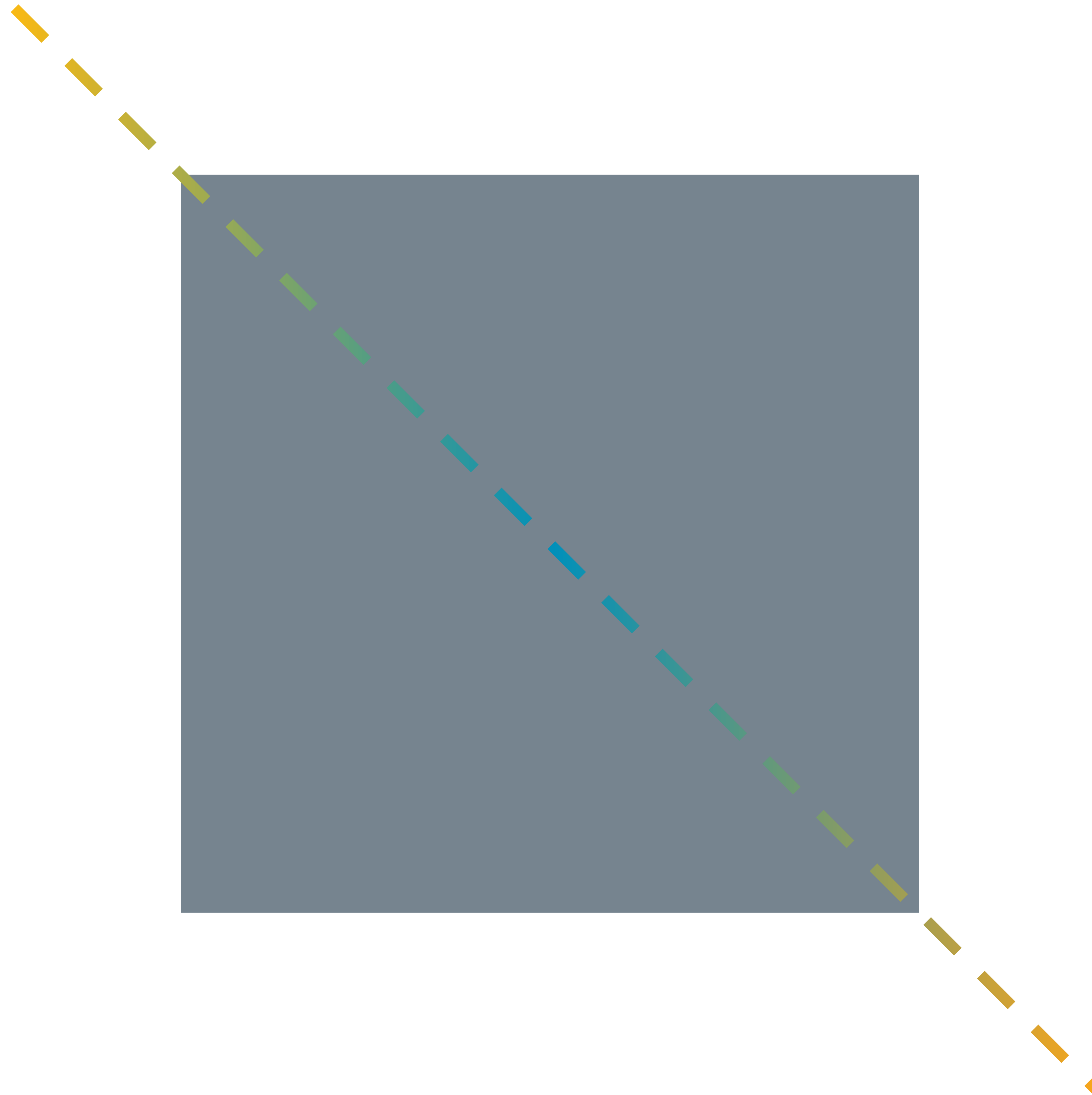




# Research



## *Conducting Software-mediated Assessments for Improvement*



# *Research*

## *Outline*

- Background –Assessment
- Research – Software-mediated Assessment Areas
- Opportunity - Collaboration



