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Sadržaj – Contents

Ekonomija – Economics

Aleksandra Vujko
Marko D. Petrović
Marina Dobić
PRIRODNI I ANTROPOGENI RESURSI KAO POKRETAČI RAZVOJA TURIZMA – PRIMER STAROG SLANKAMENA 3

Snežana Milićević
Igor Trišić
EKONOMSKI I SOCIO-KULTURNI EFEKTI RAZVOJA TURIZMA U TURISTIČKIM DESTINACIJAMA 21

Politika i bezbednost – Politics and Security

Dejan V. Kožović
Dragan Ž. Đurđević
SAJBER BEZBEDNOST U AVIJACIJI 39

Menadžment i marketing – Management and Marketing

Slavica Miletić
MULTICRITERIAL ANALYSIS OF THE MINING COMPANIES FROM THE ASPECT OF CHANGE MANAGEMENT 57

Mira Rakić
Beba Rakić
THE MARKET POWER OF DIGITAL CONSUMERS IN 24/7/365 CONNECTED WORLD 79

Saša Stepanović
MENADŽMENT U PREDŠKOLSKIM USTANOVAMA 101

Međunarodni odnosi – International Relations

Boris Krivokapić
DEJSTVO RATA I RATNOG STANJA NA MEĐUNARODNE ODNOSE DRŽAVA 117

Javne politike – Public Policies

Aleksandra Lazarević
Aleksandra Dragin
Maja Mijatov
TOURIST ESCORT AND THE BUSINESS ETHICS 133

INFORMACIONO DRUŠTVO – INFORMATION SOCIETY

NATAŠA KRSTIĆ
THE RELATIONSHIP BETWEEN WEBSITE MANAGEMENT
AND SEARCH ENGINE OPTIMISATION 155

STRUČNI RAD – EXPERT ARTICLE

DRAGANA TRIFUNOVIĆ
RANKA MITROVIĆ
BILJANA PEJOVIĆ
DINAMIKA ULAGANJA U INOVACIJE
I NOVE TEHNOLOGIJE U VISOKOOBRAZOVNIM INSTITUCIJAMA 169

PRIKAZ KNJIGE – BOOK REVIEW

IVAN D. NOVAKOVIĆ
MUTUAL RELATIONS BETWEEN TOURISM AND THE ENVIRONMENT 183

Aleksandra Vujko[*]
Marko D. Petrović[**]
Marina Dobić[***]

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PRIRODNI I ANTROPOGENI RESURSI KAO POKRETAČI RAZVOJA TURIZMA – PRIMER STAROG SLANKAMENA[****]

Stari Slankamen je naselje u Vojvodini, koje administrativno pripada opštini Inđija u Sremskom okrugu. Istraživanje za ovaj rad vršeno je pretežno na terenu kroz posetu objektima i razgovore sa stručnim licima, a informacije su prikupljane iz raznih stručnih radova, kao i usmenim putem. Cilj je da se na osnovu istraživanja prirodnih i antropogenih vrednosti dođe do zaključka o trenutnom stanju svih potencijala koji bi mogli biti iskorišteni za razvoj turizma u Starom Slankamenu. Prilikom postavljanja ciljeva vođeno je računa o objektivnosti i mogućnosti za njihovu realizaciju u skladu sa potencijalima kojima se raspolaže. Ciljevi su usmereni prema povećanju nivoa kvaliteta pružanja usluga budućim turistima, kao i poboljšanje trenutnog stanja u Starom Slankamenu. U ovom istraživanju korišćena je tehnika anketnog istraživanja, valorizacija po kvalitativno-kvantitativnom metodu, zoniranje i SWOT analiza. Ispitanici su bili slučajni prolaznici grada Novog Sada i Slankamena, kao i zaposleni u restoranima u Starom Slankamenu od kojih se tražilo da ocene postojeće potencijale za razvoj turizma u Starom Slankamenu. Sumirajući na kraju rada sve sakupljene podatke, došlo se do zaključka da postojeći potencijali nisu u dovoljnoj meri iskorišteni, ali da preduslovi za razvoj turizma postoje.

Ključne reči: *Stari Slankamen, turizam, prirodne vrednosti, antropogene vrednosti*

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1. Uvod

Turizam predstavlja sastavni deo života svakog čoveka, a po svojim karakteristikama, uticajima i mogućnostima razvoja, postao je i veoma važan faktor ukupnog ekonomskog razvoja destinacija[1,2]. Na turizam se gleda i kao na faktor oživljavanja nerazvijenih prostora, naročito ruralnih[3], ali i podsticanja zapošljavanja[4] i posebno značajan faktor u daljem razvoju ekonomskih odnosa sa inostranstvom[5]. Upravo pomenuti segmenti generatorske snage turizma trebalo bi da doprinesu da ova delatnost dobije primarno mesto u razvoju celokupnog sistema Srbije[6], te da se iskoriste svi potencijali kojima država raspolaže, a u pravcu razvoja turističkih destinacija i jačanja konkurentske prednosti kako na domaćem tako i na inostranom turističkom tržištu. Stari Slankamen predstavlja upravo jedan takav resurs.

Stari Slankamen se nalazi u severoistočnom Sremu, na levoj obali Dunava, naspram ušća Tise, odnosno na tromeđi tri oblasti: Srema, Bačke i Banata. Smešten je na atraktivnoj istorijskoj i geološkoj lokaciji, na nadmorskoj visini od 80m, samo 15km udaljen od Inđije i 55km od Beograda[7]. Lesni profili u Starom Slankamenu su već punih 280 godina predmet istraživanja domaćih i stranih naučnika iz različitih delova sveta, a s obzirom na to da su ova višedecenijska istraživanja ukazala na njihov izuzetan značaj, oni su 1975. godine stavljeni pod zaštitu i proglašeni spomenikom prirode. U kategoriju prirodnih dobara Srbije svrstani su 2007. godine. Stari Slankamen je smešten na padinama Fruške Gore, gde je zemljište pogodno za uzgoj vinove loze, a gde se takođe mogu razviti razni

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1 Vujko, A., Gajić, T. (2015): *Mogućnosti ravnomernijeg turističkog razvoja uz pretpostavke pozitivnijeg uticaja na ekonomski sektor,* Anali poslovne ekonomije, 12, 38.

2 Gajić, T., Vujko, A. (2017): *Tourism as a potential factor of economic development - A report from Serbia,* The Second International Scientific Conference: Tourism in function of development of the republic of Serbia - Tourism product as a factor of competitiveness of the Serbian economy and experiences of other countries. University of Kragujevac, Faculty of hotel management and tourism in Vrnjačka Banja, 2. 135.

3 Vujko, A., Petrović, M., Dragosavac, M., Gajić, T., (2016): *Differences and similarities among rural tourism in Slovenia and Serbia - perceptions of local tourism workers*, Ekonomika poljoprivrede, 4/2016, 1466.

4 Petrović, M., Blešić, I., Vujko, A., Gajić, T. (2017): *The role of agrotourism impact in local community in a transition society – a report from Serbia.* Transylvanian Rewiev of Administrative Structure Sciences. 50(1), 150.

5 Vujko, A., Gajić, T. (2014a): *Opportunities for tourism developmentand cooperation in the region by improving quality supply – The Cycle Danube Route - Case study*, Economic Research, 27(1), 851.

6 Vujko, A., Gajić, T. (2014c): *The gouverment policy impact on economic development of tourism,* Ekonomika poljoprivrede., 61(3), 799.

7 Golubović, V. (1969): *Geografski prikaz Starog Slankamena*, Departman za geografiju, turizam i hotelijerstvo, Novi Sad.

oblici turizma, kao i manifestacije, s obzirom na to da posla u vinogradu ima tokom skoro cele godine[8].

Kroz Stari Slankamen protiče reka Dunav, koja predstavlja posebnu vrednost za selo. Stari Slankamen se nalazi tačno na pola puta toka Dunava kroz Srbiju, gde se i Tisa uliva u Dunav, tako da sa određenih mesta moguće je videti ušće te dve reke. Dunav, pored toga što je bogat ribom, prestavlja posebnu važnost za nautiku. U arheološka nalazišta i monumentalne vrednosti Starog Slankamena se ubrajaju: arheološki lokalitet Gradina, spomenik bitke kod Slankamena, tursko kupatilo, tvrđava Acumincum, Zagrad i rodna kuća dr Đorđa Natoševića. Arheološki lokalitet Gradina predstavlja antičko utvrđenje, dok je spomenik bitke kod Slankamena postavljen na mestu gde se odigrala istoimena bitka 1691. godine između Rimskog i Osmanskog carstva[9]. Od religijskih objekata u Starom Slankamenu se nalaze dve crkve: rimokatolička crkva svetog Nikole Biskupa i pravoslavna crkva svetog Nikole, koja je sagrađena 1468.godine. Kao najstarija crkva u Fruškogorju predstavljala je obrazac po kome su građene ostale crkve u Sremu. Jedna od najstarijih banja u Vojvodini je banja Stari Slankamen. Razvoj banje beleži krupnije korake od 2007.godine, kada je izvorište slane vode vraćeno u banjsku upotrebu, nakon više desetina godina a Specijalna bolnica „Dr Borivoje Gnjatić" Stari Slankamen uvela savremenu praksu banjskog lečenja [10].

Stari Slankamen ima veliki potencijal za razvoj turizma koji se ogleda kako u prirodnim resursima, istorijskim spomenicima i zdanjima, legendama, tako i samoj tradiciji i običajima. Značajno bogatstvo ovog naselja predstavljaju dve reke: Dunav i Tisa, što predstavlja prirodni potencijal za razvoj i nautičkog turizma. Cilj rada je da se prikaže uticaj koji prirodni i antropogeni resursi imaju na razvoj turizma, naravno sve to uz adekvatnu edukaciju stanovništva i uz ostale vrednosti koje čine ovo naselje. Za razliku od ostalih naselja koja se nalaze na obali Dunava, u Starom Slankamenu se nalazi ušće Tise u Dunav, što treba iskoristiti kao poseban potencijal. Zadaci istraživanja su bili sledeći: istražiti sve prirodne i antropogene vrednosti koje imaju uticaj na razvoj turizma turizam i istražiti uticaj koji turizam ima na razvoj destinacije.

2. Metodologija

Istraživanje za rad vršeno je pretežno na terenu kroz posetu objektima i razgovore sa stručnim licima, a informacije su prikupljane iz raznih stručnih radova i publikacija, kao i usmenim putem. Sprovedeno je i anketno istraživanje

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8 Grbić, M. (2009): *Turistički potencijali Starog Slankamena*, Departman za geografiju, turizam i hotelijerstvo, Novi Sad.

9 Grbić, M., 2009.

10 *Ibid*

pomoću ankete sa pitanjima zatvorenog i otvorenog tipa, na uzorku od 328 ispitanika, slučajno odabranih prolaznika grada Novog Sada i Starog Slankamena kao i zaposlenih u restoranima u Starom Slankamenu u cilju utvrđivanja mišljenja o postojećim potencijalima Starog Slankamena i njegovom razvoju kao turističke destinacije. Anketno istraživanje vršeno je u peridu 2017. godine. Ispitanicima su ponuđene dve vrste pitanja, otvorenog tipa i pitanja u kojima su ispitanicima ponuđene određene tvrdnje koje su ocenjivali ocenama od 1 do 5 (1 – u potpunosti se ne slažem, 5 – u potpunosti se slažem). Varijable su se ticale toga koliko su ispitanici upoznati sa potencijalima, da li imaju pozitivan stav kada je razvoj turizma u pitanju i šta bi, po njihovom mišljenju bile glavne predispozicije tog razvoja. U cilju dobijanja što boljih rezultata i preciznijeg prikaza stanja turističke ponude ovog naselja, urađena je i SWOT analiza, trenutnog turističkog stanja u Starom Slankamenu. Takođe, urađena je i Valorizacija izabranog prostora kao i zoniranje.

Ocene za procenu datih lokaliteta, i u slučaju SWOT analize i u slučaju valorizacije, dobijene su od predsednika sela Stari Slankamen, gospodina Milana Kovanića, predsednika udruženja nautičara, gospodina Dušana Englendžije, višeg stručnog saradnika za turizam u opštini Inđija, gospođe Slađane Sudar i v.d. direktora turističke organizacije opštine Inđija, gospođe Maje Bošnjak.

Za potrebe rada, urađena je i analiza materijalne baze, odnosno smeštajno-ugostiteljskih kapaciteta u Starom Slankamenu i okolini. Analiza je urađena terenskim istraživanjem, odnosno razgovorom sa zaposlenima i menadžerima objekata. Jedan od postupaka analize dobijenih podataka bio je i Pearson Chi-Square Test. Ovaj test je vrlo praktičan test koji je poslužio da bi se utvrdilo da li neke dobijene (opažene) frekvencije (odgovori ispitanika muškog pola u odnosu na odgovore ispitanika ženskog pola) odstupaju od frekvencija koje su bile očekivane. Kod ovog testa se tražilo da li postoji povezanost između varijabli i verovatnost povezanosti. U radu se pretpostavilo da neće biti razlika u odgovorima ispitanika oba pola. Kako bi se uočila razlika u odgovorima merena na osnovu statistički značajne razlike u distribuciji zavisne promenjive u odnosu na nezavisnu, prikazivani su rezultati u zavisnosti od pola ispitanika, a za statistički značajnu razliku uzima se ona za koju je $p < 0,05$.

2.1 Valorizacija prirodnih i antropogenih resursa relevantnih za razvoj turizma

Valorizacija je rađena po kvantitativno-kvalitativnom metodu sa osnovnim elementima turističke valorizacije kao što su: pristupačnost resursa, turističke usluge i oprema, ambijent, specifičnost resursa, značaj resursa i umetnička vrednost[11]. Ocene, odnosno postavljeni elementi turističke valorizacije, prilikom afirmacije resursa, kretali su se u rasponu od 1 do 5, a obeležavaju veličinu kontraktivne zone, zapravo značaj same destinacije. Određeni brojevi imaju sledeće značenje: 1 – nedovoljan kvalitet; 2 – kvalitet koji zadovoljava lokalni turistički značaj; 3 – dobar kvalitet resursa sa regionalnim značajem; 4 – vrlo dobar kvalitet sa širim regionalnim (nacionalnim) značajem; 5 – odličan kvalitet resursa koji ima međunarodni značaj[12].

3. Rezultati i diskusija

Anketom je obuhvaćeno 328 ispitanika (Tabela 1), od toga 156 (47,6%) ženskog pola i 172 (52,4%) muškog pola.

Tabela 1. *Pol istipanika*

	Broj ispitanika	Procenat
Muški	172	52,4
Ženski	156	47,6
Ukupno	328	100

Uvidom u tabelu 2 možemo zaključiti da su ispitanici, kako muškog tako i ženskog pola, na pitanje o tome da li smatraju da Stari Slankamen raspolaže resursima za razvoj turizma, u najvećem broju slučajeva i ukupnom procentu od 86,3% odgovorili da smatraju da u selu postoje resursi za razvoj turizma. Odgovor na ovo pitanje podstakao je na dalje istraživanje. Uvidom u tabelu 3 možemo videti da ne postoji statistička značajnost između odgovora ispitanika u odnosu na pol ispitanika, s obzirom na to da je p= 0,057.

11 Čomić, Đ., Pjevač, N. (1997): *Turistička geografija*, Savezni centar za unapređenje hotelijerstva i ugostiteljstva, Beograd.

12 *Ibid*

Tabela 2. *Mišljenje ispitanika o potencijalima za razvoj turizma Starog Slankamena*

Da li smatrate da Stari Slankamen ima potencijale za razvoj turizma?		Pol		Ukupno
		Muški	Ženski	
Potpuno se ne slažem	Broj	1	0	1
	% od ukupnog broja	0,3%	0%	0,3%
Ne slažem se	Broj	1	0	1
	% od ukupnog broja	0,3%	0%	0,3%
Ne mogu da ocenim	Broj	3	0	3
	% od ukupnog broja	0,9%	0%	0,9%
Slažem se	Broj	27	13	40
	% od ukupnog broja	8,2%	4,0%	12,2%
Potpuno se slažem	Broj	140	143	283
	% od ukupnog broja	42,7%	43,6%	86,3%
Ukupno	Broj	172	156	328
	% od ukupnog broja	52,4%	47,6%	100%

Tabela 3. *Pearson Chi-Square Test*

Test	Value	df	Statistical significance (p)
Pearson Chi-Square Test	9,173	4	0,057

Na pitanje (Tabela 4), da li smatraju da bi lokalno stanovništvo imalo koristi od razvoja turizma, najveći broj ispitanika, kako muških tako i ženskih, odgovorilo je potvrdno (93%). S obzirom na to da je p=0.098, može se konstatovati da ne postoji statistička značajnost u odgovorima ispitanika u odnosu na pol (Tabela 5).

Tabela 4. *Mišljenje ispitanika o koristima od razvoja turizma u Starom Slankamenu*

Da li smatrate da bi razvoj turizma lokalnom stanovništvu doneo određene koristi?		Pol		Ukupno
		Muški	Ženski	
Potpuno se ne slažem	Broj	1	0	1
	% od ukupnog broja	0,3%	0%	0,3%
Ne slažem se	Broj	2	0	2
	% od ukupnog broja	0,6%	0%	0,6%
Ne mogu da ocenim	Broj	2	0	2
	% od ukupnog broja	0,6%	0%	0,6%
Slažem se	Broj	13	5	18
	% od ukupnog broja	4,0%	1,5%	5,5%

Potpuno se slažem	Broj	154	151	305
	% od ukupnog broja	47,0%	46,0%	93,0%
Ukupno	Broj	172	156	328
	% od ukupnog broja	1	0	1

Tabela 5. *Pearson Chi-Square Test*

Test	Value	df	Statistical significance (p)
Pearson Chi-Square Test	7,823	4	0,098

Ispitanici su u najvećem broju slučajeva (42,4%), odgovorili da bi najveća pogodnost od razvoja turizma u Starom Slankamenu bilo zapošljavanje žena. Žene bi u tom kontekstu mogle prodavati svoje rukotvorine i domaće proizvode, što bi dodatno doprinelo njihovom osnaživanju. Svi drugi odgovori su bili podjednako zastupljeni (Tabela 6). Uvidom u tabelu 7 možemo zaključiti, kao i u prethodnom slučaju, da ne postoji statistička značajnost u odgovorima ispitanika u odnosu na pol, s obzirom na to da je p=0.074.

Tabela 6. *Mišljenje ispitanika o pogodnostima od razvoja turizma u Starom Slankamenu*

Koje pogodnosti i koristi biste izdvojili?		Pol		Ukupno
		Muški	Ženski	
Razvoj nautičkog turizma	Broj	26	27	53
	% od ukupnog broja	7,9%	8,2%	16,2%
Otvaranje novih radnih mesta	Broj	20	29	49
	% od ukupnog broja	6,1%	8,8%	14,9%
Razvoj mesta	Broj	22	12	34
	% od ukupnog broja	6,7%	3,7%	10,4%
Razvoj rekreativnog i banjskog turizma	Broj	11	9	20
	% od ukupnog broja	3,4%	2,7%	6,1%
Bilo bi više turista pa samim tim i veća zarada za lokalno stanovništvo, posebno žene koje bi mogle prodavati svoje rukotvorine	Broj	69	70	139
	% od ukupnog broja	21,0%	21,3%	42,4%
Mladi bi imali razlog da ostanu u selu	Broj	22	9	31
	% od ukupnog broja	6,7%	2,7%	9,5%
Ne mogu da ocenim	Broj	2	0	2
	% od ukupnog broja	0,6%	0%	0,6%
Ukupno	Broj	172	156	328
	% od ukupnog broja	52,4%	47,6%	100%

Tabela 7. *Pearson Chi-Square Test*

Test	Value	df	Statistical significance (p)
Pearson Chi-Square Test	11,519	6	0,074

Tabela 8 nam pokazuje kako su ocenjeni pojedini prirodni i antropogeni resursi Starog Slankamena, od strane kompetentnih ljudi, zaduženih između ostalog i za razvoj turizma: predsednika sela Stari Slankamen, gospodina Milana Kovanića, predsednika udruženja nautičara, gospodina Dušana Englendžije, višeg stručnog saradnika za turizam u opštini Inđija, gospođe Slađane Sudar i v.d. direktora turističke organizacije opštine Inđija, gospođe Maje Bošnjak. Petu ocenu u koloni dali su autori rada, tako da je prosečna ocean zbirna ocean svih onih koji su učestvovali u ocenjivanju. Dakle, možemo zaključiti da su sve ocene relativno visoke, a da je najbolje ocenjeno ušće Tise u Dunav (4,20), što svakako predstavlja svojevrsan kuriozitet i turističku atrakciju.

Tabela 8. *Valorizacija po kvantitativno-kvalitativnom metodu*

Lokalitet	Pristupačnost resursa	Turistička opremljenost	Ambijen	Specifičnost resursa	Značaj resursa	Umetnička vrednost	Prosečna ocena
Lesne naslage	4	3	5	5	5	5	4,03
	3	3	5	5	5	5	
	4	4	3	3	3	4	
	3	4	4	3	3	4	
	3	3	5	5	5	5	
Ušće Tise u Dunav	5	4	5	4	5	5	4,20
	4	4	5	5	5	4	
	4	4	3	4	3	4	
	4	4	4	3	4	3	
	4	3	5	5	5	5	
Zagrad	3	2	4	4	4	3	3,53
	3	3	4	4	4	4	
	4	4	3	4	3	3	
	4	4	4	3	4	3	
	3	2	4	4	4	4	
Tvrđava Acumincum	2	1	5	4	4	5	3,53
	2	2	4	4	4	5	
	4	4	3	4	3	4	
	4	3	3	3	3	4	
	2	2	5	4	4	5	
Banja Stari Slankamen	4	4	5	4	5	4	4,17
	4	5	4	4	5	4	
	5	4	3	4	3	4	
	4	5	3	3	4	4	
	4	5	5	4	5	4	

Crkva Sv. Nikole	4	3	4	5	4	5	4,13
	5	3	4	5	5	5	
	4	4	3	4	4	4	
	4	4	4	3	4	3	
	4	3	5	5	5	5	

Zoniranje Starog Slankamena je izvršeno na osnovu prirodnih i antropogenih resursa koje se mogu videti: reka Dunav sa peščanim adama i plažama, izvor lekovite mineralne vode „Slanača“, lesne naslage, banja Stari Slankamen, Zagrad – ribarsko selo, pravoslavna crkva Svetog Nikole, rimokatolička crkva Svetog Nikole Biskupa, vinarija Acumincum, vinarija Šapat, spomenik bitke kod Slankamena, rodna kuća dr Đorđa Natoševića, arheološki lokalitet Gradina, tvrđava Acumincum, manifestacije: Zlatni kotlić i Doček dunavske regate, kao i ugostiteljski objekti: čarda „Kod Mike Alasa“, restorani: „Kej“, „Laguna“, „Kapetan“ i „Acumincum“. Stari Slankamen se nalazi skoro na pola puta između dva velika emitivna centra: Novog Sada, od koga je udaljen 47km i Beograda, od koga je udaljen 65km i sa kojim je povezan direktnom autobuskom linijom. Međutim, veliku prednost za ovo selo predstavlja reka Dunav, koja se ovde nalazi na 1215km toka Dunava, gde je potencijalne turiste moguće provozati brodićima. Tom vožnjom moguće je razgledati selo, odnosno sa reke se vide lesne naslage, koje svedoče da je na ovom prostoru nekada bilo more, a ovaj breg predstavljao ostrvo. Zatim, moguće je videti i tačno se naći na ušću reke Tise u Dunav. Tokom vožnje moguće je upražnjavati razne aktivnosti, kao što su razgledanje i posmatranje ptica, fotografisanje, pecanje, hranjenje labudova i drugih životinja i uopšte uživanje u samom prizoru. Nakon vožnje, turisti mogu da odaberu neki od restorana koji se nalaze sa samoj obali Dunava. U ponudi su restoran „Kej”, „Laguna”, „Kapetan” i poseban restoran u kome se služe sva jela od ribe - čarda „Kod Mike Alasa”. S obzirom da selo obiluje znamenitostima, turisti se mogu uputiti u laganu šetnju i obilazak tvrđave, crkava, zatim turskog kupatila, gde mogu napraviti predah uz čašu dobrog vina koje se tu služi. Nakon predaha, turisti bi mogli da krenu put Spomenika Slankamenačkoj bici, koji je udaljen 4,2km od centra sela. Sa spomenika se pruža pogled na Srem, Banat i Bačku. Pored uživanja u jedinstvenom prizoru, turisti mogu da učestvuju i u radovima u vinogradima i voćnjacima, kojima je spomenik okružen. Takođe, tu se nalazi i parcela sa posađenom aronijom, pa tako oni željni znanja mogu da vide i iskuse proces pravljenja raznih prerađevina od aronije.

3.1 Materijalna baza za razvoj turizma Starog Slankamena

U Starom Slankamenu se na samoj obali Dunava nalazi 6 smeštajno-ugostiteljskih kapaciteta, uključujući i banju Stari Slankamen. Idući nizvodno Dunavom prvi restoran koji se tu nalazi jeste čarda „Kod Mike Alasa“, zatim restoran

„Acumincum“, banja Stari Slankamen, brod „Kapetan“, restoran sa prenoćištem „Kej“ i restoran „Laguna“. U Starom Slankamenu se nalaze i dve vinarije: „Acumincum“ i „ Šapat“.

Čarda „Kod Mike Alasa“ – osnovana je 21.04.2009.godine. Čarda u svojoj ponudi nudi specijalitete od sveže rečne ribe, uz domaće vino i rakiju poznatih slankamenačkih vinara. Vlasnik, Milan Kovanić, je obezbedio mesto za oko 50 vezova, čamaca ili brodića. Pored toga, on nudi usluge obilaska Starog Slankamena svojim brodićem[13].

Restoran „Acumincum“ – nalazi se na samoj obali Dunava. Restoran je renoviran prošle godine, tako da sada izgled restorana podseća da istoimenu tvrđavu, koja se nalazi na brdu iznad restorana, s obzirom na to da je sav u kamenu[14].

Banja Stari Slankamen – Kao visoko specijalizovana zdravstvena ustanova za produženo bolničko lečenje i medicinsku rehabilitaciju, banja poseduje 350 raspoloživih kreveta[15].

Brod „Kapetan“ – Brod restoran se nalazi na keju u Starom Slankamenu. Ima bogatu ponudu ribljih specijaliteta. Ono što mami turiste u ovaj brod restoran, jesu bašte restorana koje se nalaze na samom Dunavu[16].

Restoran „Kej“ – U svojoj ponudi ima riblje specijalitete i specijalitete sa roštilja. Restoran raspolaže sa parkingom, zimskom baštom, a postoji i mogućnost smeštaja u 6 moderno opremljenih dvokrevetnih soba. Sala restorana raspolaže sa 120 mesta[17].

Restoran „Laguna“ - Pruža mogućnost prijatnog boravka na samoj obali Dunava uz bogatu gastronomsku ponudu u dve restoranske sale pogodne za predah ili neformalan sastanak. Jedna od njih predstavlja i zimsku baštu sa pogledom na Dunav. Tu je i pristanište pogodno za goste koji dolaze ili prolaze svojim plovilom. Laguna raspolaže i sa dobro opremljenim sobama pogodnim za smeštaj svih onih koji traže autentični duh Dunava[18].

Vinarija „Acumincum“ – Osnovana je 2011. godine, a naziv nosi po rimskom utvrđenju Acumincum, koje se nalazi na brdu iznad Starog Slankamena, a u prevodu znači – mesto na brdu. Vinarija se nalazi se na mestu gde je nekada postojalo tursko kupatilo, a izdvaja se po ambijentu koji predstavlja mešavinu savremene arhitekture i dizajna sa bogatom istorijom, kako vinarije, tako i Starog Slankamena. Posebno izdvajaju vina Širaz i Pinot Noir[19].

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13 Grbić, M., 2009.

14 *Ibid*

15 *Ibid*

16 *Ibid*

17 *Ibid*

18 *Ibid*

19 *Ibid*

Atelje vina „Šapat“ – Nalazi se na 5km od centra Starog Slankamena. Vinarija poseduje restoran koji je otvoren za posetioce od četvrtka do nedelje, uz prethodnu najavu dolaska. Takođe, ovde se nalaze i 2 apartmana i 4 sobe. Kapacitet vinarije je 100.000 boca, a planovi su da u narednim godinama imaju proizvodnju od 80 do maksimalnih 90.000 boca. Cela vinarija se prostire na 15ha zemljišta, od kojih je 8 pod vinogradima. Sam prostor vinarije je nesvakidašnji za Srbiju. Podeljen je u nekoliko prostorija, koje se na različitim nivoima prostiru na preko 400m2. Opremljen je inovativnom enološkom tehnologijom, dok se u barik podrumu nalaze tradicionalni drveni sudovi, izrađeni od francuskog hrasta, podesni i za fermentaciju, kao i za čuvanje crvenih vina[20].

3.2 SWOT analiza

SWOT analiza obuhvata detaljnu analizu i pravljenje liste slabih i jakih tačaka turističke destinacije (Starog Slankamena) i analizu njihove moguće upotrebe u kontekstu šansi, kao i opasnosti utvrđenih tendencija na tržištu. SWOT analiza je neophodna radi strategijskog planiranja turističkog proizvoda Starog Slankamena, a potom i kreiranja adekvatne promocije. Ona omogućava dovođenje u ravnotežu zahteva, želja i potreba potrošača i mogućnosti turističke ponude, zatim kreiranje konkurentske prednosti i ostvarenje širokih ekonomskih, društvenih, kulturnih, političkih, ekoloških i drugih ciljeva.

20 Grbić, M., 2009.

Tabela 9. *SWOT analiza prirodnih i antropogenih potencijala Starog Slankamena*

PREDNOSTI	NEDOSTACI
• Povoljan geografsko-saobraćajni položaj; • Prirodni ambijent (postojanje 2 reke: Tisa i Dunav); • Mogućnost razvoja nautičkog turizma; • Mogućnost razvoja banjskog turizma (tradicija posete i boravka u banjama, lekoviti prirodni i zdravstveni faktori, niska cena terapeutskih programa); • Mogućnost razvoja izletničkog turizma (okolina Starog Slankamena sa voćnjacima i vinogradima, kao i blizina Fruške gore); • Bogato kulturno-istorijsko nasleđe (tvrđava koja je odolela vekovima, spomenik Slankamenačkoj bici, Tursko kupatilo i drugo.).	• Nedovoljno iskorišćeni turistički resursi; • Nezadovoljavajuća opšta i turistička infrastruktura; • Nedovoljna ekološka zaštita prirodnih turističkih potencijala (nepostojanje kanti za odlaganje smeća, kao i zapuštenost mnogih lokaliteta); • Zastarelost medicinske opreme u banji; • Nedostatak strategijskog pristupa planiranju bilo kakvog vida turizma; • Neadekvatni programi edukacije za nove profile kadrova u turizmu (što je jedan od razloga zašto je zatvorena suvenirnica na obali Dunava); • Nedostatak kvalitetnih marketinških istraživanja; • Nepostojanje stabilnih finansijskih izvora; • Nedovoljna primena savremenih tehnologija; • Nestabilna politička situacija (što je problem koji je karakterističan za čitavu zemlju).
ŠANSE	PRETNJE
• Sve veća okrenutost ljudi zdravom životu i prirodi (ovu činjenicu potvrđuje postojanje vikend naselja u Starom Slankamenu); • Bolja saradnja sa ostalim naseljima koja se nalaze na Dunavu, razmena iskustava, organizovanje zajedničkih tura, kako u zemlji, tako i u inostranstvu; • Međunarodna saradnja, što znači priliv stranih gostiju; • Saradnja sa gradovima na Dunavu radi boljeg iskorišćenja potencijala ove reke u turističke svrhe; • Usavršavanje i prilagođavanje turističke ponude za domaće turiste i unapređenje domaćeg tržišta, a potom inostranog; • Državne subvencije, sponzorstva i donacije radi unapređenja turističke ponude Starog Slankamena.	• Loša ukupna privredna pozicija države i postojanje svetske ekonomske krize; • Nepostojanje podrške republičkih i pokrajinskih organa vlasti u vidu značajnih ulaganja u turizam Starog Slankamena; • Nizak životni standard većine stanovništva; • Stereotipnost turističke ponude i promene mentaliteta; • Sve veća zagađenja životne sredine.

Izvor: istraživanje autora

Kada sagledamo SWOT analizu prirodnih potencijala Starog Slankamena možemo uočiti da ovo mesto ima zaista veliki potencijal i da ima više snage i mogućnosti, nego slabosti i opasnosti. Slabosti i opasnosti polaze pre svega zbog opšteg stanja krize u svetu i u zemlji, ali i zbog nedovoljne organizacije, kao i zbog nedostatka stručnog kadra koji bi se ozbiljno pozabavio unapređenjem turizma u Starom Slankamenu. Zahvaljujući velikom broju antropogenih resursa u vidu spomenika, tvrđave, Stari Slankamen zaista ima odličnu kulturnu ponudu. Međutim takvu ponudu trebalo bi obogatiti prirodnim potencijalima, kojih naravno ima. Trebalo bi turističkoj klijenteli predstaviti jedinstvenu ponudu koja može zadovoljiti i njihove kulturne, ali i njihove potrebe za prirodom i rekreacijom u njoj. Celokupan utisak je da nedostaje jedna integrisana ponuda kojom bi Stari Slankamen predstavio sve svoje potencijale. Takođe nedostaju smeštajni kapaciteti ili prostor za kampovanje koji su neophodni ukoliko želimo da nam se turisti zadrže više dana.

4. Zaključak

Sve prirodne i antropogene vrednosti Starog Slankamena i okoline predstavljaju veliki potencijal za razvoj turizma. Veoma je važno pažljivo planirati razvoj turizma kako bi se izvukla maksimalna dobit, koja bi prvenstveno pripadala lokalnom stanovništvu, kao i turistima[21]. To bi dovelo i do povećanja životnog standarda stanovništva[22], njihove edukacije i uključivanje u svetske tokove, kroz posete raznim sajmovima i konferencijama u zemlji i inostranstvu. Opšte je poznato da je imidž turističke destinacije bitan činilac u procesu donošenja odluke o turističkom putovanju ali mora biti u saglasnosti sa motivima potencijalnog turiste[23]. Da bi turista došao u Stari Slankamen, neophodno je da za njega zna. Simbol Starog Slankamena pored spomenika Slankamenačkoj bici, jesu i vinogradi, a posebno što se izdvaja jeste posebna sorta grožđa koja se ovde uzgaja i to sa autentičnim nazivom „Slankamenka". U Starom Slankamenu bi se mogle prodavati flaše vina ove sorte, kao jedinstven proizvod i suvenir koji bi turisti sa sobom nosili. Brendiranje ovoog proizvoda bi imalo dvostruku ulogu: za sve one koji rade na stvaranju tog proizvoda imali bi finansijsku korist, dok bi za turiste to predstavljalo vrednost i jednu od specifičnosti koju bi vezivali

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21 Andereck, K., Valentine, K., Knopf, R., Vogt, C. (2005): *Residents' perceptions of community tourism impacts*, Annals of Tourism Research, 32(4), 1060.

22 Balaguer, J., Cantavella-Jorda, M. (2002): *Tourism as a longrun economic growth factor the Spanish case,* Applied Economics, 34(7), 881.

23 Waligo, V. M., Clarke, J., Hawkins, R. (2013): *Implementing sustainable tourism: A multi-stakeholder involvement management framework*, Tourism Management, 36, 432.

za ovo mesto. Najveći uspeh u brendiranju se postiže isticanjem autentičnosti[24], a Stari Slankamen poseduje toliko prirodnih i antropogenih vrednosti koje su jedinstvene i koje konkurencije ne može da imitira. Veoma je bitna lojalnost brendu, a što se toga tiče zaljubljenici u vino bi svakako bili lojalni, kao i mnogi ribolovci ili nautičari, jer je Stari Slankamen pogodno mesto kako za ribolov, sportsko rekreativni turizam (za razne sportove na void). Stari Slankamen, pored svih vizuelnih vrednosti koje ga čine, treba promovisati i kao pogodno mesto za život, kroz razne programe tipa „Povratak na selo". Zbog blizine Fruške gore, u Starom Slankamenu i okolini je gustina vazduha koja odgovara mnogim hroničnim bolesnicima[25]. Zatim, tu je i banja, na čijoj prepoznatljivosti bi se trebalo poraditi, dodavanjem specifičnog logoa, koji će i mlade privući, da baš tu „produže svoju mladost". Sve bi to trebalo dobro upakovati i plasirati na tržištu, a najvažnije istaći na sajtu.

