Advantages of a standard open source e-learning platform

1st international ILIAS Conference

Hamburg, September 2002

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E-learning platforms - definition and current market situation

E-learning platforms

Web based systems which integrate services for virtual learning, teaching and informing including:

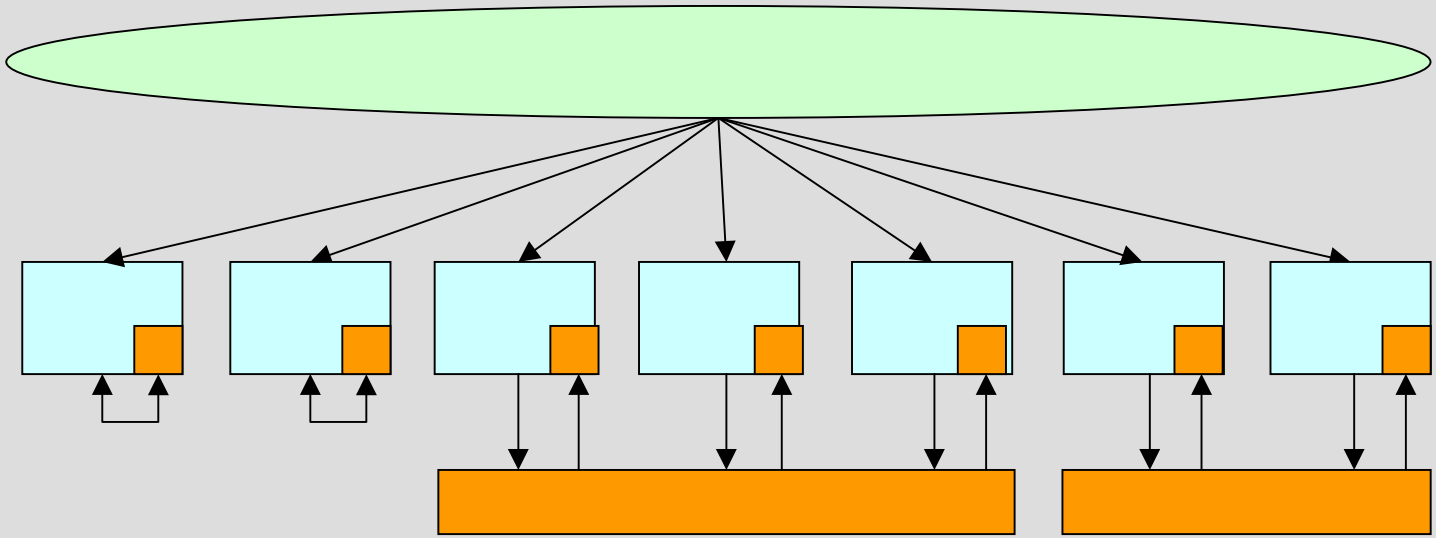
- content creation
- communication tools
- user administration ...

Current market situation

Great demand on a **immature market**:

- Many products
- difficult to compare
- many license models

Situation for education financing countries



Government pays for

- costly decision (evaluation) process
- parallel self development, double investments

