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The Italian Good Practice Project

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Agenda

- The context
- The objectives of the GP project
- The model
- The main output
- The evolution of the GP

The context

- During the 1990s there are has been a deep reforming movement Italy, in which universities received increased autonomy locally:
  - Possibility to diversify central support services
  - More leverages in resource allocation

- But we need management and accountability tools consistent with the characteristics of central services

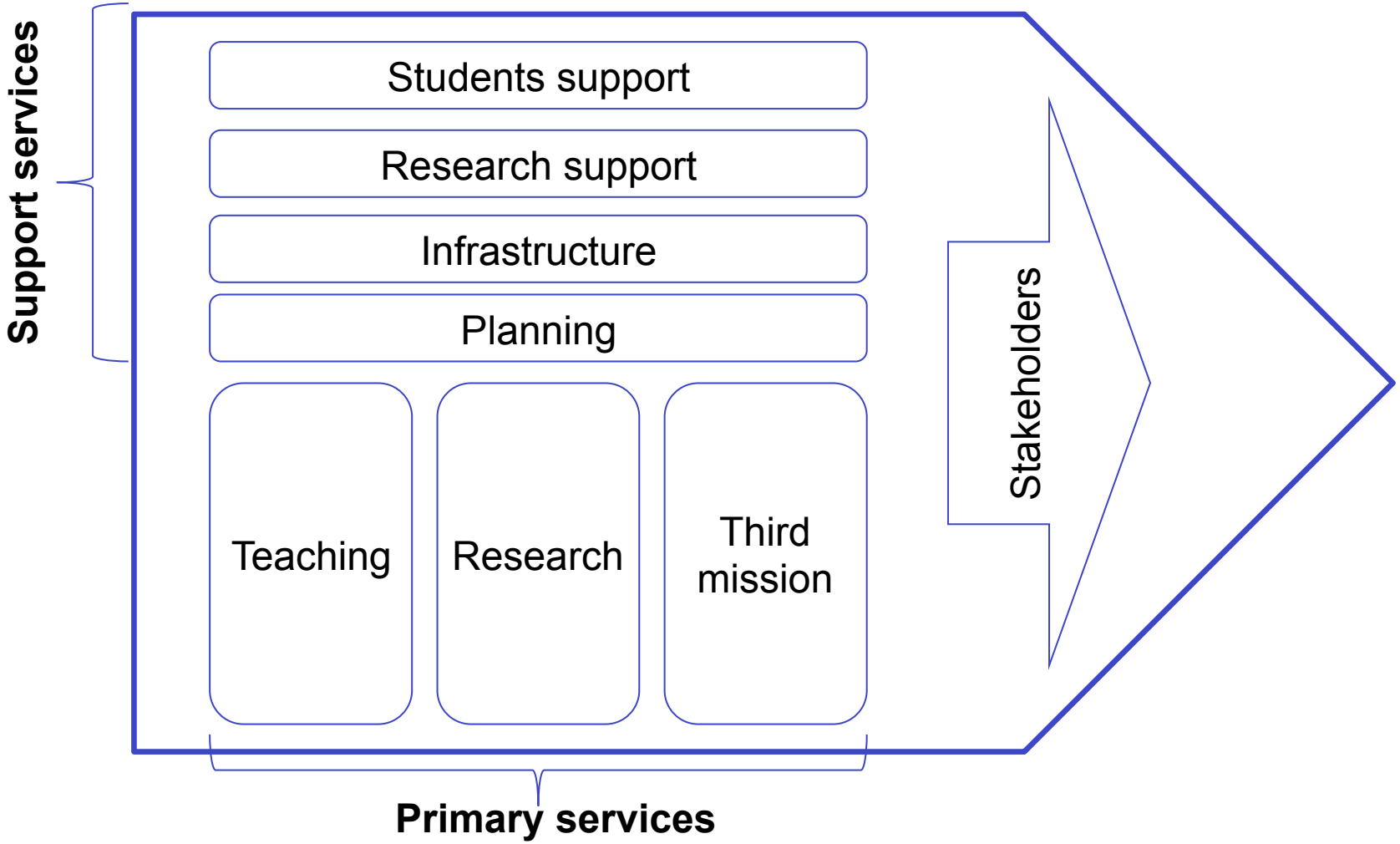
The objectives of Good Practice

- The first Good Practice project was undertaken in 1999 with the sponsorship of the Italian Committee for Evaluating University System.

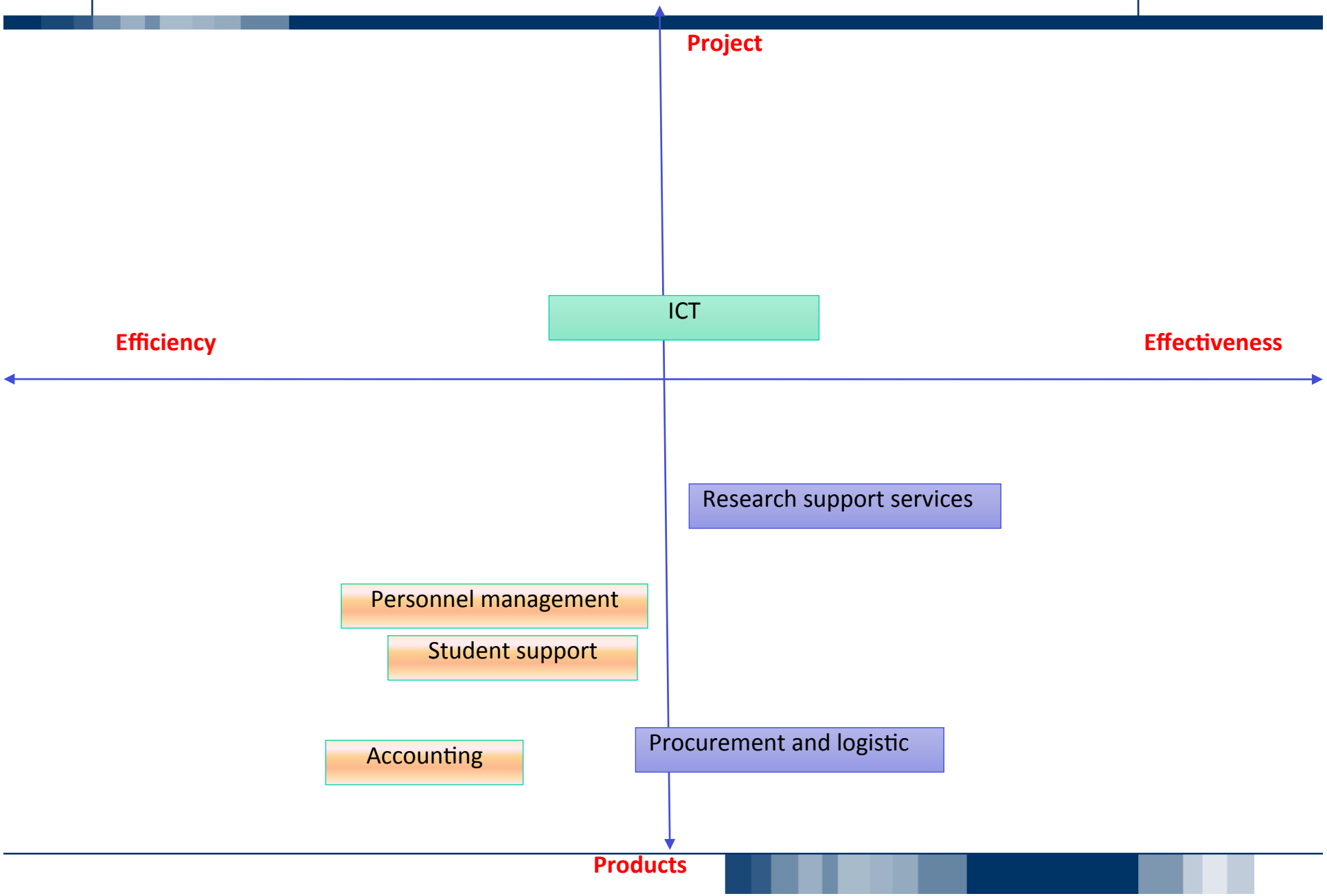
- Objectives:
  1. Defining a Performance Measurement System specific for central support services
  2. Comparing the performances of the Italian Universities involved in the project
  3. Understand key drivers of good practice, in order to suggest opportunities for improvement.