*Research*

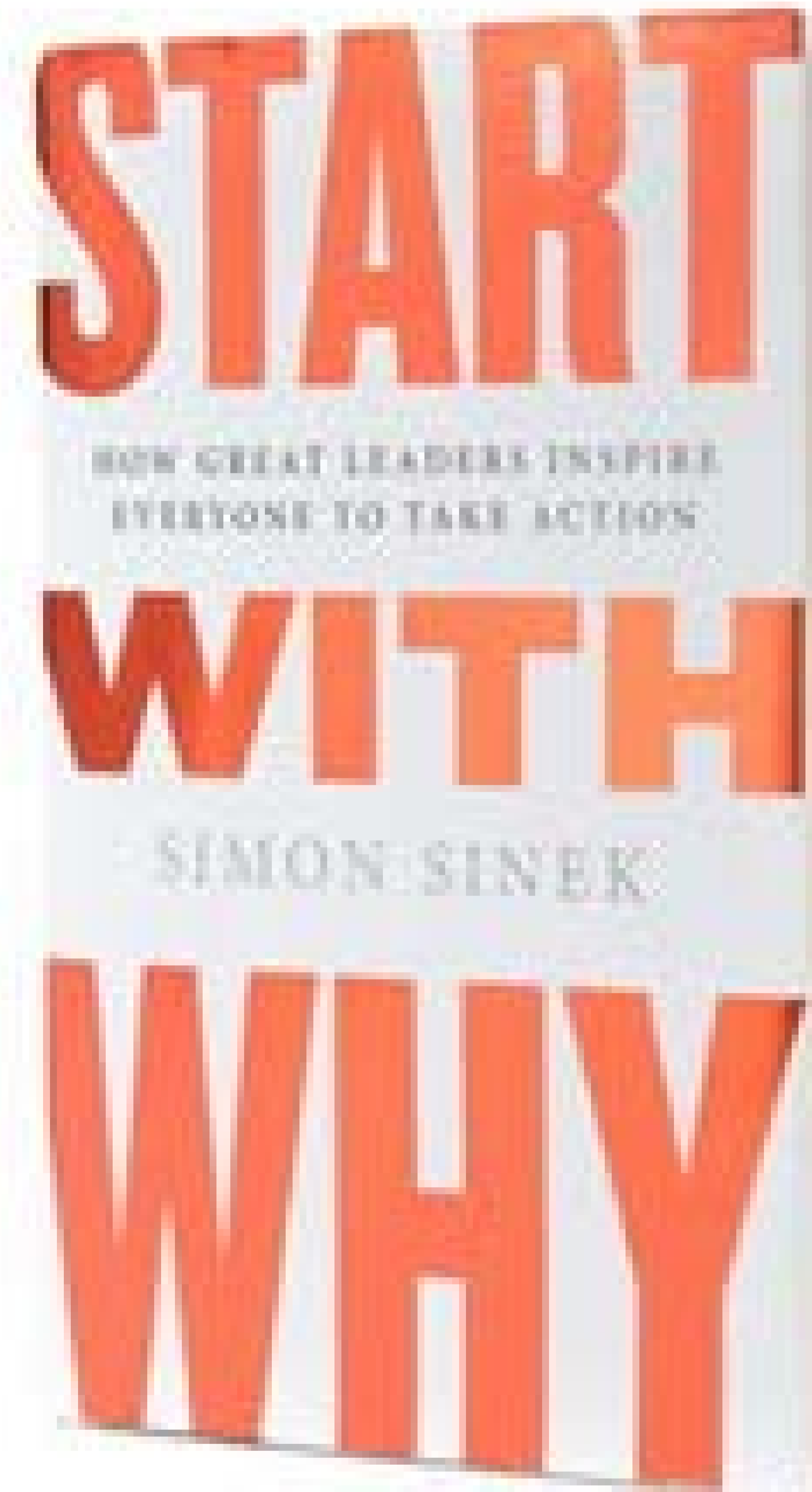
*Innovation starts with ?*



*Research*

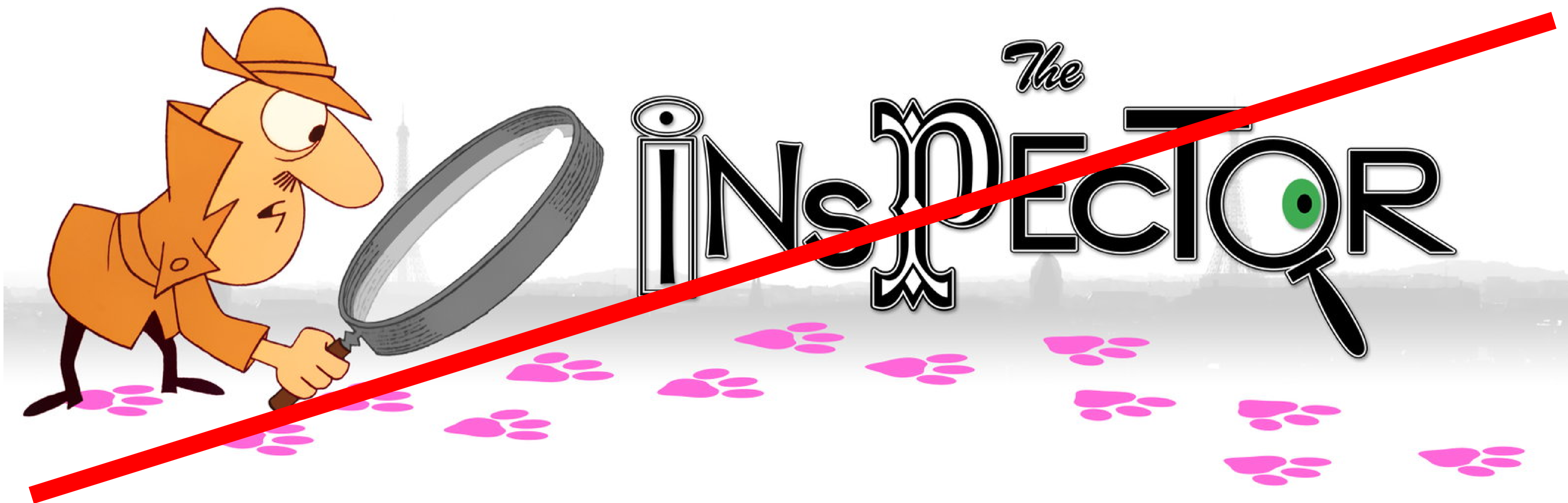
## *Asking Questions*

What?  
Which?  
Who?  
How?



## Assessment

Collecting evidence of change over time for improvement



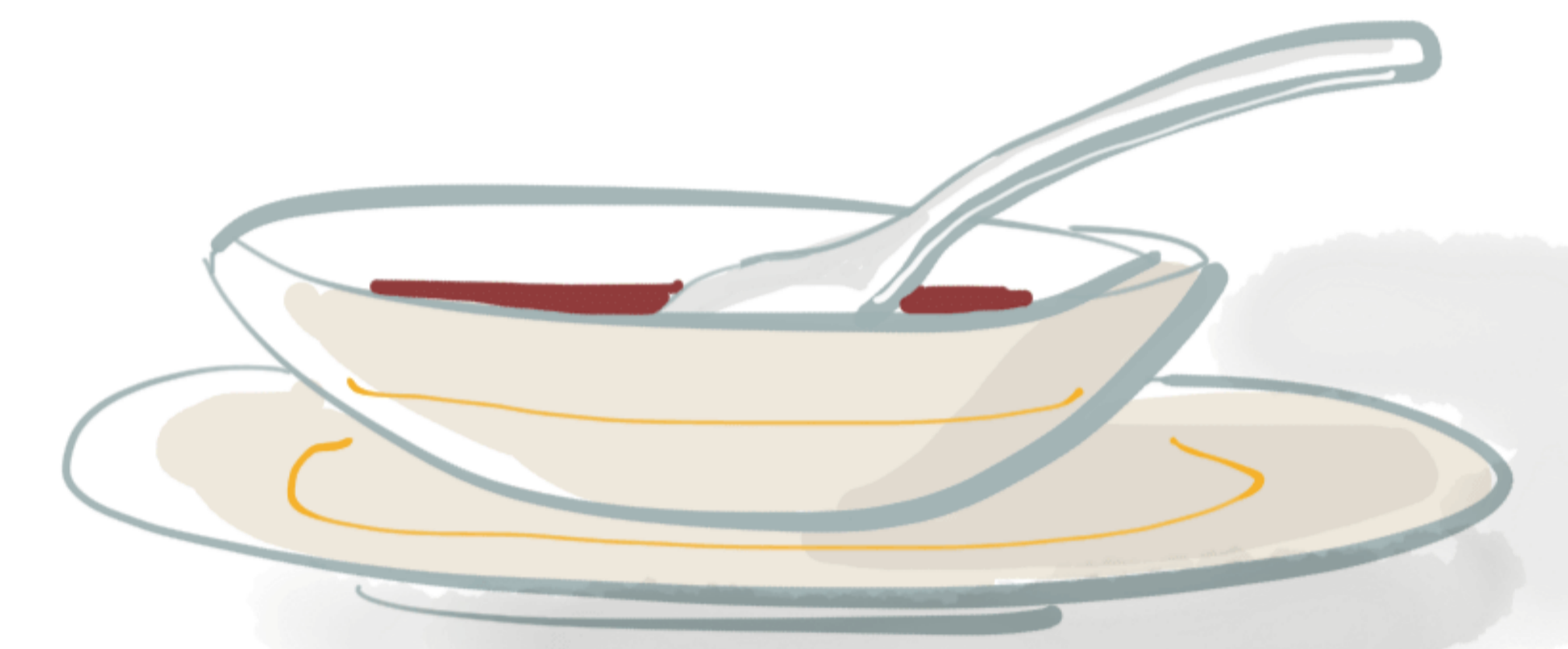
misconception

## Assessment - formative

FORMATIVE SUMMATIVE



WHEN THE **CHEF**  
TASTES THE SOUP



WHEN THE **GUESTS**  
TASTE THE SOUP

@bryanMMathers

FROM STEVE WHEELER'S BLOG "THE AFL TRUTH ABOUT ASSESSMENT"



## *Process Assessment*

**Process:** set of activities performed with a specific objective

- **Why?**

- Have we met the objective ?

