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FLOSS and Innovation

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for "FOSS Bridge EU-Vietnam - Joint Business through Free and Open
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What we'll learn now...

- How FLOSS may be used in an innovation strategy
- Principles of « open innovation »
- More business models, using FLOSS
- And hints for building the case of a corporate open innovation strategy

Why Innovate?

- “Innovation is a driver of economic growth, productivity, job creation and **rising living standards**.
- Innovation also promotes ICT competitiveness; in turn, competition leads to better products, improved consumer choice and, **ideally, greater ICT uptake.**”

Source: European Task-Force on ICT Sector competitiveness & ICT uptake, WG on innovation in R&D, manufacturing and services http://ec.europa.eu/enterprise/ict/policy/taskforce/wg/wg3_report.pdf

500 Top Projects in SourceForge

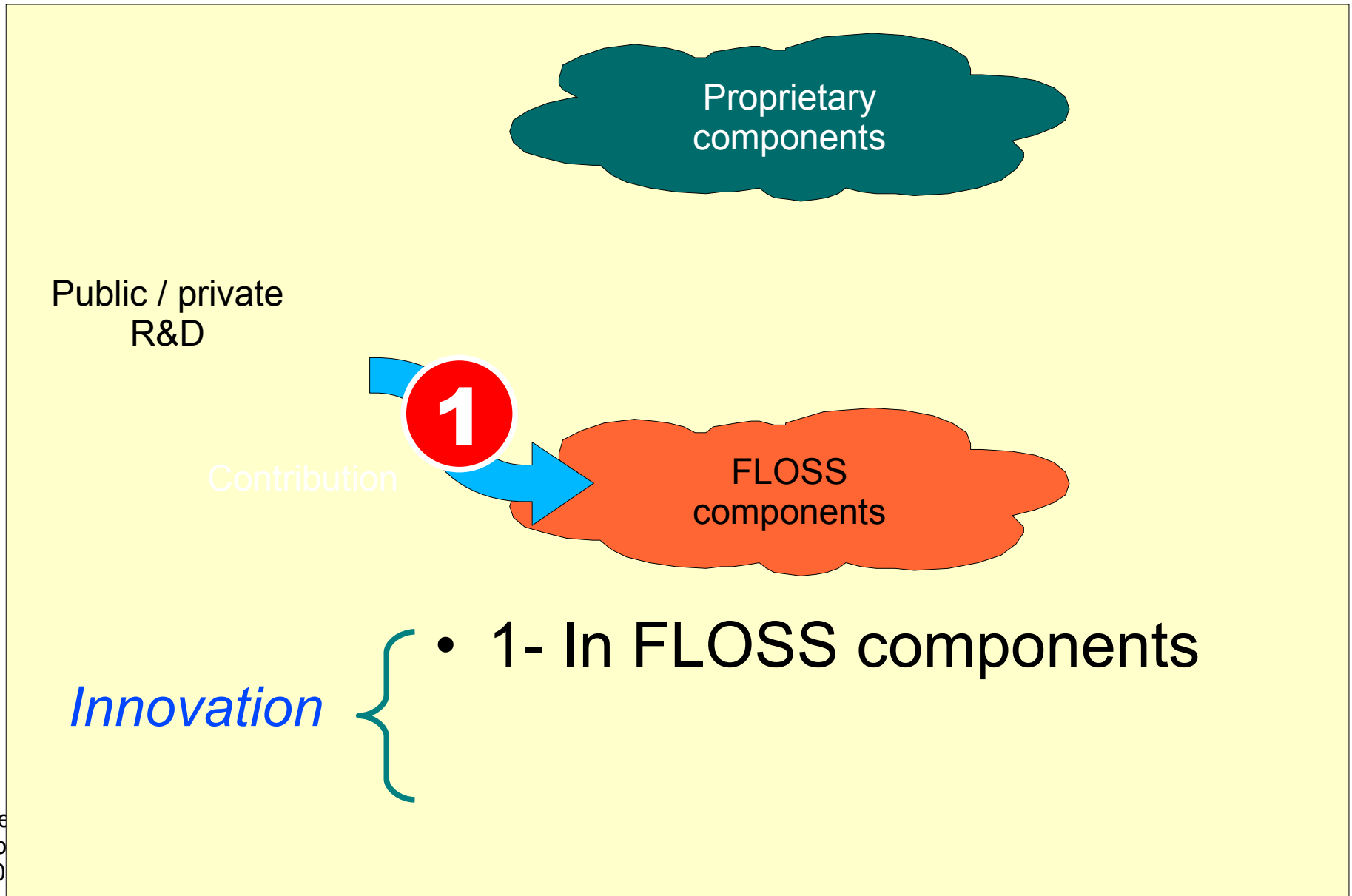
	New technology	N. for a platform	Existing techno.
New market	Radical innovation 1%		<1%
Existing market	<1%	10%	No innov. 87%

