





**natural lab experiment:  
U. of Malaya vs. NUS**

- early 1960s: 2 branches of University of Malaya
- today, stark difference:
  - THES: NUS # 34, UoM not in top 200
  - SJTU: NUS 101- 151, UoM not in top 500

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## outline of the presentation

- defining the world-class university
- the path to becoming a world-class university
- lessons of experience

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## how do you recognize a world-class university?

- everyone wants one
- no one knows what it is
- no one knows how to get one

*Philip G. Altbach*

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## defining the WCU

- self-declaration

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# the Cambridge MBA

## WORLD CLASS

A 1-year MBA with international students, faculty and corporate connections.  
A global perspective on business practice.

**What will you bring ?**

[worldclass@jims.cam.ac.uk](mailto:worldclass@jims.cam.ac.uk)  
[www.jims.cam.ac.uk](http://www.jims.cam.ac.uk)

 UNIVERSITY OF  
CAMBRIDGE  
Judge Institute of Management  
*Cambridge's business school*



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## defining the WCU

- self-declaration
- reputation
- rankings

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## concentration of talent

- teachers and researchers
- incoming students
- undergraduate / graduate students balance
  - but involving undergraduate students in research
- international dimensions

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## international dimensions

- foreign students
  - Harvard (19%), Cambridge (18%)
- foreign faculty
  - Caltech (37%), Harvard (30%), Oxford (36%), ETH Zürich (60%)
- incoming faculty

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## abundant resources

- dependence on government funding
  - US able to spend 3.3% of GDP (\$54,000 per student) – 1/3 public 2/3 private
  - Europe (E25) only 1.3% (\$13,500 per student)
- endowments

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### Comparison of US and UK Endowment Levels

US Institutions	Endowments Assets (2009 million \$)	UK Institutions	Endowment Assets (2009 million \$)
Harvard University	25,662	Cambridge	6,327
Yale University	16,327	Oxford	5,767
Stanford University	12,619	Edinburgh	264
Princeton University	12,614	Manchester	204
University of Texas	12,163	Glasgow	164

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### Comparison of US and UK Endowment per Student

US Institutions	Endowment per student (2009 \$)	UK Institutions	Endowment per student (2009 \$)
Princeton University	1,667,000	Cambridge	343,934
Yale University	1,408,000	Oxford	283,670
Harvard University	1,209,000	Edinburgh	9,298
Stanford University	824,000	Glasgow	6,952
University of Texas	239,000	Manchester	5,208

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### abundant resources

- government funding
- endowments
- fees
- research funding

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## favorable governance

- freedom from civil service rules (human resources, procurement, financial management)
- management autonomy
  - flexibility and responsiveness with power to act
- selection of leadership team
- independent Board with outside representation

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## U. Of Malaya vs. NUS

- talent
  - UM: selection bias in favor of Bumiputras, less than 5% foreign students, few foreign professors
  - NUS: highly selective, 43% of graduates students are foreign, many foreign professors

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## U. Of Malaya vs. NUS (II)

- finance
  - UM: \$385 million, \$14,000 per student
  - NUS: \$1 billion endowment, \$1,200 million, \$39,000 per student

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## U. Of Malaya vs. NUS

- governance
  - appointment of VC highly political in Malaysia: 10 VCs until 2008 (Prime Minister statement)
  - more professional in Singapore (5 VCs)
  - UM: restricted by government regulations and control, unable to hire top foreign professors
  - NUS: status of a private corporation, able to attract world-class foreign researchers
    - 52% of professors (9% from Malaysia)
    - 79% of researchers (11% from Malaysia)

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## what about Brazil?

- 5<sup>th</sup> most population nation
- 10<sup>th</sup> largest economy on the planet
- 6<sup>th</sup> largest producer of cars
- world-class companies (Embraer, Aracruz Celulose, Petrobras, etc.)
- no Brazilian university among the top 100

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## 2011 Performance of Brazilian Universities

National Rank	Institution	World Rank
1	University of Sao Paulo	102-150
2	State University of Campinas	201-300
3-5	Federal University of Minas Gerais	301-400
3-5	Federal University of Rio de Janeiro	301-400
3-5	Sao Paulo State University	301-400
6-7	Federal University of Rio Grande do Sul	401-500
6-7	Federal University of Sao Paulo	401-500

## what about Brazil?

- talent?
  - selectivity vs. social diversity?
  - inbreeding vs. mobility
  - international orientation?

