

UNIVERSITIC: Spanish IT Survey experience

Antonio Fernández

UNIVERSITIC Research and GTI4U Team Director

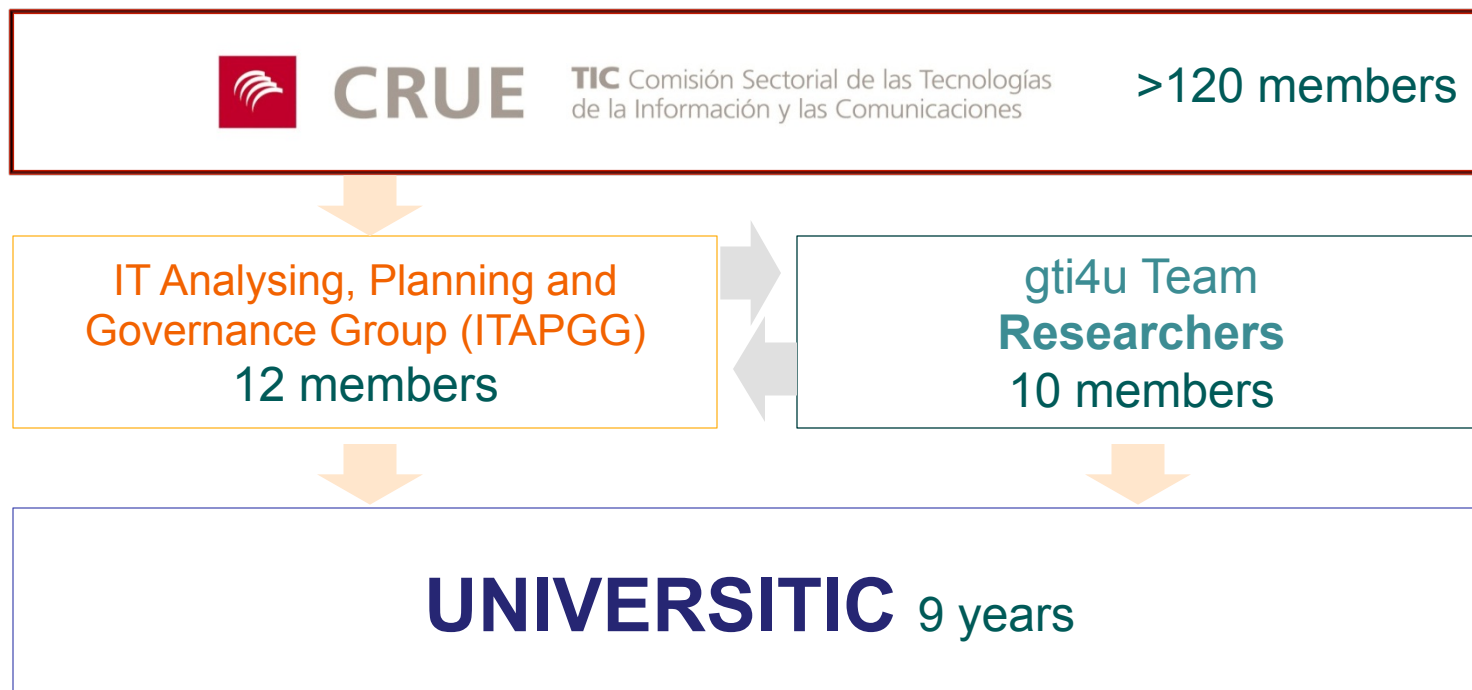
afm@ual.es - www.gti4u.es

Francisco Sampalo

CRUE IT Committee Member

paco.sampalo@si.upct.es - www.gti4u.es

How we are organized

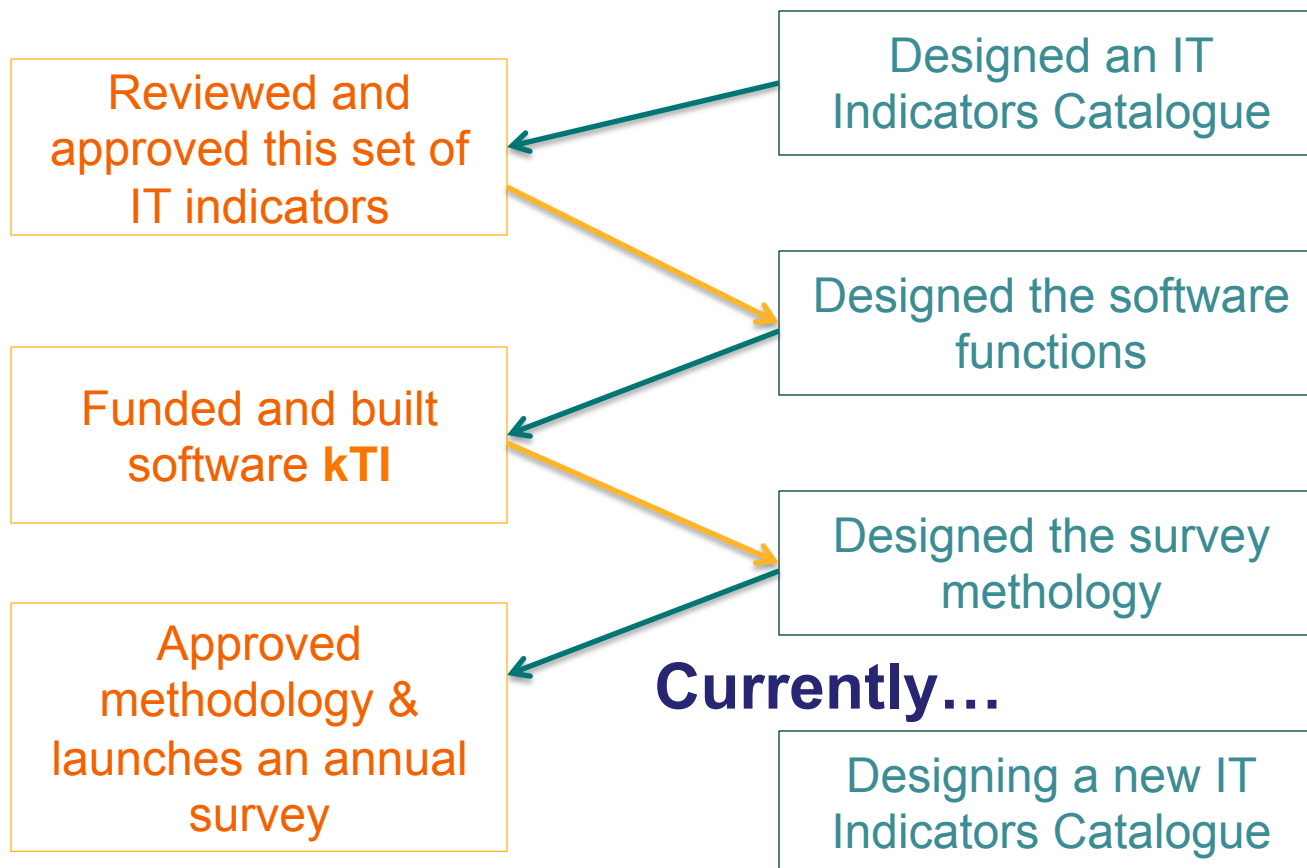


How we work

At the beginning... in 2006

IT Analysing, Planning and
Governance Group (**ITAPGG**)

gti4u Team
Researchers



How we work

Every year... since 2006

IT Analysing, Planning and
Governance Group (ITAPGG)

gti4u Team
Researchers

January

Funds UNIVERSITIC
campaign (20.000€)

Reviews IT Indicators &
encourages
participation

February

March

Launches the survey

Monitors UNIVERSITIC
campaign

April

Validates IT indicators
values

May

Sept.-
October

Reviews, publishes &
distributes
UNIVERSITIC report

Analyses results and
writes UNIVERSITIC
report

June-
July

What is UNIVERSITIC?

It is the name of...

- **An Annual Survey**, which results are published in a report of the same name.
- **A Catalogue of IT indicators**, which include 3 different kind of indicators: description, management and governance.
- **A knowledgebase**, which includes values from 9 survey editions in Spain and 2 in Latinoamerica

UNIVERSITIC is a knowledgebase

The most important thing!!!

- Analyse the current IT situation in each HEI
- Compare IT situation of a HEI versus another one (benchmarking)
- Discover the global IT situation of the Spanish Higher Education System
- But also, analyses their evolution along these 9 years and discover clusters and trends

UNIVERSITIC is a catalogue

Divided into 3 tiers...



IT Governance



IT Management



IT Description

