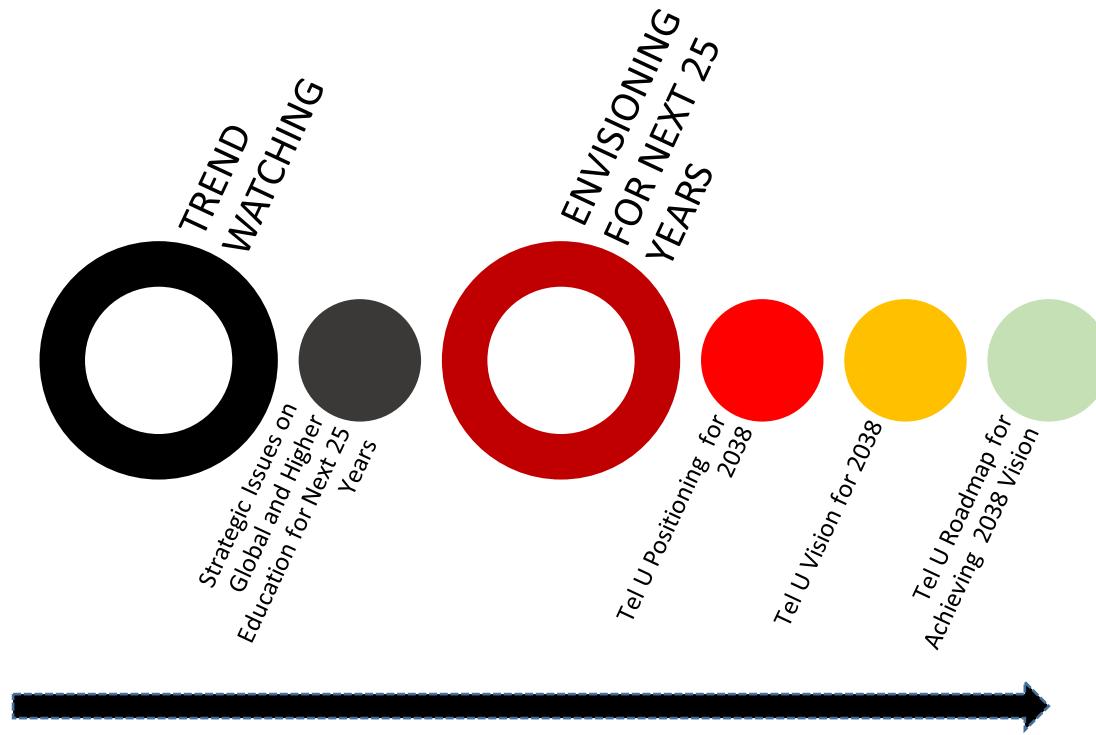


Visi, Misi, Tujuan dan Roadmap Jangka Panjang

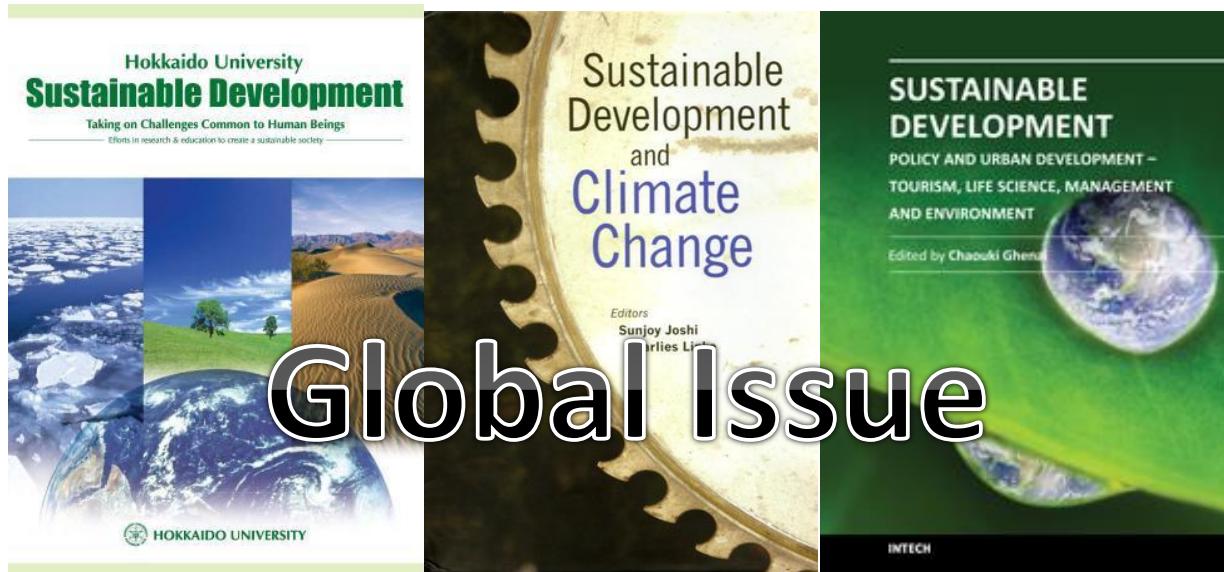


Dr. Ir. Agus Achmad S., MT
Ketua Komisi Pengembangan Senat Telkom University

Pendekatan Perumusan Visi Jangka Panjang Tel U :



References on Strategic Issue for Next 25 Years :



Global Issue

The Economist Intelligence Unit
Intelligence Unit

**Higher education in the 21st century:
Meeting real-world demands**

An Economist Intelligence Unit research programme
sponsored by Academic Partnerships

Higher Education Issue

ACADEMIC PARTNERSHIPS

This section contains a report cover from The Economist Intelligence Unit. The title is 'Higher education in the 21st century: Meeting real-world demands'. It is described as a research programme sponsored by Academic Partnerships. The cover features a graphic with a laptop, a graduation cap, and circuit boards. The overall theme is 'Higher Education Issue'.

