

# MALTA:

## A Mediterranean Island State, its University and Their Future

**Juanito Camilleri**  
Rector

**Albert Caruana**



University of Malta  
Malta

# Malta: *What is it? Where is it?*

---

- Island located in the centre of the Mediterranean
- Civilization goes back to 5200BC
- Belonged to the main powers that controlled the region
- Land area of 122miles<sup>2</sup> and population of 400,000
- Independent since 1964; joined EU in 2004
- GDP per head €13158; inflation 3.1%; unemployment 6%

# *Focus*

---

- Considers the main models of knowledge and technological development
  - Mode 2
  - National System of Innovation (NSI)
  - Various Triple Helix models
- Adopts a historical perspective of the evolving role of the University, Malta and its industry
- Employs a Triple Helix model and a matrix of different university orientations to outline a vision for the future

## *Mode 2 and NSI*

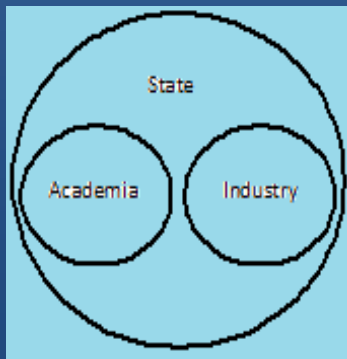
---

- Mode 2 claims to represent a paradigm shift away from the dominance of experimental science within clearly defined disciplines acting as the basis for scientific discovery
- Knowledge is problem focused, trans-disciplinary, not limited to universities, and necessitates multiple accountabilities
- NSI emphasizes the network of institutions and their interactions that result in the development and diffusion of innovation
- R&D on its own is insufficient and needs to be supported by related 'systems' of activities

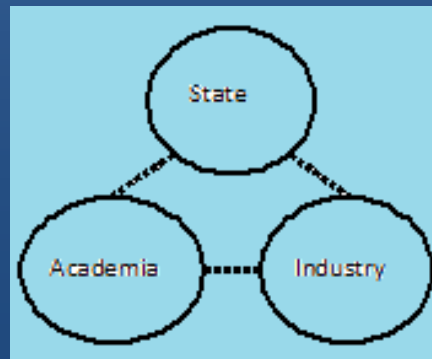
# *Triple Helix Models*

- Uses a DNA biological analogy to describe state-university-industry interaction
- Describes three Triple Helix models that are numbered sequentially and evolutionary
- Argues that today's circumstances require an intensive relationship among parties

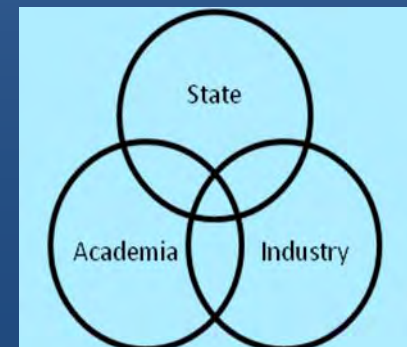
*Triple Helix I*  
*State dominated*



*Triple Helix II*  
*Laissez-faire*



*Triple Helix III*  
*Tri-Lateral Networks*



# *Malta before Independence: The Knights of Malta (1592–1798)*

---

- University of Malta traces its origin to the Jesuit *Collegium Melitense* in 1592
- The Jesuits were banished from Malta in 1768 and the College became a state university in 1769
- University consisted of three professional faculties:
  - Theology provided a flow of trained ecclesiastics
  - Law provided expertise that enabled the functioning of the legal system and the law courts
  - Medicine ensured specialists to man the *Sacra Infermeria* - reputed to be the best hospital in Europe

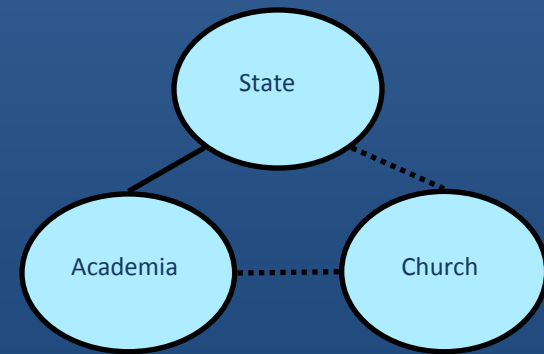
# *Malta before Independence: The British Period (1800–1964)*

