



Ministero  
dell'Economia  
e delle Finanze

# Open Source and Public Administration: barriers and opportunities for adoption

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consip



# Corporate Profile

- Consip is a **public stock company** that was created in 1997 by the Ministry of the Treasury (currently, Ministry of Economy and Finance, MEF), which is its sole stockholder.
- Its **mission** is that of providing consultancy and project support, organizational and technological services aimed at the innovation of Public Administration.
- Its **vision**, stated in the claim “Supporting a changing Public Administration”, describes the essence of the tasks entrusted to the Company: Consip is a partner at the service of Italy’s Public Administration and supports it in its drive towards modernization.
- Consip received **ISO 9001:2008** certification for ‘Conception, design, development and implementation of acquisition initiatives for goods and services as the national central purchasing body: frame contracts and emarketplace’

# Business

Consip works and operates in the following main areas:

- Management and development of ICT solutions of the **Ministry of the Economy and Finance, the Court of Audits** and, where stated by law, of other State central administrations.
- Implementation of the **Program for the Rationalization of Public Expenditure in Goods and Services**, which is based on the use of information technology and innovative tools for public administrations purchases.
- Delivery of **ICT consultancy and purchase optimization services** to the remaining public administrations.

## Method

- Consip offers consultancy and project services. The Company provides **strategic conception of projects** through the sophisticated know-how it has developed in the organization, processes and information systems of Public Administration.
- The implementation phases of the projects are executed looking at the market for the solutions that are most suited to the requirements of the administrations. Consip is thus also a “**Contracting Authority**” that defines, implements and awards tenders on behalf of the MEF and of other administrations.
- Consip employs **around 500 people**, 44% of whom are women. Over half of its employees are engaged in the activities that support the IT evolution of the MEF and one third work for the Program for the Rationalization of Public Spending on Goods and Services. The average age in Consip is below 40.
- All of Consip’s activity is characterized by the values of **innovation, transparency, competence and competition.**

# Agenda

- Current context
- Barriers to adoption
- Adoption Models
- Use Cases
- Opportunities

## Current context: Open source in PA (1)

- Strong boost to the automation of administrative processes and information dissemination.
- Lower IT Budget available (-4,3% IT investment in Italian Public Administration, “Assinform 2010 Report”).
- Cultural readiness to adopt Open source solutions.
- Know-how available in the market to work with “Open solutions”.

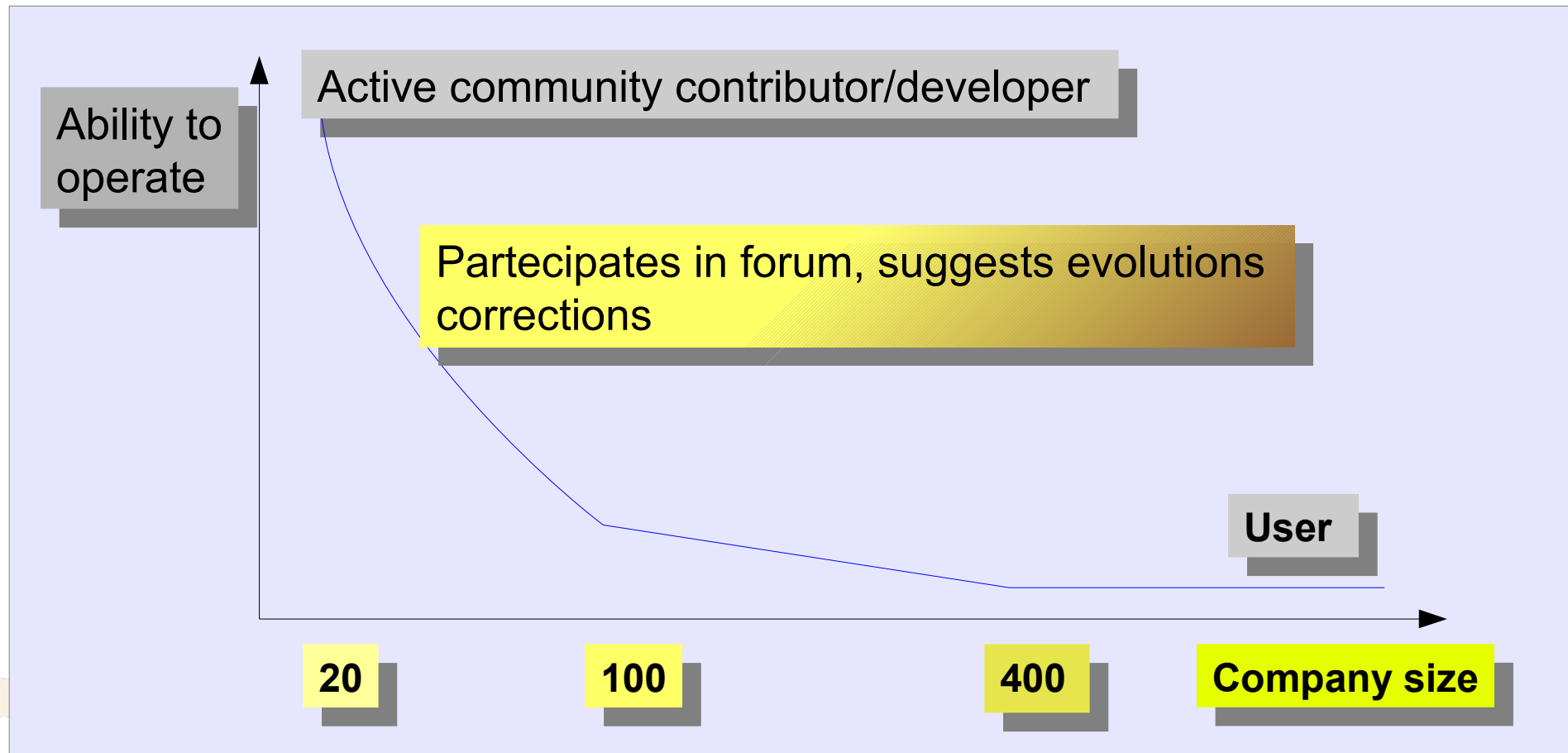
## Current context: Open source in PA (2)

