Competing on a Common Platform

[Preliminary Results]

Siobhan O'Mahony
somahony@hbs.edu

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Chicago OHare
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Why This Project? Why Now?

- Many individually founded open source projects fail (Healy and Schussman, 2003)
- Most projects that succeed do so with intense commercial support
- Many firms have experimented with some elements of community managed open source projects
- Producing a range of hybrid models that vary in their plurality and governance (e.g. MySQL, OpenOffice, SugarCRM, Mozilla)
  - But, there has been no research on how hybrid models are created, managed and sustained

Eclipse: A Hybrid Form

Elements of an open source project

- Committer status is merit based - voted in by other committers
- Development is public and transparent
- Open source license (royalty free)
- Committer status is affiliated *with the person* not the firm
- Committers at large have board representation
- The best solution wins – vendor neutrality sustained

Elements of a consortium

- Corporate membership is on a paid basis ($5-500k) or 8 FTEs
- Strategic Developers must lead a project
- Project charter approved by the board
- Board representation weighted to paying members
- Requirements, Planning, and Architecture councils have formal requirements – there is a project roadmap

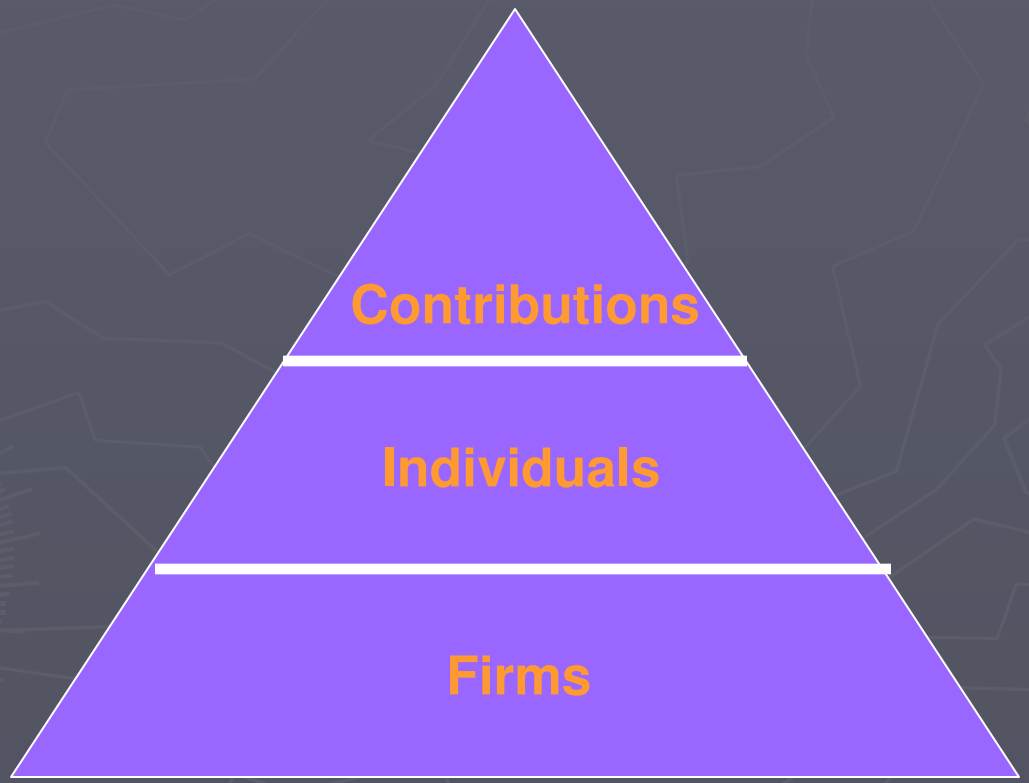
Research Questions

1. Community/Foundation Level - How does the transition from corporate sponsorship to community management occur? Where is pluralism created?
   - What role does the foundation play in encouraging cooperation and competition?
2. Sponsor Level - How do strategic sponsors determine the degree to which they contribute? What costs and benefits do they experience?
3. Sub-Project Level - How do sub-projects attract and manage multi-lateral contributions? How is vendor neutrality sustained?

Approach

- **Phase I (January – March, 2005):** Interview EMO, strategic members, and select sample of add-in providers
- **Phase II (June – September, 2005):** Interview strategic members, design and conduct member survey, collect and analyze bugzilla data, draft Eclipse Transition case
- **Phase III (October – January, 2005):** Study selected subprojects with committer interviews, observation/site visits to committer development teams, and study online interactions, conduct follow-up interviews

A Snapshot at 3 Levels



Firms

Why do they join Eclipse?
What do they gain?

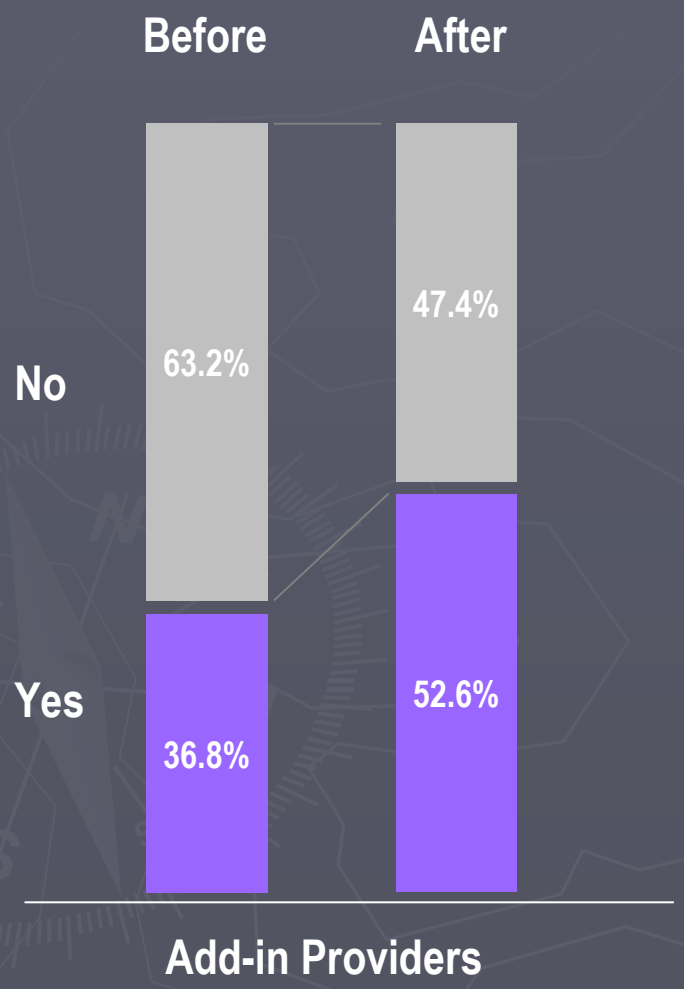
Why do firms join Eclipse?

