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## *IFIP Summer School 2007*

### *Leveraging New Business Models with Identity Management An e-learning case study*

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# Contents

- ◆ ***Introduction***
- ◆ ***New business models***
- ◆ ***Identity management as an enabler***
- ◆ ***Study Case: PABIOS project***
- ◆ ***Summary***

# ***Introduction***

- ◆ ***Convergence process in telecom***
  - ❖ Multimedia
  - ❖ Device
  - ❖ Network (IP & mobility)
- ◆ ***New business models***
- ◆ ***Identity Management as an enabler***
  - ❖ To facilitate collaboration
  - ❖ To leverage core assets
  - ❖ To provide privacy
  - ❖ To improve service usability/security

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- ◆ *Summary*

# ***New Business Models***

## ◆ *From Silos to Collaboration*

- ❖ *Telcos' branches integration*
- ❖ *Partnership*

## ◆ *Motivation*

- ❖ *New business opportunities*
- ❖ *Infrastructure and development savings*
- ❖ *Marketing savings*

## ◆ *The 2.0 approach*

- ❖ *Web 2.0, Mobile Web 2.0, Telco 2.0*

## *The 2.0 approach – The platform*

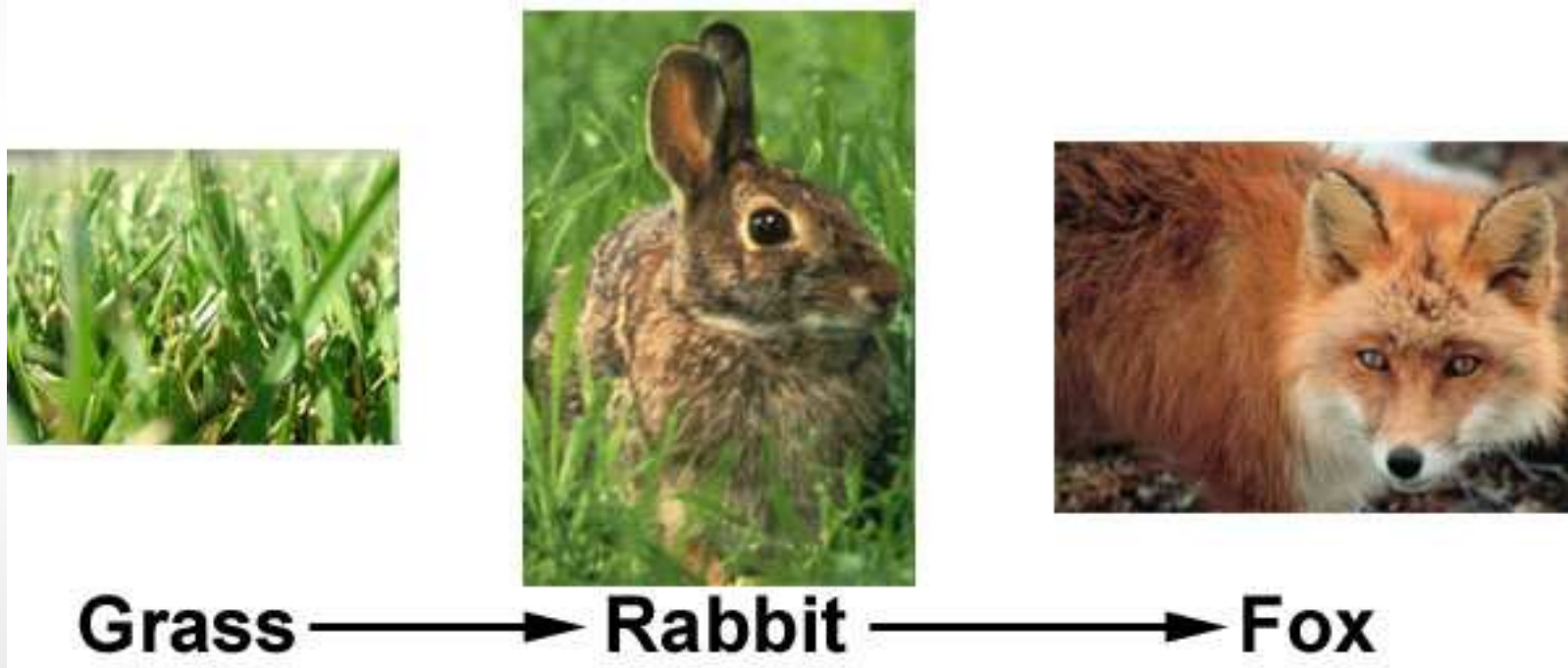
- ◆ *Allows collaboration and partnership*
- ◆ *SOA and Web Services as technology enablers*