An integral vision of IT in a HEI !!!

UNIVERSITIC is a catalogue

Each tier is divided into...

- **Axes/Principles**, extensive areas of interest for each tier
Each axis include several objectives
 - **Objectives**, goals we want to achieve in each area
And each objective include a set of
 - **Quantitative Variables/indicators**, values we collect or calculate to discover if the goal has been achieved.
There are no qualitative variables

For example:

IT Description

Axis 1. Teaching and Learning

Objective 1.1. To provide support and introduce new technologies to support classroom teaching

Ref: NAULASB Number of classrooms with BASIC IT equipment (all work spaces are connected to Internet and there is a multimedia projector)

UNIVERSITIC is a catalogue

Each variable and indicator is properly defined...

DEMO 2012 / IT Description / Axis 1 Teaching and Learning / Objective 1.1 To provide support and introduce new technologies to support classroom teaching.

NAULASB The number of classrooms with BASIC IT equipment (all work spaces are connected to the Internet and there is a multimedia projector)

Characteristics: Classrooms with Internet connection or WiFi coverage yet without a multimedia projector should be EXCLUDED. Classrooms with computers connected to the Internet and also classrooms without computers yet with WiFi coverage and a multimedia projector should be INCLUDED.

Usefulness:

Example: If there are 100 classrooms without computers but with WiFi coverage, 80 of which have a multimedia projector, and there are also 30 computer labs with PCs connected to Internet and all of them have multimedia projectors, the value for this indicator should be 110 (80 +30).

