



**Supporting Service Specialisation: the role of
incubators, accelerators, and S&T
Parks in delivering sector specific support**

16th October 2019

Belgrade, Serbia



3D Impuls

Nebojša Bogojević

3D Impuls

The Faculty of Mechanical and Civil Engineering

3D impuls

- Research and development center of the Faculty of Mechanical and Civil Engineering in Kraljevo
- Digital manufacturing- production trend of XXI century
 - Additive manufacturing
 - 3D scanning
- www.3dimpuls.com

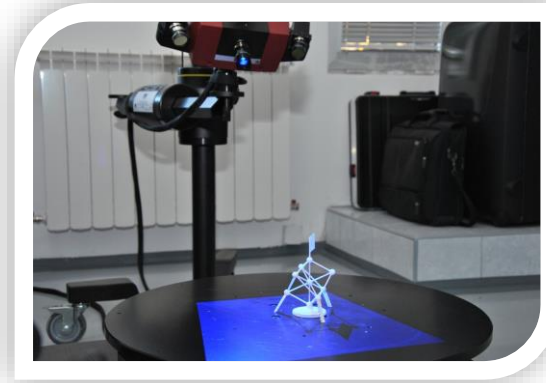


Project funded by the
European Union

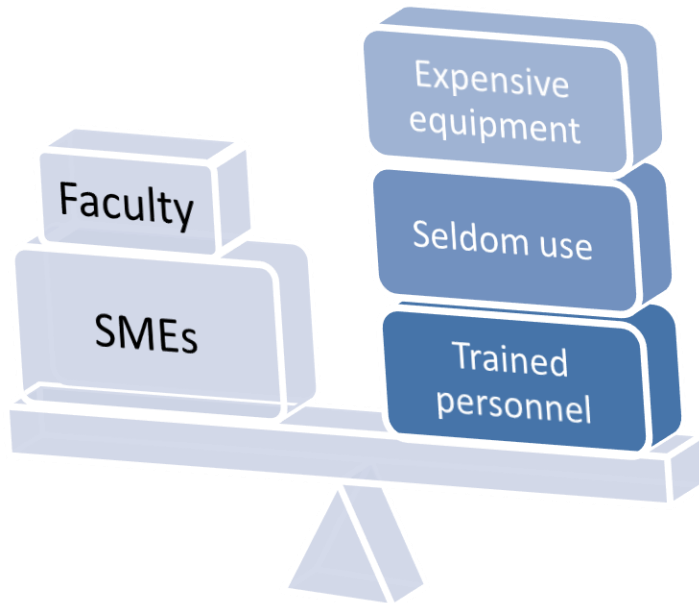


What?

- Product development
- Industry education
 - additive manufacturing
 - 3D scanning
- Digital manufacturing
 - Additive manufacturing using SLS technology
 - Rapid prototyping (plastics and metals)
 - Rapid manufacturing (plastics and metals)
 - Mold tool optimisation
 - 3D scanning
 - Reverse engineering
 - Inspection



Why?



Increasing innovation capacity of SMEs by providing advanced design technologies

Establishing of common product development center at the Faculty available to SMEs

