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3 points

1. OS model has matured – more formalized governance structures that include non-profit foundations to manage scale and a growing commercial ecosystem
2. OS model has also been adapted and diffused in innovative ways and less is known about these variants
3. Raises new questions about participation architecture and designing collaborative content creating communities

1) Maturation

Maturation of the OS Model

“People have this idea, in the open source world, that things are self-organizing...

It's like the mythology is, we are hackers, we do this stuff and we don't need marketing weenies and we don't need an organizational structure or an organizational chart,

because we are a meritocracy and we hash things out by ourselves. Well, actually that's not what happens...”

(Sponsored Contributor, GNOME Project)

Open Source Software: Then and Now

(1993-2000)

- Self-governing volunteer contributors
- Motivated by ideology and idealism
- Donated time and software to advance a cause

(2000 – 2006)

- 2/3 of 'volunteers' sponsored by vendors
- Corporate in-kind donations (legal, marketing and hardware) support its production
- Most commercial grade projects have incorporated as non-profit foundations with systems of formal governance

The Role of Non-Profit Foundations

Community Managed OS Projects

Develop free and open source software
 Maintain individual autonomy and hacker norms

Develop governance procedures
 Assign limited rights to foundations
 Elect representatives

Non-Profit Foundations

Provide firms with voice on project
 Broker agreements with firms

Hold assets for community managed projects
 Protect individuals from liability
 Represent project for PR/marketing

Firms

Hire/Support individual contributors

Donate resources
 Assign copyright to foundations

Research market/customer needs
 Supply complementary software, hardware, support services
 Bundle/sell community software

Market

Release Management?

Free Software Foundation - publishes GNU GPL and defines what is free software

Open Source Initiative - certifies what is an open source license

Questions for Wikipedia

1. Will the community's governance system lie within the community or the foundation?
2. Will a membership structure emerge? How might representation be achieved? What rights will members have?
3. How will subprojects be chartered and managed?