---

- After Napoleon took Malta and an uprising by the Maltese, Malta passed to Britain initially as a protectorate and then as a colony
- The Dockyard of the Knights became the R N Dockyard
- Malta's economy was dependent on military expenditure suffering depression in times of peace and boom in times of war and rumours of war
- War came as WWII. Malta withstood the siege but by the end everywhere was in ruins. Thousands emigrated
- After the war the UK services including the Navy saw a rundown; the Dockyard was commercialized in 1959

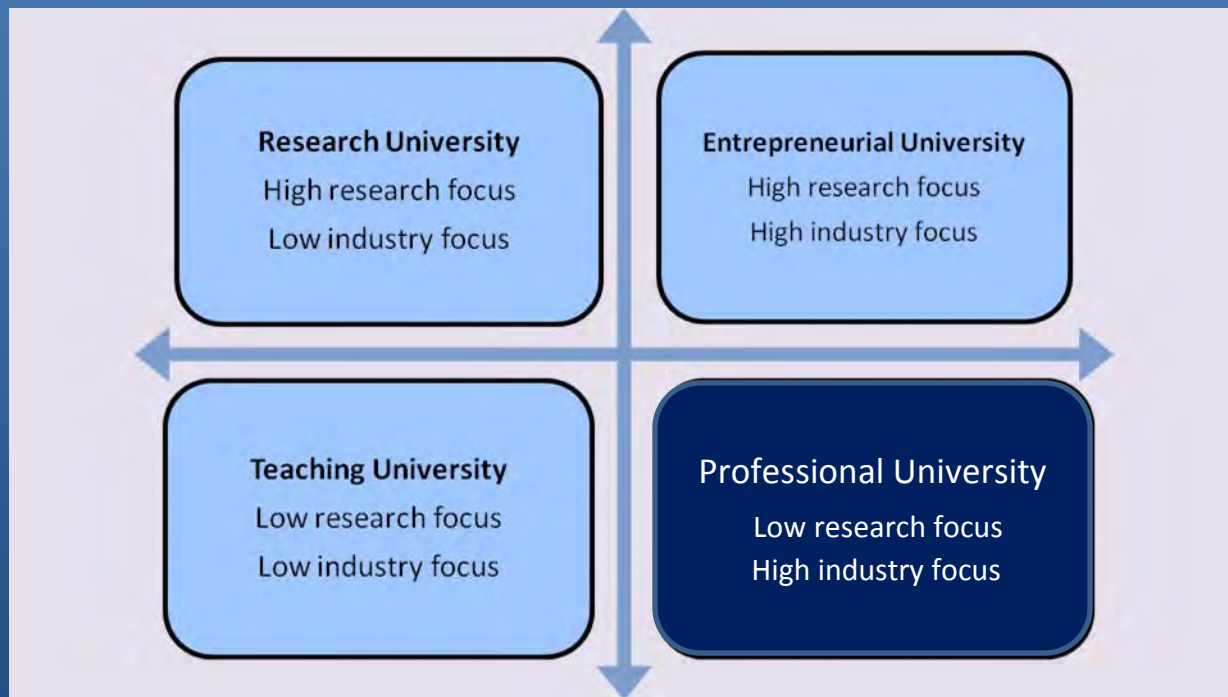
# *Malta before Independence: The British Period (1800–1964)*

- The University added four faculties:
  - Faculty of Philosophy and Arts in 1836 split into the Faculties of Literature and the Faculty of Science in 1915
  - Faculty of Engineering and Architecture in 1915
  - Faculty of Dental Surgery was added in 1954
- The University would gain and lose autonomy regularly and full autonomy came only in 1947
- Difficult to speak of a Triple Helix Model. The Church rather than industry wielded influence



# *Stance in University Evolution*

- Matrix employs a Research Focus and an Industry Focus axis to map possible university development



- The pre industrial Triple Helix described and the focus of the faculties on the professions underlines a Professional University stance

# *Malta after Independence: The Early Years*

---

- A major challenge of subsequent governments has been to foster employment
- Since Independence the Church has witnessed a gradual decline in influence
- In 1968 the University moved from its historic site to a new campus outside Valletta
- The university was edging toward a Triple Helix II