Support services

- Focus on selected support services

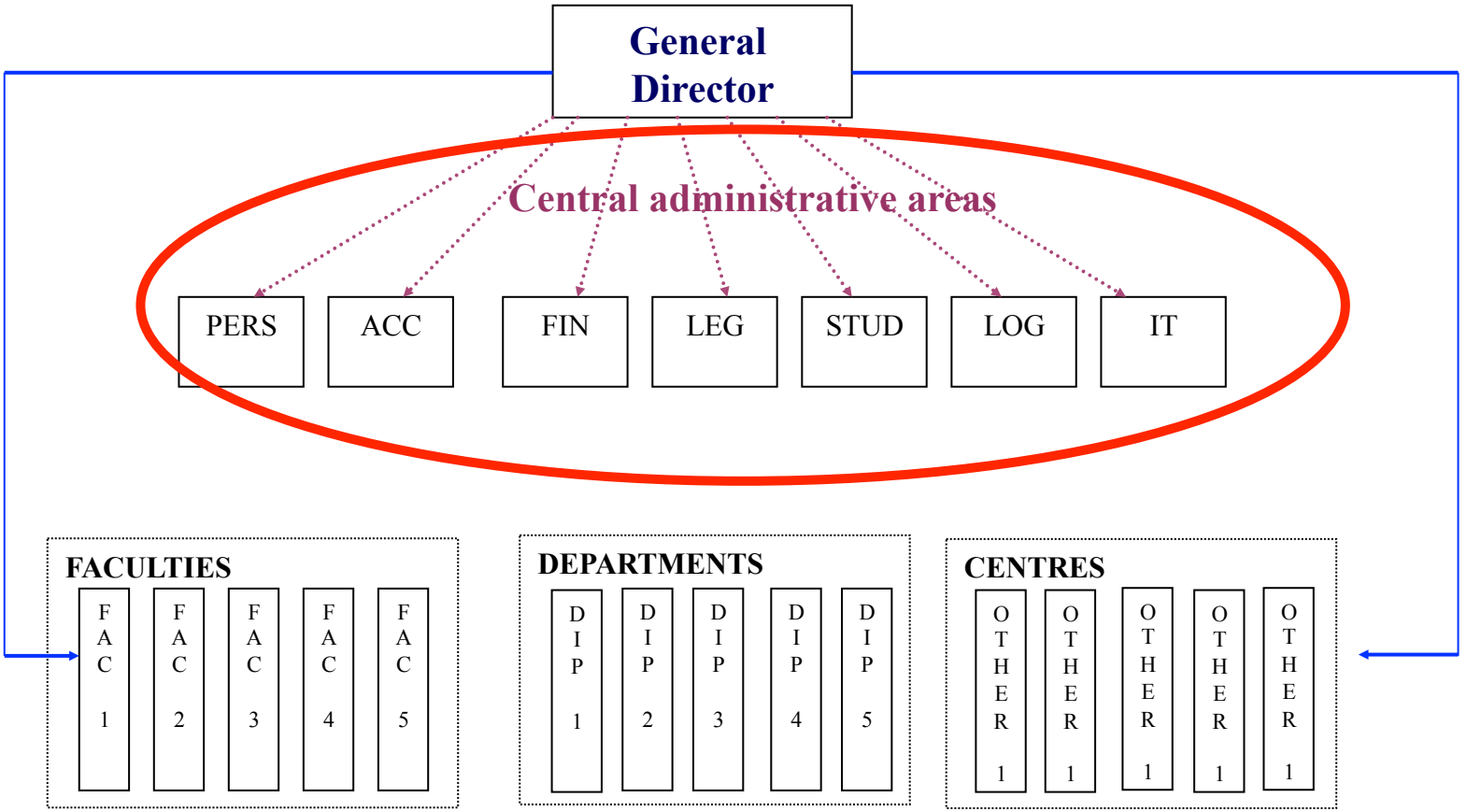


Support services: the detail



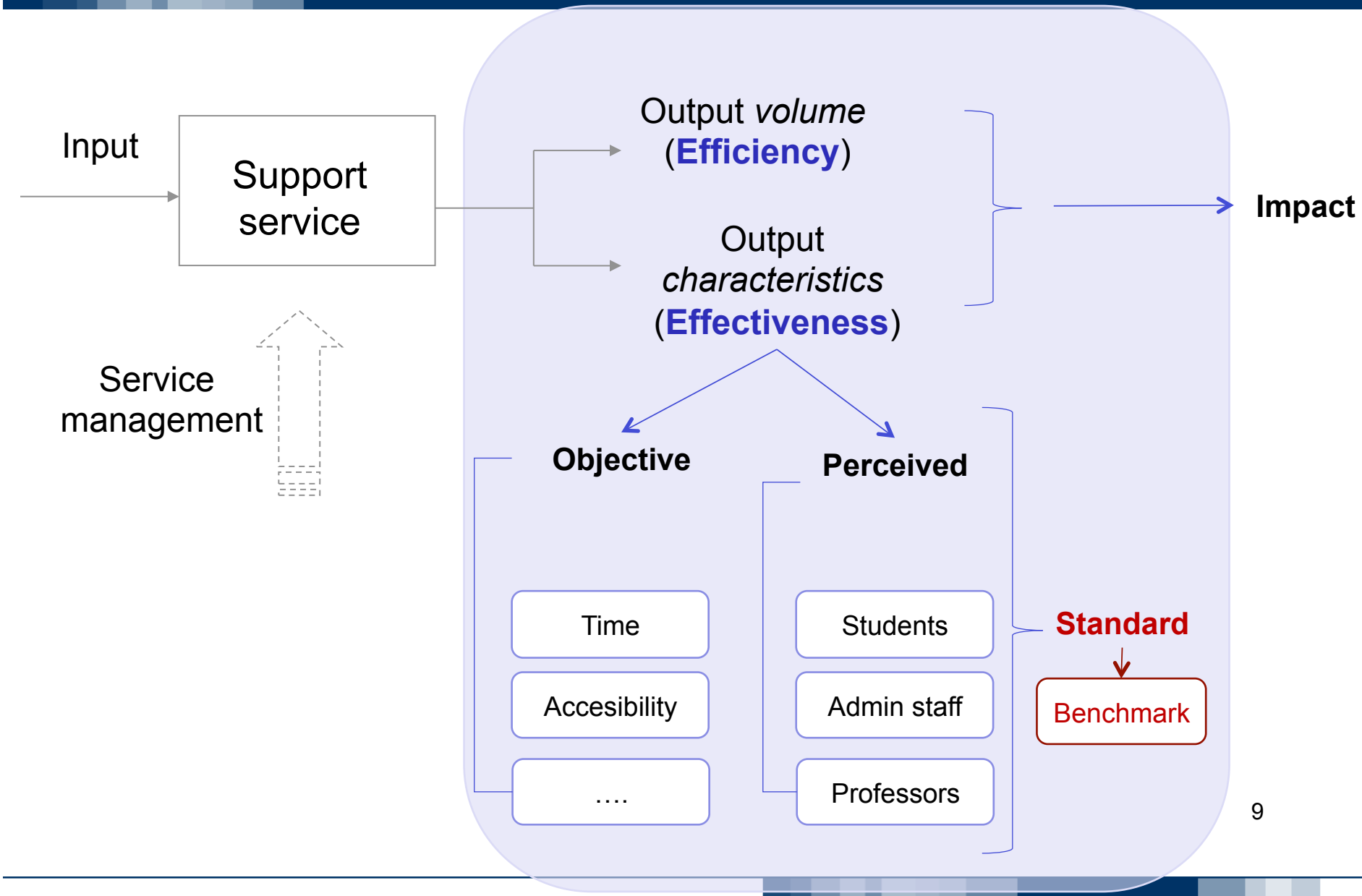
Organizational structures

- Focus on administrative offices only



		GP	GP2	GPSUD	GP 2003	GP 2005	GP 2007	GP 2009	GP 2011	GP 2012	GP2013
BOLOGNA	9	X	X		X	X	X	X	X	X	X
POLITECNICO DI MILANO	9	X	X		X	X	X	X	X	X	X
PAVIA	9	X	X		X	X	X	X	X	X	X
POLITECNICO DI TORINO	9	X	X		X	X	X	X	X	X	X
TRENTO	8	X	X		X	X	X	X	X	X	
PADOVA	8		X		X	X	X	X	X	X	X
SALENTO	7			X		X	X	X	X	X	X
FERRARA	7				X	X	X	X	X	X	X
CALABRIA	6	X	X		X	X	X	X			
MILANO STATALE	6				X	X	X		X	X	X
VERONA	6					X	X	X	X	X	X
GENOVA	6	X	X		X			X	X		X
ROMA LA SAPIENZA	6				X	X		X	X	X	X
CATANIA	5		X		X	X	X	X			
UNIVERSITÀ CA' FOSCARI	5				X	X	X			X	X
INSUBRIA	5						X	X	X	X	X
MILANO BICOCCA	5						X	X	X	X	X
IUAV	5						X	X	X	X	X
TORINO	5						X	X	X	X	X
POLITECNICO DI BARI	5	X	X						X	X	X
PALERMO	4			X		X	X	X			
FIRENZE	4		X		X	X	X				
BRESCIA	3								X	X	X
MESSINA	3					X		X	X		
MEDITERRANEA	3							X	X	X	
SIENA	3	X	X				X				
FOGGIA	3			X		X	X				
TRIESTE	2	X	X								
CAMERINO	2			X	X						
SASSARI	2									X	X
UDINE	2									X	X
NAPOLI FEDERICO II	2		X								X
NORMALE	2							X			X
S. ANNA	1										X
SISSA	1										X
CHIETI	1										X
PIEMONTE ORIENTALE	1										X
MOLISE	1			X							
NAPOLI PARTHENOPE	1			X							
SALERNO	1			X							
MACERATA	1				X						
L'AQUILA	1					X					
BERGAMO	1						X				
MODENA	1							X			
44		**10**	**14**	**7**	**16**	**19**	**22**	**22**	**20**	**21**	**26**

The reference model



Measures and area addressed

- The measurement system have included:
  - Efficiency indicators
  - Effectiveness indicators:
    - Perceived quality
    - Objective quality

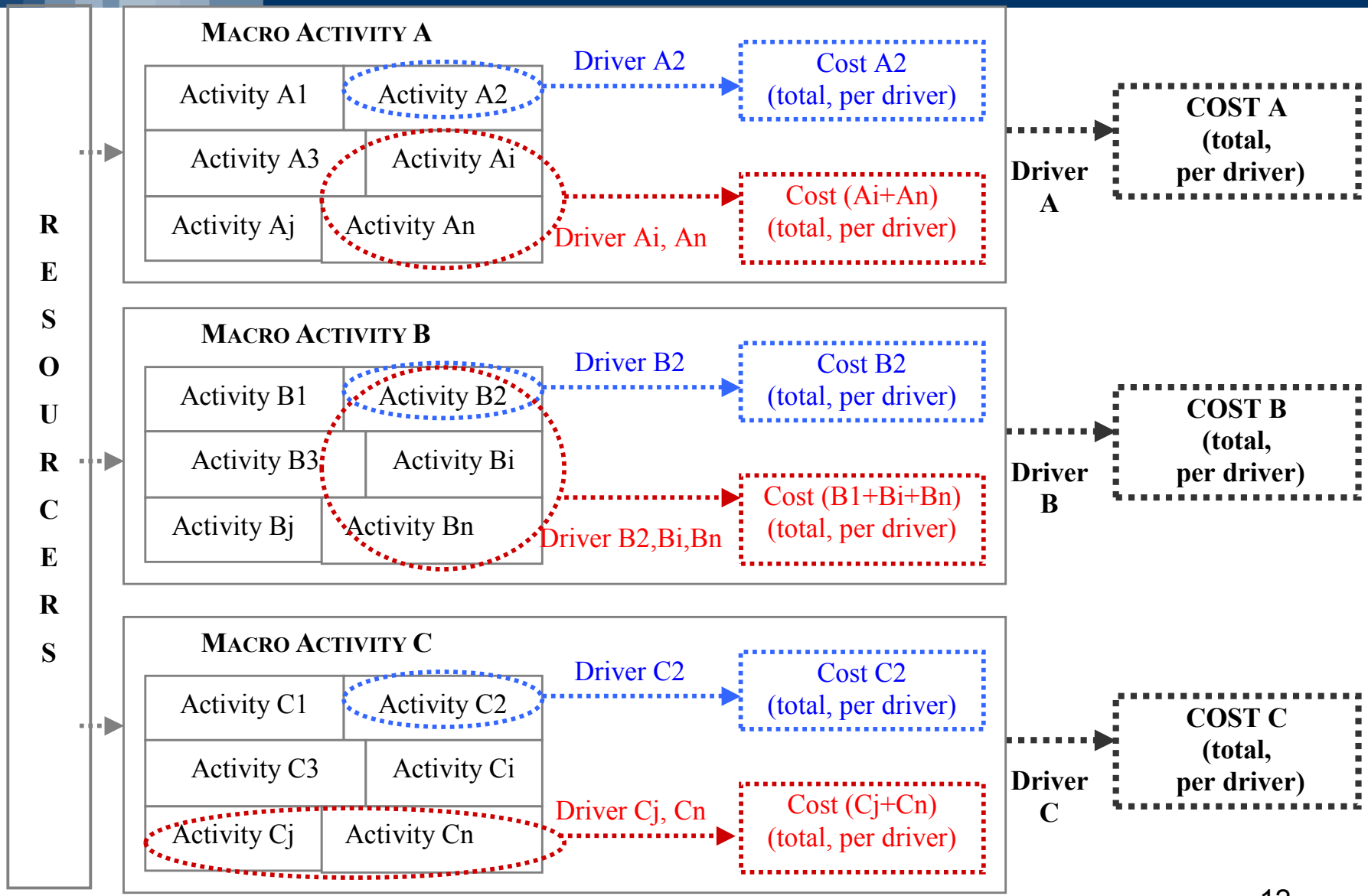
- The areas of the university included are:
  1. Student support services
  2. Accounting
  3. Procurement and Logistics
  4. Personnel management (humane resource)
  5. Research support services
  6. Information system services

Macro-activities

Macro-activity and micro-activity

Macro-activity		Micro-activity
Student support services	1	Prospective students support
	2	Information support
	3	Registration 1° year
	4	Registration
	5	Students card management
	6	Certification
	7	Students programme management
	8	Graduation management
	9	State exam management
	10	Career management
	11	Mobility management
	12	PhD management
	13	Post-graduated school
	14	Student grant management
	15	Stage management

The general model



Efficiency indicators

- The indicator used for measuring efficiency is the cost
- The model based on activity allows to measure:
  - ✓ The total cost of the activities
  - ✓ The unit cost per output of the activities

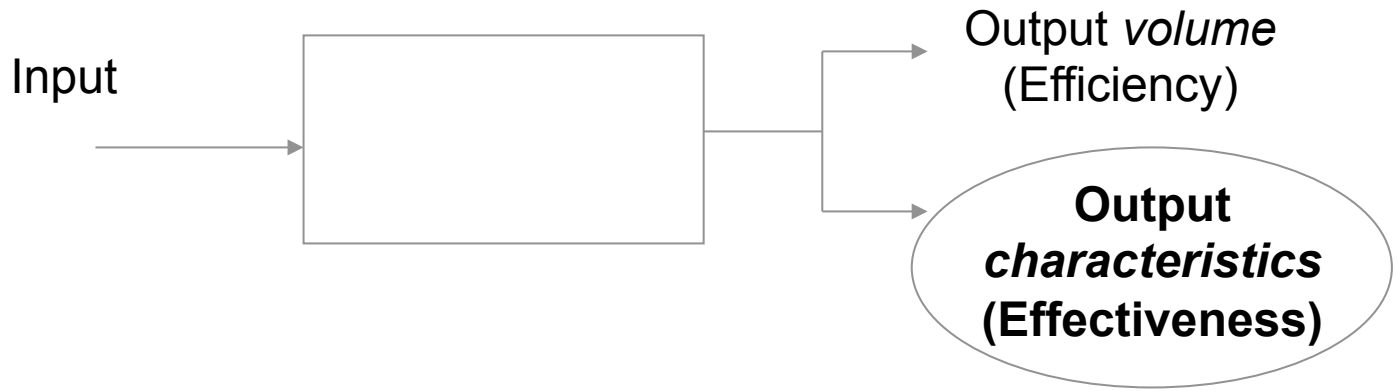
$$\frac{\text{Cost}}{\text{Output } \textit{(or driver)}}$$

- ✓ For example if we consider the enrolment activity:
  - Total cost for university A = 120,000€
  - N. of enrolled students of A = 10,000 students
  - The unit cost per output is 120,000€/10,000 = 12 €/enrolled student

An example of activities and drivers

STUDENTS SUPPORT SERVICES		
	Activity	Driver
1	Prospective students support	
2	Information	n. students
3	Registration 1st year	n. 1st year students
4	Registration	n. students
5	Students cards management	n. students
6	Certification	n. students
7	Students programme management	n. students
8	Graduation management	n. graduations
9	State exam management	n. exam
10	Career management	n. students
11	Mobility management	n. student in mobility
12	PhD management	n. PhD students
13	Post-graduate school	n. Post Graduate students
14	Student Grant management	n. grants
15	Stage management	n. stages

Effectiveness Indicators



- The effectiveness may be measured in two ways:
  - Objective quality:
    - Objective indicators (e.g. delivery time; system availability; presence of controls)
  - Perceived quality:
    - User perception

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The main “output”

The efficiency report

- An example of report for the university itself on accounting

ACTIVITY	Activity Cost	Full Time Equivalent				Driver			
		Internal Personnel	External Consultants	External services	Total FTE	Driver	Driver value	Cost per driver	Measure
Students tax management	24.826	1,00	0,00	0,00	1,00	n° iscritti	39.268	0,63	€/iscritto
Other incomes management	132.409	3,80	0,00	0,00	3,80	totale entrate	380.703	0,35	€/mgl €
Expenses management	493.613	14,45	1,00	0,00	15,45	totale uscite	398.341	1,24	€/mgl €
Fiscal management	71.881	1,75	0,05	0,00	1,80	n° operazioni	16.623	4,32	€/operazione
Annual Financial Report	263.986	3,80	0,00	0,00	3,80	ND	ND	ND	
Cost accounting, monitoring and reporting	84.120	1,85	1,00	0,00	2,85	ND	1.188	70,81	
Special entities management (e.g. consortium)	11.897	0,30	0,00	0,00	0,30	ND	ND	ND	
Budget	11.897	0,30	0,00	0,00	0,30	ND	ND	ND	
OTHER ACTIVITIES	103.926	2,55	0,00	0,00	2,55	ND	ND	ND	

Student support services: unitary costs

University	Cost per student (€/student)
U	**22,48**
V	24,85
F	28,09
G	28,56
E	28,96
R	**30,87**
I	31,71
A	34,22
B	37,89
O	37,96
H	38,97
P	39,72
C	41,46
M	44,81
L	45,90
D	51,31
N	52,73
T	59,83
S	73,18
Q	75,41