Kako bi se u Starom Slankamenu razvio nautički, izletnički, lovni i robolovni turizam, ili bilo koji drugi vid turizma, koji je ovde moguće sprovesti, potrebno je pre svega zaposliti stručan kadar, kao što su turistički vodiči, ekolozi, biolozi, geografi i slično. Veoma je važno da oni šire pozitivnu sliku lokalnom stanovništvu i uvere ih da Stari Slankamen ima potencijala za razvoj turizma, a isto tako i da oni mogu imati koristi od svega toga. Da bi se došlo do toga potrebno je lokalnom stanovništvu dati ulogu domaćina, zatim njihove proizvode plasirati turistima, uključiti ih u pravljenje suvenira, kao i spremanje tradicionalne hrane i specijaliteta[26]. U Starom Slankamenu bi se odražavale vožnje brodom, gde bi se selo i okolina prikazivali iz drugog ugla, a tu bi takođe trebalo zaposliti stručan kadar, kao i lokalno stanovništvo, koje najbolje poznaje svaki delić. Pored potencijala koje pruža Dunav za nautiku, na kopnu koje je okruženo voćnjacima i vinogradima, održavale bi se biciklističke vožnje, koje bi povezale vinarije, spomenik, kao i ostale prirodne i antropogene vrednosti. Da bi se sproveli ovi vidovi turizma neophodno je postaviti odgovarajuću saobraćajnu signalizaciju, ucrtati tačno puteve kojima bi se išlo, kako bi turisti mogli samostalno i bez ikakvih poteškoća da ih obiđu[27].

Misija razvoja turizma bilo bi širenje poslovne mreže i uspostavljanju saradnje sa svim relevantnim subjektima privrednog i društvenog života koji su od značaja za jačanje turizma u Starom Slankamenu, pa i opštini Inđija. Potrebno je omogućiti pružanje podrške kroz razne aktivnosti, kako subjektima

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24 Antić, A., Vujko, A., Gajić, T., (2015): *Tradicija kao pokretač razvoja turizma ruralnih destinacija*, Škola biznisa, Visoka poslovna škola strukovnih studija, Novi Sad, 2, 11.

25 Grbić, M., 2009.

26 Penić, M., Dragosavac, M., Vujko, A., Besermenji, S. (2016): *Impact of active tourism on economic development- The Fruška Gora National park (North Serbia)*, Geographica Pannonica, 20(3), 190.

27 Vujko, A. Plavša, J. (2014b): *Evaluation of National Park Fruška Gora (Serbia) for sport and recreational tourism,* Acta geographica Slovenica, 54(2), 330.

turističke privrede tako i lokalnom stanovništvu i udruženjima na: negovanju, čuvanju i afirmaciji kulturne baštine, običaja i tradicije, izradi suvenira, primeni standarda u proizvodnji i pripremi narodnih jela, očuvanju životne sredine i prirodnog okruženja. Pored toga, potrebno je uspostaviti marketinšku saradnju i oformiti sopstveni sajt. Veoma je važna saradnja sa Turističkom organizacijom Inđije, ali isto tako i saradnja sa Turističkom organizacijom Vojvodine, koja bi kroz svoje aktivnosti usmeravala turiste baš u Stari Slankamen[28].

Jedan od ciljeva razvoja turizma u Starom Slankamenu bio bi podizanje nivoa životnog standarda pre svega lokalnog stanovništva, a onda i šire. To je moguće ukoliko se stanovnici uključe u formiranje Starog Slankamena kao turističke destinacije. Zatim cilj je i da se očuva životna sredina, tako da svi oblici turizma koji bi se ovde spovodili ne bi stvarali devastaciju prostora. Pored prirode, važno je i sprovesti plan kojim bi se zaštitila i očuvala dobra, antropogene vrednosti[29]. Da bi postali vidljivi na tržištu potrebno je uvesti savremene trendove iz oblasti marketinga i komunikacije. Kada destinacija postane poznata na tržištu, neophodno je raditi na tome da se ispune sva očekivanja turista, pa čak i da se prevaziđu kako bi se turisti vrlo rado vraćali i širili pozitivnu sliku mesta. Na kraju, svakako jedan od najvećih ciljeva jeste da Stari Slankamen bude među prvim destinacijama kako Vojvodine, Srbije, tako i regiona te da kao takva bude ucrtana u turističku kartu Sveta.

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NATURAL AND ANTHROPOGENIC RESOURCES AS THE INITIATORS OF TOURISM DEVELOPMENT – STARI SLANKAMEN CASE STUDY

Stari Slankamen is a village in the Vojvodina Province (Northern Serbia), which administratively belongs to the municipality of Indjija in Srem district. Research for this paper was carried out mainly in the field work through visits of the facilities and by interviewing the experts. All of the information was gathered from various research papers, as well as verbally. The goal is to conclude, through the study of natural and anthropogenic values, the current situation in the observed location. The objectivity and possibilities for the implementation in accordance with their available potentials were taken into account. The goals are directed towards increasing the level of quality of the provision of services to prospective tourists as well as improving the current situation in Stari Slankamen. The survey questionnaire was used during the research. Respondents were visitors from Novi Sad and Stari Slankamen as well as the employees of the local restaurants who were asked to estimate the existing potentials for the development of tourism in Stari Slankamen. Based on the analysis of dependent and independent variables, it has been concluded that existing resources are not used properly for tourism purposes and that the prerequisites exist only if effort and resources are added towards these purposes.

Keywords: Stari *Slankamen, tourism, natural and anthropogenic values*

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EKONOMSKI I SOCIO-KULTURNI EFEKTI RAZVOJA TURIZMA U TURISTIČKIM DESTINACIJAMA

Privredni razvoj, uticaji turizma na ekonomiju i monetarnu politiku, razvoj destinacija poput planinskih, primorskih, gradskih i ruralnih, uticaji na domicilno stanovništvo i učesnike kretanja, predstavljaju stalnu temu u debatama širokih globalnih ekonomskih i demografskih naučnih struktura. Često se kao faktor revitalizacije određenih regija navodi turizam. Njegov bi razvoj u ovim područjima popravio lošije ekonomske prilike. Isto tako i etno–socijalne vrednosti, koje daju autentičnost određenom području, jačanjem kroz turizam, podigle bi imidž destinacije na najviše instance. To bi doprinelo i privrednom uravnoteženju jer bi upravo prostori koji nisu turistički valorizovani dobili šansu da se uključe u važne turističke potencijale. Stoga se sa pravom turizmu prepisuje moć da pospeši društveno-ekonomski i demografski razvoj zemlje, i nije čudo da se o turizmu govori kao o razvojnom potencijalu.

Ključne reči: *turizam, ekonomski uticaji, socio-kulturni efekti, turistički razvoj, turistička destinacija.*

1. Uvod

Cilj ovog rada je analiza uticaja turizma na ekonomski i socio-kulturni razvoj turističke destinacije. To je uključilo različite izvore informacija, statističke podatke i druge građe, koji će pomoći u izvođenju zaključaka nakon sprovedene komparativne analize i prikaza rezultata istraživanja. U fokus su stavljeni ekonomski uticaji koji uključuju turistički promet i potrošnju, zapošljavanje stanovništa pod uticajem turizma, kao i efekti razvoja u lokalnim društvenim strukturama i elementima tradicije pripadnika lokalne zajednice. Stavljanjem akcenata na intenzivan ekonomski turistički razvoj, gotovo u svim zemljama sveta, vrlo često se pored prostora pozitivno ili negativno eksploatišu i ljudski resursi. Nije redak slučaj

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kada turistički razvoj vrši uticaje na kompletnu lokalnu zajednicu određenog prostora. Kod negativnih socio-kulturnih uticaja, turizam nema mogućnost daljnjeg razvoja. Lokalno stanovništvo ga odbacuje jer nedozvoljava dalju degradaciju kulture i prostora u kojem živi. Pored preraspodele dohotka iz jednog u drugo područje nacionalne teritorije, što je odlika domaće turističke potrošnje, za zemlju su još važni direktni, indirektni i multiplikativni uticaji inostranog kapitala. Pored direktnih ekonomskih uticaja, kakvi su uticaji na društveni proizvod i nacionalni dohodak, uticaji na platni bilans zemlje, uticaji na jačanje nedovoljno razvijenih područja, turizam realizuje i direktne ekonomske uticaje na aktiviranje ljudskih resursa, kao važnog segmenta za pozicioniranje zemlje na svetskoj turističkoj sceni. Ove ekonomske promene prate i socio-kulturni uticaji koji se realizuju u turističkoj destinaciji i usko su vezani za socijalne stavove turista i lokalne zajednice. Vrlo su česti slučajevi kada turizam u određenim destinacijama ne ostvaruje ekonomski priliv a degradira prostor i okruženje, eksploatiše ljudski rad, te ga stoga lokalna zajednica odbacuje i ne prihvata. Tada možemo reći da turizam vrši negativne socio-kulturne uticaje. Zato su neophodne implementacije strategija pravilnog turističkog razvoja zemalja širom sveta.

2. Ekonomski efekti razvoja turizma u turističkim destinacijama

Izučavanjem turizma kroz ekonomski aspekt, dolazi se do zaključka da su na jednoj strani potrošači turističkih usluga – turisti, koji raspolažu novčanim sredstvima, a na drugoj kompletna turistička ponuda. Njena osnovna uloga bila bi da obezbedi zadovoljenje različitih potreba potrošača. Stoga pri definisanju turizma analizirajući ekonomske efekte, neophodno je posebno odvojiti potrošače na strani tražnje, od delatnosti koje sačinjavaju turističku privredu, na strani turističke ponude. Turistička privreda se u mnogome razlikuje od ostalih privrednih delatnosti. Te osnovne karakteristike, u delima mnogih autora, ističu se kroz formulaciju specifičnosti turističke privrede. Kao najvažnije specifičnosti turističke delatnosti, autori Milićević i Štetić, navode heterogenost strukture, visok stepen elastičnosti tražnje u odnosu na neelastičnost ponude, naglašen sezonski karakter poslovanja i specifičnosti u pogledu karaktera rada ove delatnosti.[1]

Ekonomski efekti razvoja turizma su brojni. Svakako, najznačajniji su uticaji na društveni proizvod i nacionalni dohodak, uticaj na platni bilans zemlje kroz takozvani „nevidljivi uvoz i izvoz", uticaj na razvoj nedovoljno razvijenih sektora privrede i područja, i kao podjednako značajno je izdvajanje uticaja na zapošljavanje stanovništva, odnosno uticaja na ljudske resurse, što će u ovom radu biti posebno analizirano.

1 Milićević, S., Štetić, S. (2017): *Menadžment u turizmu*, Univerzitet u Kragujevcu, Fakultet za hotelijerstvo i turizam u Vrnjačkoj Banji.

Turizam se „troši" u mestu proizvodnje, stoga turista mora otputovati u destinaciju i tamo načiniti potrošnju, stvarajući priliku za razvoj lokalnim poslovima svih vrsta i omogućavajući zaradu lokalnim zajednicama kroz neformalnu ekonomiju, putem prodaje roba i usluga direktno posetiocima. Turizam je raznovrsnija industrija od mnogih drugih. On ima potencijal da podrži druge ekonomske aktivnosti, kako kroz obezbeđivanje fleksibilnih, skraćenih radnih mesta, koji mogu dopunjavati druge delatnosti, tako i kroz stvaranje prihoda kroz složeniji lanac snabdevanja robom i uslugama. Turizam je radno intenzivan, što je posebno važno u borbi protiv siromaštva. Takođe pruža širok spektar različitih mogućnosti zapošljavanja posebno za žene i mlade ljude - od visoko kvalifikovanih do nekvalifikovanih kadrova - i obično zahteva relativno malo obuke.[2] To je izrazito zastupljeno u sektorima ugostiteljstva.

Turizam je danas jadna od najjačih „industrija" sveta, za mnoge zemlje značajan izvozni proizvod i generator zapošljavanja. Svet je postao „globalno selo" u kome je većina turističkih destinacija postala dostupna. Uprkos povremenim kriznim situacijama, svetski turizam beleži kontinuirani rast.[3] Broj međunarodnih turista je sa 25,3 miliona 1950. godine, dostigao broj od 1.186 miliona u 2015. godini (1,186 milijardi), što je bilo za 4,6% više u odnosu na 2014. godinu (u 2014. godini taj broj iznosio je 1.134 miliona). Ukupan prihod od međunarodnog turizma, u 2015. godini, povećan za 4,4% i iznosio je 1.260 milijardi US$ (1.136 milijardi evra). U 2017. godini broj međunarodnih turista iznosio je 1.323 miliona, što je za 46 miliona više nego u 2016. godini, odnosno 137 miliona više nego u 2015. godini.[4] Procene su da će 2030. godine broj međunarodnih turista biti 1.809 miliona (Grafikon 1).[5]

U 2017. godini, ukupan prihod od međunarodnog turizma iznosio je 1.332 milijardi US$, što je povećanje za 5% više u odnosu na 2016. godinu.[6] Prognoze su da će u periodu od 2018-2028. godine taj broj porasti na 2.311 milijardi US$.[7]

2 Rutty, M., et al. (2015): "The global effects and impacts of tourism", 36-63, in: Hall, C. M., Gössling, S., Scott, D: The Routledge Handbook of Tourism and Sustainability, Routledge, Taylor & Francis Group, London & New York.

3 Milićević, S. (2016): Inovativnost u funkciji rasta i razvoja turističke industrije na turističkom tržištu, *Megatrend revija*, 13(1), 147-158.

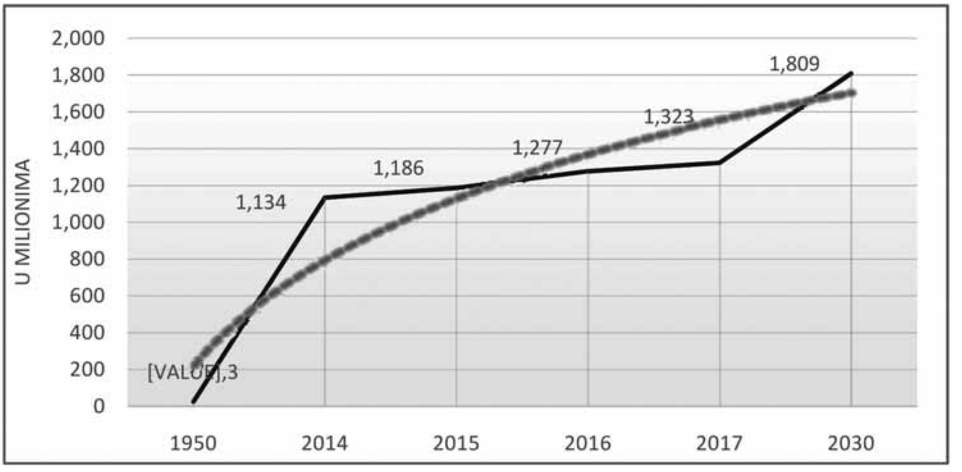
4 UNWTO, (2018): *Annual Report 2017*, World Tourism Organization, Madrid.

5 UNWTO (2017): *World Tourism Highlights 2017 Edition*, World Tourism Organization, Madrid.

6 UNWTO (2018):*World Tourism Barometer*, Vol 16, Issue 3, June 2018, World Tourism Organisation, Madrid.

7 WTTC, (2017): *Travel & Tourism, Global Economic Impact & Issues 2017*, World Travel & Tourism Council, London.

Grafikon 1. *Trend rasta broja međunarodnih turista*



Izvor: Autor, na osnovu podataka UNWTO (2017): *World Tourism Highlights 2017 Edition*

Analizom podataka u Grafikonu 1, posmatrajaću odabranih 6 godina, uočava se intenzivan porast broja turista koji se uključuju u međunarodna kretanja. Za razliku od 1950. godine, drugu deceniju 21. veka karakterišu vrednosti iskazane u milijardama. Prognoze za 2030. godinu su da će se broj međunarodnih dolazaka popeti na jednu mijardu i osam stotina i devet miliona turista.

U 2017. godini, turistička industrija nastavlja da pravi upadljivu razliku za život miliona ljudi, kroz pokretanje rasta, stvaranje novih radnih mesta, smanjenje siromaštva i podsticanje razvoja i tolerancije. Šestu godinu zaredom, rast ove industrije nadmašuje svetsku ekonomiju, pokazujući otpornost industrije u svetlu globalne geopolitičke neizvesnosti i ekonomske varijabilnosti. Industrija je doprinela globalnoj ekonomiji od 7,6 triliona dolara (10,2% globalnog BDP-a) i ostvarila 292 miliona radnih mesta (1 na 10 radnih mesta na zemlji), u 2016. godini. U istoj godini međunarodni dolasci su dostigli 1,2 milijarde, 46 miliona više nego u 2015. godini. Sa prognoziranih 1,8 milijardi međunarodnih turista do 2030. godine, ova industrija ima potencijal da igra ključnu ulogu u stvaranju visokokvalitetnih mogućnosti zapošljavanja, da deluje kao sredstvo za zaštitu i obnovu biodiverziteta naše planete i pomogne u izgradnji velikih mostova između ljudi i kultura.[8]

[8] *WEF (2017), The Travel & Tourism Competitiveness Report 2017, Paving the way for a more sustainable and inclusive future,* World Economic Forum, Geneva.

Na porast broja putovanja međunarodnih razmera, uticali su sledeći faktori:[9]

- otvaranje granica i smanjenje barijera koje doprinose rastu turizma;
- povećanje diskrecionog dohotka;
- pristupačne cene avio-karata (low-cost);
- povećan broj ljudi koji raspolažu većim novčanim sredstvima i sa više slobodnog vremena;
- povećanje broja ljudi koji žele da putuju u turističke svrhe.

Pozitivni ekonomski faktori turističke potrošnje u destinaciji realizuju se kroz multiplikovani efekat novca, odnosno cirkulacijom novca kroz sektore privrede, kada se promenom monetarnog i privrednog nivoa, pospešuje proizvodnja i prodaja. Novac kojeg turisti direktno troše, predstavlja direktan prihod. Ova potrošnja ide ka turističkim preduzećima koja turistima pružaju robu i usluge, koje služe odmoru (na primer, smještaj, obroci, izleti, itd.). Turistička preduzeća će potom potrošiti deo od ovih zarađenih prihoda, nabavljajući robu i usluge od svojih dobavljača, što im omogućava da ispune svoje obaveze prema turistima. Primer su turistički poslovi kao što su pružanje različitih usluga ili se vrši odvajanje dela sredstava od ulaznih taksi za dnevnice vodiča i slično. Ovakva sekundarna potrošnja naziva se indirektnim prihodom. U ovom obliku su i neki drugi troškovi - kao što su plaćanje hrane u lokalnom supermarketu ili poseta bioskopu. Takva potrošnja poznata je kao indukovani prihod, koji je rezultat direktnih ili indirektnih turističkih troškova. Na kraju se deo tog novca povlači iz opticaja putem plaćanja taksi, štednjom ili kroz uvoz. Ukupna cirkulacija novca i efekat kojeg on ostvaruje u destinaciji (multiplikator) dobija se kada se svaki ukupno potrošeni novac, koji se putem taksi, štednje ili uvoza povlači iz opticaja, podeli sa 100. Moguće je predvideti i vrednost multiplikatora ako se zna ukupna proporcija oticanja iz lokalne ekonomije.

Multiplikator se obično dobija primenom formule:[10]

$$\text{multiplikator} = \frac{1}{\text{proporcija oticanja } \{\sum\}}$$

Primer je oticanje dela potrošnje od 20 dolara na takse, 20 dolara na štednju i 10 dolara na uvoz. Zbir vrednosti $\{\sum\}= 20/100 + 20/100 + 10/100$, čine proporciju cirkulacije/oticanja $\{\sum\}= 0,5$.

9 Walker, R. J. (2013): *Introduction to Hospitality Management*, 4th edition, Pearson Education, Inc., New York., preuzeto od Milićević, S., Štetić, S. (2017): *Menadžment u turizmu*, Univerzitet u Kragujevcu, Fakultet za hotelijerstvo i turizam u Vrnjačkoj Banji.

10 Holloway, J. C., Humphreys, C., Davidson, R. (2009): *The Business of Tourism*, Pearson Education, Harlow.

Primenom formule dobijamo vrednost multiplikatora 2, i to:

$$M = \frac{1}{0,5}, M = 2$$

Veličina multiplikatora varira od regiona do regiona i zavisi od brojnih faktora, uključujući:[11]

- veličinu područja za analizu;
- procenat u region uvezenih roba ili usluga za potrošnju posetilaca;
- stopu cirkulacije;
- prirodu potrošačkih troškova;
- dostupnost odgovarajućih lokalnih proizvoda i usluga;
- obrasce ekonomskog ponašanja podjednako za posetioce i lokalno stanovništvo.

Autori Cooper i Hall[12] su se takodje bavili analizom pozitivnih i negativnih ekonomskih efekata razvoja turizma, što je prikazano u Tabeli 1.

Tabela 1. Prikaz mogućih pozitivnih i negativnih ekonomskih uticaja turizma u destinaciji[13]

pozitivni	negativni
• kreiranje radnih mesta • povećanje turističke potrošnje • povećanje ponude radne snage • povećanje životnog standarda • povećanje cena nekretnina • poboljšanje investicija u infrastrukturu i usluge u turističkoj destinaciji • povećanje slobodne trgovine • povećanje stranih ulaganja	• lokalna inflacija i povećanje cena • zamena lokalne spoljnom radnom snagom • veća sezonska nezaposlenost • spekulacije nekretninama • povećan jaz između prihoda bogatih i siromašnih • moguća investiranja samo u turizam, što bi značilo da drugi sektori i usluge ne dobiju podršku • neadekvatno razmatranje alternativnih investicija • neadekvatna procena troškova razvoja turizma • povećanje slobodne trgovine gubitak lokalnog vlasništva

11 Hall, C. M., Page, S. J. (2006): *The Geography of Tourism and Recreation, Environment Place and Space*, Routledge, Taylor & Francis Group, London & New York.

12 Cooper, C., Hall, C. M. (2008): *Contemporary Tourism: An International Approach,* Elsevier, New York.

13 Hall, C. M., Page, S. J. (2006): *The Geography of Tourism and Recreation, Environment Place and Space,* Routledge, Taylor & Francis Group, London & New York.

Podaci u Tabeli 1, prikazuju moguće pozitivne i negativne ekonomske uticaje turizma u destinaciji, gde su potencijalno brojniji negativni. Pravilnim planskim razvojem turizma, ovi lošiji uticaji mogu se minimizirati ili u najboljem slučaju eliminisati. U toj poziciji, destinacija, lokalna zajednica, država i turisti, delili bi pozitivne benefite ekonomskog razvoja, među kojima su najznačajniji: zapošljavanje, povećanje prometa i potrošnje od strane posetilaca, povećanje životnog standarda, jačanje infrastrukture i poboljšanje investicija u ovaj sektor, kao i drugi rezultati pozitivnih uticaja.

Prihodi od turizma mogu se proširiti povećanjem:[14]

- broja posetilaca;
- njihove prosečne dužine boravka;
- njihove prosečne dnevne potrošnje.

2.1 Turizam i ljudski resursi

Jedan od primarnih ciljeva ekonomske politike jeste postizanje što veće zaposlenosti stanovništva. Turistički sektor može se pojaviti kao osnova velikom broju radnih mesta, kako u javnom tako i u privatnom sektoru privrede, kroz upošljavanje radno sposobnog stanovništva. Ovo treba posmatrati kroz ulogu ljudskog rada u delatnostima koje sačinjavaju turističku privredu, kao i u delatnostima tercijalnog sektora privrede koji uključuje zapošljavanje stanovništva uopšte. Osnovni ključ za veću uposlenost stanovništva u turističkoj delatnosti egzistira svakako na povećanom turističkom prometu i potrošnji stranih i domaćih turista. Takođe, povećanje prometa i potrošnje uslovljava i povećan broj zaposlenih u neprivrednim delatnostima koje direktno učestvuju u podmirenju potreba turista (direktan i indirektan uticaj na privredu zemlje). I pored toga što je većina poslova u turizmu sezonskog karaktera, u mnogim zemljama turizam je od posebne važnosti jer nema drugih mogućnosti za zapošljavanje u ostalim sektorima privrede (ostrvske destinacije).

Zaposlenost koju turizam formira može biti direktna i indirektna. Direktna zaposlenost uključuje poslove uslovljene specifičnom potrebom snabdevanja i pružanja usluga turistima. To su poslovi u turističkoj industriji kojima se direktno podmiruju potrebe. Takvi su poslovi u ugostiteljstvu sa sektorima hotelijersto i restoraterstvo, poslovi u turističkim agencijama i organizatorima putovanja (opšti turistički sektor), poslovi saobraćaja, poput avio, železničkog, drumskog i brodskog, zatim poslovi u raznim kulturnim institucijama, poslovi animatora gostiju, razne receptivne vodičke i prevodilačke službe i veliki spektar ostalih poslova. Indirektna zaposlenost obuhvata sve one poslove po drugim delatnostima privrede, koji direktno snabdevaju turističku industriju. Takvi

[14] Weaver, D., Lawton, L. (2014): *Tourism Management*, John Wiley & Sons, Sidney.

poslovi odnose se na sektore poljoprivrede, građevinarstva, metalurgije, razne druge industrijske grane, poslove zanatstva itd.[15]

WTTC razlikuje sledeće kategorije zaposlenosti u turizmu:[16]

1. Zaposlenost koja uključuje poslove kroz direktne kontakte sa turistima. Takvi su hoteli, restorani, turističke agencije, prodavnice maloprodaje, poslovi zabave i slično.
2. Zaposlenost koja u turističkoj privredi uključuje indirektne poslove kakvi su: poslovi snabdevanja turističke privrede, avionske industrije, snabdevanje hranom i ketering, poslovi veleprodaje i računovodstvenih firmi, perionice itd.
3. Državne agencije za izgradnju kapitalnih dobara a koja se koriste u turističkoj industriji.
4. Poslovi proizvodnje dobara a u koju grupu spadaju industrije proizvodnje čelika, drveta, plastike, stakla, derivata nafte itd.

Mnogi autori turističku zaposlenost izdvajaju po sledećim sektorima:[17]

- hoteli i ostali objekti za smeštaj;
- restorani, kafei itd;
- barovi i noćni klubovi;
- državni objekti;
- putničke agencije i turoperatori;
- biblioteke, muzeji i ostale kulturne ustanove;
- sportski i rekreativni objekti.

Tržište turizma uključuje direktno ili indirektno oko 292 miliona radnih mesta (prema podacima iz 2016. godine), od kojih je 109 miliona činilo direktnu zaposlenost, što je bilo 3,6% od ukupne zaposlenosti, dok se ukupna svetska (direktna i indirektna) zaposlenost u turizmu 2016. godine, procenjivala na oko 9,6% od ukupne zaposlenosti. U 2017. godini, turizam je generisao direktno ili indirektno 297.896 miliona poslova, odnosno 138 miliona direktne zaposlenosti. Prognoza za 2027. godinu je da će u turizmu biti 1 na svakih 9 poslova na planeti, odnosno da će direktne i indirektne zaposlenosti biti 381.700 miliona, odnosno 11,1% od ukupne svetske zaposlenosti. Od ovog broja, 138.086 miliona, biće direktnih poslova.[18]

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15 Trišić. I., Gajić, B. (2013): „Turizam i ljudski resursi", *Hotelplan 2013, The fifth international biennial congress, Contemporary trends in the hospitality industry*, 543-550.

16 WTTC, (2017): *Travel & Tourism, Global Economic Impact & Issues 2017, World,* World Travel & Tourism Council, London.

17 Page, S. J. (2009): *Tourism Management, Managing for Change*, Butterworth-Heinemann, Oxford.

18 WTTC, (2017): *Travel & Tourism, Economic Impact 2017,* World, World Travel & Touris Council, London.

Direktan doprinos putovanja i turizma u globalnom svetskom BDP-u, u 2016. godini, porastao je za 3,1%. Ovo je brže od samog rasta globalne ekonomije u celini, koja je porasla za 2,5%, što znači da je šest puta uzastopno, sektor putovanja i turizma prevazišao rast globalne ekonomije.[19] Posmatrano u ranijem periodu, zemlje sa značajnim udelom direktne zaposlenosti u turizmu, u odnosu na ukupnu zaposlenosti u toj zemlji, u 2011. godini, isticale su se: Australija sa 7,8%, Španija sa 7,1%, Meksiko sa 4,9%, SAD sa 4,7%, Italija sa 4,2%, Turska sa 3,9%, Indija 1,6% itd.[20]

Navedeni podaci mogu poslužiti poređenju sa podacima iz 2017. godine, gde se udeo zaposlenosti u turizmu značajno smanjio u udelu ukupne zaposlenosti u određenoj zemlji. Ali to svakako ne znači smanjenje radnih mesta u ovom sektoru, već jačanje sektorske privrede na globalnom nivou zemlje. Najveći udeo zaposlenosti u turizmu u ukupnoj zaposlenosti u toj zemlji, ostvaruje se u primorskim zemljama ili zemljama sa atraktivnim turističkim regijama (Tabela 2).

Tabela 2. *Zaposlenost u turističkoj industriji u 2017. godini u odabranim zemljama*[21]

Zemlja	% od ukupne zaposlenosti
Grčka	11,3
Hrvatska	9,8
Nemačka	7,0
Velika Britanija	5,3
Španija	5,2
Italija	5,0
Australija	4,4
Francuska	4,2
SAD	3,8
Kanada	3,7
Bugarska	3,1
Brazil	2,9
Srbija	2,2
Japan	1,9

Analizom prikazanih podataka može se izvesti zaključak da zemlje koje daju najveći udeo zaposlenosti od ukupnog broja zaposlenih, jesu ujedno

[19] UNWTO, (2018): *Annual Report 2017*, World Tourism Organization (UNWTO), Madrid.

[20] Vellas, F. (2011): *The Indirect Impact of Tourism: An Economic analysis*, T20 Tourism Ministers, Paris.

[21] WEF (2017), *The Travel & Tourism Competitiveness Report 2017, Paving the way for a more sustainable and inclusive future,* World Economic Forum, Geneva

i zemlje sa atraktivnim destinacijama za inostrane turiste ili predstavljaju značajne emitivne zemlje na globalnom nivou, i da je zaposlenost usko vezana sa turističkim prometom i potrošnjom.

Od turističke potrošnje u svakoj zemlji zavisi u kojim delatnostima će turizam najviše uticati na kreiranje radnih mesta. U proseku se najveći iznos realizuje u ugostiteljstvu, zatim u saobraćaju i na kraju u trgovini. Iz sektora ugostiteljstva izdvajaju se na prvom mestu hetelijerstvo i restoraterstvo. Većina poslova u turističkoj industriji je pod velikim uticajem sezoničnosti poslovanja, što ima za posledicu nestandardne oblike zaposlenosti, koji se obično u stranoj literaturi i u statističkim analizama definišu kao povremeni (casual) ili privremeni (part time). Značajno je analizati podatke jednog istraživanja Evropske fondacije za poboljšanje životnih i radnih uslova (koje je obuhvatilo petnaest zemalja Evropske unije) i koje je pokazalo je da je 50% zaposlenih u sektoru hotela i restorana radilo po neregularnoj časovnoj šemi.[22] Pritom, 80% ispitanih radilo je u proseku 3 nedelje u mesecu a 41% je radilo približno 6 noći mesečno. Iz istog izvora podataka zvanični sati rada u turizmu u 13 zemalja Evropske unije su: Irska – više od 48 časova; Francuska, Luksemburg, Austrija, Italija, Holandija, Nemačka i Španija – od 40 do 44 sata i Belgija, Norveška, Danska, Finska i Švedska – manje od 40 časova nedeljno.

Korišćenje kategorija privremenog i povremenog zapošljavanja može biti uslovljeno sa dva faktora: [23]

- korišćenje privremene i povremene radne snage, što omogućava poslodavcima da menjaju pojedine troškove radne snage od fiksnih ka varijabilnim;
- privređivanje u turističkom sektoru ponekad zahteva 24 - časovno radno vreme ili najmanje radnog angažovanja iznad normalnih radnih sati. Ovo ima za posledicu potrebu za radom u smenama i povremeni rad.

S obzirom da se turistička tražnja koncentriše na relativno kraći vremenski period u toku godine, ova se pojava u velikoj meri odražava negativno i na angažovanje ljudskih resursa u oblasti turizma. Takve su uglavnom planinske i primorske turističke regije, dok je u gradskim ovaj uticaj nešto blaži, imajući u vidu duži vremenski period prolećnih i jesenjih meseci u toku godine. Pored zimskog sezonskog perioda, kada su posećeniji planinski regioni, posmatrano u svetskim razmerama, može se zaključiti da je najveći deo turističke tražnje koncentrisan na period letnjih meseci.[24]

Prema brojnim autorima i analitičarima, među najznačajnijim negativnim ekonomskim uticajima turizma na ljudske resurse u svetu i konfliktima iz ove

[22] Bull, A. (1994): *The tourism industry and its product,* Pitman Publishing, Melbourne.

[23] Vellas, F. (2011): *The Indirect Impact of Tourism: An Economic analysis*, T20 Tourism Ministers, Paris.

[24] Unković, S., Zečević, B. (2009): *Ekonomika turizma*, Centar za izdavačku delatnost Ekonomskog fakulteta, Beograd.

oblasti, treba izdvojiti problem dece i mladih ljudi, koji se širom sveta angažuju u turističkoj i hotelijerskoj industriji, kao jeftina radna snaga (nosači kofera i artikala za plažu, plesači, sluge itd.), neprijavljen rad, migracije, neravnopravan položaj žena, deficit stručnog osoblja, prenošenje virusnih i polnih bolesti pod okriljem poslova i mnogi drugi antropogeni negativni uticaji, koji prate ekonomski sektor.

3. Socio-kulturni uticaji razvoja turizma u turističkim destinacijama

Turizam utiče pozitivno i negativno na kulturu, na interakciju lokalne zajednice prema razvoju turizma, kao i na same turiste. Kod ovakvih uticaja mogu se menjati kolektivni i individualni sistemi vrednosti, društvena zajednica, stil i kvalitet života, odnos prema porodici i osnovnim društvenim vrednostima. Među najznačajnije društvene vrednosti, kao osnovne elemente folklora, koji su ujedno podložni promenama pod uticajima turizma, treba izdvojiti: domaću radinost i rukotvorine, jezik, način ishrane, tradiciju, običaje, izvorni narodni melos, istorijska područja, domaće poslove, arhitekturu, religiju, obrazovni sistem, nošnju i slobodne aktivnosti.[25]

Zarad povećanja benefita od turizma i smanjenja negativnih uticaja, potrebno je uspostaviti uzajamnu vezu između lokalne zajednice i ostalih subjekata turizma (država i turisti). Lokalna zajednica mora biti uključena u kontrolu razvoja turizma, kroz postavljanje ciljeva i strategija razvoja. Ona snosi i svoj deo odgovornosti za nastanak mogućih konflikata u turističkoj destinaciji. Doživljaj turista u destinaciji mora da bude autentičan odraz lokalne kulture. Lokalna zajednica ima višestruke koristi od razvoja turizma a te dobiti se mogu okarakterisati kao pozitivni uticaji turizma na lokalnu zajednicu, i to kroz: [26]

- ✓ povećanje sredstava za očuvanje i revitalizaciju kulturnih dobara, kao i za poboljšanje uslova rada kulturnih ustanova;
- ✓ o**življavanje tradicije;**
- ✓ demokratizaciju kulture;
- ✓ porast zaposlenosti lokalnog stanovništva;
- ✓ povećanje prihoda za pojedince i lokalne poslove;
- ✓ povećanje prihoda od uvedenih poreza;
- ✓ poboljšanje ukupnih ekonomskih aktivnosti;
- ✓ bolje korišćenje gradske infrastrukture i drugih pogodnosti;
- ✓ sve ostale pozitivne i poželjne društvene i ekonomske promene.