Advantages of a standard e-learning platform

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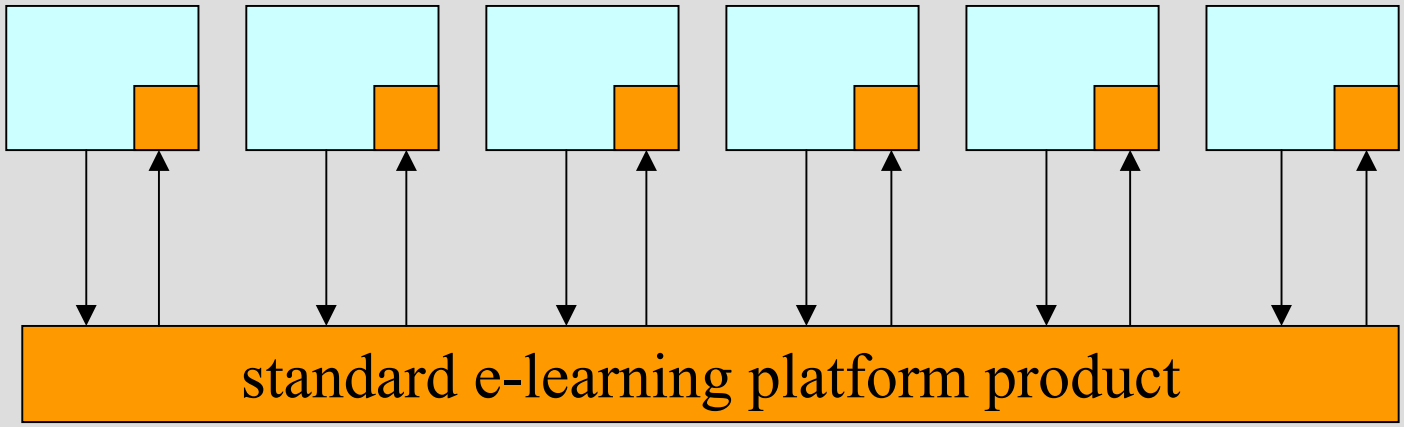
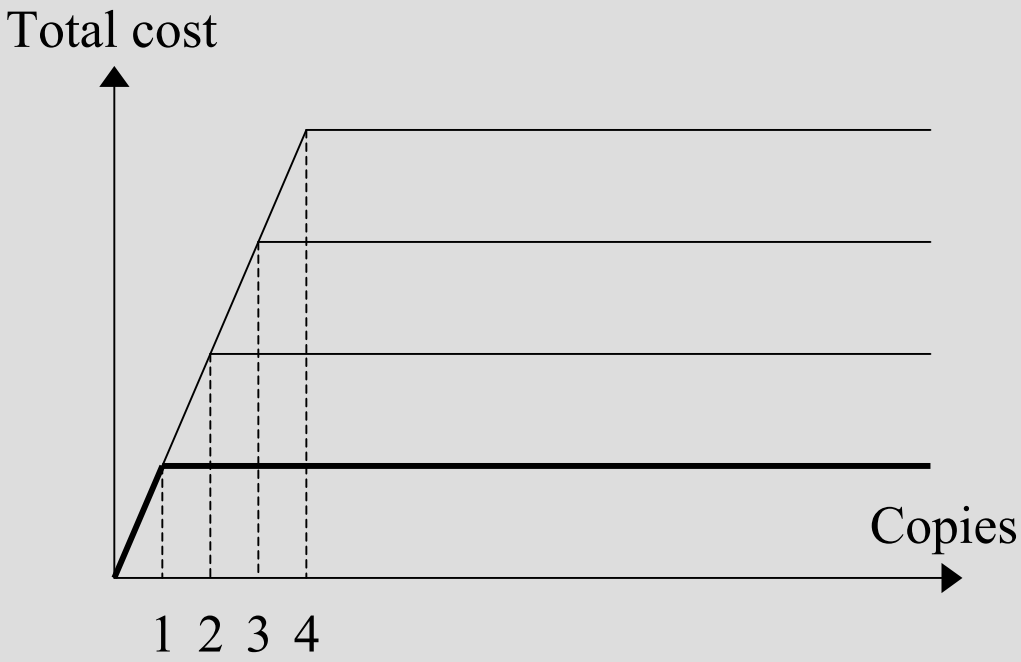


- Cheaper decision finding process
- No parallel self development
- Use of positive network externalities

Why parallel self development is problematic



Positive network externalities

"A product for which the utility that a user derives from consumption of the good increases with the number of other agents consuming the good"

Katz and Shapiro, American Economic Review, 1985, 424-40

Positive network externalities - E-learning platforms

- teachers and related people do not need expensive training when working for different educational institutions
- students can compare and study courses of different educational institutions more easily
- joint activities between educational institutions can be realised easier.

Problems of a standard closed source e-learning platform

Standard closed source software

Close source software:
Only the producing company is technically able to modify and legally allowed to distribute the software.

Standard closed source software:
Company has monopoly power**!**

Consequence I

A monopoly is able to set the price yielding the maximum profit. This price is generally higher than the competitive market price

Consequence II

- Innovation only if it yields higher profits or keeps potential entrants out of the market
- No innovations which weaken the monopoly position (e.g.: open standards)

=> **Innovation not user driven**

=> **Dynamic inefficiency**

Open source - a way out of the dilemma

Open Source

- **Access to source code**: Everyone may freely study, adapt and improve the software
- **Usage**: Everyone may run the program for any purpose on any number of machines
- **Redistribution**: Everyone may redistribute the software

In other words, open source is...

