LEADERSHIP SCHOOL

Preparing Higher Education leaders to become the change makers of the university of tomorrow

Analytic Projects in the University Context

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Data is the most valuable asset of organizations

Without data you are just another person with an opinion

W. Edwards Deming

But even with analytic systems, success is not guaranteed

Source: John Klossner: http://www.jklossner.com/computerworld/data.html

Around **80%** fail

For-profit organizations are applying analytics successfully with higher degree of performance

Let's learn from them then!

How to Conceive, Design, Develop, Implant and Evaluate Analytical Information Systems in Universitites in order to Maximize the Success??

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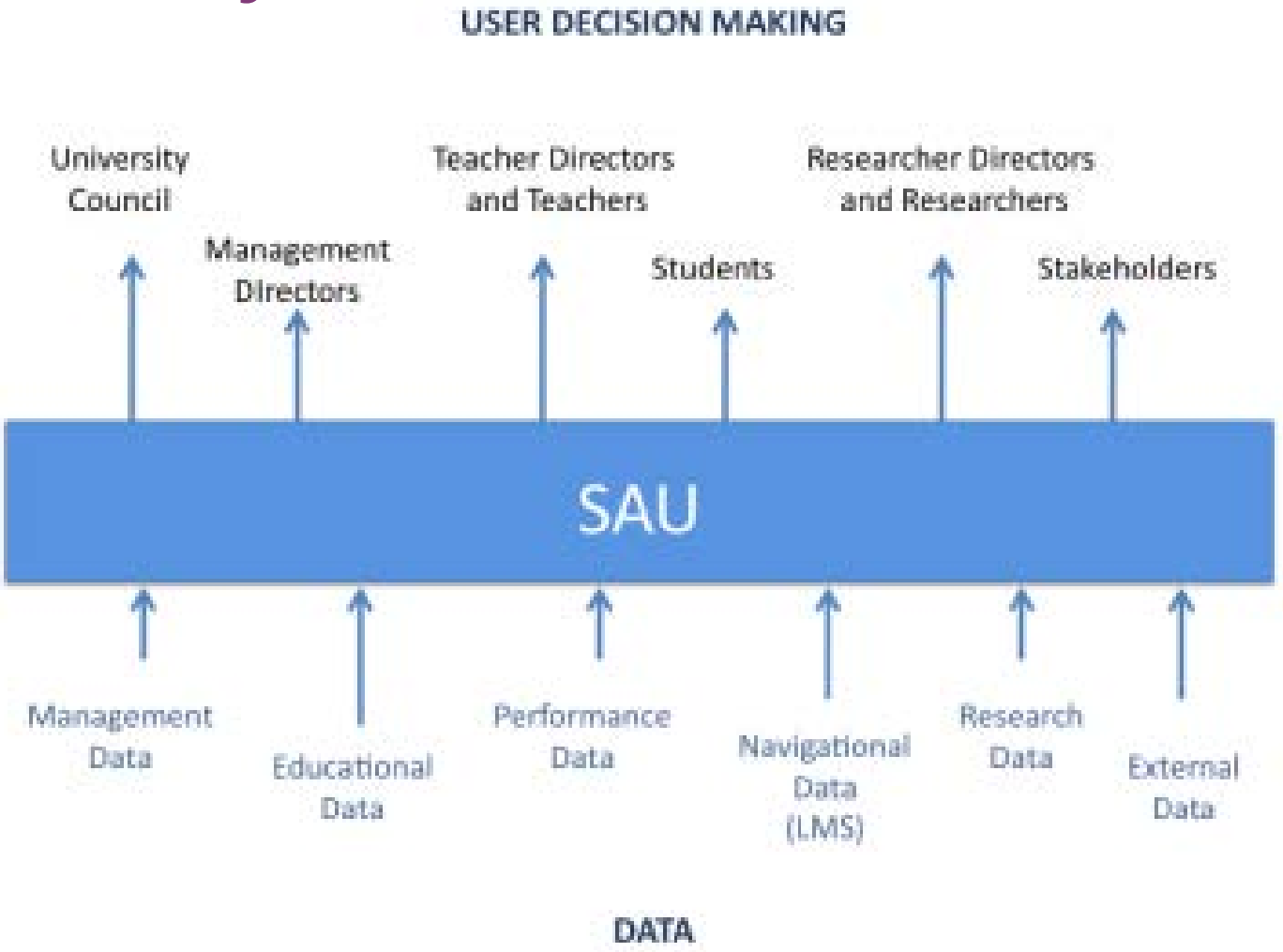
Unified Analytical Information System



Analytics in the Universtity Context

Learning Analytics (LA)

is the measurement, collection, analysis and reporting of data **about learners and their contexts**, for purposes of understanding and improving learning and the environments where it occurs.

Academic Analytics (AA)

is the application of **business intelligence in education** and emphasizes analytics at institutional, regional, and international levels.

Analytic IS in Detail

	Academic Analytics	Learning Analytics
Domain	Strategic planning, efficient management	Academic Activity
Users	Council, functional units, management, department coordination, stakeholders	Teachers, subject coordinators, students
Level Decision	Strategic decisions of long and middle term	Operative decision of short term
Data	Managerial, academic, external	Academic
Benefits	To monitor strategic goals about administration and academic activities	To improve personalization and support to learning processes
Maturity	New discipline. Few projects. Low experience in project management.	New discipline. Numerous but small projects.
Top-Down	Created using top-down strategies	Created using bottom-up strategies.
Sponsor	Sponsorship based in the strategy of university. Guaranty the availability of the required resources and the continuity/future of the project	Without sponsorship. Isolated and unrelated projects
Integration	Integrates in information systems of university	Do not integrate in information systems of university
Project Team	Complex, transversal, diverse	Teacher and technical staff. Small team.

Weaknesses of Academic Analytics

Academic Analytics projects	Academic Analytics tools
Complex structure of universities	It provides partial coverage to university
Use of business project management methodologies as is	Do not create academic knowledge for teachers
Maturity: Low experiences in implementation and lack of external experts with experience	Maturity: Lack of useful software components that satisfy academic needs of universities
Change resistance	Mainly to manage university
Requires the involvement of mostly all university staff in the process and have high economical costs	

Weaknesses of Learning Analytics

Learning Analytics projects	Learning Analytics tools
Not sponsored	Too focused to particular problems and therefore with few generalization
Misalignment with strategic planning	Barriers for data access or reusability
Created from a technological perspective	Requires a great diversity of competences
Do not have suitable coordination to define a strategic use of analytics	Do not integrates with university information systems

How to address Analytical Systems

Conception: Is the analytical problem Relevant?

Is it necessary? What are the real necessities? Is the institution ready for the analytical system? …

Implementation: Is the tool being implemented properly?

How to evaluate the evolution of the implementation? Critical success factors? Is there any deviation? …

Adoption: Is the analytical tool useful? Are its users committed?

Classical indicators (PayBack, ROI, …). What is the impact of the implemented system? Does it improve performance? Does it provide relevant answers to relevant questions? …

Let's hope we provided some useful information you can use when doing learning analytics or, at least, you enjoyed the talk

Questions

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