# *Malta after Independence: The Early Years*

---

- Two main industrialization thrusts:
  - Tourism initially targeted British market but has become more diversified and very much a local industry. Most hotels together with the national airline are local companies.
  - Manufacturing originally focused primarily on textiles and clothing. This development was instrumental in fostering an industrial mentality

# *Malta after Independence: The Middle Years*

---

- Labour governments (1971-1986) adopted an interventionist approach
- Nationalization of the banks, communications, ports, airport and a policy of import substitution was pursued
- Overseas investment continued to be attracted in electronics and from German manufacturers

# *Malta after Independence: The Middle Years*

---

- In the late 1970's the University passed through a difficult time when its role was recast into providing professions relevant to Malta's development. It saw the creation of the Faculties of Education, and that of Economics and Management while the Faculties of Science, Art and Theology were suppressed
- The University had become exclusively a Professional University and moved from a Triple Helix model II to a Triple Helix mode I

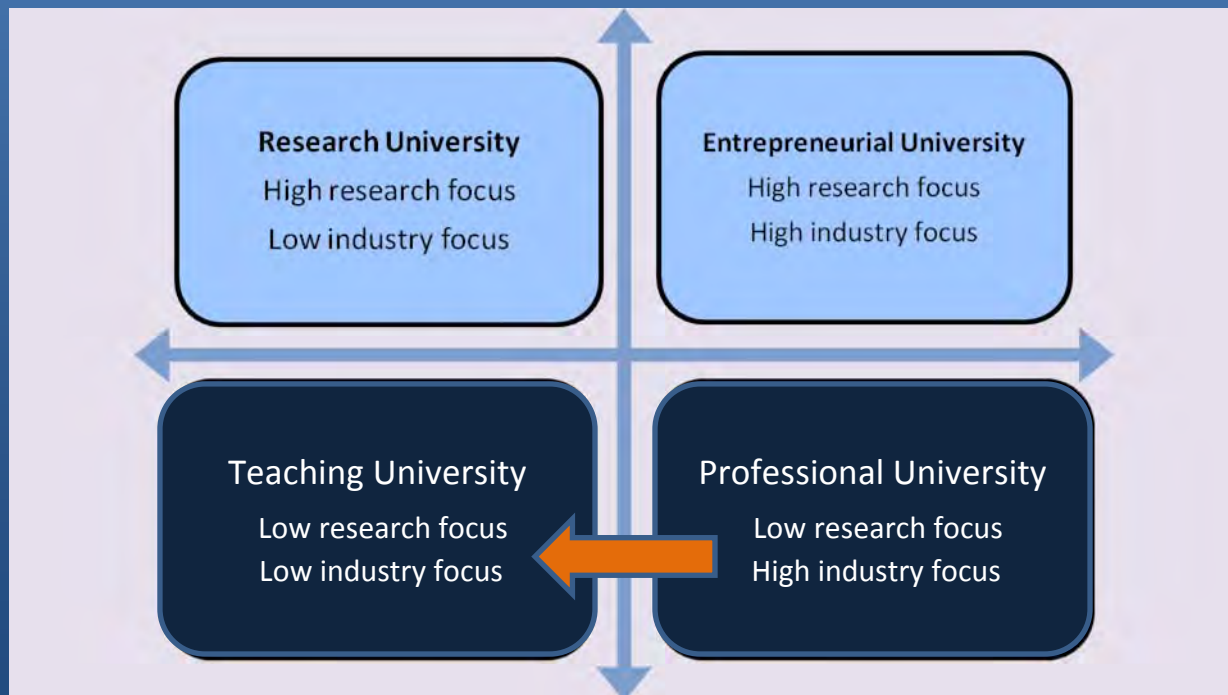
# *Malta after Independence: Recent Years*

---

- Gradual liberalization and new sectors in transshipment, financial services and ICT provided economic growth
- Malta joined the EU in 2004 and the Euro in 2008
- Change came to the university with the reform in 1988. The suppressed faculties were reinstated. New courses offered and numbers grew from 1408 in 1984/5 to 9665 by 2008/9

# *Stance in University Evolution*

- The University moved to a Triple Helix II model and from a Professional University to a Teaching University



