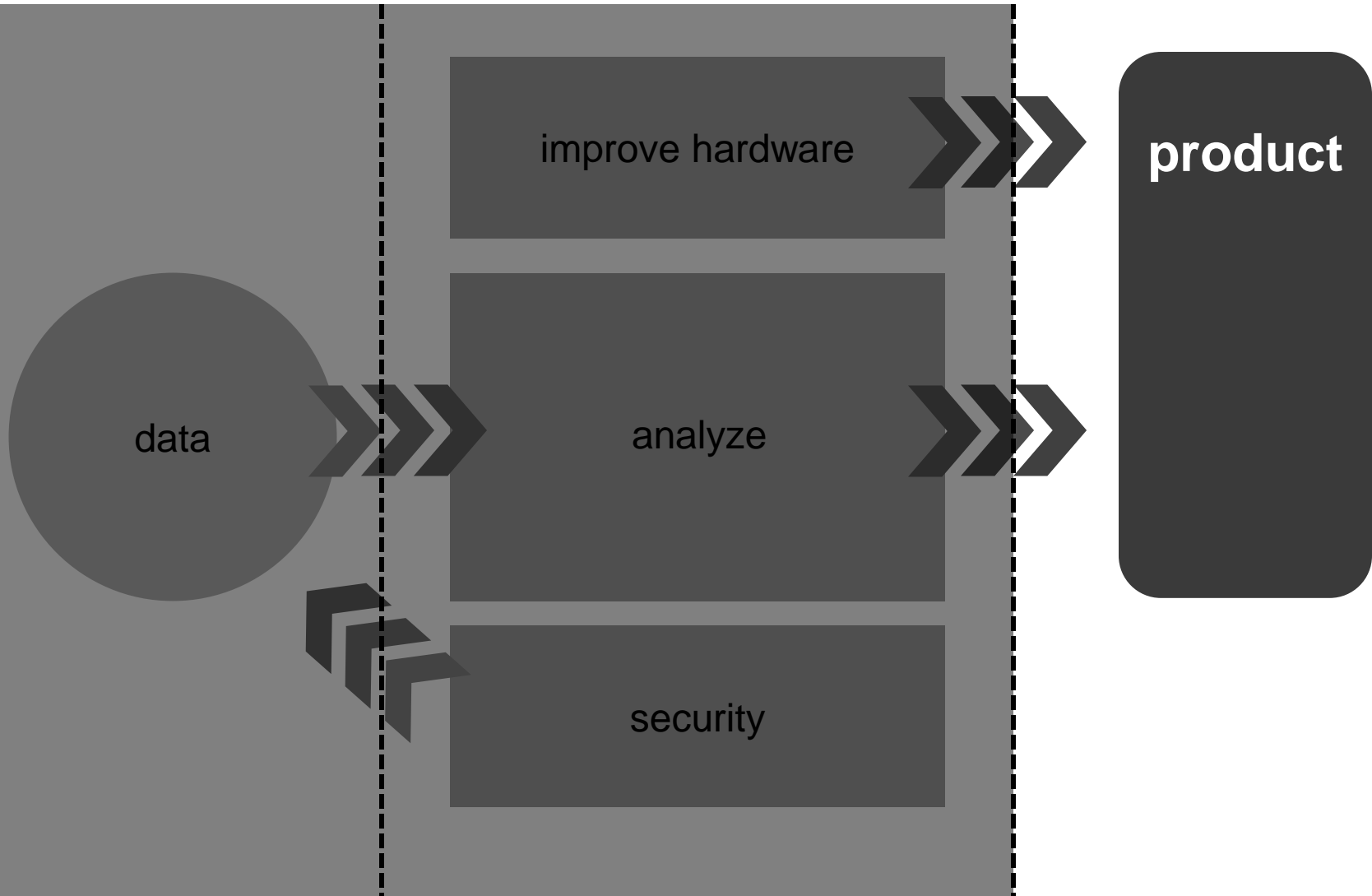
Research

Creation and development of smart machines

Product

Smart sensors, robotic technology, automotive safety systems

Research and Development Agenda



Products

Software

Decision support systems

Information management systems

Intelligent systems

Visualization systems

Geographic information systems

Products

Hardware

- RFID technology

- Artificially-intelligent machines

- Other automated machines

Manpower Development Agenda

Required Skills

Soft skills

Being able to communicate and express oneself in basic English

Good presentation skills

Being able to collaborate in a global environment and adapt to different cultures

Required Skills

Software engineering skills

Project management

Change management

Requirement analysis

Product development cycle

Documentation

Required Skills

Others

Adaptability to different programming languages

Problem solving skills

Required Knowledge

Database management

Data structures

Data analytics

Network and distributed systems

Computer organization and architecture

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