The Connectivity Between University and Industry in Disruption Era
- The Malaysian Experience

ISHAK YUSSOF, Professor (PhD)
Schools of Economics, Faculty of Economics and Management, UKM
(Pro-Vice Chancellor, Universiti Kebangsaan Malaysia)

Presentation Outline

• Introduction
• Industry 4.0
• Disruptive Era – technology, innovation etc.
• University-Industry Collaboration Framework
• The Malaysian Experience
• Conclusion
Introduction

The importance of University-Industry connectivity has been well recognised globally...

- possible benefits to the university...
  - stay relevant
  - avoid mismatch and waste of resources – ensure appropriate talent are provide to the economic system
  - developing knowledge frontier through R&D
  - access to financial resources to fund research activities

- possible benefits to the industry...
  - access to highly skilled problem solvers
  - find practical solutions to business oriented or product-related problems
  - creating long-term links with the university sector
  - the identification and recruitment of employees
  - branding, quality and develop product standards

It is even critical in the era of rapidly changing economy powered by Industry 4.0!
New ways of doing things that disrupt or changes the traditional business model and economic activities/behaviour...
Example of Digital Disruptions

Seven (7) of these companies did not exist twenty years ago

Source: Ali Selamat et al. 2017 MOHE, Malaysia

Inspiring Futures, Nurturing Possibilities

Technologies Impact

Technologies that will have the greatest impact in driving business transformation

<table>
<thead>
<tr>
<th>Technologies</th>
<th>Global</th>
<th>U.S.</th>
<th>China</th>
<th>Japan</th>
<th>ASPAC</th>
<th>EMEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud – SaaS/PaaS/IaaS</td>
<td>11%</td>
<td>13%</td>
<td>9%</td>
<td>13%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Internet of things/ M2M</td>
<td>9%</td>
<td>8%</td>
<td>14%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Data &amp; analytics</td>
<td>9%</td>
<td>13%</td>
<td>8%</td>
<td>3%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Mobile - platforms and apps</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Robotics</td>
<td>6%</td>
<td>4%</td>
<td>8%</td>
<td>3%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Cyber security</td>
<td>6%</td>
<td>10%</td>
<td>5%</td>
<td>7%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Biotech/digital health/healthcare IT</td>
<td>5%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>3D printing</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Artificial intelligence/cognitive computing</td>
<td>5%</td>
<td>8%</td>
<td>9%</td>
<td>23%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Digital currency platforms (e.g., Bitcoin, payment systems, etc.)</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Biometrics: gesture, facial, voice</td>
<td>4%</td>
<td>4%</td>
<td>12%</td>
<td>3%</td>
<td>8%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: KPMG Technology Innovation Survey 2015

Inspiring Futures, Nurturing Possibilities
Conclusion

- In rapidly changing economy and disruptions, connectivity between university and industry need to be further strengthened
- Area for collaborations must focus to recent development within the technology frontier of Industry 4.0

THANK YOU and best wishes to all