Scalable and Interoperable e-commerce Infrastructures: The Instant Commerce Server Paradigm

Transforming web-surfers to e-shoppers
PC-HCI 2001

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AHEAD Relationship Mediators
Presentation Outline

► e-buyers: expectations
► e-sellers: risks and needed investments
► Instant Commerce Server: what it is and how it reduces the gap between e-buyers and e-sellers
► An example of ICS performance
What do e-shoppers expect?

► High availability
  ▪ Shop everywhere

► Price
  ▪ As low as you can get (for a standard of quality)

► Security
  ▪ Safety for personal data (credit-cards, address, etc.)

► Interest
  ▪ Appealing sites that load fast and are fun to stay at

► Quality of service
  ▪ Require no troubleshooting
What do site-owners want?

► Ways to build e-commerce functionality …
  ▪ in minimum time
  ▪ with minimum cost
  ▪ without compromising quality
  ▪ without devaluing existing infrastructure

► But satisfactory e-commerce functionality requires
  ▪ Databases, scripting languages, SSL certificates, card clearance, presentation logic, expensive servers and software, …
  ▪ Specialized technical stuff to integrate and maintain those parts

► Which means
  ▪ It is not a trivial task to build (or integrate) satisfactory e-commerce functionality
What is Instant Commerce Server?

- A tool that reduces the gap between end-user expectations and site-owner risk and investment.
- An integrated service to build product presentations in minimum time and cost.
- An easy, nearly without programming, way to integrate fascinating product presentations into sites.
- A transparent way to accomplish transactions using the product presentations as service gateways.
What is Instant Commerce Server (cont’d)

► A full range of added-value tools
  - Shopping basket
  - Card clearance, cash on delivery, fax or phone transactions
  - Full statistics
  - Communication and security layer
  - User registration and personal page
  - Extendable profiles for shipping costs
  - Customization layers
  - Cross-selling and product matching
  - …

► ICS fully supports the transition from a simple one-product presentation to a fully functional e-commerce site.
More views on the Instant Commerce Server

► ICS is:

- A tool to easily build highly customized e-commerce sites
- A tool to create a new type of advertisements
  - click-and-buy advertisements
- A distributed network of sellers and site-owners
  - A pool of products where you can add to or from where you can consume product presentations for your site
Who is ICS for?

► **Buyers**
  - Shop from everywhere with the same service quality

► **Sellers**
  - Sell products through multiple channels

► **Site-owners**
  - Sell focused products and earn commissions
    - Without having to build or change infrastructure

► **Site designers**
  - Use ICS as a service to build transparent e-commerce functionality for customers

► **ISPs**
  - Use ICS resell the service to site designers and site owners.
Interfacing and Technology

► ICS is at [http://www.icommerce.gr](http://www.icommerce.gr)

► Friendly wizards assist with most tasks almost eliminating the need to program

► ICS integrates both presentation and logic in a transparent way

► The interconnection between ICS and sites is the minimum: just a short line of HTML code

► unlimited scaling without any backward compatibility issues
Building and consuming presentations: an example

► Step 1: Choosing products

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Product Name</th>
<th>Price</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Ημερήσια Προγράμματα Φυσικής Ακινήτης</td>
<td>Παιδικού Ποδοσφαίρου</td>
<td>12.94€ / 4409 δρχ</td>
<td></td>
</tr>
<tr>
<td>Βιομηχανία της Άσκησης</td>
<td>Η Ειδική Προπόνηση των Αθλητών με...Βάρη</td>
<td>10.86€ / 3701 δρχ</td>
<td></td>
</tr>
<tr>
<td>Αθλητικές Επιδόσεις στην Κολύμβηση</td>
<td></td>
<td>20.6€ / 7019 δρχ</td>
<td></td>
</tr>
<tr>
<td>Αντοχονιστικές Ασκήσεις για το Μάθημα</td>
<td></td>
<td>6.16€ / 2099 δρχ</td>
<td></td>
</tr>
</tbody>
</table>

**Στοιχεία Προϊόντος**

- Λέξεις αναζήτησης
- Κατηγορία: Βιβλία > Αθλητικά (8)
- Πωλητής: Διαλέξτε πωλητή
- Κείμενο συσχέτισης
Building and consuming presentations: an example

► Step 2: Designing/Choosing a presentation
Step 3: Creating an object

100 Ημερήσια Προμήθεια...
12.94 €
Αγοράστε το

77 Ασκήσεις Παιδικού...
12.94 €
Αγοράστε το

Δείτε το καλάθι σας!

O parakátω kώδικας einai o ídios me autón pout saas estáleí me to email. Mporéite na ton metakférete ópws einai se mia sélída HTML kai tha emfaniaste tó dýnamikó antikeímeno pou échete dēmioourghei.
Building and consuming presentations: an example

Step 4: Consuming objects

<script src="http://www.icommerce.gr/generator.html?scriptId=1007416520">

Put this line inside a web page, at the point that you want the product presentation to appear.

The hosting web page can be any page.
Building and consuming presentations: an example

Step 5: A page that consumes objects
# Building and consuming presentations: an example

- **Step 6: Buying products**

Neutral Shopping Basket that relies on server space

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopoly Euro</td>
<td>1</td>
<td>34.34 €</td>
</tr>
<tr>
<td>Red Alert Battleship</td>
<td>3</td>
<td>144.39 €</td>
</tr>
<tr>
<td>Map of the Galaxy</td>
<td>1</td>
<td>17.17 €</td>
</tr>
</tbody>
</table>

Secure Layer
What have we seen?

- The distance between e-buyers requirements and e-sellers costs and risks to provide them.
- A tool that addresses those problems.
- By offering a standard level of centralized service quality ICS can:
  - convince traditional business to become e-business.
  - and web-surfers to become e-buyers.