25 Mason, P. (2003): *Tourism Impacts Planing and Menagement*, Butterworth-Heinemann, Oxford.

26 Weaver, D., Lawton, L. (2014): *Tourism Management*, John Wiley & Sons, Sidney.

Uspešan razvoj kulturnog i održivog turizma zasnovan je na osnovnom postulatu da lokalna zajednica mora biti uključena u turističku industriju. Njena uloga ogleda se na prvom mestu u donošenju važnih odluka koji se tiču turističke strategije, zatim u zapošljavanju i u prezentaciji svog folklornog nasleđa, od čega ima sopstvenih materijalnih i duhovnih benefita. Kada se ispune svi navedeni uslovi, razvoj turizma u pojedinim turističkim destinacijama imaće status održivosti a svi negativni uticaji, može se očekivati da će biti isključeni. Sa druge strane pojačavaće se i pozitivni osećaji učesnika turističkih kretanja, koji sa pozicije potrošača imaju presudnu ulogu u kreiranju svake turističke destinacije. Prilikom implementacije takvih pozitivnih konstalacija razvoja turizma, mogu poslužiti značajne socijalne smernice: angažovanje lokalnih zajednica pri planiranju i donošenju odluka, procena socijalnog uticaja turističkih aktivnosti, poštovanje socijalne i kulturne raznolikosti i korisnost za kulturu domaćina.[27]

Ovakve značajne društvene i kulturne koristi povećavaju direktne ekonomske benefite koji dominiraju na platformi zaštite ovih vrednosti. Jedna od njih je ideja da turizam promoviše socio-kulturno razumevanje i mir u svetu, kroz direktan kontakt između domaćina i gosta. Štaviše, turizam pruža podsticaj za očuvanje jedinstvene ekološke, kulturne i istorijske vrednosti destinacije, kroz izdvajanje sredstava od prihoda za tekuće restauracije i održavanja.[28]

Primer za to je Agencija za upravljanje oblastima pod zaštitom Madagaskara, gde se čak polovina sredstava ostvarenih od poseta nacionalnom parku, usmerava u razvoj ruralnih sredina ovog područja. Slična situacija je i u Keniji i Zimbabveu. Značajna turistička destinacija u Španiji, Majorka, uvela je praksu plaćanja 12 evra po posetiocu, takozvanu eko-taksu, koju posetilac plaća odmah po dolasku u hotel. Većina od prikupljenih sredstava odlazi lokalnoj zajednici.[29]

U područjima gde nema ekonomskih dobiti, ne mogu se očekivati pozitivni ishodi turističkog razvoja. Uticaji turizma na lokalno kulturno nasleđe i elemente tradicije, mogu se prikazati i strukturalno u Tabeli broj 3, kao uticaji na nasleđe, jezik, religiju, narodnu umetnost, narodne običaje i domaću populaciju.

27 Vujović, S., Cvijanović, D., Štetić, Š. (2012): *Destinacijski koncept razvoja turizma,* Institut za ekonomiku poljoprivrede, Beograd.

28 Weaver, D. (2006): *Sustainable tourism: Theory and Practice*, Butterworth-Heinemann, Oxford.

29 Swarbrooke, J. (1999): *Sustainable Tourism Management*, CABI Publishing, Sheffield.

Tabela 3. *Uticaji turizma na pojedine elemente lokalne kulture*[30]

zona uticaja	**rezultat**
nasleđe	• poboljšanje kvaliteta svih kulturnih ustanova • usmerenost pažnje na zaštitu lokalne zajednice i kompletnog javnog sektora
jezik	• prisutno je veliko interesovanje u zaštiti tradicionalnog lokalnog jezika, ako je on atraktivan stranim turistima
religija	• porast respektovanja lokalne religije od strane turista i obrnuto
narodna umetnost	• intenzivan razvoj novih tržišta za domaću radinost i umetničke forme
običaji	• porast prenošenja običaja na druge krajeve u svetu
domaća populacija	• populacija se povećava dolaskom ljudi da žive ili rade u određenu destinaciju • svaka depopulacija je isključena u turistički razvijenim oblastima

Nakon formiranog odnosa između korisnika prostora (turista) i pripadnika lokalne zajednice, kreiraju se različiti stavovi i percepcije prema turizmu. U zavisnosti od nivoa turističkog razvoja sa jedne i uticaja koje turizam vrši sa socio-kulturnog aspekta sa druge strane, mogu se definisati različiti stavovi i reakcije. U tom smislu za istraživanje je interesantan koncept, poznat pod nazivom *model IRIDEX* ili *Indeks iritiranja rezidenata*. U pitanju je model pomoću koga može da se prati stepen iritacije lokalnog stanovništva uzrokovan uticajima povećanja broja turista u destinaciji, a koji podrazumeva četiri faze: [31]

- *Faza euforije* - turisti su dobrodošli i prisutno je malo kontrole i planiranja;
- *Faza apatije* - i dalje se prihvata prisustvo turista, dok odnosi između grupa postaju više formalni i komercijalizovani. Planiranje se uglavnom odnosi na marketing turističkog proizvoda;
- *Faza iritacije* - u turističkoj industriji došlo je do zasićenja i postoje dileme o tome da li okruženje za lokalnu zajednicu treba da bude prostor kojeg će turisti posećivati u velikom broju. Planeri ne ograničavaju rast infrastrukture, već je povećavaju;
- *Faza antagonizma* - u ovoj fazi prema turizmu i turistima prisutna je otvorena iritacija. Planiraju se korektivne mere **i jača se promocija destinacije**, kako bi se eliminisala pogrešna reputacija.

30 Swarbrooke, J. (1999): *Sustainable Tourism Management*, CABI Publishing, Sheffield.

31 Doxey, G. V. (1975): *A causation theory of visitor-resident irritants: methodology and research inference*, TTRA Conference, 195–198, San Diego, California.

U svetu je vrlo čest slučaj degradacije kulture, koji se dešava na mnogim nivoima unutar destinacija, naročito sa stanovišta prostitucije, zločina, erozije jezika u korist brojnih međunarodnih dijalekata i tradicije koja postaje zaboravljena ili modifikovana za turiste. Zatim prisutne su promene u lokalnoj muzici i drugim umetničkim formama, u hrani koja se priprema za potrebe međunarodne kuhinje, promene u arhitekturi, odeći, porodičnim odnosima (npr. deca koja zarađuju više od svojih roditelja nošenjem prtljaga na aerodromima), u nekim slučajevima i u samoj religiji.[32] Danas globalnu opasnost po turizam predstavlja terorizam, što zahteva posebnu analizu i istraživanje.

Autori Weaver i Lawton, izdvajaju kao najznačajnije negativne sociokulturne tvorevine turizma: komodifikaciju (proces pretvaranja predmeta ili elemenata kulture u robu na tržištu), stvaranje tzv. „frontstage" i „backstage" prostora na turističkoj sceni, kada se za turiste priređuju potpuno modifikovane predstave i izložbe, zatim prostituciju, vezu između turizma i kriminala, zločin prema turistima, kriminal od strane turista, velike razlike u pogledu bogatstva između turista i lokalnog stanovništva, kulturne razlike, previše nametljiv ili ekskluzivan kontakt, velik broj turista u odnosu na stanovništvo, brz turistički razvoj, zavisnost i različita očekivanja u pogledu autentičnosti.[33]

Do sada je sprovedeno nedovoljno istraživanja za razdvajanje društvenih i kulturnih neželjenih efekata razvoja turizma. Kada se kulturna i socioekonomska pripadnost turista veoma razlikuje od onih u lokalnom stanovništvu, rezultati njihovog uticaja mogu biti povoljni ali i vrlo burni. Takozvani „demonstracioni efekat" prosperiteta u siromaštvu, može stvoriti želju među lokalnim stanovništvom da rade više ili da postignu viši nivo obrazovanja, kako bi se dostigao način života turista. Sa druge strane, u mnogim slučajevima nemogućnost lokalnih ljudi da postignu isti nivo bogatstva, mogu stvoriti osećaj lišavanja i frustracija, pronalaženjem izlaza u neprijateljskim stavovima, pa čak i u agresivnosti. Glavna društvena korist od turizma su značajni odnosi između turista i domicilnog stanovništva i podsticanje na bolje razumevanje naroda. Iako je to u mnogim slučajevima tačno, posebno u onim zemljama gde su turisti i dalje relativno retki, to sigurno nije prisutno u mnogim zemljama gde su ukusi i navike turista vrlo uticajni na određene sektore lokalnog stanovništva. Zbog takvih faktora, brojni autori su odbacili izraz „demonstracioni efekat" i zamenili ga pojmom „efekat sukoba".[34]

Jedan od sigurnih načina eliminacije negativnih socio-kulturnih uticaja jeste aktivno uključivanje lokalne zajednice u planiranje, razvoj i kontrole turizma u destinaciji. Glavni princip ili element turizma bi trebalo da bude njegova sposobnost da maksimizira prednosti koje poseduje, ne samo u pogledu prihoda u

32 Fennell, D. A. (2015): *Ecotourism*, Routledge, London & New York.

33 Weaver, D., Lawton, L. (2014): *Tourism Management*, John Wiley & Sons, Sidney.

34 Theobald, W. F. (2005): *Global Tourism*, Butterworth-Heinemann, Burlington.

regionu, već i u pogledu očuvanja socijalne infrastrukture, tradicije i vrednosti destinacije. Konkretno, ove prednosti bi trebalo da uključe:[35]

- povećanje tražnje za smeštajnim i objektima sa lokalnom hranom i pićem, čime bi se povećala održivost lokalnih farmi, kuća za smeštaj, hotela, motela i sličnih objekata;
- dodatni prihod lokalnim maloprodajnim preduzećima i drugim uslugama (npr. medicina i bankarstvo, iznajmljivanje automobila, vikendica, prodavnica suvenira, turističke atrakcije);
- jačanje tržišta lokalnih proizvoda (npr. domaći proizvodi, artikli domaće radinosti, roba sa dodatnim vrednostima), čime se održava praksa tradicionalnih običaja;
- zapošljavanje lokalne radne snage i eksperata (npr. vodiča za eko-ture, asistenata i trgovaca za prodaju na malo, osoblja za pružanje dobrodošlice itd.);
- izvor finansiranja za zaštitu i unapređenje/održavanje prirodnih znamenitosti i simbola kulturnog nasleđa;
- finansiranje i/ili volontiranje pri terenskom radu koji se tiče istraživanja divljih životinja i arheoloških lokaliteta;
- povećanu svest zajednice o vrednosti lokalne/autohtone kulture i prirodnog okruženja.

4. Zaključak

U radu su istraženi i prikazani brojni modeli, načini, primeri i efekti turističkog razvoja, koje on ostvaruje na ekonomiju, lokalnu zajednicu i same turiste. Osnovni postulat mnogih slabije ili jače turistički razvijenih destinacija, jeste očuvanje ekonomske i socio-kulturne održivosti, što bi podrazumevalo: direktno uključivanje lokalnih struktura u valorizaciju, planiranje i turistički razvoj, jačanje ekonomskih benefita od turizma kroz veće prihode, turističku potrošnju i uposlenost. Turistička privreda je u osnovi različitija od ostalih privrednih delatnosti. Zaključuje se da nju karakterišu posebne specifičnosti. Ekonomski efekti razvoja turizma su takođe brojni. Analizom podataka u radu, izvodi se zaključak da su obim i struktura turističkog prometa u svetu u stalnom porastu. Na taj trend utiču različiti faktori, među kojima su najznačajniji povećanje prihoda i slobodnog vremena, jeftiniji oblici putovanja i razvoj turističke svesti. Takođe sa druge strane, pojavljuje se veliki broj radnih mesta i uticaj na mnoge društvene aktivnosti, što se može zaključiti analizom i poređenjem prikazanih podataka. Sa druge strane, turizam postaje globalni ekonomski fenomen i značajan faktor svetske ekonomije. Utiče pozitivno i negativno na kulturu, na interakciju lokalne zajednice prema promenama, kao

[35] Wearing, S. & Neil, J. (2009): *Ecotourism: Impacts, Potentials and Possibilities?,* Butterworth-Heinemann, Oxford.

i na same turiste. Kod ovakvih uticaja mogu se menjati kolektivni i individualni sistemi vrednosti, uzanse koje postavlja društvena zajednica, stil i kvalitet života, odnos prema porodici i osnovnim društvenim dobrima. Pozitivni sociokulturni stavovi, biće prisutni u onoj turističkoj destinaciji u kojoj su turisti dobrodošli, gde nema degradacije lokalne tradicije i kulture i u kojoj se ostavaruju rezultati turističkog razvoja, bez socijalnih, materijalnih i potencijalno skrivenih posledica. Osnovni model za postizanje takvog efekta bilo bi direktno uključivanje lokalne zajednice u planiranje, valorizaciju i turistički razvoj. Pravilo je da lokalno stanovništvo najbolje poznaje sopstveni prostor i prilike, najbolje sagledava svoje prednosti i šanse, i najbrže uočava potencijalne pretnje i opasnosti koje nosi turistički razvoj. Kakva je uloga pomenutih mera zaštite ekonomskog i socijalnog okruženja, u kojoj meri i u kom obimu takva zaštita donosi benefite za sve subjekte turističkog okruženja, daće naredna istraživanja.

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ECONOMIC AND SOCIO-CULTURAL EFFECTS OF TOURISM DEVELOPMENT IN TOURISM DESTINATIONS

Economic development, the impacts of tourism on the economy and monetary policy, the development of destinations such as a mountain, coastal, urban and rural, impacts on the domicile population and participants of the travel, are a constant topic in the debates of broad global economic and demographic scientific structures. Tourism as a factor of the revitalization of certain regions is often mentioned. The development of tourism in these areas can improve the bad economic situation. Likewise, ethnic-social values, which make the authenticity of a particular area, strengthening through tourism, can raise the image of the destination to the highest levels. This would also contribute to economic balance because non-tourist-valued areas would get a chance to engage in important tourism potentials. Therefore, tourism is given the power to foster the socio-economic and demographic development of the country, and it is no wonder that tourism is written as development potential.

Keywords: *tourism, economic impacts, socio-cultural effects, tourism development, tourism destination*

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SAJBER BEZBEDNOST U AVIJACIJI

U eri informacionih i komunikacionih tehnologija, funkcionisanje društva i privrede, pa tako i avio industrije, bazira se na međusobnom povezivanjuračunarskih sistema, koji se koriste za upravljanje raznim operacijama u vazduhoplovstvu. Ovo povezivanje, s jedne strane, omogućava brojne operativne benefite, dok s druge, infrastrukturni sistemi postaju „ranjivi" na različite sajber napade, koji se mogu ostvariti preko različitih sistema, platformi i tehnologija. Ustanovljeno je da su sajber pretnje u porastu, da su dinamične i nepredvidive, a koriste ih tzv. sajber teroristi s ciljem ostvarivanja različitih oštećenja u vazduhoplovnom sistemu, i to svih njegovihdelova, od sistema kontrole letenja, preko aviona i aviokompanija, do aerodroma i pasoške/carinske kontrole. Iako je prema proceni International Civil Aviation Organisation, rizik od uspešnog terorističkog sajber napada sa gubitkom ljudskih života, u odnosu na druge oblike terorizma, relativno nizak, činjenica je da sajber pretnje mogu imati veliki uticaj na bezbednost, operativni i finansijski integritet, kao i ugled avio sektora u celini. Najskorije, uočeni su brojni slučajevi narušavanja operativnosti velikih aviokompanija izazvanih sajberincidentima, koji, naizgled malog obima, a s obzirom na njihovu ulogu u avio procesima i tendenciju porasta, mogu imati daleko šire i ozbiljnije posledice. U tom kontekstu, u ovom radu bavimo se nekim od glavnih pitanja sajber bezbednosti u avijaciji, kao što su razumevanje i definisanje bezbednosnih sajber pretnji, s naročitim osvrtom na poznate primere sa kojima se danas suočava avijacija, ilustrujući tako rasprostranjenost sajber incidenata i uticaj koji imaju na avijaciju, kao i relevatnost ovog rada.

Ključne reči: *avijacija, sajber bezbednost, informaciono-komunikacione tehnologije, ranjivost, terorizam*

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1. Uvod

Avio industrija, koja se bazira i zavisi od vrlo kompleksnih i integrisanih tehnoloških sistema, pored toga što je „ranjiva“ na softverske, hardverske i greške na mreži, pod konstantnim je i sve većim rizikom od napada iz „sajber sveta“.[1] Na primer, enormni porast broja IoT (Internet of Things) uređaja (internet stvari)[2], koji se koriste u avio transportu, povećava i prostor za realizaciju napada na IoT sisteme, a koji najčešće nisu zaštićeni anti-spam i anti-virusnim infrastrukturama. Tako, operativnost i reputacija avio sektora u celini, mogu biti ugroženi od strane sajber prestupnika, s različitim namerama, od sabotaže, krađe informacija i intelektualne svojine, do izazivanja nereda i konfuzije. S druge strane, suočena sa zadatkom da svakodnevno prevozi milione putnika između različitih destinacija širom sveta, avio industrija je u obavezi da omogući i održava bezbedno funkcionisanje jedne od najkompleksnijih informaciono-komunikacionih tehnologija (ICT) na planeti.

Uvođenjem novih ICT tehnologija, tj. modernizacijom civilne avijacije, kreiraju se nova bezbednosna pitanja, kao što su ona vezana za „sajber bezbednost“. Sajber bezbednost odnosi sena zaštitu informacionih sistema (hardver, softver i prateća infrastruktura), kao injihovih podataka i usluga, od neovlašćenog pristupa, povrede ili zloupotrebe. To uključuje štete prouzrokovane namerno od strane operatera sistema, ili slučajno zbog nepraćenja/neuspešnog praćenja bezbednosnih procedura[3].

Vazduhoplovni sistem, kao važan resurs svake države, jedan je od kritičnih infrastrukturnih sektora, tj. meta potencijalnih sajber napada. Ovi napadi ostvaruju se podsredstvomrazličitih sistema, platformi i tehnologija, koje unapređuju sigurnost i efikasnost putovanja.Ipak, prema procenama datim prvenstveno od strane International Civil Aviation Organisation (ICAO) u odnosu na druge vrste terorizma, rizik od terorističkog sajber napada sa gubitkom ljudskih života, relativno je nizak[3], kao i uticaj na dugoročnu ekonomiju. Ipak, s obzirom na broj, dinamiku i nepredvidivost sajber pretnji, njihov efekat na bezbednost, operativni i finansijski integritet, kao i ugled avio sektora u celini, može biti veoma veliki, i imati ozbiljne štetne posledice. Pored toga, ne bi trebalo potceniti i značajne rizike u vezi sa špijunažom, pri čemu prikupljanje informacija o infrastrukturi i zaposlenima može doprineti planiranju fizičkih ili budućih sajber napada na sektor avijacije.

1 Više o tome: Aerport Cooperative Research Program (2015): ACRP Report 140–Guidebook on Best Practices for Airport Cybersecurity, Transportation research board, Washington, D.C.;http://trbcybersecurity.erau.edu/resources/acrp_rpt_140.pdf

2 Više o tome:Stevanović D. Miroslav, Đurđević Dragan (2016): „Internet stvari, lična i materijalna bezbednost“, *Bezbednost* 3/2016, 113-128

3 Aviation Cyber Security Strategy-Moving Britain Ahead (2018), The Department for Transport, London, UK; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/726561/aviation-cyber-security-strategy.pdf

Obezbeđivanje efikasnog i efektivnog prevazilaženja trenutnih/budućih sajber rizika, ostvaruje se partnerskim odnosom između vlade svake zemlje, avio industrije i regulatornih tela, od kojih svaki ima određene uloge i odgovornosti. To podrazumeva postojanje zakonskog okvira za pravovremeno razumevanje rizika, robustno upravljanje rizicima, kao i sposobnost reagovanja i oporavka od incidenta kada se realizuje. Pri tome, bezbednost u državi je odgovornost njene vlade, koja ima mnogo veća sredstva nego avio industrija, uključujući i pristup informacijama iz obaveštajnih agencija. Avijacija se tako oslanja na vladu, kao najbližeg partnera, koja obezbeđuje informacije i pomaže u upravljanju rizicima, kao i ostvarivanju bezbednosti putnika, robe i usluga. Pri svemu ovome, borba protiv sajber pretnji je zajednička odgovornost u kojoj javni, privatni i neprofitni sektori i svaki nivo vlasti, imaju veoma važnu ulogu.

S obzirom da je vazduhoplovni sistem ugrožen ne samo fizičkim, već i sajber pretnjama, i to naročito s porastom upotrebe Bring Your Own Device (BYOD)[4]na aerodromima, veliki broj organizacija na evropskom i svetskom nivou bavi se pitanjima i oblikovanjem globalnog pristupa sajber bezbednosti[3]. Jedna od vodećih je ICAO, koja postavlja međunarodne bezbednosne zahteve civilne avijacije u obliku standarda i praktičnih preporuka, kao i obezbeđuje međunarodni okvir za rešavanje „akata nezakonitih smetnji", koji uključuju faktore remećenja i bezbednosne efekte.

2. Avijacija i informacione tehnologije

Konstantni razvoj ICTpovezan je sa avijacijom na svakom nivou, od poboljšanja sistema za praćenje, navigaciju i komunikaciju, preko aplikacija koje koriste piloti za primanje, skladištenje i prikazivanje relevantnih informacija neophodnih za donošenje odluka u kokpitu, do informaciono tehnoloških rešenja za prodaju avio karata i zabavu putnika tokom leta. Unapređenje komunikacije korišćenjem vazduhoplovnih mreža, kao i međuzavisnost uključujućih sistema povećava broj bezbednosnih pitanja.

Na primer, pokazalo se da sistem, koji se koristi za nadzor vazdušnog saobraćaja, Automatic Dependent Surveillance Broadcast (ADS-B)[5], ima dizajnerske propuste sa nejasnim mogućim uticajem na plovidbenost. Cilj ICAO[6]

4 BYOD je zajednički naziv za uređaje, kao što su npr. *iPhones*, *iPads* i *Smart phones*; koriste se i nazivi: *Bring Your Own Technology*(BYOT), *Bring Your Own Phone*(BYOP) i *Bring Your Own Personal Computer*(BYOPC).

5 Ali Busyairah Syd (2016): "System specifications for developing an Automatic Dependent Surveillance-Broadcast (ADS-B) monitoring system", *International Journal of Critical Infrastructure Protection* 15/2016, 40-46

6 International Civil Aviation Organization (ICAO): Enhancing safety and expanding capacity; implementation of ADS-B out in the Unated States, AFI Planing and implementation regional group, Twenty first meeting (APIRG/21), Nairobi, Kenya (09-11 October

jeste implementacija ADS-B u svaki avion u svetu do 2020. Vrlo je važno analizirati uticaj potencijalnih sajber napada na ADS-B, s obzirom da piloti i kontrolori letenja donose vrlo važne odluke na osnovu instrumenata, a pogrešna odluka može imati neželjene posledice. Međutim, ovakva istraživanja imaju određene limitacije, koje su u vezi sa ograničenim pristupom dokumentima (visok nivo poverljivosti informacija), malim brojem dostupnih informacija (implementacija ADS-B je u toku), kao i zakonska ograničenja za primenu realnih napada u cilju empirijske procene efekata na avio sistem[7]. Ipak, smatra se da će avio eksperti otkloniti nedostatke i dati potrebne povratne informacije.

Uvođenje savremenih sistema i koncepata u avijaciji, poput Global Navigation Satellite System (GNSS), kao i uspostavljenje novih standardnih procedura, omogućili su dobijanje preciznijih informacija za navigaciju, uštedu vremena i goriva, kao i obezbedili tačnost letačkih procedura.Takođe, razvijaju se nove tehnologije kao podrška postojećim sistemima aviona (npr. fly-by wireless komponente), zatim, In Flight Entertainment (IFE) za putnike, kao i za upravljanje vazdušnim saobraćajem baziranom na GPS izveštajima i komunikaciji između pilota i kontrole letenja preko data link sistema.

Porast upotrebe softvera, kao što je Commercial-Off-The-Shelf softver (COTS)[8] i kreiranja koncepta autonomnog letenja za e-enabled avione[9](kao što su Boeing 787 i AirbusA350iA380), olakšali su upravljanje vazdušnim saobraćajem i smanjili troškove održavanja, ali su nekompatibilni sa zahtevanim bezbednosnim standardima u civilnoj avijaciji,i dovode do velikog porasta sajber ranjivosti aviona.

Tako, nakon nesreće aviona Boing 737 MAX 8 (10. mart 2019. godine) u Etiopiji, u kojoj je poginulo 157 osoba, svi Boingovi avioni ovog tipa (više od 300) su prizemljeni[10]. To je bila druga nesreća istog modela aviona; samo pet meseci ranije (oktobar, 2018. godine), u padu aviona indonežanske kompanije Lion Air, poginulo je svih 189 putnika. Preliminarni izveštaj (4. april 2019.) ukazuje na to da su pogrešni signali koje je slao sensor softverskom sistemuMCAS (Maneuvering Characteristics Augmentation System), akoji je trebalo da stabilizuje letelicu,

2017); https://www.icao.int/ESAF/Documents/APIRG/APIRG%2021/APIRG21-IPs/IP10-USG%20IP%20on%20ADS-B%202020_FAA.pdf

7 Viveros Camilo Andres Pantoja (2016):²Analysis of the Cyber Attacks against ADS-B; Perspective of Aviation Experts², Master's Thesis, University of Tartu, Institute of Computer Science, Estonia; https://pdfs.semanticscholar.org/e159/94e923c734e8c7a914b86ca25f1d7d9f14ea.pdf

8 COTS–softverski i hardverski proizvodi, napravljeni idostupni za široku upotrebu/prodaju; dizajnirani su tako da se jednostavno implementiraju u postojeće sisteme, bez potrebe za prilagođavanjima.

9 *E-enabled* avion generalno označava poboljšane mogućnosti aviona inkorporiranjem naprednih računarskih i informacionih tehnologija u avio sistem.

10 Compiled by Reuters bureau, April 4, 2019; https://www.reuters.com/article/us-ethiopia-airplane-developments-factbo/factbox-what-we-know-about-boeing-737-max-crashes-and-what-comes-next-idUSKCN1RG1Q8

najverovatniji uzrok pada aviona. Pojednostavljeno rečeno, MCAS je sistem inkorporiran u avione ovog tipa, koji softverski rešava hardverski problem. Naime, novi dizajn aviona s većim motorima pozicioniranimviše unapred u odnosu na prethodne modele ovog tipa aviona, kreirali su dodatni uzgon, koji „nos", tj. položaj aviona podiže naviše. MCAS je dizajniran tako da automatski otkloni ovu tendenciju putem softvera, a na osnovu podataka koje dobija sa jednog senzora, i to bez komande pilota.Međutim, fatalne nesreće aviona tipa Boing 737 MAX 8, ukazale su na suštinski nedostatak ovog sistema, što je rezultiralo izmenom softvera uvođenjem dodatnog senzora, i u višoj instanci – revizijom kompletnog procesa FAA sertifikacije vazduhoplova[11]. Svakako, avio nesreće u Etiopiji bila je „kap koja je prelila čašu", i podneta je prva tužba protiv kompanije „Boing".

Smatra se da je hakovanje aviona lakše nego što se misli[12]. Nakon avionske nesreće, koja se dogodila 2008. god. na Spanair flight 5022, otkriveno je da je centralni kompjuterski sistem, koji se koristi za monitoring tehničkih problema aviona bio zaražen malverom[13]. Zatim, bilo je više od 50 izveštaja o GPS smetnjama na međunarodnom aerodromu u Manili (2016), dok je jedan zvaničnik Department of Homeland Security priznao (2017) je da su on i njegov tim daljinski „upali" u Boeing 757. Takođe, komunikacioni sistemi vazduhoplova sa slabom enkripcijom, pokrenuli su debate oko bezbednosti i privatnosti poruka razmenjenih kroz sistem data-link-a, a utvrđeno je i da signal, koji emituje poziciju aviona, može potencijalno biti kompromitovan od strane visokokvalifikovanih hakera. Svakako, povećan sajber rizik u vazduhoplovstvu u vezi je sa složenošću sistema aviona, i veličinom softverskog sistema koji ga podržava. Ova složenost, koja uključuje više linija programskog koda, smanjuje mogućnosti testiranja softvera i tako povećava ranjivost sistema. Osim toga, softver, tokom „života" aviona, prolazi kroz brojne remonte i ažuriranja, što može, i pored velike pažnje, biti uzrok bezbednosnih „bagova" u softveru. Zatim, savremeni avionski softveri koriste prednosti COTSkomponenata, što može potencijalno dovesti do toga da napadač prodre do „srca" sistema.

Ali, šta se može učiniti da se spreče zlonamerni hakerski upadi? Rizici mogu biti ublaženi efektivnom sposobnošću iskusnog pilota da donese pravu odluku kada uoči nešto neobično. Pored toga, vrlo je važno razumevanje platformi za hakerske napade, a to znači da bi trebalo postaviti zajednički repozitorijum pretnji na softver/hardver detektovan od strane programera i stručnjaka za sajber

[11] https://www.flightglobal.com/news/articles/dot-launches-committee-to-review-faa-aircraft-certif-456889/

[12] O'Flaherty Kate (22. Avgust 2018), Forbes, Jersey City, New Jersey, USA; https://www.forbes.com/sites/kateoflahertyuk/2018/08/22/how-to-hack-an-aircraft/#56af6a3241d1(27.03.2019.)

[13] Malver (m*alware*) –složenica od engleskih reči *malicious* i *software* („zlonamerni" softver), tj. skraćenica za računarske programe koji su tako dizajnirani da se infiltriraju i oštećuju računar korisnika bez njegovog znanja i pristanka; to je i opšti termin koji obuhvata sve vrste kompjuterskih pretnji kao što su: *trojan horses, computer spyware*, *rootkits*, *spyware,* i sl.

bezbednost. Ovi struktuirani podaci trebalo bi da budu ažurirani od strane regulatornih agencija (npr. Federal Aviation Administration), FAA iEuropean Aviation Safety Agency, EASA) i budu dostupne u različitim razvojnim platformama.

Pri svemu ovome, od velikog značaja je razvijanje koncepta sajber bezbednosti u vazduhoplovstvu, definisanog od strane ICAO (dokument 9985)[14], koji se odnosi na bezbednost ICT sistema, tehnologija ili njihove primene[15]. To uključuje analogne i digitalne uređaje, radio stanice, telekomunikacije, računare, računarsku opremu i softver, sistem za skladištenje podataka i uređaja, satelitskei navigacione sisteme, sisteme nadzora, kao i različite, s njima povezane usluge.

FAA u SAD i EUROCONTROL u Evropi, uvode Next Generation Air Transportation System (NextGen) i Single European Sky ATM Research (SESAR) programe u cilju modernizacije upravljanja vazdušnim saobraćajem i poboljšanja slanja/primanja digitalnih informacija, tj. data linkkomunikacije. To predstavlja evoluciju kontrole vazdušnog saobraćaja bazirane na zemaljskim sistemima (a ground-based system) u onu zasnovanu na satelitskim sistemima upravljanja sa većim brojem komunikacionih veza i usluga[16]. Osim toga, za uvođenje jedinstvenih standarda u avijaciji, ICAO podržava implementaciju sličnih programa u celom svetu. Ovi programi koriste prednosti digitalnih ICT za povećanje bezbednosti, sigurnosti, operativne efikasnosti, kapaciteta, smanjenja troškova i emisije ugljen-dioksida. Pomenuti ADS-B sistem je suštinski deo ovih programa, koji daje preciznije informacije u odnosu na radar, i od koga se očekuju i brojni benefiti, kao što su efikasnost i bezbednost vazduhoplovnih operacija. Ipak, ove implementacije imaju nove sajber bezbednosne ranjivosti zbog porasta interkonekcije, integracije i interoperativnosti pripadajućih sistema.

U poslednjoj verzijiRoadmap to Secure Control Systems in the Transportation Sector[17], ukazuje se na to da uvođenje nove generacije e-enabled aviona i brojnih novih tehnologija za podršku (COTS, bežične veze, GPS i sl.), dovodi do eksponencijalnog porasta sajber bezbednosnih ranjivosti aviona. Slično,

14 International Civil Aviation Organization - (ICAO) (2012): Doc 9885 AN/492-Restricted, Air Traffic Management Security Manual, Montreal, ICAO; http://www.aviationchief.com/uploads/9/2/0/9/92098238/icao_doc_9985_-_atm_security_manual_-_restricted_and_unedited_-_not_published_1.pdf(27.03.2019.)

15 Više o tome: Siu Martin, Goh Daniel, Lim Cheri (2014): ²Aviation Cyber Security: A New Security Landscape², *Journal of Aviation Management*, 73-80; https://saa.caas.gov.sg/documents/20181/339902/SAA_Journal_2014.pdf/93eca021-cd8f-4edc-af6f-6196515bfd15

16 Williams H. James(2011): National Airspace System Security Cyber Architecture. Case #10-4169, Approved for Public Release by the FAA, 1-6. http://www.mitre.org/work/tech_ papers/2011/10_4169/10_4169.pdf

17 Transportation Roadmap(2012): Roadmap to Secure Control Systems in the Transportation Sector. Version 3.0, Prepared by the Roadmap to Secure Control Systems in the Transportation Sector Working Group; https://ics-cert.us-cert.gov/sites/default/files/documents/TransportationRoadmap20120831.pdf

dvosmerni transfer kritičnih informacija između avio sistema i aerodromskih sistema, preko npr. Electronic Flight Bags, ADS-B, i sl., može značajno uticati na sajber bezbednost, kako aviona, tako i aerodroma. Takođe, avio kompanije moraju kontinuirano unapređivati informacionu bezbednosnu strategiju da bi se zaštitile od sajber pretnji. Na primer, Boeing, u saradnji sa avio industrijom i informacionom bezbednosnom industrijom, radi na razvoju jedinstvene sajber strategije. Pored toga, aktivno se razvija Cyber Technical Center koji će se koristiti za procenu ugroženosti od sajber pretnji, dizajniranjem sajber zaštite Boingovih aviona i time obezbediti potrebnu sajber bezbednost za korisnike.

Nedavno ustanovljena strategija (2013-2023) Transportation Industrial Control Systems (ICS) Cyber-security Standards Strategy, od strane USDepartment of Homeland Security, ističe da trenutno ne postoje sajber bezbednosni standardi za aerodrome i da su postojeći uglavnom fokusirani na avionske kontrolne sisteme (CS)[18]. Tako, organizacije koje su zajednički izradile nekoliko dokumenata (ali koji trenutno nisu javno dostupni) za promovisanje sajber bezbednosnih standarda u avio industriji, a pre svega avio CS su: Airlines Electronic Engineering Committee, Aircraft Information Security Subcommittee, Radio Technical Commission for Aeronautics, Aeronautical Radio Incorporated i European Organization for Civil Aviation Equipment.

2.1. Glavne sajber pretnje u avijaciji

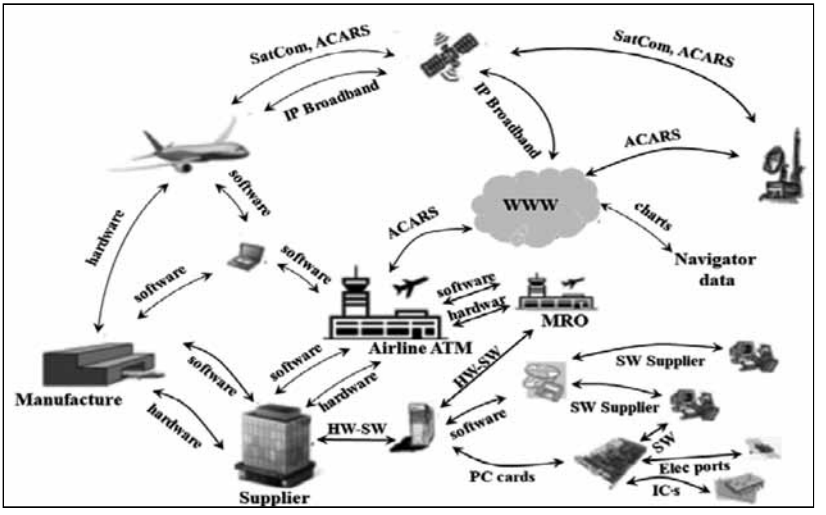
Američki institut za aeronautiku i kosmonautiku (AIAA), ukazao je na neophodnost vrlo ozbiljnog razmatranja sajber pretnji u komercijalnoj avijaciji, i naglasio potrebu za donošenjem međunarodnog sporazuma o sajber bezbednosti u avijaciji, kao i globalnih rešenja[19].

Savremeni avio sistemi koriste procesorske hardvere i zajedničke hardverske platforme za hosting funkcionalnosti softvera. Specifični interfejsi aviona jednostavno se povezuju sa COTS tehnologijama, tako da ICT obuhva ceo avio sistem (slika 1), od projektovanja aviona, preko letačkih operacija, održavanja, komunikacije i navigacije, do kontrole letenja.