- Wide availability of mature “Open” products.
- Good availability of suppliers for the maintenance of the distributions (Red Hat, Novell, Ubuntu, Oracle (Mysql ?)).
- The adoption of “Open Solutions” is supported by the law (Directive of 19 December 2003, Law No. 296 of December 23, 2006).
- Large number of projects successfully completed within the “local PA”
  - ◆ “Trio” project in Tuscany
  - ◆ “SIPA” project in Puglia.
  - ◆ .....



Orbetello (Tuscany) – M. S. Marotta

# Current context: Italian market situation



# Barriers to adoption

- Consip published more than 75 public tenders for IT services in last two years.
- The total value of tenders was greater than 547 Millions Euro.
- The mean value of each tender was of 11 Millions Euro.

It means that:

- By law, with such economic sizes, only “big market players” can participate as main contractors.
- Little sized “Open Source Companies” which are primary community contributors/developer have difficulties in collaborating with big market players.
- Projects that adopt Open Source components may experience “know how weakness”.



**PA cannot choose the supplier!**

# How to reduce barriers ? (1)

Write the public tender documentation by taking into account that:

- You can request the supplier to list all its experiences in Open source projects.
- You can evaluate the past experiences in terms of technical complexity instead of economic size.
- You can request resources with a specific know-how and experience.
- You can evaluate the participation of the supplier in an Open source community (evaluate number of posts in forums, changes made to source repository, participations to public events, etc).