PARTNERSHIPS FOR PUBLIC PURPOSES:
ENGAGING HIGHER EDUCATION
IN SOCIETAL CHALLENGES
OF THE 21ST CENTURY

A SPECIAL REPORT BY THE NATIONAL CENTER FOR PUBLIC POLICY AND HIGHER EDUCATION

APRIL 2008

PRESTIGE **PUBLIC PURPOSE**

In the United States, as in virtually any setting, societal need has been a driving force in the founding and evolution of higher education institutions. Through the provision of education as well as research, universities and colleges have contributed substantially to the advancement of public welfare. The Morrill Act and the establishment of land grant colleges, the GI Bill, and the National Defense Science and Engineering Graduate Program are just a few examples of the act of public policy stemming from a broadened conception of higher education's role in serving public purposes, accompanied by a commitment of government at several levels to provide the political

and financial support necessary to realize that potential.

At the outset of the 21st century, a confluence of social, economic, and political forces pose daunting new challenges for the nation's continuing viability. It is clear the need for higher education to assume new responsibilities. There is little question that higher education must be among the most important intellectual and creative resources assembled to address an array of critical challenges confronting the nation, including the nation's ability to attract and retain the best and brightest minds, to produce a growing, aging population, and the survival of economic vitality across a wide demographic range, which entails helping more working adults acquire higher-level skills and knowledge, instilling core human values, and strengthening social structures to ensure that future generations will be able to meet the challenges of the 21st century.

Edited by Philip G. Altbach and Patti McGill Peterson

Higher Education Issue

IIE Institute of International Education and the Boston College Center for International Higher Education

This section contains a report cover from the National Center for Public Policy and Higher Education. The title is 'Partnerships for Public Purposes: Engaging Higher Education in Societal Challenges of the 21st Century'. It is a special report from April 2008. The cover features a scale with 'PRESTIGE' on one side and 'PUBLIC PURPOSE' on the other. The text discusses the role of higher education in addressing societal challenges in the 21st century, mentioning the Morrill Act, GI Bill, and National Defense Science and Engineering Graduate Program. It also discusses the challenges of a growing, aging population and maintaining economic vitality. The report is edited by Philip G. Altbach and Patti McGill Peterson.

IIE Research Report Number Twenty-Nine

**Higher Education
in the 21st Century:
Global Challenge
and National Response**

Edited by Philip G. Altbach and Patti McGill Peterson

Higher Education Issue

IIE Institute of International Education and the Boston College Center for International Higher Education

This section contains a report cover from the Institute of International Education and the Boston College Center for International Higher Education. The title is 'Higher Education in the 21st Century: Global Challenge and National Response'. It is Research Report Number Twenty-Nine. It is edited by Philip G. Altbach and Patti McGill Peterson. The cover features the IIE logo and the text 'Institute of International Education and the Boston College Center for International Higher Education'.

STRATEGIC ISSUES ON HIGHER EDUCATION FOR NEXT 25 YEARS

- 1 • The age of knowledge, **Globalization**, Increasing Educated Work Force Demand (James J Duderstadt, 1999)
- 2 • **Educators and business leaders cooperation**, High demand on education, Technology based education system, **Internationally mobile students**, **Global Capacity Building** (Albatch & Peterson, 1999)
- 3 • **Crossing geographic boundaries**, Creative Financing, The Digital Domain ; Massive Open Online Courses /MOOC (The Economist, March 2014)
- 4 • Evergreen Student, **Globalization**, Faculty Support, Smart Buildings, Enrollment and Retention, Job Alliances, Mobility, Safety and Security, Library Transformation, Web 2.0 and Interactive Teaching, Data Management (Tracey Wilen-Daugenti, 2007)
- 5 • Equity of access, Enhancing Participation and Promoting role of woman, Advancing knowledge through research, **Long term orientation based on relevance**, **Strengthening cooperation with the world of work and society**, Lifelong Learning. Innovative Educational Approaches (UNESCO, 1998)