(Michael. K. Johnson, Manager Kernel Engineering, Red Hat Inc).

... a world-wide community of people co-operatively developing software

... a software development analogue of open scientific inquiry

... an attempt to account for the costs of software development “honestly”

... a force reshaping the software industry

Main advantage of open source

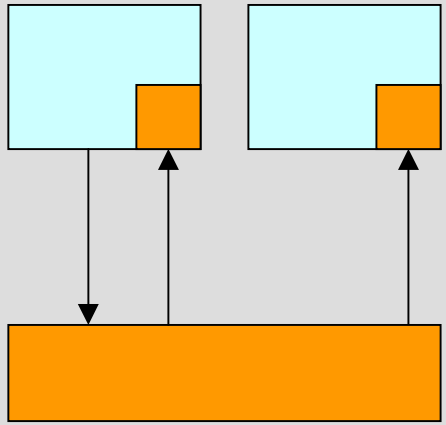
A standard system can be used

without

the problems of monopoly power!

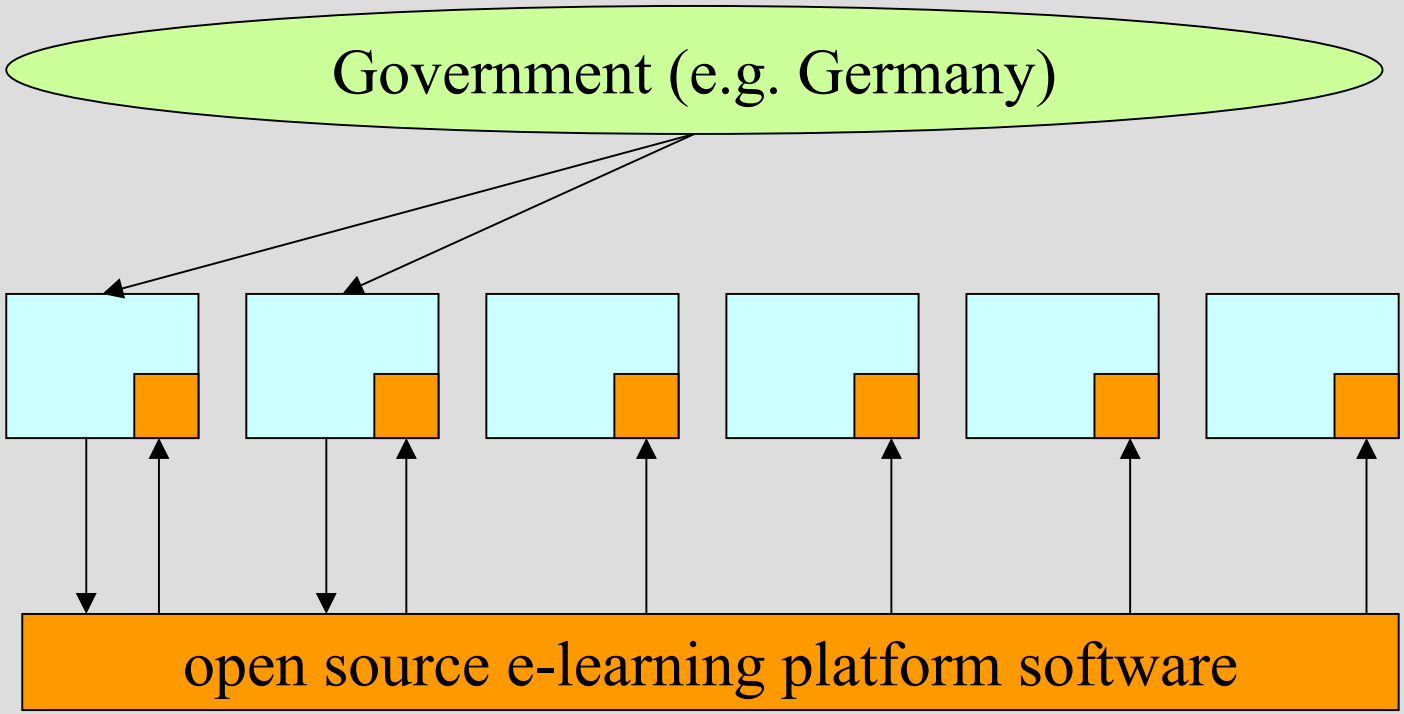
Main problem of open source

Free riding:

