

Modernization of
WBC universities
through strength-
ening of structures
and services for
knowledge
transfer, research
and innovation

OD ZNANJA I ISTRAŽIVAČKIH REZULTATA DO USPEŠNIH INOVATIVNIH PODUHVATA

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Regionalna univerzitetska inovativna platforma za Zapadni Balkan

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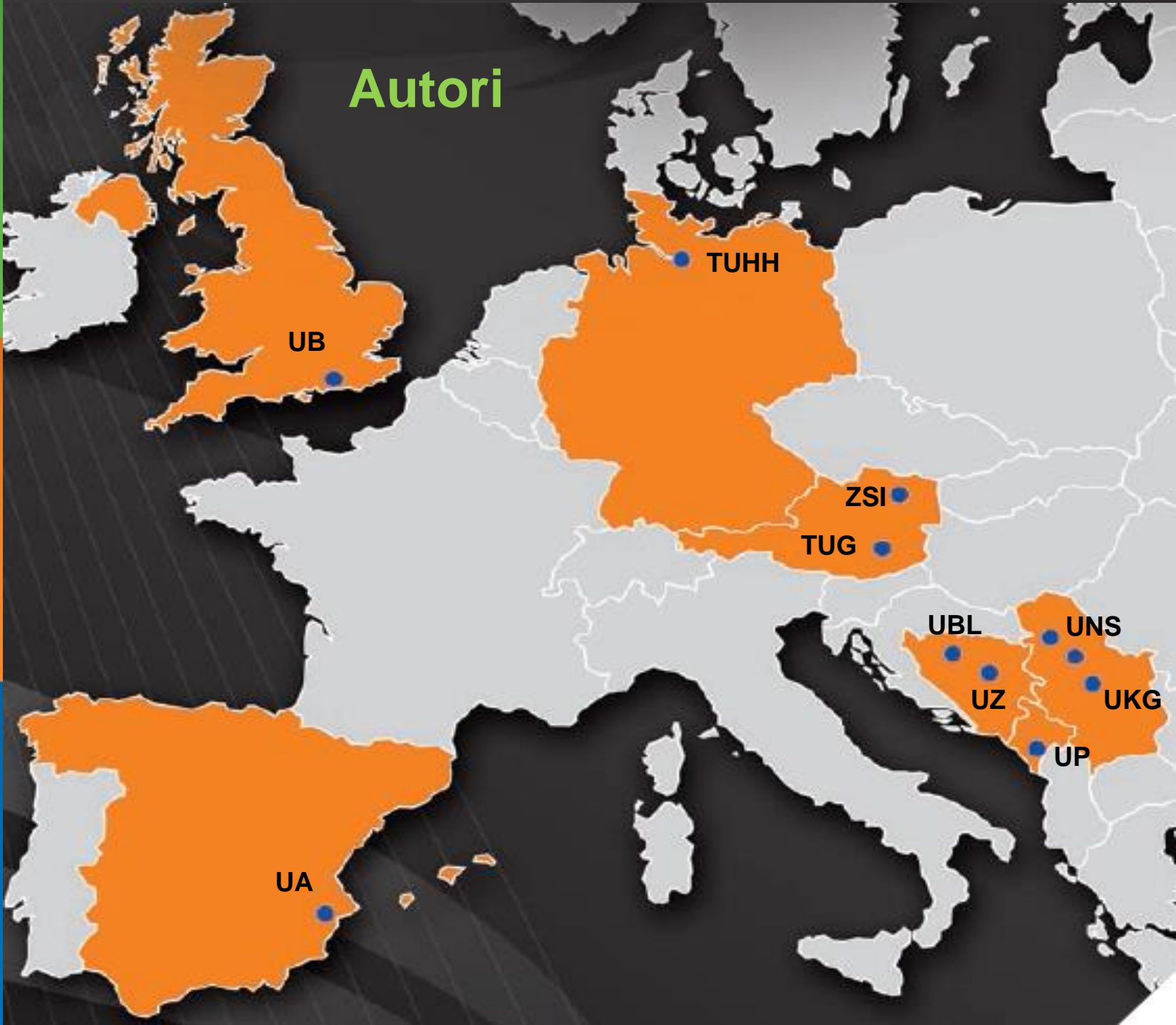
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Autori



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Cilj:

- Promocija i unapređenje **transfera znanja i tehnologija** (KTT – Knowledge and Technology transfer) uključujući komercijalizaciju istraživanja, saradnju univerziteta i privrednih subjekata i otvaranje start-up i spin-off centara



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ZAŠTO UIP?

