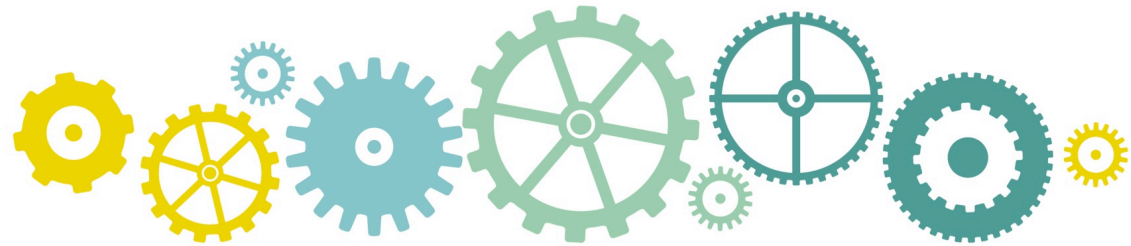




2nd CAMBRIDGE ACADEMIC DESIGN MANAGEMENT CONFERENCE  
4 – 5 SEPTEMBER 2013



---

# EVALUATING SERVICES

## AN EXPLORATORY APPROACH BEYOND SERVICE DESIGN

---

*Stefano Maffei, Beatrice Villari, Francesca Foglieni*  
POLITECNICO DI MILANO – DESIGN DEPARTMENT

# SERVICE SOCIETY >> RADICAL EFFICIENCY

- Defining a **methodological approach** to explore the field of service evaluation
- **Service evaluation** represents a possible solution to radical efficiency

## STRUCTURE

- Framing the problem: **evaluating services**
- **Facing radical efficiency** with service evaluation
- The relationship between **service design** and **service evaluation**
- Evaluation as a key factor of **decision-making processes**

## ➤ A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

# FRAMING THE PROBLEM: EVALUATING SERVICES

- Because of the intangible nature of services and the connection of production and consumption **measures tend to be qualitative**
- The **quality of a service** mostly depends on how an actor perceives it and for this reason it is **more difficult to control**  
*(Hollins, Blackman & Shinkins, 2003)*
- Within the same performance **quality can vary dramatically** from one touchpoint to another  
*(Polaine, Løvlie & Reason, 2013)*



# FRAMING THE PROBLEM: EVALUATING SERVICES

## HOW WELL IS THE SERVICE PERFORMING?

Considering **performance as a measure of value**

**INWARD-FACING**  
VALUE MEASUREMENT  
from the provider perspective



**OUTWARD-FACING**  
VALUE MEASUREMENT  
from the user perspective

*(Polaine, Løvlie & Reason, 2013)*

# FRAMING THE PROBLEM: EVALUATING SERVICES

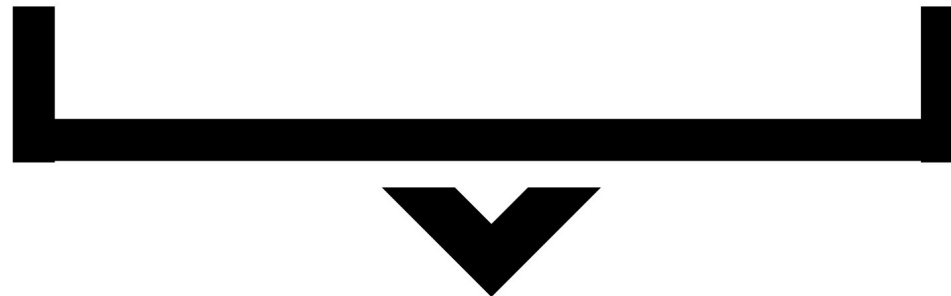
## PRIVATE SECTOR

Innovation driven  
by competitive advantage



## PUBLIC SECTOR

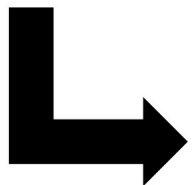
Innovation driven  
by public value



- **the customer is the main creator of value** (*Holmlid, 2010*)
- **innovation requires a systemic approach** (*OECD, 2011*)

# FACING RADICAL EFFICIENCY WITH SERVICE EVALUATION

- **Tight budgetary conditions** are placing unprecedented constraints on governments' capacity to maintain current models of public service offer and delivery, **affecting the welfare system of developed countries**  
(OECD, 2011)
- **Complex societal problems** emerged before the recession create new challenges and require public servants and **firms to do more with less**  
(Colligan, 2011)



## RADICAL EFFICIENCY

New innovation model that allows to make both **more significant savings and more significant improvements** to public services.