## How to reduce barriers ? (2)

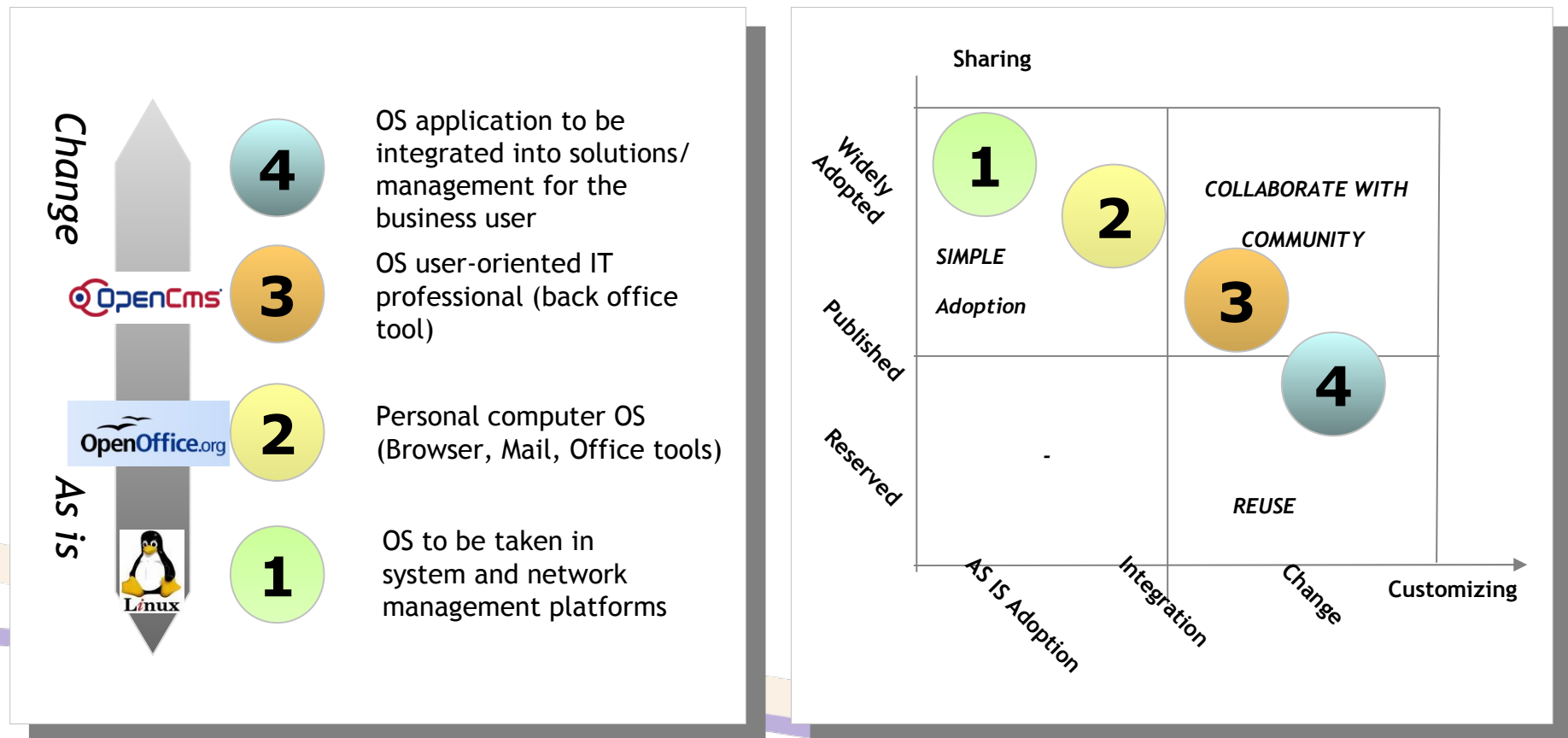
Some “technicalities” in the public tender documentation:

- you can explicitly indicate the Open source product to be adopted since its adoption does not cause a market distortion;
- it is important to define who and how must support all the adopted components;
- the interaction between the supplier and the community should be ruled;
- it is important to define the expected service levels on the various components (ad hoc developments, changes to core modules of OS products, etc);
- the appropriate professional resources **should be well identified**;
- it is important to define a **verification and certification service** for any new release of the adopted open source components. This must be object of evaluation in the public tender.