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## internacional survey

Table 1. In your courses, you emphasize international perspectives or contents

Australia	4.16
Canada	4.08
Hong Kong	3.92
Malaysia	3.90
Korea	3.86
Norway	3.86
UK	3.83
USA	3.83
Finland	3.72
China	3.71
Japan	3.71
Mexico	3.69
Germany	3.69
Argentina	3.51
Portugal	3.50
Italy	3.47
Brasil	3.46
Total	3.76

Scale of answer 5=Strongly agree to 1= Strongly disagree

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## research in a foreign language

Tbale 5. Research language

	First language/mother tongue	Other
Malaysia	15%	85%
Norway	29%	71%
Italy	32%	68%
Hong Kong	33%	67%
Finland	39%	61%
Portugal	42%	58%
Germany	50%	51%
Brazil	55%	45%
Korea	56%	44%
Total	63%	37%
South Africa	64%	36%
Argentina	70%	30%
Canada	70%	30%
Mexico	74%	27%
United Kingdom	82%	18%
United States	85%	15%
Japan	87%	13%
Australia	87%	13%
China	94%	6%

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## what about Brazil?

- talent?
  - selectivity vs. social diversity?
  - inbreeding vs. mobility
  - international orientation?
- resources?
- governance?

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## outline of the presentation

- defining the world-class university
- the path to becoming a world-class university

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## the path to glory

- upgrading existing institutions
- mergers
- creating a new institution

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## upgrading approach

- less costly
- challenge of creating a culture of excellence
- focus on governance

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## who takes the initiative?

- role of the State
  - favorable regulatory framework
  - funding
    - stability over the years

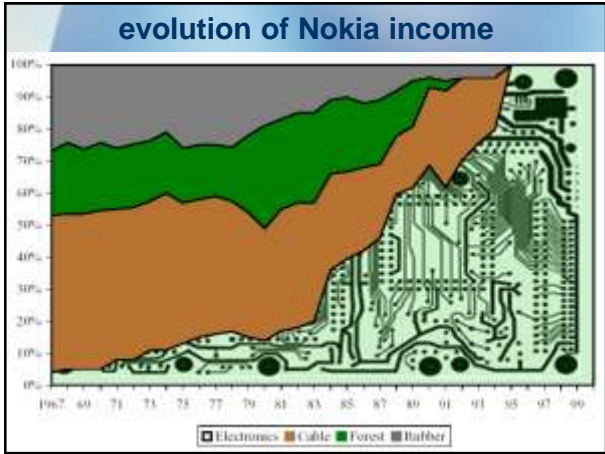
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## who takes the initiative? (II)

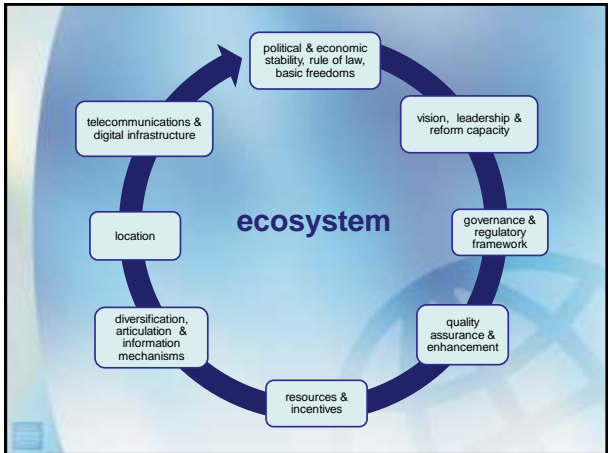
- role of the institutions
  - leadership
  - strategic vision
  - culture of excellence

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- ### outline of the presentation
- defining the world-class university
  - the path to becoming a world-class university
  - **lessons of experience**
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### common mistakes / elements of vulnerability

- focus on the physical infrastructure (U and science park)
- what about the programs, curriculum and pedagogical approach?
- assume that you can import all the content from elsewhere
  - and that pieces from different institutions will gel automatically

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### common mistakes / elements of vulnerability (II)

- delayed appointment of leadership team (lack of ownership)
- capital costs covered, but little attention to operational costs and long-term financial sustainability

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elements

- delay (lack
- capital to op
- foreign cap
- small

... / ... (II)

... ership team

... e attention

... -term

... ilding local

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## importance of sequencing

- concept to strategic plan
- governance arrangements to implementation
- academic plan to physical infrastructure
- QA and accreditation

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# conclusion

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Upgrade your knowledge –  
measure, assess and compare your universities!