Web21C SDK Do Less: Achieve More

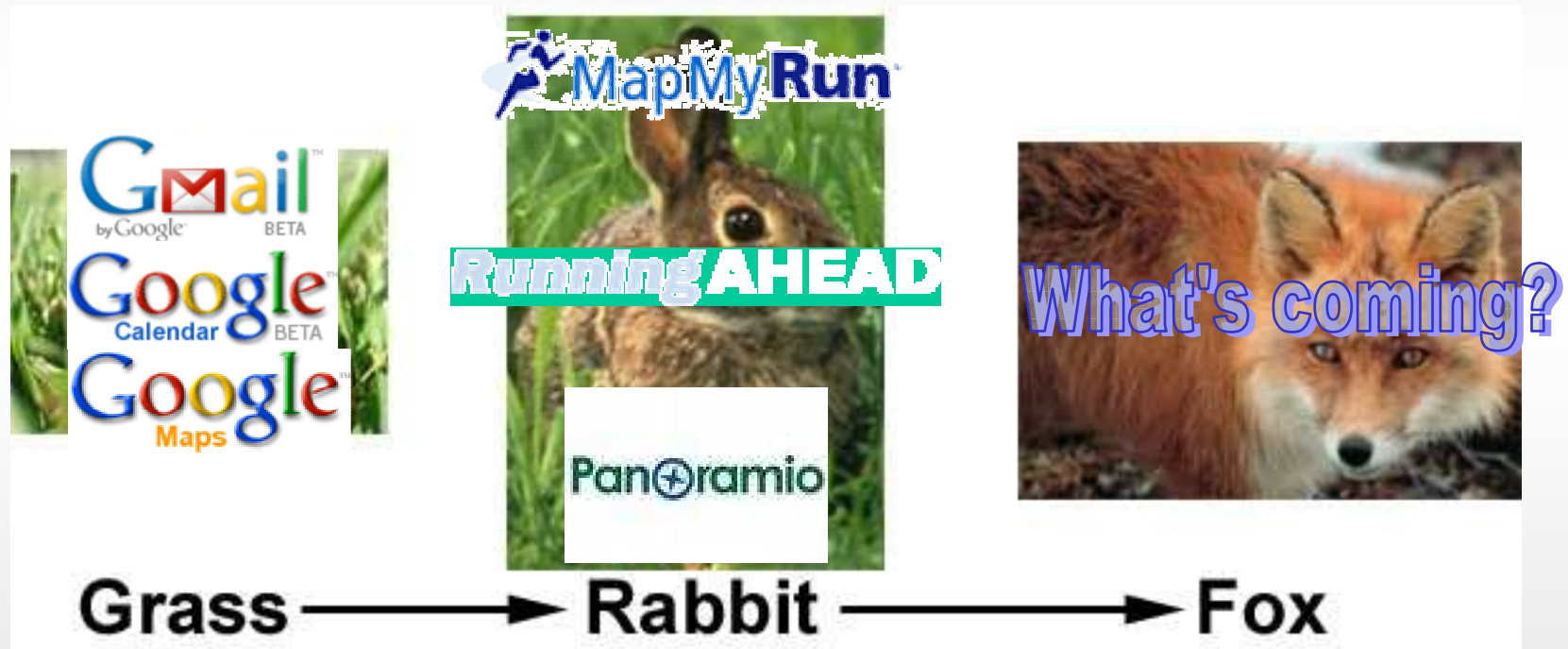
## *The 2.0 approach – The platform*

- ◆ *Business grows up better in a rich ecosystem*



## The 2.0 approach – The platform

- ◆ *Google's ecosystem*



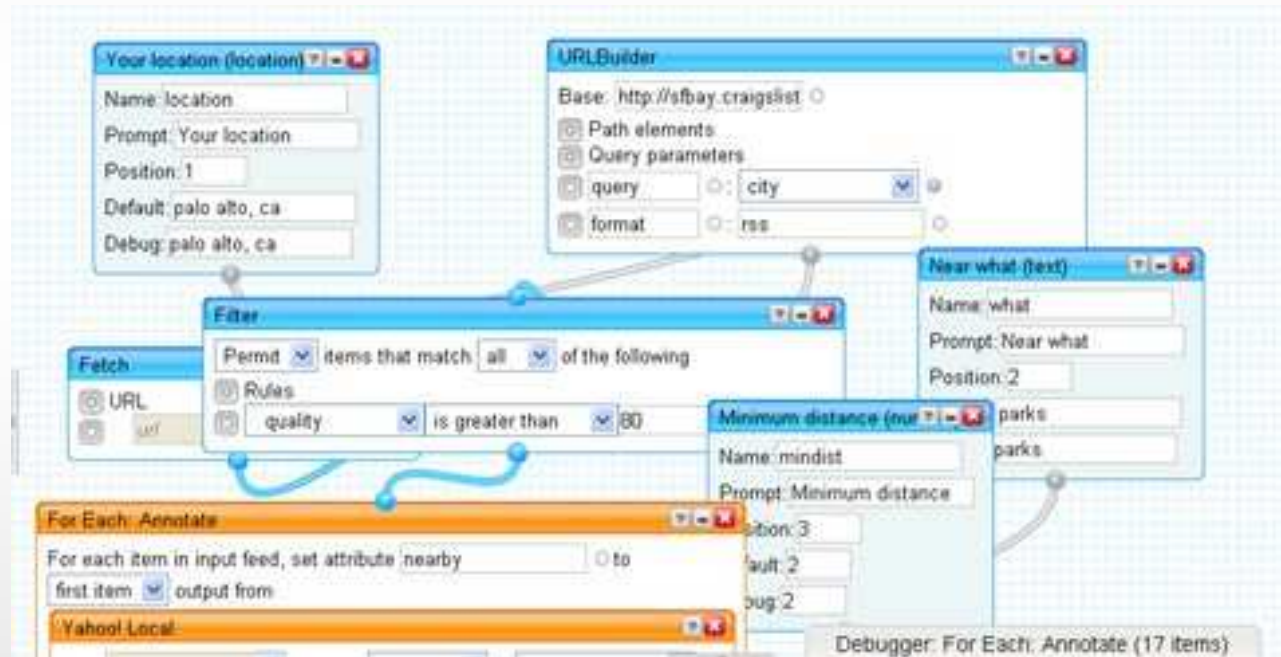


## ***The 2.0 approach – Harnessing collective intelligence***

- ◆ *Make profit from others' developments (3-fold)*
  - ❖ *They are using your own (ancillary) services*
  - ❖ *They are increasing your service offering*
  - ❖ *They are saving you lots of development efforts*
- ◆ *User-centric platforms*
  - ❖ *User generated contents*
  - ❖ *User generated services (mashups)*
- ◆ *User-centric environments & Social networks*
  - ❖ *Viral marketing*