- Univerziteti u regionu se razlikuju prema stepenu dostignutog istraživačkog i inovativnog potencijala
- Prisutna fragmentacija istraživanja i odsustvo jasno definisanih prioriteta i fokusa za dalji razvoj prosperitetnih istraživačkih oblasti
- Ne postoji strateška inovativna platforma za kapitalizaciju znanja i istraživanja, njihovu koordinaciju i mobilizaciju za ekonomski razvoj regiona
- Saradnja sa preduzećima sporadična, neinstitucionalna i bez značajnog impakta
- Ne postoji *single-point-of-access* promociju univerzitetskih usluga, tehnologija, znanja ka preduzećima
- Kreativnost studenata i mladih istraživača nije podstaknuta
- Potrebni različiti mehanizmi podrške (pravna legislativa, IPR ...)
- Zajednički nastup prema sredstvima EU fondova i uključivanje u Evropski istraživački prostor



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WBCInno projekat je razvio

Regionalnu univerzitetsku inovativnu
platformu...

... podržanu kolaborativnim softverskim
alatom za upravljanje inovacijama...

... sa ciljem da se identifikuju i podrže ideje
univerzitetskih istraživača i studenata...

... i potpomogne transfer znanja i
komercijalizacija istraživačkih rezultata.



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Problemi

Nema sistemskog
pristupa za saradnju sa
privrednim subjektima

Nerazvijena inovativna
kultura

Fragmentirana i
duplirana istraživanja –
bez prioriteta

Rešenja

Takmičenje za najbolju
studentsku ideju

Kancelarija za poslovnu
podršku – on-line
katalog

Kolaborativna platforma
za upravljanje
inovacijama

Mapiran potencijal i
definisane prioritete
istraživačke oblasti

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EC - Recommendations and Code of Practice [1].

- I. The principles for an internal intellectual property
- II. The principles for a knowledge transfer
- III. The principles for collaborative and contract research

Public research organisations (PROs), including universities, need to more actively engage in the exploitation of publicly-funded research results, for instance through academia-industry collaborations, licensing and spin-offs. Professional management of intellectual property (IP) plays a crucial role in the success of these knowledge transfer activities and in building an effective European Research Area (ERA).

Source

Recommendations and Code of Practice [1]