- What needs to be done ?

- Performed? Managed? Standardised? Controlled? Optimised?

- **Not** How to do?



# *Research*

## *Research Studies*

- Assessment 1 – IT Service Management
- Assessment 2 – Smart Grids
- Assessment 3 – Risk Management
- Assessment 4 – Knowledge Management
- Assessment 5 – Cloud Security
- Assessment 6 - ?



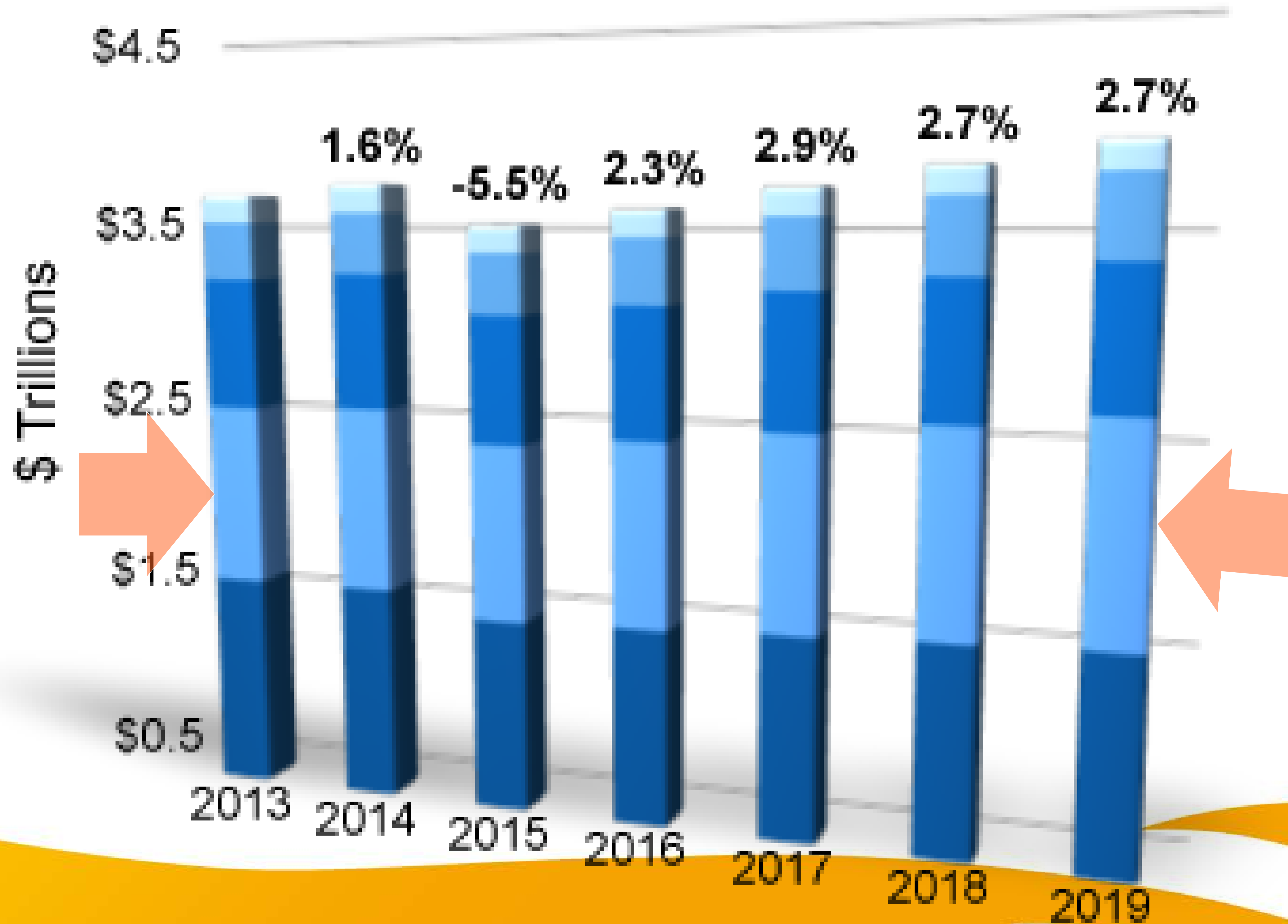


*Research*

# *Assessment 1 – IT Service Management*

# IT Service Management

- Telecommunication Services
- IT Services
- Devices
- Software
- Data Center Systems