# The 2.0 approach – Harnessing collective intelligence

## ◆ Yahoo! Pipes

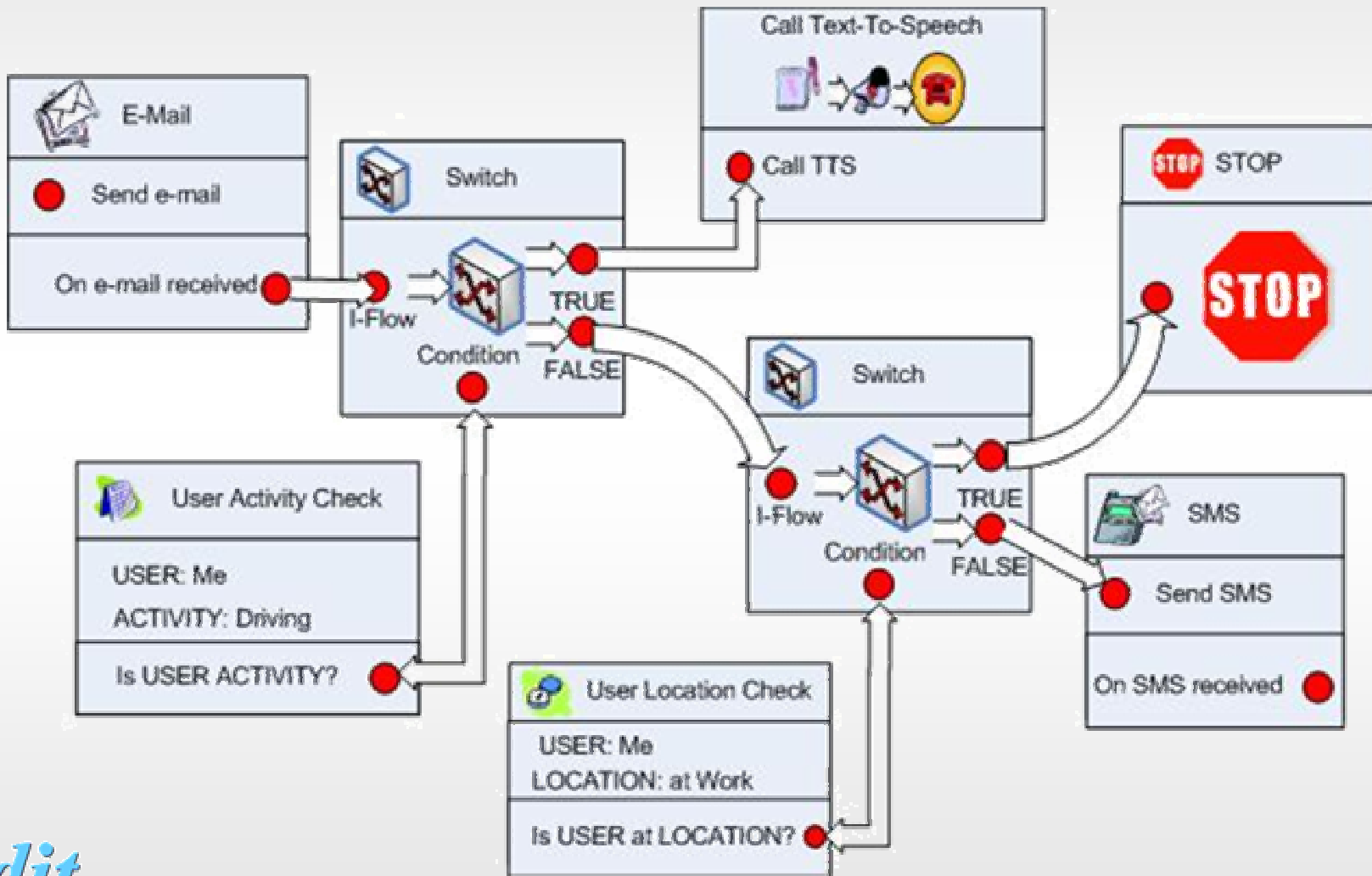


## ***The 2.0 approach – Harnessing collective intelligence***

- ◆ *OPUCE: Open Platform for User-centric service Creation and Execution*



# The 2.0 approach – Harnessing collective intelligence



## ***The 2.0 approach – Harnessing collective intelligence***

***But why would anybody want to  
use my platform and not  
anyone else's?***

## ***The 2.0 approach – Data is a powerful asset a company owns***

- ◆ *Identity information may be used to boost a company's platform*
- ◆ *Some examples*
  - ❖ *Billing information*
  - ❖ *Location*
  - ❖ *Presence*
  - ❖ *Preferences*
- ◆ *...and a related one: TRUST*
- ◆ *But user privacy and legal issues must be taken into account!!!*

# Contents

- ◆ *Introduction*
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# *Identity Management*

- ◆ *Management and selectively disclose of user-related identity information*
- ◆ *Identity Management + Federation = Enabling collaboration while enforcing privacy and security*
- ◆ *Collateral advantages*
  - ❖ *Security & Usability with Single Sign On*