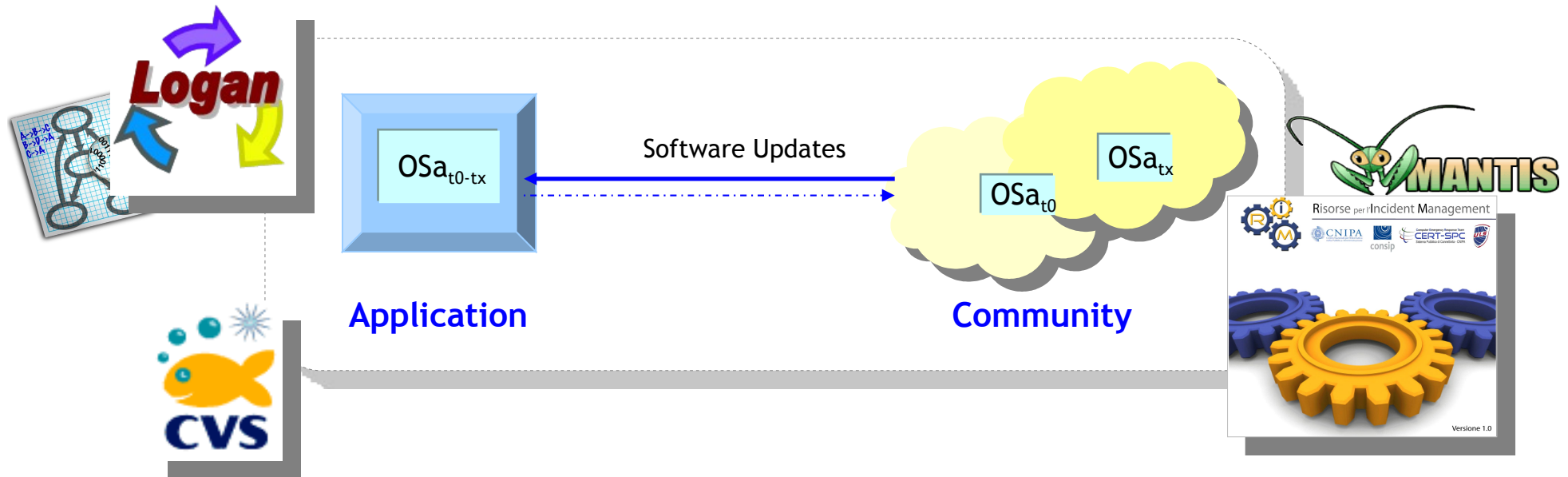
**Big Market players should be induced to collaborate with “Open Source Companies” in the public tender.**

# Adoption models segmentation

The location of the different components of Open IT infrastructure, the various applicable licenses and the availability of players in the market of "support" requires the adoption of different approaches ranging from collaboration to usage.



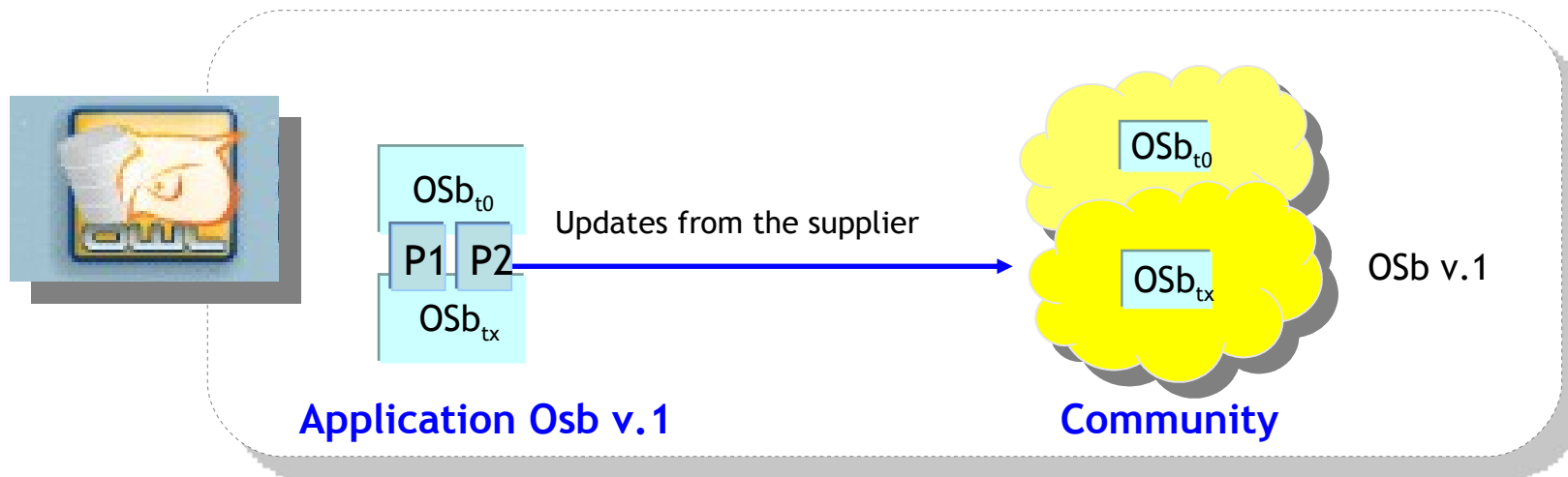
# Adoption: the “As is” model



The Open Source component “OSa” (the “core”) is adopted AS IS and it is integrated with other open source components by means of some custom software.

- The supplier must guarantee timely adaptation of the custom software to the evolution of every Open Source component.
- The supplier must inform the community of every discovered bug.
- There aren't license compatibility problem.