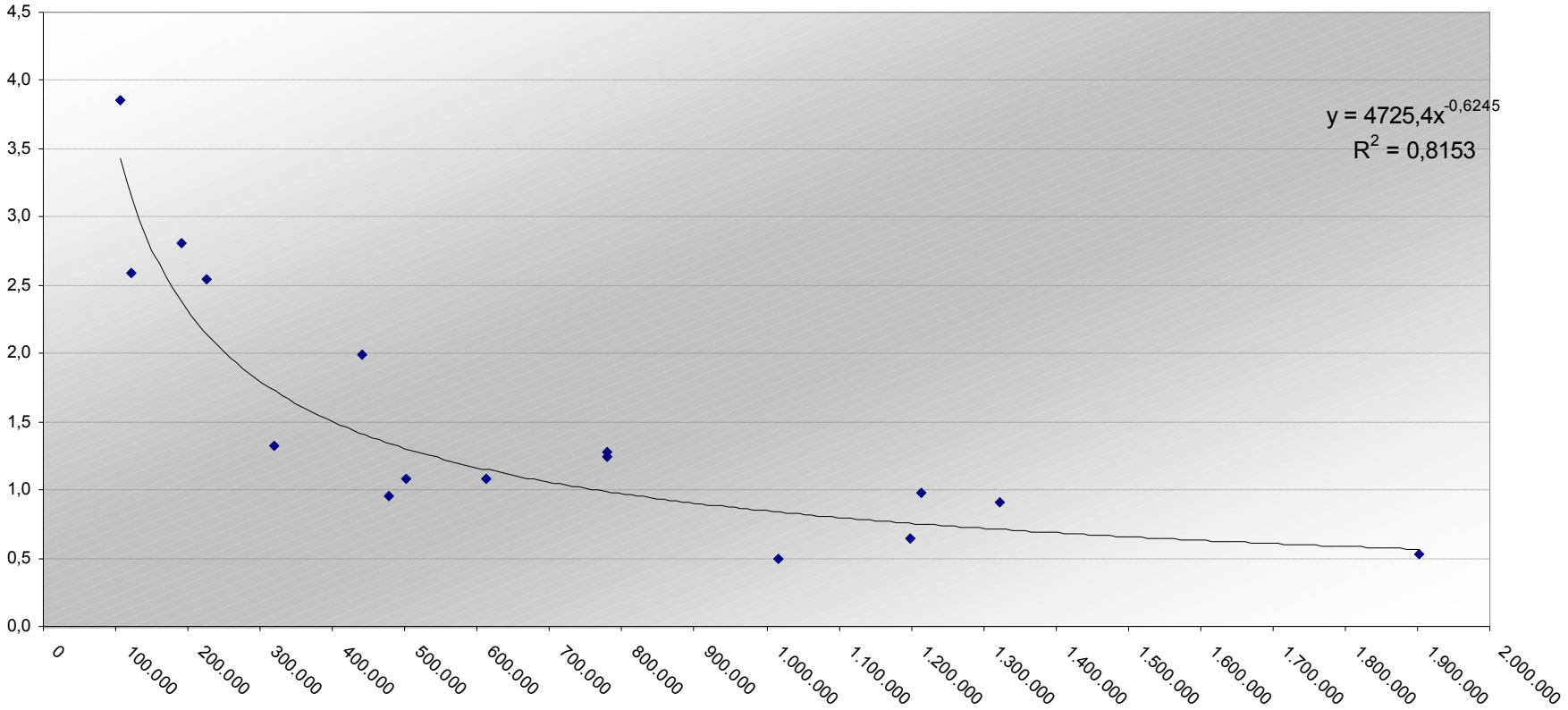
MINIMUM COST

1ST QUARTER COST

Student support services: benchmarking

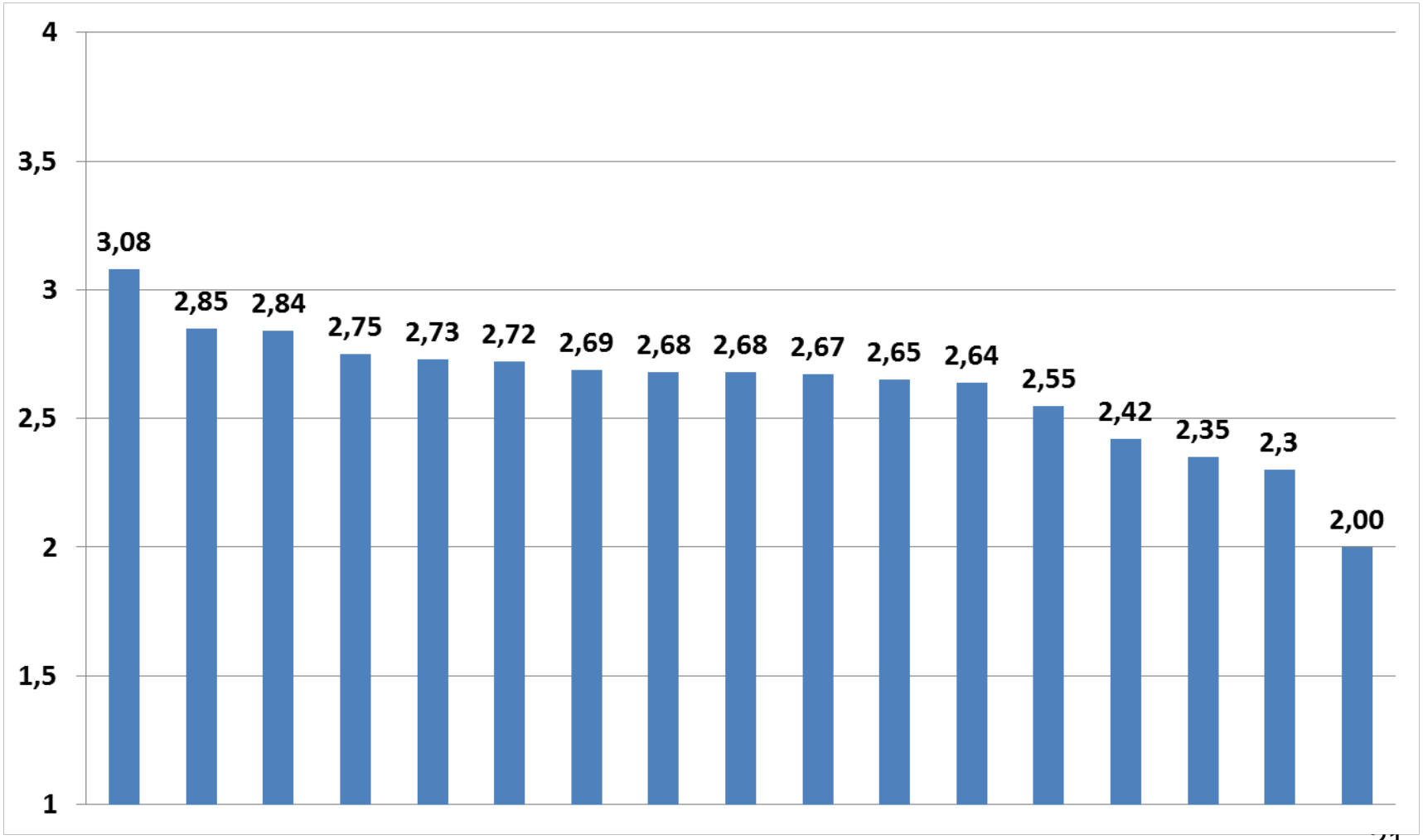
0% - 25% 25% - 50% 50% - 100%	(benchmark cost - Actual cost) €/Mgl €	€ €uro	Potential saving % On total costs %
A	-0,22	287.558	23,9%
B	-2,87	508.592	58,0%
C	-0,03	19.139	2,9%
D	-0,81	154.555	28,9%
E	0,30	0	0,0%
F	-0,32	248.799	25,7%
G	-0,36	278.757	27,9%
H	-0,25	308.874	26,0%
I	0,09	0	0,0%
L	0,26	0	0,0%
M	-0,85	427.057	42,0%
N	-0,57	129.664	24,0%
O	-0,30	94.191	16,4%
P	-0,90	94.325	24,5%
Q	-0,10	10.269	3,5%
R	-0,01	3.597	0,8%
S	-0,53	40.261	13,8%
T	0,19	0	0,0%
U	0,93	0	0,0%
V	-0,16	49.224	9,4%
Totale		**2.654.862**	**20,3%**

Accounting: the unit costs and the scale effect

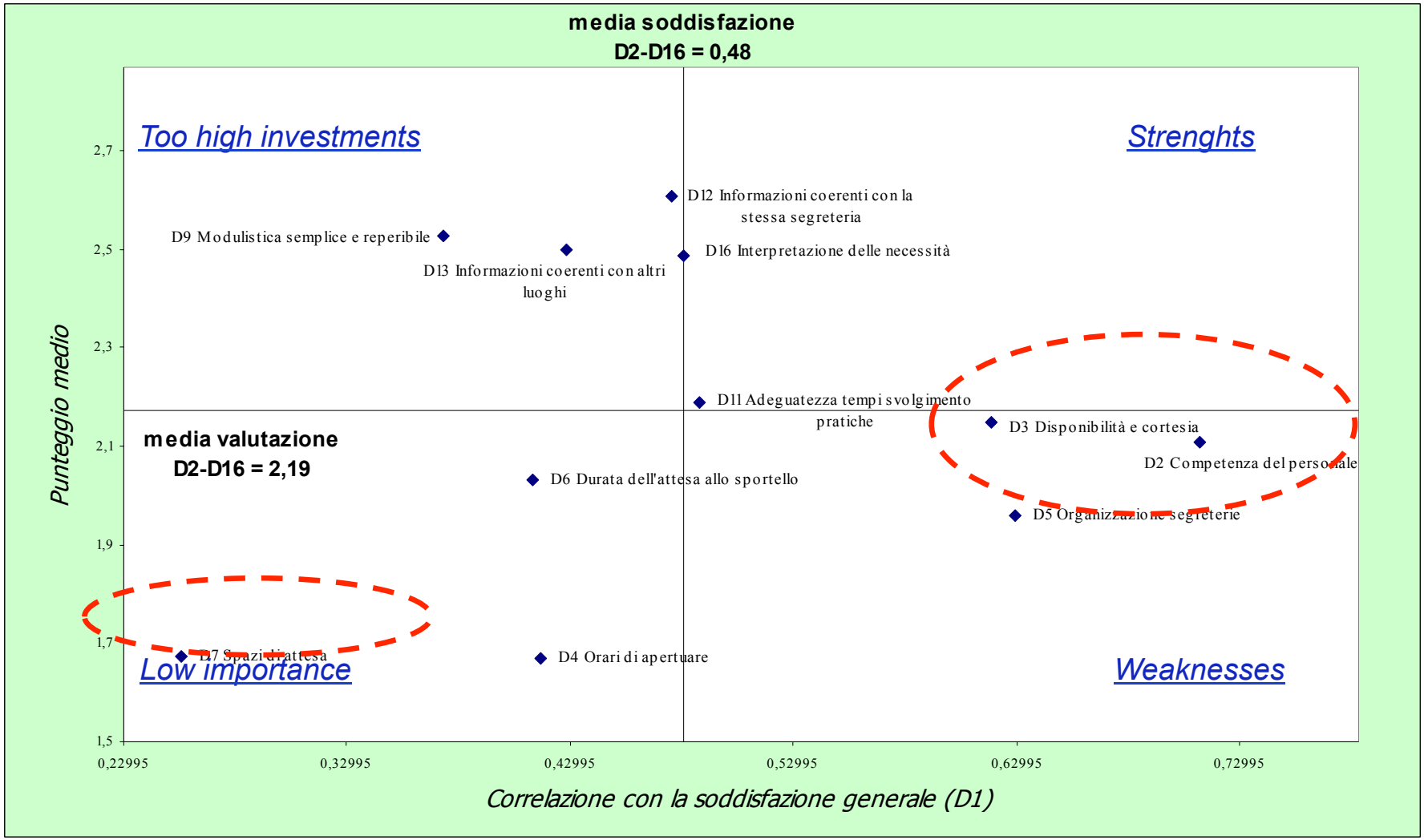


Student Support Services
Perceived quality

Students satisfaction (1-4 scale)