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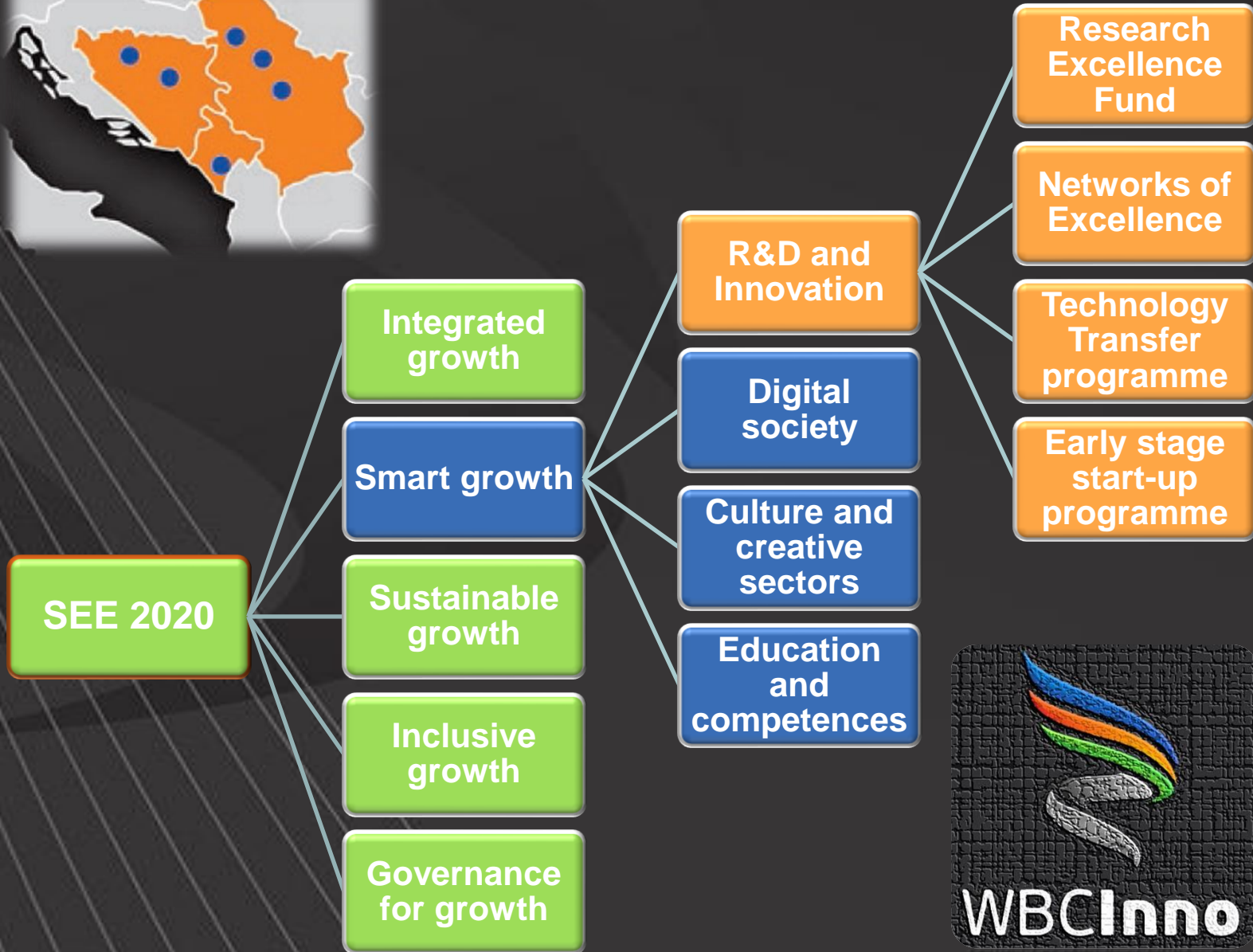


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SEE 2020

Smart growth

R&D and Innovation

Research Excellence Fund

Networks of Excellence

Technology Transfer programme

Early stage start-up programme



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WBCInno polazne osnove za UIP

3.1 EU primeri dobre prakse u KTT

Table 1: Effectiveness vs workloads for different modes of KTT [7]