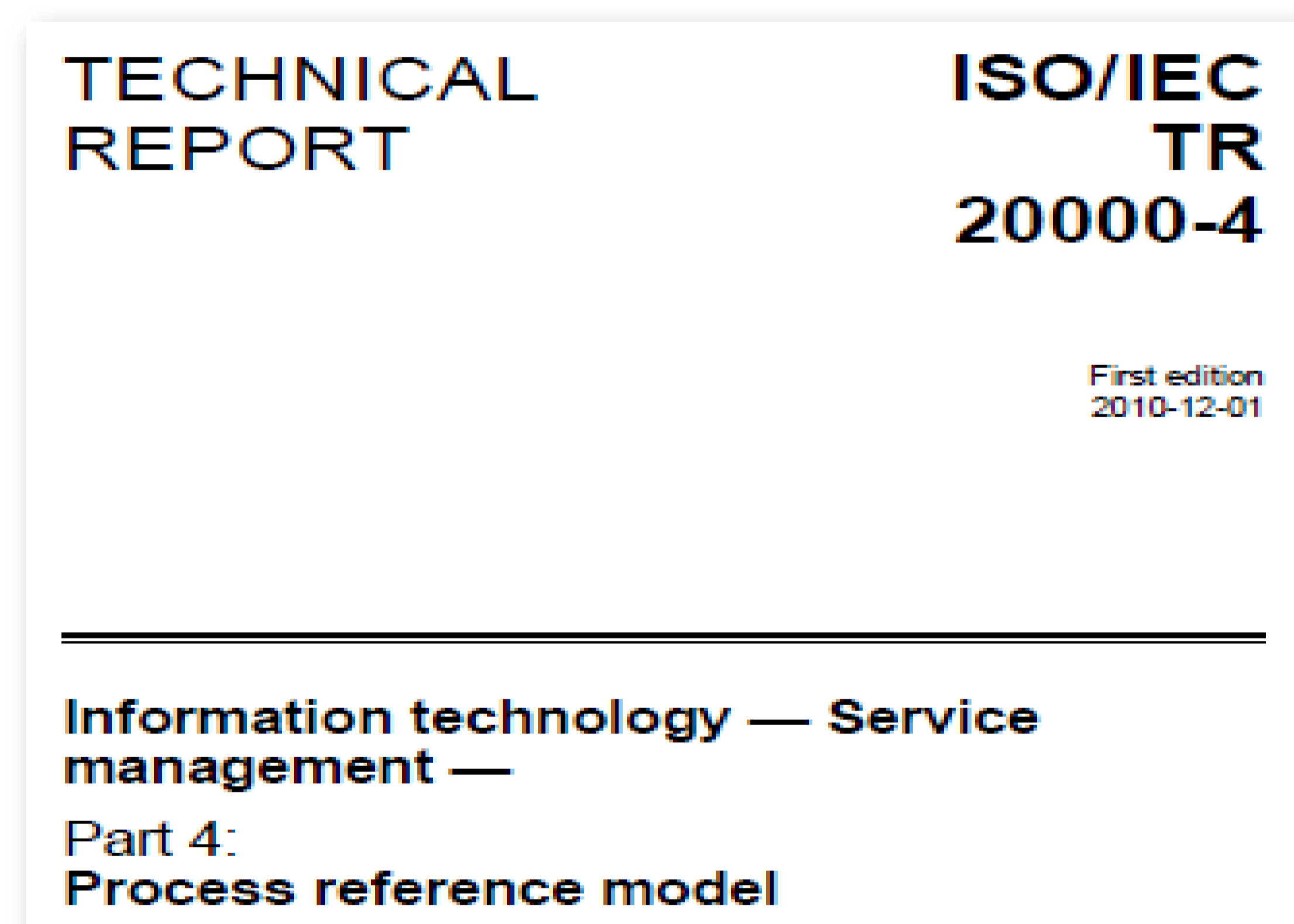




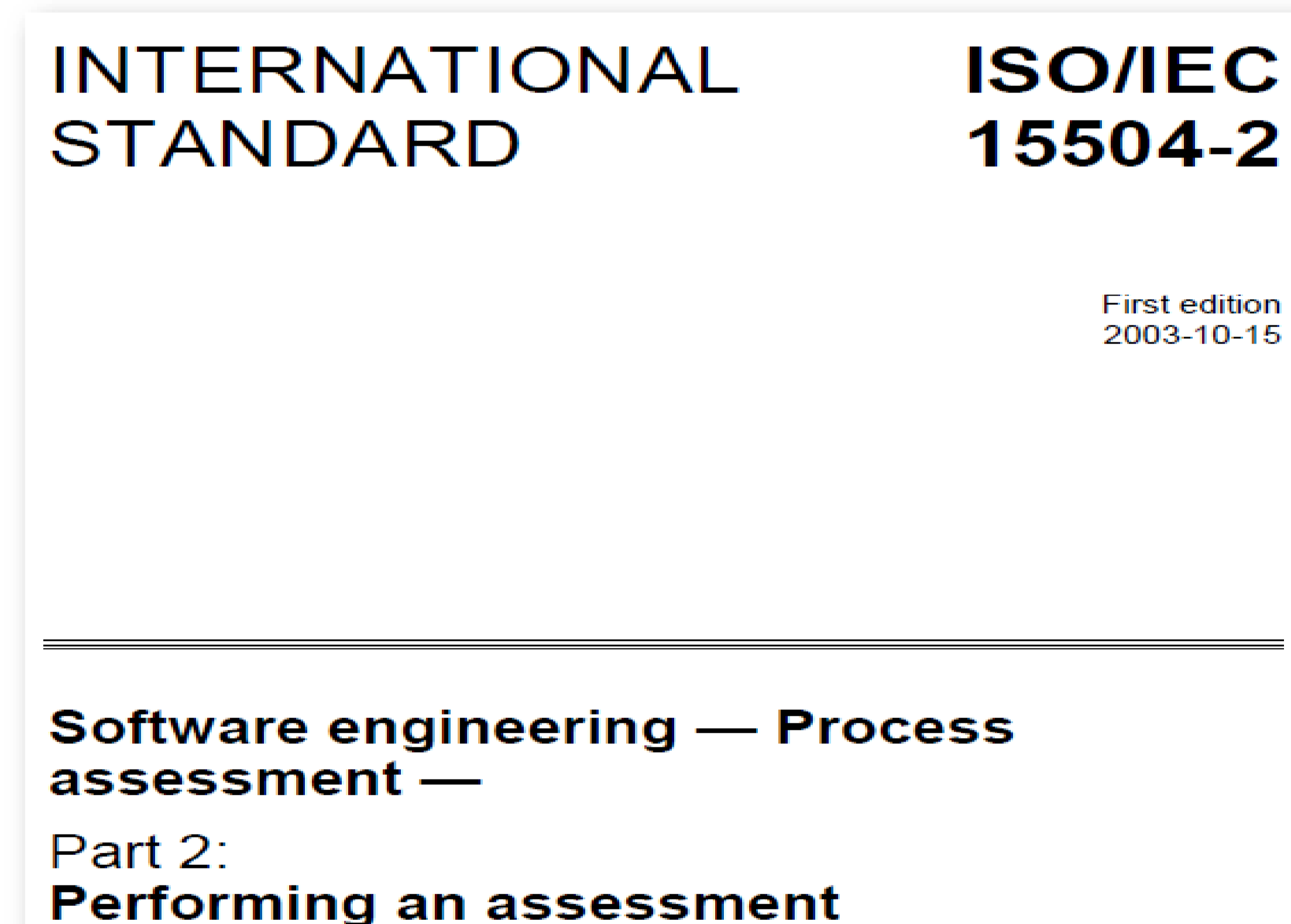
# Software-Mediated Process Assessment (SMPA)