[18] Kaiser Lisa (2012): Transportation Industrial Control Systems (ICS) Cybersecurity Standards Strategy, U.S. Department of Homeland Security, 2013-2023; http://trbcyber-security. erau.edu/files/Transportation-Standards-Plan.pdf

[19] AIAA (2013): The Connectivity Challenge: Protecting Critical Assets in a Networked World. A Framework for Aviation Cybersecurity World, An AIAA Decision Paper, American Institute of Aeronautics and Astronautic, Reston, Virginia, SAD; https://www.aiaa.org/uploadedFiles/Issues_and_Advocacy/AIAA-Cyber-Framework-Final.pdf

Slika 1. *ICT okruženje avio sistema*



Izvor: AIAA (2013): The Connectivity Challenge: Protecting Critical Assets in a Networked World. A Framework for Aviation Cybersecurity World, An AIAA Decision Paper, American institute of aeronautics and astronautic, Reston, Virginia, SAD;

Ukratko, glavne sajber pretnje naavio sistem u vezi su sa sledećim činjenicama:

- Kontrola letenja (Air Traffic Control, ATC): 1) ATC je sve više automatizovana, a povećanje upotrebe bespilotnih letilica izaziva zabrinutost zbog komunikacije između zemaljskih kontrolnih stanica i vazduhoplova; kako se ova komunikacija bazira na internetu, ATC sistem izlaže se novim ranjivostima, 2) ATC sistem je naročito podložan napadu; npr. ADS-B je bio glavna meta za hakere grupe WhiteHat;takođe, neki istraživači tvrde da ADS-B sistem nije enkriptovan u dovoljnoj meri, kao i da se može neovlašćeno prisluškivati i korumpirati korišćenjem „pametnih" telefona.
- Avion:1)uvođenjeCOTS softverskih i hardverskih rešenja u sisteme aviona povećavaju sajber rizike, 2)interpovezani sistemi omogućavaju komunikaciju svih rutinskih komandi između ATC i aviona, 3) operatori vazduhoplova–povećana razmena poruka pri komunikaciji sa vazduhoplovom, povećava potencijalnu ranjivost vazduhoplova, 4) e-enabledavion–avio industrija traži nova rešenja da bi obezbedilaon-boardinternet povezivanje, što može uvesti nove sajber rizike. Tako, novi e-enabledavioni, Air Traffic Management (ATM) sistemidizajnirani od strane SESAR, kao i NextGeni Caratsprojekti, uveliko ulaze u upotrebu, a interkonektovani, međusobno zavisni sistemi aviona, povećavaju sajber ranjivost.Pored toga, integracija aviona i off-board sistema kreirala je potrebu za razmatranjem sajber-fizičke bezbednosti.

- Aviokompanije: pretnje uključuju rizike od web aplikacija, kao i eksploatacijeTwitter naloga.
- Aerodromi i pogranične vlasti[20]: pored klasične IT infrastrukture (internet i e-pošta), neke od potencijalnih meta za sajber napade su: kontrola ulaska i sistemi koji detektuju pokušaj „proboja" perimetra, avionski sistemi koji su u funkciji, radarski sistemi, zemaljski radar, Network-enabled sistem[21]prtljaga, bežični mrežni sistemi, kontrola nadzora i prikupljanje podataka (SCADA)-tip ICS, itd.Aerodromske mreže su ranjive na napade preko: USB uređaja, laptopova, uređaja koje zaposleni pozajmljuju drugima, „pametnih" telefona, e-majla, socijalnih mreža, distribuiranih Denial-of-Service (DDoS)[22] napada i sl. Tako, na aerodromima u Los Anđelesu (2011),dogodili su se brojni sajber incidenti u vezi sa private network baggage system-om od strane malvera, zombie army[23], ili botnet[24],a koji su doveli do toga da bezbedna privatna mreža postane javna, zatim, nekoliko miliona hakerskih napada, kao i desetine hiljada internet zloupotreba.

Poslednjih godina, na radnim mestima uobičajeno je korišćenje *BYOD*,a na aerodromima, pored korisnika aerodromskih usluga, upotrebljavaju ih i zaposleni. Kako ovi uređaji komuniciraju s eksternim sistemima, tako mogu biti izvor virusa ili se potencijalno koristiti za prikupljanje poverljivih informacija. Zaposleni na aerodromima imaju mogućnost da preko ličnih naloga konektuju svoje uređaje na bezbedne kompanijske mreže, tako izlažući mrežu bezbednosnim rizicima.

Analiza[25] bezbednosti bežičnih mrežana 14 aerodroma SAD, Kanade i Azije[26], pokazala je da ovi aerodromi koriste otvorene i slabo obezbeđene wire-

[20] GopalakrishnanKasthurirangan, GovindarasuManimaran, JacobsonW. Doug, Phares M. Brent (2013):"Syber security for aerports",*International Journal for Traffic and Transport Engineering*, 3(4)/2013, 365-376

[21] *Network-enabled* sistem –sistem koji može da se poveže na internet ili se koristi na internetu.

[22] Distribuirani DoS napadi (DDoS), su napadi na Internet sajt, koji dolaze istovremeno sa više izvora. Kod DDoS napada, napadač najpre kreira „vojsku" tzv. zombija ili robota – pojedinačnih računara, koji su pod komandom i kontrolom napadača, koji tako sprovodi napad na Internet sajt s ciljem da „sruši" server; da se to ne bi dogodilo, administratori neretko privremeno isključuju napadnuti sajt, tako da server i ostali sajtovi koje hostuje ostaju u funkciji.

[23] *Zombie army*–skup kompjutera povezanih internetom, bez bezbednosne odbrane i tako podešeni da prosleđuju spam bez znanja i dozvole vlasnika

[24] *Botnet* (kombinacija reči ro**bot** i ***net****work*) – mreža koju čine brojni robotizovani računari sa kojih se vrši napad na sajt. Danas je na Internetu moguće iznajmiti botnetove (tzv. *DDoS-as-a-service)*, ali se on može kreirati i bez znanja vlasnika pojedinačnih računara, distribucijom, tj. *downloadom malware ispyware* softvera.

[25] Ograničenja u obimu rada ne dozvoljavaju elaboraciju u vezi sa metodologijom procene sajber ranjivosti (tehnička procena ugroženosti ili testiranje „prodora").

[26] Infosecurity Magazine (7. mar. 2008). Cyber security lacking at airports; https://www.infosecurity-magazine.com/news/cyber-security-lacking-at-airports/ (27.03.2019.)

less mreže. Od Wi-Fi detektovanih mreža na aerodromima, oko 80% su non-hotspot mreže koje su nebezbedne ili koriste zastareli WEP (Wired Equivalent Privacy) sistem enkripcije, koji se smatra fatalno lošim. Neke od ovih Wi-Fi mreža sistema za izdavanje karata, sistema za prtljag, kao i aerodromskih prodavnica i restorana, koriste se i za kritične aerodromske operacije.

3. Kratki pregled sajber pretnji sa kojima se suočava avio industrija danas

Sajber bezbednosne pretnje nisu samo pretpostavka, već su nekei realizovane. Kada se razmišlja o sajber incidentima, i kada se uzmu u obzir oni koji su poznati (Tabela 1), smatra se da nemaju opasan/kritičan uticaj na bezbednost putnika i aviona. Međutim, uzimajući u obzir da verovatno postoje i sajber incidenti koji nisu obelodanjeni, sagledavanje njihovog uticaja, donekle se dovodi u pitanje. U tabeli 2 date su neke od potencijalnih ranjivosti, uočene od strane vazduhoplovnih organizacija, hakerske zajednice i medija.

Tabela 1. *Pregled sajber bezbednosnih incidenata u avijaciji (period 1997 - 2014.)*

Godina	Opis incidenta
1997	Upad hakera u Bell Atlantic kompjuterski sistem što je dovelo do gašenja svetla na kontolnom tornju, kao i pisti
2006	Ubačeni virus u sisteme ATCFAA izazvao je prekid rada dela sistema kontrole vazdušnog saobraćaja na Aljasci
2007	Virus unet u Thai Airways Electronic Flight Bags je onesposobio ovaj sistem i proširio se na druge uređaje istog tipa (tablete i ajpede)
2008	800 detektovanih sajber incidentnih upozorenja u objektima kontrole letenja vazdušnog saobraćaja, od kojih preko 150 incidenata nisu još uvek rešeni
2009	Vozač kamiona koji je posedovao ometač GPS-anenamerno je prouzrokovao zastoj u raduNewark Liberty International Airport's ground-based augmentation system
2011	Grupa softverskih inženjera optužena je za sabotažu u programskom kodu što je dovelo do prekida rada check-in servisa i otkazivanja velikog broja letova na mnogim aerodromima
2014	Mnogi avioni su nestali sa radara u Austriji, Nemačkoj, Češkoj i Slovačkoj. Navodno, uzrok tome bile su vojne vežbe

Izvor: Viveros Camilo Andres Pantoja (2016): "Analysis of the Cyber Attacks against ADS-B Perspective of Aviation Experts", Master's Thesis, University of Tartu, Institute of Computer Science, Estonia, p. 13.

Tabela 2. *Pregled potencijalnih sajber „ranjivosti" u avijaciji (2008 - 2015.)*

Godina	Opis
2008	Prema navodima FAA, postojeći dizajn i infrastruktura Boeing-a 787 omogućava nove načine povezivanja putnika sa podacima na mrežama (koje su ranije bile izolovane), a koje su povezane sa sistemima za obavljanje aktivnosti potrebnih za bezbednost leta
2010	FAA je objavila da neki komjuterski sistemi Boeing 747-8 and 747-8F mogu biti podložni eksternim napadima zbog prirode njihovog povezivanja
2012	• Andrei Costin predočio je slabosti u sistemu kontrole letenja; korišćenjem jeftine tehnologije, uređaja i softvera, moguće je imitirati ADS-B signale i tako ubaciti „avion-duh" u displej kontrole letenja • Haker je demonstrirao da je teorijski moguće, korišćenjem Android telefona, izvršiti napad/otmicu aviona na daljinu • Potencijalna ranjivost u Electronic Flight Bags programiranju koji mogu biti korumpirani prilikom ažuriranja, kada se uređaji povezuju sa eksternim mrežama
2014	Ekspert za bezbednost je saopštio da je navodnouspešno hakovao, i kao konsekvencu upravljao vazduhoplovom tokom leta, upadom kroz In Flight Entertainmentsistem za zabavu putnika
2015	Avion WestJet-a je navodno emitovao kôd 7500, koji ukazuje na otmicu; postoji mogućnost da je ta modifikacija bila izazvana sajber sredstvima

Izvor: Viveros Camilo Andres Pantoja (2016):"Analysis of the Cyber Attacks against ADS-B Perspective of Aviation Experts", Master's Thesis, University of Tartu, Institute of Computer Science, Estonia, p. 13.

3.1. Primeri realnih sajber pretnji u avijaciji

U cilju sagledavanja uticaja sajber pretnje na avijaciju, kao i njihoverasprostranjenosti, u nastavku teksta date su neke od obelodanjenih pretnji na avio sistem.

- ***Kontrola letenja.***Na samitu o bezbednosti (2013),Hugo Teso, profesionalni pilot i istraživač iz oblasti sajber bezbednosti, pokazao je da je moguće preuzeti ATC i komunikacije korišćenjem Android Smartphone[27]. Tako, razvijeni specijalni kôd za „upad" (nazvan SIMON) i android aplikacija naziva PlaneSploit omogućili su potpuno kontrolu sistema za letenje, kao i pilotovog displeja u simuliranim uslovima. Haker može promeniti smer i brzinu letenja koristeći handset, i modifikovati sve u vezi s navigacom aviona. Takođe, pokazano je da ADS-B nije potpuno bezbedan i da komunikacija aviona može biti pasivno prisluškivana ili aktivno prekinuta.Iako je FAA tvrdila da se ovaj hakerski napad ne može dogoditi na sertifikovanom

[27] http://conference.hitb.org/hitbsecconf2013ams/materials/D1T1%20-%20Hugo%20Teso%20-%20Aircraft%20Hacking%20-%20Practical%20Aero%20Series.pdf(28.03.2019.)

avionu, Teso je skrenuo pažnju na neke od propustavezanih za sajber bezbednost aviosistema.

- ***Avion.***FAA je objavila (2008) da je konekcija putničke kabine Boeing-a 787 Dreamliners kontrolnim, navigacionim i komunikacionim sistemima aviona, odnosno na taj načinkontrolisani sistem aviona, ranjiv na sajber napade. Boeing-u je savetovano da bi trebalo da reši ovaj problem. Bezbednosnu zabrinutost izavaju, delimično,i nove aplikacije na telefonima (npr. Gogo Text&Talk) koje omogućavajuputnicima da primaju i šalju poruke preko Wi-Fimreže dok je avion u vazduhu, s obzirom na to da nemaju mogućnost šifrovanja poruka i nisubezbedni (kao ni bilo koja druga javna mreža).

U avgustu 2008, u nesreći aviona kompanijeSpanair, poginulo je 154 osobe, a istragom je utvrđeno da je do pada aviona došlo usled toga što je centralni kompjuterski sistem za praćenje tehničke ispravnosti/problema aviona bio zaražen virusom (trojan horse). Računar je trebalo da pokaže alarmni signal kao upozorenje pilotima na postojanje tri tehnička problemapre poletanja aviona, do čega nije došlo. Poletanje je sprovedeno u nepravilnoj konfiguraciji (s potpuno uvučenim flapsovima i slotovima), a pri tome nije bilo zvučnog upozorenja u kokpitu (zbog kvara na sistemima koji aktivira sistem za upozorenje). Malver je mogao prodreti u sistem na različite načine, kao npr. preko uređaja trećih lica ili preko daljinske VPNkonekcije.

Danas, aviokompanije teže da obezbede svojim putnicima što kvalitetnijekonekcije, korišćenjem onboard Wi-Fiveze ili razvojem eEnabled aviona, štomeđutim, može dovesti do pojave brojnih sajber rizika širokog spektra[28]. Zbog toga ove konekcije moraju biti odvojene od veza koje se koriste za avionske operacije.

- ***Aviokompanije***. Za napade se koriste različiti alati, kao na primer tzv. Sykipot, koji se upotrebljava za prikupljanje podataka o civilnom avio sektoru u SAD, sa još uvek nepoznatim namerama. Sykipot kampanja (2013), imala je ciljane napade na potencijalne učesnike konferencije 2013 IEEE Aerospace Conference. Sykipot inficira metu korišćenjem spear-phishingtehnika[29], slanjem e-mejlova sa malicioznim prilozima. Danas,maliciozni hakeri favorizuju napade koji za cilj imaju operativni sistem ili aplikacije (npr. Web browsersi Java), kao i DDoSnapade. Tako, izraelska nacionalna kompanija El-Al, bila je glavna meta za politički inspirisan sajbernapad (2012), kada je websajt ove kompanije bio privremeno ugašen od strane hakera organizacije Nightmare Group, iakointerni kompanijski sistemi i raspored letenja nisu bili ugroženi. Grupa Qods Freedomje tvrdila da je hakovala (2013), pored drugih izraelskih websajtova i websajt El-Alkompanije, i preuzela sajt u planiranom DDoS napadu.

28 SenseCy (2016): Cyber Threats to the Aviation Industry – 2014, Netanya, Israel; https://www.cpni.gov.uk/documents/publications/2012/2012020-cyber_security_in_civil_aviation.pdf?epslanguage=en-gb

29 *Spear-phishing*je e-mail ili elektronska komunikaciona prevara usmerena na pojedinca/organizaciju, s ciljem krađe podataka ili instaliranja *malware* na računar korisnika.

- ***Aerodromi i pogranične vlasti***. Ulazi i izlazi, od i do međunarodne turske granice bili su zatvoreni (2013), zbog problema u Police Intra-netsistem (PolNet). Turska RedHackhakerska grupa je preuzela odgovornost za ovaj napad, ali je policija demantovala tvrdnje hakera, navodeći da je sajt bio zatvoren „kontrolisanom" deaktivacijom zbog transfera podataka. Napada na PolNet sistem bilo je i ranije (2012), što je izazvalo privremen prekid rada sistema pasoške kontrole, tj. PolNet sistema baze podataka na Atatürk i Sabiha Gökçen internacionalnim aerodromima. Prema pisanju Hurriyet Daily News razlog pada mreže, bio je sajber napad izazvan nepoznatim kompjuterskim virusom, a niko nije preuzeo odgovornost za ovaj napad. Zatim, hakeri grupa Hackers of Portugal Cyber Armyi HighTech Brazil HackTeam(2013) objavili su da su „probili" oficijelni sajt Dubai International Airport koji je hostovan na domenu dubaiairport.com, izazivajući onlajn „curenje" e-mail adresa i lozinki osoblja. Motivacija je nejasna.

U tabeli 3 dati su sajber sajber bezbednosni incidenati koji utiču na aerodromske operacije[30].

Tabela 3. *Pregled sajber bezbednosnih incidenata (2016) na aerodromima*

Država	Opis
SAD	Hiljade putnika širom sveta se našlo u nezavidnoj situaciji nakon što je nestanak struje primorao američku avio kompaniju Delta da do daljnjeg suspenduje letove. Celovečernji nestanak struje koji se dogodio u Atlanti, u blizini centrale avio kompanije Delta, prouzrokovao je pad kompjuterskih sistema, što je uticalo na otkazivenje check-insistema, ekrana za obaveštavanje putnika, websiteaviokompanije, kao i smartphoneaplikacije
Vijetnam	Uspešni napadi na dva najveća aerodroma i najveću avio nacionalnu kompaniju u Vijetnamu (Vietnam Airlines). Hakeri su nakratko zaposeli ekrane za informisanje putnika, kao i sisteme za ozvučenje.Umesto informacija o letovima, ekrani, kao i ozvučenje, emitovali su anti-vijetnamske i anti-filipinske slogane, zbog čega su aerodromske vlasti ugasile oba sistema. Istovremeno, vebsajt aviokompanije je takođe bio hakovan i prebačen na maliciozni inostrani sajt, dok su podaci putnika bili zloupotrebljeni. Zbog ovih napada, vlasti Vijetmana imaju nameru da sprovedu sveobuhvatnu proveru kineskih uređaja i tehnologije na vijetnamskim aerodromima, jer se pretpostavlja da kineska hakerska grupa 1937cn može biti odgovorna za napade

30 Više o tome: ENISA –The European Union Agency for Network and Information Security (decembar, 2016): Securing Smart Airports; https://www.enisa.europa.eu/publications/securing-smart-airports

Italija	Pokušaj gašenja automatizovanog check-insistema na rimskom aerodromu Fiumicino, što je izazvalo dvo-satno kašnjenje operativnosti ovog sistema. „Upad" je bio neuspešan zahvaljujući Internet provajderu koji koristi automatizovani check-insistem za pristup i obradu podataka putnika
UK	Nakon sletanja, pilot British Airways-a prijavio je koliziju sa dronom pri približavanju aerodromu Hitrou. Ovaj inident je aktuelizovao razmatranje štete koju dronovi mogu prouzrokovati na avionu
Širom sveta	Proizvođač civilnih vazduhoplova Airbus Groupje žrtva oko 12 sajber napada godišnje i to uglavnom u cilju iznude i drugih akcija od strane hakerskih grupa, i to često uz podršku različitih država

Izvor: ENISA - The European Union Agency for Network and Information Security (decembar, 2016): Securing Smart Airports, p. 10; https://www.enisa.europa.eu/publications/securing-smart-airports

4. Zaključak

Modernizacija civilne avijacije usled uvođenja novih ICT, otvara brojna bezbednosna pitanja. Tako, raste i broj sajber ranjivosti, koje mogu biti eksploatisane od strane hakerske zajednice s različitim ciljevima. Za razumevanje sajber napada u vazduhoplovstvu, važno je postojanje svesti o situaciji, kao i priprema za adekvatnu reakciju pilota/kontrolora letenja ukoliko dođe do napada. Iako su neka nova tehničko-tehnološka rešenja povećala bezbednost informacija i network-a, kao i detekciju pretnji, jasno je da je ljudska odluka zasnovana na prethodnim znanjima i sposobnostima, neophodna za rešavanje kritičnih situacija.

Sajber napadi su velika opasnost po državu. Računari svakako neće, u dogledno vreme, zameniti klasična sredstva borbe terorista, poput eksploziva i oružja, ali sajber terorizam postaje realna opasnost. Sajber prestupnici različitih profila već su pokazali da mogu ugroziti funkcionisanje čitavih sistema, a pitanje je da li to mogu učiniti i teroristi. Internet i računarske mreže su veoma moćan resurs, i postoji bojazan da sajber napad terorista može ozbiljno poremetiti funkcionisanje napadnutog sistema, pa i dovesti do ugrožavanja života. Eksperti za bezbednost procenjuju da postoji realna opasnost od takvog scenarija u budućnosti. Naime, sajber terorizam se odnosi na unapred isplanirane, politički motivisane napade na podatke, računarske sisteme i programe, u ciljuizazivanja, pre svega, osećaja straha i nesigurnosti napadnutih. Kako se odvija u sajber prostoru, podrazumeva se da je teroristički akt planiran, izvršen ili koordinisan pomoću računara i mreža. Jedan od potencijalno najopasnijih oblika sajber terorizma jeste ugrožavanje kritične nacionalne infrastrukture, kao što je vazdušni saobraćaj.

Za razumevanje načina postupanja, neophodna je sistematska analiza, zasnovana na akademskom znanju, kao i dostupnim informacijama o izvršenim sajber napadima. Rezultati analize pokazuju da neki napadi nisu predstavljali problem za operatore određenog avio sistema, dok drugi mogu izazvati konfuziju zbog svoje kompleksnosti. Pri tome, odlučujući faktor za ublažavanje sajber napada jeste iskustvo operatera.

Iako se rizici u vezi sa sajber pretnjama u avijaciji ne mogu elimisati, oni se mogu ublažiti implementacijom industrijskih standarda, dobrim sajber bezbednosnim merama, dobrom praksom i edukacijom kako zaposlenih, tako i korisnika.

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SYBER SECURITY IN AVIATION

In today's information and communication technologies, the functioning of society and economy, as well as the aviation industry is based on interconnecting computer systemsthat are used to manage various operations in aviation. This connection on one hand provides numerous operational benefits, while on the other, infrastructure systems become more vulnerable to different cyber attacks, which can be achieved through a variety of different systems, platforms and technologies. It has been found that cyber threats are on the rise. They are dynamic and unpredictable and are used by the so-called cyber terrorists with the aim of achieving various damage in the aviation system, in all of its parts, from the air traffic control system, through aeroplanes and airline companies, to airports and passport/customs controls. Although, according to the International Civil Aviation Organization, the risk of a successful terrorist cyber attack with a loss of human life in relation to other forms of terrorism is relatively low, the fact is that cyber threats can have a major impact on security, operational and financial integrity, and the reputation of the aviation sector as a whole. Most recently, numerous cases of violating the operation of large airlines caused by cyber incidents were observed, seemingly small in volume, and given their role in air processes and the tendency of growth, they may have far wider and more serious consequences. In this context, this paper deals with some of the major issues related to cyber security in aviation, such as understanding and defining security cyber threats, with particular reference to the familiar examples that aviation is facing today, illustrating the scale of cyber incidents and impact it has on aviation as a whole, as well as the relevance of this paper.

Keywords*:* *aviation, cyber security, information-communication technology, vulnerability, terrorism*

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MULTICRITERIAL ANALYSIS OF THE MINING COMPANIES FROM THE ASPECT OF CHANGE MANAGEMENT**

The aim of this paper is to evaluate the advantages of the mining companies by the multicriterial analysis in terms of changed management. This approach to the mining companies represents the best practice because there is an increasing number of companies that have been forced to point out their advantages in order to preserve and expand the market positions, profit and successfully change management due to the global changes. This paper analyzes five advantages (alternatives): teamwork, knowledge management, competence, equipment and implementation of an integrated management system (ISM) and four criteria: competitiveness, sustainability, stakeholder satisfaction and positioning. The analysis was carried out using the combined AHP and Electra methods. The presented multicriterial analysis has given the following results: the best alternative is the alternative A5, the implementation of ISM and the most influential criterion is C3, the satisfaction of the stakeholders with a weight coefficient of 0.425.

Keywords: *multicriterial analysis, mining companies, change management*

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1. Introduction

Today, the business success of the mining companies involves considering the business benefits as an ability to understand, adapt, change management and creation of a sustainable business model. Professional management has a task to understand the future of mining companies, their strategic goals: what and how to make changes based on their advantages. Strategic analysis is the first step of the strategic management[1]. Management is a practice of permanent and universal modelling of an organization[2]. The purpose of management is to notice and solve the problems that have arisen leading to their changes and management.

The changes are permanent and they are only secure in modern business. The types of changes according to[3] are: technological changes; changes of products and services; structural and systematic changes and changes of people. Modern organizations have to be changed constantly so that they can respond to the customers' demands and needs, technological changes and changes of the government measures[4]. The change management, by Certo[5] and Hayes[6], is a modification of the organization.

Consequently, the task of the author is to rank the advantages in the mining companies using the multi-criteria analysis, as well as the ability to the change management. Analyzing the advantages of a mining company by implementation the ELECTRA (Elimination and (Et) Choice Translating Reality) method, the professional managers identify, in an easier way, what have to be changed in order to increase the efficiency of realization the products and services[7]. The Electra method belongs to the multi-criteria decision-making methods (MCDM) for decision-making in choosing the most favorable decision among the given alternatives, authored by Bernard Roy[8].

Using the AHP (Analytical Hierarchy Process) method, an analysis of the criteria impact was made on ranking the mining companies' advantages and their weight coefficients. This method is one of the most famous of the MCDM

1 Sullivan, K., Thomas, S., Rosano, M. (2018): Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals, *Journal of Cleaner Production,* 174/218, 237-246.

2 Jovanović, P. (1996): *Management-Handbook of managemet*, FON, Beograd.

3 Daft, R.L. (2001): *Organization Theory and Desing, Seventh Edition,* South West Publishing, Tomson Learing, Vanderbilt University.

4 Certo, S. (1988): *Principles of Modern Managemenat,* Allin and Bacon, Bostan.

5 Ibid

6 Hayesu, J. (2002): *The Theory and Practice of Change Management,* New York.

7 Bogdanović, D. (2016): *Upravljanje promenama*, Tehnički fakultet u Boru, Univerzitet u Beogradu.

8 Roy B. (1991): *The outranking approach and the foundation of electre methods, Theory Decision* 31, 49-73.

methods[9]. The author of this method is Saaty[10]. In the AHP method, the complex problems of multi-criteria decision-making are parsed in the multidimensional hierarchical structure of criteria and goals[11].

The methodology of multi-criteria analysis or multi-criteria decision-making (MCDM) clearly identifies the main participants in the decision-making process such as the decision makers (DMs), analysts and interested parties, and their role in solving the conflicting problems. The DM defines the defining goals and evaluates the obtained solutions. The analyst is responsible for decision support, constructs a decision model, selects methods, supporting tools, and explains the consequences of such decisions. The interested parties are active participants in the decision-making process for solving problems and making the optimal decisions. A Multicriterial analysis is an area that originated from the operational research - OP[12] and focuses its efforts on solving the multiple critical problems[13]. The problems are such complex situations, often contradictory in which they have to be taken into account from a higher point of view[14]. The problem of solving the problem relates to three alternative situations: selection of the best/most desirable variant (selection is problematic), sorting of variances, ice assigning of a predefined class (sorting is problematic) and ranking variants, i.e. ordering from the best to the worst (ranking is a problematic)[15], [16].

The applied combined methodology provides a greater and easier identification of resolution the conflict problems, the ability to change management, creating a sustainable business model, a more competitive company, increase the company profit and most important, increasing the satisfaction of interested parties due to which the advantages of the mining companies are ranked.

The introduction of extension by the MCDM methods and their interactive use significantly improves the performances of the process in planning and management[17].

9 Miletić, S., Paunković, Dž., Bogdanović, D. (2016). Evaluacija indikatora održivosti za donošenje odluka u rudarskim kompanijama. *Megatrend revija* , 13(2)/2016, 83-96.

10 Saaty, T.L. (1980): *The Analytical Hierarchy Process*, New York: McGraw-Hill.

11 Lee, W.B., Lau, H., Liu, Z.Z., Tam, S. (2001): A fuzzy analytical hierarchy process approach in modular product design, *Expert System,* 18(1)/2001, 32-42.

12 Hillier, F., & Lieberman, G. (2001): *Introduction to Operations Research,* New York: McGraw-Hill.

13 ***Żak, J., & Kruszyńskib, M.*** (2015): Application of AHP and ELECTRE III/IV methods to multiple level, multiple criteria evaluation of urban transportation projects, *Transportation Research Procedia*, 10/2015 820 – 830.

14 Vincke, P. (1992): *Multicriteria Decision* – Aid, Chichester: John Wiley & Sons.

15 Ibid

16 Roy B. (1991): *The outranking approach and the foundation of electre methods, Theory Decision 31,* 49-73.

17 Kangas J. (2011): Experiences on applying MCDM tools in natural resources management, *The 21st International Conference on Multiple.*

The combined MCDM methods have been widely used in solving conflict problems in the mining companies.

The works of a newer date by implementation the combined MCDM methods are: Zavadskas et al[18], Bogdanović & Miletić[19], Zavadskas et al[20], Karabasevic et al[21], Karabasević et al[22], Stanujkić[23], Stanujkić[24], Urosevic et al[25] and others.

2. Material and Methods

In the world of globalization, the mining companies, due to a large number of changes (technological, political, ecological and organizational), operate in increasingly more complex conditions, so that their advantages are indicators of the company's ability to the change management.

The advantages (Alternatives) of the mining company are:

Teamwork (Alternative 1): It involves engagement the necessary competent staff for realization of the production and service process. The effective formation and exploitation of the team gives positive results in the mining companies. In the modern business with constant changes, the teamwork is the most important

18 Zavadskas, E. K., Antucheviciene, J., Saparauskas, J., Turskis, Z. (2013): MCDM methods WASPAS and MULTIMOORA: verification of robustness of methods when assessing alternative solutions, *Economic Computation and Economic Cybernetics Studies and Research,* 47(2)/2013, 5-20.

19 Bogdanović, D., & Miletić, S. (2014):Personnel evaluation and selection by multicriteria decision making method, *Journal of Economic Computation and Economic Cybernetics Studies and Research,* 48(3)/2014, 179-196.

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21 Karabasevic, D., Stanujkic, D., Urosevic, S. & Maksimovic, M.,(2015): Selection of Candidates in the Mining Industry Based on the Application of the SWARA and the MULTIMOORA Methods, *Acta Montanistica Slovaca,* 20(2)/2015, 116-124.

22 Karabasevic, D., Zavadskas, E. K., Turskis, Z., Stanujkic, D. (2016): The framework for the selection of personnel based on the SWARA and ARAS methods under uncertainties, *Informatica,* 27(1)/2016, pp. 49-65.

23 Stanujkić, D. (2015): Extension of the ARAS Method for Decision-Making Problems with Interval-Valued Triangular Fuzzy Numbers, *Informatica,* 26(2)/2015, 335-355.

24 Stanujkić, D. (2016): An Extension of the Ratio System Approach of Moora Method for Group Decision-Making Based on Interval-Valued Triangular Fuzzy Number, *Technological And Economic Development Of Economy*, 22(1)/2016, 122-141.

25 Urošević, S., Karabašević, D., Stanujkić; D., Maksimović, M. (2017): An approach to personnel selection in the tourism industry based on the swara and the waspas methods, *Economic Computation & Economic Cybernetics Studies & Research*, 51(1)/2017, 75-88.

to the mining companies for planning, organizing, implementation, managing and controlling the process.

Knowledge Management (Alternative 2): In the modern business of the mining companies, there is an increasing difficulty in knowledge management. There are many definitions of knowledge management. One of these definitions, according to Sveiby [26], is "the knowledge management involves identifying and analyzing the available and required resources of knowledge and processes to fulfil the organizational goals". Rapid development and innovations in the mining companies require an efficient application of knowledge, which needs to be managed in an effective and safe way", Hylton[27]. The mining companies must have some knowledge as to stay competitive in the market because the knowledge is in itself a commodity that offers a competitive advantage[28]. Knowledge management is a great advantage of the mining companies. It is important for professional managers to use and direct the knowledge in a proper way. They need to know which intellectual property is owned by the mining companies, and how to manage that property in order to realize a maximum profit[29].

Staff Competence (Alternative 3): is one of the basic elements of the mining companies that is prescribed in the system management standards. The competence is another one of many changes, a novelty brought by the ISO 9001:2015. Competence is the ability to apply the knowledge to achieve the certain goals of the organization. Personnel training requires the possession of certificates resulting from the requirements of the ISO standards and user requirements. The competent personnel in the mining companies must also have the appropriate knowledge on the product and services process.

Equipment (Alternative 4): The modern sustainable business of professional managers requires the mining companies to be equipped with the innovative eco-technologies. Equipment brings them competition, good positioning, sustainable business, successful change management, as well as the ISO standard compliance and integrated management in order to increase profits and meet the customer requirements.

[26] Sveiby, K.E. (1996): *What is Knowledge Management? Criteria Decision Making,* University of Jyvaskyla, Finland .

[27] Hylton, A. (2002): *Measuring & Assessing Knowledge-Value & the Pivotal Role of the Knowledge Audit, CEO,* Hylton Associates.

[28] Mazur, M., Spahić, A., Grabar, D., Grd, P.,Sedlbauer, G.,Siroska, K., Pallares Beamonte, E. (2014): *Knowledge Management 2.0 for SMEs, km20.eu.*

[29] Lee, C., Egbu, C., Boyd, D., Xiao, H., & Chinyo, E. (2005): Knowledge Management for Small Medium Enterprise: Capturing and Communicating Learning and Experiences, *4th Triennial International Conference Rethinking and Revitalizing Construction Safety, Health, Environment and Quality,* 808–20.

Implementation of the Integrated Management System (ISM) (Alternative 5): Today's modern business of the mining companies requires introduction and implementation of the ISO standards (ISO 9001, HACCP, ISO 14001, OHSAS 18001, ISO 22000 and ISO 27001). All these integration systems are an integrated management system. ISO 9001 is an international standard containing the requirements for the quality management system of organizations, which they have to fulfil in order to integrate their business with the internationally recognized standards. The mining companies with integrated ISM operate according to the methodologies; their processes are organized according to the ISO standards; the organizational culture and structure are modelled according to the modern methods, what contributes to the integral management and profit generation. The ISM constantly improves the production processes of the mining companies[30], [31].

Criteria are measures or evaluations of the given alternatives and contain the most important characteristics of the hypothesis:

Competitiveness (Criterion 1): The research has shown that competition is the essence of economic science that increases the profit of mining companies. Harold Demsetz thinks that the competition takes the main place in the economy, and it is impossible to imagine it without it[32]. The mining companies to be more competitive try to produce the products according to the user requirements and requirements of the ISO standard. To be competitive means to satisfy the interested parties, on that way win to win the competition and generate the profit.

Sustainability (Criterion 2): Sustainability of the mining companies implies a harmonized economic, ecological, sociological and cultural development. Sustainability of the mining companies represents the organizational efforts on how to manage the organization in order to meet the demands of interested parties[33].

Satisfaction of the interested parties (Criterion 3): Interested parties are the integrated groups of people with different interests and responsibilities in

30 Miletić S., Bogdanović, D., Paunković, Dž. (2015): Selection the optimal model of integrated sustainable management system in the mining companies, *Journal Mining and Metallurgy Engineering Bor*, 2/2015, 181-204.

31 Miletić, S., Bogdanović. D., Milanović, D. (2016): Advantages of implementation the process model for sustainable business operations of mining companies, *Journal Mining and Metallurgy Institute Bor*, 3/2016, 71-82.

32 Demsetz, H. (1982): *Economic, Legal, and Political Dimensions of Competition*, NorthHolland, Amsterdam.

33 Miletić, S., Bogdanović, D., Paunković, Dž., Mihajlović, D. (2016): Primena višekriterijumskog odlučivamja u cilju procene održivog poslovanja rudraskih kompanija, *Reciklaža i održivi razvoj,* 9/2016, 15-20.

organizations with the same objective named profit. The interested parties in the mining companies develop a sense of dependency and integration to achieve the organizational objectives. Understanding the needs and expectations of the interested parties is under point 4, the context of an organization, the new requirement of the ISO 9001:2015. Implementation of the Quality Management System (QMS) enables the mining companies to meet the satisfaction of requirements and needs of interested parties.

Positioning (Criterion 4): is a position of the mining company in relation to the competition and perception of the consumers. The positioning determines the place of a company on the market in relation to the competitive products in the consciousness of users. It is important for the mining companies to develop the products that will meet the requirements and needs of the interested parties. The positioning of the company is determined by the low price and high quality of products and services. The position of mining companies on the market determines the competition. Understanding the position of the organization is also the same new clause in the ISO standard ISO 9001:2015.

Employee Resistances (Criterion 5): are created with organizational changes that are a part of today's business in the modern business of the mining companies. They have the negative consequences for employees causing the resistance. Such a working environment gives employees the insecurity and uncertainty in their work[34]. The modern managers are those who manage the change by the best possible way to reduce employee resistance. Employee resistance can reduce the efficiency and productivity in the mining companies.

3. Analysis of the Problems

Hypothesis: *The benefits of the mining companies contribute to the professional managers the ability of change management.*

The authors, in order to determine the weight coefficients of criteria have chosen the AHP method that shows the impact degree of individual criterion on the ranking result. The sum of weight coefficients of criteria must be equal to the unit. If its value is high, it has a greater impact on the ranking result. The scale of comparison is given in Table 1, ranging from 0 to 1. On the basis of the scale of comparison, a matrix of criterion comparison is formed, shown in Table 2. It was obtained on the basis of an empirical assessment by the decision maker (expert

[34] Chauvin, B., Rohmer, O., Spitzenstetter, F., Raffin, D., Schimchowitsch, S., Louvet, E. (2014): *Assessment of job stress in factors in context of organizational change, Elsevier Masson SAS.*

team) in order to determine the significance of each criterion for evaluating the advantages of a mining company in order to manage the change management. The expert team consists of 5 managers and relevant experts (mining area).