# *Malta after Independence: The Future*

---

- Vision 2015

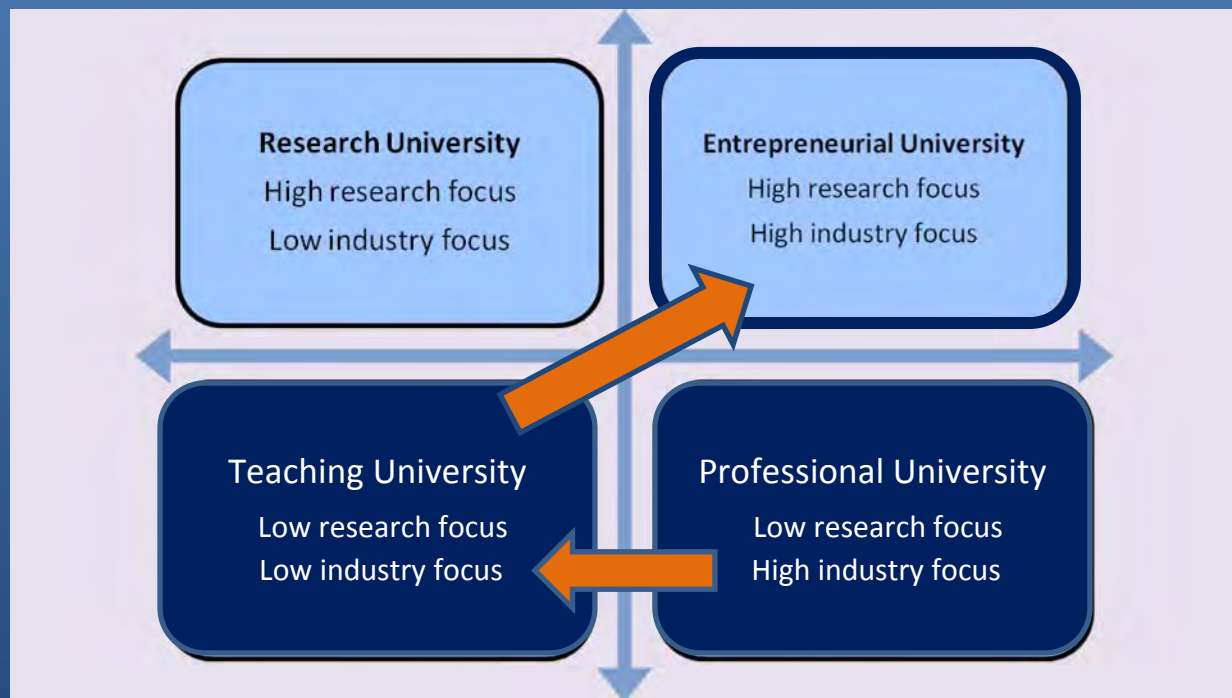
...is of an of an intelligent European, Mediterranean island nation, promoting peace, security, justice and well-being, a smart hub generating wealth and prosperity and an incubator fostering expertise, innovation and entrepreneurship.

- Focus on:

- Hospitality Services
- Maritime Services
- Educational Services
- Health and Care Services
- Business and Financial Services

# *Teaching University to Entrepreneurial University*

- Attaining goals of vision 2015 needs moving to a Triple Helix III and becoming an entrepreneurial university



- Create a milieu that is conducive to Research, Technological Development and Innovation (RTDI)

# *Research Framework for the University of Malta*

---

## **Technologies and Systems to enhance the quality of Services**

- Hospitality Services
- Health Services
- Financial Services
- Transportation Services
- Educational Services
- Communications Services

## **Technologies and Systems to enhance High Value Manufacturing**

- Food
- Electronics
- Software Development;
- Pharmaceuticals
- Other consumables

## **Technologies and Systems to enhance Sustainable Development**

- Water
- Alternative Energy
- Waste Management
- Coastal Management
- Marine
- Agriculture

## **Fundamental Science and Technology**

- Digital Technology and Media
- Biotechnology and Pharmacology
- Earth Sciences

## **Design and Aesthetics**

- Artistic and Content Design
- Architectural and Engineering Design
- Product Design

# *Building the Infrastructure*

---

- Recent revision of the conditions of work of academic staff
- Post-Doctoral Research Fellows
- Setting up of a Trust Fund for Research, Development and Innovation
- Strategic Alliances
- Amendments to the Education Act to strengthen governing structures and autonomy