UNIVERSITIC:
Spanish IT Survey experience

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HE IT Benchmarking in Europe

How we are organized

CRUE

Comisión Sectorial de las Tecnologías de la Información y las Comunicaciones

>120 members

IT Analysing, Planning and Governance Group (ITAPGG)
12 members

gti4u Team Researchers
10 members

UNIVERSITIC 9 years
How we work

At the beginning… in 2006

IT Analysing, Planning and Governance Group (ITAPGG)

Reviewed and approved this set of IT indicators

Funded and built software kTI

Approved methodology & launches an annual survey

gti4u Team Researchers

Designed an IT Indicators Catalogue

Designed the software functions

Designed the survey methodology

Currently…

Designing a new IT Indicators Catalogue
HE IT Benchmarking in Europe

How we work

Every year... since 2006

January
Funds UNIVERSITIC campaign (20,000€)

March
Launches the survey

IT Analysing, Planning and Governance Group (ITAPGG)

February
Reviews IT Indicators & encourages participation

March
Monitors UNIVERSITIC campaign

May
Validates IT indicators values

June-July
Analyses results and writes UNIVERSITIC report

gti4u Team Researchers

Reviews, publishes & distributes UNIVERSITIC report

1st Dec. 2014, Bolonia
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...

To avoid ambiguity!!!
UNIVERSITIC is a catalogue

1. Teaching and Learning
2. Research
3. Management
4. Information Management
5. IT Training and Culture
6. IT Resources
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

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

0 Variables – Introduced by HEIs
0 Indicators – Calculated automatically by the system

1st Dec. 2014, Bolonia
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 Governance survey
UNIVERSITIC is a survey
Composed of two different projects…

IT Description and Management survey

IT Governance survey
In 2014, 88% of Spanish HEIs participated.
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
• 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
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
Some results…

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 expenditure has dropped drastically and goes up again (225 €/student)
Some results…

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

<table>
<thead>
<tr>
<th>Year</th>
<th>HEIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3 HEIs</td>
</tr>
<tr>
<td>2012</td>
<td>5 HEIs</td>
</tr>
<tr>
<td>2013</td>
<td>2 HEIs</td>
</tr>
</tbody>
</table>

**IT Governance survey**

**Participation…**
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.
HE IT Benchmarking in Europe

1st Dec. 2014, Bolonia

IT Description and Management survey

IT Governance Best Practices results…

IT Governance

Responsibility

- SI: 31%
- NO: 69%

Strategy

- SI: 31%
- NO: 69%

Acquisition

- SI: 28%
- NO: 72%

Performance

- SI: 29%
- NO: 71%

Conformance

- SI: 18%
- NO: 82%

Human Behaviour

- SI: 21%
- NO: 79%
Test Data Benchmarking in Europe

1st Dec. 2014, Bolonia

IT Description and Management survey

DEFENSIVE HEIs

• 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.
• 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.
Attitudes in relation to their IT were offensive, front-runners and innovative, having established cooperation processes and the 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 no inhibitor elements.

The improvement process has been successful and impacts on IT and strategic objectives.

Conclusion: Board support the process.
CONCLUSIONS...

- 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 !!!

1st Dec. 2014, Bolonia
What is kTI?

**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).

<table>
<thead>
<tr>
<th>Campaign</th>
<th>Value</th>
<th>Mean</th>
<th>Deviation</th>
<th>Percentil</th>
<th>Num. samples</th>
<th>Sample date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>300</td>
<td>340.00</td>
<td>-40.00</td>
<td>-11.76%</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Campaign</th>
<th>Value</th>
<th>Mean</th>
<th>Deviation</th>
<th>Percentil</th>
<th>Num. samples</th>
<th>Sample date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0.75</td>
<td>0.72</td>
<td>0.03</td>
<td>+3.83%</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
What is kTI?

### Scorecards

**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

**D. General indicators**

**1. Teaching and Learning**

- **1.1. Supporting classroom learning with IT**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAULASB</td>
<td>458.00</td>
<td>(+79.39%)</td>
</tr>
<tr>
<td>NAULASA1</td>
<td>99.00</td>
<td>(+323.15%)</td>
</tr>
<tr>
<td>NAULASA2</td>
<td>10.00</td>
<td>(-40.44%)</td>
</tr>
<tr>
<td>NAULASA3</td>
<td>0.00</td>
<td>(-100.00%)</td>
</tr>
<tr>
<td>NOLIBRE</td>
<td>1,249.00</td>
<td>(+68.41%)</td>
</tr>
<tr>
<td>NPORTATILES</td>
<td>168.00</td>
<td>(-76.11%)</td>
</tr>
<tr>
<td>NPAULAMOVIL</td>
<td>455.00</td>
<td>(-516.87%)</td>
</tr>
<tr>
<td>NCONWiFi</td>
<td>4,456,968.00</td>
<td>(+130.52%)</td>
</tr>
<tr>
<td>NUSUARIOSWiFi</td>
<td>29,826.00</td>
<td>(+109.59%)</td>
</tr>
</tbody>
</table>

- **1.2. Supporting and promoting E-Learning**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDIDV</td>
<td>1,930.00</td>
<td>(+31.81%)</td>
</tr>
<tr>
<td>NEDV</td>
<td>27,076.00</td>
<td>(+35.94%)</td>
</tr>
<tr>
<td>NTITULANP</td>
<td>0.00</td>
<td>(-100.00%)</td>
</tr>
</tbody>
</table>
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 !!!