Top Reasons	Add-in Providers	Strategic Members
Enhance functionality of their products	**57.9%**	**66.7%**
Enhance product extensibility and market scope	**42.1%**	**50%**
Influence the platform	15.8%	**33%**
Image	**21.1%**	16%

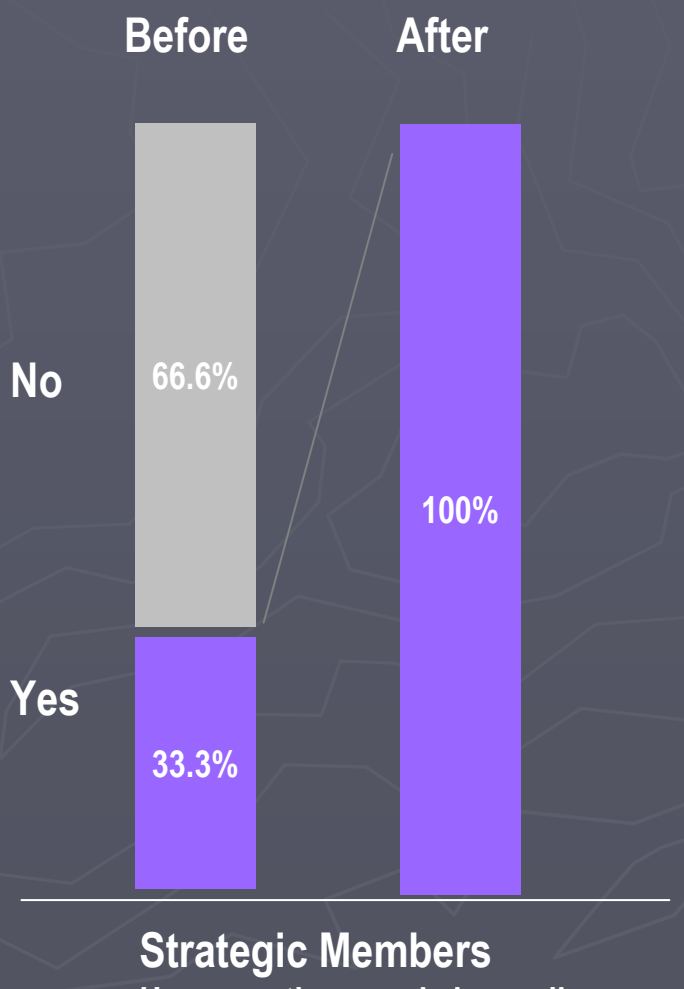
(Percent of respondents ranking the reason as a top-3 reasons to join)

Impact of Eclipse

Companies are leveraging Eclipse to offer a complete IDE



Add-in Providers

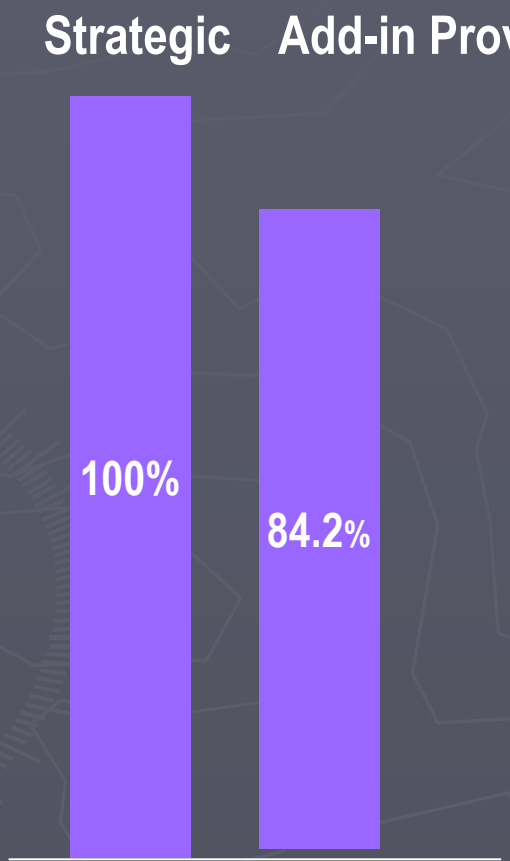


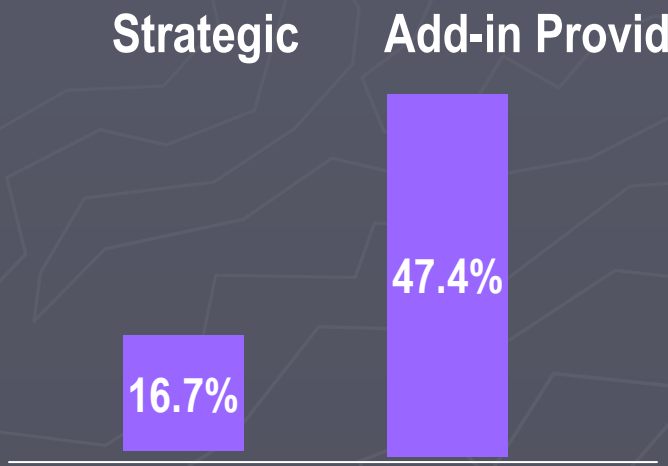
Strategic Members

However, the sample is small

Impact of Eclipse

Most experience an increase in functionality,
Add-in providers more likely to see increase in rate of product introduction





Managing A Rising Bar

"What I requested was I need visibility six months out. I can't be commoditized tomorrow. If you give me six months, I can adapt" (*Add-in Provider A, 2/8/05*)