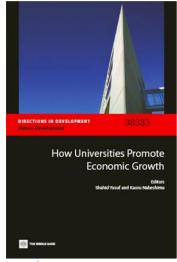
STRATEGIC ISSUES ON FOR NEXT 25 YEARS



Globalization



University Industry Linkage

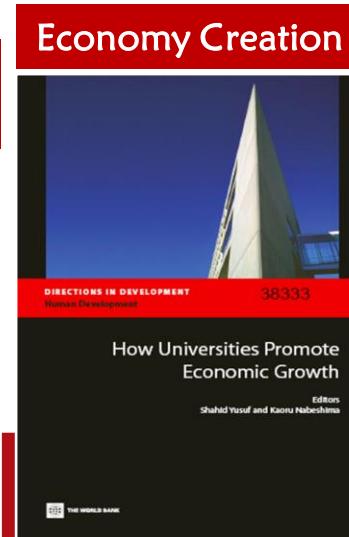
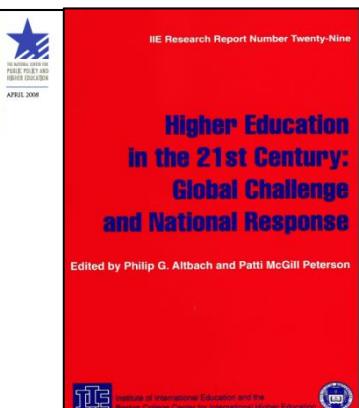
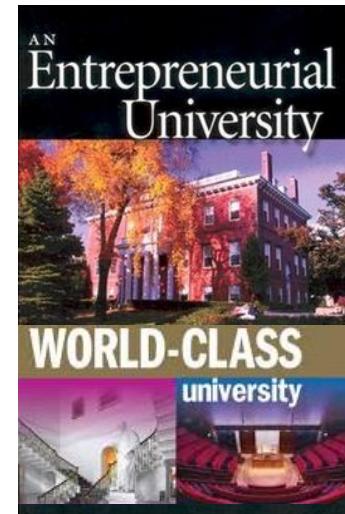
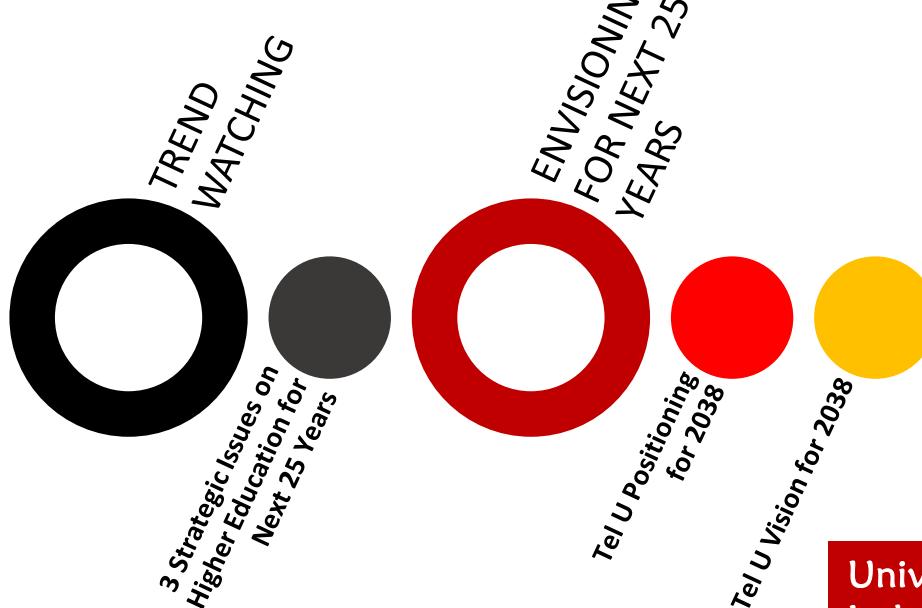
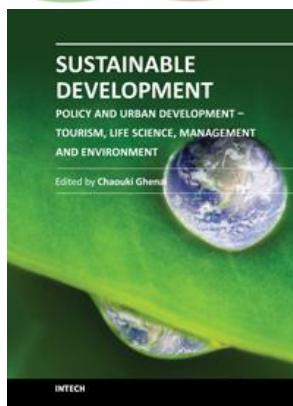
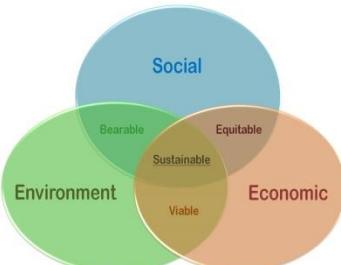


Economic Development



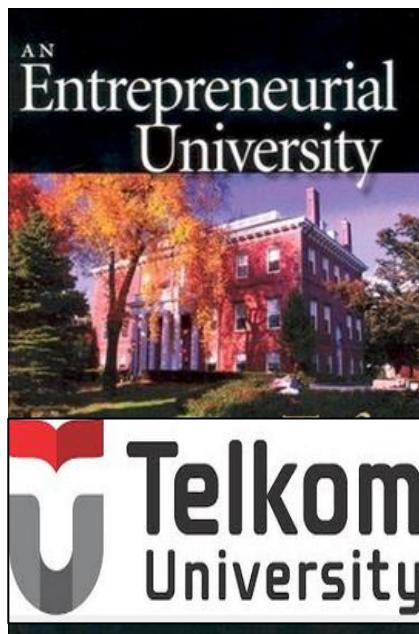
Sustainable Development

Trend Watching & Envisioning Tel –U for 2038 :



Long term Telkom University Vision (2038) :

To Become a Global Entrepreneurial University



*Represents :
Institutional Capability*



*Represents :
Institutional "Business" Operation*

Rumusan Misi Jangka Panjang Telkom University (2038) :



Menyelenggarakan sistem pendidikan dengan dasar keilmuan yang kuat, bersinergi antar disiplin ilmu, berwawasan kewirausahaan dan berorientasi global (***global innovative entrepreneurial education system***)



Menyelenggarakan penelitian lanjut (***advance research***) yang menghasilkan pengetahuan baru (***new knowledge***) dan produk –produk intelektual bernilai ekonomi (***intellectual economic value products***) sesuai kebutuhan bangsa dan dunia.



Turut serta dalam meningkatkan kemajuan bangsa dan dunia melalui penerapan ilmu pengetahuan yang dikembangkan dan mendorong menciptakan unit-unit bisnis baru (***new business incubators***).