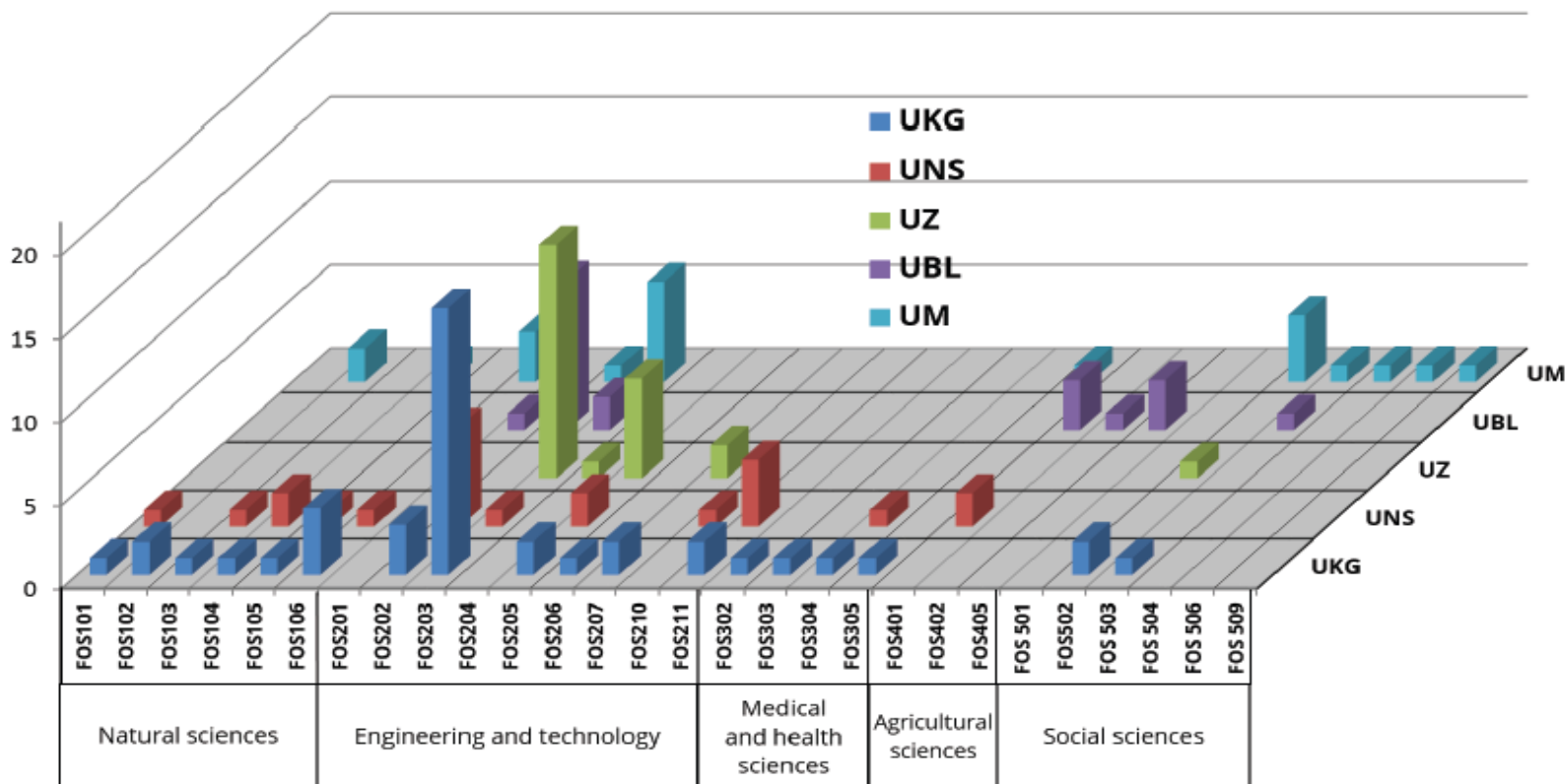
<i>Effectiveness: 1 (very effective) to 5 (very little effect); ranking in this table by workload (average)</i>	<i>Effectiveness</i>	<i>Workload % of total</i>
R&D coll. / contract research projects, scientific/tech. services	1.30	42
Commercialization of R&D results by patenting, licensing	2.67	22
Student projects with businesses	2.44	11
Entrepreneurship: spin-outs from university, start-ups	2.30	8
Student mobility, career services	2.00	6
Lifelong learning, training courses	2.22	5
Mobility of academics between science and businesses	2.00	3
Involvement of businesses in curricula development	2.60	2

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3.2 Mapiranje istraživačkog i inovativnog potencijala

Name of University	Centers	Laboratories	Research groups	Other ^s	Total number of mapped entities
University of Kragujevac	13	7	6	-	26
University of Novi Sad	7	5	10	1	23
University of Zenica	-	13	-	9	22
University of Banja Luka	3	10	-	7	20
University of Montenegro	15	6	-	1	22



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3.3 Benchmarking analiza pet WBC univerziteta – EU partneri

Univerzitet u Kragujevcu 27 – 28 avgust 2013

Univerzitet u Novom Sadu 29 – 30 avgust 2013

Univerzitet u Banjoj Luci 23 – 24 septembar 2013

Univerzitet u Zenici 25 – 26 septembar 2013

Univerzitet Crne Gore 3 i 5 oktobar 2013



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1. Procena i praćenje efikasnosti modela za transfer znanja i tehnologija



2. Definisavanje prioriternih istraživačkih oblasti i kapitalizacija znanja i istraživačkog potencijala



3. Komercijalizacija istraživačkih rezultata i njihova transformacija u inovacije



4. Efikasno upravljanje inovacijama podržano kolaborativnom softverskom platformom



5. Razvoj saradnje između univerziteta i preduzeća



6. Motivisanje studenata i istraživača da pokrenu start-up i spin-off preduzeća



7. Jačanje kapaciteta univerziteta za podršku razvoju Biznis inkubatora i Naučno-tehnoloških parkova



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1. Procena i praćenje efikasnosti modela za transfer znanja i tehnologija