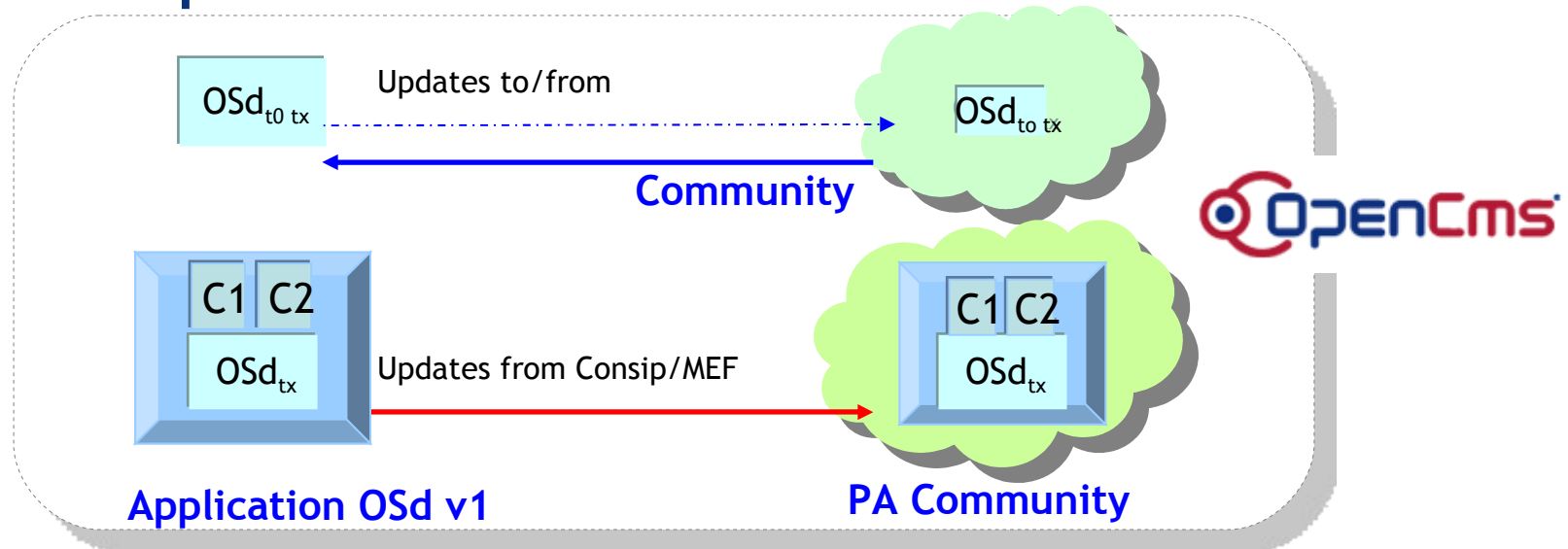
# Adoption: the “open model”



Complete adoption of Open Source paradigm (OSb v.1).

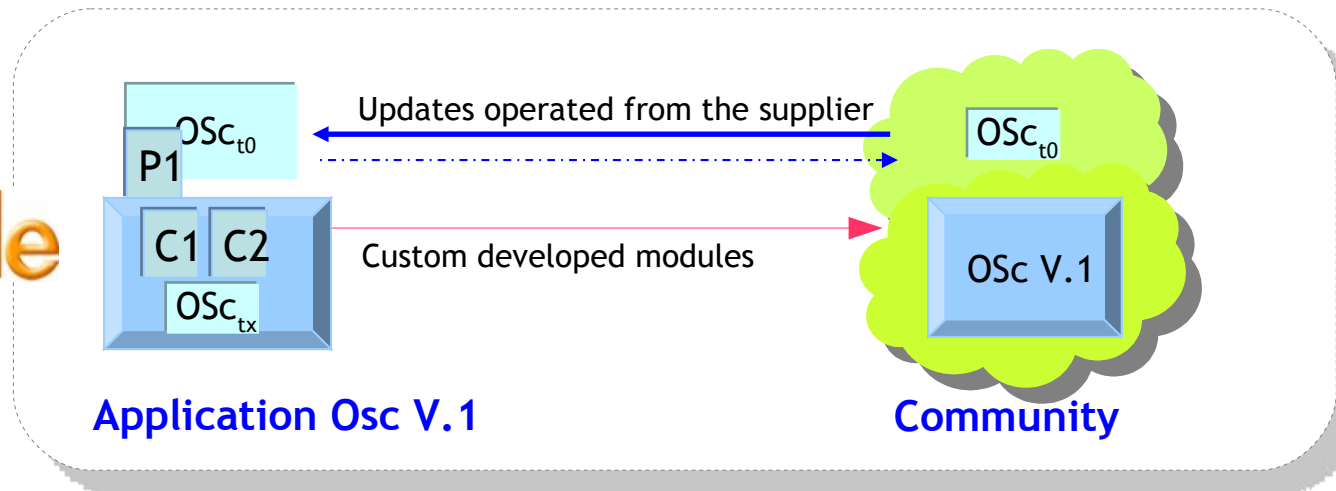
- The supplier modifies the “core” of the Open Source component and **MUST provide** it to the community. **It must be avoided any fork.**
- The updates sent to the community **must comply** with component license.
- Sharing updates with the community it's an opportunity to ensure continuity of service, cost reduction and technological evolution.