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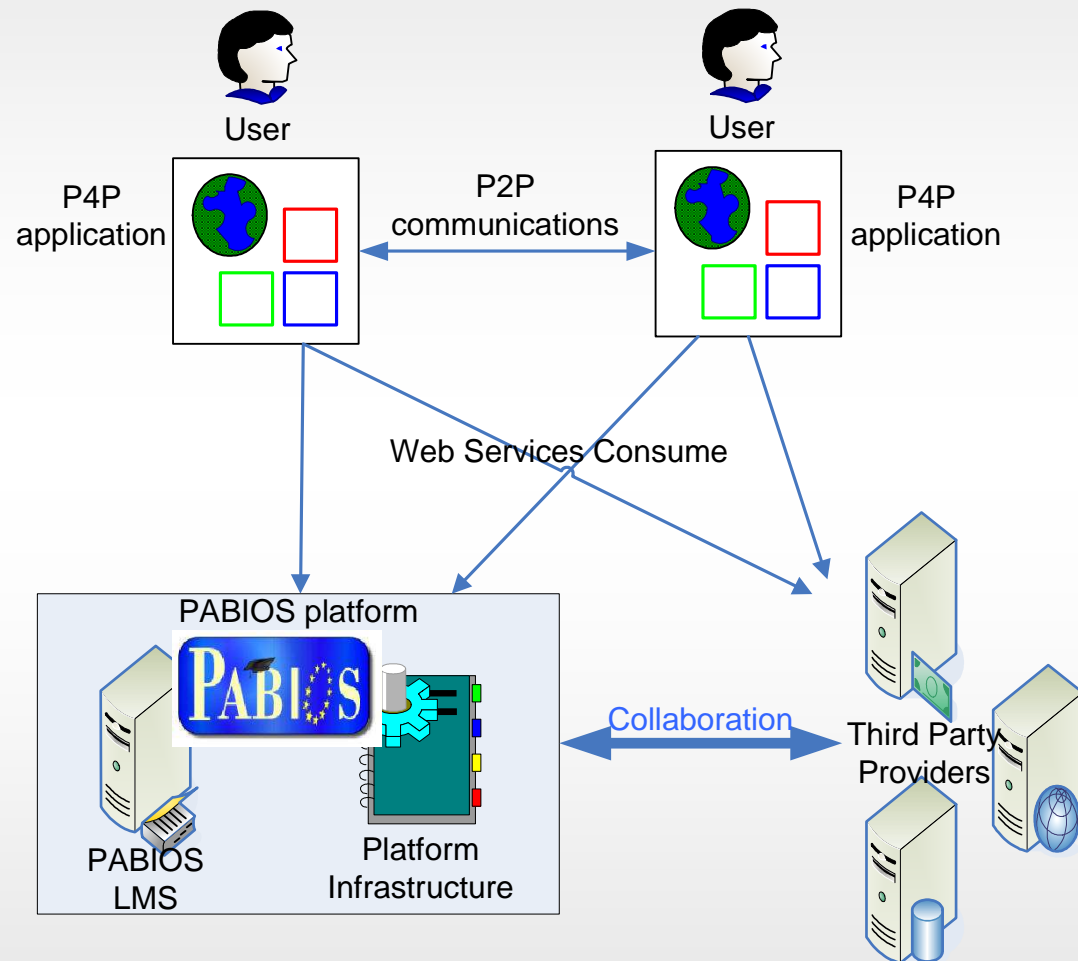
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## ***PABIOS project***

- ◆ ***PABIOS: P4P Application Based Open Source***
- ◆ ***Goal: Development of a software infrastructure that will enable new business models in an e-learning context following the 2.0 approach.***