(Innovation Unit and Nesta , 2010)

# FACING RADICAL EFFICIENCY WITH SERVICE EVALUATION

## ➤ **Radical efficiency model may be applied to both private and public sectors**

1. Public organizations require support from private firms
2. Private sector is affected governments' policies and reforms
3. In both cases innovation requires a common, systemic process

## ➤ **The role of evaluation**

- diagnostic tool
- instrument of value creation and cost reduction
- driver of innovation

# THE RELATIONSHIP BETWEEN SERVICE DESIGN AND SERVICE EVALUATION

## WHAT ABOUT DESIGN WHO IS DESIGNING SERVICES NOW



A great deal of service design happens  
**without any professional design input**  
*(Brown, 2009)*

# THE RELATIONSHIP BETWEEN SERVICE DESIGN AND SERVICE EVALUATION

**IS IT ENOUGH TO INVOLVE DESIGN  
TO REACH RADICAL EFFICIENCY PURPOSES**



When we measure service performance in the right way,  
we can prove that service design results in more effective  
employment of resources - human, capital, and natural.



*(Polaine, Løvlie & Reason, 2013:18-19)*

# THE RELATIONSHIP BETWEEN SERVICE DESIGN AND SERVICE EVALUATION

## A NEW CHALLENGE FOR SERVICE DESIGN DISCIPLINE



TO CONTRIBUTE IN DESIGNING AND DEFINING  
A **SERVICE EVALUATION APPROACH**  
TO BE APPLIED TO THE **ENTIRE SERVICE LIFECYCLE**,  
**ACROSS SEVERAL SERVICE SECTORS.**

