Ayo bangkit dari lamunan ........

Merajut Inovasi Insani
dengan Spirit Socio-entrepreneur
untuk Kejayaan Negeri

Oleh : Rektor UGM
Goal

Daya tahan dan daya saing

Indonesia > th 2045
Kejayaan Nusantara

Teaching University

Research (Intensive) University

Teaching Industry

2000-2015 ??

Indonesia Memimpin Dunia

2025 ??

Spirit: Socio-entrepreneurial

Locally Rooted, Globally Respected

www.ugm.ac.id
World Population Projection

- >70% world’s population is in Asia-Africa region
- Asia-Africa must be biggest contributor to future talent and global leader pool

Source: Population Reference Bureau, 2013
Global common problems

- Scarcity and mismanagement of natural resources
- Natural and man-made disaster
- Social conflict and violence
- Poverty

ENVIRONMENT SAFETY
HUMAN SURVIVABILITY
SOCIETY RESILIENCE

Burning Issues

How we can nurture the resilient future leaders
National root problems

- Ignorance of the values of indigenous knowledge, believes and wisdom
- Lack of recognition and respect on diversity as the driving force for adaptation and innovation
Challenges

Volatility Uncertainty Complexity Ambiguity
Multiple Challenges

• Global competition: Asean Singgle Community, TPP, EU, etc.
• Global common problems
• National threatens:
  – Disintegration
  – Radicalism
  – Drug
  – Value disorientation
Global common problems

- Scarcity and mismanagement of natural resources
- Natural and man-made disaster
- Social conflict and violence
- Poverty

ENVIRONMENT SAFETY
HUMAN SURVIVABILITY
SOCIETY RESILIENCE

How we can nurture the resilient future leaders
National root problems

- Ignorance of the values of indigenous knowledge, believes and wisdom
- Lack of recognition and respect on diversity as the driving force for adaptation and innovation
## Regional Disparity

<table>
<thead>
<tr>
<th>Region</th>
<th>Population ('000)</th>
<th>Living in poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Sumatera</td>
<td>2,049.64</td>
<td>4,127.54</td>
</tr>
<tr>
<td>Jawa</td>
<td>7,119.22</td>
<td>8,703.35</td>
</tr>
<tr>
<td>Bali, NTB, NTT</td>
<td>626.02</td>
<td>1,363.55</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>254.60</td>
<td>678.33</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>337.09</td>
<td>1,708.50</td>
</tr>
<tr>
<td>Maluku, Papua</td>
<td>121.20</td>
<td>1,505.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,507.77</strong></td>
<td><strong>18,086.87</strong></td>
</tr>
</tbody>
</table>

**Large Disparity!**
University Mission Differentiation

Big numbers, large diversity!

I. Basic research institutions (e.g., Oxford University)
   - Fundamental science orientation

II. Relevant research institutions (e.g., MIT)
   - Application orientation

III. Teaching focussed institutions (e.g., Liberal art colleges)
   - Fundamental science orientation

IV. Professionally oriented institutions (e.g., Polytechnics, Community colleges, Grande Ecoles, professional institutions)
   - Application orientation
## Number of Patents Granted by U.S. Patent and Trademark Office, Selected Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>23,151</td>
<td>32,922</td>
<td>36,679</td>
</tr>
<tr>
<td>Singapore</td>
<td>35</td>
<td>242</td>
<td>450</td>
</tr>
<tr>
<td>Taiwan, China</td>
<td>1,252</td>
<td>5,806</td>
<td>7,779</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>586</td>
<td>3,472</td>
<td>8,731</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11</td>
<td>47</td>
<td>168</td>
</tr>
<tr>
<td>Thailand</td>
<td>2</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>China</td>
<td>41</td>
<td>163</td>
<td>1,874</td>
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<tr>
<td>Indonesia</td>
<td>9</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Philippines</td>
<td>7</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Yang Terjadi ... *Gap of Confidence*

**Ketrampilan Umum**

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**Ketrampilan Teknis**

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*Kulenjang Ketrampilan dan Kompetensi*

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**LULUSAN UNIVERSITAS**

---

**EKSPERTASI PENGGUNA**

---
... are Reflected in Early Year Performance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>High</td>
</tr>
<tr>
<td>Peers</td>
<td>Medium</td>
</tr>
<tr>
<td>Training and Developing</td>
<td>High</td>
</tr>
<tr>
<td>Selecting</td>
<td>Low</td>
</tr>
<tr>
<td>Appraising</td>
<td>Medium</td>
</tr>
<tr>
<td>Leadership</td>
<td>High</td>
</tr>
<tr>
<td>Listening</td>
<td>Medium</td>
</tr>
<tr>
<td>Delegating Authority and Responsibility</td>
<td>Medium</td>
</tr>
<tr>
<td>Understanding of Technology</td>
<td>Low</td>
</tr>
<tr>
<td>Control of Quality</td>
<td>Medium</td>
</tr>
<tr>
<td>Control of Costs</td>
<td>Low</td>
</tr>
<tr>
<td>Definition of Objectives</td>
<td>Low</td>
</tr>
<tr>
<td>Performance Against Objectives</td>
<td>Medium</td>
</tr>
<tr>
<td>Initiative</td>
<td>High</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>Low</td>
</tr>
<tr>
<td>Oral and Written Communication</td>
<td>High</td>
</tr>
<tr>
<td>Creativity</td>
<td>Medium</td>
</tr>
<tr>
<td>Decision-Making</td>
<td>Medium</td>
</tr>
<tr>
<td>Ability to Work Under Pressure</td>
<td>Low</td>
</tr>
<tr>
<td>Energy Level</td>
<td>Low</td>
</tr>
</tbody>
</table>