# Adoption: mixed model



- The OSd component (“core” module) is adopted AS IS.
- Custom software components (C1 and C2) are developed for the PA by the supplier.
- The PA owns the Intellectual Property of these modules that are external to the Open Source component.
- C1 and C2 modules could be distributed to other PA to establish a “Public Administration Community”.

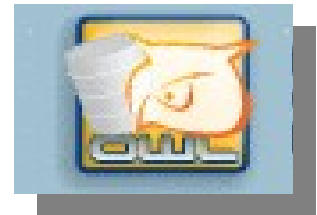
# Adoption: the modular model

- The OSc component (“core” module) is adopted and developed with new functionalities (P1 is the new component that is a part of the “core”).
- C1 and C2 are new and independent modular components developed for the PA.
- P1 is released to the community, according with the “core” license while C1 and C2 are shared only with the PA Community.

## Use case: the document management system (1)

- The Ministry of Economy and Finance (MEF) has a portal dedicated to the management of technical IT documents.
- The document engine is based on the Open source component “**OWL Intranet Engine**”.
- This component has been developed through several modifications and adaptations to the needs of MEF.
- The **Supplier** supports the product ensuring the agreed service levels.



## Use case: the document management system (2)

### Consip:

- Has designated some of its internal resources (as individually authorized developer) to interact with the community;
- has instructed its supplier to share the developed changes with the OWL community;
- has obtained from the community, the approval of the modifications and their integration into the development branch;
- suggests to the community the possible development paths for the product;
- also cooperates with an economic contribution to the evolution of OWL, having a direct relationship with the most active developers.



## Use case: The e-learning system (1)

- MEF has an e-learning platform based on a proprietary product that no longer meets its needs.
- After a careful study phase, Moodle, one of the most popular e-learning platform, was adopted.
- The adoption of Moodle has resulted in the definition of "new constraints" in the tender documentation.



## Use case: The e-learning system (2)



New constraints in the tender documentation:

- The supplier must adhere to the programming standards of the community.
- The supplier staff must actively participate in the community for bug reporting or to propose “core modules” evolutions.
- The supplier must be authorized by MEF to propose new custom developed modules to the community.
- The supplier must be authorized by MEF to modify the Moodle core (avoid fork).
- The supplier maintains any developed module ensuring integration and compliance with the contracted service levels.
- The supplier monitors the community to adopt new OS components versions.
- The supplier provides a first-level support for any anomalies on the components and must interact with the community to search for possible solutions and/or workarounds.

## Use case: OpenCMS (1)

- MEF has adopted OpenCMS as the Content Management System for all its Internet web sites.
- The need to adapt to new requirements has led to the development of independent modules that interact with OpenCMS.
- The entire solution is now being adopted by the Court of Audits, creating a small PA Community.



## Use case: OpenCMS (2)

The adoption of "mixed model" allows you to:

- Distribute only to other PA the developed modules following a "reuse paradigm".
- Make it possible to create a real community where every PA contributes to software improvements and exchanges informations and know-how.
- Become a catalyst for greater cooperation between Public Administrations.



OSARE: Open Source As  
Reuse Experience

# Opportunities

Open Source adoption in the PA can “make the difference”:

- To tip the balance of IT investments from Licenses to Services.
- Promotes market know how improvement.
- Reduce Total Cost of ownership by stimulating competition between market players.
- Promotes collaboration and “reuse” of the developed software among Public Administrations.
- It's green! (less Hardware resources to make the same work).

# References

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# Thank you !