---

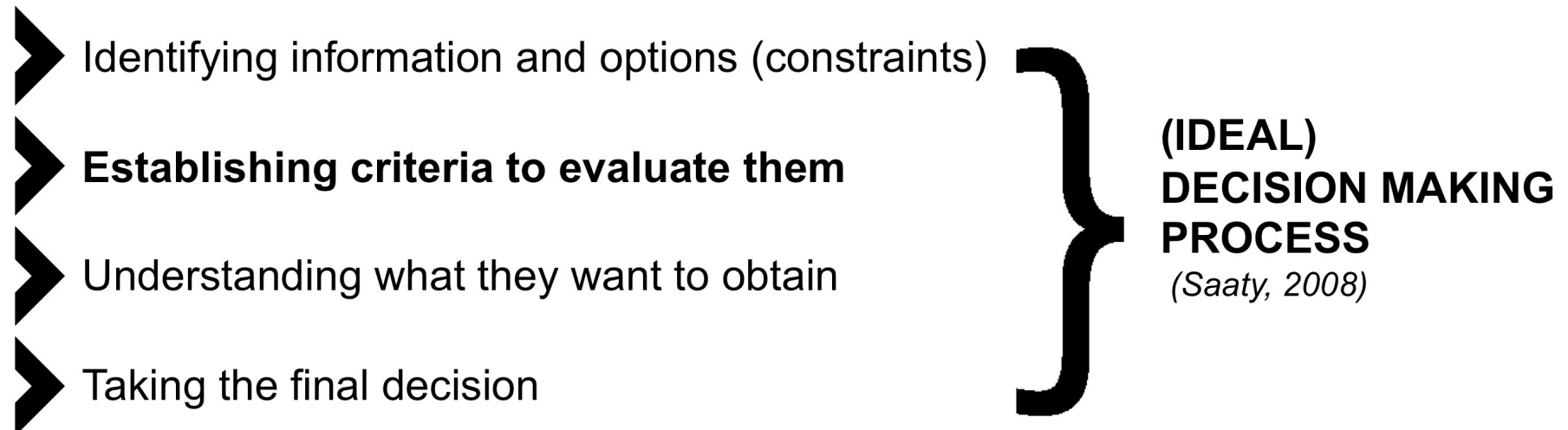
**EVALUATING SERVICES / AN EXPLORATORY APPROACH BEYOND SERVICE DESIGN**

*Stefano Maffei, Beatrice Villari, Francesca Foglieni / POLITECNICO DI MILANO – DESIGN DEPARTMENT*



# EVALUATION AS A KEY FACTOR OF DECISION MAKING PROCESSES

**Evaluation is a matter of decision and evaluate options**





# EVALUATION AS A KEY FACTOR OF DECISION MAKING PROCESSES

## Aspects of decision making affecting evaluation processes: (according to a perfect rationality model)



PURPOSE OF EVALUATION



CRITERIA OF EVALUATION



ROLE OF DECISION-MAKER(S)

# EVALUATION AS A KEY FACTOR OF DECISION MAKING PROCESSES

## Aspects of decision making affecting evaluation processes: (according to a perfect rationality model)



### PURPOSE OF EVALUATION

*What does the decision-maker want to obtain through evaluation?*

1. Rating systems
2. Ranking systems
3. Clustering systems

# EVALUATION AS A KEY FACTOR OF DECISION MAKING PROCESSES

## Aspects of decision making affecting evaluation processes: (according to a perfect rationality model)



### CRITERIA OF EVALUATION

*Which aspects of the alternatives available does the decision-maker want to compare?*

Set a **synthesis framework** to confront the evaluation criteria, that must be **both qualitative and quantitative**

# EVALUATION AS A KEY FACTOR OF DECISION MAKING PROCESSES

## Aspects of decision making affecting evaluation processes: (according to a perfect rationality model)



### ROLE OF DECISION-MAKER(S)

*Who is (which are) the decision-maker(s)?  
Whose needs the evaluation must respond?*

**Expected utility model:** a rational decision maker will prefer the prospect offering the highest expected utility

*(Von Neumann & Morgenstern, 1947; Raiffa, 1968; Fishburn, 1970; Savage, 1954)*

# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION



## PURPOSE

Mapping the service evaluation field to build a sort of **decision aiding methodology**