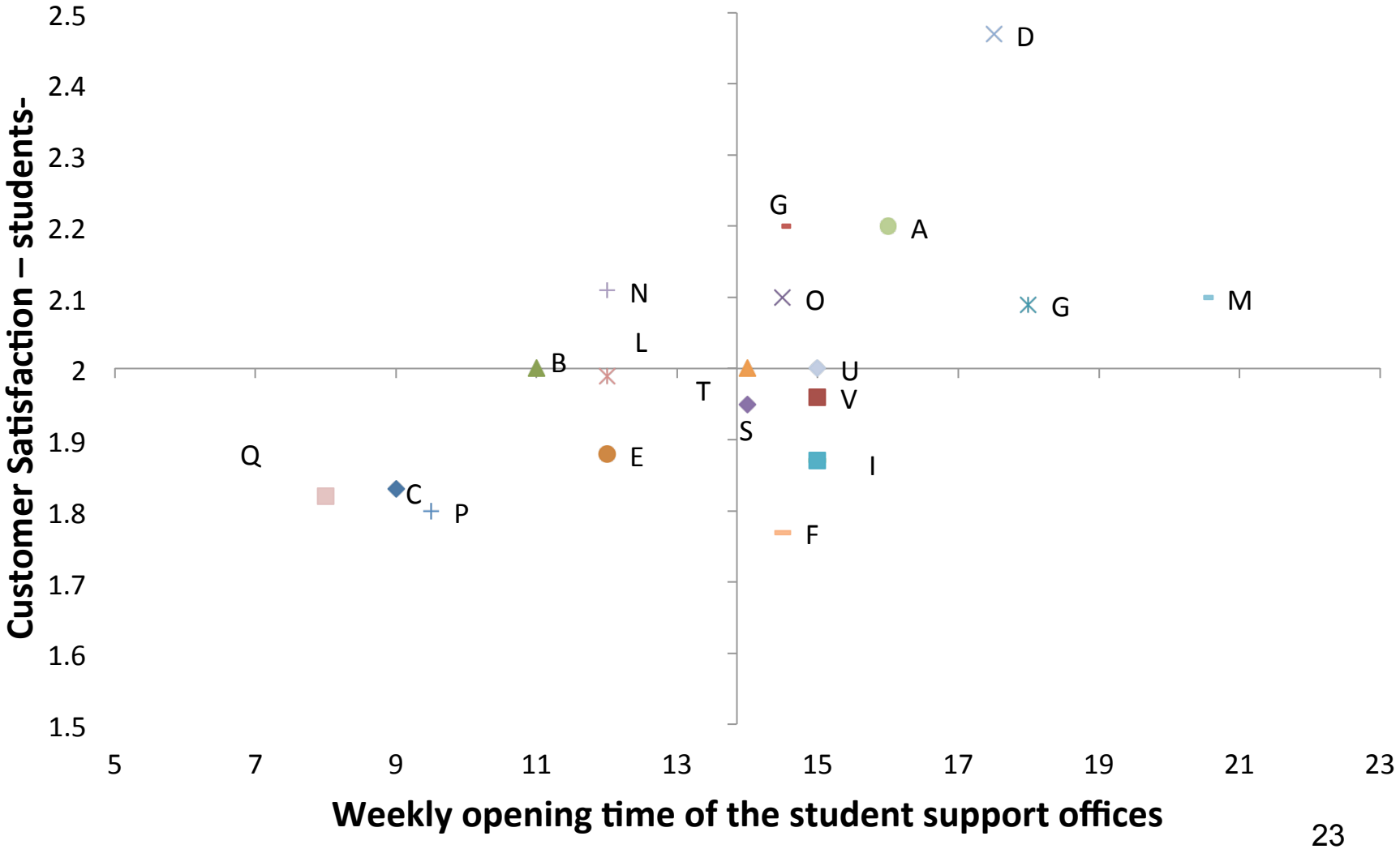


Student Support Services:
Drivers of Subjective quality

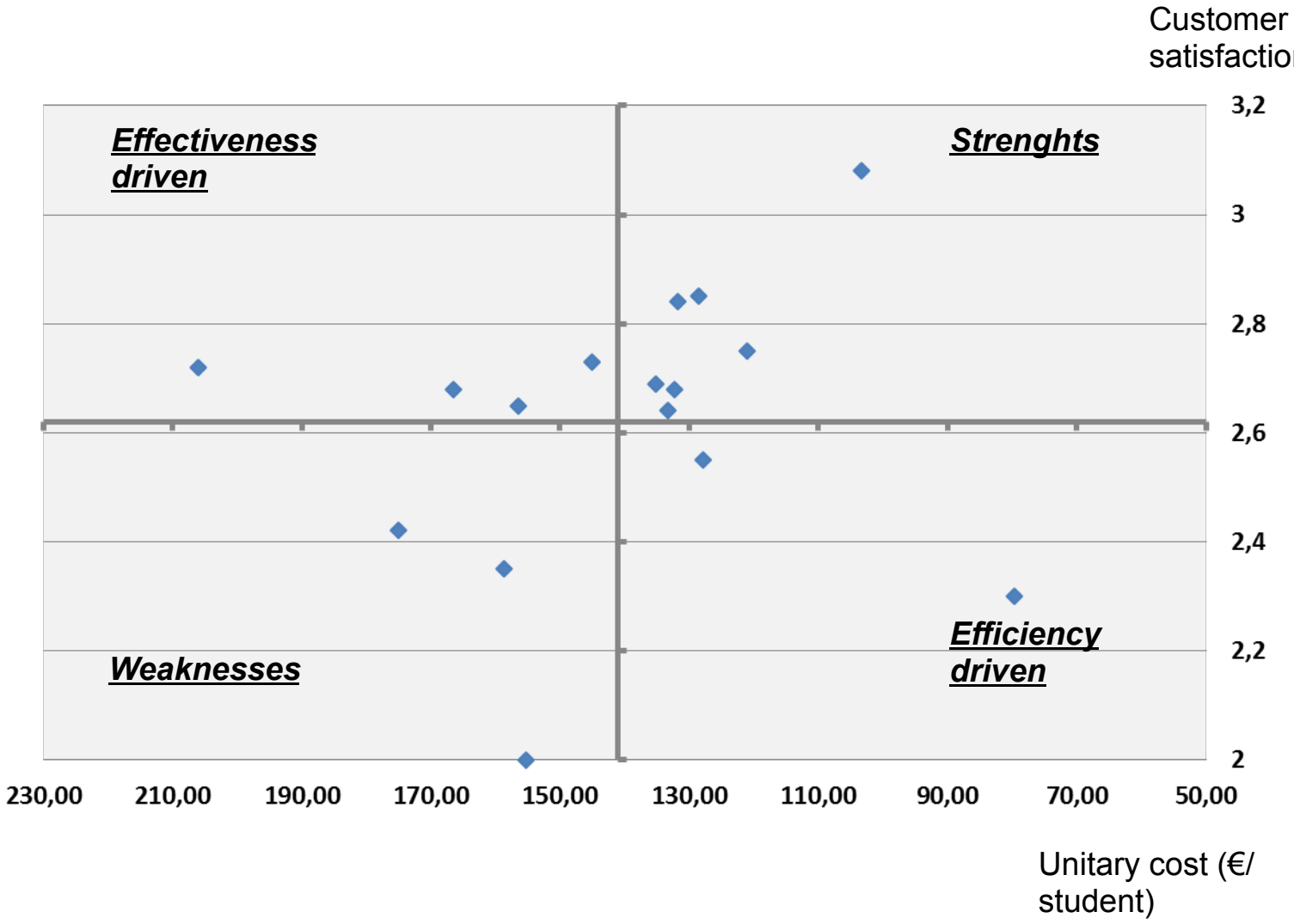


Student Support Services:
Perceived and objective quality

The relation between perceived and objective quality

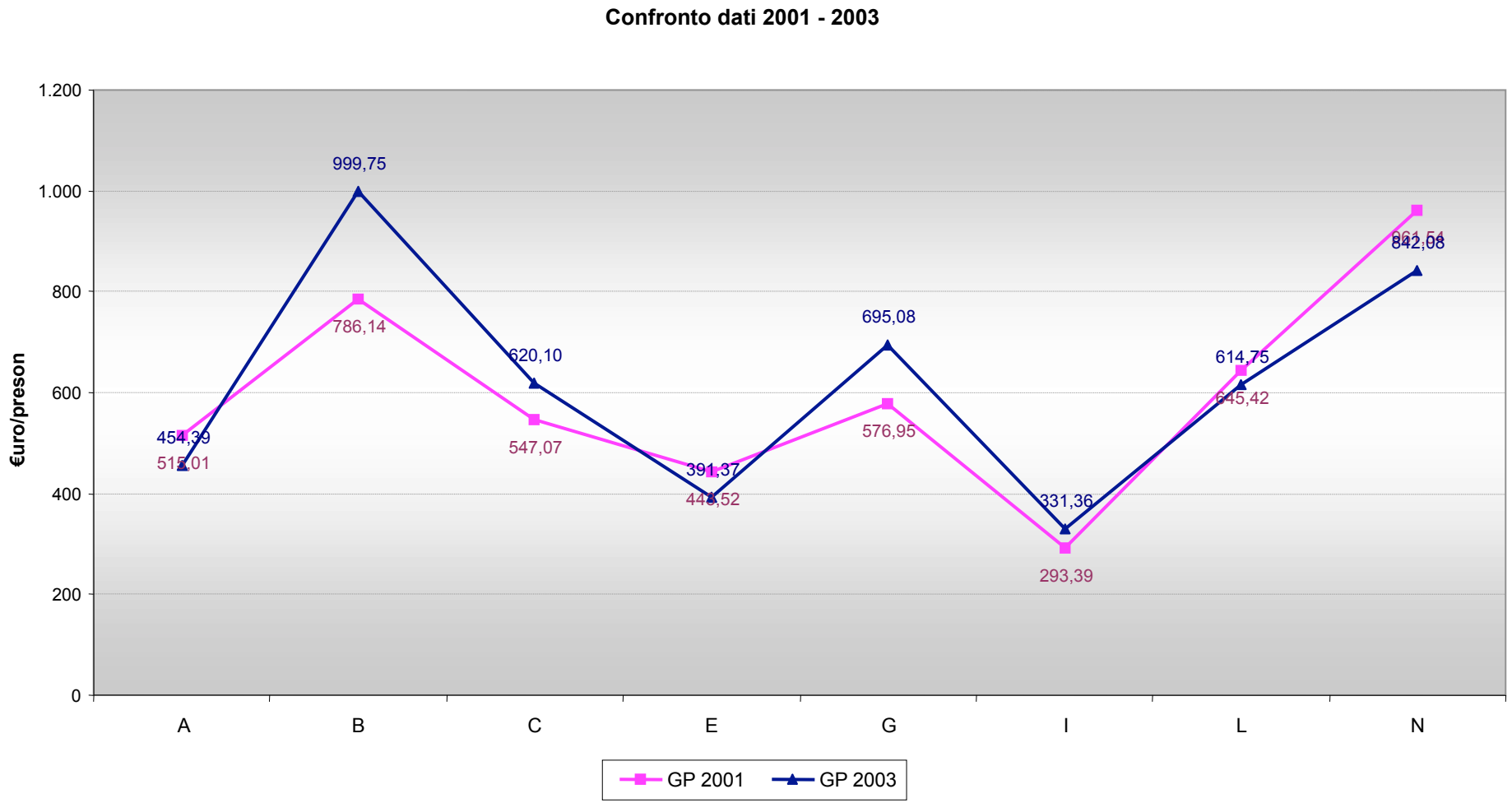


The integration of Efficiency and Effectiveness



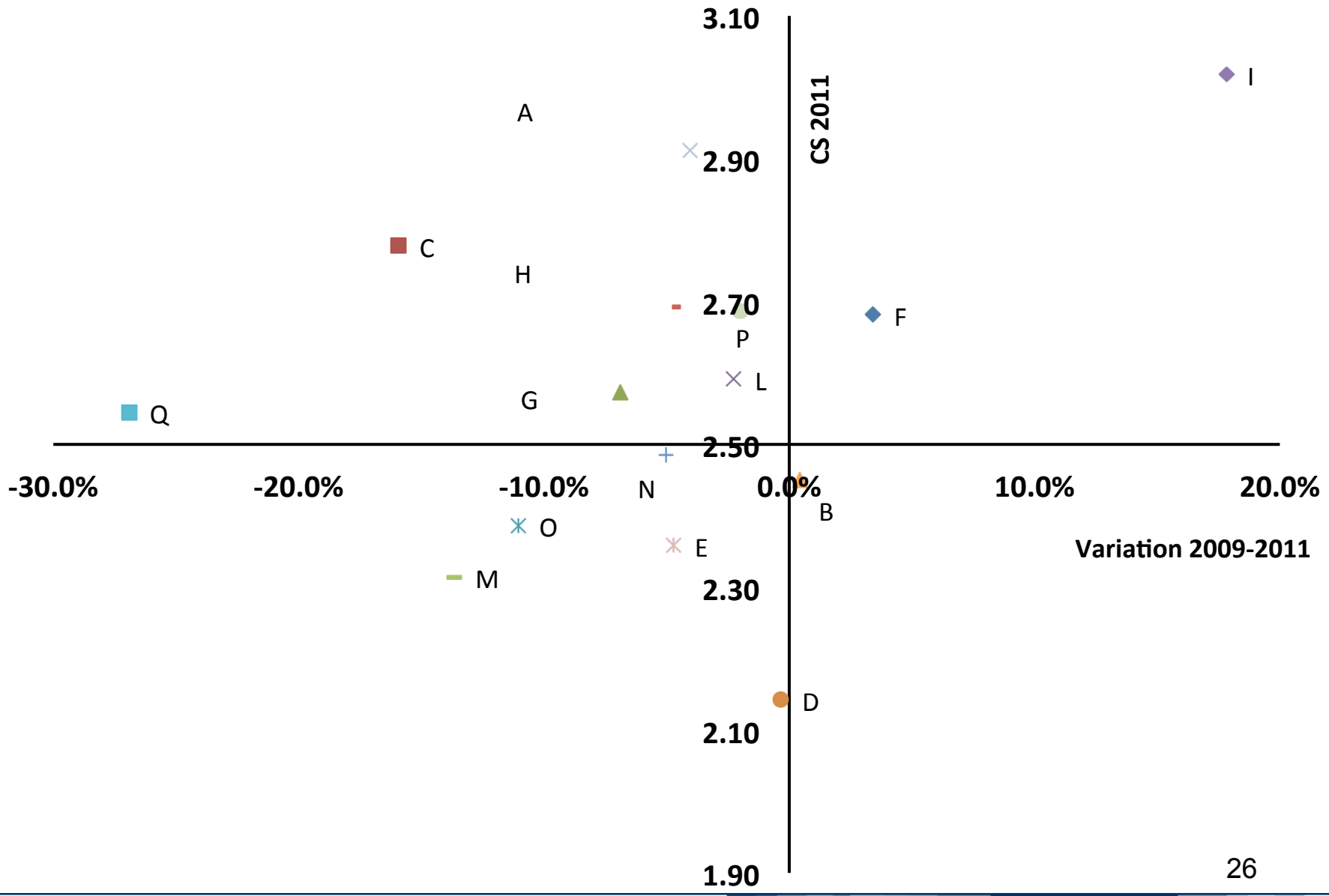
Trend analysis

The evolution of unit costs between two projects



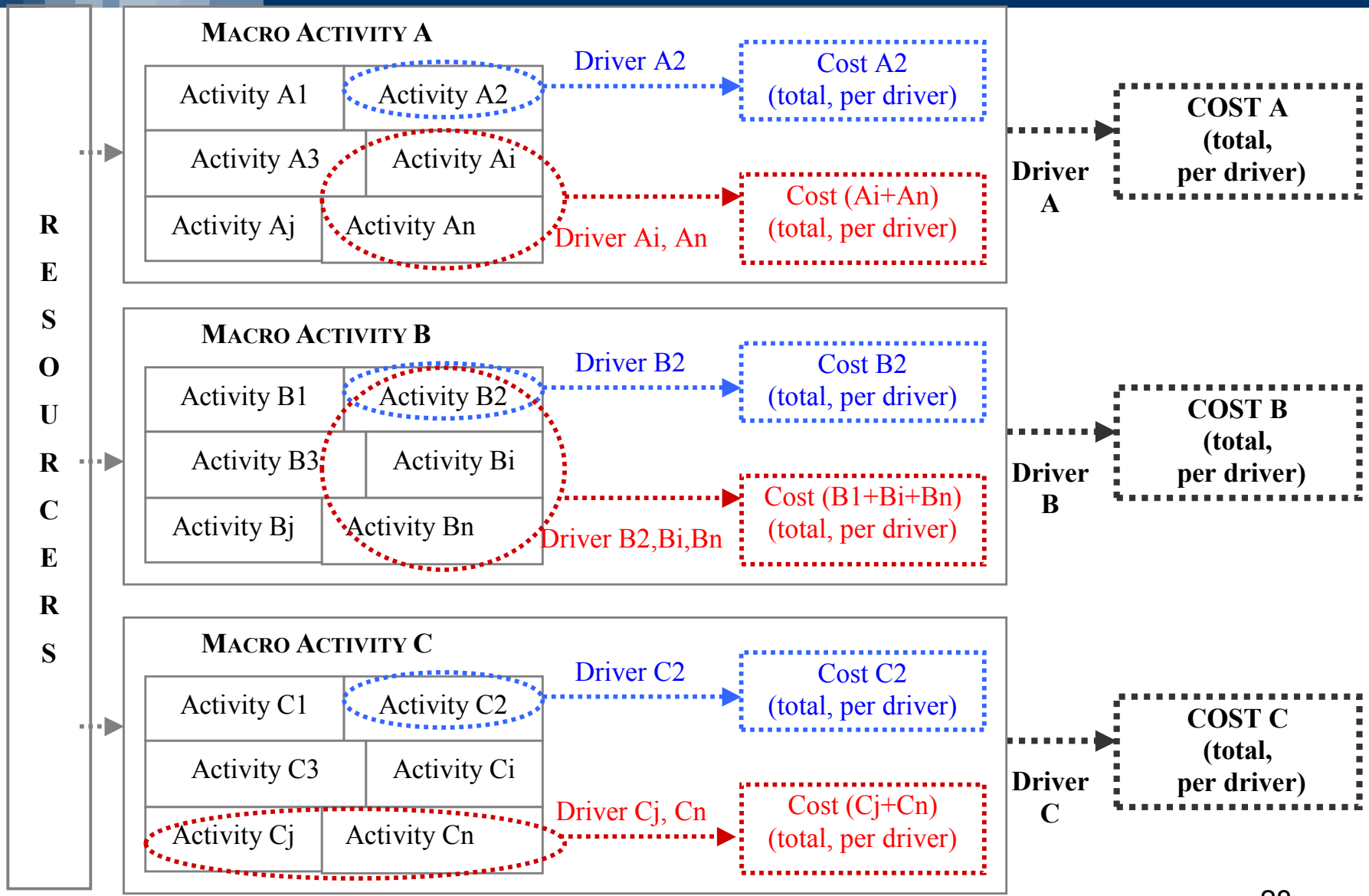
Trend analysis

The evolution of customer satisfaction



The «back office»: the process of data collection

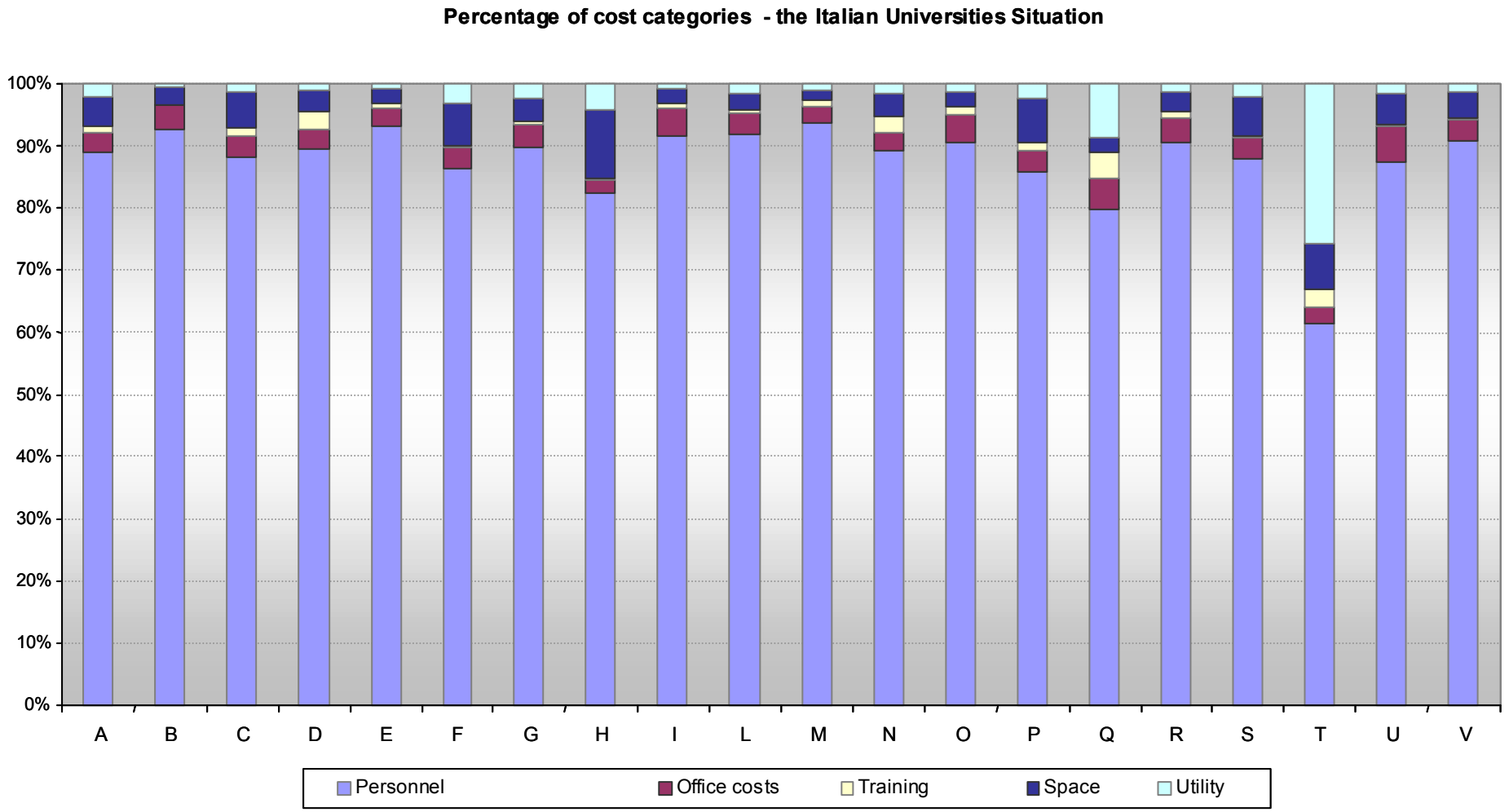
Focus on efficiency



The cost model

- Costs included were the following
  - Personnel Cost
    - Internal personnel
    - External personnel
  - Office costs
    - Laptop
    - Printer
    - Phone
  - Training costs
  - Costs for space occupancy
  - Utilities costs
    - Energy
    - Gas
    - Water
    - Conditioning and heating

The cost model: the incidence of costs



The cost model: Personnel

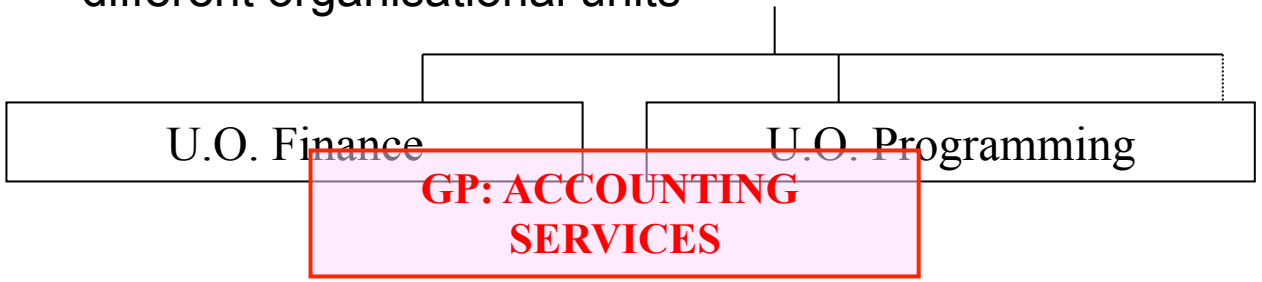
- There are three possible groups of personnel:
  - Internal staff
  - External consultants
  - External services

- We consider the gross cost per each person for the university:
  - Wages, salaries and similar expenses
  - Employee welfare expenses

The process of data collection

The steps for collecting data are:

- Identifying the people who contribute to a macroactivity
  - For example people to be associated to Accounting Services belong to different organisational units



- Insert data in an excel file (one for each macroactivity) which is composed of three sheets
  1. Input personnel
  2. Input activities
  3. Input drivers

Input Personnel Sheet

People enrolled in the university who contribute to the Macroactivity (e.g. Accounting)

External people who contribute to the Macroactivity (e.g. Accounting)

Student with Scholarship who contribute to the Macroactivity (e.g. Accounting)

INTERNAL PERSONNEL	Level	GROSS COST	Part-time PERCENTAGE
Associate a number to each person for anonymity	Text or number	Value (€uros)	%
1	D1	35.161	100,0%
2	D1	33.614	50,0%
3	D3	41.852	80,0%

EXTERNAL RESOURCES	GROSS COST
External consultants	
Associate a number to each person for anonymity	Value (€uros)