## Upgrading & Fixing Universities

FOR  
**DUMMIES**

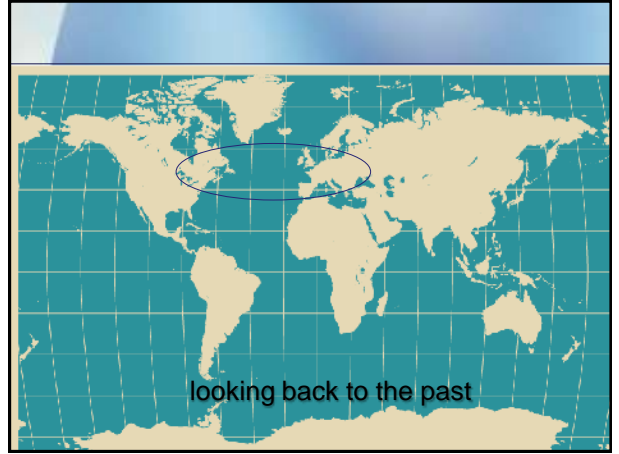
A Reference  
for the  
Rest of Us!

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Pr. Cassio Rolim

Covers maintenance,  
troubleshooting,  
add-ons, and more





## Population per top institution

Country	Top 500	Thousands of people for each top 500 institution
Sweden	11	854
New Zealand	5	874
Finland	5	1073
Israel	7	1082
Switzerland	7	1113
Australia	19	1175
Austria	7	1197
Norway	4	1221
Netherlands	13	1279
Denmark	4	1391
Ireland	3	1484
Belgium	7	1552
Canada	22	1553
United Kingdom	37	1682
United States	151	2051
Slovenia	1	2065
Germany	39	2093
Singapore	2	2570
Italy	22	2753
France	21	3089

## Brazil and China

- Brazil ranks 33 with 7 top institutions (27.8 million people for one top-ranked institution)
- China ranks 35, with 23 top institutions (38.2 million people for one top-institution)
- Evolution between 2003 and 2011
  - Brazil: 4 to 7
  - China: 14 to 23

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## a word of caution

- ❖ stress of competition
- ❖ danger of homogenization

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## Ernest Boyer (Scholarship Reconsidered)

We need a climate in which colleges and universities are less imitative, taking pride in their uniqueness. It's time to end the suffocating practice in which colleges and universities measure themselves far too frequently by external status rather than by values determined by their own distinctive mission.

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## a word of caution

- ❖ stress of competition
- ❖ danger of homogenization
  - *dare to be different*
- ❖ need for diversified tertiary education system
  - universities and non-universities institutions
- ❖ not all institutions "world-class"
- ❖ world-class tertiary education **system**

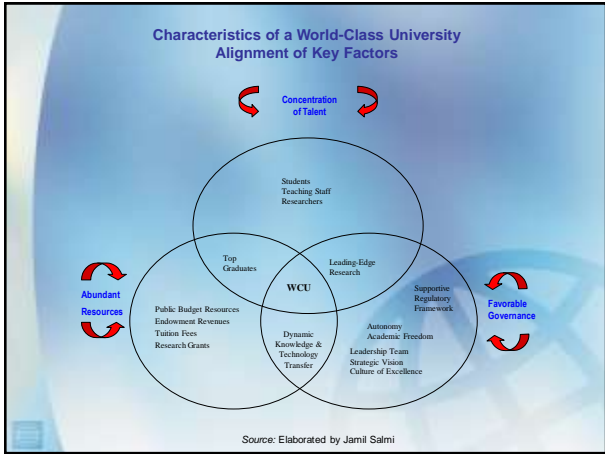
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## money is not enough

- ❖ the most expensive universities in the world are not world-class
  - George Washington U (Washington DC)
  - Kenyon College (Ohio)
  - Bucknell U (Pennsylvania)
  - Vassar College (NY)
  - Sarah Lawrence College (NY)

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## it's all about alignment



danger of complacency







*World Class University Recipe*

*Lots of Talent*

*Plenty of Resources*

*A Touch of Governance*

*Allow to Simmer for a Long Time*