# PABIOS architecture

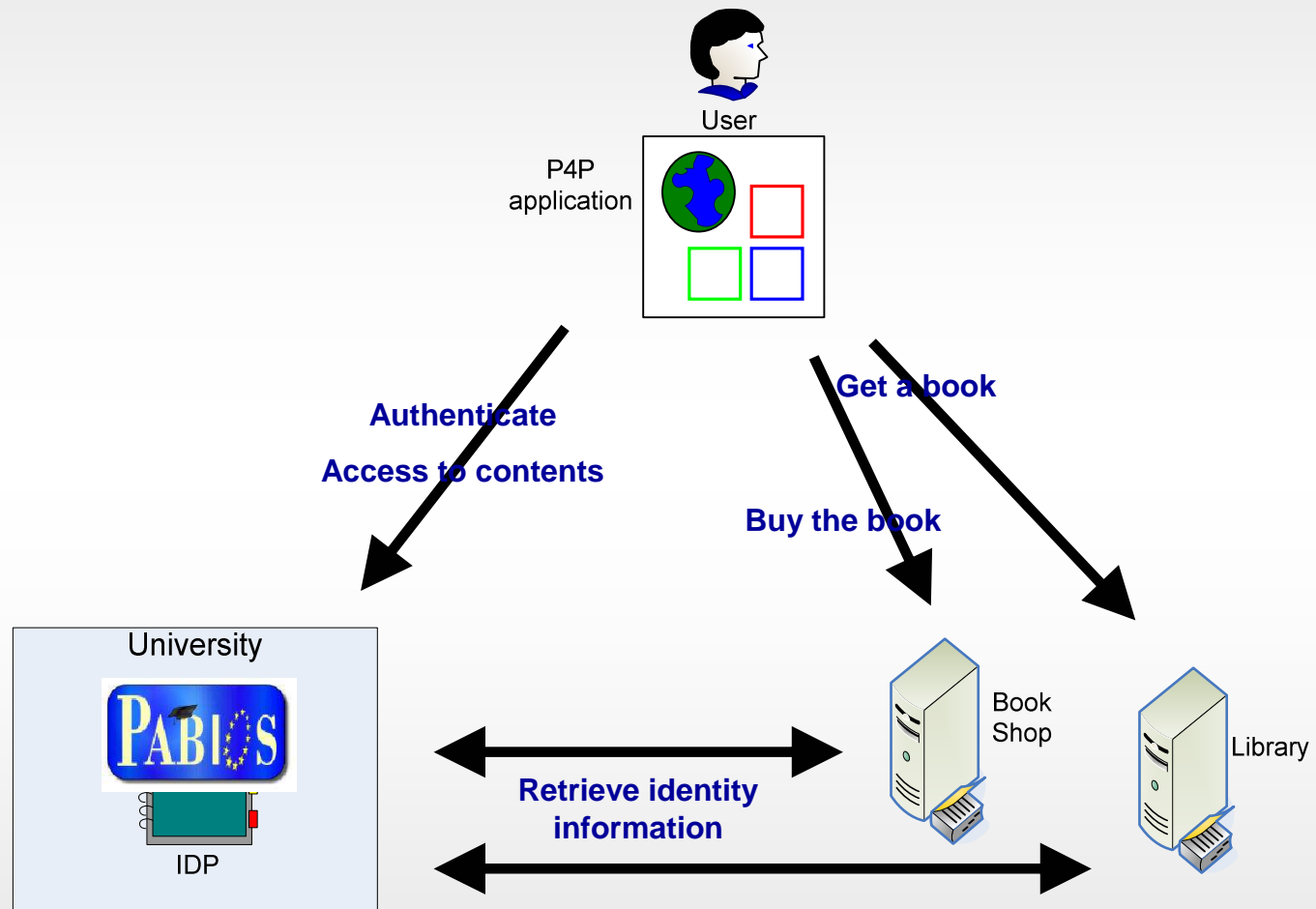


# ***PABIOS project***

## ◆ *Features*

- ❖ *Following a 2.0 approach*
- ❖ *Takes parts from other models: traditional learning models, P2P, Wikis*
- ❖ *Supported by Liberty Alliance Identity Federation Framework (ID-FF) and Web Services Framework (ID-WSF) to allow third parties collaboration and partnership*

# PABIOS Scenario



# ***PABIOS project***

## ◆ *Win-win(-win) scenarios*

- ❖ *Students are better and easier served*
- ❖ *Annoying identifications are not needed*
- ❖ *Third parties could make business in an anonymous (for students) and yet traceable way*
- ❖ *No spread accounts are needed*

# Contents

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# Summary

- ◆ *Identity Management is the cornerstone to support new business models based on open service ecosystems in telecom and IT domains*
  
- ◆ *Further research*
  - ❖ *User-centric service creation environments: service composition, workflows and identity management*
  - ❖ *Apply these ideas to the IP Multimedia Subsystem (service delivery platform for Next Generation Networks) as a business enabler*