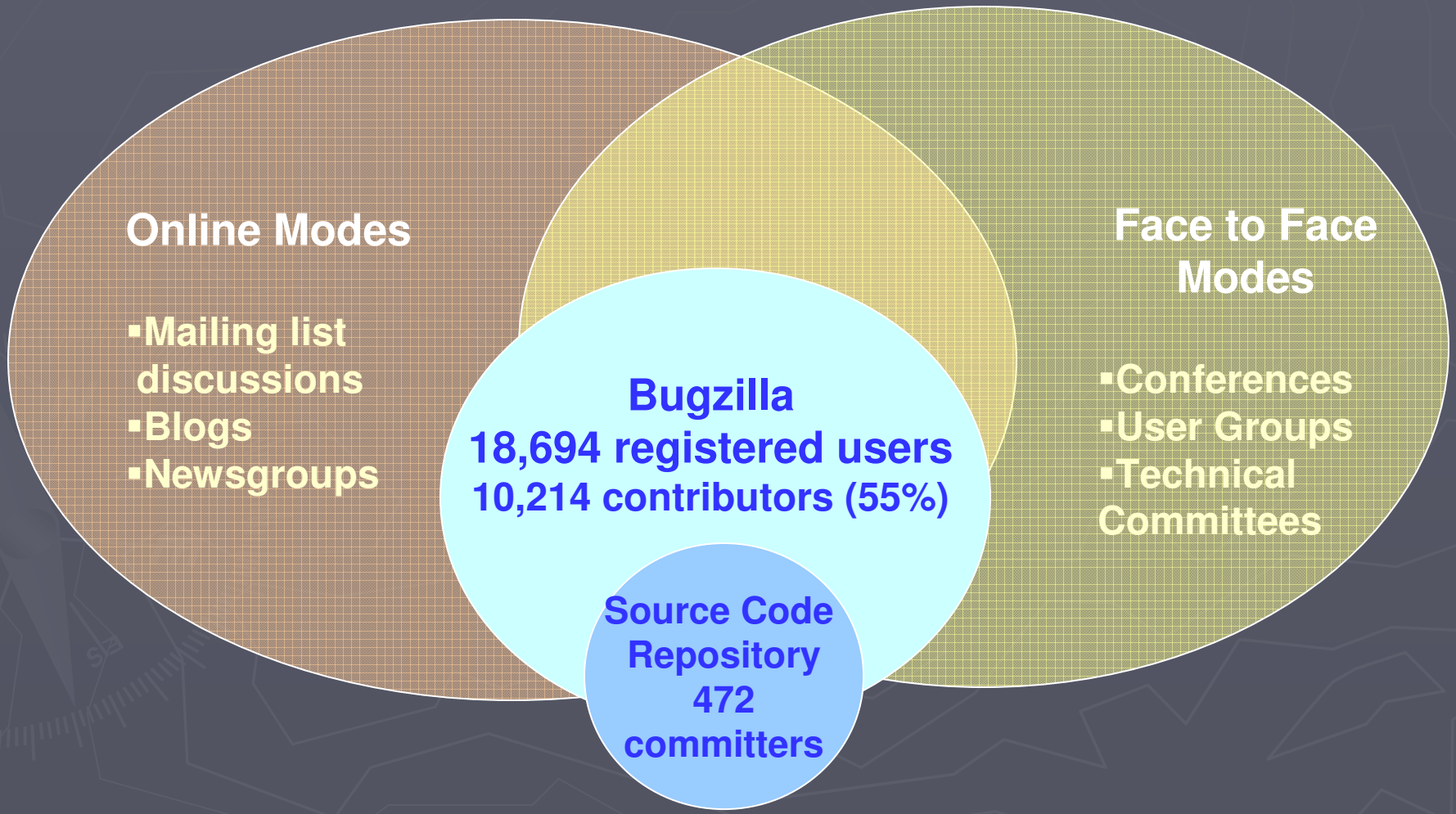
"What I think is interesting here, because of the platform - some of my stuff will become a commodity year after year and I have to keep ahead of it. So, every year some of my proprietary stuff will drop into the open source and I've got to bring out some more stuff" (*Add-in Provider B, 2/28/05*)

Individuals

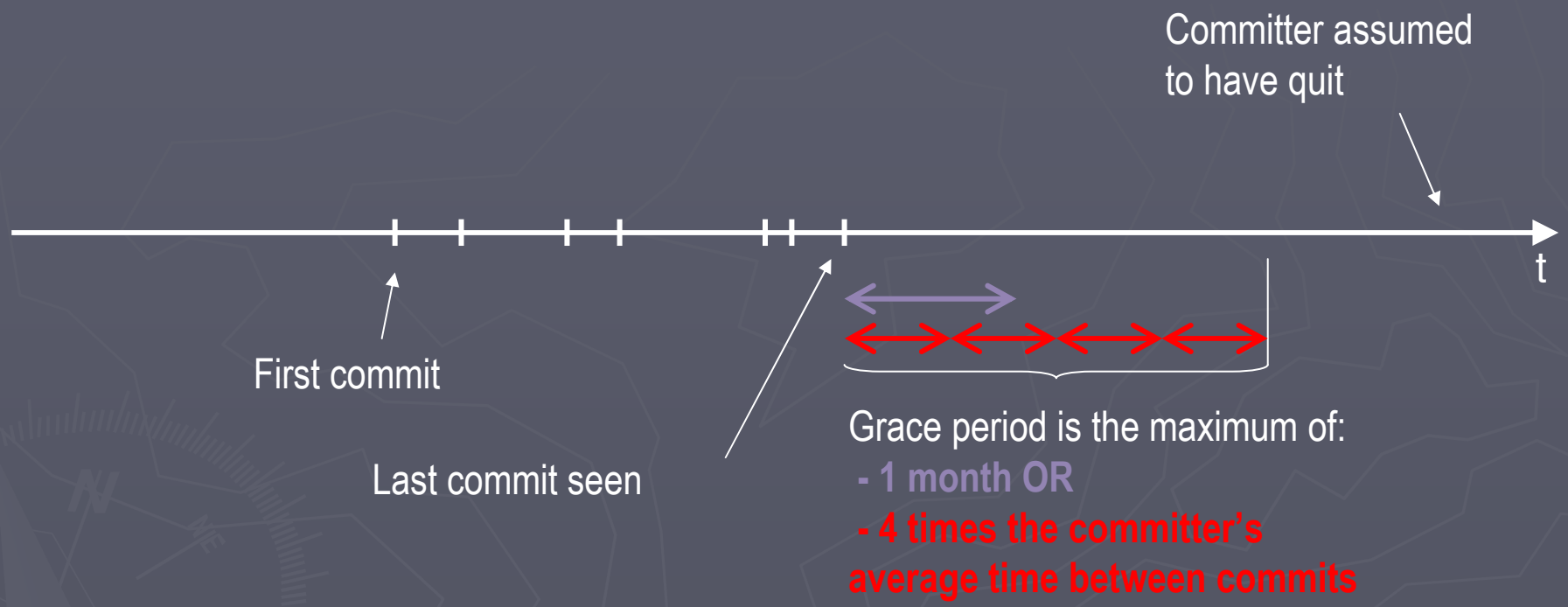
How does the committer population change over time?

How does independence affect committer growth?