4	17.000
5	14.084
External Services	GROSS COST
associare un numero al singolo/organizzazione	Value (€uros)
6	16.586
7	16.586
Student scholarship	GROSS COST
associare un numero al singolo/organizzazione	Value (€uros)
8	16.586
9	16.586

Gross costs associated to each person

Input Activity Sheet (1)

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	Students tax management	Other incomes management	Expenses management	Fiscal management	Budget	Annual Financial Report	Cost accounting, monitoring and reporting	Special entities management (e.g. consortium)	Gestione obiettori	Other activities	EXTRA ACTIVITIES	
INTERNAL PERSONNEL	%	%	%	%	%	%	%	%	%	%	%	**check 100%**
1			60%		10%		30%					100%
2			20%	70%				30%				120%
3	10%	10%				40%		20%	10%		10%	100%
Sutotal	**10%**	**10%**	**80%**	**70%**	**10%**	**40%**	**30%**	**50%**	**10%**	**0%**	**10%**	**320%**
EXTERNAL RESOURCES												
External consultants	%	%	%	%	%	%	%	%	%	%	%	**check 100%**
4		85%									15%	100%
5			100%									100%
Sutotal	***0%***	***85%***	***100%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***65%***	***200%***
External Services	%	%	%	%	%	%	%	%	%	%	%	**check 100%**
6	10%	15%	35%						40%			100%
7			100%									100%
Sutotal	**10%**	**15%**	**135%**	**0%**	**0%**	**0%**	**0%**	**0%**	**40%**	**0%**	**0%**	**200%**
Student scholarship	%	%	%	%	%	%	%	%	%	%	%	**check 100%**
8	10%	15%	35%						40%			100%
9			100%									100%
Sutotal	**10%**	**15%**	**135%**	**0%**	**0%**	**0%**	**0%**	**0%**	**40%**	**0%**	**0%**	**200%**

Input Activity Sheet (2)

- For every macroactivity there were two additional categories:
  - Other Activities: it is a residual category including projects and other activities which are not included in our list, however related to the macro-activity
  - Extra Activities: account for the percentage of time that people dedicate to other activities not related to the macro-activity addressed in the sheet
    - Example for ACCOUNTING: a person who dedicates 80% to accounting and 20% to legal services, allocated the 20% to EXTRA ACTIVITIES

Input Drivers Sheet

	Description	Value	Measure
1	n. students	*12.000*	*n°*
2	total incomes	*560.000*	*thousands euros*
3	total expenses	*560.000*	*thousands euros*
4	n. operations	*420*	*n°*