The results are obtained using the Criterium Decision Plus software, and are shown in Table 3.

Table 1. *Scale of comparison the decision making elements*

Dominations	
Description	**Rating**
Equal	1
Poor domination	3
Strong domination	5
Very strong domination	7
Absolute domination	9
2, 4, 6, 8 are intermediate values	

Table 2. *Matrix of comparison for criteria*

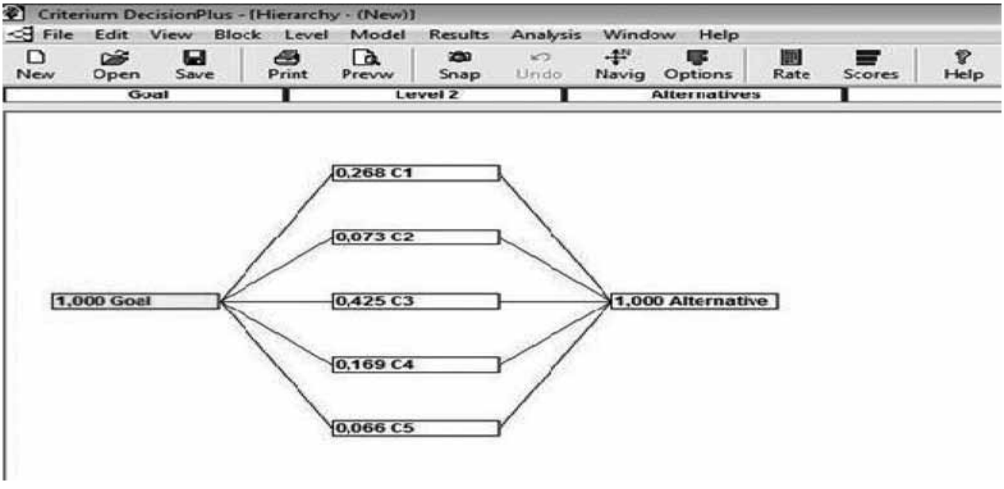
Criteria	C_1	C_2	C_3	C_4	C_5
C_1	1	3	1/2	2	5
C_2		1	1/5	1/3	1
C_3			1	3	5
C_4				1	3
C_5					1

Table 3. *Results obtained by AHP calculations*

Criterion	C1	C2	C3	C4	C5
Weight coefficients of criteria	0.268	0.073	**0.425**	0.169	0.066
Consistency coefficient	**0.018 < 0.1**				

Based on the implementation of the AHP method, the following results were obtained: The most influential criterion for ranking the advantages of mining companies is the criterion C3, stakeholder satisfaction; at the second place - criterion C1, competitiveness; the third place - criterion C4, positioning; the fourth place - criterion C2, sustainability, and the fifth place - criterion C5, employee resistances. Figure 1 shows the hierarchical structure of the AHP method.

Figure 1. *Hierarchical structure*



In order to rank the advantages of the mining companies, the authors have chosen the Electre method where it focuses on comparison the actions in pairs. The methodology of work is as follows: First, the degree of a agreement the paired connections and the weight of preferences are determined, and then the degree of disagreement is determined, where the assessments of weights of individual actions are mutually different. Differentiation of this method from the other MCDM methods is that the first has introduced the possibility of quantification in the problem of qualitative decision making.

The decision makers defined the problem, gave the appropriate alternatives (advantages) and defined the criteria that have a decisive influence on the decision making process. The starting point for these methods is the decision matrix and weight of criteria.

This method contains nine steps to solve the problem, to get the best alternative:

1. Calculation a normalized matrix of decision-making;
2. Creating a weight normalized matrix;
3. Resolving the sets of agreement and disagreement;
4. Calculation the matrix of agreement;
5. Calculation the matrix of disagreement;
6. Calculation the matrix of domination matrix by agreement,
7. Calculation the matrix of domination by disagreement,
8. Calculation the aggregate matrix of domination, and
9. Exclusion the worst alternatives.

Methodology of work: the defined criteria evaluate the advantages (alternatives) of the mining companies and form the matrix of evaluation. Criteria due to the uncertain structure cannot be precisely determined; a qualitative scale is formed with the corresponding numerical values having five levels (Table 4).

Table 4. *Qualitative scale of ELECTRE*

Qualitative values	Very poor	Poor	Medium	High	Very high
Numerical values	1	2	3	4	5

In relation to the qualitative scale, in the range from 1 to 5, a quantified decision matrix is calculated in the range from 1 to 5 (Table 5).

Table 5. *Quantified decision matrix*

Alternatives/Criteria	C1	C2	C3	C4	C5
A1	4	3	4	3	5
A2	3	3	4	3	4
A3	4	4	5	4	5
A4	5	5	3	5	3
A5	5	4	5	5	4

Based on this matrix, the calculation using the ELECTRE method uses its software.

I step: Calculation of the normalized matrix that is calculated by the formula:

$$n_{ij} = \frac{c_{ij}}{Norma_j} = \frac{c_{ij}}{\sqrt{\sum_{i=1}^{m} c_{ij}^2}} \qquad (1)$$

Based on the given data, this normalized decision matrix is obtained (Table 6).

Table 6. *Normalized decision matrix*

Alternatives/Criteria	C1	C2	C3	C4	C5
A1	0.41931	0.34641	0.41931	0.32733	0.52414
A2	0.31449	0.34641	0.41931	0.32733	0.41931
A3	0.41931	0.46188	0.52414	0.43644	0.52414
A4	0.52414	0.57735	0.31449	0.54554	0.31449
A5	0.52414	0.46188	0.52414	0.54554	0.41931

II step: Calculation of the weight normalized matrix of decision making.

The decision maker, to choose one of the five alternatives (advantages), must show its preferences according to the attributes. Then, the weight-normalized decision matrix is calculated. The matrix of selected weight coefficients is:

$$TN = N \cdot T \tag{2}$$

Where,

$$T=\begin{bmatrix} t_1 & \cdots\cdots & 0 \\ \cdots & t_2\cdots & \cdots \\ \cdots & \cdots\cdots & \cdots \\ 0 & \cdots\cdots & t_n \end{bmatrix} \tag{3}$$

N denotes a normalized matrix. Total sum of the "diagonal" matrix of the given weights for the individual attributes (T) should be equal to the unit (1), i.e.

$$\sum_{j=1}^{m} t_1 = 1 \tag{4}$$

The weight-normalized decision matrix is obtained by multiplying the matrix of selected weight coefficients and normalized matrix (Table 7).

Table 7. *Weight normalized decision matrix*

	C1	C2	C3	C4	C5
A1	0.11238	0.02529	0.17821	0.05532	0.03407
A2	0.08428	0.02529	0.17821	0.05532	0.02726
A3	0.11238	0.03372	0.22276	0.07376	0.03407
A4	0.14047	0.04215	0.13366	0.09220	0.02044
A5	0.14047	0.03372	0.22276	0.09220	0.02726

III step: Resolving the sets of agreement (S) and disagreement (NS).

A further methodology is the comparison of pairs in action that are marked with p and r (p, r = 1, 2, ..., m and p ≠ r). First, a set of agreement (spr) is formed for actions a_p and a_r consisting of defined criteria (J = j and j = 1,2, ..., n), where the action a_p is more desirable than the action a_r, i.e.

$$s_{pr} = (j|x_{pj} \geq x_{rj}) \quad (5)$$

If there is a minimum type criterion, the opposite is a sign of inequality (≤). Furthermore, a complementary set of disagreement is obtained, where:

$$NS = (j|x_{pj} < x_{rj}) = J - S_{pr} \quad (6)$$

If a minimum type criterion is obtained, the inequality sign is the opposite (>).

IV step: Calculation the matrix of agreeement (MS)

The matrix of agreeement is calculated in the previous step, and is calculated on the basis of the sets of agreement. The indexes of agreement are the matrix elements, calculated as the sum of preferences (weight coefficients).

The index of agreement S_{pr} for actions a_p and a_r is calculated as follows:

$$M\,S_{pr} = \sum_{j \in s_{pr}} t_j \quad (7)$$

where its value ranges in the interval from 0 to 1. So, the rule is applied, if the value of the given index is closer to the unit,, the action a_p is more desirable than the action a_r. In this way, the indexes of agreement form the matrix of agreement because it has the elements equal to zero on the main diagonal where the alternative does not compare with itself.

Presentation of the matrix of agreement is given in Table 8.

Table 8. *Consent matrix*

A1	0	1.00000	0.33300	0.49000	0.06500
A2	0.66700	0	0.00000	0.49000	0.06500
A3	1.00000	1.00000	0	0.49000	0.56300
A4	0.51000	0.51000	0.51000	0	0.51000
A5	0.93500	1.00000	0.93500	0.92700	0

V step: Calculation the matrix of disagreement (MNS).

The indexes of disagreement constitute the elements of matrix of disagreement. They are calculated using the matrix TN (weight normalized matrix) in the following way:

$$MNS_{pr} = \frac{\max\limits_{j \in NP_{pr}} |t_{pj} - t_{rj}|}{\max\limits_{j \in J} |t_{pj} - t_{rj}|} \tag{8}$$

And here, as in the previous step, the same rule is applied to the index of disagreement and determining a more desirable action. The index of disagreement is derived from the weight- normalized decision matrix (TN) and a set of disagreements for the observed alternatives (advantages) (NS_{pr}).

The matrix of disagreement is shown in Table 9.

Table 9. *Matrix of disagreement*

A1	0	0.00000	1.00000	0.82783	1.00000
A2	1.00000	0	1.00000	1.00000	1.00000
A3	0.00000	0.00000	0	0.31526	1.00000
A4	1.00000	0.79285	1.00000	0	1.00000
A5	0.15286	0.00000	0.24244	0.09461	0

VI step: Calculation the matrix of agreement domination (MSD).

The matrix elements are calculated using the threshold of the agreement index, which are defined as the average index of agreement, and counted as:

$$PIS = \sum_{\substack{p=1 \\ p \neq r}}^{m} \sum_{\substack{r=1 \\ p \neq r}}^{m} \frac{MS_{pr}}{m(m-1)} \tag{9}$$

Based on calculation, a derived value of average index of agreement has shown that the action a_p is preferable than the action a_r and in case if its corresponding index of agreement MS_{pr} exceeds the value of average index. The matrix of agreement domination is calculated on the basis of the following criterion:

$$MSD_{pr} = 1 \ for\ MS_{pr} \geq PIS$$
$$MSD_{pr} = 0 \ for\ MS_{pr} < PIS \tag{10}$$

Matrix of agreement domination is shown in Table 10.

Table 10. *Matrix of agreement domination*

A1	0	1	0	0	0
A2	1	0	0	0	0
A3	1	1	0	0	0
A4	0	0	0	0	0
A5	1	1	1	1	0

VII step: Calculation the matrix of disagreement domination.

- As in the previous step, the matrix of disagreement domination is calculated in such a way that the average index of disagreement is first calculated through a relation:

$$PINS = \sum_{\substack{p=1 \\ p\neq r}}^{m} \sum_{\substack{r=1 \\ p\neq r}}^{m} \frac{MNS_{pr}}{m(m-1)} \tag{11}$$

Table 11 shows the matrix of disagreement domination.

Table 11. *Matrix of disagreement domination*

A1	0	1	0	0	0
A2	0	0	0	0	0
A3	1	1	0	1	0
A4	0	0	0	0	0
A5	1	1	1	1	0

VIII step: Calculation the matrix of aggregate domination (MAD).

Matrix of aggregate domination is calculated as a product of position the elements of matrix of agreement and matrix of disagreement domination:

$$MAD_{pr} = MSDpr \cdot MNSDpr \tag{12}$$

Calculation of the aggregate domination matrix is shown in Table12.

Table 12. *Matrixes of aggregate domination*

A1	1	0	0	0
0	**A2**	0	0	0
1	1	**A3**	0	0
0	0	0	**A4**	0
1	1	1	1	**A5**

IX step: Exclusion of less desirable actions.

If the value is $MAD_{pr} = 1$, then the action a_p dominates over the action a_r by one and the other criterion (agreement and disagreement). This does not show that there is no other alternative that does not dominate over the action a_p. Therefore, one more condition has to be met:

$MAD_{pr}=1$ for at least one r, r=1, 2, ..., m and $p \neq r$

$MAD_{pr}=0$ for all i, i=1, 2, ..., m i $p \neq r$ and $i \neq r$

The results of implementation combined by the AHP and Electre methods show that:

- A1 dominates over: A 2
- A2 does not dominate over any action
- A3 dominates over: A 1 and A2
- A4 does not dominate over any action
- A5 dominates over: A1, A2 and A4
- The best alternative: A5

4. Results and Discussion

The results of the integrated method, AHP and Electre show that the best alternative is A5, implementation of the Integrated Management System (ISM). Implementation the ISM helps to the managers of the mining companies to manage the changes integrally in a standardized and easier way. Change management is the hardest task of the professional managers. The implemented method provides the opportunity to the mining companies to function according to the ISO standards where they are more competitive and able to manage the changes.

The alternative A3, staff competence, is in the second place. The mining companies require, due to their complexity, the competent staff to plan, organize, control, and manage processes in a changeable environment. Staff competence is the basic element of the mining companies prescribed in the QMS management standards. On the basis of this, it is seen that the staff competence gives managers the ability to manage effectively the changes

The ranked advantages of the mining companies, as well as the ability to manage the changes by the multi-criterial analysis, combined AHP and Electre method, is obtained that the teamwork, alternative A1, is at the third place. Today's changeable business requires the mining companies to make the team decisions strategically bringing the ability to manage the resulting changes.

The knowledge management and equipment are very important as the benefits for the ability to manage the change in the mining companies. Without knowledge, there is no recognition and analysis of the available and necessary resources and work processes. In the case of alternative equipment, if the mining companies are not equipped according to the needs of the process and demands of the interested parties, there is no conquest of the new markets nor survival of the company.

Regarding the criteria, the most influential criterion for ranking the advantages of the mining companies is the criterion C3, the satisfaction of the interested parties, because its weight coefficient is 0.425. It means that this criterion affects with 42.5% of the mining company benefits. Organizations exist for the users and consumers that form an integrated group with the other interested parties. The ISO 9001: 2015 under item 4, the context of an organization, requires understanding and needs of expectation of the interested parties.The interested parties are the groups of people who are interested in achieving the organizational goals, all for the sake of profit.

At the second place, by influence the ranking of advantages in the mining companies, is the criterion C1, competitiveness because its weight coefficient is 0.268; what means that it affects with 26.8% to the final result. Without competition as the basis of economic science, there is no survival for the mining companies. Being competitive is an increase in the satisfaction of the needs and demands of the interested parties.

At the third place is the criterion C4, positioning with weight coefficient of 0.169; which means that with 16.9% it affects the ranking of advantages of the mining companies and making the final decision making. Good positioning determines the place of the mining companies on the market compared to the competition.

At the fourth place is the criterion C42, sustainability, because its weight coefficient is 0.073. This criterion affects 7.3% to the final result of ranking the benefits. The sustainable business of the mining companies is considered to be a dynamic and continuous process that requires a great adaptation and flexibility (Miletić et al., 2016c).

At the fifth, and the last place, is the criterion C5, the resistances of employees because their weight coefficient is 0.066. The final result is influenced by 6.6%. Resistance as a criterion is important for ranking the preferences of the mining companies because they are very common in today's business due to the major changes. The professional managers have this role to reduce the employee resistances and motivate them.

5. Conclusion

This work presents the original methodology of multicriterial analysis advantages of the mining companies as the ability to manage the changes. The five most significant advantages in the mining companies, teamwork, knowledge management, staff competence, equipment and implementation of the integrated management system (ISM) are analyzed. The used criteria were: competitiveness, sustainability, the satisfaction of interested parties, and positioning with which they were prioritized. Such a multiple analysis requires the application of an appropriate MCDM method. In the first stage of realization for determining the criteria and their weight coefficients, the AHP method was used due to the subjectivity of a decision making. In the second phase of implementation for ranking the alternatives (priority), the Electra method was used due to quantification in the problem of qualitative decision making.

The main result of this work is a comparative analysis of the results, obtained by combining the AHP and Electra method.

The best alternative (advantages) for the mining companies is the alternative A5, implementation of the Integrated Management System (ISM).

The most influential criterion for the final ranking is the criterion C3, the satisfaction of the interested parties.

The applied methodology provides a great opportunity and ability to the professional managers to manage the changes in today's business with the mining companies. Such combined methods can be used to solve other conflicting problems in the process of managing the mining companies by other combined methods.

The proposed model, compared to the results of other models, can be modified so that different decision makers have a different impact on the weight of the criteria, which also influences the choice of the most acceptable alternative.

The authors propose further research in the process of adopting and solving the conflict problems in the process of managing the mining companies with the other combined methods.

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APPENDIX

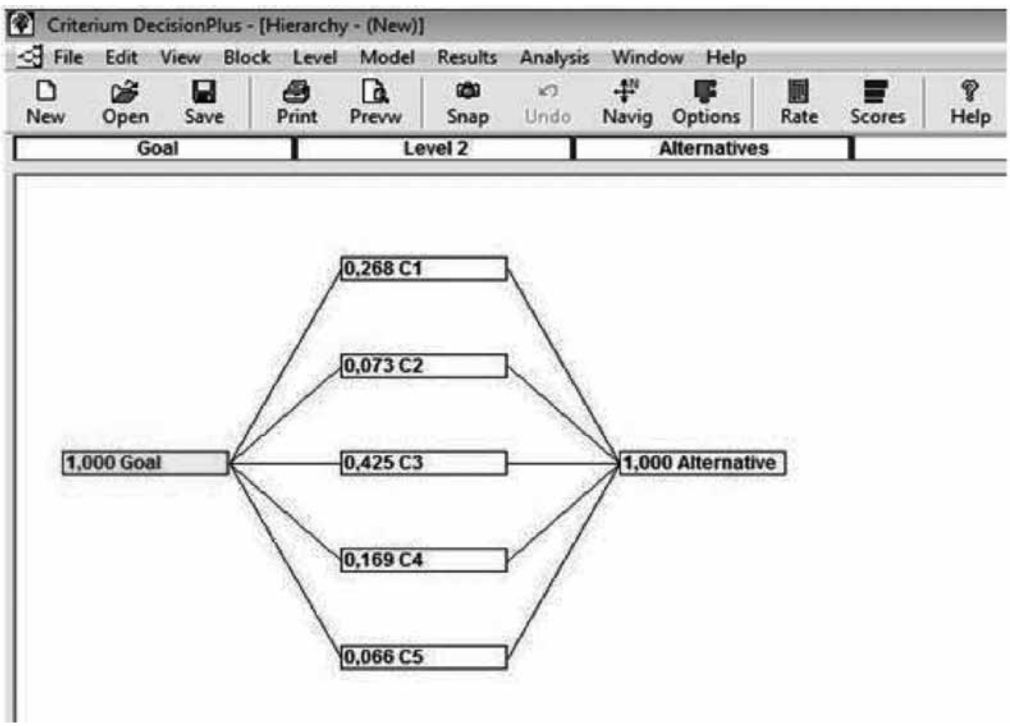

Figure 1. *Hierarchical structure*

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MULTIKRITERIJUMSKA ANALIZA PREDNOSTI RUDARSKIH KOMPANIJA SA ASPEKTA UPRAVLJANJA PROMENAMA

Cilj rada je evaluacija prednosti rudarske kompanije multikriterijumskom analizom. Ovakav pristup rudarskim kompanijama predstavlja najbolju praksu jer je usled globalnih promena sve veći broj kompanija koje je prinuđeno da istakne svoje prednosti radi očuvanja i ekspanzije tržišnih pozicija, profita i uspešno upravljanje promenama.

U radu su analizirane pet prednosti (alternative): timski rad, upravljanje znanjem, kopetentnost osoblja, opremljenost i implementacija integrisanog sistema menadžmenta (ISM) i četiri kriterijuma: konkurentnost, održivost, zadovoljstvo zainteresovanih strana i poziciranje. Analiza je urađena kombinovanom AHP i Electre metode.

Prikazana multikriterijumska analiza je dala sledeće rezultate: njabolja altenativa je alternativa A5, implementacija ISM a najuticajniji kriterijum je C3, zadovoljstvo zainteresovanih strana sa težinskim koeficijentom 0,425.

Ključne reči: *Multikritrijumska analiza, Rudarske kompanije, Upravljanje promenama*

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THE MARKET POWER OF DIGITAL CONSUMERS IN 24/7/365 CONNECTED WORLD

This paper analyzes and presents the sources of the market power of digital consumers and marketing opportunities for companies in the 24-7-365-connected world. A research was conducted into the impact of students connected via the social media on changes at the faculty, civil society and social change. Market power is being redirected from companies to digital consumers. Key sources of digital consumers' power are their abundance, connectivity with other consumers, increased awareness, mobility, and as a result – the control of communications and the impact on organizations' business. Numerous, connected, informed and mobile consumers can control communications and the business of companies. Digital consumers have the power and it should not be seen as a threat but as an opportunity. This is why the sources of market power of digital consumers and marketing opportunity are presented as a honeycomb. The conclusion can be drawn that digital consumers have market power only if they are connected to each other and aware of their power. Figuratively speaking, "one bee can achieve almost nothing but the bee community can." The similar thing happens with digital consumers.

Keywords: *digital consumers, social media, market power, connected world, marketing opportunities*

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1. Introduction

Access to technology and the Internet is having a positive impact at all levels – the personal, the family, the professional and the social ones.[1] The changes in WEB environment cause changes in the power of the actors on market and civil society. Numerous users of the social media (social networks in particular) in different locations can fast connect with each other, communicate with one another in real time and engage themselves in different manners, ranging from informing to organizing online and offline events.[2] Digital consumers can use social media and digital communications to make impacts on the business doing of companies, civil society and social change. Consumers can invite people not to buy certain products, boycott some companies, follow certain consumption patterns (e.g. buy organic food) etc. Students can gather together and mobilize themselves via social media in order to pursue their goals and have an impact on the work of the faculty, civil society and social change. Users of social media could "foster people's political engagement" and "contribute to transforming social injustices and inequalities".[3] Consumer online behavior is developing fast. Today, consumers in social media are involved in a wide range of different activities, ranging from consuming content to taking part in discussions, sharing knowledge with other consumers, and contributing to activities carried out by other consumers.[4] Users of the digital media in their different roles (as students, the employed, consumers, members of civil society etc.) can have an influence on civil society and social change via digital communications. This paper is focused on the sources of the powers of digital consumers, their impacts on companies and marketing opportunities for companies.

"Web 2.0" is an umbrella term that is used to refer to a new era of Web-enabled applications that are built around user-generated or user-manipulated content, such as wikis, blogs, podcasts, and social networking sites.[5] The stated definition of Web 2.0 emphasises the power of users. In addition to the usual term: user-generated content, the term user-manipulated content is also used. Users can create but also to manipulate the content. Denning[6] explains that there

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5 Pew Internet & American Life Project. (2013): Web 2.0. Available at http://www.pewinternet.org/topics/Web-20.aspx?typeFilter=5

6 Denning, S. (2010): "Managing the threats and opportunities of the open corporation." *Strategy & Leadership,* 38, 16-22.

has been a fundamental shift in the balance of power in the marketplace from sellers to buyers so that buyers gain power. In the twentieth century, companies had control of the marketplace but web technology has generated changes. Now, buyers have instant access to reliable information. Aprimo[7] explains it is not just the media landscape that has evolved – it is the customer as well. Now, the customer has empowered role, and that means that customer is active, engaged and in control of the conversation. Yesterday's passive consumer has been replaced by one who is active, engaged and in control of how he or she encounters marketing communication.[8] The growth of social media enabled companies to impose unnecessary harm upon their businesses by not paying attention to consumer-generated advertisements and the influence of communicative technology on their products. This new trend in consumer behaviour must be recognized by companies and they should take advantage of consumer efforts to promote their brands by adjusting their marketing strategies so as to utilize this trend.[9] Fish[10] says - at the heart of social media channels is the power to the people. Schiller[11] notes that the web is rapidly being redeveloped as a consumer medium. In an interview with Brian Solis, Klout CEO Joe Fernandez said, "We live in an amazing time where the power has shifted to the individual. You mix blindness to advertising, the scale of word of mouth, and the empowered consumer, and now you have a situation where every interaction between a brand and a person is the story that's created about that brand," Fernandez added. As power continues to shift from large organizations to individuals, and brand trust becomes harder to establish, conversations and recommendations have become like a form of currency. Consumers generated more than 500 billion impressions about products and services through social media in 2011, according to Forrester Research's study "Competitive Strategy In The Age Of The Customer." Understanding how customers and potential customers behave online, and why, is going to become increasingly important for companies. Understanding how they interact directly and indirectly with a brand is going to become even more important in the pursuit of cultural and personal relevance.[12] "New media penetrate into so many areas of society and permeate social cohabitation so

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7 Aprimo (2011): *Insights to Help Advance Digital Marketing*. Available at http://research.itpro.co.uk/content12192

8 *Ibid*.

9 Pehlivan, E., Sarican, F., Berthon, P. (2011): "Mining messages: Exploring consumer response to consumer- vs. firm-generated ads." Journal of Consumer Behaviour, 10, 313-321.

10 Fish, J. (2010): "Power to the People Is at the Heart of Social Media Channels!" *Credit Union Times,* 21, 10.

11 Schiller, D. (1999): "Deep impact the web and the changing media economy." *Info - The journal of policy, regulation and strategy for telecommunications,* 1, 35-51.

12 Contreras, E. (2013): *Social State: Thoughts, stats, and stories about the state of social media in 2013***.** Social Nerdia, 189-190.

deeply that the investigation of associated (social psychological) phenomena has become a prolific field of research and is likely grow further in the future".[13]

The structure of this paper is as follows. Section 1 presents the sources of power and reviews the relevant literature in order to construct hypotheses. Section 2 presents the method. Section 3 investigates hypotheses about of power of digital consumers. Section 4 briefly summarises the paper and its contributions.

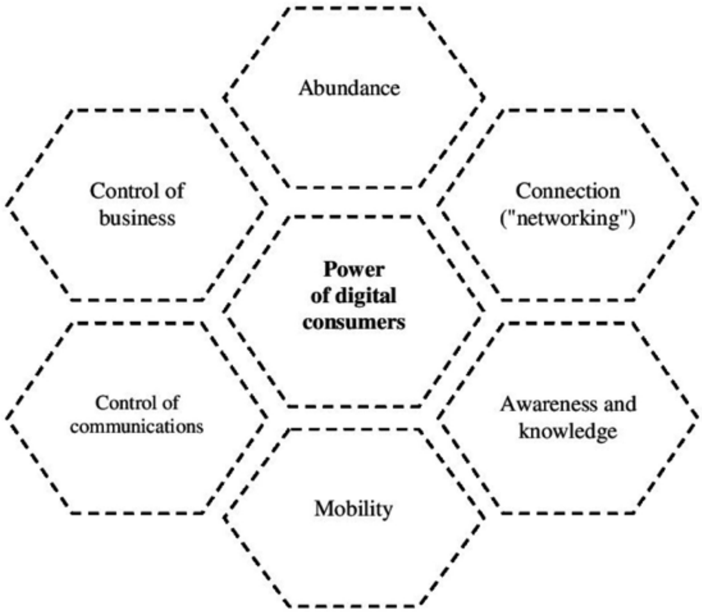
2. The sources of market power of digital consumers

The development of digital technologies influences consumers' behaviour. From the perspective of the companies, the key challenges in the area of consumers' behaviour in the digital environment are: abundance, the ability to connect with other consumers, increased awareness, mobility, and as a result – the control of communications and the impact on companies' business. Figure 1 shows the six key sources of consumers' power. The result is a huge potential for informed and connected digital consumers.

First, the number of digital consumers is large. Second, the digital technologies allows consumers to connect with each other, exchange information and experiences, influence companies, events, persons etc. regardless of the geographic location, primarily through social media (networking sites, blogs, etc.), but in some other ways, too. Third, the consumers quickly and easily obtain information, are enabled to follow current events ("live"), compare information and make better decisions. Fourth, wireless and mobile devices make mobile consumers, i.e. they allow the consumer to always be available everywhere, which is most important for the consumer if they want to be available. Fifth, consumers can control communications and thus influence the online image of brands and companies. Sixth, numerous, connected, informed, educated and interested in the impact, consumers can have greater power than companies and they can influence the business. However, on one hand consumers are often unaware of their power, potential, and on the other hand, the initiators – the leaders who will initiate and encourage consumers to certain activities are needed.

[13] Batinic, B., Goritz, A. (2009): "How Does Social Psychology Deal with New Media." *Social Psychology,* 40, 3.

Figure 1. *The honeycomb of the power of digital consumers.*



Source: Rakić and Rakić, 2015.

These sources of power of digital consumers should not be seen as a threat, but as a marketing opportunity. As consumers have increasingly been conducting activities that were previously controlled by companies, the entire marketing environment has started to change. Therefore, companies need to understand consumer's changing behaviour better in order to create mutual benefits from the harnessing of social media.[14] As BBC Business Editor Tim Weber[15] explains: "It's a dramatic shift in consumer power. But what if companies could harness this power and turn it to their advantage?" Marketing opportunity for companies based on the marketing power of digital consumers is presented in Figure 2. Social media marketing leads to the increase of the number of consumers as users of social media. A company can "direct" communications and contribute to the additional connecting of users as users of social media (customer community) on the basis of the marketing community. Content marketing influences the awareness and knowledge of customers. Mobile marketing encourages mobile communications. A company cannot control social media communications, but it can direct and influence them. Interactions with users of

14 Heinonen, K. (2011): "Consumer activity in social media: Managerial approaches to consumers' social media behavior." Journal of Consumer Behaviour, 10, 356-364.

15 Weber, T. (2010): Why companies watch your every Facebook, *YouTube, Twitter move.* Available at http://www.bbc.co.uk/news/business-11450923

social media and word of mouth marketing (WOMM) influence word of mouth (WOM) communications which are favoured by companies. The engagement and collaboration with the users of social media lead to good business for both the consumers and the companies.

Figure 2. *Opportunities for companies on the basis of honeycomb of digital consumers' power.*

Source: Rakić and Rakić, 2015.

2.1. Abundance

There are almost 3.9 billion Internet users, i.e. 51.7% of the total population in the world according to the data from June 2017.[16] Kim, Jeong and Lee[17] states that today hundreds of millions of Internet users are using thousands of social Web sites to stay connected with their friends, discover new "friends" and to share user-created contents, such as photos, videos, social bookmarks, and blogs. "Social networks are now the operating systems for consumers' lives. They have rapidly become indispensable." says Ajaz Ahmed, chairman and founder

[16] Internet World Stats. (2017): *World Internet Users and 2017 Population Stats.* Available at http://www.internetworldstats.com/stats.htm

[17] Kim, W., Jeong, OR., Lee, SW. (2010): "On social Web sites. " *Information Systems, 35*, 215-236.

of AKQA, one of the world's leading digital advertising agencies.[18] The Market is made of people – consumers. The data shows that the number of the Internet users is great. However, users of the Internet and especially social media do not have to be a certain brand consumers. The data on the number of potential and actual consumers who are not only Internet users but are also active through social media are even more important. According to the statistics [19] on the Top 25 Facebook Pages Lists, there are two Facebook's own fan pages that ranked first and second in November 2015 (Facebook for Every Phone and Facebook). Cristiano Ronaldo, as the most popular person on Facebook (107 348 909 total fans, in November 2015), ranked third, and musical icon Shakira (103 035 465 total fans, in November 2015) is ranked the fourth. On the Top 25 Facebook Pages List, entertainment pages are predominant (Shakira, Vin Diesel, Eminem, Rihanna, Michael Jackson, etc.), popular soccer teams and players (Cristiano Ronaldo, FC Barcelona, Real Madrid, Leo Messi, Manchester United, etc.). Coca-Cola, ranked the sixth, singles out amongst companies (93 533 055 total fans, in November 2015).[20]

2.2. Opportunities to connect with other consumers

The number of Internet users is even more important if such numerous users are connected with each other. Hanna, Rohm and Crittenden[21] note that in the 21st century connected consumer marketplace, we are all connected, so the social media ecosystem has the power. They add that interactive digital media platforms are changing the marketing landscape, and the nature and sources of information and connectivity are vast, in effect creating a 24/7 collaborative world. These platforms have empowered consumers to connect, share, and collaborate, creating spheres of influence that have fundamentally altered the way marketers engage in influencing activities.[22]

[18] Vollmer, C., Premo, K. (2012): *From Campaigns to Capabilities-The Impact of Social Media on Marketing and Beyond*, Booz & Company Inc. Available at http://www.booz.com/global/home/what-we-think/reports-white-papers/article-display/from-campaigns-capabilities-impact-social, 4.

[19] Socialbakers. (2015): *Facebook Pages Stats.* Available at http://www.socialbakers.com/statistics/facebook/pages/total/page-1-3/

[20] *Ibid.*

[21] Hanna, R., Rohm, A., Crittenden, V. (2011): "We're all connected: The power of the social media Ecosystem." *Business Horizons,* 54, 265-273.

[22] See: Alberici, AI., Milesi, P. (2013): "The Influence of the Internet on the Psychosocial Predictors of Collective Action." *Journal of Community & Applied Social Psychology,* 23, 373-388.; Aldás, E.N., Murphy, J.M. (2013): "Occupy Movements and the Indignant Figure." *Peace Review - A Journal of Social Justice,* 25, 333-335.; Aldás, E.N., Pinazo D. (2013): "Communication and Engagement for Social Justice." *Peace Review - A Journal of Social Justice,* 25, 343-348.; Aragon-Correa, J.A., Cordon-Prozo, E. (2005): "The influence of strategic dimensions and the environment on the introduction of internet as innovation into small and medium-sized enterprises." *Technology Analysis and Strategic Management,*

The connectivity of consumers allows consumer-to-consumer communications and e-Word of Mouth (e-WOM). Segbers[23] speaks about exponential power of WOM via Internet. Mangold and Faulds[24] states that the emergence of Internet-based social media has made it possible for one person to communicate with hundreds or even thousands of other people about the companies and the products each one provides. Thus, the impact of consumer-to-consumer communications has been greatly magnified in the marketplace. Social media pro-

17, 2205-218.; August, C., Liu, J.H. (2015): "The Medium Shapes the Message: McLuhan and Grice Revisited in Race Talk Online." *Journal of Community & Applied Social Psychology,* 25, 232-248.; Galera, C.G., Hurtado, M.H., Muñoz, C.F. (2014): "Engaged Youth in Internet. The Role of Social Networks in Social Active Participation." *Comunicar Journal*, 43, 35-43; Hamill, A.C., Stein, C.H. (2011): "Culture and empowerment in the Deaf community: An analysis of internet weblogs." *Journal of Community & Applied Social Psychology,* 21, 388-406.; Hanna, R., Rohm, A., Crittenden, V. (2011): "We're all connected: The power of the social media Ecosystem." *Business Horizons,* 54, 265-273.; Niland, P., Lyons, A.C., Goodwin, I., Hutton, F. (2015): "Friendship Work on Facebook: Young Adults' Understandings and Practices of Friendship." *Journal of Community & Applied Social Psychology,* 25, 123-137.; Obst, P., Stafurik, J. (2010): "Online we are all able bodied: Online psychological sense of community and social support found through membership of disability-specific websites promotes well-being for people living with a physical disability." *Journal of Community & Applied Social Psychology,* 20, 525-531.; Rakic, B., Rakic, M. (2015): *Digitalni marketing – integrisani pristup digitalnim marketinskim aktivnostima, monografija*. Beograd: Zavod za udzbenike.; Rakic, B., Rakic, M. (2017a): *From Marketing Myopia to Contemporary Marketing: Transformations in Marketing in the Context of Digitalization and Sustainability (Integration of Traditional, Digital, Co-Creative and Sustainability-Oriented Mindsets Inside Actors in Contemporary Marketing)*. E-Book, available at eBook retailers: Amazon.com - Kindle Store, etc.; Kindle Edition ASIN: B06WGV26DT https://www.amazon.com/Marketing-Myopia-Contemporary-Through-Evolutions-ebook/dp/B06WGV26DT/ref=sr_1_2?s=digital-text&ie=UTF8&qid=1487803402&sr=1-2&keywords=marketing+myopia or https://www.books2read.com/u/bMGKkk; Rakic, B., Rakic, M. (2017b): Facebook or the "Book of Faces" as a database for customer profiles, marketing communications and applications. *21st International Scientific Conference on Economic and Social Development. Book of Proceedings: Economic and Social Development,* 48-58.; Siddiquee, A., Kagan, C. (2006): "The internet, empowerment, and identity: an exploration of participation by refugee women in a Community Internet Project (CIP) in the United Kingdom (UK)." *Journal of Community & Applied Social Psychology,* 16, 189-206.; Singh, T., Veron-Jackson, L., Cullinane, J. (2008): "Blogging: A new play in your marketing game plan." *Business Horizons,* 51, 281-292.; Su, P., Wang, L., Yan, J. (2018): "How users' Internet experience affects the adoption of mobile payment: a mediation model." *Technology Analysis and Strategic Management*, 30, 186-197.; Walmsley, A. (2010): New media needs new PR. Available at http://www.marketingmagazine.co.uk/article/985566/andrew-walmsley-digital-new-media-needs-new-pr

23 Segbers, R. (2010): "Go where the customers are – Marketing (and managing) your patient experience with social media". *Marketing health services,* 30, 22-25.