Increase cooperation between the academia and the industry



Project funded by the
European Union

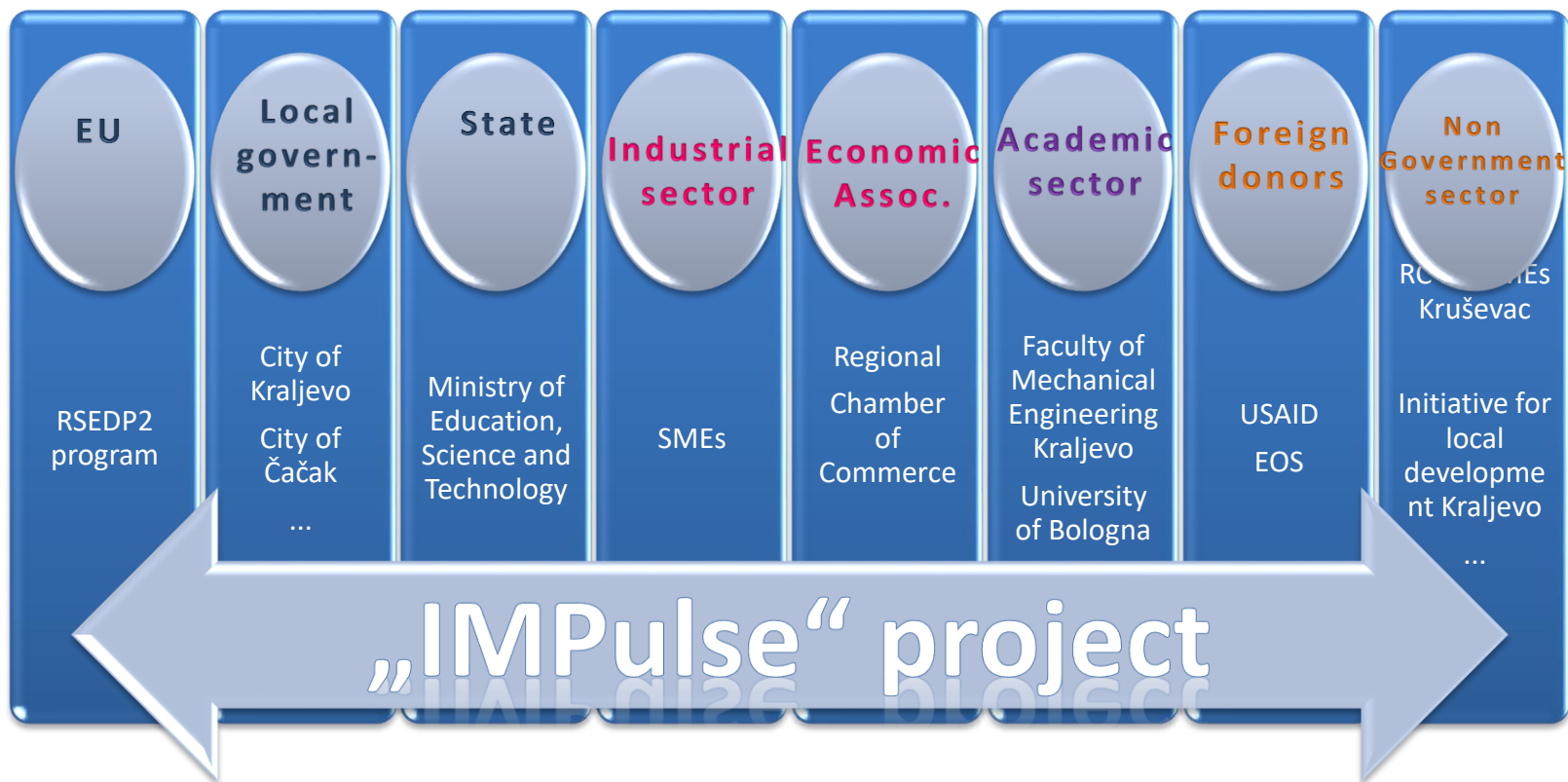


How?

- Project „IMPuls“ – EU RSEDP II
 - The European Commission
 - USAID
 - City of Kraljevo
 - City of Čačak
 - Budget – cca. 1,000,000 EUR
 - Duration 3/9/2011-6/9/2013
 - Provision of equipment
 - Staff training
 - Services to SMEs:
 - 120 prototypes and 300 models
 - Innovation management, marketing and tech trainings



How?