2) Adaptation and Diffusion

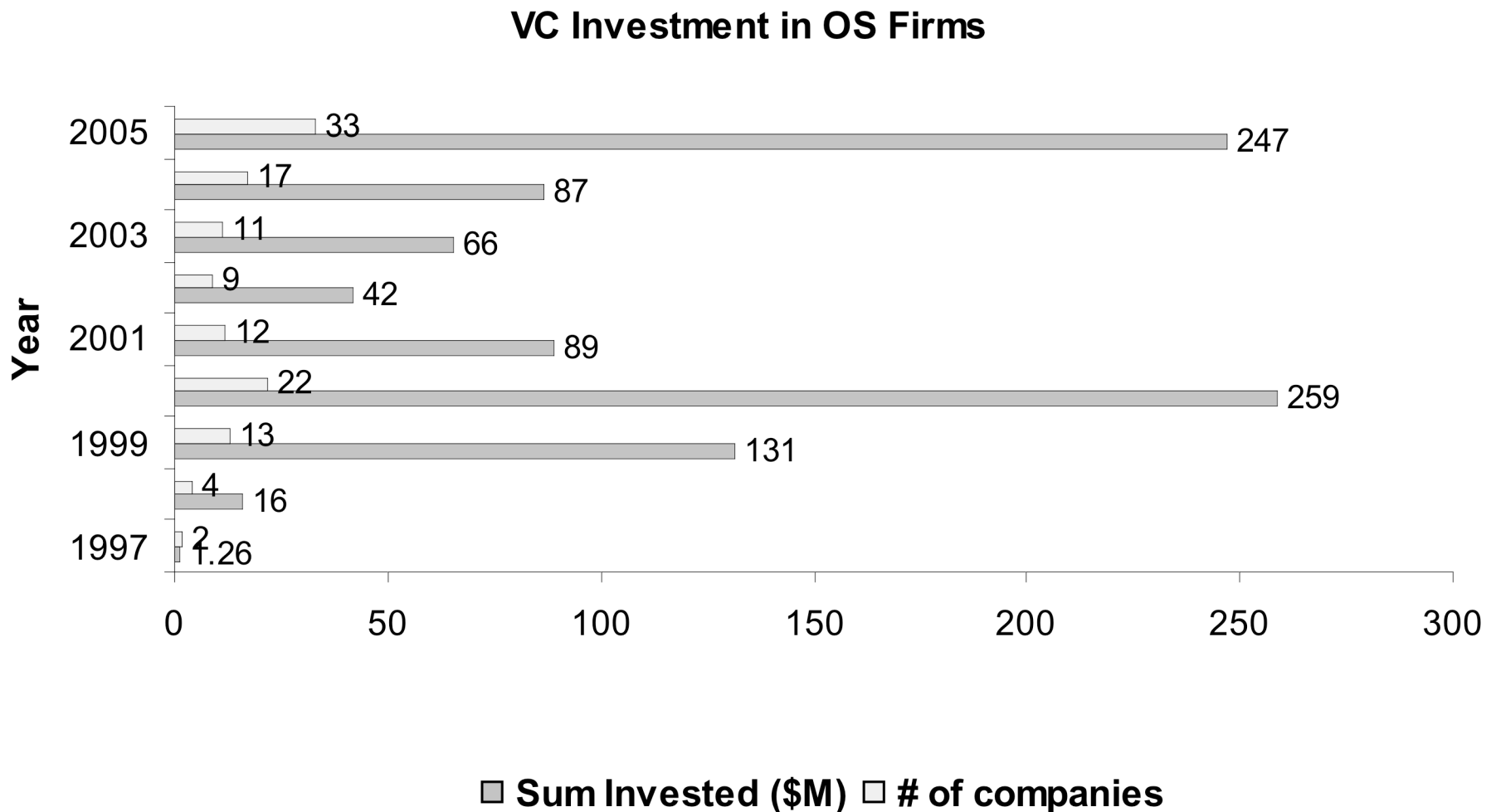
Open Source Adaptation

- **Adapting the *whole model*** — Firms, governments and transnational organizations are starting their own open source software projects (*e.g. the EU, UN, corporate sponsored projects*)
- **Adapting *process elements*** — Organizations in public and private sectors are experimenting with elements of the OS model (*e.g. Firms doing “open innovation” like P&G and Innocentive*)
- **Adapting *legal elements*** — Organizations are experimenting with new approaches to managing intellectual property to develop common information resources (*creative commons, science commons, patent commons*)
- **Adapting *community elements*** — New online communities that engage in distributed community based content creation (*flickr, del.icio.us, ccmixtr*)

Open Source Diffusion

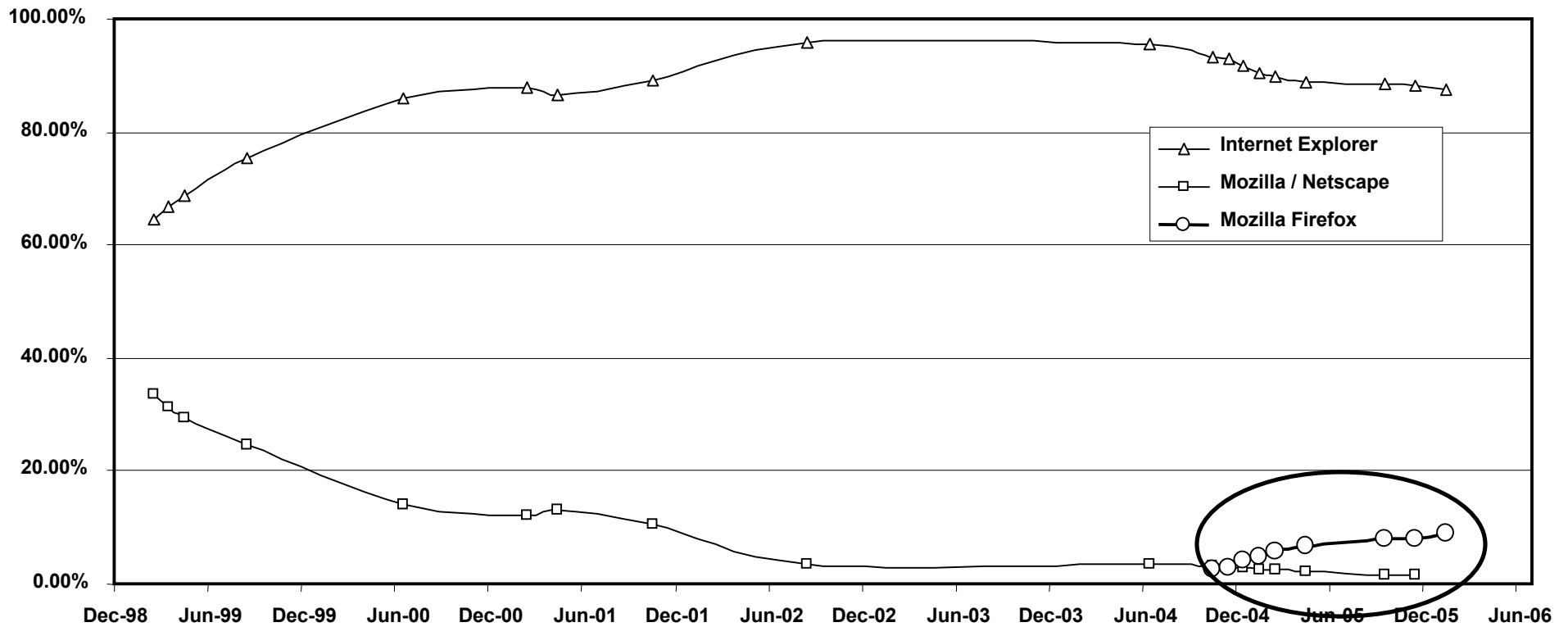
- **Diffusion of Method** — Open source projects are no longer focused on infrastructure but developing more end user applications and applications for vertical markets
 - Traditional software firms are acquiring open source start-ups to accelerate adaptation
- **Diffusion of Corporate Usage** — More traditional organizations and governments are using open source software
- **Diffusion of Capital** — More venture capital is dedicated to funding open source business models