*(Tsoukias, 2007)*

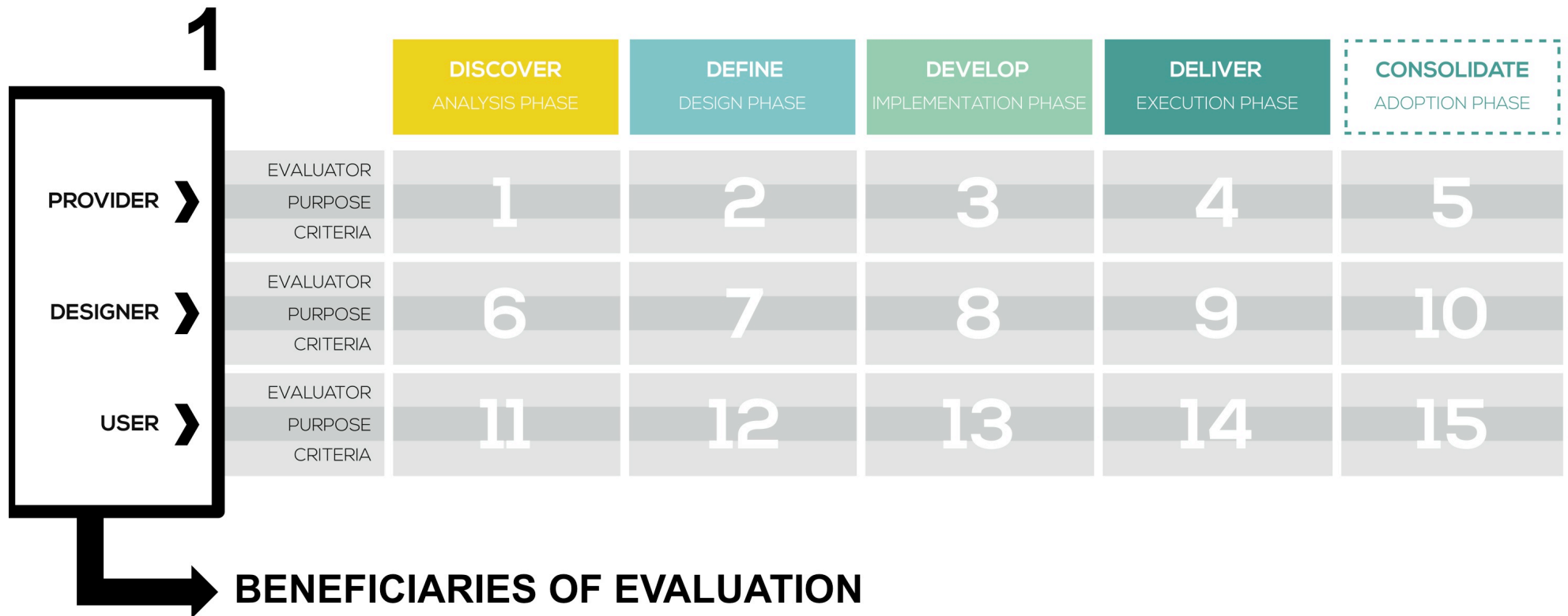


## SET UP PROCESS

1. Determining the **beneficiaries of evaluation**
2. Defining the **phases of service lifecycle**
3. Defining **aspects of decision making process** that have a role in the evaluation process

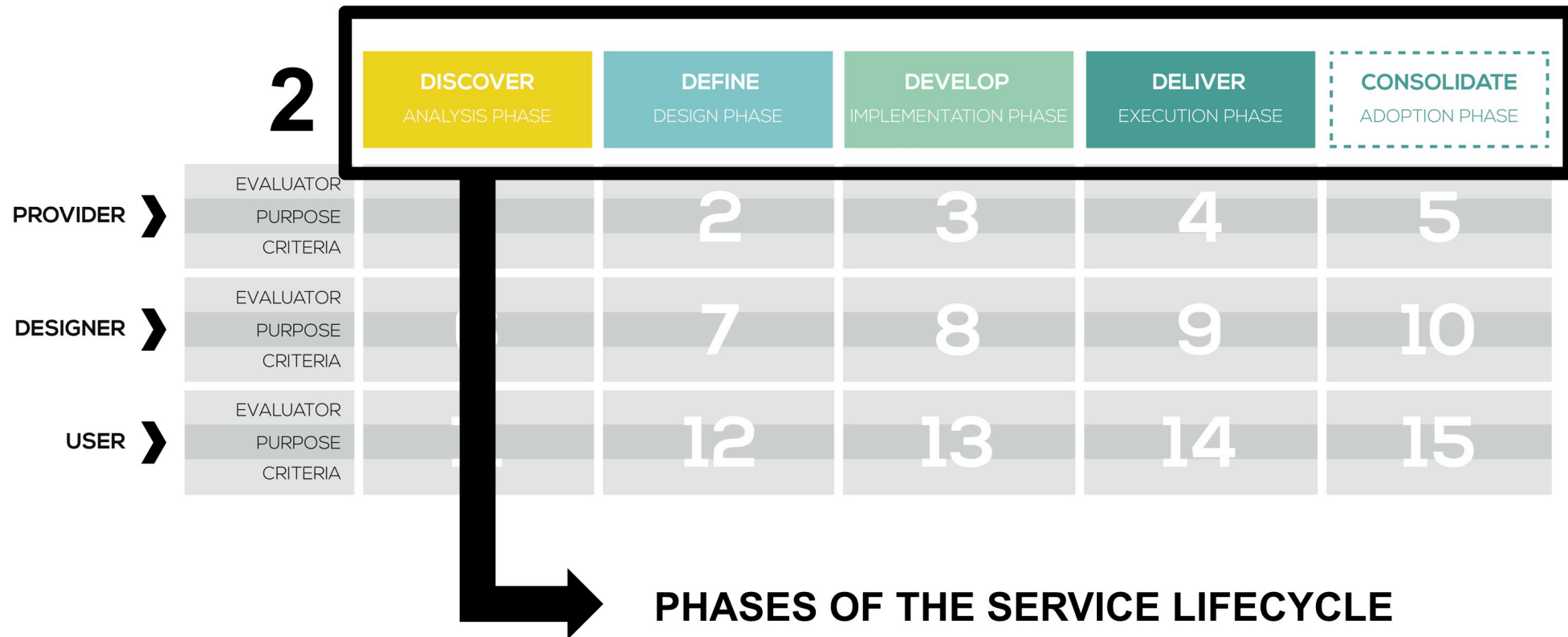
# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