Preporučeni Ključni Indikatori Progresa (*KPI, metrics*)

- KPI za investiranje u transfer znanja, inovacije i istraživanje (ukupna ulaganja u istraživanja, broj zaposlenih u KTT, troškovi održavanja patenata itd.)
- KPI za transfer znanja kroz saradnju (broj i prihod od ugovora – R&D, konsultantskih, broj preduzeća itd.)
- KPI za transfer znanja kroz iskorišćavanje i komercijalizaciju istraživačkih rezultata (patenti, licence, tehnologije, obuke, prihodi itd.)
- KPI za transfer znanja koje pojedinci realizuju (mobilnost, prezentacije, broj start up, spin-off itd.)

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2. Definisane prioritetskih istraživačkih oblasti i kapitalizacija znanja i istraživačkog potencijala

- Mapiranje istraživačkog i inovativnog potencijala univerziteta (kontinuirano, sistematično, upitnici)
- Identifikacija potreba društva, tržišta, preduzeća u regionu koji gravitira univerzitetu (upitnici, TSNA)
- Ka evropskim, regionalnim i nacionalnim politikama (strategije, zakoni, preporuke itd.)
- Prioritetne istraživačke oblasti univerziteta (izvrsnost u istraživanju, broj istraživača, opremljenost, broj međunarodnih projekata, rezultati itd.)
- Kapitalizacija univerzitetskog znanja i istraživačkog potencijala (promocija, saradnja, multidisciplinarnost, umrežavanje, zajednički nastup za EU fondove itd.)

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3. Komercijalizacija istraživačkih rezultata i njihova transformacija u inovacije

- **Pristupi za komercijalizaciju istraživačkih rezultata**
 - *Open science model*
 - *Technology transfer model*
 - *Open innovation model or exchange of knowledge*
 - *Creation of new activities (spin-offs)*
- **Praćenje komercijalizacije rezultata i efekata (ključni indikatori progressa)**
- **Podizanje svesti o značaju i podrška komercijalizaciji istraživačkih rezultata** (promocija, podrška istraživačima posebno u delu IPR, standardizacije, modela za transfer znanja i tehnologija (KTT), pisanja biznis plana, pozicioniranja na tržištu, vođenja biznisa itd.)



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4. Efikasno upravljanje inovacijama podržano kolaborativnom softverskom platformom

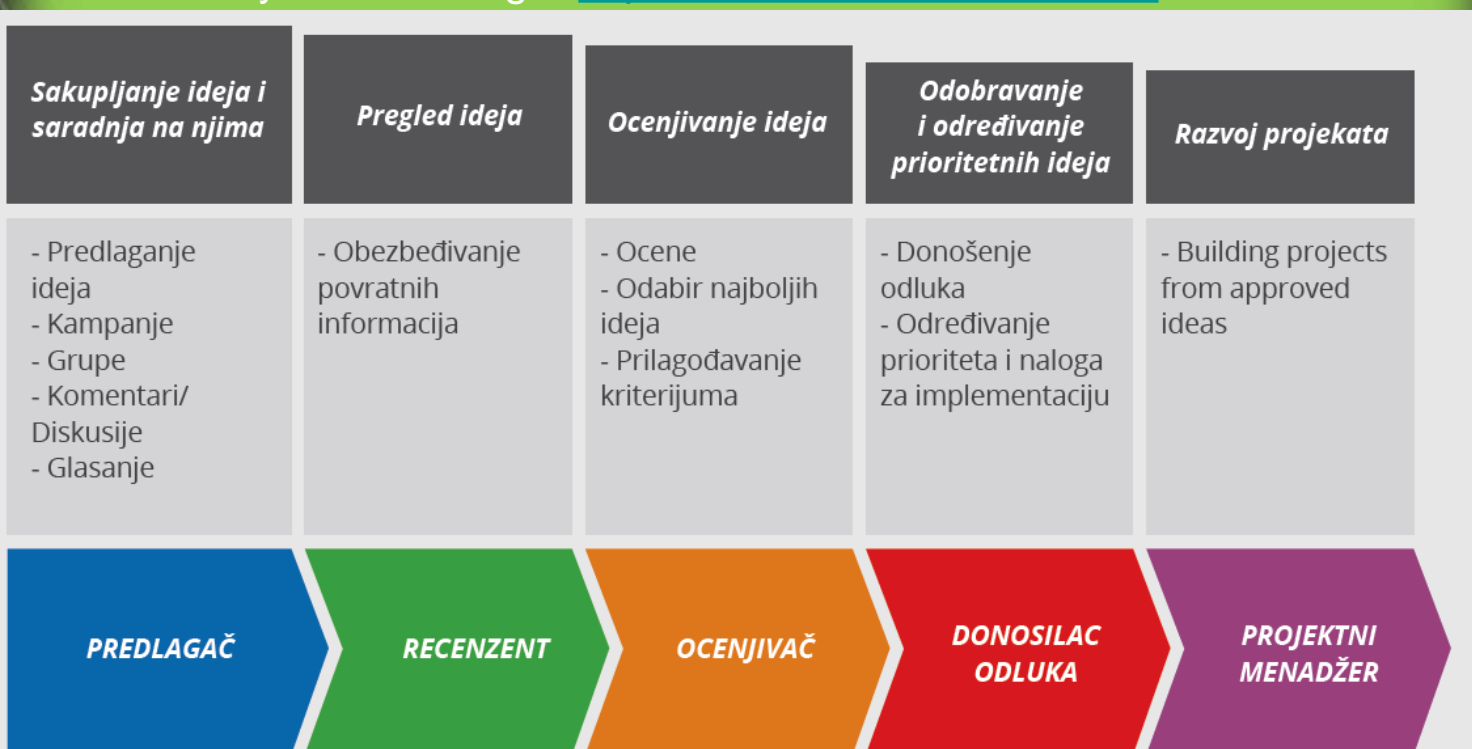
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University of Novi Sad <https://unsinno.datastation.com>

