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IoT, economic and management challenges for e-health integration in the enlarged Europe

IoT, ECONOMIC AND MANAGEMENT CHALLENGES FOR E-HEALTH INTEGRATION IN THE ENLARGED EUROPE

CEI COOPERATION ACTIVITY

WITHIN THE HIGHER EDUCATION IN CLINICAL ENGINEERING (SSIC-HECE) MASTER'S PROGRAMME

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eProcurement in Health

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Content – Some Questions

- What is eProcurement in health sector?
- What are the benefits of eProcurement in health sector?
- What is eMarketplace and how it works?
- Which actions for e-health integration in the enlarged Europe should we pay attention to?
- How could I personally engage in a cross-border Health eProcurement development in the eRegion?

eProcurement in Health Sector

eProcurement in health refers to the use of electronic procurement systems and technologies within the healthcare industry.

It involves the electronic purchasing, ordering, and management of healthcare-related goods and services.

eProcurement streamlines and automates the procurement process, enabling healthcare organizations to efficiently manage their purchasing activities and maintain accurate records.

Benefits of eProcurement in the Health Sector

- Electronic ordering
- Supplier management
- Cost savings
- Inventory management
- Compliance and traceability
- Data analytics and reporting

The issues in eProcurement in Health Sector

- Implementation complexity
- Data integration and interoperability
- Supplier onboarding and integration
- User adoption and training
- Security and data privacy
- Supplier diversity and competition
- Maintenance and upgrades
- Legal and regulatory compliance

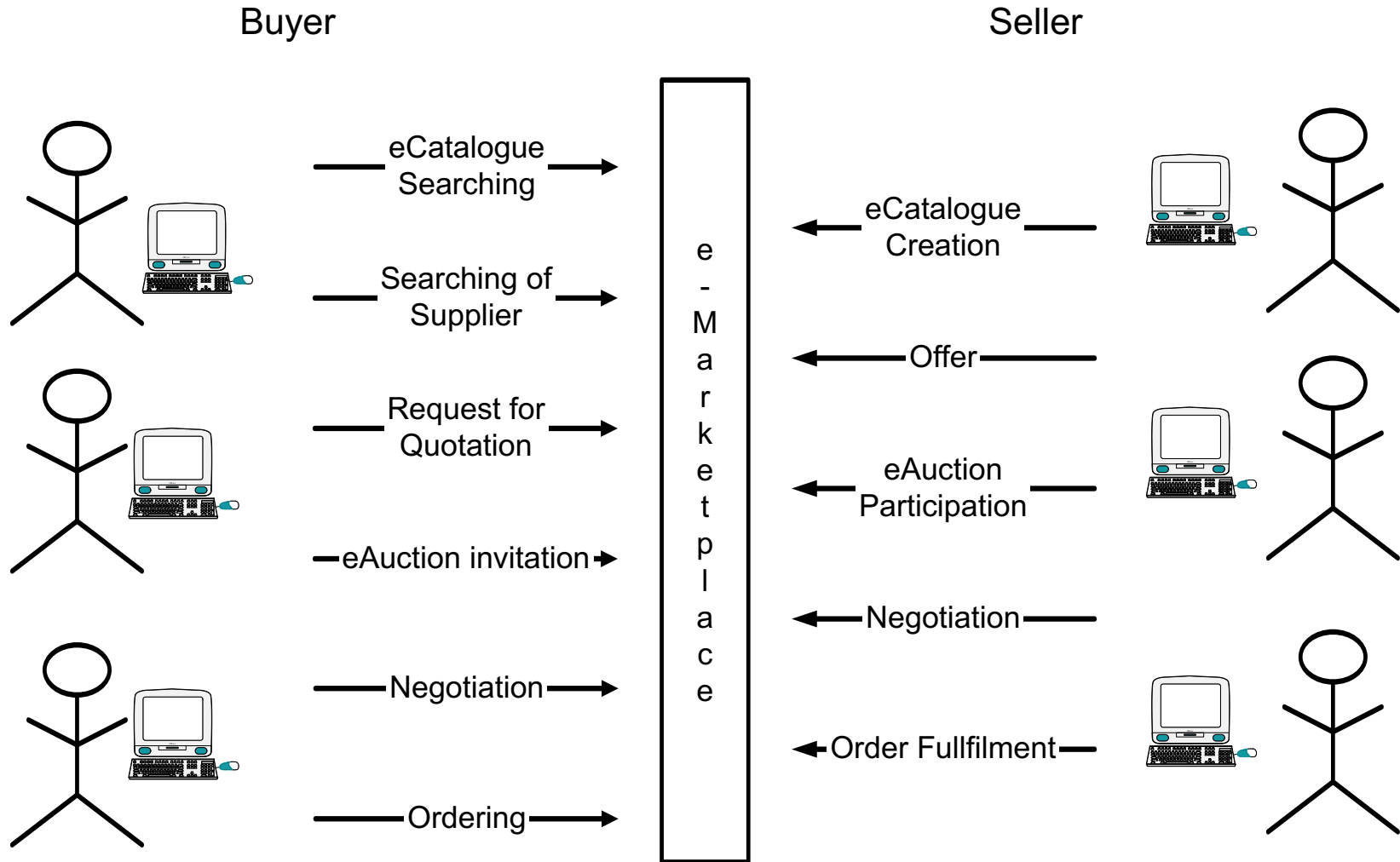
Changes and Challenges in the Healthcare Supply Chain