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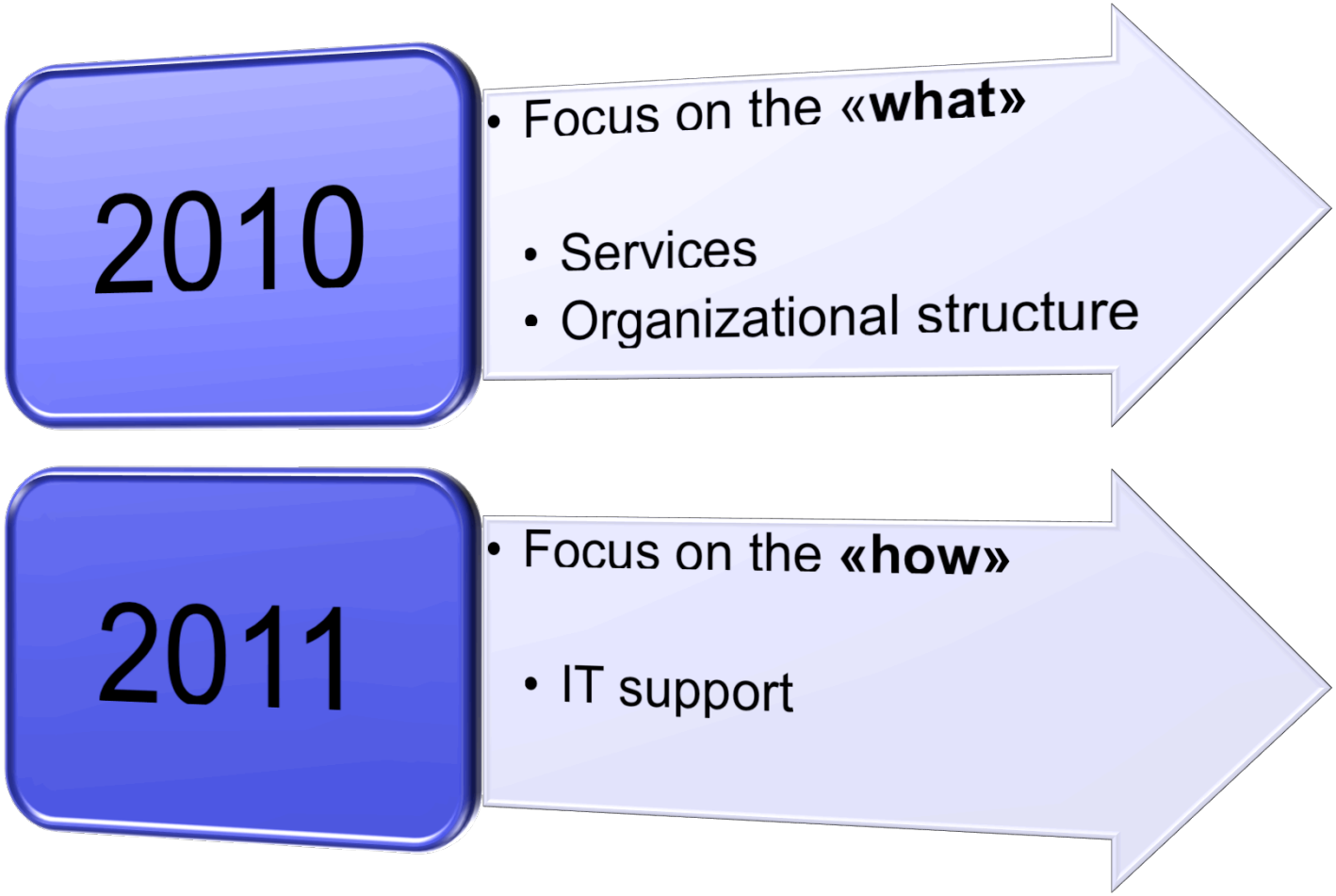
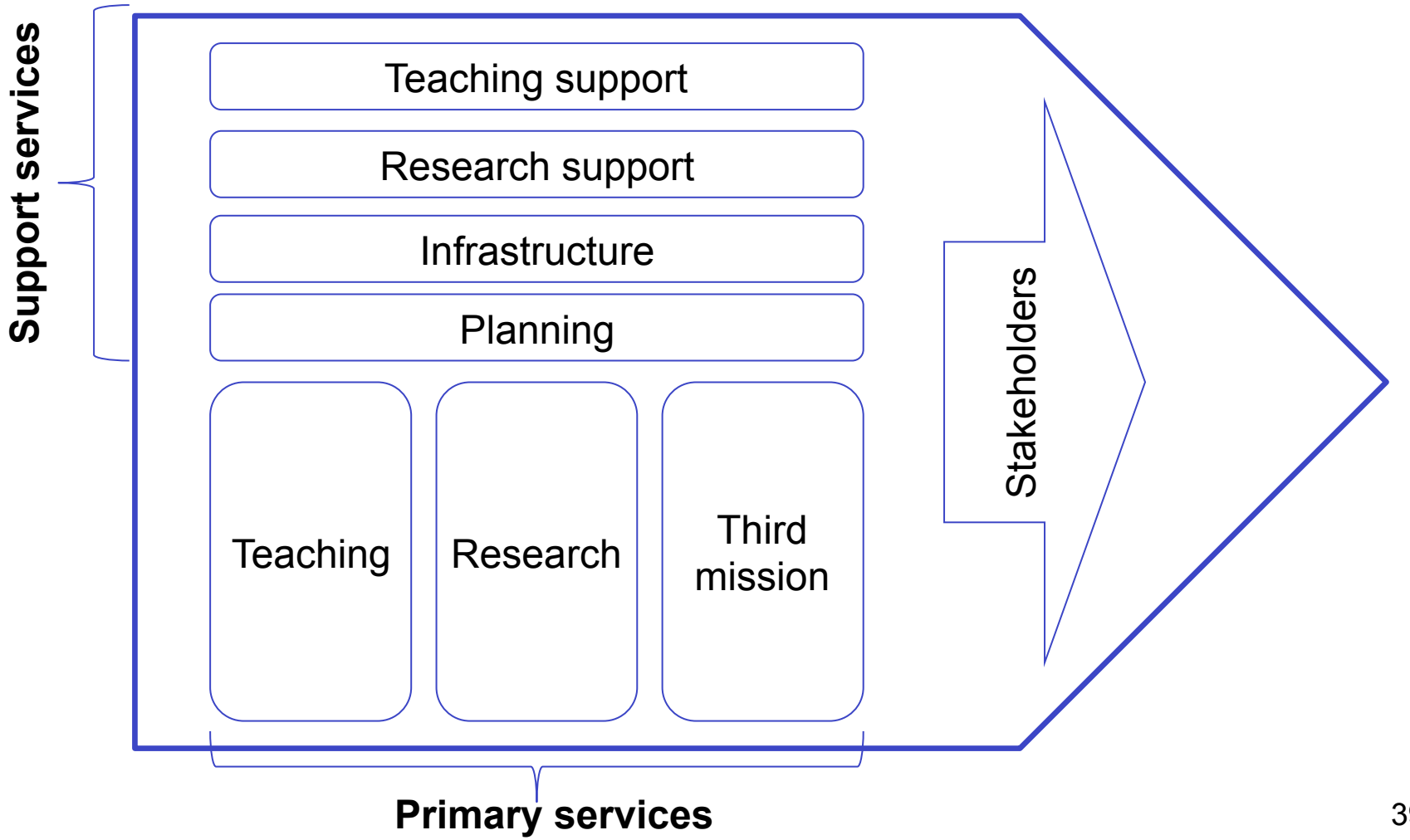
The evolution of the GP project

Evolution of the model

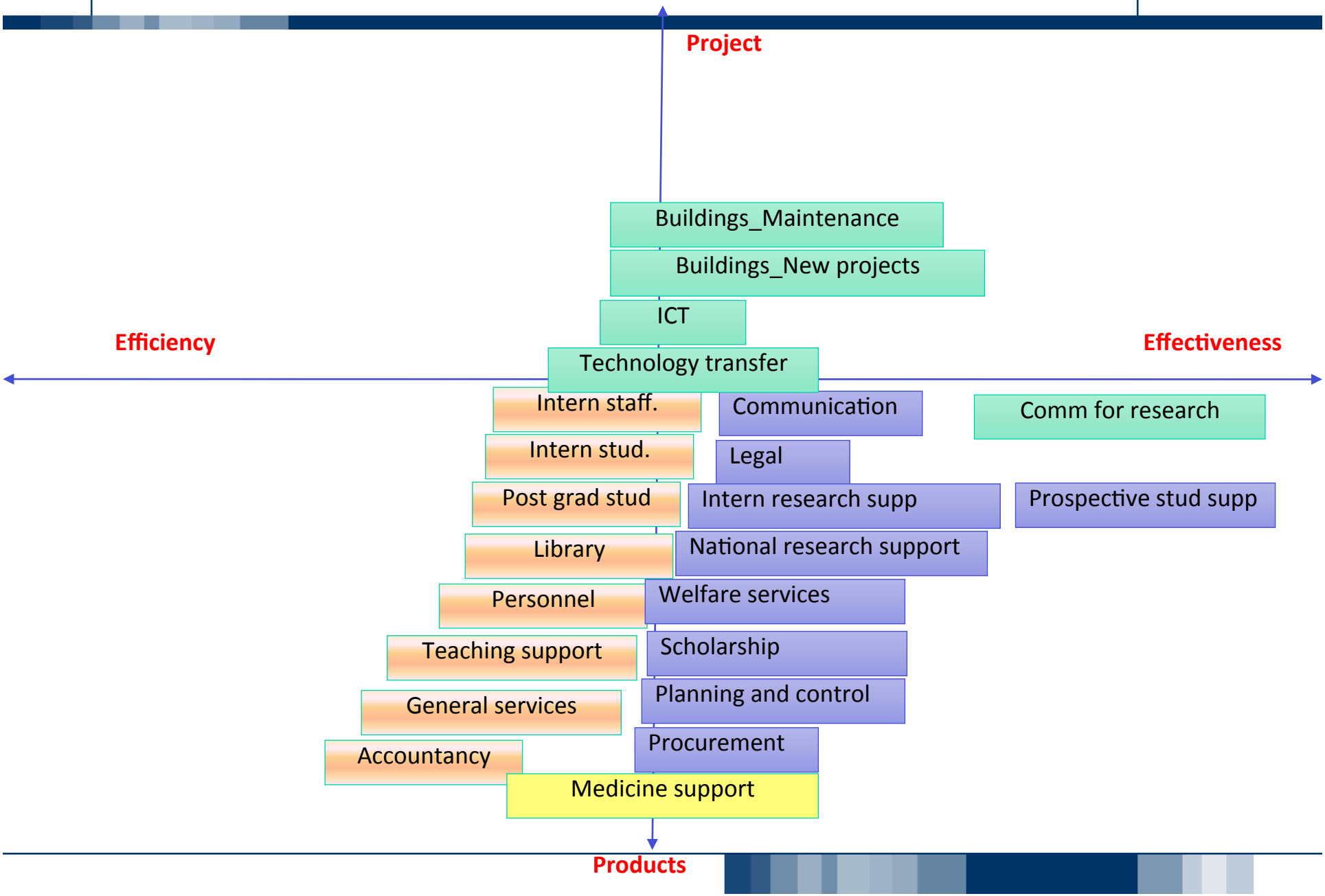


Support services

- Focus on the whole support services

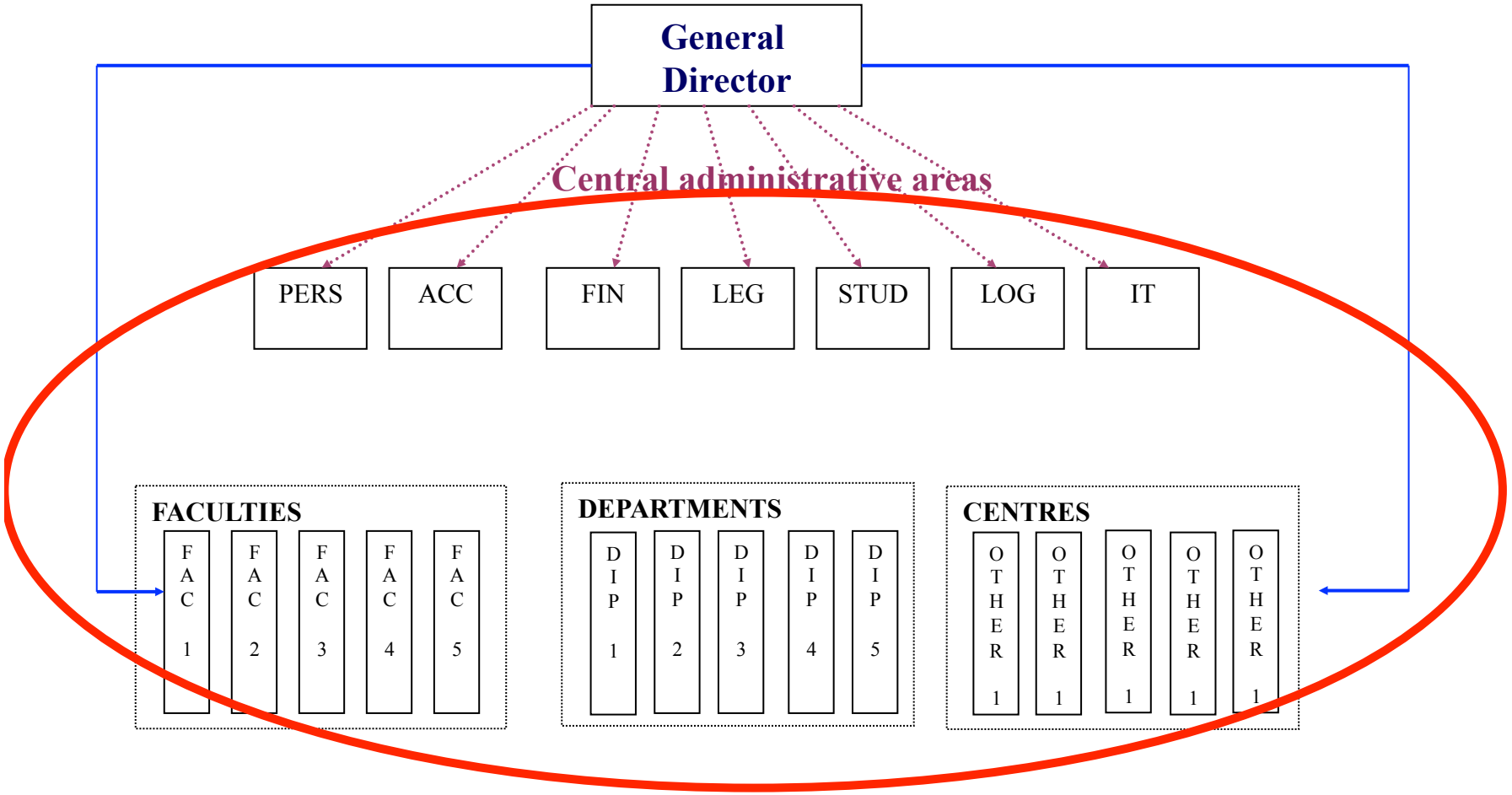


Support services: the detail



Organizational units

- Focus on all organizational units: central offices, departments, faculties, centres