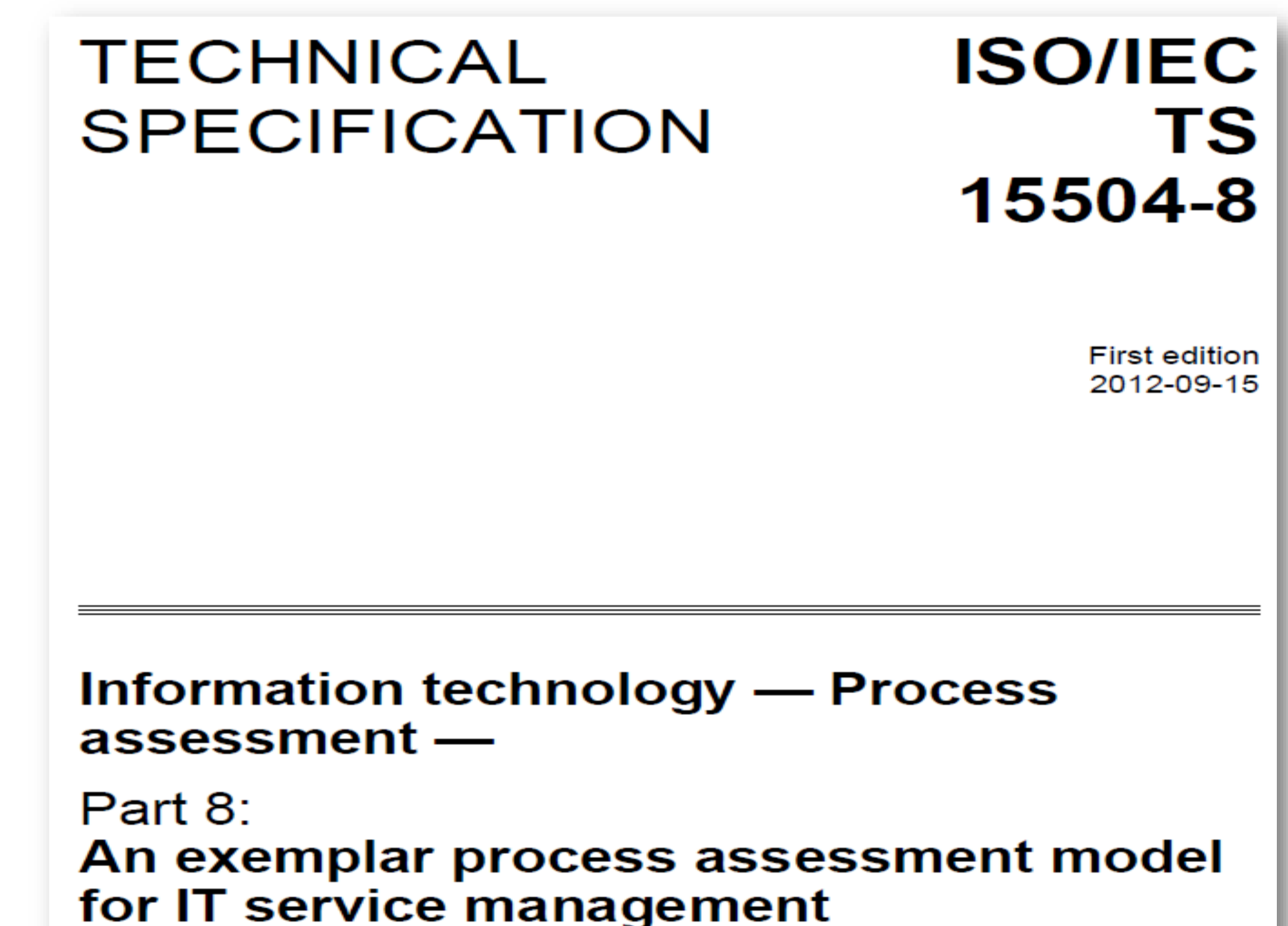
Use of a software tool for a **TRANSPARENT approach** to data collection, analysis and reporting



