Strategies for Developing a World-Class University in a Complex Context:
The Case of the Valencia University of Technology

José-Ginés MORA and Francisco-José MORA
UNIVERSIDAD POLITECNICA DE VALENCIA
The rationale

- Becoming a *world-class university* is a challenge for many universities around the world

- Historical and cultural contexts, legal frameworks, economic circumstances are so different that strategies should be diverse

- The objective of this paper is twofold
  - It will analyse the complex context of the UPV.
  - It will present how the UPV is dodging the contextual difficulties in order to define internal strategies to become a *world-class university*. 
The historic context

❖ Spanish universities at the beginning of the nineteenth century adopted the Napoleonic model of higher education
  ▪ Universities were totally regulated by laws and norms issued by the state at the national level
  ▪ Study programmes were identical in all institutions (same curricula and syllabi)
  ▪ Universities had no specific budgets and expenditure was regulated by the state down to the smallest detail

❖ In 1983, the University Reform Act transformed the Spanish higher education system
  ▪ Universities became autonomous entities
  ▪ Responsibility for universities was transferred to regional governments
  ▪ Institutions began to receive public appropriations as a lump sum
The structural context I

🌟 **Academic Staff with an “old fashioned” status**
- Mostly civil servants, with salaries and working conditions defined by the central government

🌟 **University Governance: a real challenge**
- Responsibility for managing institutions lies among the staff (academic and non) and students
- Decisions are made in universities by the staff through their collegiate boards
- The results are normally far from being a model of good practice
The structural context II

**Funding: scarce and unbalanced**
- In 1985, the total funding for higher education was only 0.54% of GDP, and in 2000 reached 1.2% of GDP, a figure relatively stable until now
- Lack of diversification
- Scarce role of private funding for higher education:
  - Low fees
  - Low contribution from industry

**Lack of competitiveness for students, staff, funds and reputation**

**Scarce “client power” and social responsibility of institutions**
The economic context: The Valencian Region

- 4.7M inhabitants
- GDP per capita is close to the national average and to the EU-27 average
- 30% population aged between 25 and 34 with higher education qualification
- Internal expenditure on R+D is 0.87% of GDP
- High-technology companies only generate 8% of industrial net added value
Looking for shortcuts

* When circumstances, legal or economic, do not allow universities a better adaptation to the new demands, the most dynamic institutions are able to find shortcuts:

  - **Entrepreneurialism through satellites.** Universities can adopt the solution of not changing the institutional core (because it is legally or culturally difficult, even impossible at the short term) but creating satellites around the university which can adopt an entrepreneurial behaviour.

  - **Entrepreneurialism through individuals.** Another alternative that non-entrepreneurial universities adopt when they have the potential in some individuals is developing individual entrepreneurialism.
The organisational model of the UPV

**The UPV:**
- 34,000 students in Engineering, Architecture, Business and Fine Arts.
- 2,000 doctoral students
- 300 M€ budget

**Shortcuts at institutional level:**
- Public foundations:
  - INNOVA
  - City of Innovation (Scientific Park)
- Market oriented bodies
  - Continuing Education Centre
  - Technological Transfer Centre
  - Employment Centre
  - Entrepreneurialism Centre

**Shortcuts at individual level**
- Recognition: Personal index based on R&I activities (broad sense)
- Operational (and economic):
  - Broad freedom to develop R&I
  - Each teacher can operate as a “Micro-enterprise”
  - Individuals manage 90% of projects income
General results:
- 60 M€ income from competitive sources
- 2,000 publications
- 1,000 projects
- 200 doctoral thesis

The Scientific Park “City of Innovation”
- 32 research institutes and centres
- 5 areas: industrial and power technologies; information and communication technologies; civil engineering; agro-alimentary technology; biotechnology; processes and chemical agents
- 1 Technology Transfer Centre
- 1 Park for companies connected to the UPV
- 120,000 sqm for 1,500 researchers working in strong cooperation with enterprises

INNOVA.
- Foundation to promote university technology networking.
- A partnership between the UPV, the Business Association of Valencia and the regional government.
The life-long learning activity: Continuing Education Centre (CFP)

- The CFP offers over 1,600 courses from a wide range of areas with high demand by the labour market.
- It is part of the Scientific Park
- The total number of enrolled students reached 45,000 last year.
- While in regular degrees, students pay only a portion of the real cost of the courses, CFP fees account for the total cost.
- This centre provides 8.5 M€ to the university budget
- Strong international orientation, delivering courses in other countries, especially in Latin America.
Students: Internationalization and entrepreneurialism

• **International exchange**
  - Foreign students (grade): 2.700
  - Foreign students (doctorate): 900
  - UPV students abroad: 1.200

• **Stages in companies**
  - 54% students spent a period of time at companies

• **Entrepreneurialism among students**
  - Office for promoting creation of companies by students
  - 25 students companies per year (15 years)
Conclusions

- It is possible to design shortcuts for complex realities
  - Promoting entrepreneurialism in Academia
  - Creating entrepreneurial satellite structures

- Developing incentives through
  - Academic recognition
  - Extra funds for individuals and groups

- With positive results for
  - Research
  - Innovation
  - Resources (institution and individuals)
  - Attracting students

- ....and for paving the way for becoming a WCU
Thank you