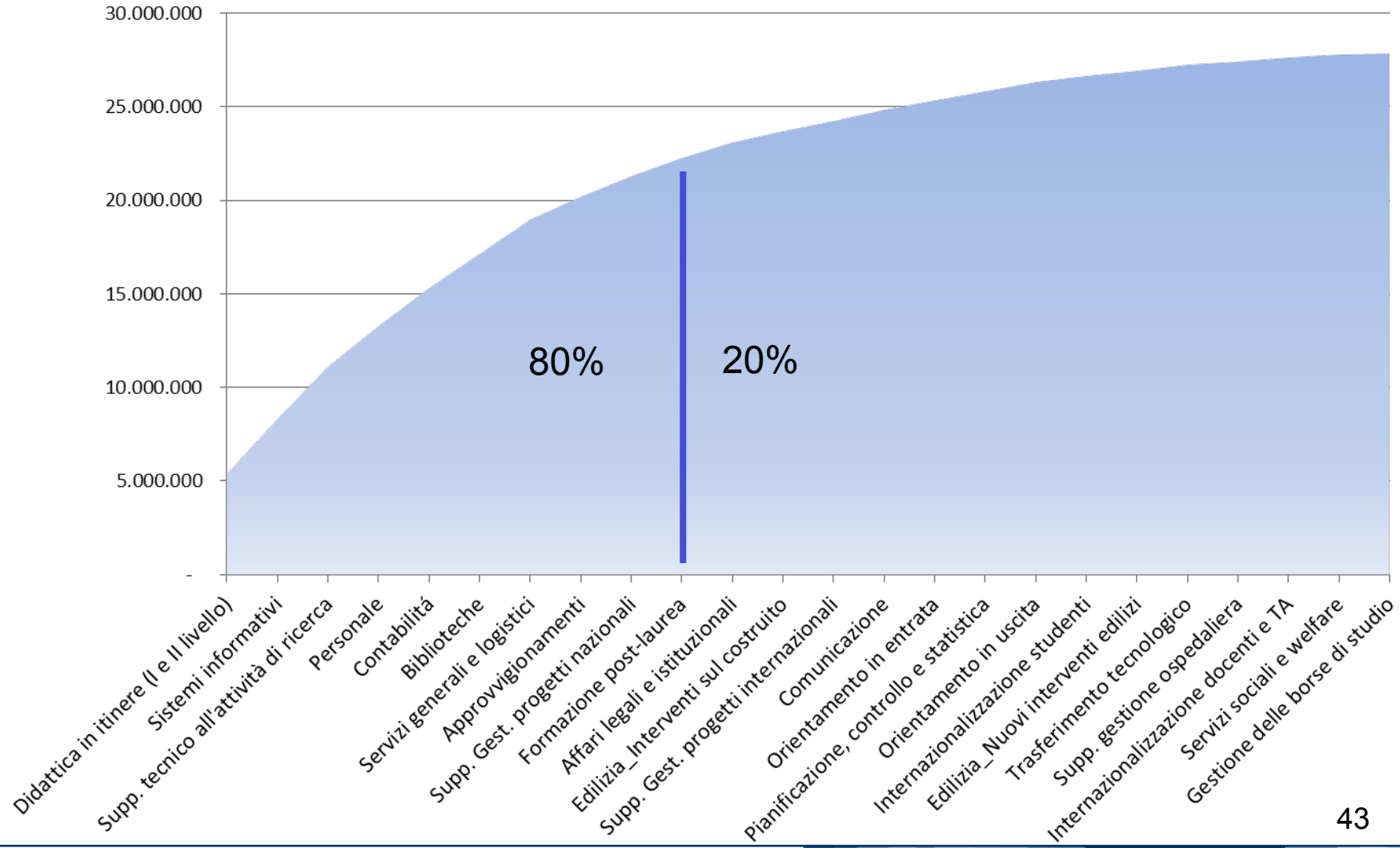


But….

- Simplification of the model:
  - Analysis on macro-activities only
  - Focus on personnel costs only (gross costs)

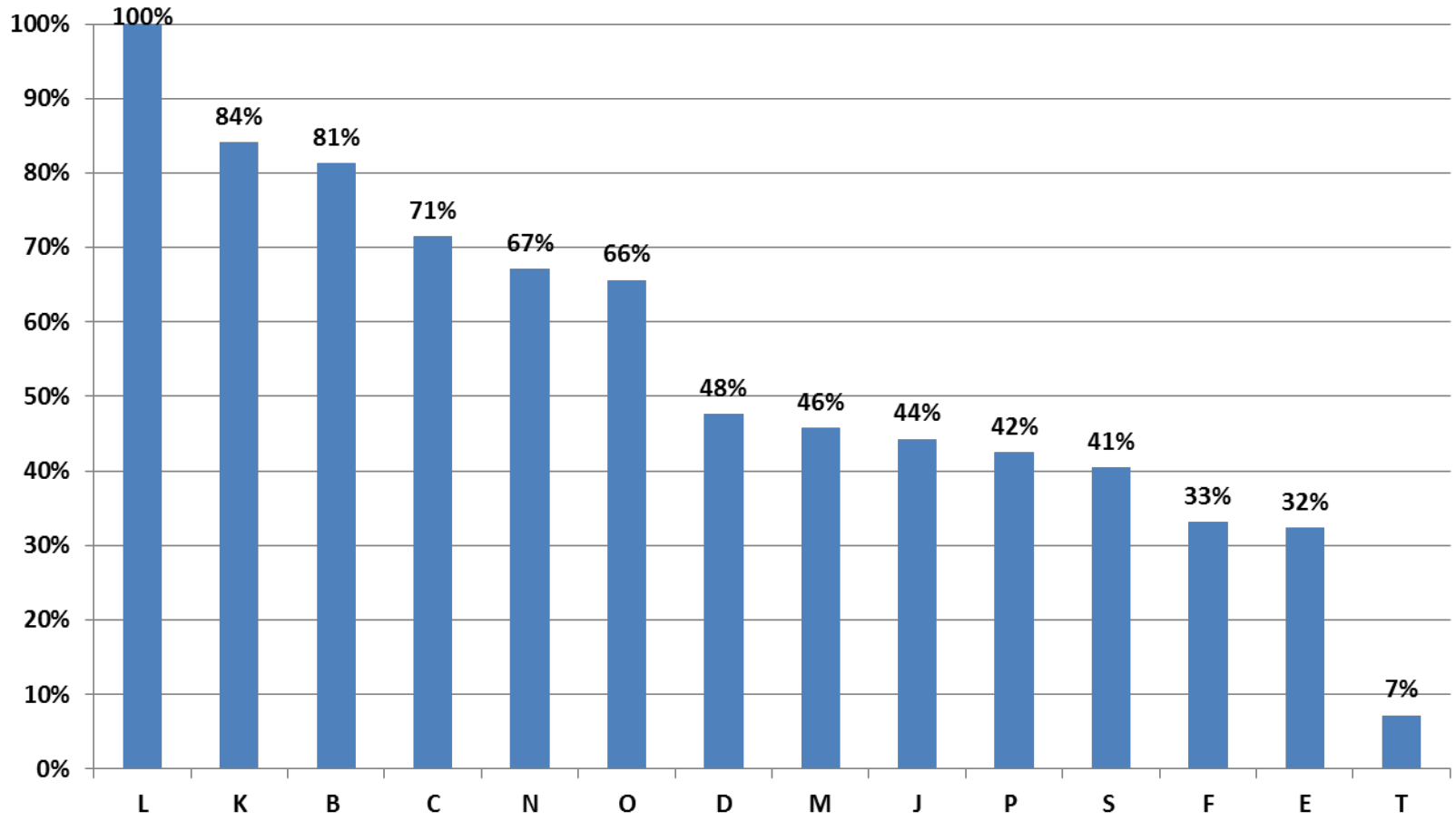
First evolution of the model: impact (1)

- Cumulated costs



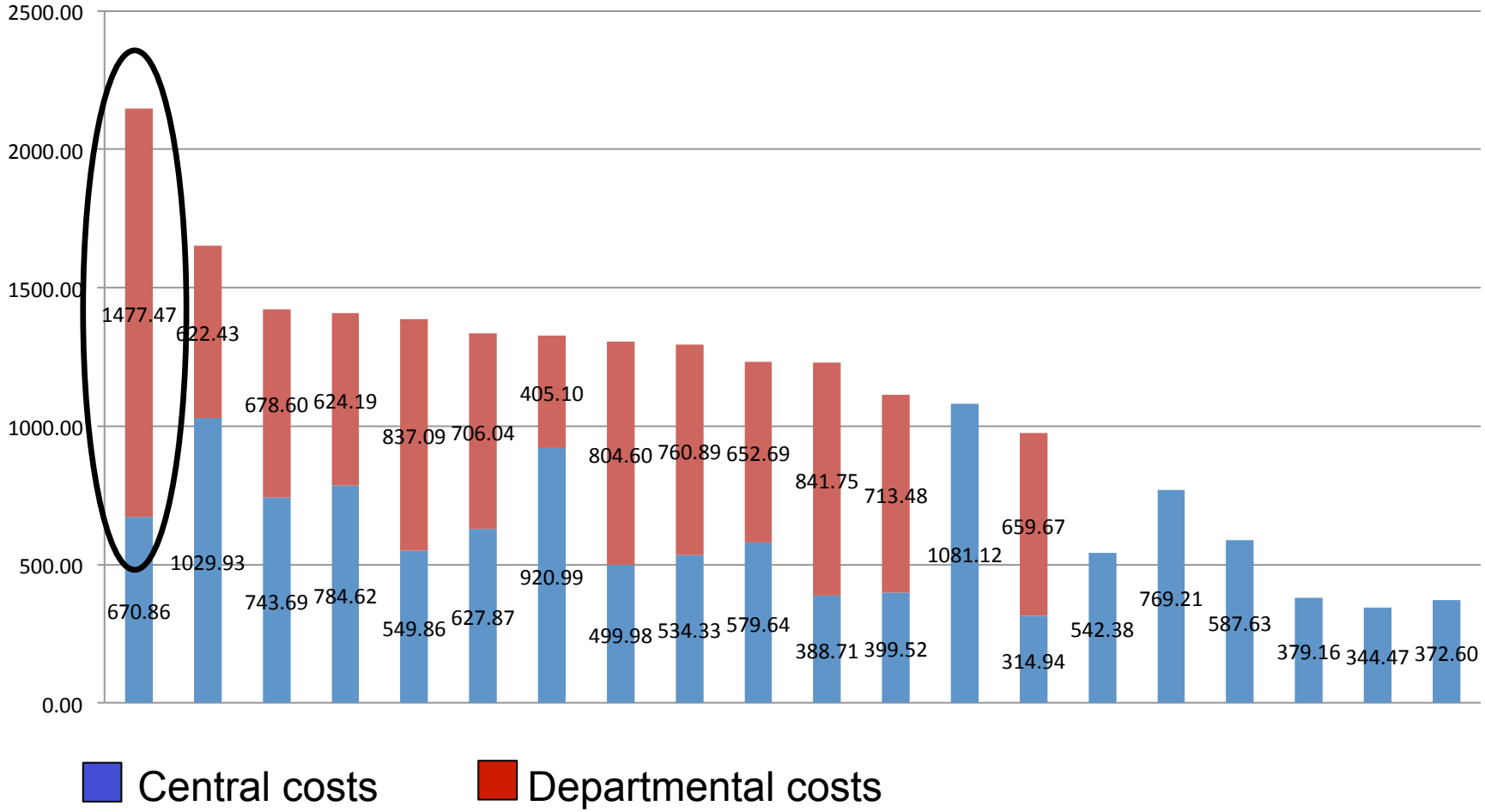
First evolution of the model: impact (2)

- Level of service centralization (% centralization)



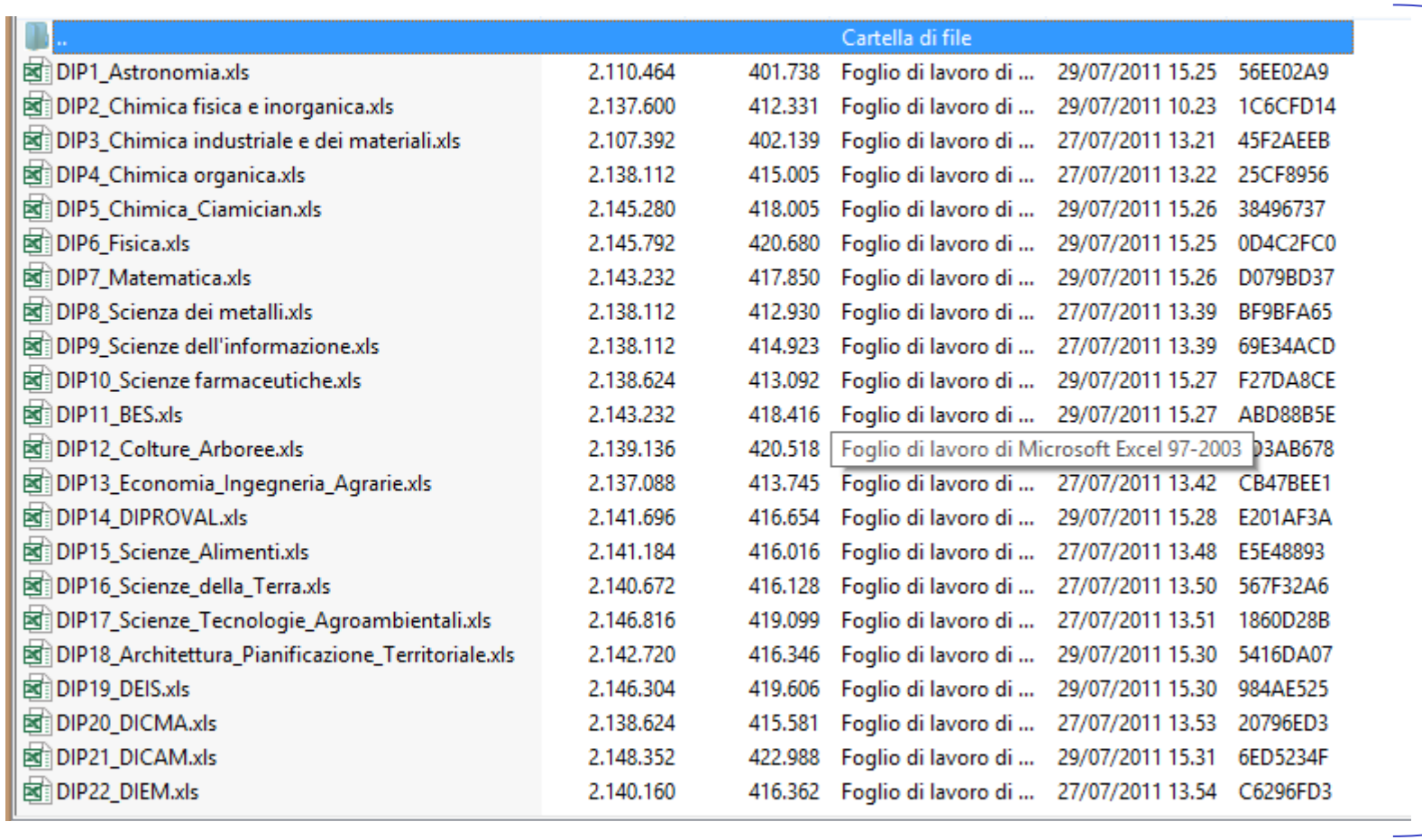
First evolution of the model: impact (3)