Example value: 50.00

Minimum value: 0.00

Maximum value: NAULAS

To avoid ambiguity!!!

DEMO 2012 / IT Description / Axis 1 Teaching and Learning / Objective 1.2 To provide support to and promote distance teaching.

PEDV The percentage of students that use the institution's virtual learning environment.

Usefulness: This is used to find out the percentage of university students that use the institution's virtual learning environment.

Interpretation: Ideally this value should be close to 1 (100%).

Formula: NEDV / NESTUDIANTES

UNIVERSITIC is a catalogue

1. Teaching and Learning

2. Research

3. Management

4. Information
Management

5. IT Training and
Culture

6. IT Resources

IT Description
Axes

UNIVERSITIC is a catalogue

1. IT Resources
2. IT Projects
3. IT Services
4. IT Management
5. IT Quality, Regulations and Standards
6. Collaborations



IT Management
Axes

UNIVERSITIC is a catalogue

1. Responsibility
2. Strategy
3. Acquisition
4. Performance
5. Conformance
6. Human Behaviour



IT Governance
Principles
(ISO 38500)

UNIVERSITIC is a catalogue

Principles: **6**
Objectives: **30**
Variables: **128**
Indicators: **-**

IT Governance

Axes: **7**
Objectives: **20**
Variables: **80**
Indicators: **37**

IT Management

Axes: **6**
Objectives: **16**
Variables: **57**
Indicators: **27**

IT Description

Variables – Introduced by HEIs

Indicators – Calculated automatically by the system

UNIVERSITIC is a survey

- **Designed by and for IT Directors and ViceRectors**
- **Includes cost and volume indicators but most of them are best practices indicators**

UNIVERSITIC is a survey

Composed of two different projects...

IT Description and Management survey

IT Governace survey

UNIVERSITIC is a survey

Composed of two different projects...

IT Description and Management survey

IT Governace survey

IT Description and Management survey

Participation...



In 2014, 88% of Spanish HEIs participated

IT Description and Management survey

- Funded with 20.000€ by CRUE-TIC (this sum comes from partners)
- For HEIs, participation is currently free of charge
- CRUE-TIC hires GTI4U Team to promote participation, supervise the campaign, validate the dates, analyse the data and write the UNIVERSITIC Report
- In each university, IT Area Director coordinates the data gathering needed for the survey and introduces their values into kTI

IT Description and Management survey

- CRUE has established a Confidential Information Policy
- UNIVERSITIC Report contains a detailed analysis of the aggregated results for all Spanish universities
- Participants also receive an Excel file with all the collected values, which allows them to prepare their own reports and compare their situation with others HEIs (benchmarking)
 - They can only publish anonymous information

IT Description and Management survey

Some results...

IT Description

**2 out of 3 classrooms
have Internet access
and a multimedia
projector**

**4% are fully IT equipped*
and 20% have no IT
equipment**

* Fully IT equipped – Internet access, multimedia projector, interactive whiteboard, & recording and diffusion of classes system

IT Description and Management survey

Some results...

IT Description

**75% of students use
the institutional WiFi
once or more during
an academic year**

**95% of students and
91% of teachers are
members of the
e-learning platform**

IT Description and Management survey

Some results...

IT Management

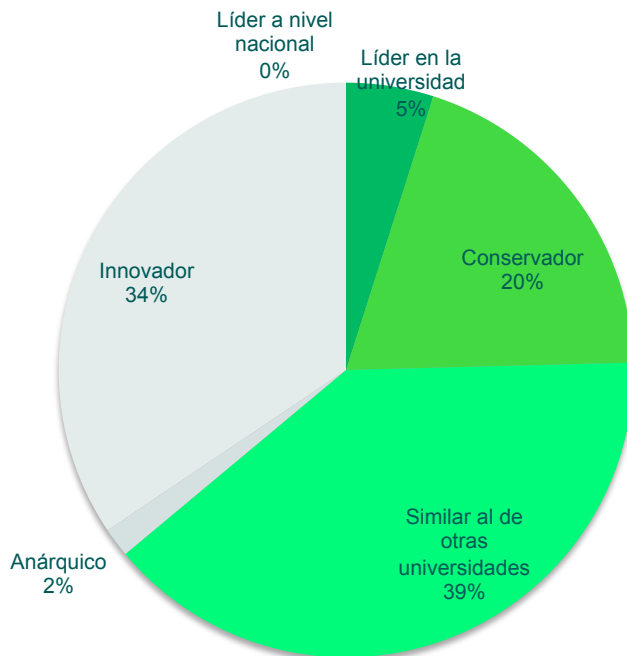
**IT expenditure has
dropped drastically
and goes up again
(225 €/student)**



IT Description and Management survey

Some results...

IT Management



1 out of 3 of the HEIs consider that IT are controlled with innovative style, 1 out of 5 with conservative style and most of them (4 out of 10) are followers

UNIVERSITIC is a survey

Composed of two different projects...