Project funded by the
European Union



Effect/ Results

LEONI

damson

ekofarm
D.O.O. UŠČE SRBIJA

**BEKTO
PRECISA**



INMOLD
mold design & production

**GALEB
GROUP**

RT-RK

Aero-East-Europe
SILA Serbian Industry Light Aircraft
JAR - PART 21 VLA & 23 GA

LOGIC
www.d-logic.net

УНИВЕРЗИТЕТ У БЕОГРАДУ
ИНСТИТУТ ЗА ФИЗИКУ БЕОГРАД **IP3**

ATM

ATI-TERMING
AQUA TERM INVEST-TERMING

**METALKA
MAJUR**

SPEKTAR

CINI

BUCK svako dobro **HIF Hemofarm**
član STADA grupe



Poliplast

MET
BH TECHNOLOGY
By Dragilević

**elit
inox**

CIMOS
AD KRUŠIK - PRECIZNI LIV

RASINA

**GOMMA
LINE**

MITCO

the most advanced technology center in Bosnia and Herzegovina.

Center for Advanced Technologies

D logic **ELEX
COMMERCE**

**turbo.
SERVIS** Ušice

**Omni
PROJEKT**

EVROTEHNA
RAZVODNI ELEKTRO ORMANI

**PHOTON
OPTRONICS**

ALING CONEL

insomnia

TCS
TürControlSysteme

Feniks Elektro Inženjering d.o.o.

ORAO
1944

TRAYAL
KORPORACIJA

KORALI



Project funde
Europea

MAREL D.O.O.
PRIVREDNO DRUŠTVO
ZA PROIZVODNJU PROMET I USLUGE

SINEL
d.o.o. - Labin - Croatia

jokey

hwt
SOFTWARE & SOFTWARE
SOLUTIONS

EU4Tech
Western Balkans

Results

Innovative Multi-Height Ergonomic Shoe - Glass Slipper d.o.o.

The innovation voucher has enabled Glass Slipper to successfully complete 3D modeling, 3D printing and tooling for the latest version of our prototype shoe.



Modular heels are attached onto the shoe to change heel height from 6cm to 10cm within seconds

