Chapter 7

Openness
Defining What Platform Users/Partners Can & Cannot Do

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Platform Revolution:
Chapter 7 – Openness

1. Introduction: Welcome to Platform World
2. Network Effects: The Power of the Platform
3. Architecture: Basic Principles for Designing Successful Platforms
4. Disruption: How Platforms Conquer & Transform Traditional Industries
5. Launch: Chicken or Egg? 8 Ways To Launch Successful Platforms
6. Monetization: Capturing the Value Created by Network Effects
7. Openness: Defining What Platform Users/Partners Can & Cannot Do
8. Governance: Policies That Increase Value and Enhance Growth
10. Strategy: How Platforms Change Competition
11. Policy: How Platforms Should (and Should Not) Be Regulated
12. Future: Industries Facing Imminent Change
GOOGLE MASH-UPS

PAUL RADEMACHER COMBINES MAPS WITH CRAIGS LIST.

Lawyers say Sue!  Engineers say Hire!
REUSABLE IDEAS
When Spore launched, the premise was that users would create their own content for each other through the action of playing---other examples?
OPEN INNOVATION

“a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology” (Chesbrough, 2003).
CROWDSOURCING

“The act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call” 
(Jeff Howe 2006)
<table>
<thead>
<tr>
<th>CLOSED INNOVATION PRINCIPLES</th>
<th>OPEN INNOVATION PRINCIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The smart people in our field work for us</td>
<td>Not all of the smart people work for us* so we must find and tap into outside knowledge and expertise.</td>
</tr>
<tr>
<td>To profit from R&amp;D we must discover, develop, and ship it ourselves.</td>
<td>External R&amp;D can create value; internal value is needed to realize this.</td>
</tr>
<tr>
<td>If we discover it, we will get it to market first.</td>
<td>We don’t have to originate the research in order to profit from it.</td>
</tr>
<tr>
<td>If we are the first to commercialize an innovation, we will win.</td>
<td>Building a better business model is better than getting to market first.</td>
</tr>
<tr>
<td>If we create the most and best ideas in the industry, we will win.</td>
<td>If we make the best use of internal <em>and</em> external ideas, we will win.</td>
</tr>
<tr>
<td>We should control our IP so that our competitors don’t profit from our ideas.</td>
<td>We should profit from others’ use of our IP, and se should buy other’s IP when it fits our business model.</td>
</tr>
</tbody>
</table>
OPEN INNOVATION: COMMERCIALIZE IDEAS FROM INSIDE AND OUTSIDE. BOUNDARY IS POROUS.

GE AIRCRAFT BRACKET CHALLENGE

GE and GrabCAD asked designers to improve upon this bracket. It weighs 2,033 grams.

Marie Kurniawan was able to slash the original bracket weight by nearly 84 percent to just 327 grams. His design is inspired by the H-beam profile. $7K prize.

GE Executive Director of Global Innovation Steve Liguori said, “At GE, we know innovation can come from anywhere.”

WHAT IS OPENNESS?

ACCESS

- 1. Is source code freely available to all developers, at the same time?
- 2. Is source code available under a permissive OSI-approved license?
- 3. Developer support mechanisms – are project mailing lists, forums, bug-tracking databases, source code repositories, developer documentation and developer tools available to all developers?
- 4. Is the project roadmap available publicly?
- 5. Transparency of decision mechanisms – are project meeting minutes/discussions publicly available such that it is possible to understand why and how decisions are made relating to the project?

Source: VisionMobile “Open Governance Index” 2011
WHAT IS OPENNESS?

DEVELOPMENT

• 6. Transparency of contributions and acceptance process – is the code contribution and acceptance process clear, with progress updates of the contribution provided (via Bugzilla or similar)?
• 7. Transparency of contributions to the project – can you identify from whom source code contributions originated?
• 8. Accessibility to become a committer – are the requirements and process to become a committer documented, and is this an equitable process (i.e., can all developers potentially become committers?). Note that a “committer” is a developer who can ‘commit’ code to the open source project. The terms ‘maintainer’ and ‘reviewer’ are also used as alternatives by some projects.
• 9. Transparency of committers – can you identify who committers to the project are?
• 10. Does the contribution license require a copyright assignment, a copyright license or patent grant?

Source: VisionMobile “Open Governance Index” 2011
WHAT IS OPENNESS?

DERIVATES

• 11. Are trademarks used to control how and where the platform is used via enforcing a compliance process prior to distribution?

• 12. Are go-to-market channels for applications derivatives constrained by the project in terms of approval, distribution or discovery?

COMMUNITY STRUCTURE

• 13. Is the community structure flat or hierarchical (i.e., are there tiered rights depending on membership status?)

Source: VisionMobile “Open Governance Index” 2011
A firm in charge of a business platform is a firm in charge of a microeconomy.

We can control the openness, the duration of IP rights, and thus the spillovers
OPENNESS VS. CONTROL

MAXIMUM PROTECTION ≠ MAXIMUM VALUE

Your Reward = (Value added to industry) x (Your share)

Based on: Shapiro & Varian ’99
ANDROID FRAGMENTS

2Q 2014 Smartphone Results Forked Android AOSP Grows 20% Quarter-on-quarter Driven by Chinese Domination
GOOGLE REASSERTS CONTROL

Google’s iron grip on Android – Controlling open source by any means necessary
OPEN VS. CLOSED / FRAGMENTED VS. INTEGRATED
The Model

We need a platform and multiple rounds of innovation.
Sponsor offers platform of value $V$ – Then gives some of it away.

Developers build apps for installed base, adding new layers of value.

