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Technological Choices
for the
Renovation of the French Tax Information System




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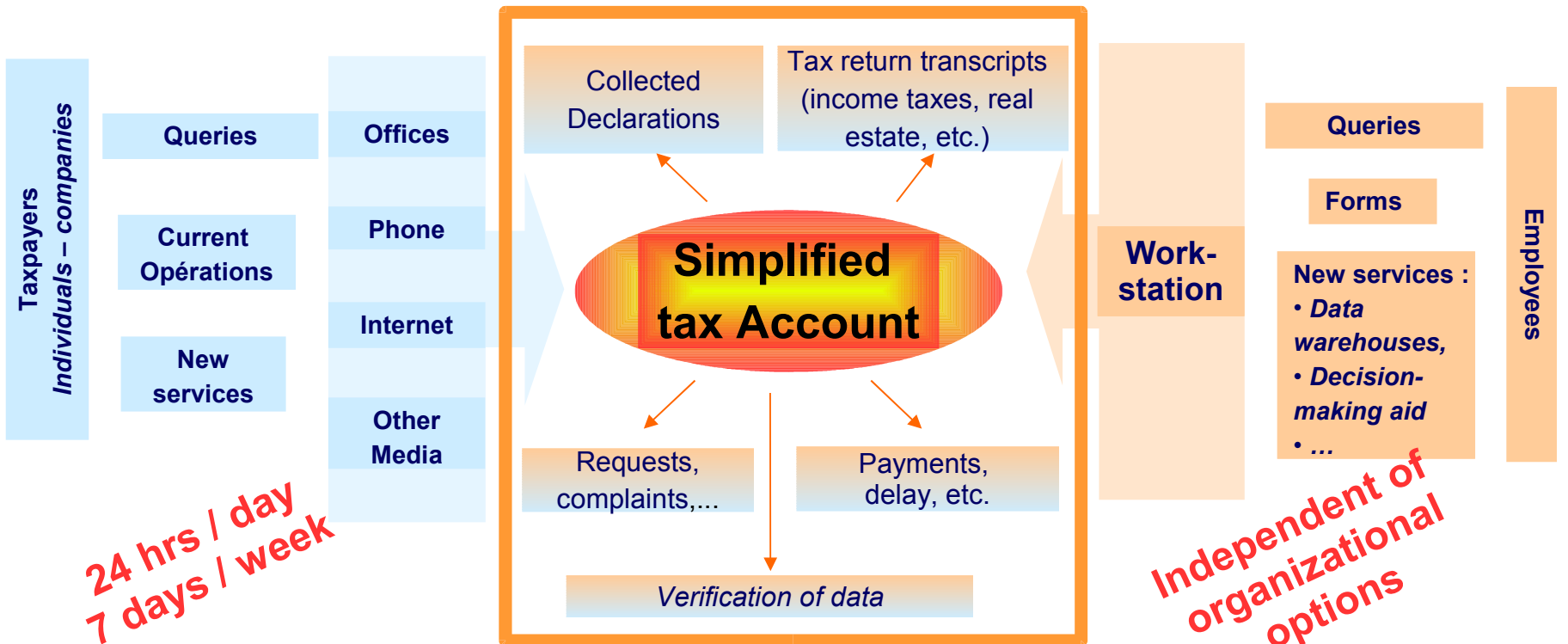
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COPERNIC: Stakes

- A new unique fiscal IT system for two government agencies & accessible to citizens
- 1 billion € budget over 10 years for ~ 60 projects

Give **taxpayers** a global, coherent and cheaper access to their fiscal situation

Reinforce the efficiency of the agencies **employees**



COPERNIC: Examples

- Income tax : e-File & Transcripts

- ~ 3 800 000 on-line declarations in 2005
- ~ 120k in 02, ~ 600k in 03, ~ 1250k in 04

- On-line Payment
 - income taxes
 - real estate taxes
 - « social contributions »

- On-line payment contract management

Tax Authority IT policy Strategic Imperatives

What?

Control
of IT systems

Long-term
sustainability

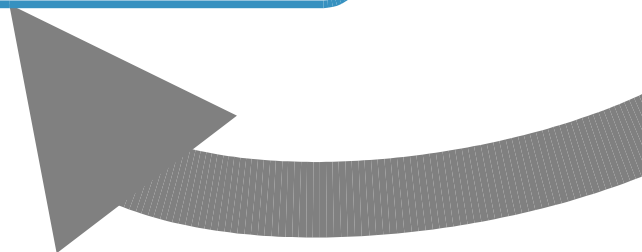
Vendor
Independence

How?