Modes of Participation

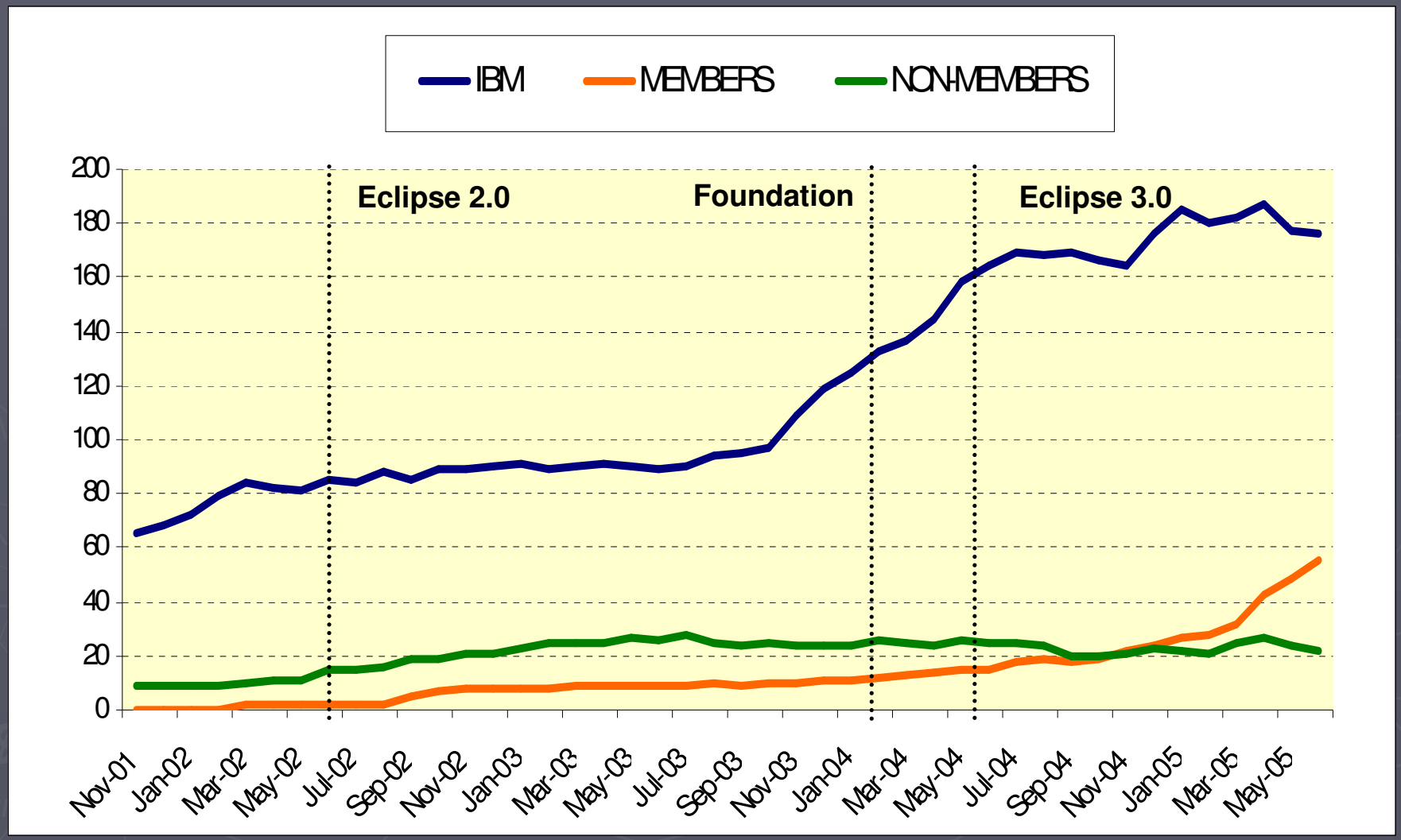


When is a committer considered "active"?

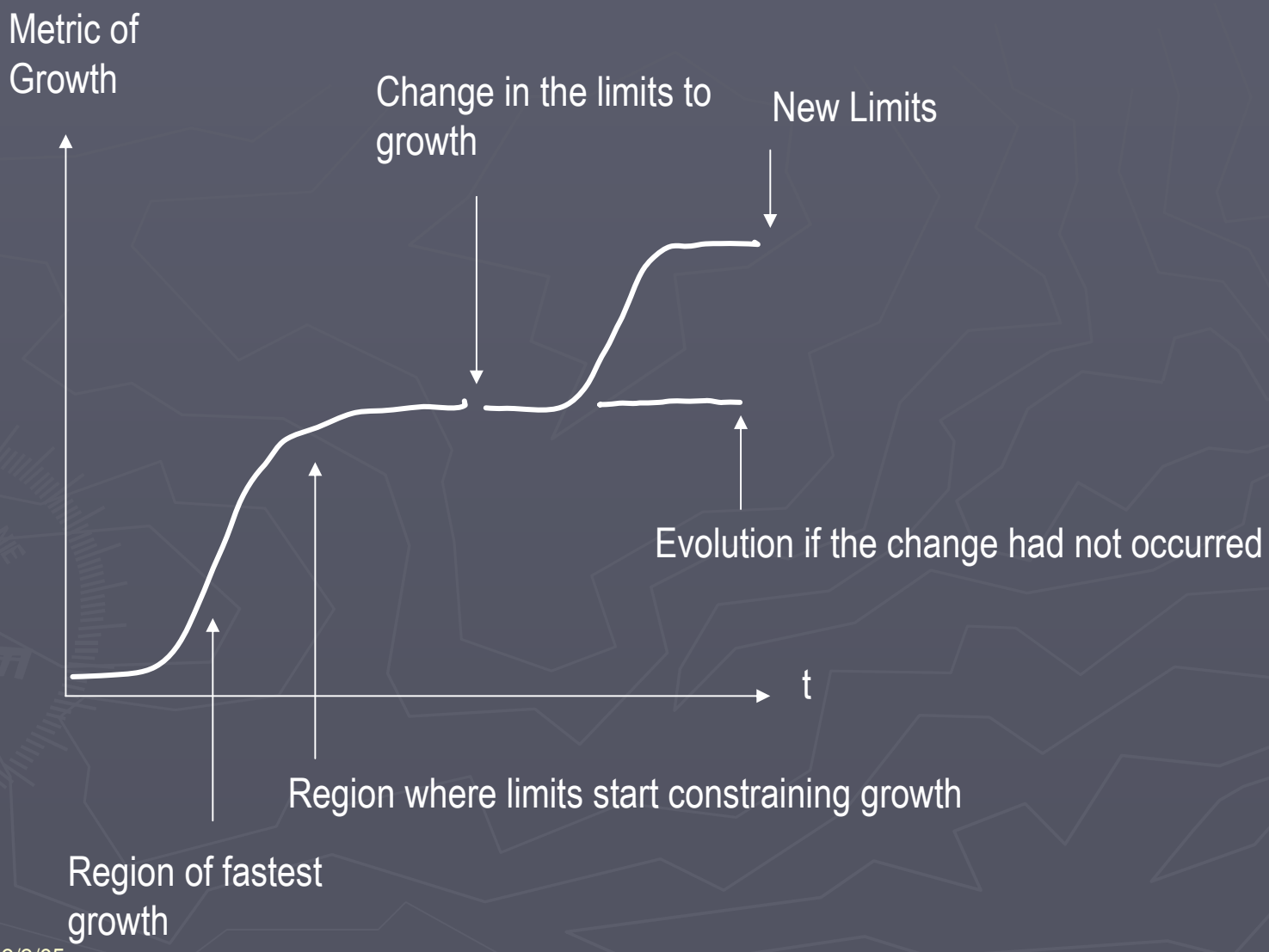


Observation: since committers make changes very often, it is quite evident when they stop committing