IT Description and Management survey

IT Governace survey

IT Governace survey

- IT Governance survey is included in an extensive project which main goal is to implant an IT Governance system in a HEI
- Funded with 12.000€ by each participating HEI
- CRUE-TIC promotes participation and supports the survey with an online course
- GTI4U Team designed an IT Governance reference model for universities, based on ISO 38500, called the GTI4U Model

IT Governace survey

Participation...

2011	3 HEIs
2012	5 HEIs
2013	2 HEIs

In total, **10 HEIs** have participated in this project
(15% of Spanish universities)

IT Governace survey

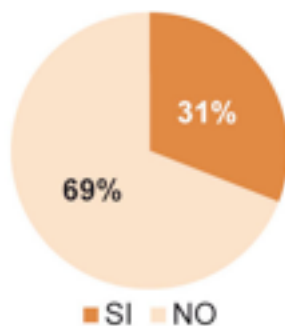
- An IT Governance Committee (ITGC) is created in each HEI, which is composed of those in charge of IT (usually several members of the HEI Executive Board)
- ITGC is educated in IT Governance, it fills in the survey forms individually, and achieves consensus about the proposed items
- ITGC discovers the current state of IT Governance, sets the future goals and selects improvement actions they consider appropriate to achieve them
- GTI4U Team supports ITGC along this process and helps write the final report

IT Description and Management survey

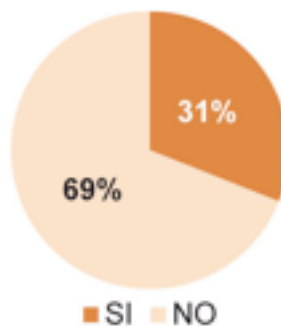
IT Governance Best Practices results...