## Service Evaluation Research Matrix



# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

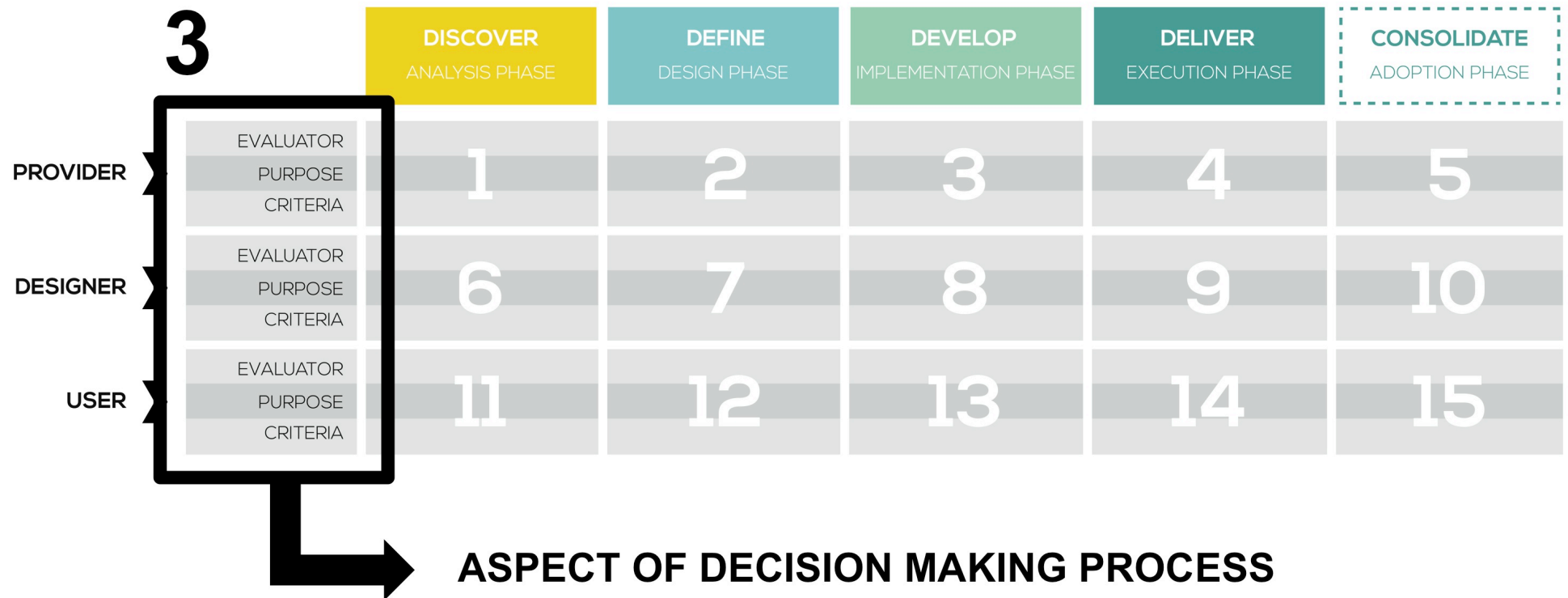
## Service Evaluation Research Matrix





# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

## Service Evaluation Research Matrix





# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

## Some examples of application

### **COST-BENEFIT ANALYSIS**

**EVALUATOR:** everybody

**PURPOSE:** ranking system

**CRITERIA:** costs and benefits

		DISCOVER ANALYSIS PHASE	DEFINE DESIGN PHASE	DEVELOP IMPLEMENTATION PHASE	DELIVER EXECUTION PHASE	CONSOLIDATE ADOPTION PHASE
PROVIDER >	EVALUATOR					
	PURPOSE	1	×	×	×	5
	CRITERIA					
DESIGNER >	EVALUATOR					
	PURPOSE	6	7	8	9	10
	CRITERIA					
USER >	EVALUATOR					
	PURPOSE	11	12	13	14	15
	CRITERIA					

# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

## Some examples of application

### ***CUSTOMER SATISFACTION SURVEY***

**EVALUATOR:** service customers

**PURPOSE:** clustering system

**CRITERIA:** e.g. quality, speed, pricing...

		DISCOVER ANALYSIS PHASE	DEFINE DESIGN PHASE	DEVELOP IMPLEMENTATION PHASE	DELIVER EXECUTION PHASE	CONSOLIDATE ADOPTION PHASE
PROVIDER >	EVALUATOR	1	2	3	×	5
	PURPOSE					
	CRITERIA					
DESIGNER >	EVALUATOR	6	7	8	9	10