Active Committer Growth

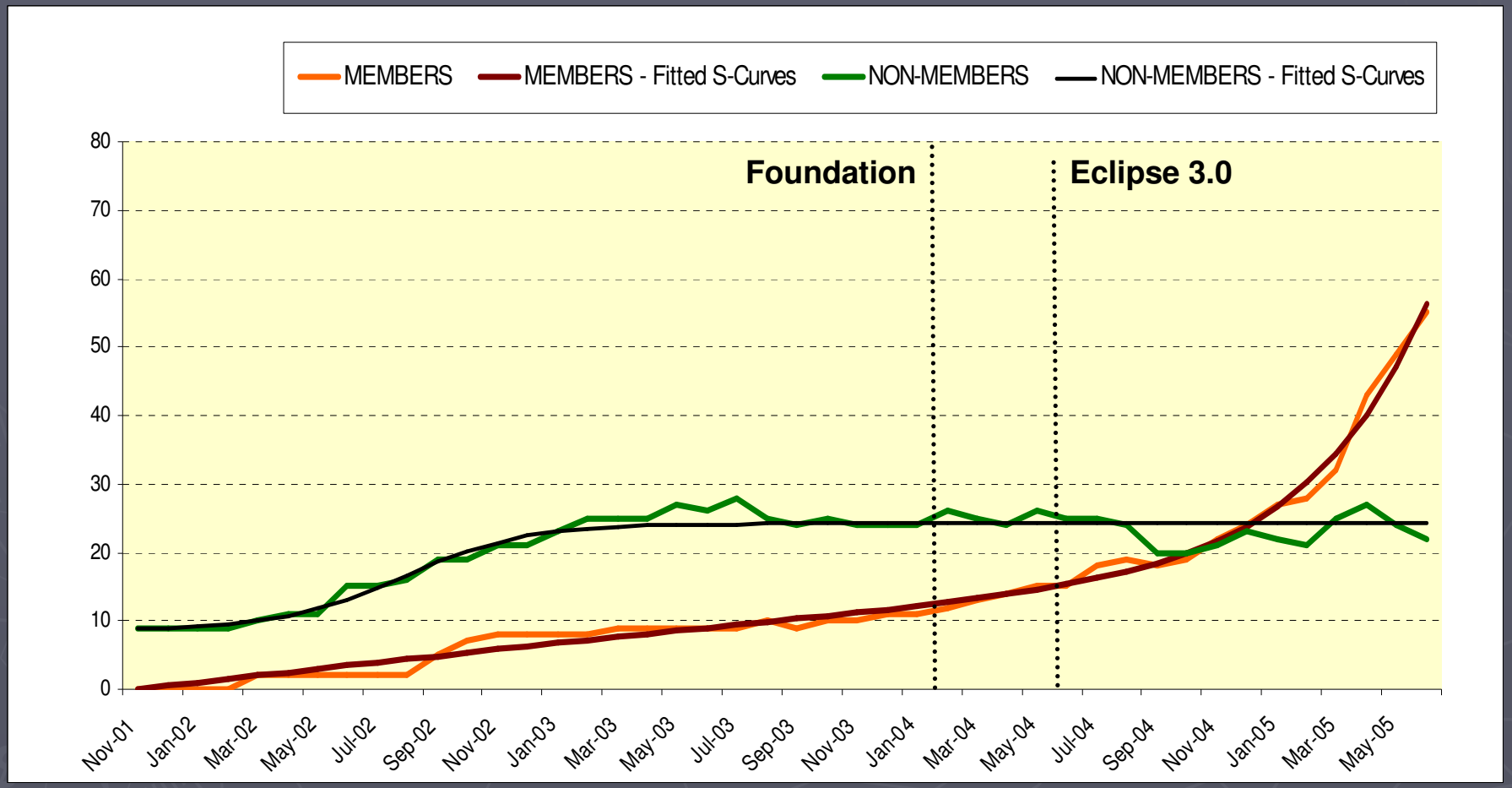


S-Curve Analysis: the theory



External Active Committer Population

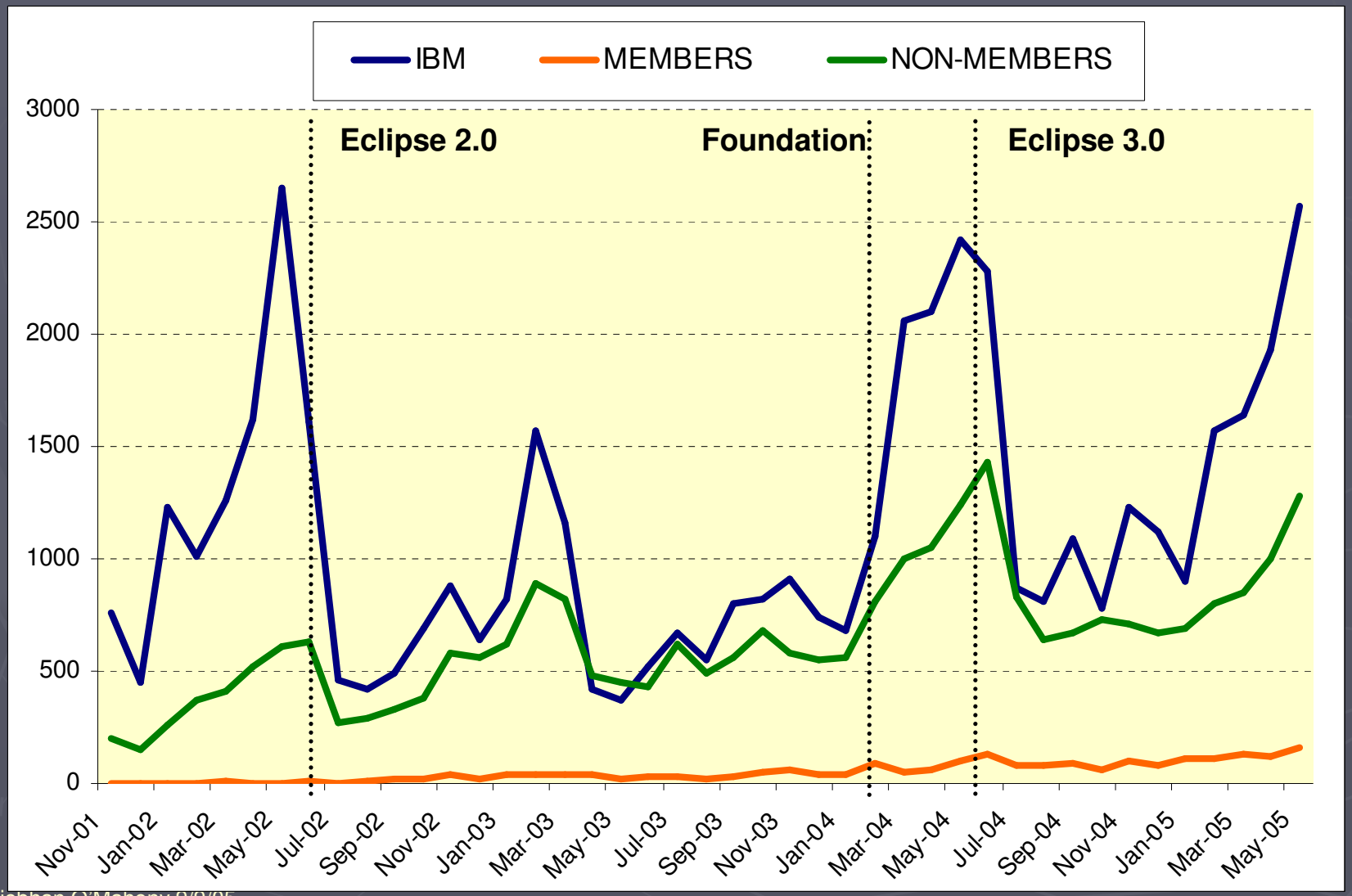
Members (excluding IBM) and Non-Members



Contributions

How do the contributions of members, non-members and IBM contributors to the platform differ over time?