Personal Research on Performance Factor of 1-3 Years Seniority Employees
## Development Stages at Each Tier of HEIs

<table>
<thead>
<tr>
<th></th>
<th>Fully-developed</th>
<th>Developing</th>
<th>Less-developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nation’s competitiveness</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Autonomy</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Organizational health</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>
Concept and Approach

COMPETENCE

Value Alignments

Untuk merubah / membangun perilaku

- Organisasi
- Process
- SDM

Excellence Performance

- Daya Saing
- Daya Tahan
Strategi menghadapi Multiple Challenges & Memenangkan Persaingan

• Daya saing
  – Cermat dalam membaca/ menganalisis risiko dan peluang.
  – Berani dan Jitu dalam memutuskan
• Daya tahan :
  – Cepat bangkit dari kegagalan (Tangguh/ Resilience)

Spirit Socio-entrepreneur
Strategi menghadapi
Multiple Challenges & Memenangkan Persaingan

• Daya saing
  – Cermat dalam membaca/menganalisis risiko dan peluang.
  – Berani dan Jitu dalam memutuskan
• Daya tahan :
  – Cepat bangkit dari kegagalan (Tangguh/ Resilience)
  – INDONESIA > 2045

Personal Quality
• Daya saing :
  – Logika pikir, kemampuan bahasa/komunikasi aktif
  – Kreatif dan inovatif
  – Trampil
  – Kekuatan berjejaring
• Daya tahan : Persyaratan
  – Adaptif
  – Fleksibel
Nurturing *Leaders* is a long term investment

Company acts as the *Ecosystem for Personal Development*

*Value Alignment* is fundamental in talent acquisition

*Unlearning* must be part of the personal development program

Indonesian *can lead* the world. Trust me!
Nurturing Talents to be Global Leaders

Value Alignment

Sponsor
Mentor
Coach

Future Life Competencies
Opportunity
Diversity
Early Responsibility
Exposure inc. Mobility
International Standard of Excellence
Meritocracy

Future Life Competencies
The Development Ecosystem

- University
- Govt
- Private Sector
- Community

Policy

- Collaborative Research Base
- Develop the Science
- Define Leadership Model
- Build Development Framework
- Develop Mentoring Scheme

- Development Partner
- Best Practices

Diversity
Exposure
Insight and Wisdom
Interaksi, Kolaborasi, Jejaring

Paparan, Tantangan & Pengayaan Pengalaman

Misi, Visi, Nilai, Pola Pikir, Perilaku, Tujuan

Sistem Manajemen Terpadu

Kurikulum Teknis Akademis

Kurikulum Non-Teknis & Ekstra Kur.

Kebhinnekaan

Kepercayaan, Toleransi, Inovasi, Perubahan

Penilaian dan Umpanganbalik

Mentoring & Coaching

Pengungkit IT, KM, Learning System, Perpustakaan, Infrastruktur dsb

Strategi Penerimaan Mahasiswa, Pengajar, Staff

PENGABDIAN MASYARAKAT

PENDIDIKAN

PENDIDIKAN T

PENELITIAN
The Making of a Leader
Percepatan untuk bangkit dari lamunan

• Reorientasi Academic Excellent Values:
  – Adaptif Curriculla & Learning Process, Teaching Industry
  – Global Leadership Program

• Redefine the future targets:
  – Redesain HRD system (misal : pengembangan penilaian kinerja)
  – Debirokrtisisasi: otonomi lokal utk Pembinaan SDM dan Pengembangan Akademik
  – Deregulasi : Diversifikasi regulasi
Concept of hybrid socio-technical system (socio-preneur)

**TECHNICAL SYSTEM**
- MAP + INSTRUMENTS

**RESEARCH & EDUCATION**
- Research-based education

**SOCIAL SYSTEM**
- Community service

**KEY DRIVING POWER**
- Research action

**RESILIENCY SUSTAINABILITY**
- Empowerment

**SCIENCE-BASED IMPLEMENTATION**
- Early Warning System

**HYBRID SOCIO-TECHNICAL SYSTEM**
- Key driving power

**RESILIENCY SUSTAINABILITY**
- www.ugm.ac.id
Three in one package

Geology Eng.

Social Science + Psychology

Civil & Env. Eng. + Electrical Eng.