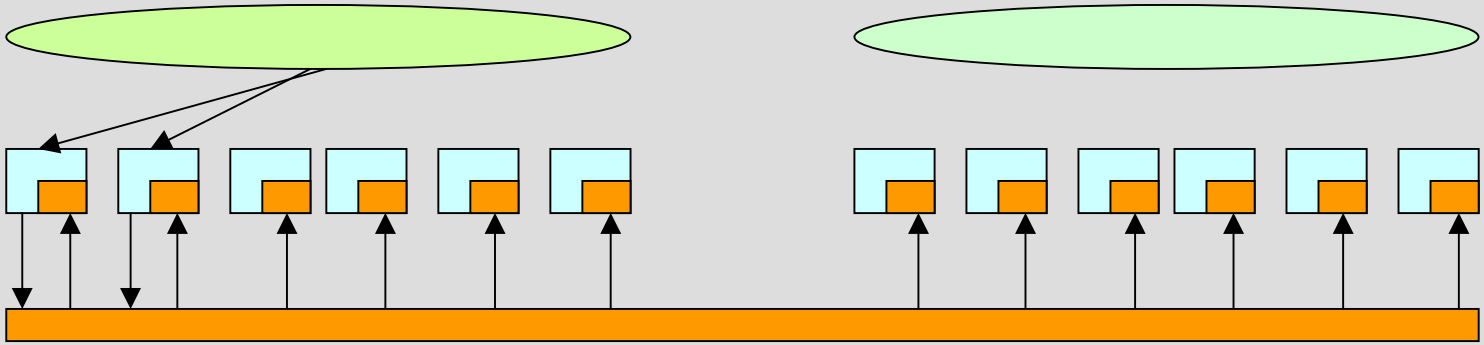


Someone receives the benefit of a good without paying for it.