Menjalankan fungsi perguruan tinggi secara harmonis (***harmony***) antara kepentingan ekonomi, sosial dan lingkungan (***economic, social and environment interests***)

Rumusan Tujuan Jangka Panjang Telkom University (2038) :



Menghasilkan lulusan berdaya saing global (*global competitive graduates*) dan *technopreneur* sukses (*Successful technopreneurs*)



Menghasilkan penelitian yang berkontribusi pada penciptaan pengetahuan baru dan produk intelektual yang bernilai ekonomi (*new knowledge and economic value creation*)



Menghasilkan dan mendorong tumbuhnya perusahaan-perusahaan baru (*spinoff companies*) yang berdampak pada peningkatan kemajuan bangsa dan dunia



Menjadi agen kemajuan bangsa dan dunia serta turut serta dalam menjaga kelestarian budaya bangsa dan lingkungan dunia (*sustainable development*)

Silicon Valley: Inisiasi Stanford University





Cikal Bakal Silicon Valley

- Frederick Terman, Dekan Fakultas Teknik **Stanford University**, setelah Perang Dunia 2 mengajak para mahasiswa dan lulusannya untuk berkarya menghasilkan “**perusahaan baru**”
- Frederik Terman mencari **sponsor** kepada **pemerintah maupun industri terkait** untuk keberlanjutan Silicon Valley
- Aktivitas di laboratorium Stanford University menjadi penyumbang utama, berdirinya perusahaan-perusahaan baru di awal Silicon Valley

Pusat Pertumbuhan Ekonomi USA & Dunia

- Banyak perusahaan muncul dari ekosistem di Silicon Valley ini, contoh saat ini **Facebook, Google, Yahoo, WA**
- **Venture Capitalist** dan capitalist dunia lainnya menjadi pendorong tumbuhnya Silicon Valley sebagai pusat peradaban

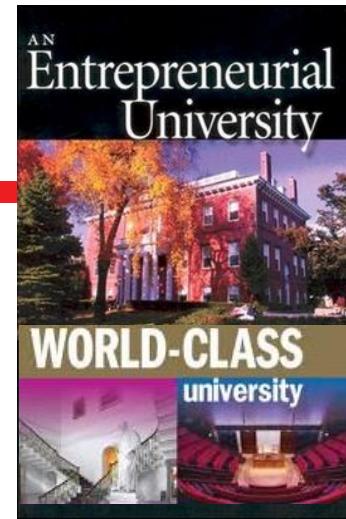
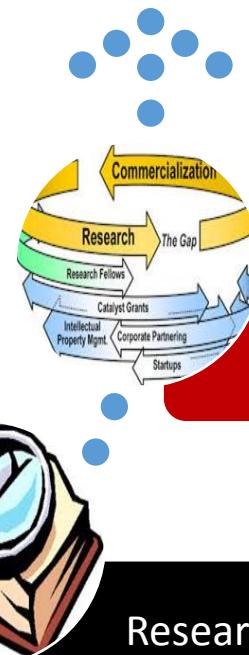
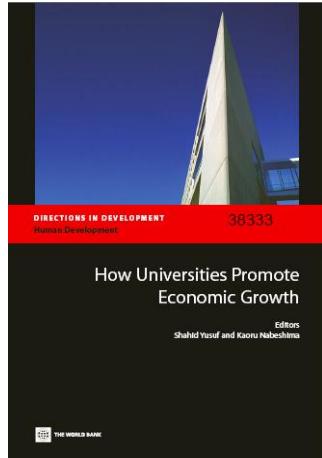
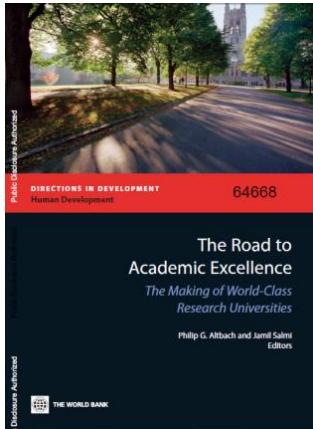
Tsinghua Science Park



Tuspark memberikan bukti suatu keberhasilan dari Triple Helix



Main Roadmap for Achieving The Vision (Metaphore)



Mega
Economic
Contribution

Entrepreneurial
University

Knowledge
Creation

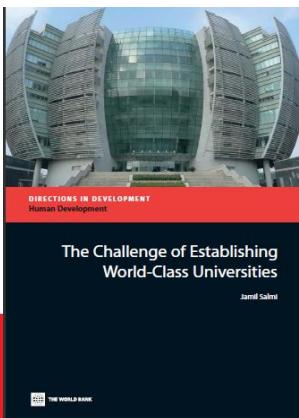
Macro

Research University

Quality of
Education

Micro

Teaching University



Fokus Pengembangan Tahap I :