Source: Innovativeness of open source software projects, K. Klincewicz 2005

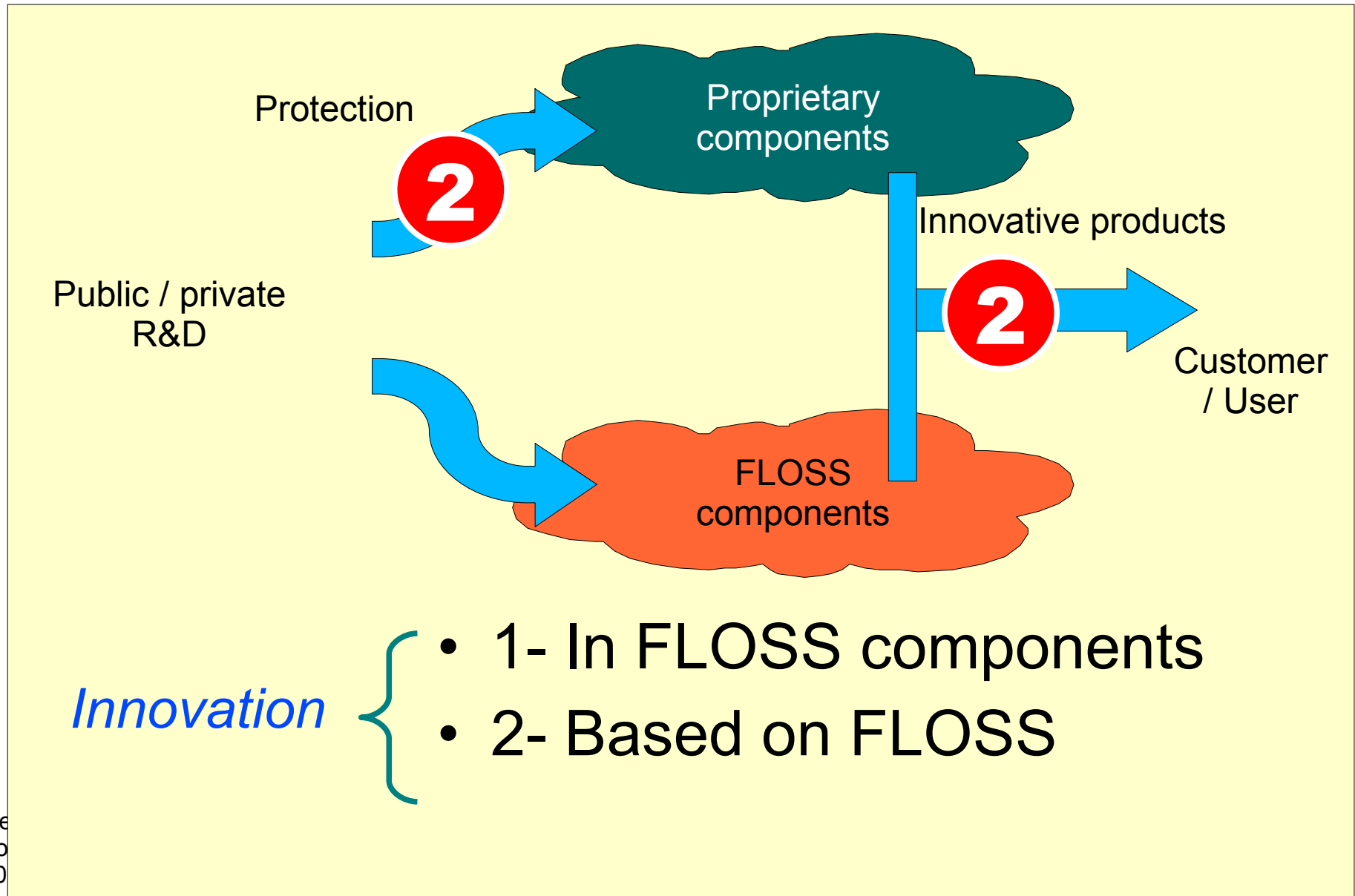
How Does Innovation Happen in FLOSS?