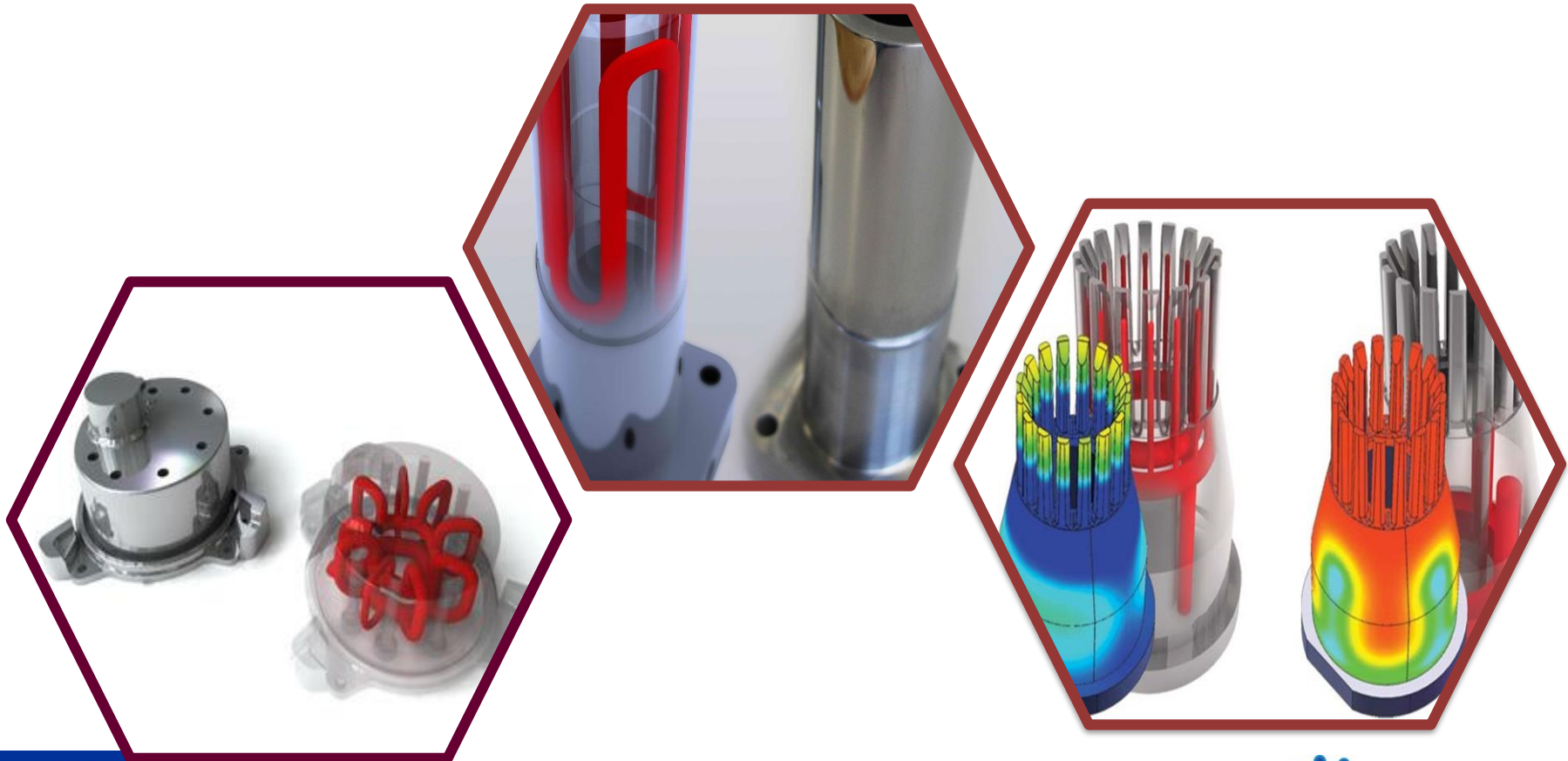


Project funded by the
European Union



Results

- InMold d.o.o. – mold tool optimisation

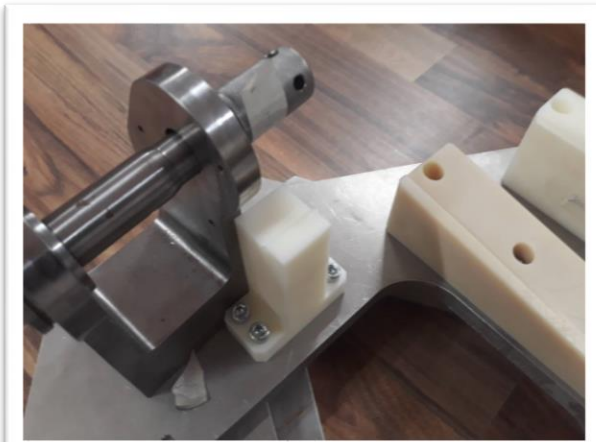


Project funded by the
European Union



Results

- Custom tools for jet plane engine reparation – Konelek d.o.o.



3 Lessons for the wider community

- Low level of the knowledge about the additive manufacturing and 3D modelling in general
- Big expectations from the users of the AM that cannot be achieved by the technology at the moment
- One need to spend a lot of time to educate the customers about AM possibilities
- Sustainability of the Laboratory is an issue



Nebojša Bogojević

Lead engineer for additive production

Nebojsa Bogojević is the leading engineer for additive production in the 3D Impulse laboratory. His responsibilities include the preparation and realization of selective laser sintering production. Nebojsa is a mechanical engineer who graduated at the Faculty of Mechanical and Civil Engineering in Kraljevo, and later passed post-graduate specialization at KTH University in Stockholm, in the field of design of mechanical systems. Since 2012 he is engaged in the field of additive manufacturing. After passing specialist courses at the faculty in Kraljevo and in the company EOS in Kraling /Germany/, he participated in almost 200 additive manufacturing projects.



Contact:

E-mail: bogojevic.n@mfv.kg.ac.rs

www.3dimpuls.com

www.mfv.kg.ac.rs



Project funded by the
European Union