Diffusion of Capital



Source: Venture Economics

Success Brings New Challenges



Questions for Wikipedia


1. What structures will remain constant across related projects? What role will the foundation play as an umbrella organization? How will new projects be prioritized?
2. How will the boundary between community and commercial activity be managed?
3. How will more capital affect what Wikipedia can accomplish? (e.g. Firefox)


3) Rethinking Participation Architecture

Participation Architecture

- Socio-technical framework by which distributed people can make micro-contributions and collaborate for individual or mutual gain
- Technical, legal and governance design parameters can enable or constrain integration and thus affect a community's ability to attract quality contributions

Design Levers

 **Technical Organization** — How modular is the system? How hard is it to learn? How are micro contributions integrated into the whole? How are interfaces determined?

 **Governance Model** — How are community decisions made? What rules govern access and decision rights? What norms govern participation, decision making?

 **Intellectual Property Rights** — Who owns the right to the content contributed? Is collective ownership established? Are individual 'micro' contributions aggravated?

All can affect potential contributor motivation, interest, and thus the quality of contributions that will make up the whole

Two Forms of Openness

A community's participation architecture can provide two types of 'openness':

- **Transparency** - Allows potential members to observe community production
- **Permeability** - Allows members to shape community production, provides them access to the organization and some level of decision rights (usually triaged)

How to balance tension between control over access, the community's opportunity structure and quality?

Questions for Wikipedia

1. **Vitality** – How active/productive/responsive/innovative are members of the community?
2. **Transparency** - How pluralistic are sub-communities?
 - To what degree is expertise meritocratic vs. credentialled?
 - How are contributions distributed?
 - How are content level decisions made?
 - How are project priorities established?
3. **Permeability** - What can members access?
 - How can revision tools attract and inspire?
 - What tools and resources are available to help people learn?
 - How are new sub-projects created? How are distributed inputs integrated?

Enabling Transparency

- **Social network and data visualization techniques** can make collaboration patterns more accessible
- **Ranking, sorting and feedback mechanisms** can reveal information use and sharing patterns (e.g. Amazon, Google)
- **Categorization schemes that emerge with users' interactions** to better reflect how information is actually valued or used (e.g. Technorati, Flickr, del.icio.us)
- **Community activity plots** can show where bulk of 'the action' lies

Even though communities have transparent production processes, enabling transparency *across* the community becomes more important as communities get larger because most interaction patterns do not follow a normal distribution.

The Mozilla Development Community Today

~5% of code
developed
by external
contributors

15% of code
programmer
s sponsored
by corporate
partners

~80% of
code
developed
by Mozilla
employees