24 Mangold, G., Faulds, D. (2009): "Social media: The new hybrid element of the promotion mix." *Business Horizons,* 52, 357-365.

vide an interactivity platform to consumers, and interactivity leads to consumer empowerment by giving the consumer a platform to vote for themselves.[25]

As Aula[26] explains - social media is characterised by interactivity - participants freely send, receive, and process content for use by others. Anklam[27] adds that linking - ideas and people - is a pivotal force in our shifting social context. Linking, commenting and connecting with people stimulates a truly global and boundary-less knowledge network. Stowe Boyd coined the term "social tools" in 1999 as "…a generation of software…designed from the start to guide human behaviour into new paths and patterns, to counter prevailing ways of interaction".[28] For now, as O'Hare and Murdock[29] explains we lead a double life in parallel social systems. First, in our offline life - in our everyday experience, we have friends, family, events, and social connections that happen in the real world that enrich and give meaning to our lives. Second, in our online life - we also have friends, family, events and social connections that exist primarily online, which also enriches and gives meaning to our lives. Third, viewed integrally, in our double life in parallel social systems - for most of us, our online life and our offline life have points of intersection such as events that we arrange online, but that take place offline, or places that we visit and then photograph, discuss, and share with our online social community.[30]

2.3. Awareness and knowledge

People have been referring to social networks as an increasingly common way to have their information shared and to seek emotional support for different issues, such as, for example, health problems (e.g. weight loss etc.),[31] and product purchase and so on. Content is one of the essential reasons for connectivity. Numerous and connected digital consumers can quickly exchange much more information thus contributing to the knowledge about e.g. brands. In this way they affect the reputation of brands online.

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25 Pehlivan, E., Sarican, F., Berthon, P. (2011): "Mining messages: Exploring consumer response to consumer- vs. firm-generated ads." Journal of Consumer Behaviour, 10, 313-321.

26 Aula, P. (2010): "Social media, reputation risk and ambient publicity management." *Strategy & Leadership,* 38, 43-49.

27 Anklam, P. (2009): "Ten years of net work." *The Learning Organization,* 16, 415-426.

28 *Ibid.*

29 O'Hare, N., Murdock, V. (2012): "Modeling locations with social media." *Information Retrieval*, *16*, 30-62.

30 *Ibid.*

31 Ballantine, P.W., Stephenson, R.J. (2011): "Help me, I'm fat! Social support in online weight loss networks." *Journal of Consumer Behaviour,* 10, 332-337.

2.4. Mobility

We live in a world which provides opportunities for ongoing communications and connections - 24/7/365. As Scott[32] explains – while Facebook, Twitter, and LinkedIn are the most recognized of the social media, other related sites like Foursquare, iMeet, and Mashable are exploding on the scene with great fan fare. Amidst this tsunami of tech applications are legions of mobile devices like smart phones, laptops and iPads that allow users to interact with social media remotely, 24/7/365.

2.5. The control of communications

Many authors speak about the inability of companies to control the communications about their brands. As Mangold and Faulds[33] state, consumers' ability to communicate with one another limits the amount of control companies have over the content and dissemination of information. Also, Vollmer and Precourt[34] note that in the era of social media "consumers are in control; they have greater access to information and greater command over media consumption than ever before". This shift in the information control needle is dramatically influencing the way consumers receive and react to market information.[35] Consumers are no longer merely passive recipients in the marketing exchange process. Today, they are taking an increasingly active role in co-creating marketing content with companies and their respective brands.[36] "The rise in interactive digital media has catapulted company and consumer contact from the traditional Web 1.0 model to the highly interactive Web 2.0 world, where consumers are dictating the nature, extent, and context of marketing exchanges".[37] The freedom provided

32 Scott, M. (2011): "Social Media Flurry". *OfficePro,* 71, 38-41.

33 Mangold, G., Faulds, D. (2009): "Social media: The new hybrid element of the promotion mix." *Business Horizons,* 52, 357-365.

34 Vollmer, C., Precourt, G. (2008): *Always on: Advertising, marketing, and media in an era of consumer control*. McGraw-Hill: New York, 5.

35 See: Mangold, G., Faulds, D. (2009): "Social media: The new hybrid element of the promotion mix." *Business Horizons,* 52, 357-365.; Ramsey, G. (2006): *Digital marketing strategies in the age of consumer control*.http://www.asc.upenn.edu/courses/comm530/secure/Fall%202006/Digital%20Marketing%20Strategies.pdf; Singh, T., Veron-Jackson, L., Cullinane, J. (2008): "Blogging: A new play in your marketing game plan." *Business Horizons,* 51, 281-292.

36 Berthon, P.R., Pitt, L.F., McCarthy, I., Kates S. (2007): When customers get clever: Managerial approaches to dealing with creative consumers. *Business Horizons,* 50, 39-48.; Hanna, R., Rohm, A., Crittenden, V. (2011): "We're all connected: The power of the social media Ecosystem." *Business Horizons,* 54, 265-273.

37 Hanna, R., Rohm, A., Crittenden, V. (2011): "We're all connected: The power of the social media Ecosystem." *Business Horizons,* 54, 265.

by social media empowers the consumer to make their voice heard.[38] Aula[39] talks about the problem of communications control in terms of strategic reputation management. In terms of strategic reputation management, what is important is that social media content cannot be controlled in advance and that content cannot be managed in the same way as, for example, conventional media such as TV or newspapers. In practice, this means that it is almost impossible for organizations to control conversations about themselves. Chen, Fay and Wang[40] explain that social media provide an unparalleled platform for consumers to publicize their personal evaluations of purchased products and thus facilitate word-of-mouth communication. Based on WOM communication, consumers can influence to a great extent the online, and thus the overall image of an organisation.

The control of communications by consumers should not be seen as a threat, but as an opportunity for communications to be on equal terms with consumers. Booth and Matic[41] explain that control is an illusion. Companies cannot control the conversations with social media, but they can influence them. This is why mapping and leveraging influencers in social media to shape corporate brand perceptions is very important.

Because of the changes in environment, Denning[42] posts a question: How are corporate leaders to reconcile the need to preserve appropriate control and confidentiality with today's seemingly inexorable pressure to manage, communicate and share information more openly? As Denning[43] suggests: To defend against the threats and to take advantage of the opportunities posed by social media, senior leaders need to understand how to manage in identifies six elements of openness in terms of information sharing:

- Explaining - giving the reasons for what is happening.
- Updating - passing on new information.
- Conversing - interacting with people.
- "Open mic" - letting everyone have her or his say.
- Crowd-sourcing - seeking ideas from a larger crowd.
- Platforms - to set standards and share data.

[38] Pehlivan, E., Sarican, F., Berthon, P. (2011): "Mining messages: Exploring consumer response to consumer- vs. firm-generated ads." Journal of Consumer Behaviour, 10, 313-321.

[39] Aula, P. (2010): "Social media, reputation risk and ambient publicity management." *Strategy & Leadership,* 38, 43-49.

[40] Chen, Y., Fay, S., Wang, Q. (2011): "The Role of Marketing in Social Media: How Online Consumer Reviews Evolve." *Journal of Interactive Marketing,* 25, 85-94.

[41] Booth, N., Matic, J. (2011): "Mapping and leveraging influencers in social media to shape corporate brand perceptions." *Corporate Communications: An International Journal,* 16, 184-191.

[42] Denning, S. (2010): "Managing the threats and opportunities of the open corporation." *Strategy & Leadership,* 38, 16-22.

[43] *Ibid.*

2.6. The Control of Business

"It is widely recognized that many different opes and forms of knowledge contribute to technology development".[44] "You have to be on 24/7," noted a senior executive with a major apparel brand. "You have to respond to customers all the time. Issues escalate so fast, you can be held hostage by someone in social media."[45] The authors have added - furthermore, once visitors become fans, companies have the responsibility to listen to them and reward their behaviour with an "always on" social media experience that is responsive, interesting, and attentive. If not, companies may face disappointment and disfavour from many of their most valued consumers.[46] Digital environments are commonly depicted as sites of consumer empowerment, participation, co-creation and prosumption the intertwined process of production and consumption.[47] Since Toffler[48] has first invented the term the "prosumer," numerous authors talk about the importance of prosumers and prosumption, prosumer age, age of the digital prosumer, prosumer capitalism[49] and co-creation.[50] Prosumer is the one who is both the

44 Fleck, J. (1997): "Contingent knowledge and technology development. *Technology Analysis and Strategic Management*, 9, 383-398.

45 Vollmer, C., Premo, K. (2012): *From Campaigns to Capabilities-The Impact of Social Media on Marketing and Beyond*, Booz & Company Inc. Available at http://www.booz.com/global/home/what-we-think/reports-white-papers/article-display/from-campaigns-capabilities-impact-social, 10.

46 *Ibid, 9.*

47 Bajde, D., Koklic, M.S., Bajde, J. (2015): "Back to consumption and production? Prosumers negotiating the WMG lockdown on YouTube. " *Journal of Consumer Behaviour,* 14, 297-306.

48 Toffler, A. (1980): *The third wave*, New York: William Morrow.

49 See: Collins, S. (2010): "Digital Fair: Prosumption and the Fair Use Defence." *Journal of Consumer Culture,* 10, 37-55.; Comor, E. (2011): "Contextualizing and Critiquing the Fantastic Prosumer: Power, Alienation and Hegemony." *Critical Sociology,* 37, 309-327.; Cook, W. (1997): "World Wide Wake-Up Call." *Journal of Advertising Research* March-April, 5.; Davis, J. (2012): "Prosuming Identity: The Production and Consumption of Transableism on Transabled.org." *American Behavioral Scientist,* 56, 596-617.; Rey, P. (2012): "Alienation, Exploitation, and Social Media." *American Behavioral Scientist,* 56, 399-420.; Ritzer, G., Jurgenson, N. (2010): "Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital Prosumer." *Journal of Consumer Culture,* 10, 13-36.; Ritzer, G., Dean, P., Jurgenson, N. (2012): "The Coming of Age of the Prosumer." *American Behavioral Scientist,* 56, 379-398.

50 See: Harwood, T., Garry, T. (2014): "Co-creation and ambiguous ownership within virtual communities: the case of the Machinima community." *Journal of Consumer Behaviour,* 13, 148-156.; Prahalad, C.K., Ramaswamy, V. (2002): "The co-creation connection." *Strategy and Business,* 27, 51-60.; Prahalad, C.K., Ramaswamy, V. (2004): *The future of competition: Co-creating unique value with customers*, Boston: Harvard Business Review Press.; Prahalad, C.K., Krishnan, M.S. (2008): *The new age of innovation: Driving co-created value through global networks*, NewYork: McGraw-Hill.

producer and the consumer; and prosumption involves a combination of production and consumption.[51] It follows that companies must not only communicate with users of social media/consumers, but also to respond to their demands. Otherwise, they may lose their customers, i.e. business - in the long term. So, consumers can control not only the communications, but also the business of the companies.

Based on these sources of power of digital consumers, the following hypotheses have been set.

- Hypothesis 1: The more numerous consumers on social media, the greater the market power of digital consumers.
- Hypothesis 2: The more connected consumers are through social media, the greater the market power of digital consumers.
- Hypothesis 3: The more informed consumers are through social media, the greater the market power of digital consumers.
- Hypothesis 4: The more mobile consumers are through social media, the greater the market power of digital consumers.
- Hypothesis 5: The more ability consumers have to control communications through social media, the greater the market power of digital consumers.
- Hypothesis 6: The more ability consumers have to control business through social media, the greater the market power of digital consumers.

3. Methodology

The primary data were collected through observation. We have observed online behaviour of the students at the Megatrend University – what they demand from the university and the fulfilment of these demands. Students have formed a forum (The Forum of Megatrend University students), they are present on Facebook and so on. The Facebook group of Megatrend Info – The Forum of Megatrend University students has had 4,605 likes. Observational research has included the behaviour of the above mentioned groups from their establishment (The Forum from October 2006, and the Facebook group from 2010).

Secondly, additional survey was intended to answer the research question – whether there has been a change in marketing activities, business and relationships in Megatrend University due to students' requirements? Data were collected from interviews in the marketing departments, Vice Deans of Academic Affairs of two faculties and 10 teachers (within the above university).

51 Rakic, B., Rakic, M. (2014): "Integrated Marketing Communications Paradigm in Digital Environment: The Five Pillars of the Integration." *Megatrend Review,* 11, 187-204.

4. Results

The results of the observational research show that students are more active on the forum, compared to the Facebook group. As for the topics in the forum related to the university, students share information on courses, lectures, exam experiences etc. Some teachers are also active forum members. Students have connected with each other through forums online and have worked on the admission of their representatives by certain representatives of the University (e.g. Rector, Pro-Rector, executive director etc.) so that students' representative can make a specific request for an extra examination period. The application was subsequently accepted. Also, a number of other students' requirements were accepted like organising student internships ("Mega career"), benefits for employed students, greater number of preliminary exams, humanitarian action ("Mega Heart") and so on. On the other hand, not all the requirements were accepted, but when the right arguments were presented to the students, they accepted them. A great number of students are online; they are active, they share information about faculties at the university, as well as about other topics of their (like most young people) interest; they may be the initiators of communication with University representatives and other employees, they communicate with each other in real time and affect changes of certain activities at the University if the requirements are real (as shown in examples).

Via Facebook, students are informed about their initiatives and results, such as, e.g. specializing at foreign faculties, engaging in projects, cooperating with the business entities and practice at companies, taking part in domestic and foreign students' competitions, learning foreign languages (e.g. Chinese, Japanese etc.), communicating with the rector and deans, introducing new subjects, changing the methods of teaching, engaging visiting teachers, accepting additional examination terms, changing the price for services etc. Students organize different events significant for the society, such as, e.g. helping people affected by floods, campaigns for voluntary blood donations etc. Students express their attitudes of needed changes in the society, e.g. by presenting the attitudes of Megatrend University of the strategy of higher education by taking part at a public discussions and so on.

In addition to the observational research of students' behaviour (especially in the aforementioned forum), another survey was conducted. Out of ten interviewed teachers, two are active participants, three are passive "activity monitors" and five do not monitor the activities of the forum. Teachers who are active participants in the forum as advantages of communication via forum mentioned - direct communications with students in real time and the ability to respond rapidly which is important when lot of "disinformation" is posted in the forum. Teachers who only passively monitor activities in the forum as a significant advantage of the forum state - a fast and simple collection of information on the students' attitudes towards a particular course and teacher. Vice Deans of Academic Affairs have stated that they were in a position to deal with the demands of students who got organised through forums (the requirements for humanitarian engagement, the allowing of an additional examination period, organising student internships, etc.). Then, when the students had justifiable requirements, they could meet them. In some cases, they had to change plans and activities because of students' feasible demands. The marketing department has stated that Megatrend University is up to date with the changes in digital environment; it is present in social media such as Facebook, Twitter and YouTube, and ready for communications through social media, both with students and with all stakeholders.

5. Discussion and conclusion

Some initiatives and proposals on the above forum failed to gather a larger number of students, so that the desired results of the topic starters and the initiators of proposals were not achieved, and thus forth, they did not affect marketing activities and business of the University. This is in accordance with the first and second initial hypothesis. Students as forum users, were not equally informed of all the issues and proposals. Whenever they were better informed about the problem, topic and the actors of communications, they had more power. This is in accordance with the third hypothesis. Mobile phones helped students a lot (especially the "organisers and initiators") with online organising of the offline events. This is in accordance with the fourth hypothesis. Through forums, Facebook groups and other social media students can be initiators of communications in real-time, so that they can increasingly control the communications, which further increases their market power. This is in accordance with the fifth hypothesis. Finally, students can affect marketing activities and business of the university, which increases their market power, which is in accordance with the sixth hypothesis. In short, this research can leads us to the conclusion that the more numerous the students are, more connected, more informed, more mobile, they can more affect the communications, marketing activities and the business of the University.

A tweet uploaded on 13th Oct. 2011 (Megatrend Info on Twitter): An Initiative for October-3! (Join Our Forces) is an excellent one for the conclusion. The mentioned tweet is an inseparable part of the students' online "fight" for the additional October Examination Term. Over 30,000 members of The Forum of Megatrend University and almost 5,000 fans of the Facebook Group of Megatrend Info can stand for a significant "Army" for both the students and the university.

Online communities of people sharing similar interests and goals (e.g. Facebook groups) can have a bigger power. Online communities need to "join their forces" in order for them to initiate, organize and implement online and offline activities. A conclusion can be drawn that the digital consumers have the market power only if they are connected to each other and are aware of their power. Figuratively speaking, "one bee can achieve almost nothing, but the bee community can achieve a lot." The similar thing happens with the digital consumers. On the other hand, companies can see the power of digital consumers as an opportunity (rather than a threat) and direct their marketing activities towards social media marketing, the marketing community, the content, mobile marketing, interactions and the WOMM, engagement and collaboration with customers (and stakeholders).

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TRŽIŠNA MOĆ DIGITALNIH POTROŠAČA U POVEZANOM SVETU 24/7/365

Ovaj rad analizira i predstavlja izvore tržišne moći digitalnih potrošača i marketinške mogućnosti za kompanije u stalno povezanom svetu (24/7/365). Sprovedeno je istraživanje o uticaju studenata povezanih preko društvenih medija na promene na fakultetu i u društvu. Tržišna moć se preusmerava od kompanija ka digitalnim potrošačima. Ključni izvori moći digitalnih potrošača su brojnost, povezivanje sa drugim potrošačima, povećana informisanosrt i znanje, mobilnost i kao rezultat - kontrola komunikacija i uticaj na poslovanje organizacija. Brojni, povezani, informisani i mobilni potrošači mogu da kontrolišu komunikacije i poslovanje preduzeća. Digitalni potrošači imaju moć i to ne bi trebalo posmatrati kao opasnost, već kao mogućnost. Zbog toga su izvori tržišne moći digitalnih potrošača i marketinške mogućnosti predstavljeni u "obliku saća". Zaključak je da digitalni potrošači imaju tržišnu moć samo ako su povezani jedni s drugima i svesni svoje moći. Figurativno govoreći, " jedna pčela ne može postići skoro ništa, ali zajednica može." Slična situacija je kod digitalnih potrošača.

Ključne reči: *digitalni potrošači, društveni mediji, tržišna moć, povezani svet, marketinške mogućnosti*

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MENADŽMENT U PREDŠKOLSKIM USTANOVAMA

Razvoj obrazovanja u savremenom dobu, prateći globalni napredak znanja i tehnologije, neminovno iziskuje potrebu za angažovanjem menadžera u obrazovnim institucijama. Menadžerski rad se primarno oslanja na detaljno planiranje, donošenje odluka o ciljevima i strategijama ustanova i koordinisanje ljudskih resursa, u cilju efikasnijeg i efektivnijeg funkcionisanja svakog aspekta obrazovnog procesa. Kroz svoj rad, menadžer može doprineti kvalitetnijem toku znanja i podržati razvoj obrazovnog sistema, što je veoma relevantno za državu u razvoju kao što je Republika Srbija. U predškolskim ustanovama, u kojima se najmlađa generacija socijalizuje, uči i priprema za dalje školovanje, potrebno je ojačati ulogu menadžera. Inovativnošću, posvećenošću i kreativnošću u radu, menadžer može učvrstiti opštu organizaciju i mrežu zaposlenih, što se pozitivno može odraziti na podsticaj dečijih potencijala i ključnih kompetencija.

Cilj ovog rada je ukazivanje na značaj koji menadžment ima u radu predškolske ustanove, sa akcentom na ljudske resurse i umreženost sa ulogom vaspitača. Dodatno, analizirano je stanje predškolskih ustanova u Republici Srbiji i ukazano je na određene slabosti i potencijalne šanse obrazovnog sistema, u kome implementacija menadžmenta može služiti kao podstrek za progres.

Ključne reči: *menadžment, obrazovanje, predškolske ustanove.*

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1. Uvod

Sredina u kojoj dete odrasta je od presudnog značaja za njegov razvoj i učenje. Drugim rečima, razvoj većine relevantnih kompetencija koje deca treba da formiraju tokom ranog uzrasta, zavisi od kvaliteta sredine u kojoj se razvijaju. Značajnim u okruženju se smatraju ciljevi i način vaspitanja prihvaćen u datom društvu, zajedno sa objektivnom mogućnošću otkrivanja i negovanja sposobnosti svakog deteta. Iz navedenog razloga, kao i opšteg mišljenja da se ono što je u ranom uzrastu propušteno ne može nadoknaditi[1], sledi važnost bavljenja sredinom koja utiče na rani razvoj deteta. U ovom radu orijentišemo se na predškolske ustanove, kao jedan od najvažnijih elemenata sredine u kojima se deca razvijaju i uče u ranom uzrastu.

Preteče današnjih vrtića nastale su kao posledica promenjenih uslova života i rada, kao i položaja žene u društvu, a potom i u porodici. Svaka od epoha, počevši od osnivanja prvog vrtića 1837. godine (*kindergarden*: deca kao biljke koje pažljivo treba odgajati)[2], dodala je procesu vaspitanja nešto novo i jedinstveno, sve do savremenog doba kada vrtići postaju nezamenljivi u životu i razvoju najmlađih članova zajednice. Razvojem modernih vrtića čiju je osnovu utvrdio Fridrih Frebel, došlo je i do potrebe za menadžmentom, tj. za funkcionalnom, celovitom organizacijom rada. Ona obuhvata, pre svega, vaspitno-obrazovne, organizacione, finansijsko-administrativne elemente, bez kojih ovakvi tipovi ustanova ne bi mogli da funkcionišu. Premda nema zvaničnu definiciju, zbog toga što se njegov razvoj paralelno ostvaruje u različitim naukama[3], menadžment se, kao interdisciplinarna grana, bavi problemima upravljanja različitim poslovima i zadacima, i istražuje efikasne, uspešne načine rukovođenja svakim korakom koji dovodi do željenog ishoda[4]. Inkorporiranje metoda uspešnog menadžmenta u vrtiće može biti vrlo delotvorno za zemlju u razvoju kao što je Srbija, ali sa sobom nosi mnogo izazova zbog iziskivanja promena koje ne dotiču samo pitanje obrazovanja. Ovaj članak predstaviće komponente menadžmenta i njegove uspešne implementacije u predškolski obrazovni sistem, spajajući, u cilju ukazivanja zona za razvoj ustanova, elemente teorije menadžmenta, psihologije obrazovanja i pedagogije.

Savremeni koncept vaspitanja menja ne samo organizaciju predškolskih ustanova, već i ulogu vaspitača. Oni nisu samo prenosioci znanja, već i

[1] Stojanović, K. (2016): Primena menadžmenta u predškolskim ustanovama. Fakultet za primenjeni mednadžment, ekonomiju i finansije, Beograd. Doktorska disertacija.

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kreatori vaspitno-obrazovnog procesa. Oni predstavljaju nosioce upravljanja organizacionom sredinom koja treba da podstiče decu na učenje[5]. To znači da u predškolskim ustanovama praćenje i analiza razvoja dece treba da služe, na prvom mestu, obezbeđivanju odgovarajućih iskustava i okvira za razvoj (prema individualnim razlikama), kako bi se ostvario i podržao razvoj ključnih kompetencija. Od vaspitača se traži da poseduje menadžerske sposobnosti i znanja specifična za svoju obrazovnu delatnost, a u okviru sistema sačinjenog od nivoa rukovođenja usmerenih na ostvarivanje ciljeva predškolskog vaspitanja. Vaspitači su kao pokretači aktivnosti u vaspitno-obrazovnoj praksi odgovorni za aktivnosti koje karekterišu dobrog menadžera. Oni su time i odgovorni za rezultat rada koji je vidljiv u psiho-fizičkom razvoju najmlađih generacija na kojima počiva razvoj društva. U ovome se i ogleda uloga menadžmenta u predškolskim ustanovama. Zapravo, aktivnosti u predškolskim ustanovama se moraju planirati, organizovati, voditi i kontrolisati tako da se ostvaruju ciljevi i strategije obrazovanja zajednice i da se omogući stvaranje zdrave baze mladih generacija.

Uvid u teorije i modele menadžmenta u obrazovanju pokazuje da nema jedinstva u pogledima funkcionisanja obrazovnih ustanova i njihovog menadžmenta[6]. Nijedna predškolska ustanova, čak i ukoliko ima iste materijalne uslove rada, ne može da funkcioniše na isti način i da ima isti menadžment, jer se ne mogu pronaći isti ljudi koji rade na identičan način i koji imaju iste karakteristike. Napraviti model uspešnog menadžmenta može umnogome uticati na unapređenje samog menadžmenta, sve dok se ima u vidu da se svaka organizacija kontinuirano prilagođava uslovima i kadrovima kojima raspolaže. Najvažnije, menadžment u predškolskim ustanovama treba da usvoji činjenice da je svako dete različitio i jedinstveno, da dolazi iz drugačije mikro i makro sredine, i da ulazak u predškolsku ustanovu znači odvajanje od primarne porodice i okruženja. Ove činjenice treba da se postave kao polazna tačka svakog menadžerskog poduhvata.

2. Određenje pojma menadžmenta i njegova primena u predškolskim ustanovama

Menadžment u obrazovanju predstavlja koordinaciju ljudskih, fizičkih i finansijskih potencijala u obrazovnim institucijama radi postizanja ciljeva utvrđenih državnom, mesnom i prosvetnom politikom[7]. Unutar okvira posla koji

5 Nikić, J. (1996): Uloga vaspitaca u adaptaciji deteta u jaslicama i organizovanju obogacene strukturisane sredine. Novi Sad, Zbornik Filozofskog fakulteta u Novom Sadu, 11.

6 Staničić, S. (2006): *Menadžment u obrazovanju*, Vlastita naklada, Rijeka.

7 Terzić, E. (2016): Značaj komunikacijskih kompetencija u izvršavanju funkcija menadžmenta u obrazovanju. Međunarodna konferencija iz oblasti sporta, nauke, edukacije i razvoja. InSSED 2017, Travnik.

menadžeri rade, spada donošenje odluka o ciljevima, strategijama, programima i planovima institucije, vođenje osoblja (aktivnosti, motivacija, ponašanje, komunikacija), podsticanje unutrašnjeg razvoja ustanove i strateško, efektivno komuniciranje sa svim uključenim stranama. Ove aktivnosti nose različiti nivoi menadžera i oni skupno omogućavaju usmeravanje, prilagođavanje i efikasnost poslovanja predškolske ustanove. Pod poslovanjem u ovom kontekstu podrazumevaju se planirani ciljevi i zadaci, zatim uslovi za njihovo ostvarivanje, kao i izvršioci pojedinih zadataka. Efikasnost u menadžerstvu se odnosi na postizanje maksimuma uz minimalna ulaganja, a efektivnost podrazumeva one aktivnosti vezane za posao koje pomažu organizaciji da ostvari svoje ciljeve. Konačni cilj menadžmenta u obrazovanju, prema savremenoj literaturi[8], predstavlja kvalitetniji tok znanja, razvijanje i podržavanje sistema obrazovanja, nadgledanje infrastrukture znanja jedne zemlje, koordinacija i komunikacija. Imajući u vidu prirodu posla i izazove koje menadžment donosi, ono se može gledati i kao kreativni proces koji se ponavlja, tj. koji teži da se konstantno usavršava. U funkciju obrazovnog menadžmenta spadaju planiranje, organizacija, kontrola i vođenje.[9]

Planiranje je odskočna tačka menadžerstva. Ono uključuje određenje preciznih ciljeva, donošenje odluka o načinu dostizanja tih ciljeva, a u okviru opšte strategije poslovanja. Organizacija se odnosi na određivanje resursa, definisanje poslova i zadataka, izvršenje podele rada, određivanje aktivnosti i ljudi. Ono obezbeđuje skladno povezivanje ljudi koji pribavljaju, raspoređuju i koriste sredstva za rad i materijal u cilju uspešnog poslovanja. Na osnovu podele rada, ukupno poslovanje stiče pogon kroz grupisanje zaposlenih, a zatim i kroz organizovan rad pojedinaca. Drugim rečima, nastala podela rada nužno iziskuje potrebu za koordinacijom radnih grupa, ali i između pojedinaca u radnim grupama. Predškolske ustanove funkcionišu u promenjljivim uslovima društvenog okruženja kojima se stalno moraju prilagođavati, ukoliko žele da ostvare svoje ciljeve. Zato je neophodno da menadžeri svojim sposobnostima vođstva uspostave zajedništvo među ljudima u ustanovi, da ih motivišu na što veće zalaganje u pravcu ostvarivanja ciljeva, kao i da osete promene u okruženju kako bi naveli ljude da im se prilagode. U tome je ključna uloga kvalitetne, jasne i ciljane komunikacije[10].

Kontrola predstavlja fazu menadžment procesa koja mora da omogući da se sve planirane aktivnosti i rezultati zaista i ostvare. Njena suština se sastoji u monitoringu aktivnosti zaposlenih i celokupnog poslovanja. Kontrolisanje

8 Šormaz, G. Uloga i značaj menadžmenta u obrazovanju. *Ekonomija: Teorija i Praksa*, 4, 19-32.

9 Karavidić S. i Čukanović Karavidić M. (2016): *Menadžment*. Visoka škola za poslovnu ekonomiju i preduzetništvo, Beograd.

10 Terzić, E. (2016): Značaj komunikacijskih kompetencija u izvršavanju funkcija menadžmenta u obrazovanju. Međunarodna konferencija iz oblasti sporta, nauke, edukacije i razvoja. InSSED 2017, Travnik

poslovanja ima za cilj da obezbedi da ostvareni rezultati poslovanja odgovaraju planiranim. Ono obuhvata skup ciljeva, planova, politika, procedura i pravila kojima se određuju standardi i rezultati poslovanja. Konačno, vođenje se oslanja na međusobni odnos menadžera i zaposlenih. Menadžer dodeljuje zadatke zaposlenima i posredno vodi računa o njihovim rezultatima, i stoga se ponekad izjednačava sa liderstvom u široj teoriji menadžmenta[11]. Međutim, ovde u okviru vođenja ističemo, kao visoko relevantno, motivisanje vaspitača i saradnika u predškolskoj ustanovi da rade posvećeno, u najboljem interesu dece i obrazovne ustanove čiji su oni esencijalni deo.

Iz rečenog nužno sledi važnost menadžmenta ljudskih resursa u vrtićima. Ovaj menadžment predstavlja proces privlačenja, angažovanja, obuke i motivacije zaposlenih sa ciljem stvaranja bezbednog i pravednog okruženja za zaposlene sa jedne strane, a sa druge strane postizanje strateških ciljeva ustanove. Zbog relevatnosti uloge zaposlenih, tj. vaspitača u predškolskim ustanovama, ovom aspektu menadžmenta posvetiće se dodatna pažnja.

3. Ljudski resursi u predškolskim ustanovama i uloga menadžera

Menadžment ljudskog kapitala se definiše kao strateški i koherentni pristup rukovođenja zaposlenima u ustanovi koji radeći individualno i/ili kolektivno doprinose postizanju njenih ciljeva[12]. U tom smislu, pod menadžmentom ljudskih resursa podrazumeva se deo ustanove koji svojom delatnošću doprinosi postizanju strateških ciljeva iste, time što će privući i zadržati kvalitetne i stručne zaposlene i motivisati ih da rade na efektivan i efikasan način. Preciznije, uloga menadžmenta ljudskih resursa jeste da omogući organizaciji da ostvari uspeh pomoću ljudi.

Svaka predškolska ustanova okuplja stručne kadrove od kojih se zahtevaju određena znanja, iskustva i sposobnosti kako bi odgovorili zahtevima za pripremu dece za početak školovanja. Sve aktivnosti moraju se sprovoditi planski na osnovu unapred postavljenih ciljeva, čije se izvršenje kontroliše od strane lica odgovornih za kontrolu rada. Menadžment u obrazovanju se razume kao proces usaglašavanja i razvoja ljudskih i materijalnih potencijala, u cilju ostvarivanja razvojnih ciljeva i ciljeva obrazovne politike[13]. Kvalitet ljudskih resursa se može razvijati kroz proces profesionalnog razvoja zaposlenih, pod pretpostavkom da

11 Vilijams, C. (2010): *Principi menadžmenta*. Beograd: Data Status.

12 Đurić, I. (2015): Smisao i značaj menadžmenta u obrzovanju. Zbornik radova Filozofskog fakulteta,15. 4, 117-135.

13 Zuković, S., Knežević, O. (2014): Pedagoški menadžment u funkciji partnerstva obitelji i škole, Školski vjesnik, Vol. 63, Br. 1-2, 201-213.

je on zasnovan na kompetencijama i stvaralaštvu[14]. Ovo je posebno potrebno u predškolskom obrazovanju, s obzirom da vaspitač omogućava konstrukciju znanja kod mlađih generacija. Govoreći o vaspitačima kao koordinatorima aktivnosti u radu sa decom i njihovim menadžerskim sposobnostima, možemo naglasiti bitna obeležja menadžmenta ljudskih resursa:[15]

- rad sa ljudima pomoću kojih se osigurava da se ciljevi organizacije ostvare kolektivnom akcijom nosilaca pojedinačnih zadataka,
- ostvarivanje ciljeva organizacije koji se ogledaju u ispunjavanju svrhe i misije,
- težnja ka balansu između efikasnosti i efektivnosti,
- relativno ograničeni resursi,
- promenljivi uslovi poslovanja.

Moderni menadžment, koji je sve primenjeniji u predškolskim ustanovama, naglašava značaj tzv. mekih varijabli, kao što su: zaposleni u organizaciji, njihova znanja, veštine i sposobnosti, stilovi vođenja i slično. Jedan od glavnih izazova savremenog menadžmenta je kako najbolje iskoristiti resurse u promenljivom, dinamičnom okruženju. Zbog toga je u radu sa ljudima (zaposlenima) potrebno staviti akcenat na njihovo obrazovanje, stručno usavršavanje, motivaciju, razvoj komunikacionih sposobnosti i učvršćivanje osećanja odgovornosti i inicijative. Kada su u pitanju osnovne aktivnosti vaspitača, kao što su podsticanje samostalnosti, samopoštovanja i dobrih saradničkih, vršnjačkih odnosa, bogaćenja izvora znanja, pažljiv izbor metoda i oblika rada, usklađenost aktivnosti sa razvojnim stadijumom i rukovođenje individualnim razlikama[16], pitanje motivacije, zadovoljstva poslom i kvaliteta rada sa decom postavlja se u centar menadžerstva ljudskim resursima (uz, svakako, i pitanje pažljive selekcije i regrutacije koja dolazi pre održavanja motivacije).

Menadžeri specijalizovani za različite oblasti poslovanja postali su danas među najtraženijim kadrovima. Njihov cilj je ostvarivanje poslovnog uspeha organizacije, uz etičnost koja se odslikava u doprinosu široj društvenoj zajednici[17]. Kada govorimo o njihovoj ulozi i kada konkretizujemo njihovu delatnost, prvenstveno polazimo od postojanja utvrđene organizacione jedinice ili instance koja se bavi menadžmentom u predškolskoj ustanovi. Menadžeri su centralni nervni sistem organizacije kao što je predškolska institucija, i njihova uloga je

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14 Đurić, I. (2015): Smisao i značaj menadžmenta u obrzovanju, Zbornik radova Filozofskog fakulteta Vol. 15. Br. 4., 117-135.

15 Dukić, D., Milivojević, T. (2011): Model menadžment konsaltinga za preduzetnike i vlasnike malih preduzeća, Industrija, Vol. 39, Br. 2, 336-355.

16 Za pregled, videti: Apostolović, D. (2016): *Kurikulumi predškolskog vaspitanja kao osnova za planiranje i programiranje rada vaspitača u predškolskoj ustanovi*. Nacionalni naučni skup sa međunarodnim učešćem, „Savremeno predškolsko vaspitanje i obrazovanje: Izazovi i dileme", Jagodina, 297–313.