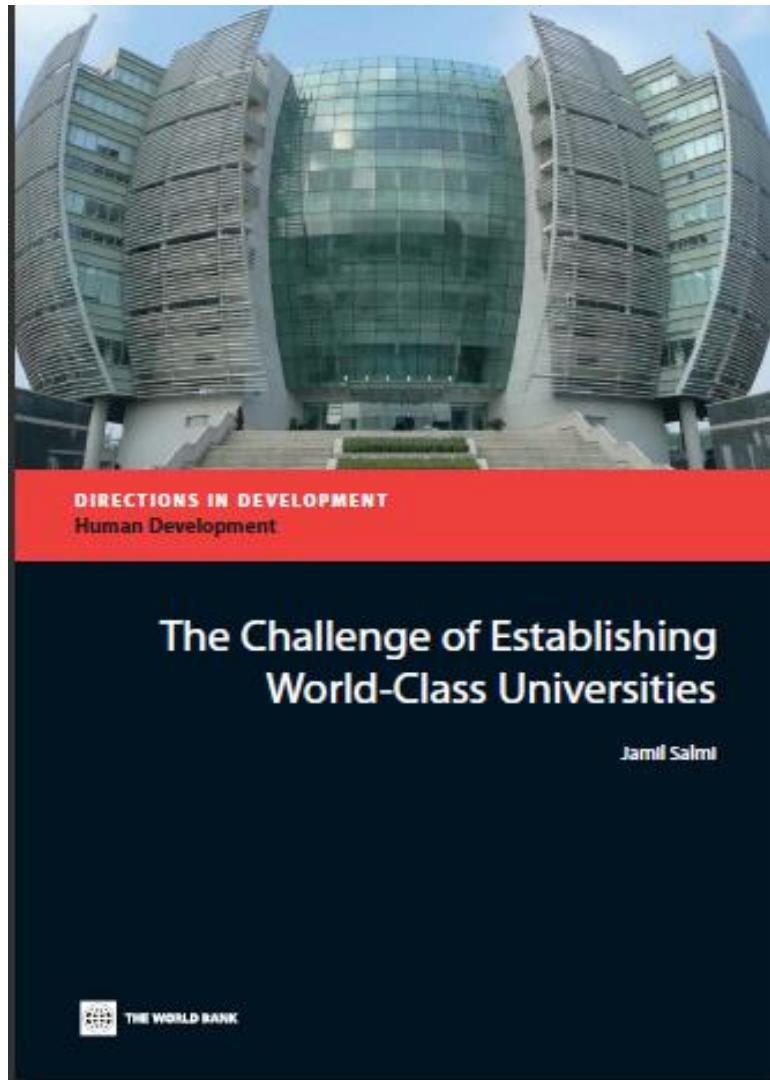
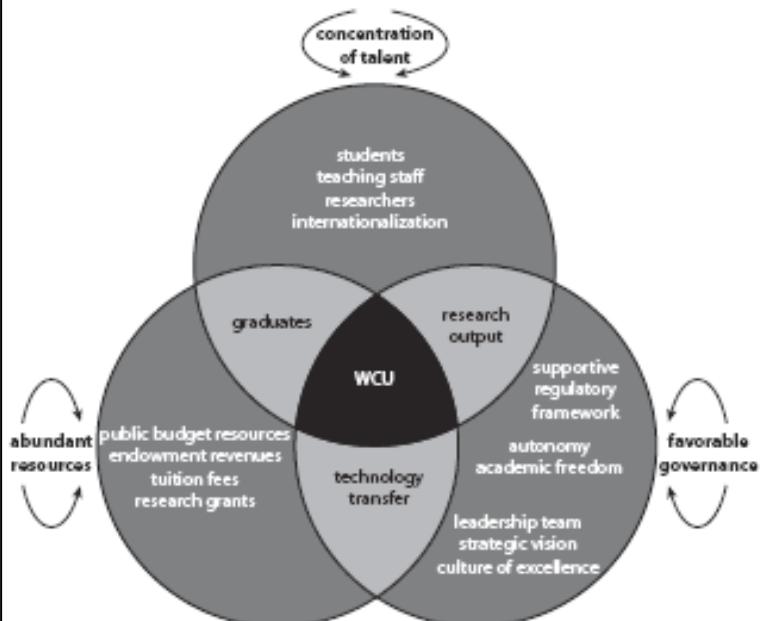


Figure I.1 Characteristics of a World-Class University: Alignment of Key Factors



Source: Salmi 2009.

Note: WCU = world-class university.

Fokus Pengembangan Tahap II :