Bug Reports


IBM
MEMBERS
NON-MEMBERS
Eclipse 2.0
Foundation
Eclipse 3.0
3000
2500
2000
1500
1000
500
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Jan-02
Mar-02
May-02
Jul-02
Sep-02
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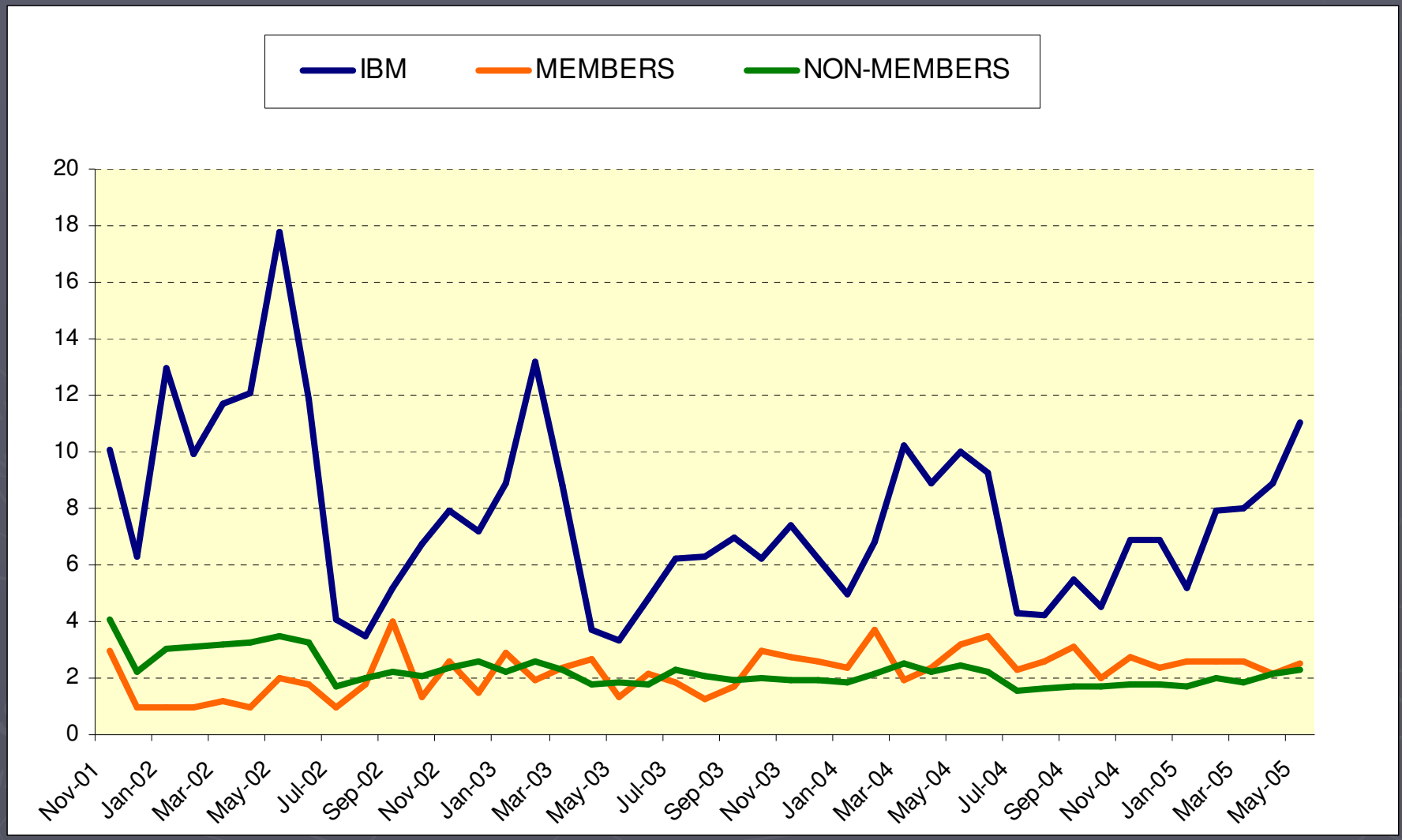
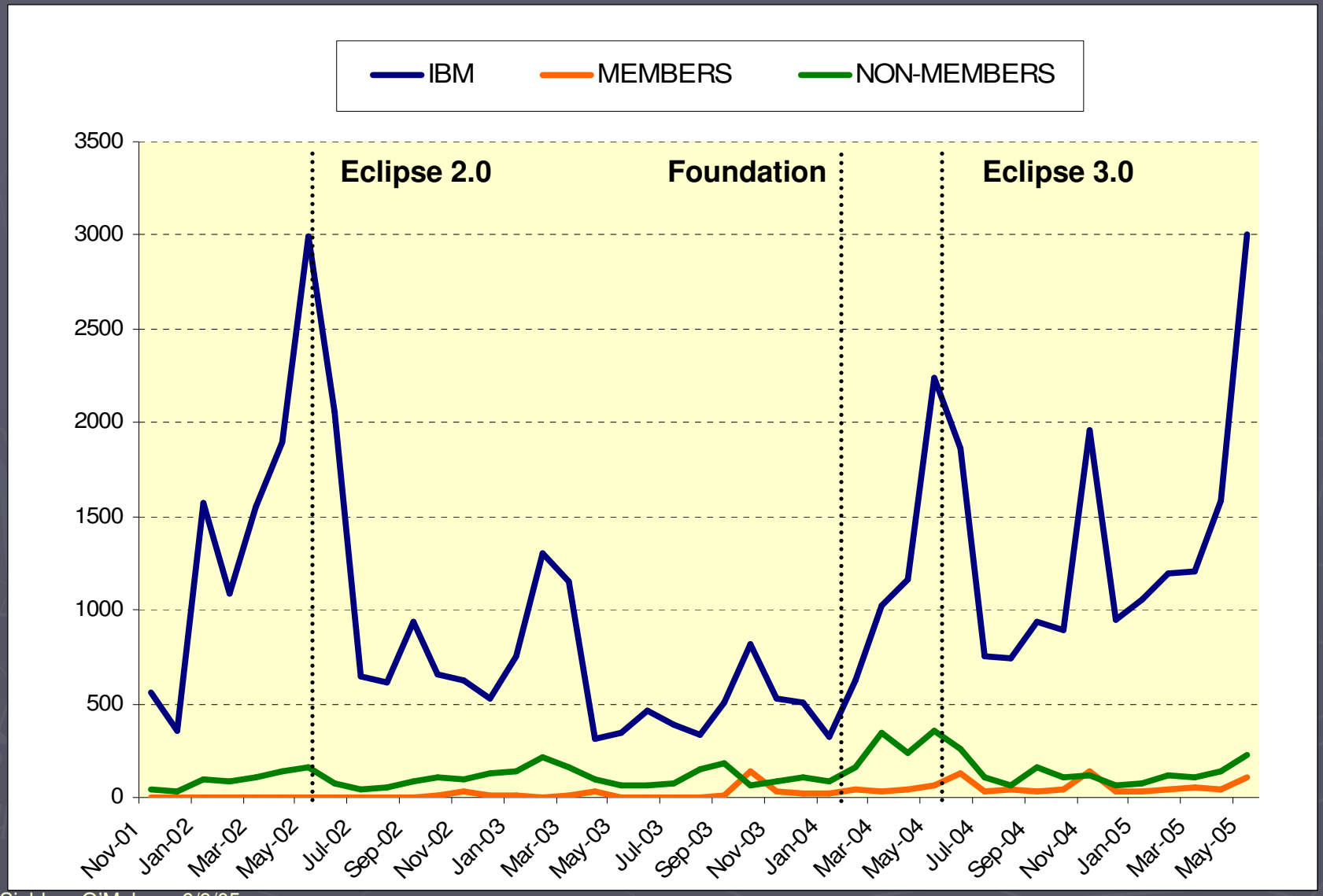
May-05