Strong architecture
Paradigm (SOA)

Systematic use of
Standards

Free & Open Source
Software

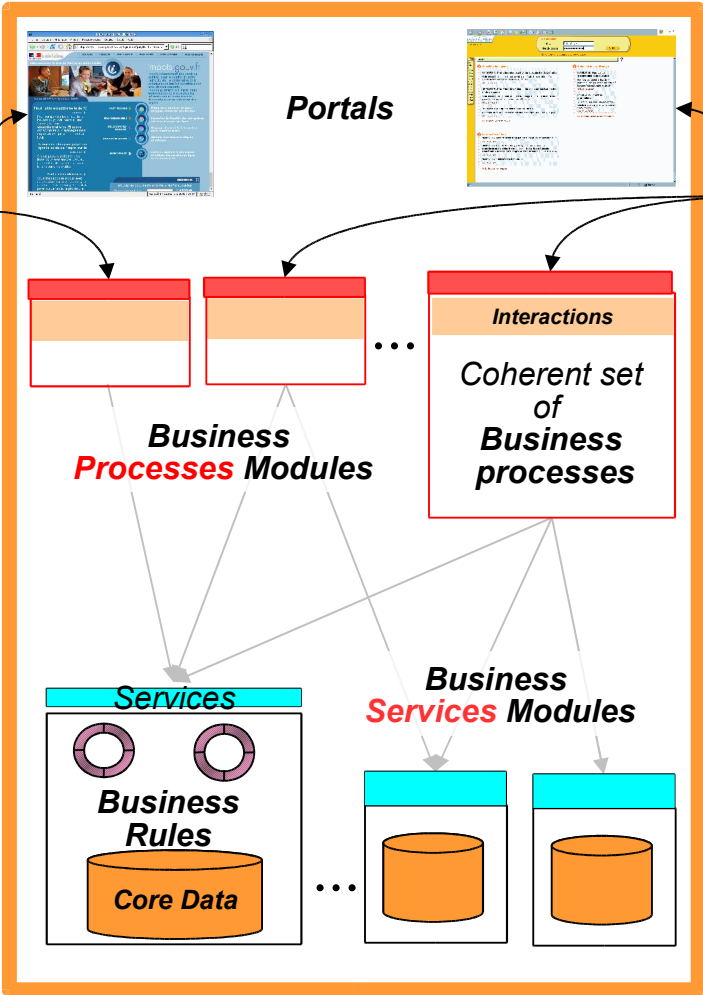


Copernic is a full implementation of Service-Oriented Architecture (SOA)

~ 55M citizens
~ 3M corporations



~100K employees



Business processes and organization can *evolve independently* from elementary business services and data

Core business data can always *stay coherent* and can be reached from any business process at any time

Mandatory prerequisite
All interconnections must follow a *Standard* rule

FOSS: Free & Open Source Software

A rational choice

Standards Compliance & flexibility of use

2000

Successful
experimentation

Mature support
in the market

Demonstrated (much) lower
TCO (75 to 90%)

- ~ 4000 *linux* servers
- *Full FOSS system monitoring* (Nagios, MRTG)
- *Middleware and runtime framework are FOSS* (Apache, **JBoss**)
- *Software development platform built on FOSS* (Eclipse)

2004

FOSS is now our standard policy even for critical applications

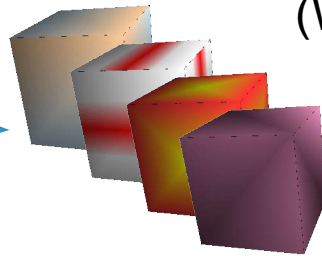
Why JBoss? *Early history*

Program-wide J2EE choice in 2000
Apache chosen for Web container
without choosing an EJB implementation

Projects chose several \neq products:

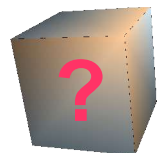
(WebLogic, WebSphere, Oracle, JBoss)

- Multiple support
- Multiple contracts to manage
- Heavier costs in dev^t and production...



We needed a unique EJB reference implementation

How would our **unique critical** EJB server be chosen
along with professional support and service



Why JBoss?

The evaluation procedure

Our strong FOSS policy wasn't already established

We issued a “neutral” **Request for Proposals** putting *Open-Source* and *proprietary* solutions in competition

Criteria:

- Compliance to Standards (J2EE 1.3 + JMX)
- Performance
- Support Quality
- Contractual commitment
- Price

We wrote a **benchmark**
(8 man*month to develop, 1 week long test for each candidate)
to evaluate the proposals (product and support level)
(recognized as unusually strong by every candidate)

The procedure is auditable

Why JBoss? *The choice*

7 proposals:

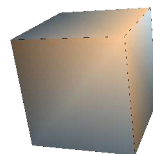
- 4 based on FOSS (3 JBoss)
- 3 “proprietary” (the usual ones!)

JBoss-based proposals were ranked 1st, 2nd, and 5th
The proposal ranked 3rd was also FOSS-based

The evaluation demonstrated that open source rival or beat proprietary software on a technical level.

More importantly, it proved that there are **mature offers** for **cost-saving professional support and service**

We signed a contract with Atos Origin / JBoss Inc. on June 2004



= JBoss

Why JBoss? *one year later*

The contract execution is in par with what was promised in the proposal

This experience made us definitely switch to an FOSS-friendly strategy

We have extended the model and have issued a RFP to give us support and assistance on every FOSS we use with similar requirements as for JBoss:

- Every critical bug must be solved within 48h
- We can't be forced to a version change (with the same level of support)
- Every patch must be committed back to the community dev^t trunk.

These contracts not only allow us to achieve our goals but also cut our software costs (TCO) by 4 (for the JBoss part) to 10 (on a global scale)