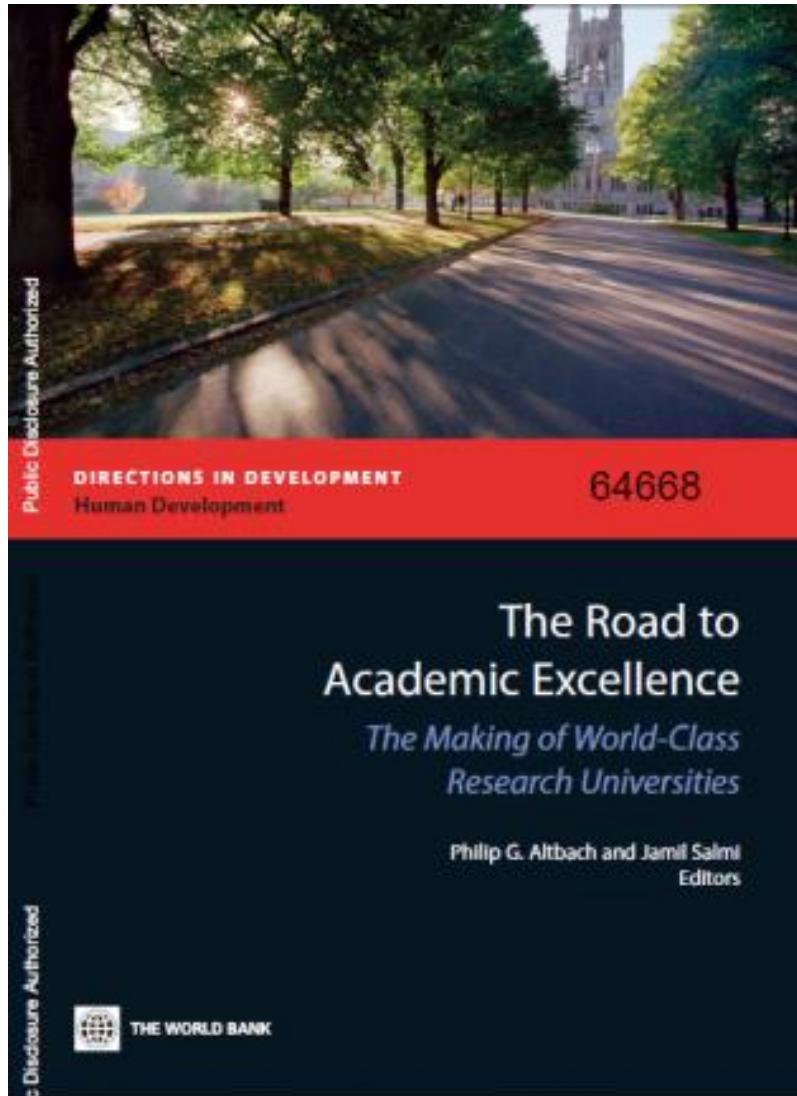


Table I.1 Evolution of the Research Production of the Selected Institutions, 1999–2009

Institution	Number of articles published in top journals	
	1999	2009
University of Ibadan (Nigeria)	132	568
Shanghai Jiao Tong University	650	7,341
Pohang University of Science and Technology (Republic of Korea)	706	1,516
University of Chile	548	1,186
Pontifical Catholic University of Chile	385	1,153
Indian Institutes of Technology*	345	939
Hong Kong University of Science and Technology	949	1,857
University of Malaya	257	1,565
National University of Singapore	2,101	4,614
Monterrey Institute of Technology (Mexico)	55	242
Higher School of Economics (Russian Federation)	3	38

Building World-Class Universities in China: Shanghai Jiao Tong University 41

Governance Structure and Management Reform

The Academic Council

Benchmarking and Evaluation

Campus Development

Improvement of Faculty Quality

Encouragement of Academic Discipline Development and Research Excellence

Development of Academic Disciplines

Encouragement of Research Excellence

Promotion of Internationalization Strategies

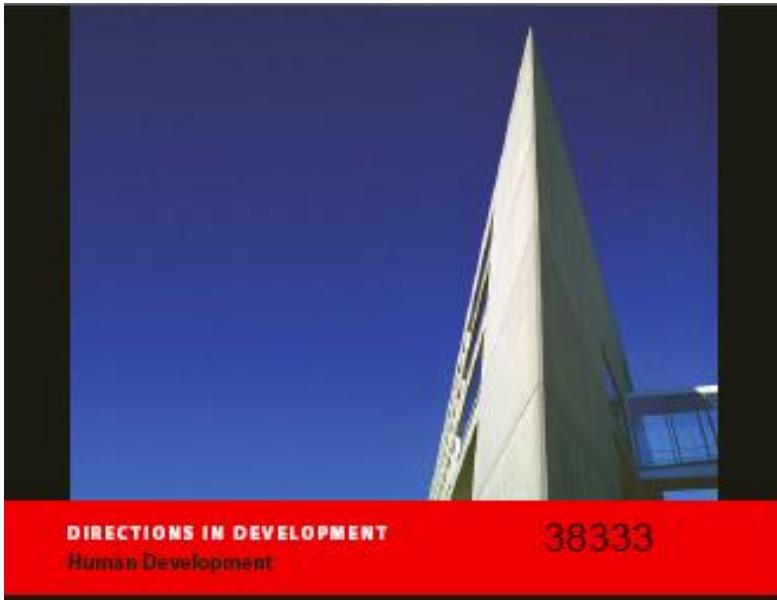
Bilingual Teaching and Learning

Summer Schools, Exchange Students, and Internships

Dual Degree Programs and Joint Institutes

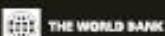
Diversification of Financial Resources

Fokus Pengembangan Tahap III



How Universities Promote Economic Growth

Editors
Shahid Yusuf and Kaoru Nabeshima



Patenting

The number of patent applications from and patents granted to NUS has visibly increased in the 2000s compared with the 1990s. The total number of NUS patent applications grew from an annual average of fewer than 80 between 1997 and 1999 to more than 100 in 2004. The number of patents granted also registered a distinct increase between 2000 and 2004, averaging 30 per year versus 13 per year between 1997 and 1999.

Table 12.2. Profile of Changes in NUS before and after Shift to Entrepreneurial University Model

Indicator	FY 1996/97	FY 2004/05
Teaching staff	1,414	1,765
Foreign share (%)	39.0	51.9
Research staff	843	1,087
Foreign share (%)	70.1	78.6
Undergraduate students enrolled		
Graduate students enrolled		
Graduate students share of total enrollment (%)		
Foreign students studying at NUS (%)		
Total research funding ^a (S\$ million)		
Share of industry-sponsored research ^c (%)		
Total research projects funded ^b		
Research publications		
Share of articles in refereed journals (%)		
Patents filed		
Patents granted		
Cumulative patents granted by USPTO and IPOS		

Sources: NUS various years; U.S. Patent and Trademark Office; Inf

Licensing

A clear increase in the intensity of technology commercialization from 2000 is also evident. As of the end of fiscal year 2004, NUS had made 239 technology licensing agreements. Of these, only one-fourth were issued before 2000; the remaining three-fourths were signed between 2000 and 2004. The majority of NUS licenses up to 2003 were signed with commercial companies (44.8 percent) or NUS start-ups (29.5 percent); the remainder were signed with government bodies or public research institutions.

