Value co-creation in platform ecosystems: SynBio cases in Finland and California

Jeffrey Pittaway, Erkko Autio, David Rejeski
jeffrey.pittaway@imperial.ac.uk
Value chains and platforms

Source: Pagani 2013, MIS Quarterly
Platform ecosystems → Generativity

Foster Generativity?
Avoid Pitfalls?
Static governance mechanisms
Governance modes X ecosystem life cycle?

Birth

Expansion

Leadership

Renewal

Evolution of an ecosystem

Birth

<table>
<thead>
<tr>
<th>Significance</th>
<th>Governance Mode</th>
<th>Finland</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Static</td>
<td>Industry</td>
<td>Industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Univ.</td>
<td>Univ.</td>
</tr>
<tr>
<td></td>
<td>Dynamic</td>
<td>Policy</td>
<td>Policy</td>
</tr>
<tr>
<td>Low</td>
<td>Static</td>
<td>Keystone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industry</td>
<td>Policy</td>
</tr>
<tr>
<td></td>
<td>Dynamic</td>
<td>Policy</td>
<td>Policy</td>
</tr>
</tbody>
</table>
Leadership → Slow Growth

Finland

<table>
<thead>
<tr>
<th>Governance Mode</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Significance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>Univ.</td>
<td>Policy</td>
</tr>
<tr>
<td>Keystone</td>
<td>Industry</td>
<td>Policy</td>
</tr>
<tr>
<td>Low Significance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

California

<table>
<thead>
<tr>
<th>Governance Mode</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>Policy</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>Policy</td>
<td></td>
</tr>
</tbody>
</table>

Jeffrey Pittaway and Erkko Autio
Renewal & Expansion

**Finland**

- **High Significance**
  - Static Governance Mode: University
  - Dynamic Governance Mode: Keystone

- **Low Significance**
  - Static Governance Mode: Keystone
  - Dynamic Governance Mode: Policy

**California**

- **High Significance**
  - Static Governance Mode: University
  - Dynamic Governance Mode: Open Source

- **Low Significance**
  - Static Governance Mode: Industry
  - Dynamic Governance Mode: Policy

Jeffrey Pittaway and Erkko Autio
Leadership → Tipping Point

Finland TIPPING POINT

- Governance Mode
  - Static
  - Dynamic

- Significance
  - High
  - Low

- Organization
  - Keystone
  - Industry
  - Univ.
  - Policy

California SUSTAINABLE

- Governance Mode
  - Static
  - Dynamic

- Significance
  - High
  - Low

- Organization
  - Policy
  - Industry
  - Univ.
  - Open Source

Jeffrey Pittaway and Erkko Autio
Lessons learned (preliminary)

- Dynamic *and* static governance modes
- Mix should adapt to ecosystem life cycle
- Life cycle is not linear
- Don’t formalise too early
- Keystone actors:
  - Firms, Individuals: sufficient but not necessary at birth, renewal
  - Open source: supports sustainability
- Policymakers should fund *business model experimentation*
Value co-creation in platform ecosystems: SynBio cases in Finland and California

Jeffrey Pittaway, Erkko Autio, David Rejeski
jeffrey.pittaway@imperial.ac.uk