IT Governance

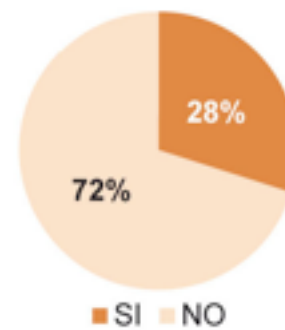
Responsibility



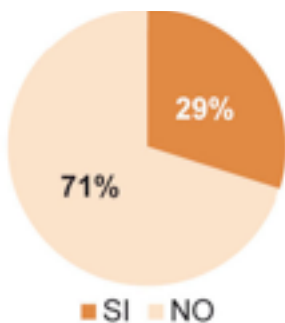
Strategy



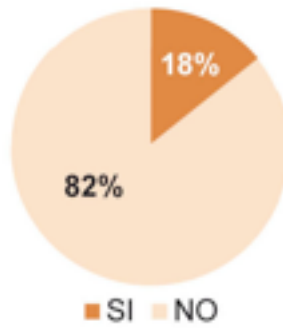
Acquisition



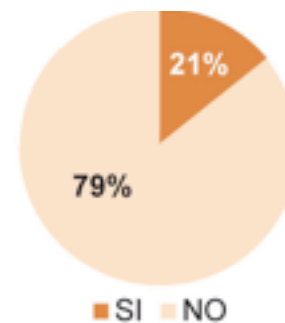
Performance



Conformance



Human Behaviour



IT Description and Management survey

Study Cases Results

IT Governance

	DEFENSIVE HEIs		OFFENSIVE HEIs			FRONT-RUNNERS AND OFFENSIVE HEIs		
	UA	UE	UC	UH	UD	UB	UF	UG
HEI's attitude related with IT	Defensives, Self-sufficient and Anarchic	Defensives, Self-sufficient and Similar to other HEIs	Defensives, Self-sufficient and Similar to other HEIs	Offensive, Cooperating and Innovative	Offensive, Cooperating and Innovative	Offensive, Front-Runner and Innovative	Offensive, Front-Runner and Innovative	Offensive, Front-Runner and Leader
Are IT strategy and university strategy aligned?	NOT ALIGNED	NOT ALIGNED	NOT ALIGNED	NOT ALIGNED	ALIGNED	ALIGNED	ALIGNED	ALIGNED
% IT Budget relative to Spanish HEI's average	FAR BELOW AVERAGE	EQUAL AVERAGE	BELOW AVERAGE	EQUAL AVERAGE	EQUAL AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE
IT expenditure per student above Spanish HEI's average	FAR BELOW AVERAGE	FAR BELOW AVERAGE	FAR BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	EQUAL AVERAGE	FAR ABOVE AVERAGE
% Description Indicators above Spanish HEI's average	FAR BELOW AVERAGE	FAR BELOW AVERAGE	EQUAL AVERAGE	BELOW AVERAGE	EQUAL AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE
% Management Indicators above Spanish HEI's average	FAR BELOW AVERAGE	FAR BELOW AVERAGE	EQUAL AVERAGE	BELOW AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE
% ITG Good Practices above Case's average	FAR BELOW AVERAGE	FAR BELOW AVERAGE	BELOW AVERAGE	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE
Initial ITG Maturity level relative to 8 Cases Average	BELOW AVERAGE	FAR BELOW AVERAGE	BELOW AVERAGE	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE
ONE YEAR AFTER								
Target ITG Maturity level relative to 8 Cases Average	BELOW AVERAGE	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE	FAR ABOVE AVERAGE
% Proposed Improvement Practices Implanted	VERY LOW IMPLANTATION	NOT AVAILABLE	VERY HIGH IMPLANTATION	HIGH IMPLANTATION	VERY HIGH IMPLANTATION	VERY HIGH IMPLANTATION	VERY HIGH IMPLANTATION	HIGH IMPLANTATION
IMPLANTATION ENABLERS	FEW	NOT AVAILABLE	MANY	FEW	MANY	MANY	MANY	MANY
IMPLANTATION INHIBITORS	MANY	NOT AVAILABLE	FEW	MANY	MANY	FEW	NONE	NONE
EMMA's Impact on IT Goals	LOW 1,8/5	NOT AVAILABLE	HIGH 3,8/5	HIGH 3,8/5	NOT AVAILABLE	HIGH 3,8/5	MEDIUM 3/5	NOT AVAILABLE
EMMA's Impact on Strategic Goals	LOW 1,8/5	NOT AVAILABLE	HIGH 3,8/5	MEDIUM 2,8/5	NOT AVAILABLE	HIGH 3, 4/5	MEDIUM 2,3/5	NOT AVAILABLE
CIO's opinion	EMMA low impact due to little support by the Governing Body to the Improvement Plan	No Information available due to little support by the Governing Body to the Improvement Plan	Mutual support from the Board and CIO to the Improvement Plan has become it in a success	Initial support from the Board has led the implantation of many improvement actions, but the new Board has been a great inconvenience for the process continuity	Despite some structural inhibitors, both support from CIO and ES has promoted a high implementation of the improvement actions	ITG enhanced is due to the high governance culture in this HEI, besides its IT planning and quality procedures	The strategic importance of IT for this university, has facilitated the improvement of its ITGS	High ITG culture and IT consideration has facilitated the maturity level improvement
This HEI has a HIGHER status than SUE's average or respect to 8 cases average								
This HEI has a SIMILAR status than SUE's average or respect to 8 cases average								
This HEI has an INFERIOR status than SUE's average or respect to 8 cases average								

IT Description and Management survey

DEFENSIVE HEIs

IT Governance

- Attitude in relation to their IT was *defensive, self-sufficient and innovative*.
- Initial situation was *unfavourable*.
- Final situation one year later: *improvement objectives below average, few improvement actions implemented, few enabler elements and many inhibitors elements*.
- The improvement process *has failed and had no impact on IT and strategic objectives*.
- Conclusion: *Board of Directors didn't support the process*.

IT Description and Management survey

OFFENSIVE HEIs

IT Governance

- *Different attitudes in relation to their IT and different initial situation (two unfavourable and two favourable)*
- *Final situation one year later: improvement objectives above average, high percentage of improvement actions implemented, many enabler elements and few inhibitors elements.*
- *The improvement process has been successful and impacts on IT and strategic objectives.*
- *Conclusion: Board were involved in the process.*

IT Description and Management survey

FRONT-RUNNERS and OFFENSIVE HEIs

IT Governance

- Attitudes in relation to their IT was *offensive, front-runners and innovative, have established cooperation processes and IT initial situation was favourable*
- Final situation one year later: *improvement objectives above average, high percentage of improvement actions implemented, many enabler elements and few or none inhibitors elements.*
- The improvement process *has been successful and impacts on IT and strategic objectives.*
- Conclusion: *Board support the process.*

IT Description and Management survey

CONCLUSIONS...

IT Governance

- GTI4U has demonstrated to be efficient as reference model to implement IT governance in the universities
- But Board must support and be involved in the implementation of a IT governance model to be successful

What is kTI?

Web software...

- Is a web software created by CRUE to support UNIVERSITIC Project
- With kTI you can design catalogues of IT indicators, and launch campaigns to collect and analyse their values

If you are interested in testing kTI we can send you a login to access a demo version in English !!!

What is kTI?

DEMO
Campaign: DEMO 2012
language | contact | help | log out | 11/8/12

IT Description
Jun 1 - Dec 31

IT Management
Jun 1 - Dec 31

IT Governance
Jun 6 - Dec 31

Reports

- Scorecards
- Forms

Administration

- User Management
- Change password

Home \ IT Description \ Axis 1 \ Objective 1.1
Antonio Fernández (Administrator)
Universidad de Murcia

IT Description 4%

0.General indicators 17%
Objective 0.1 2/12 - 17%
1.Teaching and Learning 7%
Objective 1.1 2/22 - 9%
Objective 1.2 0/8 - 0%
2.Research 0%
Objective 2.1 0/2 - 0%
Objective 2.2 0/5 - 0%
Objective 2.3 0/3 - 0%
3.Management 0%
Objective 3.1 0/2 - 0%
Objective 3.2 0/2 - 0%
Objective 3.3 0/6 - 0%
4.Information Management 0%
Objective 4.1 0/5 - 0%
Objective 4.2 0/2 - 0%
Objective 4.3 0/3 - 0%
5.IT Training and Culture 0%
Objective 5.1 0/8 - 0%
Objective 5.2 0/6 - 0%

IT Description

Axis 1. Teaching and Learning

Objective 1.1. To provide support and introduce new technologies to support classroom teaching.