No real free-riding within a education financing country

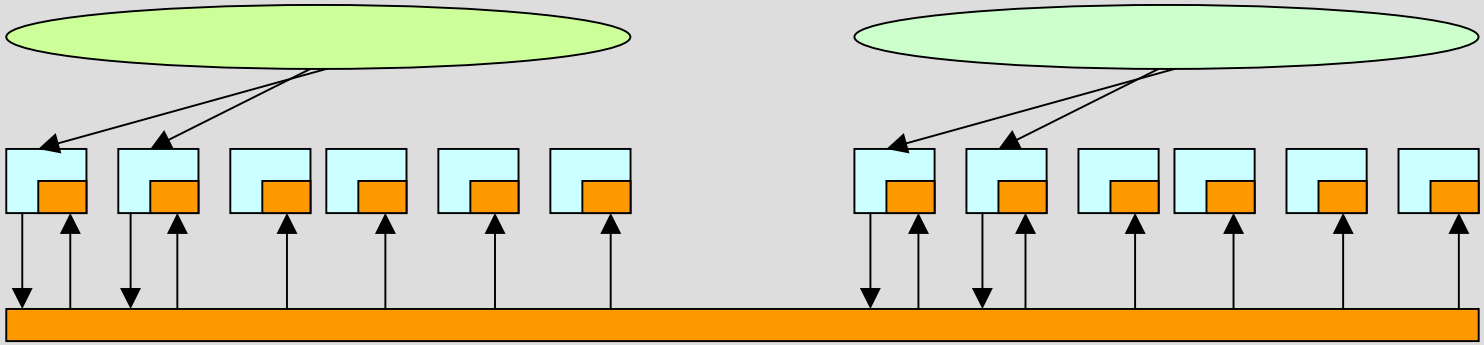


World wide free-riding



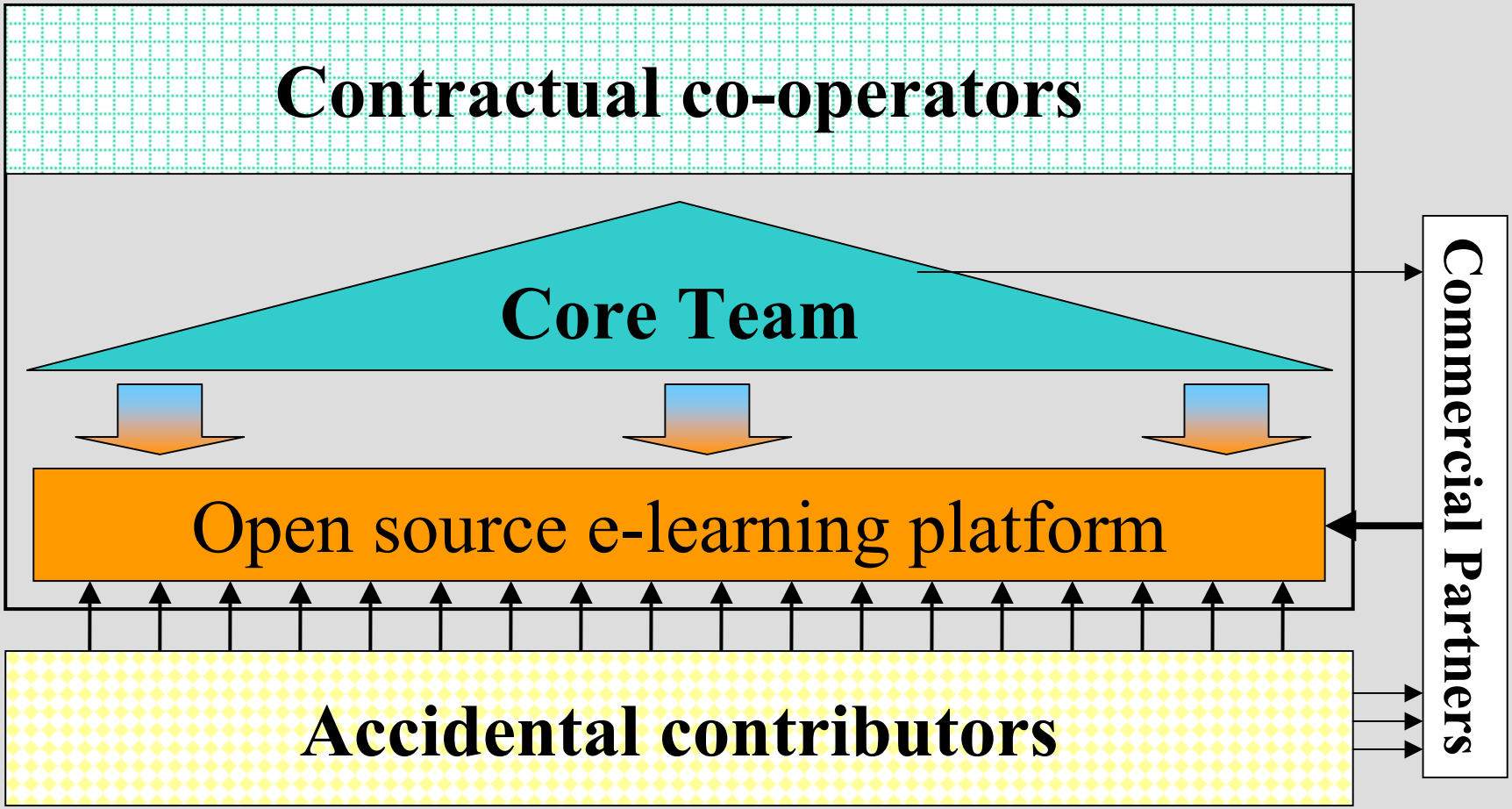
Danger: Underprovision

Need for co-operation



A possible co-operation structure

Structure


Contractual co-operators
Core Team
Open source e-learning platform
Accidental contributors
Commercial Partners

Contractual co-operators

- Partners agree on binding contracts
- Finance the core team
- Derive big absolute benefit per invested amount of money
- Big projects (e.g. PolitikON, E-L I-P), Countries (e.g.: U.K.) or unions (e.g. Europe)

- Strong leadership/vision
- Marketing: more users and co-operators
- Stable releases
- Maintenance, bug fixing
- Programming works for core infrastructure
- Programming standards