**Reference Model**



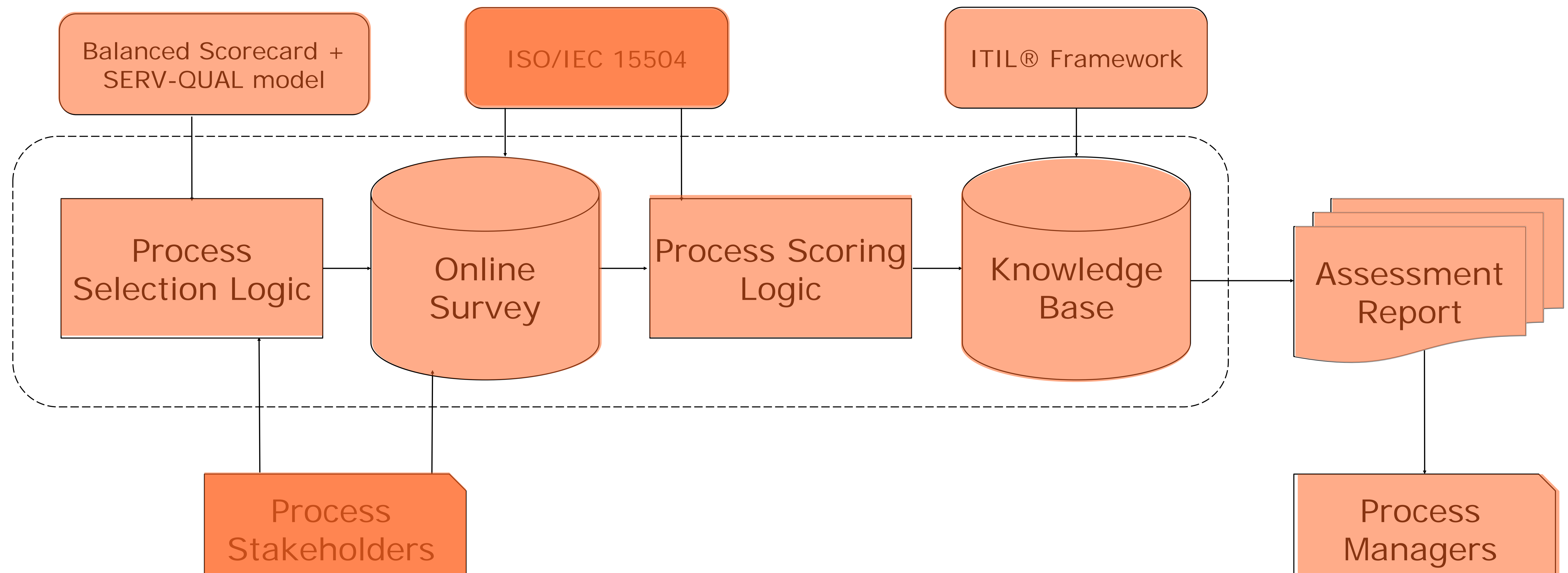
**Measurement Framework**



**Assessment Model**



# Software-Mediated Process Assessment (SMPA)

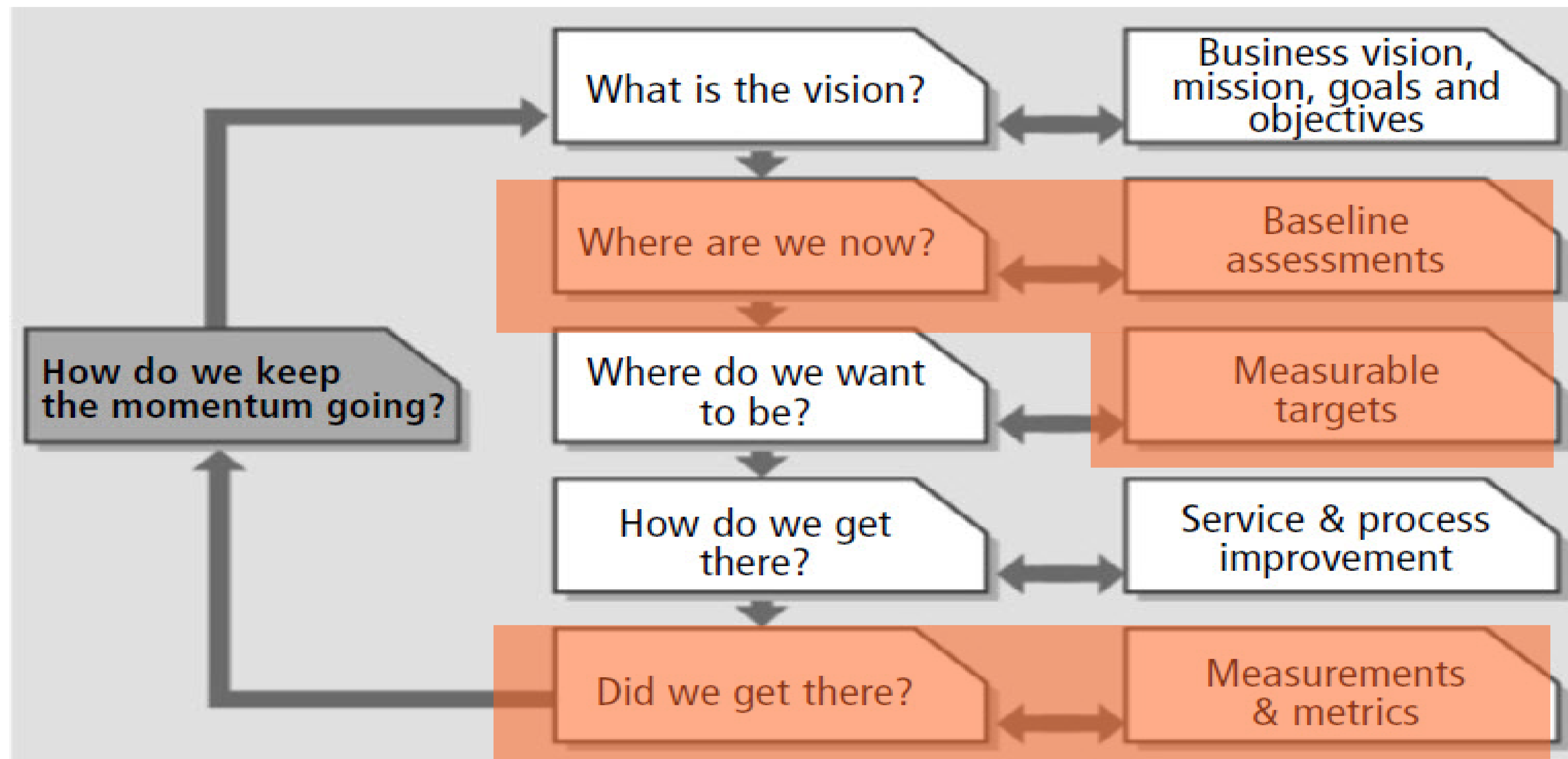


ECIS 2014: Software-mediated Process Assessment for IT Service Capability Management

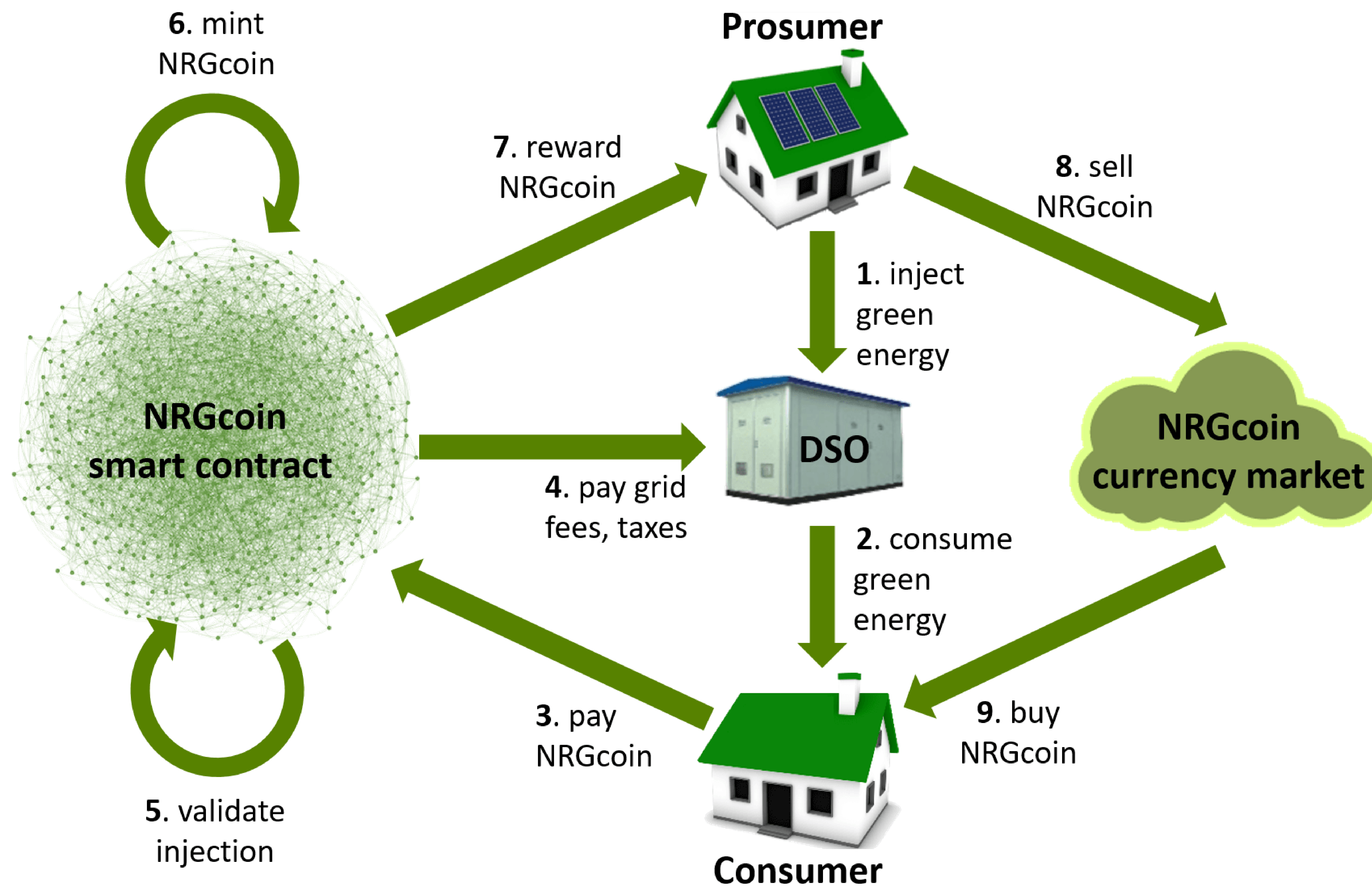
<https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1256&context=ecis2014>