Show all (22)
Show completed (2/22)
Show pending (20/22)

✓ **NAULASB** The number of classrooms with BASIC IT equipment (all work spaces are connected to the Internet and there is a multimedia projector)

Campaign	Value	Mean	Deviation	Percentil	Num. samples	Sample date
2012	300	340.00	-40.00	-11,76%	2	10/21/12

✓ **PAULASB** The percentage of classrooms with BASIC IT equipment (all the work spaces are connected to the Internet and there is a multimedia projector).

Campaign	Value	Mean	Deviation	Percentil	Num. samples	Sample date
2012	0.75	0.72	0.03	+3,83%	2	

What is kTI?

Scorecards

Select scorecard Variables UNIVERSITIC 2011

Variables UNIVERSITIC 2011

Todos los indicadores tipo variable que se han introducido

Summary

Positive deviation: 74 (57.81%)

Negative deviation: 50 (39.06%)

No available: 4 (3.12%)

No filled: 0 (0.00%)

IT Description

0. General indicators

1. Teaching and Learning

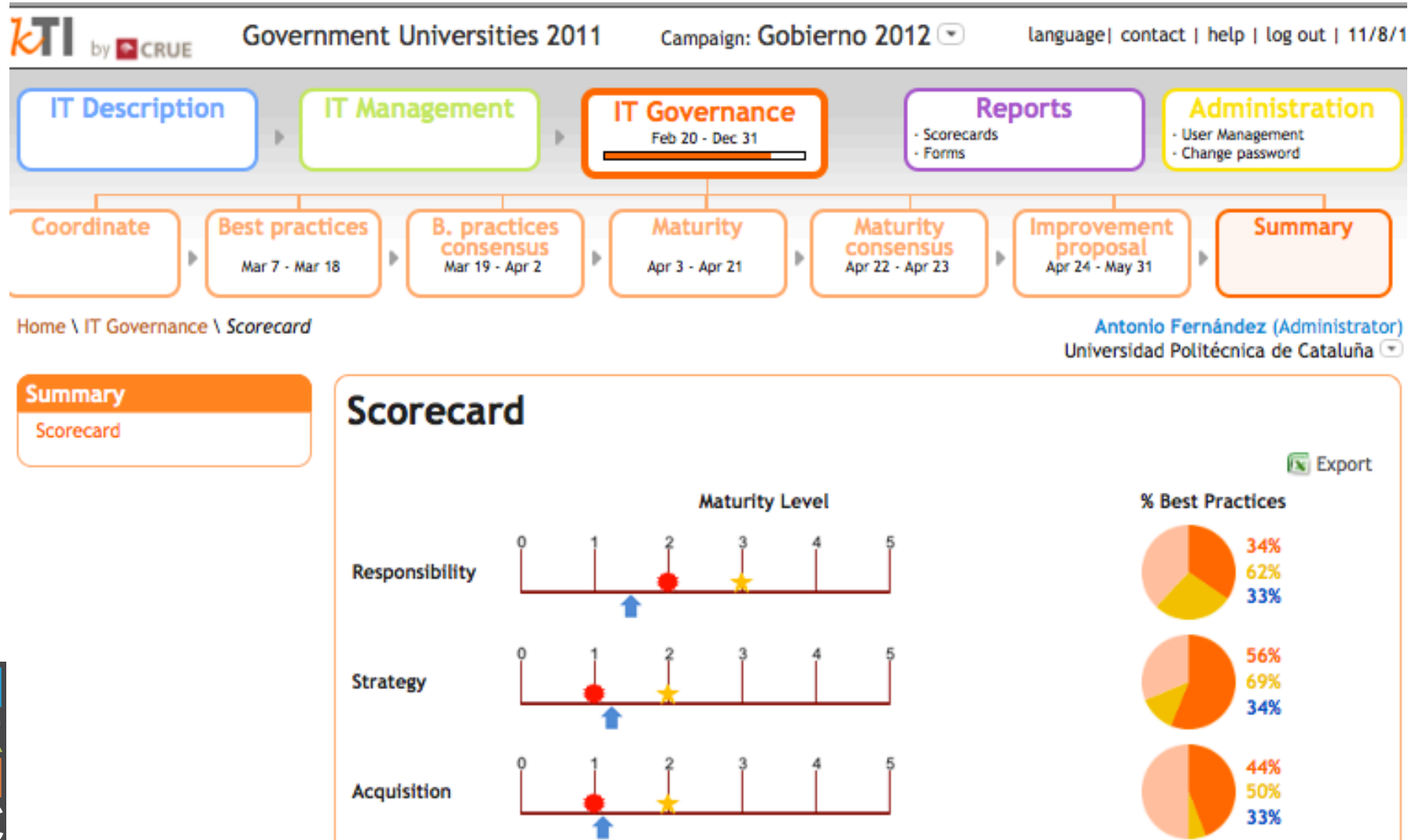
1.1. Supporting classroom learning with IT