Student Community Service (SCS-CEL) - 20 students in 2 months

Research-Based Community Service Program
ACADEMICALLY AND PROFESSIONALLY QUALIFIED HUMAN RESOURCES

- Reference for HRD Values Alignment
- (Menjadi Contoh Dunia atas SDM yang Berintegritas dan Berjiwa UGM)
- Academically and Professionally Qualified Melalui Berbagai Indikator Tridharma dan Pendukung

- HRD Setara 150 Perguruan Tinggi Besar Dunia

- Center for HE-Management Training in ASEAN
- Best Performance-based Remuneration System in ASEAN

- Autonomous Professorship
- Professional through Vertical and Horizontal Recruitment
- Internationally Standardized HRD System

- Accountable and Flexible HRD Policy and Regulation,
- Remuneration System,
- HRD Syllabi to Build Integrity and Professionalism,
- Etc. that We Lack of
<table>
<thead>
<tr>
<th>Teaching Factory and Teaching Industry</th>
<th>Business R&amp;D and Industrial Incubation Center</th>
<th>High Tech Yogyakarta Campus (HTCY)</th>
<th>Word Class / Reference for Industrial Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science and Techno Park Development</td>
<td>ASEAN Center for Business and Industrial R&amp;D by Dual System and Industrial Linkage</td>
<td>HIGH TECH YOGYAKARTA INDUSTRIAL CAMPUS</td>
<td>WORLD REFERENCE FOR FUTURE SCIENCE AND TECHNOLOGY</td>
</tr>
<tr>
<td>Multicampus Initiation in Asia and Africa Regions</td>
<td>Center for Humanity, Indigenous Knowledge, Bioethics, Pancasila and Nusantara Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOOC and Menara Air Liberal Arts Initiative</td>
<td>Socio-entrepreneurial Center (Innovative Academy), Liberal Arts Enhancement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Year Range</th>
<th>Year Range</th>
<th>Year Range</th>
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</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Existing</th>
<th>Initiator</th>
<th>Trendsetter</th>
<th>Leader</th>
<th>World Reference</th>
</tr>
</thead>
</table>

Future Modelling for Academic Masterplan Universitas Gadjah Mada
<table>
<thead>
<tr>
<th>KEBIJAKAN YANG MENDUKUNG PERLUASAN MAKNA PENGABDIAN</th>
<th>START UP COMPANIES IN SMALL MEDIUM LEVEL (INNOVATION INDUSTRIES)</th>
<th>LEADER IN NATIONAL AND INTERNATIONAL COMMUNITY EMPOWERMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUSTAINABLE COMMUNITY EMPOWERMENT MODELS</td>
<td>MENARA AIR AND COMMUNITY OF PRACTICES</td>
<td>UGM AS WORLD REFERENCE FOR COMMUNITY RESILIENCE</td>
</tr>
<tr>
<td>MENARA AIR AND COMMUNITY OF PRACTICES</td>
<td>UGM MODEL FOR MOOC TOWARDS NATIONAL DIGNITY AND RESILIENCE THROUGH DIGITAL-BASED KNOWLEDGE SHARING MANAGEMENT)</td>
<td>INNOVATIVE AND RESILIENCE COMMUNITY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXISTING</td>
<td>INITIATOR</td>
<td>TRENDSETTER</td>
<td>LEADER</td>
<td>WORLD REFERENCE</td>
</tr>
</tbody>
</table>
Repeater Interface for real-time landslide monitoring data on PC/web

Local server for data acquisition and data logger and Receiver

FIELD SENSORS

Digital Extensometer (Upper/underground)

Wireless Tiltmeter and its controller

Automatic Rainfall Recorder (ARR)

Ultrasonic water level sensor

IP Cam and Wi-fi

PC-based monitoring

Control Room

Interface for real-time landslide monitoring data on PC/web

Sirene and Rotary Light as warning devices

Latest innovation
Installation of Monitoring Devices

Extensometer

Latest innovation of most adaptive technology
Installation of Monitoring Devices

2008-2009

Fieldserver

2012-2013

IP Camera

Latest innovation of most adaptive technology

Locally Rooted, Globally Connected
Situbondo (2007)
Banjarnegara (2007)
South Sulawesi (2008)
Yogyakarta (2010)
ICL (2007)
UGM in cooperation with Ministry for the Development of Disadvantage Regions (KPDT)
UGM in cooperation with National Agency for Disaster Management (BNPB)
UGM in cooperation with Private Mining Company
UGM in cooperation with International Consortium on Landslides (ICL - DPRI Kyoto Univ.)
UGM in cooperation with National Oil & Gas Company (2013)
Myanmar (2012)
Cianjur (2009)
Pariaman (2012)
Karanganyar (2008)
Palu (2012)
South Sulawesi (2008)
South Kalimantan (2009)
Banjar (2007)
ICL (2009)
UGM in cooperation with International Consortium on Landslides (ICL-DPRI Kyoto Univ.)
UGM in cooperation with National Oil & Gas Company (2013)
TERIMA KASIH