# Impact

Assessment results are consistent & comparable for benchmarking & Continual Improvement



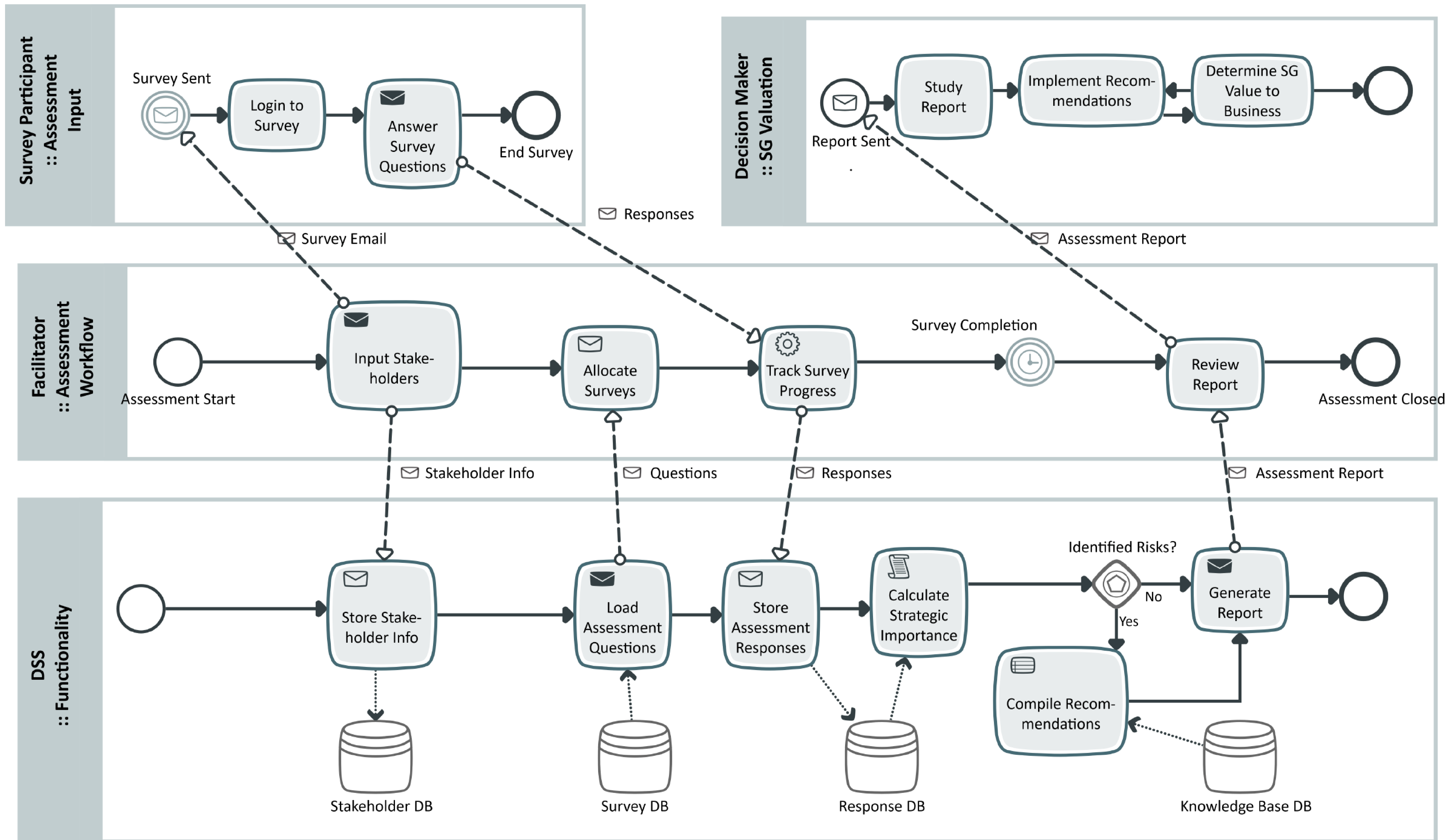
## Assessment 2 – Smart Grids



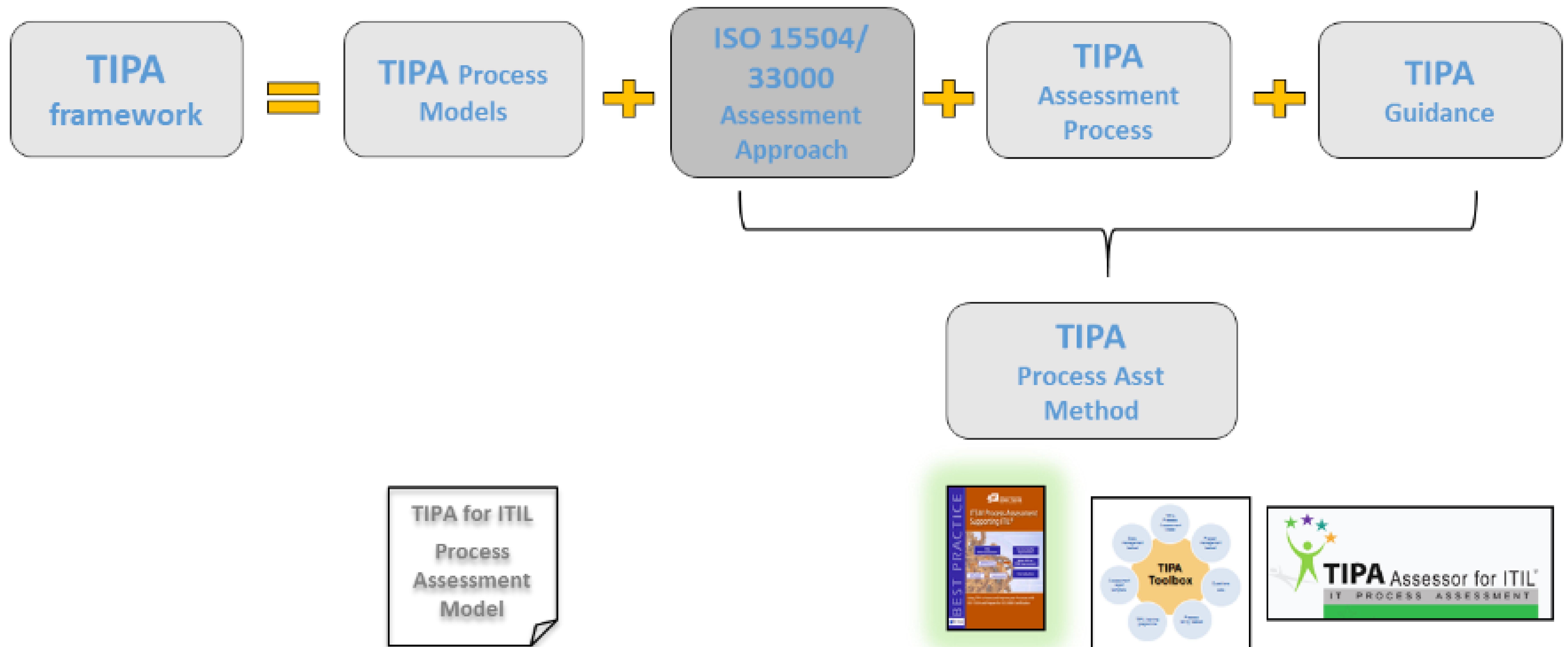
ACIS 2017 –

[https://www.acis2017.org/wp-content/uploads/2017/11/ACIS2017\\_paper\\_251\\_FULL.pdf](https://www.acis2017.org/wp-content/uploads/2017/11/ACIS2017_paper_251_FULL.pdf)

SG Architecture - Strategic Importance of elements



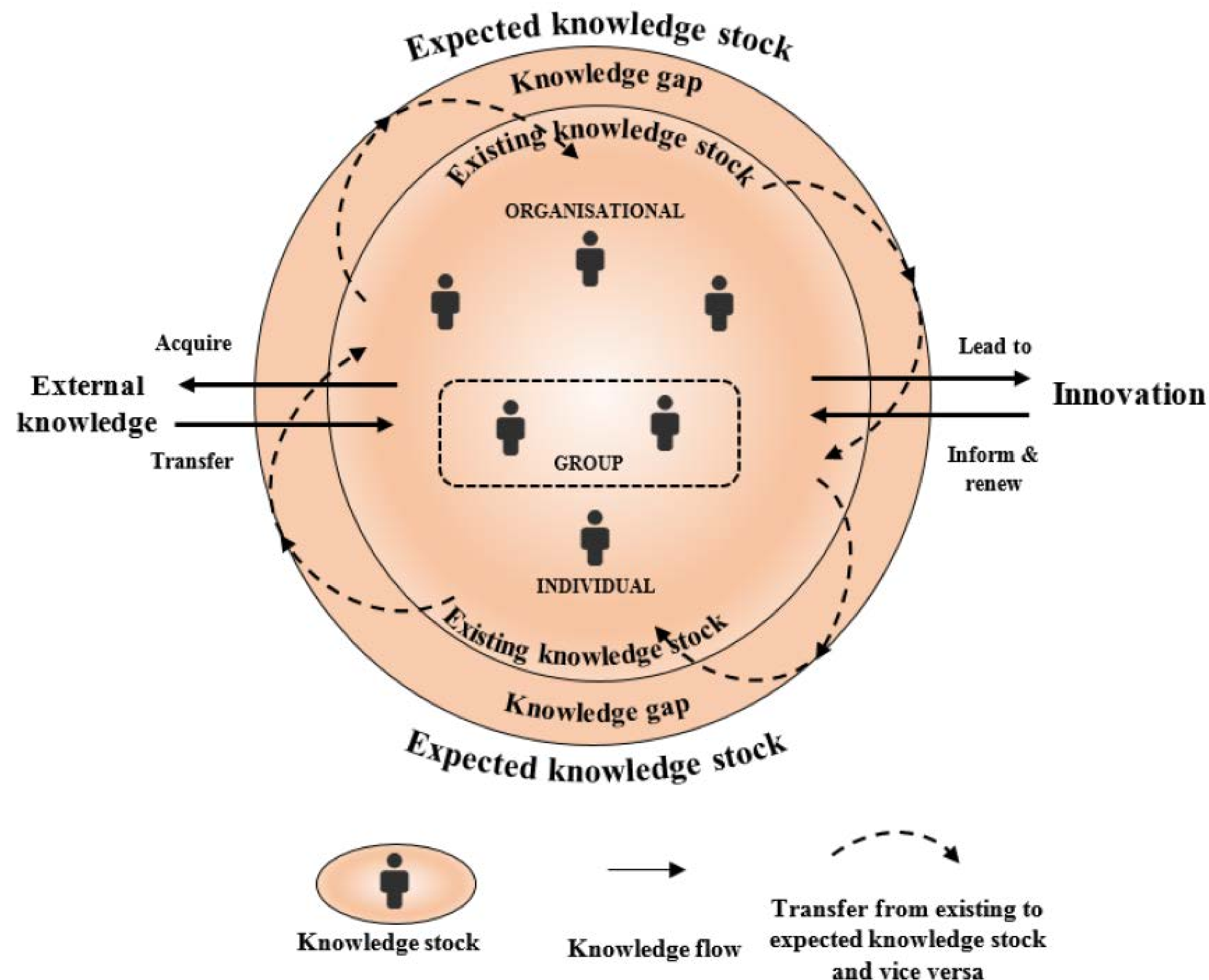
## Assessment 3 – Risk Management



Journal: Computer Standards & Interfaces –  
<http://www.sciencedirect.com/science/article/pii/S0920548916301866>



## Assessment 4 – Knowledge Management



ACIS 2017:

[https://www.acis2017.org/wp-content/uploads/2017/11/ACIS2017\\_paper\\_245\\_RIP.pdf](https://www.acis2017.org/wp-content/uploads/2017/11/ACIS2017_paper_245_RIP.pdf)

## Assessment 5 – Cloud Security

Mapping responsibility for data Security & privacy requirements to cloud service models: (developed from Microsoft, Techtalk, IBM, and Amazon)

**C = Client; CSP = Cloud Service Provider**

Responsibility	On-premise	SaaS		PaaS		IaaS	
Data Governance	C		C		C		C
Endpoints Protection	C		C		C		C
User Access Management	C		C		C		C
Identity Infrastructure	C	CSP	C	CSP	C		C
Application	C	CSP		CSP	C		C
Network Control	C	CSP		CSP	C		C
OS Security	C	CSP		CSP			C
Host	C	CSP		CSP		CSP	
Network	C	CSP		CSP		CSP	
Data Centre	C	CSP		CSP		CSP	

Bright Internet Global Summit 2017 – <http://www.bigs2017.org/> (upcoming)

## *Working Together...*

- Joint Research Collaboration
- Where does an Assessment framework fit?
- Open to other collaboration opportunities





*Research*

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