NAULASB	458.00 (+79,39%)	NAULASA1	99.00 (+323,15%)	NAULASA2	10.00 (-40,44%)
NAULASA3	0.00 (-100,00%)	NOLIBRE	1,249.00 (+68,41%)	NPORTATILES	168.00 (-76,11%)
NPAULAMOVIL	455.00 (+516,87%)	NCONWIFI	4,456,968.00 (+130,52%)	NUSUARIOSWIFI	29,826.00 (+109,59%)

1.2. Supporting and promoting E-Learning

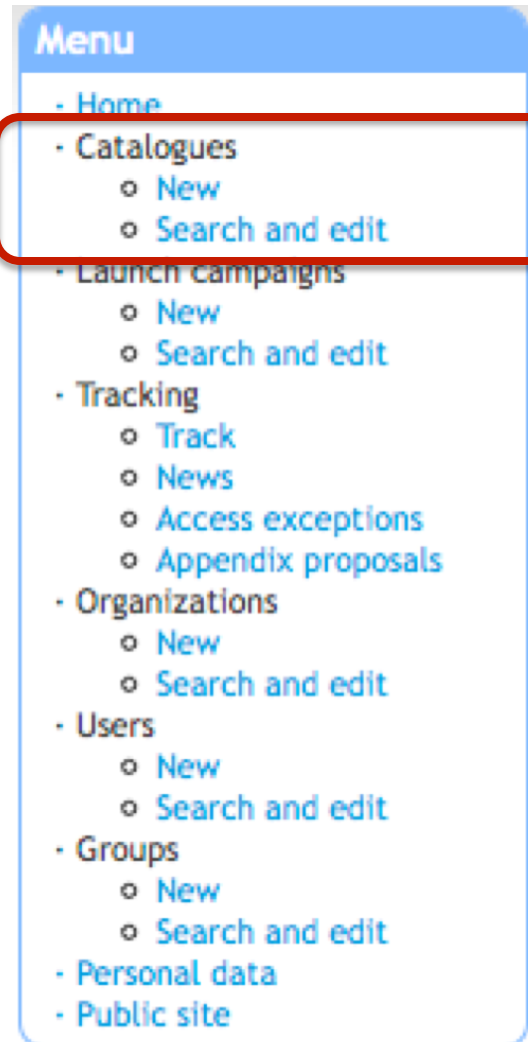
NPDIDV	1,930.00 (+31,81%)	NEDV	27,076.00 (+35,94%)	NTTULANP	0.00 (-100,00%)
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What is kTI?



What is kTI?

Administration Menu...

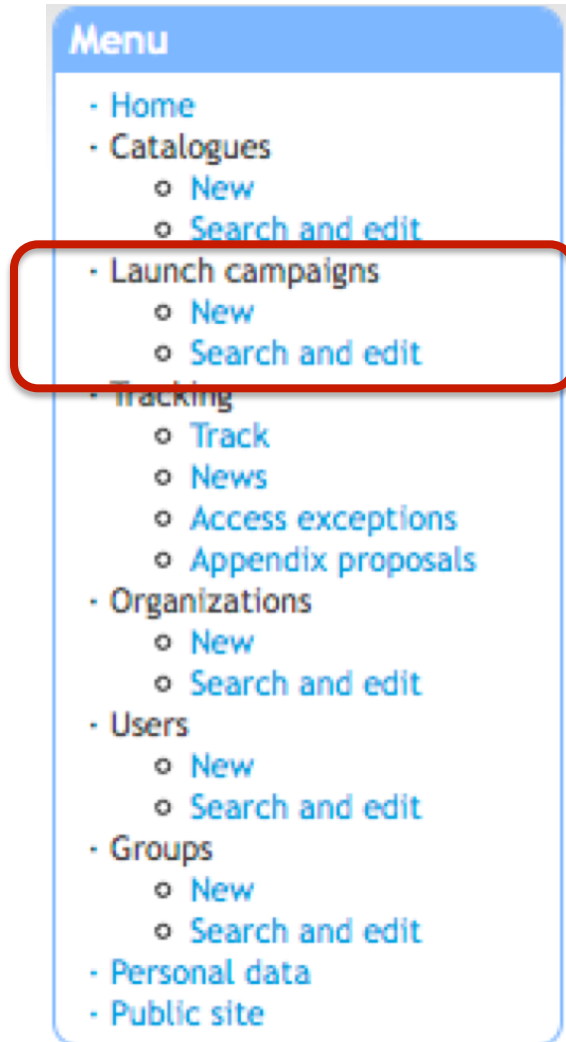


Create and edit a new catalog of IT indicators

Use UNIVERSITIC 2011 catalog

What is kTI?

Administration Menu...