Entrepreneurial Spinoffs

The results of NUS's change in policy after 2000 are also evident. Of the 82 spinoffs and start-ups formed between 1980 and 2004, two-thirds were established from 2000 onward. Focusing only on spinoffs, which are companies formed to commercialize NUS's patented inventions (as opposed to other faculty start-ups that do not involve NUS-owned intellectual property), one finds that NUS's average spinoff formation rate of four to five per year in recent years is creditable, even though it remains much lower than those of some of the top American universities, such as the Massachusetts Institute of Technology (23 spinoffs in 2002), Stanford (13), and Harvard (7) (Wong and Ho 2006).

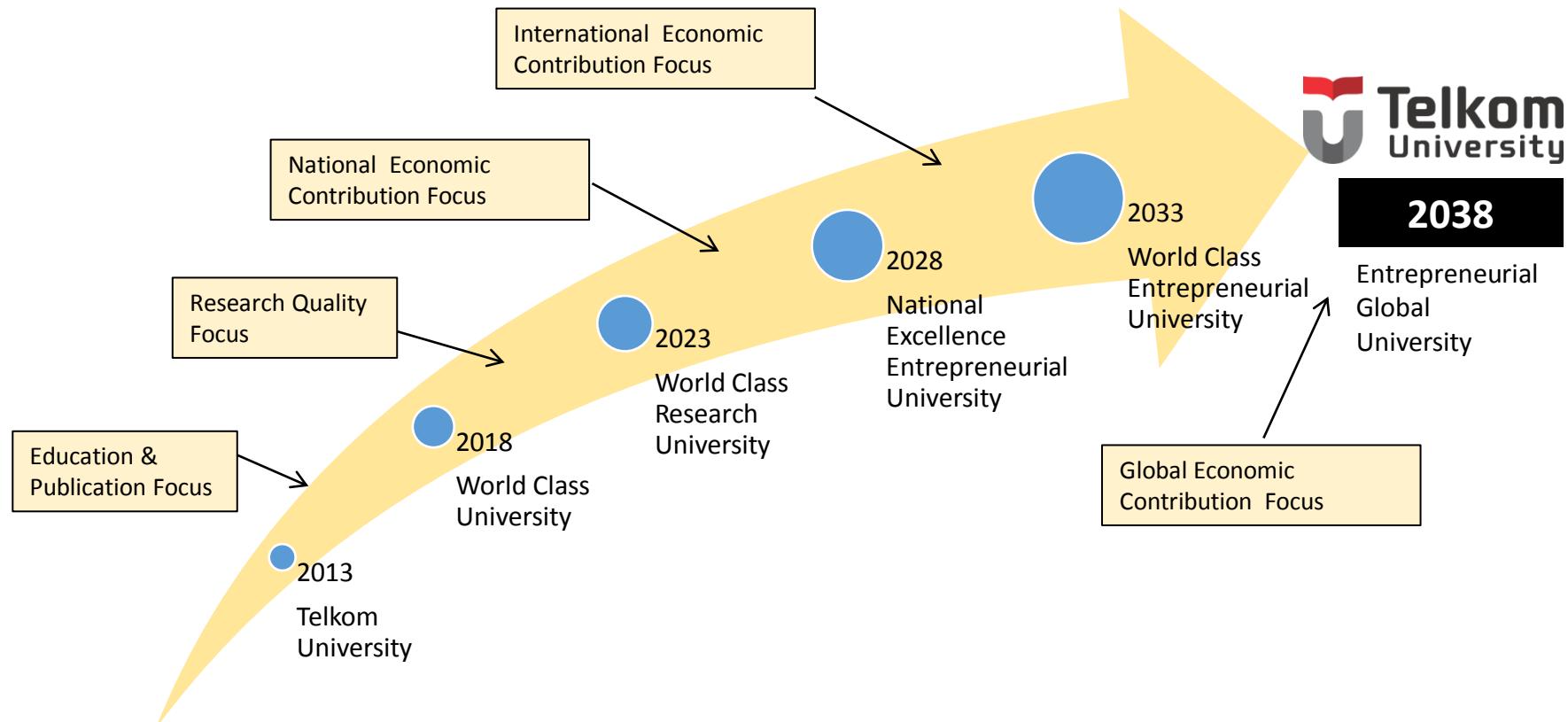
Industry-Sponsored Research

The proportion of university R&D expenditure accounted for by industry-sponsored research has also visibly increased over the past few years, reaching 12 percent in fiscal year 2004/05. Although this proportion is still lower than proportions in the Massachusetts Institute of Technology and Imperial College, it is higher than the average among many leading U.S. and U.K. universities (Wong and Ho 2006).