- Innovation contributed to a FLOSS project
- FLOSS enabler of innovation happening « elsewhere »
- FLOSS as an innovative development paradigm
- open innovation

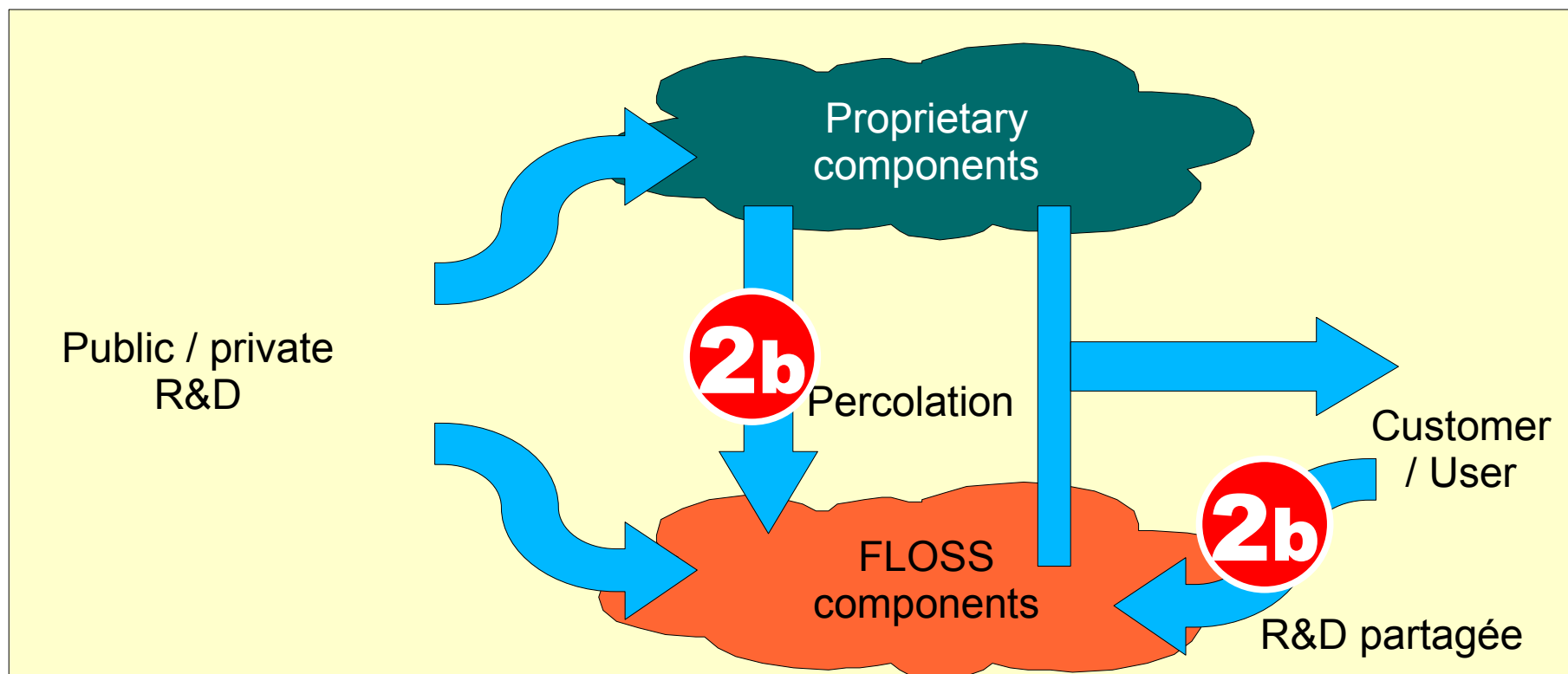
Innovation in FLOSS



Innovation Based on FLOSS



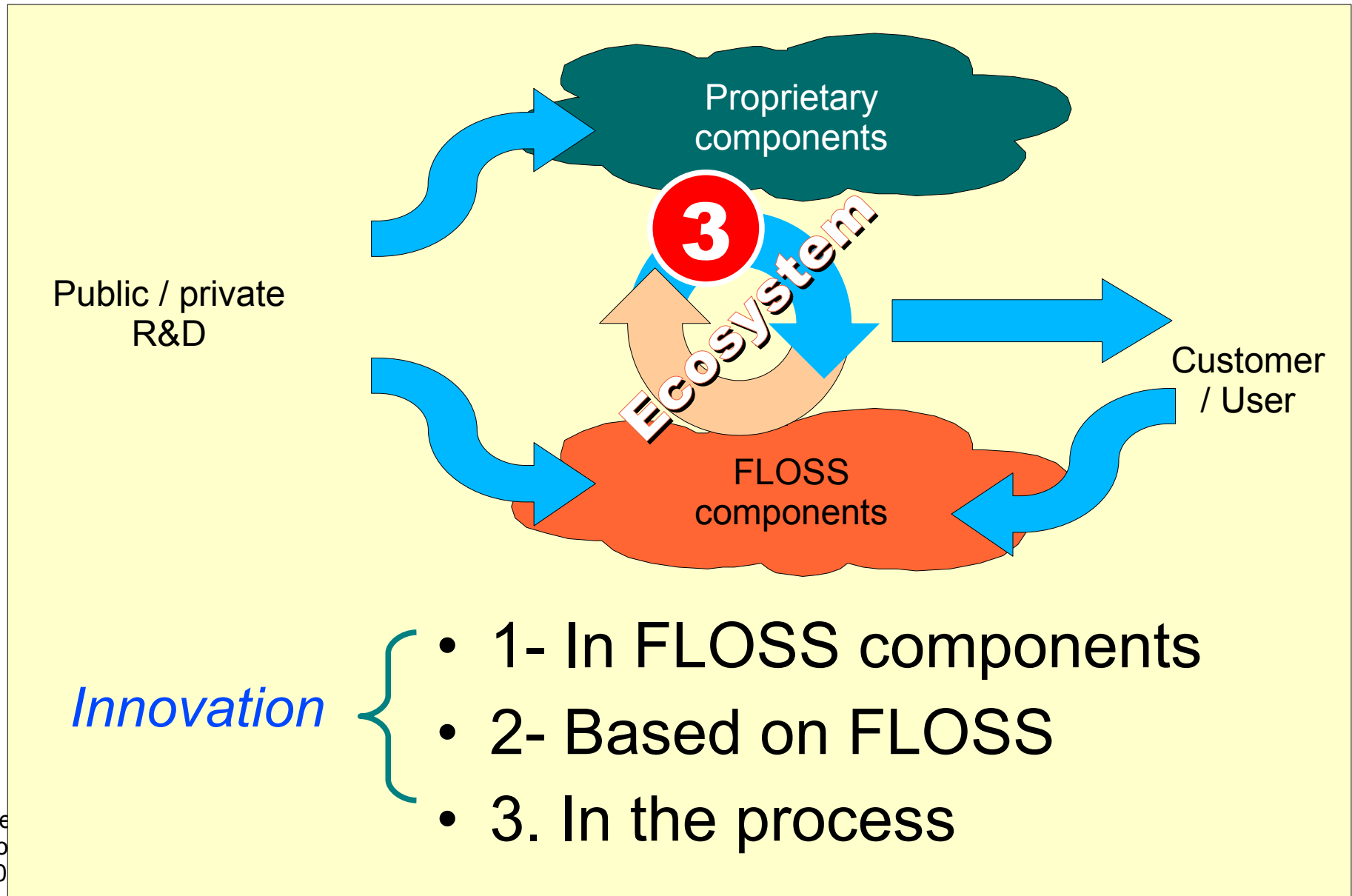
Innovation Contributed Back to FLOSS



Innovation

- 1- In FLOSS components
- 2- Based on FLOSS

Innovative Value Creation Process



The Non Innovation Model Abandonware

- The worst practice: *we don't know what to do with this project... let's open-source it!*
 - Obsolete
 - Useless
 - No market
 - No community

- Trash in, trash out!

FLOSS Business Models

Free Rider or OEM

- FLOSS distributed under a permissive license...
- Used to build proprietary products
- Free riders / OEM are objective allies of companies running a Loss Leader strategy
- Unlawful is done with copylefted software
 - hence the dual-license business model

FLOSS Business Models Embedded

- Hardware selling
- Embedded software / firmware based on FLOSS
- The R&D is mainly targeted to the design of the final product, more than to the software

FLOSS Business Models

Infoware / SaaS

- On-line service
- Based on FLOSS + **in-house enhancements**