- **Supply chain** – obtaining products/services via a network of producers, manufacturers, distributors, transporters and vendors.
- **The patients are the consumers** in healthcare; the product they want is their own **improved health** at the best, or most affordable, price possible.
- Healthcare is **not based on supply and demand**. It can't be 'stocked' like it's a traditional product.
- A hospital's supply chain is **very different from a company's** supply chain.
- The **changing expectations** of patients as consumers and the **highly regulated nature of healthcare**.

Supply Chain Costs

- **Outdated IT Infrastructure** (poor access to data, errors, looking for supplies or the correct clinical equipment).
- Supply chain management costs - **the largest expenses** for healthcare and hospital and one of **the biggest areas for savings opportunities**.
- Focusing not on product costs only, but on **distribution and invisible costs** as well.
- Some larger hospital systems become their own warehouses and distributors, **bypassing vendors**.

eMarketplace Trading Processes



eMarketplace added value

- Aggregating a large number of buyers or sellers
- Matching buyers and sellers to negotiate prices on a dynamic and real-time basis
- Ensuring trust among participants by maintaining neutral position
- Facilitating market operations by supporting certain transactions

eMarketplace functions

- Partner search
- Brokerage
- Auction
- Payment
- Logistics
- Insurance
- Legal
- Consulting



Complete eService provided



eMarketplace - Revers Auction

- Supplier creates a catalogue.
- Buyer searches for products and services.
- Buyer creates request for quotation to several possible suppliers.
- Supplier submits a quotation.
- Selected suppliers are invited to participate in a revers auction.
- The most convenient bid is accepted by the buyer.
- The buyer issues an order.
- The supplier takes care of the order fulfillment.

Cloud Computing

Cloud computing is the on-demand availability of computer system resources, especially data storage (cloud storage) and computing power, without direct active management by the user.

Large clouds often have functions distributed over multiple locations, each location being a data center.

Cloud computing relies on sharing of resources to achieve coherence and typically using a "pay-as-you-go" model which can help in reducing capital expenses but may also lead to unexpected operating expense.

Amazon: Simplified sourcing for healthcare

Healthcare is complex. Buying shouldn't be.

Improving the way healthcare organizations source and purchase products, making supply chains more efficient, simplifying contract administration, and bringing comparison-shopping to healthcare.

Simplify your purchasing processes by integrating systems to drive efficiencies and quickly discover insights.

Consolidate purchases and invoices into a digital system.

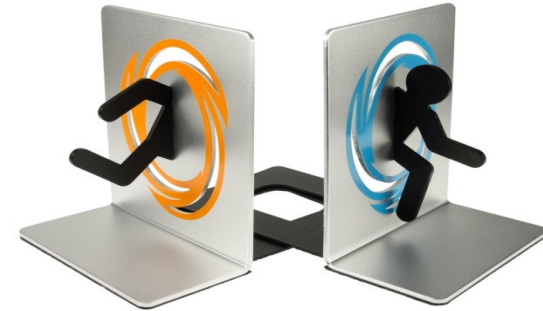
ICT-Powered eRegion



eRegion

In the eRegion
business & government
organizations,
as well as individuals,
extensively use
eTechnologies
in order to support
their work

eRegion Portal



The benefits of the eRegion Portal:

- contributing to increased efficiency of current business processes;
- assisting in bringing together researchers and developers in an eRegion;
- supporting eCollaboration;
- promoting cross-border events: meetings, workshops, conference;
- supporting new business creation.

ICT-Powered eRegion



**Invitation
to a Cross-border
eCollaboration
in Health eProcurement**

**What is a problem?
Which individuals agree
on the problem?
Who should be
involved?**

Actions Needed

Prepare for the eProcurement.

Engage in doing business on eMarketplace.

Define a problem in the eProcurement process.

Establish contacts with the organizations in the cross-border eRegion.

Invite to thinking outside the box & innovating.

Prepare for EU calls for project.

Exploit the *eRegion Portal*.

Be the leader!



References

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Thank you!

If we tell someone everything we know,
we still have everything left.