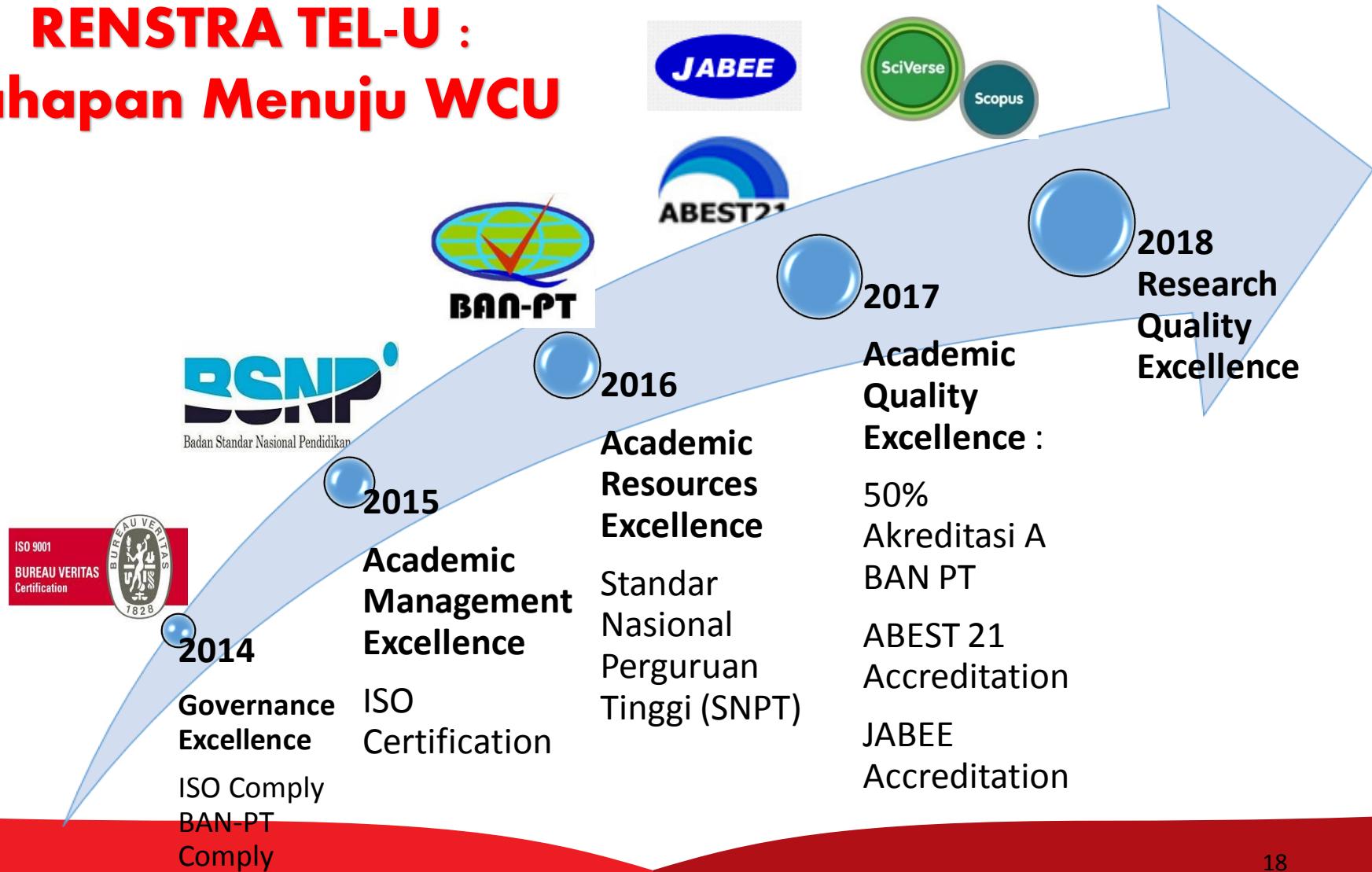
Attraction of Foreign Talent

A marked increase in NUS's role in attracting foreign talent is also evident in terms of both student intake and recruitment of faculty members and researchers. Between fiscal years 1996/07 and 2004/05, the propor-

Mile Stones for Achieving as The Entrepreneurial Global University @ 2038



RENSTRA TEL-U : Tahapan Menuju WCU

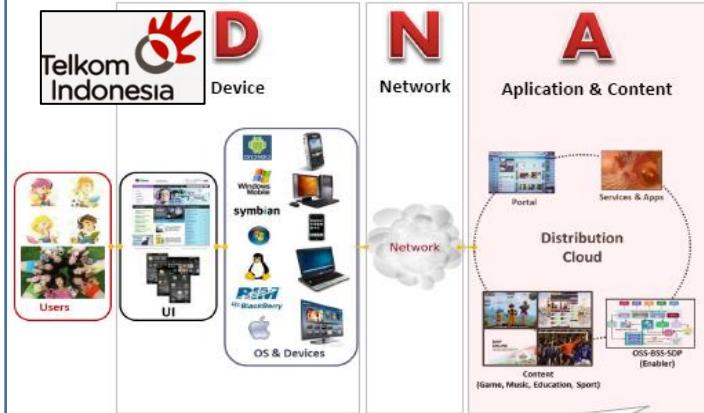


Our Recent Strengths and Opportunities for Achieving The Vision



Strength

Opportunity



THE FIRST 5 YEAR STRATEGY I FOR ACHIEVING THE VISION (2014-2019: Quadruple Helix : ABCG (Strength – Opportunity)

Triple Helix + Community



The concept of the Triple Helix of university-industry-government relationships initiated in the 1990s by Etzkowitz (1993) and Etzkowitz and Leydesdorff (1995)





Telkom University



@TelUniversity



TelkomUniversity



www.telkomuniversity.ac.id



BANDUNG TECHNOPLEX – JL. Telekomunikasi, Terusan Buah Batu, Bandung, West Java, Indonesia 40257

Phone: +62 22 75641088 | Fax: +62 22 7565200 | Email: info@telkomuniversity.ac.id

**Terima Kasih
Semoga Bermanfaat**