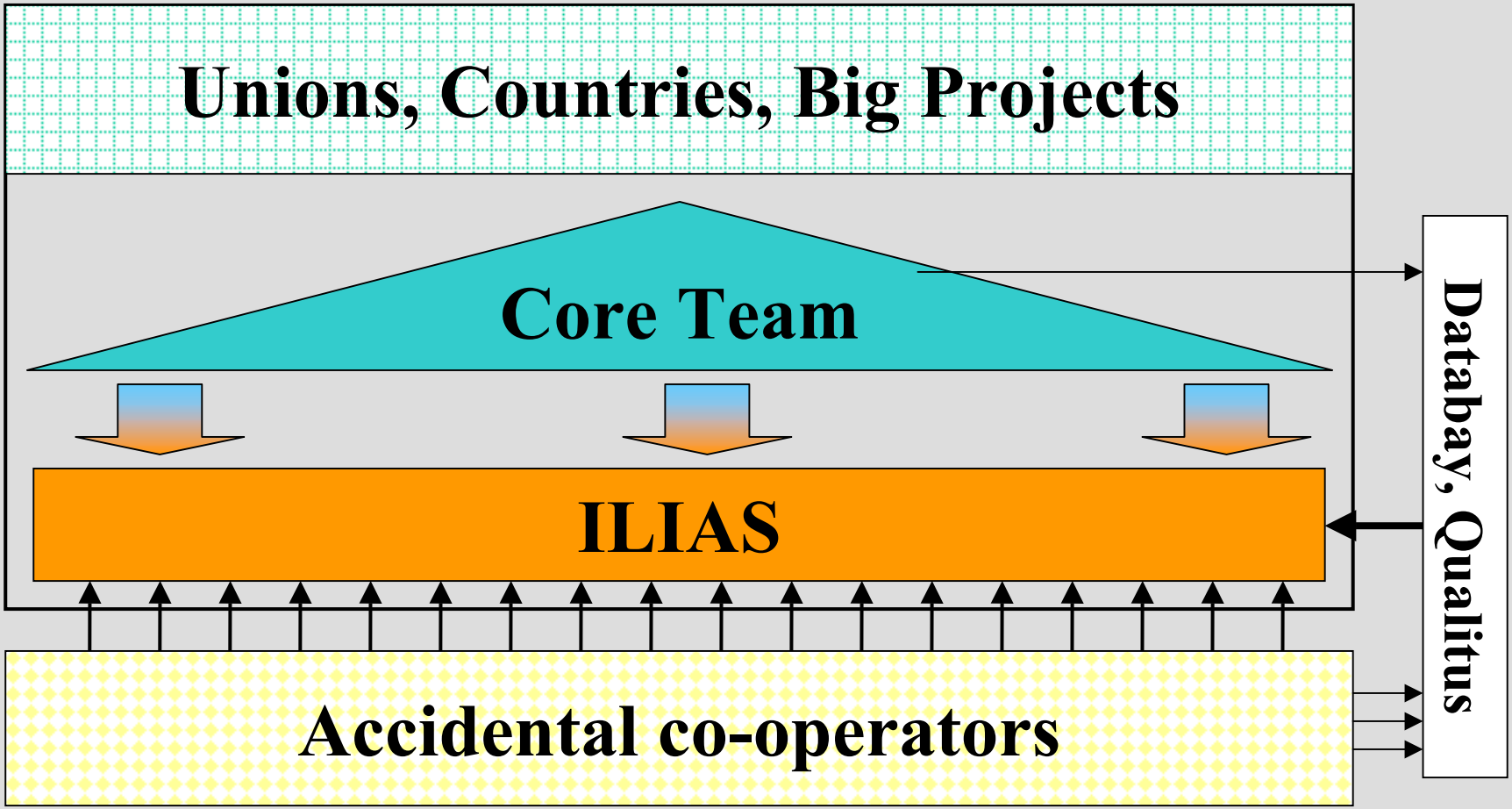
Accidental contributors

- Partners co-operate spontaneously
- Derive small absolute benefit per invested amount of money
- Small projects, small institutions, single persons
- Mainly specific software improvements

Open source e-learning platform

- ILIAS
- Only existing successful oss (300 installations, many co-operatiors)
- Development since the beginning user driven (QFD)
- Sophisticated managmen/team
- Working with trustful commercial partners

Structure for co-operation



Conclusion

Many advantages go along with a standard e-learning platform

Conclusion

If this standard software is closed source, problems of monopoly power arise

Conclusion

Open source can be a way out of this dilemma

Conclusion

One condition for success is, that education financing unions/countries become contractual partners

Conclusion

The starting point should be
ILIAS open source

Questions?

Thank you!

Direct and indirect benefit

Cost of contribution	<	Price of equivalent proprietary product

E-learning platforms are complex goods