Benefits:
- Sponsor from increased sales, and downstream royalties.
- Developer from cost savings and installed base.

Sponsor bundles new innovation into platform. Makes it freely available.

Repeat
OPENNESS TRADEOFF: LOWER REVENUES VS. MORE APPS

Average selling price (and gap) of iOS and Android smartphones worldwide

More open system has lower price

More open system has more apps

Total Number of Apps by App Store

More open system has lower price

More open system has more apps
THE COMPUTER INDUSTRY STACK 1983

CONSULTING
APPLICATIONS
TOOLS
OS
NETWORKING
PERIPHERALS
COMPUTERS
## THE COMPUTER INDUSTRY STACK 2002

<table>
<thead>
<tr>
<th>Consulting</th>
<th>Accenture</th>
<th>EDS</th>
<th>KPMG</th>
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<tbody>
<tr>
<td>Applications</td>
<td>Adobe</td>
<td>Autodesk</td>
<td>IBM</td>
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<tr>
<td>Tools</td>
<td>Borland</td>
<td>IBM</td>
<td>Microsoft</td>
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<tr>
<td>OS</td>
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<td>Linux</td>
<td>Microsoft</td>
</tr>
<tr>
<td>Networking</td>
<td>Cisco</td>
<td>Compaq</td>
<td>IBM</td>
</tr>
<tr>
<td>Peripherals</td>
<td>Canon</td>
<td>HP</td>
<td>Kodak</td>
</tr>
<tr>
<td>Computers</td>
<td>Apple</td>
<td>Compaq</td>
<td>Dell</td>
</tr>
<tr>
<td>Processors</td>
<td>AMD</td>
<td>Intel</td>
<td>Motorola</td>
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# LAYERS IN THE ITUNES MOBILE STACK 2011

<table>
<thead>
<tr>
<th>CUSTOMER NETWORK</th>
<th>msn</th>
<th>Yahoo! Music</th>
<th>Facebook</th>
<th>Spotify</th>
<th>myspace</th>
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<tbody>
<tr>
<td>MOBILE OPERATORS</td>
<td>at&amp;t</td>
<td>verizon</td>
<td>T-Mobile</td>
<td>vodafone</td>
<td>Sprint</td>
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<tr>
<td>CHANNEL</td>
<td>lala</td>
<td>Zune</td>
<td>Rhapsody</td>
<td>Amazon.com</td>
<td>Pandora</td>
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<tr>
<td>CONTENT</td>
<td>WMG</td>
<td>Sony BMG</td>
<td>Universal</td>
<td>EMI</td>
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<td>APPLICATION</td>
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<tr>
<td>OPERATING SYSTEM</td>
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<tr>
<td>HARDWARE</td>
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OPEN ARCHITECTURE VS IP RIGHTS

Closed

Architecture

Open

Only the lead firm, proprietary

Excluded unless invited

Welcome unless excluded

Public open access

Closed

IP Rights

Open
WHAT DOES CONTROLLING OPENNESS MEAN?

1. Open Access
2. Extend Platform
3. Touch Customers
   - Split IP control from Customer contact control
4. Change Platform
MODELS FOR ORGANIZING PLATFORMS

One Sponsor

One Provider

DVPRS | USERS
-----|-----
PROVIDER | SPONSOR

1) Proprietary: e.g. Mac

Many Providers

DVPRS | USERS
-----|-----
PROVIDERS | SPONSOR

2) Licensing: e.g. Google Android

Many Sponsors

DVPRS | USERS
-----|-----
PROVIDER | SPONSORS

3) Joint Venture: e.g. Orbitz

DVPRS | USERS
-----|-----
PROVIDERS | SPONSORS

4) Shared: e.g. Linux

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APPLE TRIED TO CONTROL TOO MUCH OF THE ORIGINAL MAC

- Remember MacWrite, MacPaint?
- Charged ~$10,000 for SDKs.
- Controlled OS & HW and dominant Apps.
- Vertical integration choked network effects.
MICROSOFT OPENED MUCH MORE OF ITS ECOSYSTEM BUT MAINTAINED CONTROL

- Microsoft had 6-10X developers
- Open APIs / Cheap SDKs
- Controlled OS, licensed.
- Strong network effects.
LINUX WAS TOO OPEN

- Difficult to capture value
- Difficult to plan technology
- Difficult to cross-subsidize
FOR REAL PROFITS, CONTROL FULL LAYER

- Linux
  - No one driving the bus.
  - Limited scope of control.

- Joint Venture
  - Contact layer allows financial choke point.

- Licensing
  - Can shut off access to IP of underlying platform.

Open
Closed
DANGER!

Watch for new control points closer to customer.

Microsoft fear of Netscape
SAP fear of ADP

AT&T fear of Apple
Apple fear of Google Maps

DVPRS USERS

SPONSOR

Open Closed
DANGER!

Watch for loss of control as ecosystem partners develop features you don’t have
# TAKEAWAYS FROM CHAPTER SEVEN

The ability to remix content and to add 3rd party value is why openness matters.

Openness entails tradeoffs: The more closed system is more tightly integrated and lets you charge more. The more open system innovates faster but can fragment.

Openness also represents a form of intellectual property policy. Absorbing 3rd party innovations, i.e. taking control, reduces fragmentation and hold-up but also stifles 3rd party contributions.

Openness applies at two levels of the platform: architecture and governance. Ask whether participation at each level is open to 3rd parties.

Openness applies to at least four parties: Users, Producers, Providers (relationship control), and Sponsors (governance control)

In open platforms, watch out for provider partners who seek to control the complete relationship and commoditize the platform sponsor.
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