



Tempus Kisek project {  
at **FER**  
and **HrOpen**  
} Competence Center;

k o l a b o r a t i v n a  
i n t e r n a c i o  
n a l i z a c i j a  
p r o g r a m s k o g  
i n ž e n j e r s t v a  
u h r v a t s k o j

University of Zagreb  
Faculty of Electrical  
Engineering and Computing

Computer Systems and  
Processes group



Croatian Society for Open  
Systems and Internet

HrOpen Expert group



# We are both @ FER

University of Zagreb

Faculty of Electrical Engineering and Computing



# What we research...

- ❑ Web technologies
- ❑ Education enhancement
- ❑ Embedded computing
- ❑ Java world

# Using...

- ❑ Software engineering
- ❑ Open systems



# What is an open system?

- A system that implements sufficient **open specifications**
  - for interfaces
  - services and
  - supporting formats



# Why open systems?



Open system



Closed system

# But roller-coaster looks *cooler*...

## □ Does it?

- portability
- interoperability
- user portability
- choice of vendor



# Who needs open systems?

- ❑ Individuals
- ❑ Companies
- ❑ Public and government bodies





# Individuals

- ❑ Quick bug-fixing, big user community
- ❑ Easy learning and insight in software creation
- ❑ Longer life of a software product
- ❑ Lower costs of buying



# Companies

- ❑ Insight in the software product
- ❑ Prolonged life of a software product
- ❑ Lower costs of
  - licenses
  - employment, training and specialization
  - maintenance and support



# Public bodies (and companies)

## □ Vendor independence

- it is relatively easy to change the product and the vendor

## □ Direct consequences... Vendor:

- improves the level of service (positive competition)
- offers the products at a "decent" price
- lowers the possibility of a blackmail from one of the offerers



# It looks promising, but who is using it?

## □ Maybe once:

- Computer science students
- Software enthusiasts

## □ Today:

- Governments
- Private sector
- Public sector



# Example: UN and Open source



## UN recommends open source

*The United Nations has recommended its members use open source software, particularly in areas related to **health, education and international commerce**, UN inspector Dominique Ouredrago said during a speech at the II international open source conference in Spain.*

*According to Ouredrago, in two of its reports the **UN considers open source as the most appropriate vehicle for the development of its members.***

*[February 20, 2006]*

<http://www.tmcnet.com/usubmit/2006/02/20/1389065.htm>

# Croatia and open systems

## □ Open source software policy

- The Government of the Republic of Croatia shall promote...
  - ...software development based on the open source...
  - ...integration of open software and open standards...
  - ...use of open software and open standards...
  - ... integrating the knowledge related to the software solutions based on the open source into educational programmes...
- ...In the process, contents on the open and proprietary software shall be presented equally...





k o m p e t e n c i j s k i . c e n t a r  
z a . p r o g r a m s k o . i n ž e n j e r s t v o  
u . o t v o r e n i m . s u s t a v i m a

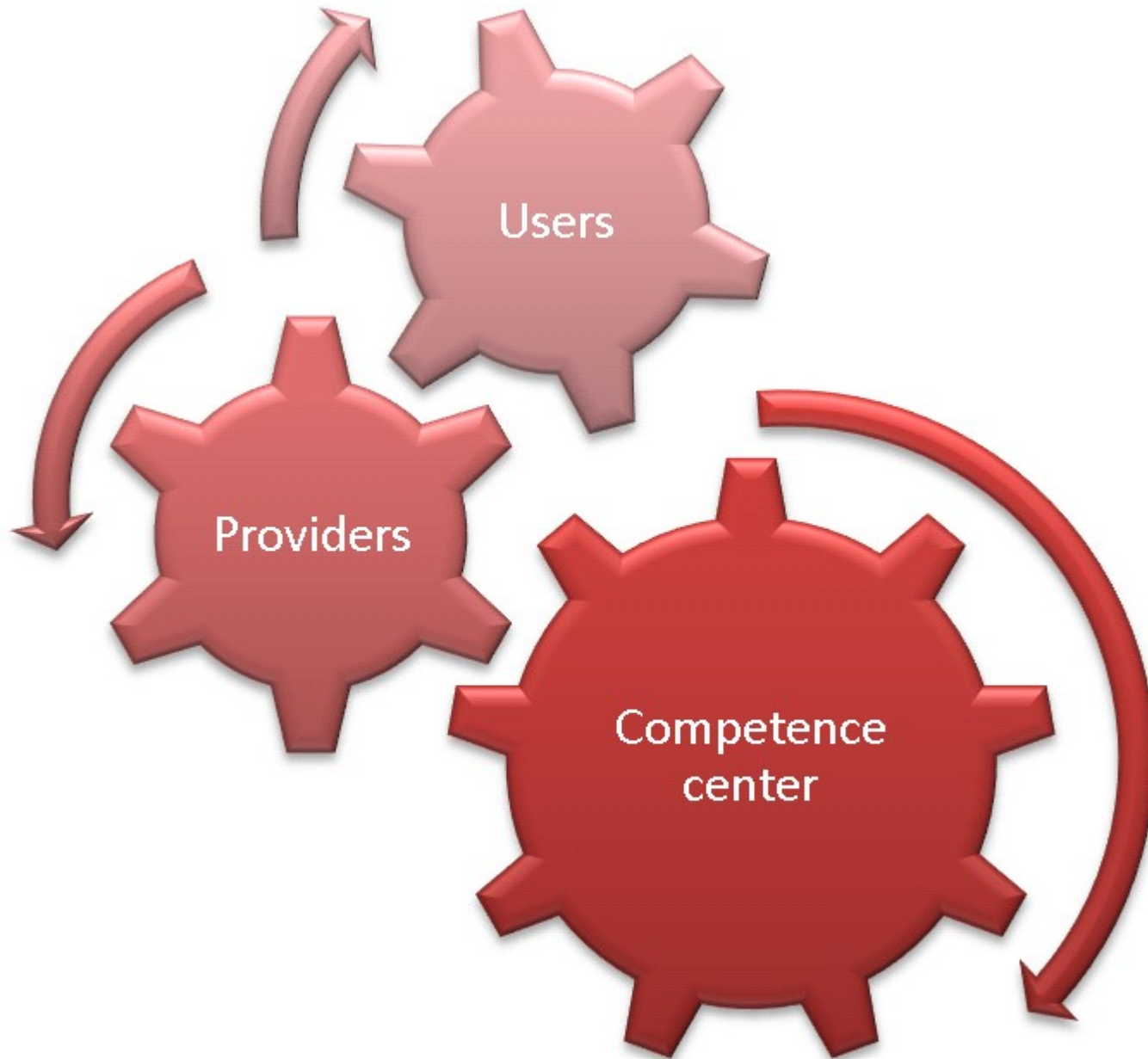
*Competence center for software engineering in open systems*