- Accounting – unitary costs (€/mgl€)



First evolution of the model: impact (4)

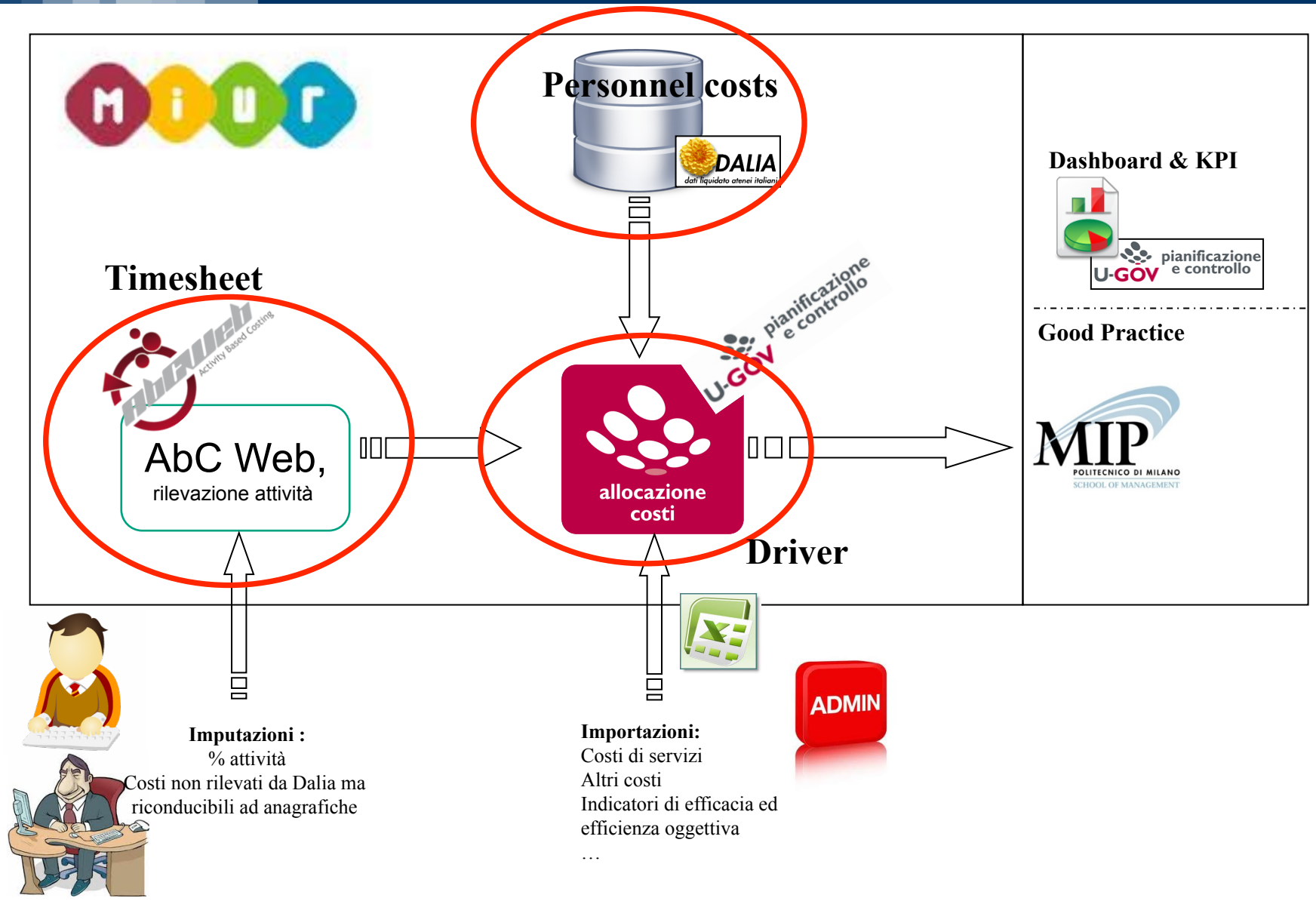
- From the «back office» perspective



..			Cartella di file		
DIP1_Astronomia.xls	2.110.464	401.738	Foglio di lavoro di ...	29/07/2011 15.25	56EE02A9
DIP2_Chimica fisica e inorganica.xls	2.137.600	412.331	Foglio di lavoro di ...	29/07/2011 10.23	1C6CFD14
DIP3_Chimica industriale e dei materiali.xls	2.107.392	402.139	Foglio di lavoro di ...	27/07/2011 13.21	45F2AEEB
DIP4_Chimica organica.xls	2.138.112	415.005	Foglio di lavoro di ...	27/07/2011 13.22	25CF8956
DIP5_Chimica_Ciamician.xls	2.145.280	418.005	Foglio di lavoro di ...	29/07/2011 15.26	38496737
DIP6_Fisica.xls	2.145.792	420.680	Foglio di lavoro di ...	29/07/2011 15.25	0D4C2FC0
DIP7_Matematica.xls	2.143.232	417.850	Foglio di lavoro di ...	29/07/2011 15.26	D079BD37
DIP8_Scienza dei metalli.xls	2.138.112	412.930	Foglio di lavoro di ...	27/07/2011 13.39	BF9BFA65
DIP9_Scienze dell'informazione.xls	2.138.112	414.923	Foglio di lavoro di ...	27/07/2011 13.39	69E34ACD
DIP10_Scienze farmaceutiche.xls	2.138.624	413.092	Foglio di lavoro di ...	29/07/2011 15.27	F27DA8CE
DIP11_BES.xls	2.143.232	418.416	Foglio di lavoro di ...	29/07/2011 15.27	ABD88B5E
DIP12_Colture_Arboree.xls	2.139.136	420.518	Foglio di lavoro di Microsoft Excel 97-2003		)3AB678
DIP13_Economia_Ingegneria_Agrarie.xls	2.137.088	413.745	Foglio di lavoro di ...	27/07/2011 13.42	CB47BEE1
DIP14_DIPROVAL.xls	2.141.696	416.654	Foglio di lavoro di ...	29/07/2011 15.28	E201AF3A
DIP15_Scienze_Alimenti.xls	2.141.184	416.016	Foglio di lavoro di ...	27/07/2011 13.48	E5E48893
DIP16_Scienze_della_Terra.xls	2.140.672	416.128	Foglio di lavoro di ...	27/07/2011 13.50	567F32A6
DIP17_Scienze_Tecnologie_Agroambientali.xls	2.146.816	419.099	Foglio di lavoro di ...	27/07/2011 13.51	1860D28B
DIP18_Architettura_Pianificazione_Territoriale.xls	2.142.720	416.346	Foglio di lavoro di ...	29/07/2011 15.30	5416DA07
DIP19_DEIS.xls	2.146.304	419.606	Foglio di lavoro di ...	29/07/2011 15.30	984AE525
DIP20_DICMA.xls	2.138.624	415.581	Foglio di lavoro di ...	27/07/2011 13.53	20796ED3
DIP21_DICAM.xls	2.148.352	422.988	Foglio di lavoro di ...	29/07/2011 15.31	6ED5234F
DIP22_DIEM.xls	2.140.160	416.362	Foglio di lavoro di ...	27/07/2011 13.54	C6296FD3

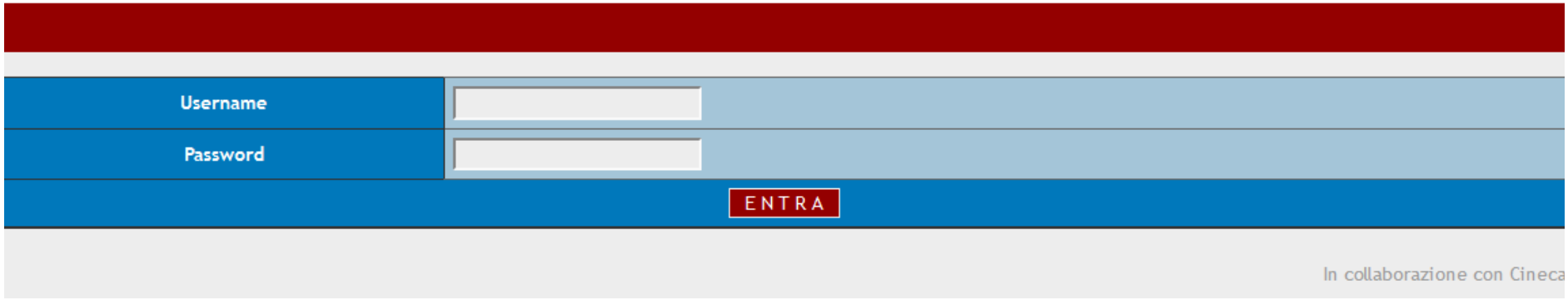
607 excel files

2011: The second evolution of the model



The process of data collection (1)

- A single platform for data collection:
  - Personnel
  - Timesheet
  - driver



The process of data collection (2)

- An example of timesheet for data collection

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2013 2012

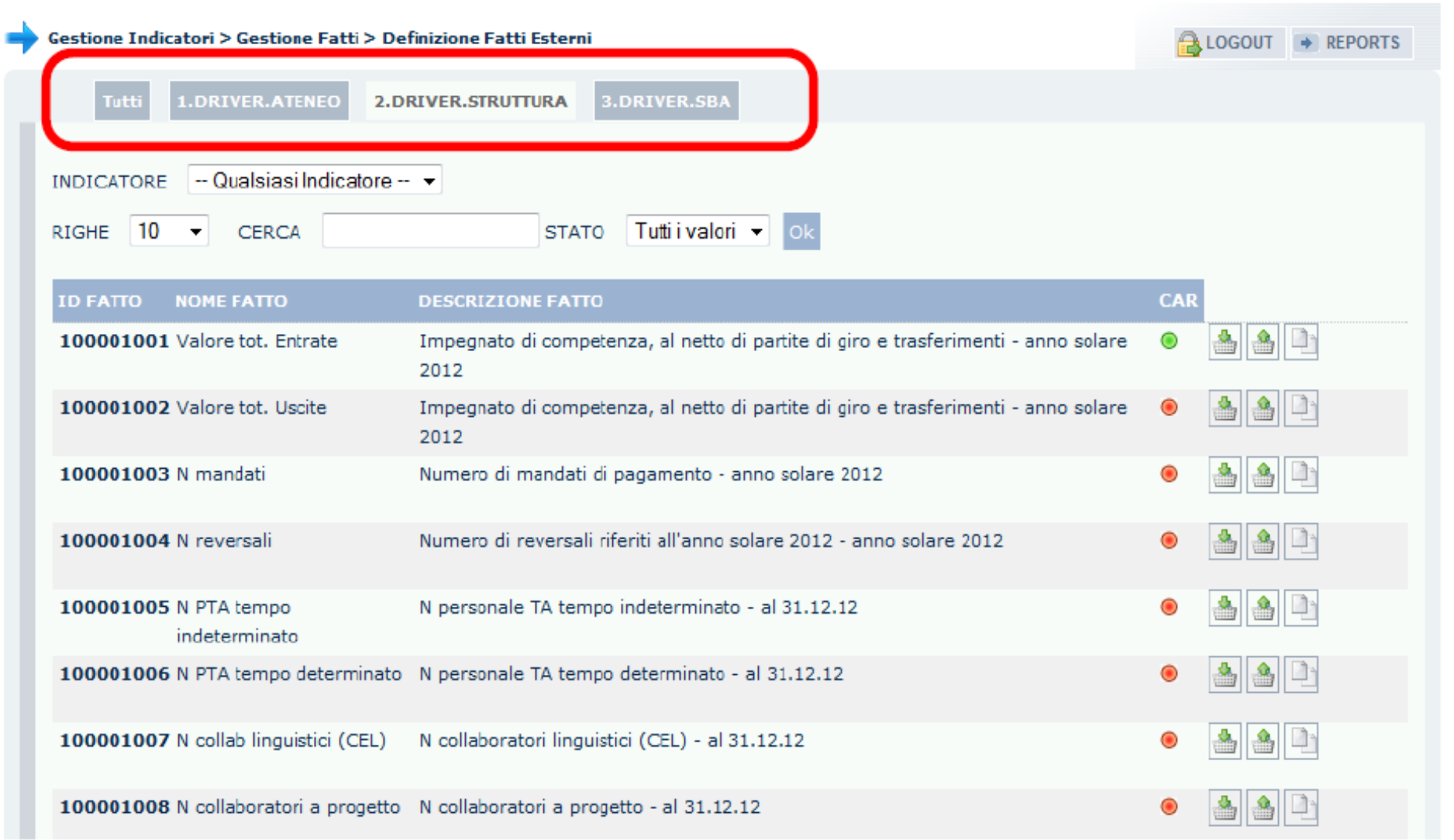
SERVIZI (Interni)

Struttura	ID	Codice Fiscale	Cognome	Nome	1. Pianificazione, controllo e statistica	2. Contabilitá	3. Affari legali e istituzionali	4. Comunicazione	5. Servizi sociali e welfare	6. Personale	7. Edilizia_Nuovi interventi edilizi
DC052 - Amministrazione Centrale	41690	NAILNZ66A16G702F	Aiani	Lorenzo	85	15	0	0	0	0	0
DC052 - Amministrazione Centrale	40765	LLGBBR66A48E625X	Allegranti	Barbara	0	100	0	0	0	0	0
DC052 - Amministrazione Centrale	40766	LLGFBA57H65G702P	Allegranti	Fabia	100	0	0	0	0	0	0

The process of data collection (3)

POLITECNICO DI MILANO

- Driver collection



Second evolution of the model: impact

- Benefits:
  - Better control on data entry
  - Creation of a permanent time series of data
  - Faster and easier data update

- Problems
  - Change the flexibility associated with «excel routines»
  - Personnel training

Lesson learnt and next steps

- Lesson learnt
  - Common language
  - Community on performance measurement
  - Diffusion of practices

- Next steps
  - Organizational structure
    - From the department to the single office
  - Activities object of the analysis
    - Macro-activities, but also micro-activities
  - International comparison
    - Activities that cross the organizational/national boundaries