17 Orlić, B. (2005): *Kadrovski menadžment*. Beograd: Zoran Damnjanović i sinovi.

višestruka. Mincberg[18] je u svom radu opisao sve uloge koje menadžer nosi: lider, osoba za vezu, kontrolor, portparol, osoba za širenje informacija, preduzetnik, pregovarač, alogator sredstava, osoba za rešavanje problema i simbolička glava organizacije. Ove uloge iznedrile su i nekoliko formalnih i neformalnih pravila ponašanja i poslovanja menadžera. Svaki idealan menadžer, ili onaj koji teži da se što više njemu približi, u predškolskoj ustanovi treba da se pridržava sledećih pravila u poslovanju:[19]

1. Mora pouzdano da definiše šta želi da uradi, odnosno treba da ima jasnu koncepciju svog posla i radnih zadataka;
2. Potrebno je da definiše vremenski horizont u okviru koga se očekuje da će se realizovati postavljeni zadaci;
3. Ne sme nikada u potupunosti da bude zadovoljan postignutim rezultatima;
4. Uvek treba da bude spreman da prihvati savet;
5. Potrebno je da bude entuzijasta i da svoj entuzijazam u poslu prenosi na druge;
6. Treba stalno da radi na svom ličnom usavršavanju;
7. Uvek treba da bude spreman na preuzimanje poslovnog rizika;
8. Mora sebe dobro da poznaje, kao i svoje reakcije u različitim situacijama;
9. Važno je da odabere stil menadžmenta koji odgovara datoj situaciji.

Ove veštine i zadaci impliciraju i da sâm menadžer mora posedovati određene atribute. To se pre svega odnosi na njegove komunkacijske veštine, njegovu sposobnost da pored praćenja formalnih protokola motiviše i emotivno podstiče i podržava zaposlene[20], zatim veštinu konflikt-menadžmenta, snalaženja u višeznačnosti i neodlučnosti, procesiranja informacija i građenja mreže kontakta, sposobnost introspekcije, ambicioznost i upornost, među ostalima[21].

Aktivnosti koje obavljaju savremeni menadžeri u vrtićima su od velikog značaja za funkcionisanje i uspešan rad ustanove, kao i za formiranje i održavanje kulture poslovanja[22]. Oni su odgovorni za organizacione rezultate zato što definišu ciljeve, određuju načine za njihovo ostvarivanje i utiču na one koji u organizacionoj strukturi zauzimaju podređen položaj. Kada posmatramo iz ugla generalne strategije predškolske ustanove, vidimo da se kroz nju odgovara na četiri ključna pitanja strateške vizije[23]:

18 Mintzberg H. (1973): *The Nature of Managerial Work*. New York: Harper & Row.

19 Orlić, B. (2005): *Kadrovski menadžment*. Beograd: Zoran Damnjanović i sinovi.

20 Fenton, J. (1990): *101 Ways to Boost Your Business Performance*. Mandarin Business.

21 Yau, W.S.L., Sculli, D. (1990). Managerial Traits and Skills. *Journal of Management Development*, 6, 32-40.

22 Andevski, M. (2007): *Menadžment obrazovanja*. Novi Sad: Cekom books.

23 Torrington, D., Hall, L., Taylor, S. (2004): *Menadžment ljudskih resursa*. Beograd: Data Status, str.66.

1. Gde smo sada?

U prikupljanju informacija o trenutnom stanju ustanove mogu se koristiti intervjui, ankete, fokus grupe. Krajnji cilj je što tačnija procena s koje tačke se polazi ka promenama. Odgovor na ovo pitanje treba da sjedini procenu organizacione kulture, zadovoljstva zaposlenih i nivo motivacije, jasnoće definisanih ciljeva poslovanja, trenutni način menadžmenta, kao i stavove zaposlenih o deci i individualnim razlikama (manjine, invaliditet).

2. Gde želimo da budemo?

Odgovor na ovo pitanje zasniva se na pažljivom planiranju nakon uvida u trenutno stanje. Pored intervjua i ostalih opisanih tehnika, u ovoj fazi analiziraju se i konkretni predlozi za unapređenje poslovanja pod okriljem jedne jasne poslovne vizije.

3. Dizajn i upotreba planova u cilju ostvarenja tranzicije

Predstavlja kreiranje konkretnih planova i seriju aktivnosti za njihovo sprovođenje, uz definisanje načina evaluacije rezultata.

4. Uticaj okruženja

Odnosi se na razmatranje sredinskih faktora u menadžmentu, poput procene težine nalaženja pravih ljudi za posao vaspitača, koliko inovacija trenutni obrazovni sistem može objektivno da nosi, kakav je uticaj privatnih vrtića na rad državnih (i obratno), i tako dalje.

U ovom kontekstu, od menadžera i njihovog rada u velikoj meri zavisi uspeh ili neuspeh, opstanak, stagnacija ili razvoj date ustanove. Posao menadžera dakle, ne podrazumeva *lično* dostignuće, već se odnosi na pomaganje drugim zaposlenima da što više postignu, da što bolje urade sopstveni posao. Ipak, ono što može ograničiti ili olakšati posao menadžera, a što je van njegove direktne kontrole je sredina, tačnije nivo razvoja obrazovnog sistema jedne zemlje, ali i ostalih ekonomskih, političkih i socijalnih karakteristika države u određenom trenutku, koje utiču na funkcionisanje i kvalitet usluge jedne predškolske ustanove.

4. Predškolsko obrazovanje u Republici Srbiji i uticaj primene savremenog menadžmenta u njemu

Uvidom u relevantnu literaturu i dokumenta[24], može se zaključiti da različiti aspekti menadžmenta u Republici Srbiji nisu na zavidnom nivou kada su u pitanju predškolske ustanove. Iako u Srbiji predškolsko obrazovanje ima dugu tradiciju, kvalitetnu praksu i stručni potencijal, zakone koji su usklađeni sa strandardima

[24] Strategija razvoja obrazovanja u Srbiji do 2020. godine., „Sl. glasnik RS“, br. 107/2012.

EU, detaljna ispitivanja kroz SWOT analize su ukazala na određene slabosti. Njime nisu obuhvaćena sva deca, tj. deca iz svih slojeva društva. Nadalje, to reflektuje i kriterijum upisa, jer prednost pri upisu imaju deca roditelja koji su u radnom odnosu. U Srbiji postoji samo "klasična" ponuda predškolskih ustanova (ceo dan ili pola dana), što ukazuje na nefleksibilnost rada vrtića; nema sistema za akreditaciju, dovoljne statistike o radu i deci, kao ni jasnog standarda kvaliteta i njegovog praćenja. Konačno, ključni element podrške radu od strane nadležnih resora i institucija ne postoji u pogledu saradnje. Ipak, postoji nekoliko polja na kojima se situacija znatno može poboljšati, a ona se tiče stvaranja zakonske mogućnosti za integrisanje privatnih predškolskih ustanova. Time se može povećati obuhvat dece, ali pod uslovom da se primeni sistem akreditacije programa i ustanova. Takođe, trenutni postojeći resursi sistema predškolskog vaspitanja i obrazovanja (kadrovski, prostorni, finansijski) mogu se iskoristiti za diversifikaciju programa i usluga. Najveće opasnosti koje mogu ugroziti rad predškolskih ustanova su nedovoljna informisanost javnosti, kreatora politika i donosioca odluka o značaju ranog razvoja dece za njihov sveukupni razvoj i za dugoročni razvoj zemlje. Kada je u pitanju finansijski aspekt, na nacionalnom i lokalnom nivou postoji manjak finansijskih sredstava. Lokalne samouprave su nedovoljno osposobljene za planiranje strateškog razvoja i za korišćenje drugih izvora finansiranja (npr. EU fondova), a raspodela odgovornosti i finansijskih resursa između nadležnih resora takođe nije na zavidnom nivou. Raspoložive predškolske ustanove u odnosu na broj dece u Republici Srbiji navode na zaključak da:[25]

- obuhvat dece u vrtićima je mali i ne zadovoljava potrebe dece i porodica;
- postoji značajno zaostajanje u poređenju sa zemljama EU i nekim bivšim jugoslovenskim republikama;
- obuhvat dece je duboko nepravičan, jer su najmanje obuhvaćena deca iz marginalizovanih društvenih grupa za koje je neophodan rani podsticaj razvoja (na taj način Republika Srbija ne ostvaruje prvi od ciljeva globalnog programa Obrazovanje za sve).

Ukoliko se pogleda stanje u EU može se videti da je protekle 72 decenije porastao broj dece koja su uključena u predškolsko obrazovanje. U 2009. u EU je predškolsku nastavu pohađalo 92% dece, starosne dobi od 4 godine do godina određenih za polazak u osnovnu školu, dok je taj procenat 2000. iznosio 86%. U 11 članica, stopa dece uključene u predškolsko obrazovanje iznosila je čak 92% u 2009, čime su te zemlje već ostvarile ciljeve u obrazovanju i obuci za 2020. Pritom, značajan napredak ka ostvarivnaju tog cilja zabeležen je u Letoniji, gde se stopa dece uključene u predškolsko obrazovanje povećala sa 65% na 90%, Kipru (sa 65% na 86%), Litvaniji (sa 61% na 80%), Finskoj (sa 55% na 72%), Rumuniji (sa

[25] Pećanas, R. (2010): Obavezno obrazovanje i vaspitanje u sistemu obrazovanja, Norma, Vol. 15, Br.2, str.201-210.

68% na 82%) i Poljskoj (sa 58% na 71%). U Hrvatskoj je 69% dece bilo obuhvaćeno predškolskim obrazovanjem, u Makedoniji samo 28%, a u Turskoj 32% u 2009. U Japanu gotovo sva deca predškolskog uzrasta, 98%, uključena su u predškolsko obrazovanje, dok taj procenat u SAD iznosi 66%. U predškolske ustanove u Srbiji u istom periodu upisano je 51,6% dece starosne dobi od 3 do 6 godina, dok obavezno pripremno predškolsko pohađa 87,8% dece. Ovde se postavlja pitanje koji je razlog velikog raskoraka u pohađanju predškolskog obrazovanja u Srbiji i ostalim zemljama EU. Da li je ta razlika u samom sistemu obrazovanja i vaspitanja, ili visokoj stopi nezaposlenosti, pa samim tim nemogućnosti plaćanja obdaništa, pa roditelji odlučuju da samostalno brinu o deci? Takođe, značajno je pitanje čuvanja dece od strane ostalih članova porodice (bake, deke i sl.) i poverenje roditelja u predškolske ustanove.

Kao što je pomenuto, i što SWOT analiza ubedljivo demonstrira, jeste činjenica da je posao menadžera donekle ograničen političkim, ekonomskim i socijalnim faktorima okoline. Međutim, to ne treba da preusmeri menadžere i zaposlene u vrtićima na stav o nepromenljivosti i obeshrabrenost. Pitanje socijalne nejednakosti, na primer, na lokalnom nivou, radom menadžera koji upravlja ljudskim resursima i ima jasnu viziju i uspostavljenu kulturu poslovanja, može se posredno uticati na vaspitače i izgradnju atmosfere prihvatanja u radu jedne predškolske institucije. Trenutno, upravljačke (menadžerske) akcije u predškolskim ustanovama Republike Srbije sadrže:

1. opšte osnove predškolskog programa koje donosi Nacionalni prosvetni savet, i
2. aktivnosti kojima se doprinosi svim aspektima razvoja.

Upravljanje uglavnom prolazi kroz dve faze:

- U prvoj se bira upravljačka akcija koja obuhvata izbor sadržaja, metoda, oblika, sredstava, kako bi došlo do optimalnih rezultata;
- Druga faza podrazumeva sprovođenje upravljanja. Vaspitač preduzima odgovarajuće akcije kako bi se postigao odgovarajući cilj. Ciljevi mogu biti različiti, opšti ili dugoročni.

Ove dve faze vrše se na tri nivoa:[26] strategijskim, taktičkim i operativnim upravljanjem. Glavni nosioci strategijskog upravljanja jesu Ministarstvo prosvete i Nacionalni prosvetni savet. Ministarstvo prosvete donelo je i Pravilnik[27] o bližim uslovima za početak rada i obavljanje delatnosti ustanova za decu. Pravilnik o opštim osnovama predškolskog programa obezbeđuje naučnu zasnovanost delatnosti dečijih vrtića. Odlučujuću ulogu u taktičkom upravljanju ima Ministarstvo prosvete koje je zaduženo da na različite načine vodi računa o uspeš-

[26] Buble, M. (2006.): *Osnove menadžmenta*. Zagreb, Sinergija.

[27] Pravilnih o bližim uslovima za početak rada i obavljanja delatnosti ustanova za decu (Sl. glasnik RS, br 50/94 i 6/96)

noj realizaciji programa u dečijem vrtiću. U okviru sektora za osnovnoškolski i predškolski uzrast postoje savetnici za predškolski uzrast. Na čelu je pomoćnik ministra za ovaj sektor. Njemu su podređeni načelnici koji koordiniraju rad savetnika. Savetnici su zaduženi za planiranje i razvoj predškolskog sistema. Pored njihove delatnosti postoje i školske Uprave Beograda i različitih regiona u zemlji. Operativno upravljanje se vrši neposrednom realizacijom u neposrednoj praksi u vrtiću. Od vaspitača koji je na „ulazu", direktno će zavisiti efekti „izlaza". Iz tog razloga se u literaturi neprestano stresiraju mnogobrojne uloge i vaspitača, ali i menadžera. U navedenim načinima upravljanja, i direktorska uloga je od važnosti. Direktorski poslovi vezani za menadžment neophodni su za organizaciju svakodnevnog života predškolske ustanove i odnose se na planiranje, analiziranje, organizaciju i nadzor, a poslovi vezani za vođstvo vezuju se za ljude, njihovo ponašanje, stil rada, komunikaciju i motivisanje. Aktivnosti direktora predškolskih ustanova u Srbiji mogu se posmatrati kroz sledeće:[28]

- Planiranje rada ustanove (direktor obezbeđuje donošenje i sprovođenje planova rada ustanove),
- Organizacija ustanove (direktor obezbeđuje efikasnu organizaciju ustanove),
- Kontrola rada ustanove (direktor obezbeđuje praćenje, izveštavanje, analizu rezultata rada ustanove i preduzimanje korektivnih mera),
- Upravljanje informacionim sistemom ustanove (direktor obezbeđuje efikasno upravljanje informacijama u saradnji sa upravom i lokalnom samoupravom),
- Upravljanje sistemom obezbeđenja kvaliteta ustanove (direktor razvija i realizuje sistem osiguranja kvaliteta rada ustanove).

Brojne analize ukazuju da investiranje u rano vaspitanje i obrazovanje obezbeđuje značajne ekonomske uštede u kasnijim obrazovnim ciklusima i daje osnovu za celokupni razvoj osobe. U Srbiji nema preciznih podataka o ekonomskoj isplativosti sistema predškolskog vaspitanja i obrazovanja. U nekim regionima kapaciteti ustanova su nedovoljno iskorišćeni, dok su u drugim regionima kapaciteti iskorišćeni preko 100%, tj. broj dece u vaspitnim grupama daleko premašuje zakonsku pedagošku normu (u nekim vaspitnim grupama upisano je i do 50 dece sa tri vaspitača u istom vaspitnom prostoru), čime se ozbiljno ugrožava kvalitet nege i vaspitno-obrazovnog rada, smanjuje bezbednost dece i ugrožava njihov lični i socijalni razvoj. Posmatrajući ekonomsku situaciju u Republici Srbiji, kriza poslednjih godina i životni standard umnogome su imale uticaja i na predškolsko obrazovanje. Reforme koje su se desile u društvu odrazile su se kako na obrazovnu sferu, na predškolsko vaspitanje i obrazovanje, tako i na istaknutu ulogu menadžmenta u ovim institucijama. Ovi podaci to pokazuju, ali osvetljavaju i zone narednog razvoja u kojima ključnu ulogu mogu nositi menadžeri

[28] Pravilnik o standardima kompetencija direktora ustanova obrazovanja i vaspitanja, „Sl. glasnik RS", br. 38/2013

obrazovanja, sa jakim kompetencijama u komunikaciji i poslovanju. U lancu uticaja od direktora do vaspitača, napor usmeren ka poboljšanju svake karike može se povoljno odraziti na zdrav razvoj i negu najmlađih učenika, kao i na njihovo učenje.

5. Zaključak

Obezbeđivanje kvalitetne, podržavajuće sredine za decu koja prelaze iz roditeljskog doma u novu okolinu, zahteva visok nivo organizacije koja počiva na percepciji važnosti posvećenog pedagoškog rada. U zemljama u razvoju kao što je Srbija, pitanju menadžmenta nije posvećena potrebna pažnja. Pregledom postojećih statističkih podataka koji govore o nedovoljnom broju predškolskih institucija, nedovoljnim finansijskim sredstvima i neravnopravnosti u pogledu uključenja dece različitih slojeva društva, postaje jasna potreba za kompetentnim, obrazovanim menadžerima. Menadžeri u obrazovanju imaju cilj da usaglase sve nivoe upravljanja i unaprede njihovu efikasnost, donoseći važne odluke o svim aspektima poslovanja. Imajući u vidu najbolji interes dece, tj. usmerenje aktivnosti ka praktičnim, primenljivim znanjima i veštinama relevantnim za dalje školovanje i život, vešt menadžer upravlja i vodi računa o svim zaposlenima, njihovoj motivaciji i zadovoljstvu. Različite opisane uloge menadžera koje u srži drže opšti strateški plan, inkorporirane u funkcionalni sistem jedne predškolske ustanove, mogu dovesti do promena sa potencijalom generalizacije na ceo obrazovni sistem i društveno-ekonomski razvoj. Pod tim se podrazumeva veća fleksibilnost, rast kompetencija zaposlenih, bolji performans, balansiranje društvenih nejednakosti, i na kraju, jače kompetencije dece koja ulaze u sistem školovanja.

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MANAGEMENT IN PRESCHOOL INSTITUTIONS

The development of education in the modern age, following the global progress of knowledge and technology, requires the engagement of managers in preschool institutions. Educational management primarily relies on detailed planning, decision making regarding goals and strategies, and the coordination of human resources. Its overall aim is the effective and efficient functioning of every aspect of the educational process. Through his work, the manager can contribute to the quality of knowledge flow and support the development of the educational system, which is very relevant for a developing country such as the Republic of Serbia. In preschool institutions, where the youngest generation socializes, learns and prepares for further education, the role of a manager needs to be reinforced. With the innovation, dedication and creativity in managing, the manager can strengthen the general organization and the network of employees, which can positively reflect on the inducement of children's potential and key competencies.

The aim of this paper is to point out the significance of management in preschool institutions, with an emphasis on human resource management and its relationship with the role of a teacher. Additionally, the state of preschool institutions in the Republic of Serbia is analyzed, with the indication of certain weaknesses and potential chances of the educational system. In it, the implementation of management can serve as an incentive for prosperity.

Keywords***: Management,*** *Education, Preschool institutions*

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DEJSTVO RATA I RATNOG STANJA NA MEĐUNARODNE ODNOSE DRŽAVA

Rad se bavi dejstvom izbijanja rata odnosno ratnog stanja ne međunarodne odnose država. Prvo je dat kratak osvrt na razliku između rata kao faktičke i ratnog stanja kao pravne kategorije. Zatim je u okviru posebnih odeljaka razmotreno njihovo dejstvo na odnose sa neprijateljem (stupanje na snagu pravila ratnog i humanitarnog prava, prekid diplomatskih odnosa, dejstvo na ugovore, položaj neprijateljskih državljana), na odnose sa saveznicima, na odnose sa neutralnim državama (prava i obaveze neutralnih država, položaj neutralnih stranaca itd.) i, na kraju, na odnose sa međunarodnim organizacijama (koje se mogu javiti u ulozi neprijatelja, saveznika, neutralne strane, ali i u posebnoj ulozi faktora koji se stara o očuvanju svetskog mira). Zaključak je da su mnoga pitanja koja se tiču dejstva rata, odnosno ratnog stanja na odnose sa međunarodnim organizacijama, nedovoljno obrađena u pravnoj literaturi.

Ključne reči: *Rat, Ratno sanje, Međunarodno pravo, Neprijatelj, Neutralna država, Međunarodne organizacije*

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1. Rat i ratno stanje

1. Rat. - Rat se može shvatiti i definisati na razne načine.[1]

Ovde imamo u vidu rat u užem smislu, što znači ozbiljan oružani sukob između dveju ili više država, radi nasilnog ostvarenja političkog ili drugog interesa. Taj interes može biti različit i može se ogledati u želji da se otme tuđa teritorija, da se drugoj zemlji nametne određeno društveno uređenje (npr. kapitalizam) ili oblik vladavine (npr. monarhija), da se pohvataju i kazne politički, verski i drugi prvaci određene države, da se otme neko važno dobro itd.

U sklopu razmatranja kojima se bavimo u ovom radu zapravo i nije važno koji su konkretni uzroci i motivi izbijanja rata. Bitno je nešto drugo, a to je činjenica da ovde nemamo u vidu unutrašnje oružane sukobe, kao ni relativno beznačajne oružane okršaje između država kakvi su npr. čarke na granici, bez ili sa malim brojem žrtava; razmena vatre između dva ratna broda; sporadično raketiranje ciljeva na tuđoj teritoriji koje nije preraslo u veći sukob i slično.[2] To je i razlog zbog kog ovde koristimo termin "rat" koji je u naše vreme uglavnom napušten u korist šireg pojma "oružani sukob".[3]

U naše vreme Povelja UN i čitavo pozitivno međunarodno pravo izričito zabranjuju ne samo upotrebu, već i pretnju silom u međunarodnim odnosima. Štaviše, agresija je najteži međunarodni zločin, a lica odgovorna za nju (planeri i izvršioci) mogu pod određenim uslovima biti suđena od strane Međunarodnog krivičnog suda.[4] Pa ipak, međunarodni oružani sukobi, pa i pravi ratovi nisu zbog toga iščezli. Oni se,

[1] Wright Quincy (1942): *A Study of War,* Volume I, Chicago 5-7; Radojković Miloš (1947): *Rat i međunarodno pravo,* Beograd, 3, 24; Gažević Nikola: (1974) *Vojna enciklopedija,* tom 7, Beograd, odrednica „Rat“, 746; Detter Delupsis Ingrid (2000): *The Law of War,* Cambridge University Press, 5-26; Kegli Čarls V., Vitkof Judžin R. (2004): *Svetska politika – trend i transformacija,* Beograd, 579; Krivokapić Boris (2017a): *Mir i rat u međunarodnim odnosima i pravu,* Beograd, 451-463.

[2] Premda vrlo lako mogu da se izrode u njega, takve situacije obično se ne doživljavaju i ne označavaju kao rat. Ovo posebno kad sve prođe bez težih posledica.

[3] O oružanom sukobu ima smisla govoriti naročito u vezi sa primenom pravila humanitarnog prava i odgovarajućim normama međunarodnog krivičnog prava. Nas, međutim, ovde zanimaju prvenstveno odnosi između država, te je termin "rat" ne samo prihvatljiv, već zapravo i precizniji. Ovo i zato što ima oružanih sukoba u kojima niko ne vidi rat, kakvi su npr. puškaranje između graničara, kratkotrajna intervencija komandosa i slično. Drugim rečima, premda je svaki rat – oružani sukob, nije svaki oružani sukob – rat.

[4] Za zločine protiv mira sudili su, uostalom, odmah nakon završetka Drugog svetskog rata, međunarodni vojni sudovi, na poznatim procesima u Nirnbergu i Tokiju. Zanimljive osvrte na zločin agresije vidi u: Koran Surendran (2012): „The International Criminal Court and Crimes of Aggression: Beyond the Kampala Convention“, *Houston Journal of International Law* 2/2012, 231-288; Grzebyk Patrycja (2013): *Criminal Responsibility for the Crime of Aggression,* Routledge; Sayapin Sergey (2014): *The Crime of Aggression in International Criminal Law,* Asser Press, Springer; Kreiß Claus, Barriga Stefan, eds. (2016): *The Crime of Aggression – A Commentary,* Cambridge University Press; Dannenbaum Tom (2017): "Why Have We Criminalized Aggressive War“, *Yale Law Journal* 5/2017, 1242-1318; Weisboard Noah (2009): "Conceptualizing Aggression", *Duke Journal of Comparative & International Law* 1/2009, 1-68;

nažalost vode i danas, a mnogo toga nas upozorava da smo u predvečerje jos jednog velikog (nadamo se ne i novog svetskog) rata.

2. Izbijanje rata. - Kao što se sam rat može doživeti na razne načine, tako se različito može shvatiti i dejstvo koje ima njegovo izbijanje.

Može se govoriti o dejstvu rata na unutrašnjem planu (na odnose u datoj državi) i o njegovom dejstvu u međunarodnim okvirima. Gledano iz drugog ugla, može se govoriti o dejstvu izbijanja rata na međunarodne ugovore, o teritorijalnom dejstvu rata, o njegovom dejstvu u odnosu na lica itd.[5]

Ovde će biti reči samo o dejstvu izbijanja rata na odnose između država i, jednim delom, odnose između država i međunarodnih organizacija.

3. Ratno stanje. – Strogo uzev, treba pre govoriti o dejstvu uspostavljenog ratnog stanja, nego o dejstvu izbijanja rata. Ovo zato što premda u tesnoj vezi, rat i ratno stanje nisu isto.

Rat je faktički događaj (činjenica), a ratno stanje je pravna kategorija. Rat je opis onoga što se dešava (oružani sukob), a ratno stanje je naziv za pravno regulisane odnose koji su sa tim u neposrednoj vezi.

U pitanju su različite društvene pojave koje kao takve imaju sopstveni značaj i ulogu, a neretko i različito vreme nastanka i prestanka. Početak odn. kraj rata mogu se poklopiti sa početkom odn. krajem ratnog stanja, ali ne mora uvek biti tako. Ovo zato što ratno stanje može postojati nezavisno od toga da li se stvarno vode borbe, odn. ratne operacije.

Tako je npr. u principu moguće da je objavom rata između država zvanično uspostavljeno ratno stanje, a da još nema stvarnog rata (ne izvode se neprijateljstva), pa čak i da do stvarnih sukoba nikada ne dođe.[6] To će biti slučaj ako se u međuvremenu (nakon proglašenja ratnog stanja, a pre otpočinjanja stvarnih neprijateljstava) spor reši mirnim putem; ako odnosi pređu u neku vrstu mirovanja[7] ili zato što za vreme trajanja ratnog stanja protivnici iz nekog razloga nijednom ne budu u prilici da se sukobe.[8]

Weisbord Noah (2011): "Judging Aggression", *Columbia Journal of Transnational Law* vol. 50, 82-158.

5 Perazić Gavro (1986): *Međunarodno ratno pravo,* Beograd, 96-101; Krivokapić Boris 575-654.

6 Tako je npr. „rat" između Holandije i ostrva Sili (*Scilly Islands*) trajao 335 godina (1651-1986) bez ijednog okršaja, sve dok 1986. holandski ambasador u Ujedinjenom Kraljevstvu nije posetio Ostrva i potpisao mir.

7 Kad je 1904. počeo rusko-japanski rat, Crna Gora je, kao saveznik Rusije, objavila rat Japanu. Japan je 1906. zaključio mir sa Rusijom, ali ne i sa Crnom Gorom, sa kojom se realno nikada nije ni sukobio. Već 1914. izbio je Prvi svetski rat, nakon koga je Crna Gora ušla u sastav Kraljevine SHS odn. Jugoslavije, tako da se na crnogorsko-japanski rat zaboravilo. Tek kada je 2006. Crnu Goru, nakon njenog osamostaljenja, posetila japanska delegacija, ne samo da je Japan zvanično priznao Crnu Goru, već je potvrđeno i da je su rat odn. ratno stanje završeni.

8 Pred sam kraj Prvog svetskog rata niz latinoameričkih država objavilo je rat Nemačkoj i Austrougarskoj – ne došavši u poziciju da se sa njima zaista sukobi. Slična situacija se

Moguća je i suprotna situacija. Može se dogoditi i ponekad se događa da se stvarno ratuje, a da ratno stanje među državama nije proglašeno, ili da makar nije uspostavljeno u punom kapacitetu. Praksa nudi niz primera ratova povodom kojih nijedna od sukobljenih strana iz nekog razloga nije formalno proglasila da je u ratnom stanju sa onom drugom. Stoga se dešava da, premda oružani sukob realno postoji, ne nastupaju mnoge pravne posledice koje su odlika ratnog stanja - nema prekida diplomatskih odnosa među stranama u sukobu, nema ukidanja ili suspendovanja međusobnih ugovora i slično.

Ipak normalno je da rat ima za posledicu uspostavljanje ratnog stanja. Ono proizvodi određene pravne i faktičke posledice i na unutrašnjem, i na međunarodnom planu. Ovde nas zanimaju upravo ove poslednje.[9] Među njima je moguća dalja podela s obzirom na to da li se tiču odnosa sa neprijateljem, sa saveznicima, sa neutralnim državama ili sa međunarodnim organizacijama.

2. Odnosi sa neprijateljem

Opšte uzev, na međunarodnom planu ratno stanje se uspostavlja objavom rata[10] ili početkom faktičkih dejstava tj. oružanih neprijateljstava.[11]

Činjenica da su miroljubivi i prijateljski odnosi između država ustupili mesto suprotnim, neprijateljskim, u principu dovodi do niza vrlo važnih pravnih posledica. Ovde će biti ukazano samo na najvažnije među njima.

1. Stupanje na snagu pravila ratnog i humanitarnog prava. – Kada se između država uspostavi ratno stanje, otvaraju se pitanja kojih nema u miru: gde i protiv koga mogu da se vode ratne operacije, ko sme da učestvuje u njima, koje su metode i sredstva borbe zabranjeni, koje su kategorije ljudi i objekata kako zaštićene, kakav je status učesnika oružanog sukoba, kako se zaključuju i koje je dejstvo primirja itd. Ova materija regulisana je onim delom međunarodnog prava koje se zove ratno i humanitarno pravo, odn. pravo oružanih sukoba. Jedna od najvažnijih posledica izbijanja rata, odn. uspostavljanja ratnog stanja, ogleda se upravo u tome da počinju da se primenjuju pravila međunarodnog prava oružanih sukoba.

Ova materija kodifikovana je putem niza konvencija.[12] Ako se dogodi da sukobljene strane nisu članice istih ugovora iz ove materije (što je u naše vreme

ponovila i u Drugom svetskom ratu, kada su neke latinoameričke zemlje bile u ratnom stanju sa silama Osovine, a da između njihovih oružanih snaga nije bilo nikakvih neprijateljstava.

9 Za unutrašnje posledice vidi: Krivokapić Boris 578-580.

10 To se danas više ne čini, jer bi time odnosna strana samu sebe označila kao agresora.

11 Фердросс А. Ф. (1959): *Международное право,* Москва, 427.

12 Perazić Gavro 15-36; Vučinić Zoran (2006): *Međunarodno ratno i humanitarno pravo,* Beograd, 95-111; Knežević Predić Vesna, Avram Saša, Ležaja Željko, (2007): *Izvori*

skoro nemoguće, bar kada su u pitanju najvažniji odnosni ugovori) među njima u najmanju ruku dejstvuju odgovarajuća pravila univerzalnog običajnog prava koja su kao takva obavezna za sve.[13]

2. Diplomatski odnosi. – Pravilo je da se uspostavljanjem ratnog stanja između država, automatski kidaju njihovi međusobni diplomatski odnosi.[14]

U tom slučaju država prijema dužna je da omogući svim članovima diplomatske misije protivne strane, osim sopstvenim državljanima, i članovima porodica tih lica, ma kog državljanstva oni bili, da u najkraćem roku napuste njenu teritoriju, a takođe da poštuje i štiti prostorije misije, njenu imovinu i arhivu.

Država imenovanja može poveriti na čuvanje prostorije misije sa imovinom koja se u njima nalazi, kao i arhivu, nekoj trećoj državi (sila zaštitnica) koju prihvata i država prijema. Pod istim uslovima ona može poveriti trećoj državi zaštitu svojih interesa i interesa svojih državljana.

3. Dejstvo rata na ugovore. – U prošlosti se smatralo da izbijanjem rata prestaju da važe svi ugovori između zaraćenih strana. Danas se, međutim, vodi računa o predmetu i cilju ugovora i nameri ugovornica, pa se primećuje između strana u sukobu: 1) neki ugovori ostaju na snazi; 2) određeni ugovori prestaju da važe; 3) dejstvo izvesnih ugovora se suspenduje (privremeno obustavlja) do kraja rata; 4) neki ugovori počinju da dejstvuju; 5) izbijanje neprijateljstava stvara potrebu za zaključenjem novih ugovora između odnosnih strana.[15]

Smatra se da su neki ugovori takve prirode da izbijanje oružanog sukoba ne sme da utiče na njih. Tu se prvenstveno misli na najvažnije univerzalne i regionalne međunarodne sporazume iz materije ljudskih prava. Njihov značaj je po mnogo čemu izuzetan, a njihova primena može doći u obzir i prema državljanima neutralnih, pa i neprijateljskih država. Premda se neka ljudska prava pod određenim uslovima i na propisani način mogu suspendovati ili ograničiti, postoje i ona koja se uvek moraju poštovati.[16] Dakle, najmanje u tom delu ovi sporazumi ostaju na snazi.

humanitarnog prava, Beograd; Jončić Vladan (2010): *Međunarodno humanitarno pravo,* Beograd, 75-99; Solis Gary D. (2010): *The Law of Armed Conflict: International Humanitarian Law in War,* Cambridge University Press, 11-20; Scott Shirley V. (2010): *International Law in World Politics,* Boulder, 243-263; Krivokapić Boris 552-567, 656-657.

13 Krivokapić Boris (2012): *Običajna pravna pravila u međunarodnom pravu, Megatrend revija* 3/2012, 63-65.

14 Ipak, u praksi nije uvek tako. Do prekida diplomatskih odnosa nije došlo tokom indijsko-kineskog sukoba 1962, indijsko-pakistanskog sukoba 1965, agresije NATO na Jugoslaviju 1999. i dr. Za vreme NATO agresije Jugoslavija je prekinula diplomatske odnose sa svega nekolicinom članica Alijanse, dok je iz ostalih samo pozvala svoje ambasadore na konsultacije.

15 Krivokapić Boris (2017b): *Međunarodno javno pravo,* Beograd, 250-251.

16 Mogu se uvesti policijski čas, zabrana okupljanja, cenzura itd. Ipak, određena prava su apsolutno zaštićena i ne mogu se nikada ukinuti niti ograničiti. Tu spadaju pravo na život; zabrana mučenja, zabrana nečovečnog ili ponižavajućeg postupanja ili kažnjavanja; zabrana ropstva; sloboda misli, savesti i veroispovesti; itd. Paunović Milan, Krivokapić Boris, Krstić Ivana (2018): *Međunarodna ljudska prava,* Beograd, 63-67.

Neki ugovori se automatski ukidaju, kao nespojivi sa ratnim stanjem. To će npr. biti slučaj sa ugovorima o vojnom savezu, o uzajamnoj pomoći, o prijateljstvu, o mirnom rešavanju sporova, o neutralnosti i slično.

Jedan broj ugovora se ne ukida, ali se njihovo izvršenje privremeno obustavlja (suspenduje) do kraja rata. To je slučaj sa mnogim ugovorima kojima su kodifikovane odnosne materije (Bečka konvencija o diplomatskim odnosima, Konvencija UN o pravu mora itd.), kao i sa ugovorima o pravnoj pomoći, ugovorima iz oblasti međunarodnog privatnog prava, tehničkim sporazumima i slično.

Sa druge strane, izbijanjem rata izvesni ugovori počinju da dejstvuju. Reč je o ugovorima iz oblasti ratnog i humanitarnog prava, koji po svojoj prirodi imaju primenu tek u slučaju oružanog sukoba. Takvi su Haška konvencija o zakonima i običajima rata na kopnu (1907), Ženevske konvencije o zaštiti žrtava rata (1949) i dr.

U praksi je, međutim, teško sprovesti preciznu podelu, odnosno pouzdano klasifikovati ugovore prema načinu na koji oružani sukob utiče na njih.

Događa se i da je neki oružani sukob velikog intenziteta, ali kratkotrajan, tako da ne uspe da proizvede sve načelno predviđene pravne posledice, pa ni one na međunarodne ugovore; da jedna, ili čak obe strane odbijaju da priznaju da je posredi rat (nazivaju sukob drugim imenom – intervencija, kampanja i slično); da strane u sukobu izričito ili prećutno ostave na snazi odn. u primeni neke ugovore koji bi redovnim tokom stvari trebalo da budu suspendovani,[17] itd.

Konačno, osim što na određeni način utiče na postojeće ugovore strana u sukobu, izbijanje oružanog sukoba izaziva i potrebu za zaključenjem novih sporazuma kojima se regulišu određene situacije koje nastaju u toku ili povodom neprijateljstava. Misli se na ugovore o primirju, sporazume o razmeni zarobljenika, sporazum o kapitulaciji, ugovor o miru i slično.[18]

4. Neprijateljski državljani. – Neprijateljskim državljaninom ili neprijateljskim strancem naziva se građanin države s kojom se sopstvena država nalazi u ratnom stanju.