# Goals

- ❑ Best-practice transfer from EU to Croatia
  - standards
  - open concepts and technologies
- ❑ Showing importance of the open systems to the relevant groups
- ❑ Spreading knowledge in Croatia about the open systems



# Target groups



# Project partners

- **FER** – Faculty of Electrical Engineering and Computing
  - **ŠORA** – School of open computing, already existing at FER
- **HrOpen** – Croatian society for open systems and Internet
- **e-Croatia** - Central state administrative office for e-Croatia
- Others?



# Activities I

- Lectures and round tables to inform and educate the audience in the field of software engineering in open systems



# Activities I - examples



## □ DORS / CLUC

- Biggest and oldest open source conference in the region
- Lasts for three days and includes:
  - Invited world renominated guest speakers
  - Speakers from Croatian government, private and public sector
  - Speakers from neighbouring countries
  - Workshops
  - Hands on lab experience

## □ Invited speakers - “Open Friday event”

- One day, one or two speakers event
  - Round table discussion on current open systems topics

# Activities II

- Gathering information and open educational content, content creation and localization



# Activities II - examples



## □ Translation of:

- Moodle translation marathon – translation to Croatian language of the best known open source Learning management system

## □ Books and manuals (acquiring ISBN):

- “Moodle”
- “PHP”
- “GNU/Linux”
  - All in Croatian under Creative Commons licence

# Activities II - examples



## □ Books and manuals (in writing):

### – Open computing

- University textbook about open systems and technologies (for compulsory course at FER)

### – Open databases systems

- first Creative commons manual in Croatian for well known open database systems PostgreSQL and MySQL

### – Creating web pages

- creative Commons manual in Croatian for creating web pages using advanced techniques like CSS and JavaScript

# Activities III

- ❑ Lectures and workshops for acquiring new knowledge and skills in software engineering, with an emphasis on open systems and technologies





# Activities III - examples



□ Workshops and materials for teachers of primary and secondary schools:

- SE using open technologies
- supporting SE education with open systems

– All Croatian major regions

- Zagreb
- Osijek
- Rijeka
- Split



# Activities IV

- Enabling students to work on "real-life" projects in the software engineering field



# Activities IV – examples



## □ Distributed Software Development course

– a joint, **project based** course of two Kisek partners:

- MdH



- FER



– a cooperation with industry partners from Kisek project

- Ring Datacom



- others who are interested?

# Themes I



Managing process



Quality assurance

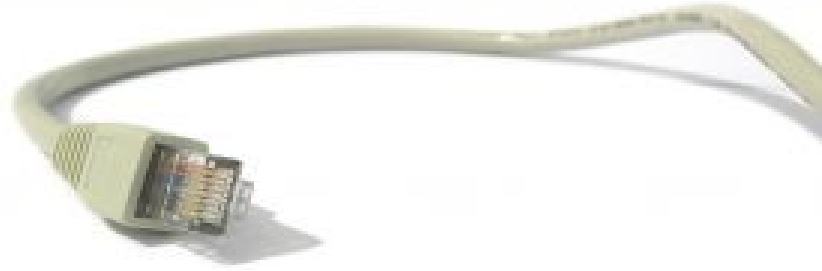


Measuring quality when  
looking for products



Enhancing team efficiency

# Themes II



Importance of standards



Free/libre software



Advanced specialization and  
certification



Basic knowledge and skills

# Contact

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- [udruga@open.hr](mailto:udruga@open.hr) (HrOpen)





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