Mean Bugs Reported Per Person



Bug Fixes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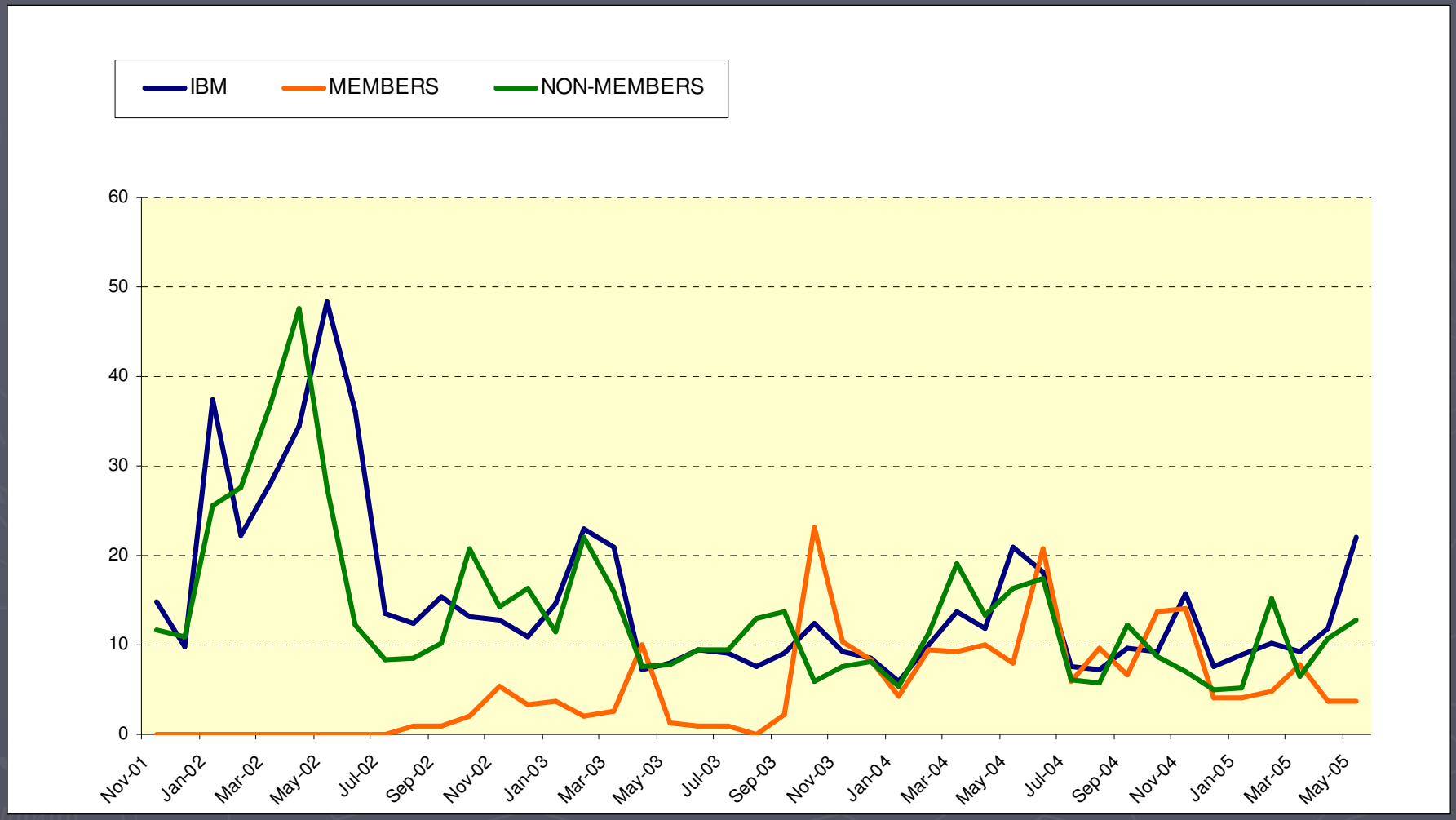
May-05