- Access to the source code for customization, and reduction of license costs contribute to the company's agility
- Some strong copyleft license (e.g. Affero GPL) in this case require that the source code of the site be made available to the users

FLOSS: Open Innovation in Software

- Because sooner or later, proprietary software vendors face the competition of (almost) **free substitutes**
- Because software production **costs can be reduced** through collaborative engineering
- Because opening the source code is the best way to maximize the **potential of collaboration**
- And because when competition becomes pointless, collaborating is a good way to **keep innovating**

From Proprietary to FLOSS

The Culture Shock

- NIH syndrom
- NSH syndrom
- Perfectionism: not good enough to be FLOSS
- What developers must learn
 - reuse before reinventing the wheel
 - contribute patches and enhancements
 - communicate with peers
- Suicide strategy
 - Reinvent, redevelop everything, overlook standards and customers

Conservation of Attractive Profits

- Software is developed in a modular way
- At any point in time, parts of the value stack are commoditized, other are not
- As software matures, some components get « commoditized »
- The opportunities for attractive profit margins move upmarket



FLOSS Based Open Innovation Recommendations

- FLOSS provides a turnkey legal framework
- Lock-in risk mitigation facilitates negotiation with providers and subcontractors
- Always make sure you can find substitutes for any key technology you use
- Evaluate risks and consequences of change according to your business model
- Tooling is available in FLOSS - use it
- Get involved in the communities, play by the rules and be aware of the limits

Recap

- Innovation happens
 - in FLOSS projects
 - on products based on FLOSS
 - through « percolation »
 - and in the process itself: open innovation
- Commoditization is tightly linked to innovation through the conservation of attractive profits
- Be prepared to a culture shock when moving from proprietary to FLOSS

About:

"FOSS Bridge EU-Vietnam - Joint Business through Free and Open Source Software" is an ASIA-Invest programme implemented by InWEnt - Capacity Building International of Germany, Institut National de Recherche en Informatique et en Automatique (INRIA) of France and the Institute of Information Technology of Vietnam (IOIT) with financial support by the European Commission and the German Federal Ministry of Economic Development and Cooperation (BMZ).

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