University of Zenica <https://uzinno.datastation.com>

University of Banja Luka <https://ublinno.datastation.com>

University of Montenegro <https://uminno.datastation.com>



Slika 9: Radni tok i uloge u upravljanju idejama

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5. Razvoj saradnje između univerziteta i preduzeća

- Sistem za izveštavanje i praćenje saradnje sa preduzećima
- Podizanje svesti i kreiranje ambijenta i kulture za saradnju (motivacija, podsticaji, nagradjivanje itd.)
- Formalizacija i promocija postojećih aktivnosti i procesa bez (ili sa minimalnim) administrativnih prepreka
- Promocija najboljeg i najefikasnijeg načina za saradnju univerziteta i preduzeća, i za transfer znanja
- Saradnja na svim nivoima i svim aspektima
- Kancelarije za poslovnu podršku na univerzitetima

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6. Motivisanje studenata i istraživača da pokrenu start-up i spin-off preduzeća

- ☞ Zašto univerziteti treba da promovišu i omoguće osnivanje spin-off-ova
- ☞ Koristi za univerzitete koji su uključeni u osnivanje spin-off-ova
- ☞ Moguće fiskalne i društveno-ekonomske koristi
- ☞ Univerziteti i inkubacione mogućnosti u WBC regionu
- ☞ Preduzetništvo i poslovno okruženje u regionu
- ☞ Jasne univerzitetske politike, strategije i misija
- ☞ Preduzetnička kultura kod studenata
- ☞ Pristup mehanizmima podrške

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7. Jačanje kapaciteta univerziteta za podršku razvoju Biznis inkubatora i Naučno-tehnoloških parkova

- Podrška stanarima BIs/STPs
- Organizacija obuka i zajedničkih događaja
- Logistička podrška razvoju naučno-tehnoloških parkova
- Koristi za univerzitet od saradnje sa BIs/STPs



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Akcioni plan za implementaciju Regionalne univerzitetske inovativne platforme za zapadni Balkan

Svaki WBC univerzitet definiše prioritete, plan implementacije, realizatore, i rokove, na bazi preporučenog Akcionog Plana.



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Hvala na pažnji



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Razviti Regionalnu univerzitetsku inovativnu platformu...

... podržanu kolaborativnim softverskim alatom za upravljanje inovacijama...

... sa ciljem da se identifikuju i podrže ideje univerzitetskih istraživača i studenata...

... i potpomogne transfer znanja i komercijalizacija istraživačkih rezultata.