Mean Bugs Fixed Per Person



Questions for Consideration

- Eclipse demonstrates the potential of a hybrid model – will this become a model for others?
- Each sponsor has had a different concern with respect to 'coopetition' which affected the design of the foundation and its management structure - it may be more robust as a result, but to what degree can it scale?
- Sponsors use the platform for different purposes – some compete **with** the platform, as opposed to '**on**' the platform – does the platform entrain new development cycles and rhythms? Does this differ for small and large firms?
- How does the evolution of community differ within sub-projects?

Relevant Prior Work

- **"Managing the Boundary of an Open Project"** (with Fabrizio Ferraro), in *Market Emergence and Transformation*, forthcoming.
- **"Hacking Alone? The Effects of Online and Offline Participation on Open Source Community Leadership"** (with Fabrizio Ferraro), *under review*.
- **"The Participation Architecture of Online Production Communities"** (with Joel West), under review.
- **"Nonprofit Foundations and Their Role in Community-Firm Software Collaboration"** in *Perspectives on Free and Open Source Software*, MIT Press, 2005.
- "Guarding the Commons: How Community Managed Projects Protect Their Work" *Research Policy*, 2003.

How You Can Get Involved

- Conduct an interview with me
- Connect me with your product development teams
- Send me an email - **somahony@hbs.edu**
- Complete survey

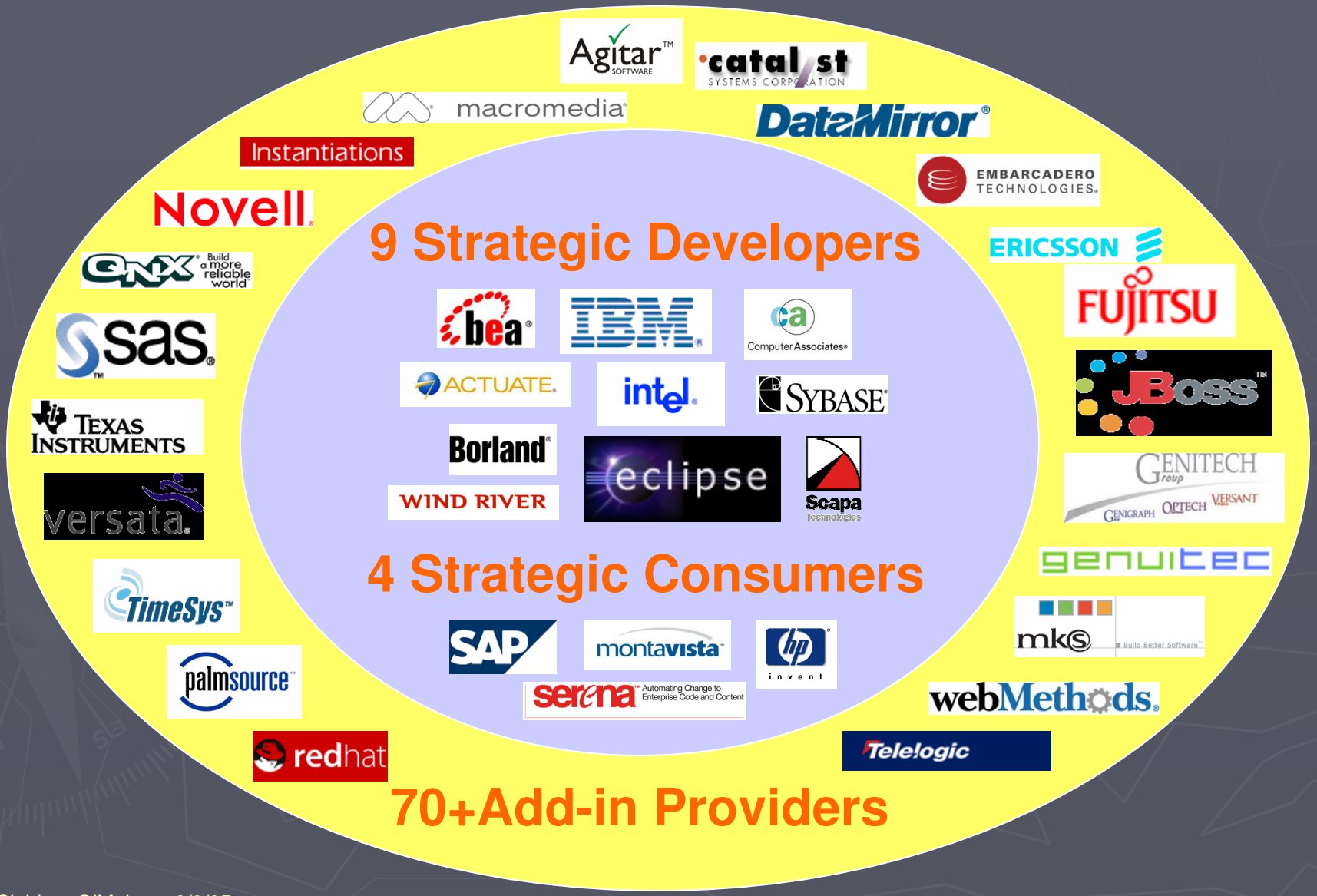
Sample Demographics

Very large and very small companies dominate

Revenues	%
<$10 M	**36%**
$10-100M	12%
$100-500M	24%
>$500M	**28%**

% Rev. from Software	%
0%-40%	20%
40%-70%	16%
70%-100%	**28%**
100%	**36%**

Developers	N
1-50	**44%**
50-200	12
200-500	16%
>500	**28%**

% Rev. from Eclipse	%
0%	**28%**
0%-10%	**34%**
10%-85%	16%
85%-100%	20%

Eclipse Ecosystem