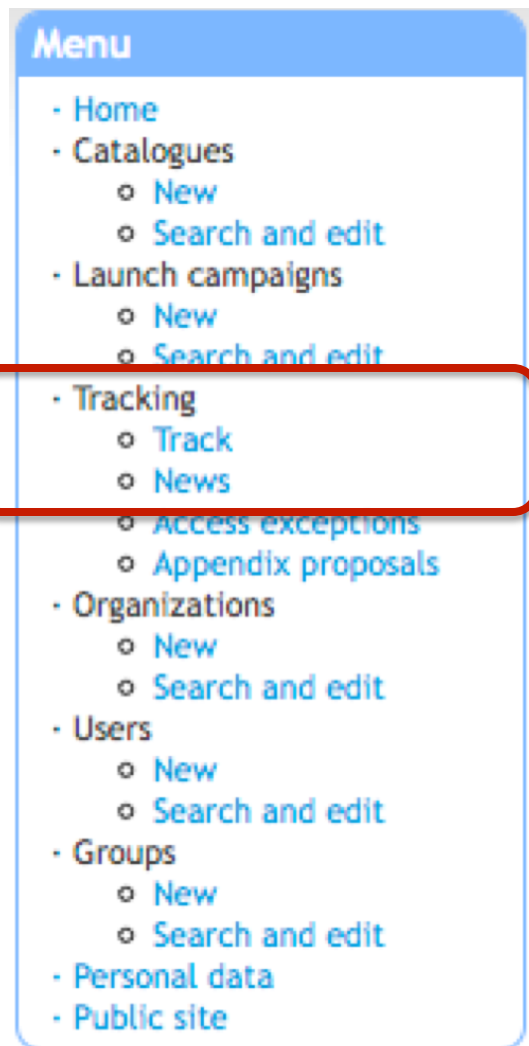
Set the main dates of a campaign

Determine the participating HEIs

Select the catalog of IT indicators to be used

What is kTI?

Administration Menu...

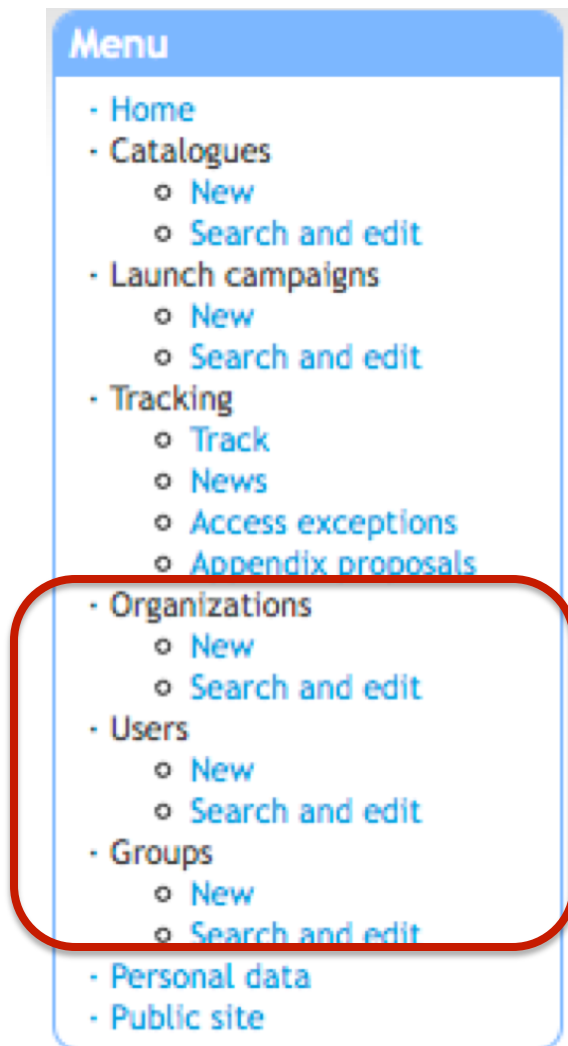


Track the HEIs interaction with the system

Create and communicate news to the users

What is kTI?

Administration Menu...



Introduce a new HEI, users of each HEIs or create group of HEIs & manage them

Another Experience

LatinAmerica

- Second Edition of *UNIVERSITIC LatinAmerica 2014* have participated 41 HEIs
- Next year, an IT Governance campaign will be launched and we hope will participate at least 10 HEIs

Proposals

A new European IT indicators Catalog...

- Which includes the main common IT indicators from each of our national surveys
- Each national system could keep their own surveys and feed the common system with the needed values
- Publish a final report with European results
- Distribute the data to every participant allowing to do your own analysis (after “sign” a Confidential Information Policy)

Proposals

Different views...

BenchIT

- Focus is on financial issues and accurate costs analysis.
- Quantitative analysis: “How much IT do we have?” and “how much does it cost?”

UNIVERSITIC

- Centres in a Qualitative view: “What is our IT service portfolio? How do we manage the IT in the University?”

UCISA

- Includes quantitative and qualitative approaches.

Proposals

We share...

- Around 20 global IT indicators with each one.
- Not enough, we need to design a broader catalogue of indicators to describe how to manage IT in European HEIs

UNIVERSITIC:

Spanish IT Survey experience

Thank you !!!