	PURPOSE					
	CRITERIA					
USER >	EVALUATOR	11	12	13	×	15
	PURPOSE					
	CRITERIA					

# A RESEARCH FRAMEWORK FOR SERVICE EVALUATION

## Some examples of application

### ***SERVQUAL OR RATER***

**EVALUATOR:** service managers

**PURPOSE:** rating system

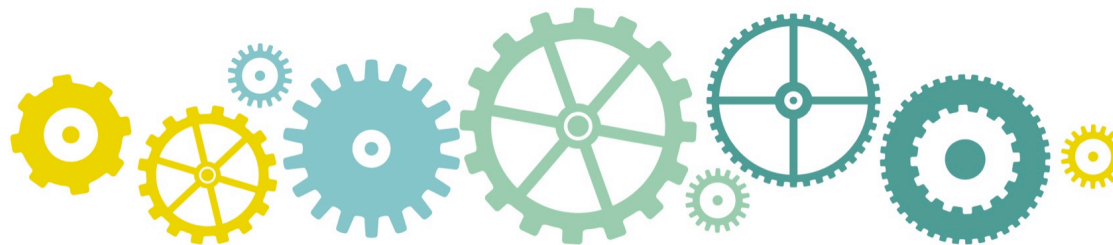
**CRITERIA:** reliability, assurance, empathy, tangibleness and responsiveness

		DISCOVER ANALYSIS PHASE	DEFINE DESIGN PHASE	DEVELOP IMPLEMENTATION PHASE	DELIVER EXECUTION PHASE	CONSOLIDATE ADOPTION PHASE
PROVIDER >	EVALUATOR	1	2	3	×	×
	PURPOSE					
	CRITERIA					
DESIGNER >	EVALUATOR	6	7	8	9	10
	PURPOSE					
	CRITERIA					
USER >	EVALUATOR	11	12	13	×	×
	PURPOSE					
	CRITERIA					

## FUTURE ACTIONS

- »» Outline a **service evaluation overview**, mapping existing evaluation methods and approaches coming from different disciplines
- »» Understand how service design can represent a tool to **measure service quality and efficacy**
- »» Define a **unique blend of service evaluation techniques**, mostly focussing on the adoption phase and assessing existing services.

**ANY QUESTIONS?**



**THANK YOU!**

*Stefano Maffei | stefano.maffei@polimi.it*

*Beatrice Villari | beatrice.villari@polimi.it*

*Francesca Foglieni | francesca.foglieni@polimi.it*