Democratic Innovation at Google

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Lost In Translation

Innovation Potential

Innovation Model

Actual Innovation
Innovation Models

Top-down
Democratic
<table>
<thead>
<tr>
<th>Top-down Innovation</th>
<th>Democratic Innovation</th>
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<tbody>
<tr>
<td>1. Create a Research Lab</td>
<td>1. Create an innovation culture</td>
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<tr>
<td>2. Hire a bunch of PhDs</td>
<td>2. Use <em>all</em> employees</td>
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<tr>
<td>3. Ideas: few, big &amp; from the <em>top</em></td>
<td>3. Ideas: lots from everywhere</td>
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<td>4. Close and secretive environment and results</td>
<td>4. Open and shared environment and results</td>
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<tr>
<td>5. Formal research proposals</td>
<td>5. Informal proposals – if that</td>
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<tr>
<td>6. Papers, patents, ..., products</td>
<td>6. Prototypes, products, ..., papers</td>
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Democratic Innovation @Google
“Our business is innovation.”

“We take our jobs to be innovators and we are failing if we are not innovating quickly enough.”

“Our future growth rates will be determined by our rate of innovation.”

“... want to be looked back on as being very innovative.”

“Innovation is the technological precondition for growth”

...
## Core Belief

**Ideas Come from Everywhere**

Look for, expect and encourage innovation everywhere, **anytime** from **anyone**.

"You cannot plan innovation, you cannot plan invention. All you can do is try very hard to be in the right place and be ready."

Eric Schmidt, CEO, Google Inc.
Organization

Built for Speed

• Organizational Structure:
  • Flat and autonomous

• Management’s Role:
  • Connectors vs. Controllers
  • “I am a very expensive smart email router”
Chaos Is OK

Lots of Projects

“The best way to have a good idea is to have a lots of ideas.” –Linus Pauling

6,000+ engineers

2.5 engineers / project
Openness, Collaboration, Freedom and Speed

- **Openness and collaboration:**
  - 6,000+ developers
  - One shared code base!

- **Freedom:**
  - Java, C/C++, Python, Perl, ...

- **Speed (& Scale)**
  - N,000s CPUs to build and test:
    - N00,000s builds / week
    - N,000,000 of tests / week
Product Philosophy

Innovation > Instant Perfection

• How to build the right product:
  1. Get something out
  2. Get feedback
  3. Iterate quickly and often

• Really hard for a lot of engineers

"If you're not embarrassed by the first product you launched, you've launched too late."
Googlers get to spend “20%” of their time working on pet projects.
Does it work for Google?

YES!
Can Democratic Innovation work for you?

- Believe in the basic premises?
- [Re]organize for it?
- Build infrastructure and tools for it?
- Accept some amount of chaos?