U praksi se značenje ovog pojma neretko proširuje, pa se pod neprijateljskim državljaninom podrazumeva svako lice koje boravi na teritoriji koja se nalazi pod vlašću neprijatelja (dakle, i državljani neutralnih zemalja i stanovnici teritorija koje je neprijatelj okupirao).[19]

Lica koja se u trenutku izbijanja rata zateknu na teritoriji neprijateljske države imaju na osnovu čl. 35. Ženevske konvencije o zaštiti građanskih lica za

[17] Već je pomenuto da premda u principu ratno stanje automatski dovodi do prekida diplomatskih odnosa između sukobljenih strana, događalo se i da odnosne države ne kidaju ove odnose i zadržavaju diplomatska predstavništva jedna kod druge. Samim tim, među njima su i dalje ostajali na snazi Bečka konvencija o diplomatskim odnosima (1961) i odnosni bilateralni sporazumi.

[18] Krivokapić Boris (2017a): 762-766, 915-935.

[19] Tokom Drugog svetskog rata ponekad se išlo tako daleko da je za neprijateljskog državljanina smatran i sopstveni državljanin koji je dobrovoljno ostao na neprijateljskoj teritoriji.

vreme rata (1949) pravo da je napuste, ali ih neprijateljska država može zadržati i internirati ako to zahtevaju razlozi njene bezbednosti.

3. Odnosi sa saveznicima

Glavno dejstvo izbijanja rata odn. ratnog stanja na odnose sa saveznicima ogleda se u aktiviranju ugovora o savezništvu, o kolektivnoj odbrani i slično.[20] Ovde se, dakle, misli na one saveze koji su ugovoreni još u miru i počinju da dejstvuju u vezi sa nastalim sukobom, a ne na razna savezništva koja mogu da se jave nakon početka sukoba.

Povelja UN dozvoljava sklapanje odbrambenih saveza, precizirajući u čl. 51. da ništa u njoj „ne umanjuje urođeno pravo na individualnu ili kolektivnu samoodbranu u slučaju oružanog napada protiv člana Ujedinjenih nacija, dok Savet bezbednosti ne preduzme mere potrebne za očuvanje međunarodnog mira i bezbednosti".

4. Odnosi sa trećim (neutralnim) državama

1. Neutralnost. - Izbijanje oružanog sukoba odn. uspostavljanje ratnog stanja između država utiče i na njihove odnose sa trećim zemljama, onima koje nisu uključene u sukob. Stupaju na snagu ona pravila međunarodnog ratnog prava koja uređuju prava i obaveze neutralnih država i sa tim povezana pitanja. Stoga je pravilo da strane između kojih je izbio oružani sukob o tome bez odlaganja obaveštavaju treće (neutralne) države.

Najkraće rečeno, neutralnost[21] je naziv za nepristrasan položaj države koja ne učestvuje u ratu, priznat od strane drugih država.[22] Poznato je da neutralnost može biti privremena (obična) ili stalna, ali to izlazi izvan okvira ovog rada.[23]

[20] Premda u načelu mogu postojati razni savezi, ovde se imaju u vidu prvenstveno vojni savezi. Vučinić Zoran (1996): *Vojni savezi od Svete alijanse do NATO*, Beograd; Vukadinović Radovan (2004): *Međunarodni politički odnosi,* Zagreb 2004, 163-175; Dafild Džon S., Mičota Sintija, Miler Sara En (2012): „Savezi", u: Vilijams Pol D.: *Uvod u studije bezbednosti,* Beograd, 377-394.

[21] Od lat. *neutralis*, nepristrasan, koji ne pripada nijednoj strani, *neuter*, ni jedan ni drugi.

[22] Radojković Miloš 155-169; Perazić Gavro 274-305; Van Boven Theo C. (1984): „Some reflections on the principle of neutrality", in: Swinarski Christophe (ed.) *Studies and essays on international humanitarian law and Red Cross principles in honor of Jean Pictet,* Martinus Nijhoff Publishers, 643-654; Vučinić Zoran (2006): 411-423; Ганюшкин Б.В. (1985): *Нейтралитет и неприсоединение*, Москва, 10-17; Novaković Igor (2011): "Koncept neutralne države", *Međunarodni problemi* No. 1147, 5-20; Bothe Michael (2013): „The Law of Neutrality", in: Fleck Dieter (ed.): *The Handbook of Humanitarian Law in Armed Conflicts,* Oxford University Press, 549-580.

[23] Ipak, da podsetimo da se privremena neutralnost tiče se samo konkretnog oružanog sukoba, tako da odnosna država, mada neutralna u odnosu na njega, može zaratiti s

Neutralnost je poznata još od prvih zabeleženih ratova. Prvo se radilo o faktičkoj poziciji, ali se ubrzo takav položaj utvrđuje i međunarodnim ugovorima i sadržinski razvija, u smislu sve preciznijeg definisanja pravnog položaja neutralne zemlje.[24] Time neutralnost postaje jedan od najvažnijih instituta ratnog prava. Mada su ponekad u praksi grubo kršena,[25] ova pravila su u najvećem broju slučajeva dosledno poštovana.

Premda je u naše vreme klasičan institut neutralnosti prevaziđen, pa i u sukobu sa osnovnim principima savremenog međunarodnog prava (u situaciji kada je agresija proglašena međunarodnim zločinom nije prihvatljiv nepristrasan odnos napadaču i njegovoj žrtvi), o neutralnosti se govori i danas. Ovo zato što su, nažalost, ratovi i dalje prisutni, s tim da ponekad nije moguće utvrditi ko je otpočeo sukob, kao i zbog činjenica da se države neretko ponašaju vođene svojim interesima, na način koji nije u svemu u skladu sa međunarodnim pravom. Kako god bilo, institut neutralnosti deo je i pozitivnog prava oružanih sukoba.

Ne samo što ne učestvuje u ratu, neutralna država je dužna i da se nepristrasno odnosi prema njegovim akterima ne favorizujući ni na koji način bilo koju stranu.

2. Prava i obaveze neutralne države. - U prošlosti se smatralo da je dovoljno da neutralna država ima jednak odnos prema stranama u sukobu - ako pomaže jednu, treba u istoj meri da pomaže i drugu. Pošto je takav odnos bilo teško obezbediti i izmeriti, tako da je uvek ostajala sumnja u pogledu nejednakog

trećom silom, a može tokom trajanja sukoba promeniti stav i ući u rat. Tako je npr. Italija u Prvom svetskom ratu bila neutralna do maja 1915, kada je ušla u rat na strani Antante. Naprotiv, stalna neutralnost znači trajnu nepristrasnost u odnosu na sve oružane sukobe u sadašnjosti i budućnosti. Da bi jedna država bila stalno neutralna, nije dovoljna njena izjava o tome, već je potrebno da takav njen položaj prihvate i garantuju druge države (najčešće velike sile odn. susedne zemlje). Najpoznatija stalno neutralna država je Švajcarska, čija je stalna neutralnost ustanovljena i garantovana na Bečkom kongresu (1815) a zatim potvrđena Pariskim aktom (1815) kao i čl. 435 Versajskog mirovnog ugovora (1919) i čl. 375 Senžermenskog ugovora (1919). Besarabić Vojin L. (1938): *Neutralnost i njena savremena shvatanja,* Beograd, 27-31; Афанасьева О. (1956): „К истории швейцарского нейтралитета", *Международная жизнь* 1/1956, 78-84; Ганюшкин Б.В. 111-180; Havel Brian F (2000): „An International Law Institution in Crisis: Rethinking Permanent Neutrality", *Ohio State Law Journal* 1/2000, 167-266; Aeschimann Stefan et al. (2004): *Swiss Neutrality*", Federal Departmen of Defence, Civil Protection and Sports, Bern; Krivokapić Boris (2017b): 287-288.

24 Pored ostalog, već u Staroj Grčkoj ne samo što je bila poznata neutralnost u odnosu na konkretan sukob, već su postojali i stalno neutralni gradovi i neutralizovane oblasti, čiji je takav status bio potvrđen ugovorima zaključenim između grčkih polisa. O neutralnosti u prošlosti: Besarabić Vojin L. 2-9; Ганюшкин Б.В. 5-8.

25 Primera radi, na samom početku Prvog svetskog rata Nemačka je pogazila stalnu neutralnost Belgije koja je bila garantovana Londonskim sporazumom (1839) umarširavši na njenu teritoriju da bi obišla glavne odbrambene linije Francuza i napala ih sa boka. To se ponovilo u Drugom svetskom ratu, kada je 10.5.1940. Nemačka upala na teritoriju neutralne Belgije i preko nje zaobišla francusku odbrambenu "Mažino liniji".

tretmana zaraćenih sila, kasnije je prevladalo shvatanje da je neutralna strana dužna da se uzdrži od bilo kakve pomoći sukobljenim stranama, dok su ove, zauzvrat, u obavezi da poštuju nepovredivost njene teritorije.[26]

Između ostalog, neutralna država ne sme dozvoliti prelaz preko svoje teritorije trupa i konvoja s municijom ili vojnim snabdevanjem, strana u sukobu. Ona ne sme dozvoliti da se na njenoj teritoriji postave radio-telegrafski i drugi uređaji koji su namenjeni da služe kao sredstvo veze snagama zaraćenih strana na kopnu ili moru. Ona ne sme dozvoliti ni upotrebu ma kakvog uređaja ove vrste koji su zaraćene strane ustanovile na njenoj teritoriji pre rata, isključivo u vojne svrhe, a koji nije otvoren za službu javnog poštanskog saobraćaja.

Sa druge strane, ona nije dužna da zabrani i sprečava privrednu saradnju svojih državljana i pravnih lica sa stranama u sukobu, pa tako ni davanje zajmova, izvoz ili tranzit za račun neke od zaraćenih strana, oružja, municije i slično. Ona, takođe nije dužna da zaraćenim stranama zabrani ili ograniči upotrebu telegrafskih ili telefonskih kablova kao i uređaja bežične telegrafije koji su u njenom ili u vlasništvu kompanija ili pojedinaca, s tim da mora da se ponaša nepristrasno prema obema stranama.

Na teritoriji neutralne države zabranjeno je formiranje vojnih jedinica u korist neke zaraćene strane i otvaranje ureda za vrbovanje. Međutim, činjenica da pojedinci prelaze pojedinačno granicu da bi se stavili u službu jedne od zaraćenih strana ne smatra se povredom neutralnosti i ne povlači odgovornost neutralne države. Drugim rečima, ona nije dužna da spreči svoje državljane koji žele da se kao pojedinci dobrovoljno priključe vojskama zaraćenih strana.

Neutralna država dužna je da razoruža i internira daleko od ratne pozornice trupe zaraćenih strana koje pređu na njenu teritoriju.[27] Ratni zarobljenici koji prebegnu na teritoriju neutralne države ostaju na slobodi, ali im se može odrediti mesto boravka.

Neutralna sila može dopustiti prelazak preko svoje teritorije ranjenicima i bolesnicima koji pripadaju zaraćenim vojskama, pod uslovom da transportna sredstva koja ih dovode ne prenose ni borce, ni ratni materijal. U takvom slučaju dužna je da preduzme potrebne mere sigurnosti i kontrole. Ranjenike i bolesnike koje jedna od zaraćenih strana dovede pod navedenim uslovima na neutralnu teritoriju, a koji pripadaju protivnoj strani, neutralna sila mora čuvati tako da ne mogu ponovo učestvovati u ratnim operacijama.

Ako se ne ponaša u skladu sa obavezama koje prostiču iz njenog neutralnog statusa, država krši svoju neutralnost.

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[26] Ova pitanja, uključujući konkretna prava i obaveze, uređena su naročito V i XIII haškom konvencijom iz 1907. (Konvencija o pravima i dužnostima neutralnih sila i lica u slučaju rata na kopnu odnosno Konvencija o pravima i dužnostima neutralnih sila u slučaju pomorskog rata).

[27] Ako o tome ne postoji posebna konvencija, neutralna država dužna je da snabdeva internirce namirnicama, odećom i pomoći koju zahteva čovečnost. Troškovi interniranja priznaju se prilikom zaključenja mira.

Zaraćene države dužne su da se uzdrže od povrede teritorijalnog integriteta neutralne države, koja, ukoliko do toga ipak dođe, može pribeći oružanoj akciji. Zapravo, pravo je, ali i dužnost neutralne države da ako treba i oružjem brani svoju neutralnost.[28] Međunarodno pravo precizira da se akti koje u toj odbrani preduzima neutralna država ne mogu smatrati neprijateljskim.[29]

Bez obzira na to ko ga je počinio (neutralna država ili zaraćene strane) kršenje neutralnosti je međunarodni delikt i povlači za sobom sankciju koja se najčešće sastoji u naknadi štete. U posebno teškim slučajevima, kršenje neutralnosti može dovesti do rata između oštećene strane i prekršioca.

3. Neutralni državljani. – Jedno od važnih pitanja je i odnos prema državljanima onih zemalja koje ne učestvuju u ratu. Premda se može činiti da je reč o pukom odnosu prema pojedincima, problem je zapravo mnogo osetljiviji, jer bi nepovoljno, a tim pre nezakonito tretiranje njenih državljana moglo nagnati do tada neutralnu državu da uđe u rat.

Neutralni državljanin i njegova imovina moraju, po pravilu, biti poštovani od strana u sukobu. Međutim, državljanin neutralne države koji vrši neprijateljske akte protiv neke strane u sukobu, ili radi u korist njenog neprijatelja (počini akte u njegovu korist, a naročito ako se dobrovoljno stavi u njegovu službu), ne može se pozivati na neutralnost svoje zemlje i strana u sukobu može sa njim postupati kao sa neprijateljskim državljaninom.[30]

Ne smatraju se kao akti počinjeni u korist jedne zaraćene strane izvršene isporuke (uključujući isporuke oružja i municije) ili zajmovi odobreni jednoj od zaraćenih strana, pod uslovom da isporučilac ili zajmodavac ne stanuje na teritoriji druge strane, ni na teritoriji koju je ova okupirala, i da isporuka ne potiče sa tih teritorija. Kao takvi akti ne smatraju se ni usluge učinjene u oblasti policije i civilne uprave.

4. Sila zaštitinica. – Odmah po izbijanju sukoba svaka zaraćena država treba da imenuje svoju silu zaštitnicu – neutralnu zemlju koja je voljna da štiti njene interese, a koju u tom svojstvu prihvata protivnička strana.

Uloga sile zaštitnice je da drugoj zaraćenoj strani predaje saopštenja, proteste, predloge i slično države čije interese štiti; da čuva prostorije diplomatske misije i diplomatsku arhivu te države; da pruža zaštitu njenim državljanima koji se

28 Bez toga bi uvek visila sumnja da neutralna zemlja možda samo glumi neutralnost, a zapravo pomaže neku od strana u sukobu (puštajući je npr. da koristi njenu teritoriju za svoje operacije).

29 Čl. 10. Haške konvencije o pravima i dužnostima neutralnih sila i lica u slučaju rata na kopnu (1907) glasi: "Činjenica da jedna neutralna sila odbija, makar i silom, napade na svoju neutralnost, ne može se smatrati neprijateljskim aktom." Tako npr. za vreme Drugog svetskog rata Švajcarska je oborila 26 aviona ratujućih strana i internirala 203 avijatičara, a da zbog toga niko nije protestovao.

30 Neutralni državljanin koji stupi u oružane snage protivnika gubi neutralni karakter i stiče status pripadnika tih snaga, što znači da dok se tretira kao borac može biti predmet legitimnog napada, a u slučaju zarobljavanja ima status ratnog zarobljenika.

nalaze na teritoriji protivnika; da vrši kontrolu nad primenom humanitarnog prava, prvenstveno Ženevskih konvencija o žrtvama rata (1949) i Dopunskog protokola I uz njih (1977)[31] i dr. Ove funkcije sila zaštitnica obično ostvaruje preko svog diplomatsko-konzularnog osoblja, mada može da imenuje i posebne delegate među svojim državljanima ili državljanima drugih neutralnih zemalja.

Jedna neutralna država može preuzeti zaštitu nekoliko država.[32]

5. Odnosi sa međunarodnim organizacijama

Moglo bi se postaviti pitanje ima li smisla posebno izdvajati odnose koji u vezi sa ratom odn. ratnim stanjem mogu nastati između države i neke međunarodne organizacije. Ovo zato što su u članstvu međunarodnih organizacija države, koje ih, uostalom i stvaraju i preko svojih predstavnika u njihovim organima, rukovode njihovim aktivnostima.[33] Drugim rečima, na prvi pogled sve se u krajnjoj liniji opet svodi na međudržavne odnose. Ipak, nije tako.

Međunarodne organizacije su posebni subjekti međunarodnog prava. Štaviše, one su, uz države, i njegovi najvažniji subjekti. One imaju sopstvenu pravnu ličnost, sopstvena prava i obaveze, sopstvenu volju,[34] imovinu itd. Uz to, neke od njih su se pretvorile u tvorevine koje su negde između međunarodne organizacije i nekakve superdžave (Evropska unija). Već zbog toga, odnos svake države sa najvažnijim međunarodnim organizacijama je vrlo važno pitanje.

Neke međunarodne organizacije (UN, NATO itd.) imaju ili mogu imati i sopstvene oružane snage. Takva situacija u principu postoji i onda kada su te snage sastavljene od nacionalnih kontingenata, ali potčinjene jedinstvenoj komandi međunarodne organizacije. U tom slučaju ona može voditi i ratne operacije.

To ima za posledicu da se u načelu tu može napraviti paralela sa odnosom koji nakon izbijanja rata odn. uspostavljanja ratnog stanja postoji između država.

31 Pored ostalog, odredbom iz čl. 5/1 Protokola precizirano je da su strane u sukobu dužne da od početka sukoba obezbede poštovanje i primenu Ženevskih konvencija i Protokola primenom sistema sila zaštitnica

32 Za vreme Prvog svetskog rata poslanik neutralne Španije u Švajcarskoj u jednom trenutku zastupao je interese 21 zaraćene države. U Drugom svetskom ratu, Švedska je štitila interese 19, a Švajcarska 35 država.

33 Račić Obrad, Dimitrijević Vojin (1980): *Međunarodne organizacije,* Beograd; Feld W.J., Jordan R.S., Hurwitz L. (1983): *International Organizations,* New York; Bennett LeRoy A., Oliver James K. (2004): *Međunarodne organizacije,* Zagreb; Rottberger Volker, Zangl Bernhard, Kruck Andreas (2012): *International Organization,* Palgrave MacMillan; Archer Clive (2015): *International Organizations,* Routledge; Krivokapić Boris (2017b) 351-398.

34 I kada u njima sede predstavnici država (kao npr. u Savetu bezbednosti UN) odluke tih organa nisu prosti zbir volja prisutnih delegacija, niti neka od članica može da stalno nameće ostalima svoje stavove.

Može se dogoditi da za odnosnu državu međunarodna organizacija ima neprijateljski karakter. Primer su odnosi između Jugoslavije i NATO saveza tokom agresije Alijanse 1999. godine. Istini za volju, u praksi se tu obično i dalje vide i međudržavni odnosi i neretko uspostavljaju drugačije ocene i pozicije u zavisnosti od toga o kojoj članici odnosne organizacije je reč i kakva je njena pozicija i u samoj odnosnoj organizaciji i u vezi sa konkretnim oružanim sukobom.[35]

Odnos neprijateljstva može postojati i iz sasvim drugih razloga. To će biti slučaj kada npr. UN preduzmu kolektivnu akciju oružanim snagama da bi pomogle žrtvi agresije. Primer je situacija koja je postojala u vreme Korejskog rata (1950-1953).

Bez obzira na to ko je odgovoran za početak neprijateljstava (da li se međunarodna organizacija javlja u ulozi napadača ili, naprotiv, suprotstavlja se agresoru), mnoge pravne posledice biće slične. Između sukobljenih strana počeće da važe pravila prava oružanih sukoba, najverovatnije će nastupiti određene posledice po njihove diplomatske odnose, ugovore itd.

Ipak, u praksi stvari obično nisu tako jednostavne. Može se dogoditi da i onda kada međunarodna organizacija, u prvom redu OUN, preduzima oružanu akciju za očuvanje svetskog mira, zapravo nema saglasnosti, a time ni solidarnosti i savezništva među njenim vodećim članovima. Štaviše, moguće je i da se među njima rasplamsa oružani sukob, premda se iz raznih razloga može nastojati da se on ne označi kao rat, odnosno ratno stanje. Primer je već pomenuti Korejski rat.[36]

U bilo kojoj varijanti, činjenica da se na jednoj strani (a možda i na obe) bore oružane snage pod komandom i zastavom međunarodne organizacije, otvara niz zanimljivih problema. Neki se tiču toga, kakav je odnos protivničke strane prema toj organizaciji i njenima oružanim snagama, a kakav prema njenim državama članicama i, posebno, onima među njima čiji vojni kontingenti učestvuju u datom sukobu. Tako npr, ko u slučaju zarobljavaja pripadnika oružanih snaga međunarodne organizacije treba da pregovara o njihovom statusu, razmeni, repatrijaciji i slično – funkcioneri te organizacije, ili predstavnici država čije državljanstvo zarobljenici imaju? Šta sa ratnim zločinima koje počine pripadnici međunarodnih oružanih snaga – kome oni odgovaraju? Ko je odgovoran za

35 Tako je npr. Jugoslavija 1999. g. pravila razliku između članica NATO-a koje su najaktivnije učestvovale u agresiji i onih koje su bile prinuđene da se priključe, a posebno onih (Grčka) koje su odbile da u tome učestvuju.

36 Odluka o tome da se Severna Koreja označi kao agresor i UN uključe u sukob na strani Južne Koreje, doneta je uz kršenje odredbe iz čl. 27/3 Povelje UN (iskorišćena je činjenica da je predstavnik SSSR u znak protesta bojkotovao sednice Saveta bezbednosti i prekršeno pravilo koje za donošenje odluke Saveta bezbednosti zahteva potvrdne glasove svih njegovih stalnih članova). Toje dovelo do situacije da se protiv Severne Koreje bore snage UN pod vođstvom SAD, a da se protiv tih snaga (na strani Severne Koreje) bore snage SSSR (osnivač UN i stalni član Saveta bezbednosti) i NR Kine (ona je tek 1971. svoje mesto u UN i, posebno, Savetu bezbednosti). Pri tome nijednom nije izbio i otvoreni rat između pomenutih velikih sila kao takvih.

štetu koju pričine pripadnici oružanih snaga međunarodne organizacije? Kakav je status borca koji se bori protiv svoje zemlje u redovima protivnika, s tim da taj protivnik nije druga država, već su to npr. UN? Sličnih pitanja ima još.

Međunarodna organizacija može biti uvučena u rat i zbog savezničkih odnosa između njenih članica. Uostalom, neke međunarodne organizacije osnovane su upravo kao mehanizmi za obezbeđenje kolektivne samoodrane, podrazumevajući da napad na jednu od članica automatski znači da su ostale dužne da joj pruže pomoć. Međutim, za razliku od raznih odbrambenih saveza kakvi su se javljali tokom čitave istorije, ovde nisu u pitanju neposredni odnosi između država ugovornica kao takvih, već se aktivira i kao jedinstveni subjekt istupa (vojno, politički, pravno itd.) čitava međunarodna organizacija.

Kao što se mogu javiti kao ratujuća strana (bez obzira na to da li u ulozi saveznika, čuvara svetskog mira ili, naprotiv, agresora) međunarodne organizacije mogu biti i neutralne u odnosu na oružani sukob. Štaviše, često je njihova uloga upravo da spreče eskalaciju sukoba, posreduju, odnosno na drugi način doprinesu mirnom rešenju spora i slično. Moglo bi se reći da se od nekih od njih (UN pre svih) to zapravo s punim pravom očekuje. I to sa mnogo više razloga i realno gledajući znatno većom šansom na uspeh, nego kada se u takvoj ulozi nalazi neka neutralna država.

Međunarodne organizacije imaju i razne druge mehanizme, ne samo za sprečavanje sukoba, već i za uticaj na to da se sukob što brže okonča, za kažnjavanje odgovornih itd. Pored ostalog, tome služe međunarodne sankcije, koje se mogu sastojati u raznim ekonomskim, diplomatskim, saobraćajnim i sličnim koracima, sve do isključenja odnosne države iz članstva.[37]

Utisak je da su neki od ovih momenata, a posebno pozicija međunarodne organizacije kao strane u sukobu, nedovoljno obrađene u pravnoj literaturi.

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EFFECT OF WAR AND STATE OF WAR ON INTERNATIONAL RELATIONS OF STATES

The first part of the paper deals with the effect of the outbreak of war or the state of war, on the international relations of states. Following is a brief overview of the differences between the war as a factual and wartime state as a legal category. Within the special sections, the effect on relations with the enemy (the entry into force of the rules of war and humanitarian law, the termination of diplomatic relations, the effect on treaties, the status of alien enemies), relations with allies, relations with neutral countries (rights and obligations of neutral states, the position of neutral aliens, etc.) and, ultimately, relations with international organizations (which can appear in the role of enemies, the allies, the neutral side and in the special role of the factors concerned with the preservation of world peace) were analyzed. The conclusion is that many issues relating to the effects of war or the state of war on relations with international organizations are not sufficiently addressed in the legal literature.

Keywords: War, *State of war, International law, Enemy, Neutral state, International organizations*

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TOURIST ESCORT AND THE BUSINESS ETHICS****

This paper deals with the problems related to the development of business ethics and the profession of tourist escort. The starting hypothesis of this research is based on the belief that business ethics in Serbia is not adequately regulated, that tourist escorts are still not properly educated on this issue and that the whole profession is not sufficiently regulated and protected. Historical method, as well as the field research (co-author's work on the position of the tourist escort), together with the survey research, were used for the purpose of data collecting procedure. Analysing the data and interpretation of gained results were conducted by using the descriptive, statistical, comparative and analytical-synthetic method.

Keywords: tourist *escort, Serbia, tourism, business ethics*

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1. Introduction

The word "ethics" derives from the Greek word *ethos* (custom, essence, spirit) and it is usually considered as a synonym for morality. It is a part of the philosophy that studies and estimates the values, in terms of what is considered as good or bad; what could or should not be done; but it is also a part of the philosophy that considers the origin of morality, together with its principles[1]. Thus, business ethics represents a set of personal and collective moral acts throughout all forms of business activities, focused on determining the boundaries to which is possible to go, in order to provide an avoidance of undesirable relationships within the company and in its environment, caused by those activities, procedures and decisions, as well as avoidance of unnecessary costs and causing the damage to the company itself and to environment where it is operating. Therefore, the precise subject of business ethics is obtained by crossing the moral and economic aspects of the business[2].

Increased interest in researching business ethics is reflected in an extensive literature devoted to this topic[3], which is pointing to the fact that the business world is increasingly accepting the importance of business ethics[4]. Some of these

1 Subotić Dragan (2009): *Korporativna poslovna etika: Vrednosti - načela – modeli* (Knjiga 1). Beograd, Primenjena korporativna poslovna etika.

2 Ristić Dušan (2004): *Osnovi menadžmenta*, Novi Sad, Fakultet za menadžment.

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4 Donaldson Tom (2003): Taking ethics seriously - A mission now more possible, *The Academy of Management Review, 28*, 363-366;

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studies pointed to a positive effect of business ethics on the organization itself, first of all, in the form of better performances and productivity of the business, which is the reason why ethical behaviour could be considered as useful, because organizations that adhere to moral principles are often more profitable in comparison with those that are prone to unethical practices[5]. Thus, researches from the end of the last century, showed that successful companies, those that mostly neglected the ethical elements in their business, made an average increase of their company's value by 120% during a ten-year period, while those that implemented these elements in more intensive way increased their company's value for 600% in the same period. The similar goes with their shares, so the shares of successful "unethical companies" increased for 110%, while "ethical" ones reached the increase in their shares for 900% throughout the stated period[6].

The main purpose of studies related to business ethics is an attempt focused on explaining the institutionalization of formal policies and the ways of implementing ethics into a decision-making process and the overall business practice[7]. There is a question in which manner is business ethics incorporated in Serbia in terms of business in the tourism sector?

Elias Z. Rafik (2005): 'The effect of corporate ethics values on accountants' perception of social responsibility', *Journal of Applied Business Research, 21*(4), 1-10;

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5 Weeks A. William, Loe W. Terry, Chonko B. Lawrence and Wakefield Kirk (2004): 'The effect of perceived ethical climate on the search for sales force excellence', *Journal of Personal Selling & Sales Management, 24*, 199-214.

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2. Literature review

Human resources represent an important factor in tourism business. Therefore, business success of travel agency, as a type of a business organization that is operating within the tourism sector, depends on the quality, qualifications and capabilities of its employees, due to their involvement in creation, selling and providing the tourist services, where tourist escorts have an important role throughout evoking pleasant or unpleasant feelings among the tourists[8].

An ethical code is the most developed and the most integrated component of managing the business ethics within the business practice of tourism worldwide, which is confirmed by the World Tourism Organization, as a specialized agency of the United Nations[9], as well as throughout the practice of international hotel chains (e.g, Hilton World Wide, Hyatt, Melia)[10] and tour operators (e.g. TUI)[11]. It should be noted that system related to managing the business ethics obtains wider issues than simple creation and usage of ethical code, as Trevino and Nelson (1999) pointed out, implementation of the ethical code represents just a beginning of wider ethical efforts. However, even its existence and usage could be considered as an initial and commendable step for further introducing and managing the business ethics, precisely for introducing and managing the ethical business. Different associations in the world, similar to the National Association of Travel Agencies of Serbia, prescribed the code of business and ethical rules that imposes specific requirements, related to professional performing of business tasks and consumers' (tourists') protection, in front of those agencies and tour operators, who want to become their members[12]. The

8 Štetić Snežana i Dragićević Vanja (2011): 'Evaluacija turističkih agencija u Srbiji', *Ekonomske teme, 1*, 71-81.
Blešić Ivana, Pivac Tatjana and Besermenji Snežana (2018): 'Croatia as a tourist destination from the perspective of tourists from Serbia', Megatrend revija, 15(1), 19-34.

9 World Tourism Organization - UNWTO. (1999): *Global code of ethics for tourism*. (Retrived from: http://ethics.unwto.org/sites/all/files/docpdf/serbia.pdf).

10 Krdžić Marko (2014): *Poslovna etika na primeru međunarodnog hotelskog lanca "Hilton Worldwide"* (master rad), Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo;
Kalinić Mina (2012): *Poslovna etika i međunarodni hotelski lanac "Hyatt Hotels Corporation"* (master rad), Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo;
Stevanović Sonja (2014): *Poslovna etika i međunarodni hotelski lanac "Melia hotels international"* (master rad), Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo.

11 Šuleić Marija, Dragin Aleksandra and Dragićević Vanja (2014): 'Business ethics of tour operators – The case study of TUI', *Turizam, 18*(4), 154-165;
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12 Simat Karolina, Dragin Aleksandra and Dragićević Vanja (2012): The institutionalization of business ethics of travel agencies in Serbia, '*Turizam', 16*(3), 113-123.

same goes with the principles of managing business ethics within the association of tourist guides[13]. And what about the tourist escorts in Serbia?

During the analysis related to the application of business ethics in tourism, foreign authors often consider the aforementioned ethical code as a vital component for managing the organization and the number of such a researches is constantly increasing[14], which is pointing to the importance of ethical principles for employees in tourism activities in terms of providing the guidelines for a decision-making process. However, dealing with the issue of ethics in tourism in domestic academic circles is still at its initial level. Academic approaches to this topic were mainly focused on studying ethics in the function of sustainable development of tourism and considering the business ethics within the various managerial subjects, where is usually mentioned as a mechanism for improving the quality of services[15]. Pioneering researches related to ethics in tourism within Serbia were published in this decade[16], while, according to our findings, this topic was not researched before that period.

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[13] Prelić Milena (2012): *Poslovna etika i turistički vodič* (master rad). Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo.

[14] Dornier Raphael, Cothias Vanessa and Loussaief Leila (2011): 'The application of collective ethics charters: The case of French Adventure tour-operators', *International Business Research, 4*(1), 133-144;

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Stevens Betsy (2001). 'Hospitality ethics: Responses from human resource directors and students to seven ethical scenarios', *Journal of Business Ethics, 30*, 233–242.

[15] Kosar Ljiljana i Rašeta Slobodan (2005): *Izazovi kvaliteta: Menadžment kvaliteta u hotelijerstvu*, Beograd, Viša hotelijerska škola.

[16] Dragin Aleksandra, Jovanović Tamara and Besermenji Snežana (2013): *Ethical climate in hospitality facilities in Serbia*. Paper presented at the 15th Contemporary Trends in Tourism and Hospitality - CTTH 2013, Novi Sad;

Mijatov Maja, Dragin Aleksandra and Jovanović Tamara (2015): *Ethical climate in hotels of Kopaonik*. Paper presented at the 16th Contemporary Trends in Tourism and Hospitality, Novi Sad;

Mišković Ivana (2012): 'Ethics in providing tourism services by travel agents in Serbia', *Turizam, 16*(1), 20-28;

Simat Karolina i Dragin Aleksandra (2012): '*Poslovna etika - element uspešnog poslovanja turističkih agencija*', Zbornik radova Departmana za geografiju, turizam i hotelijerstvo, 41, 297-309;

Simat Karolina i Dragin Aleksandra (2012): '*Poslovna etika - element uspešnog poslovanja turističkih agencija*', Zbornik radova Departmana za geografiju, turizam i hotelijerstvo, 41, 297-309;

2.1. Business ethics in the practice of travel agencies in Serbia

Implementation of ethics and social responsibility in the business of travel agencies in Serbia is based on the rules prescribed within the Law on Tourism, as well as within the YUTA (Serbian National Association of Travel Agencies) standards for member agencies (in the form of aforementioned code), but it should also be based on general conditions of the business, as well as on other accompanying regulations. As business entities, travel agencies also need to operate within the market in accordance with other legislative acts, such as Law on the Protection of Competition, Law on the Consumer Protection, Law on the Prohibition of Discrimination, Law on the Prevention of Abuse, Health and Safety at Work, Law on the Environmental Protection and others[17]. Also, ethical business needs to be reflected in respect of the Code of Business Ethics of the Republic of Serbia[18], as well as in respect of prescribed contracts between business partners, tour operators, intermediaries, transport companies and, finally, the customers[19]. The existence of numerous specific regulations (primarily the laws) aimed at governing the ethical business in tourism is proof that Serbia recognized the importance of responsible behaviour of employees in tourism[20]. However, there is a question related to sufficiency and adequacy of existing regulations for accepting the importance of ethical business by travel agencies, as important business entities in tourism.

The frequent affairs of travel agencies during the high seasons[21] are based on unethical business operations and they are indicators that are pointing to insufficient awareness of the main actors within the tourism activity in Serbia regarding the importance of business ethics. These situations could cause inconvenient positions for tourist guides, as representatives of travel agencies, due to their direct interaction with tourists during the travelling. Therefore, this paper will analyse the data obtained throughout the research conducted in the

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Šuleić Marija, Dragin Aleksandra and Dragićević Vanja (2014): 'Business ethics of tour operators – The case study of TUI', *Turizam, 18*(4), 154-165;

Šuleić Marija, Dragin Aleksandra and Dragićević Vanja (2015): The relationship of a foreign tour operator in Serbia towards tourists based on the example of TUI, '*Turizam*', *19*(1), 1-12.

17 Lazarević Aleksandra (2014): *Poslovna etika i turistički pratilac* (master rad), Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo.

18 Official Gazette of the Republic of Serbia, 1/2006

19 Simat Karolina, Dragin Aleksandra and Dragićević Vanja (2012): The institutionalization of business ethics of travel agencies in Serbia, '*Turizam*', *16*(3), 113-123.

20 Dragin S. Aleksandra (2011): *Turizam i poslovna etika* (materijal sa predavanja), Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo.

21 Ministry of Trade, Tourism and Telecommunications of Republic of Serbia, 2017

form of the interviews with Serbian tourist escorts, regarding their attitudes on the business ethics and the extent to which business ethics is represented in the scope of their job requirements.

2.2. Tourist escort as a profession in Serbia

Appearance and a definition of the profession of tourist escorts in our country are related to the Law on the Conditions for Providing the Services of Tourist Guides and Tourist Escort from 1978[22], which defined the rights and duties of tourist escorts for the first time, in addition to the profession of tourist guides. According to this Law, services of newly-defined tourist escorts were related to performing the operational and technical activities throughout the following a group of tourists, but also to providing the information to tourists in a situation when the group is not followed by the tourist guide. Immediately in the following year (1979), the Rulebook on the Program and the Manner of checking the Expert Qualifications for the Activities of Tourist Guides and Tourist Escorts for the Territory of the Republic of Serbia (without Federal Autonomous Province) was adopted[23] and the first professional exam for tourist escorts was organized. Former national tour operator (Yugotours) stimulated development of emitting tourism, so tourist escorts from Serbia were engaged in travelling with domestic tourist groups abroad.

However, due to a decline in tourist arrivals in Serbia in the last decade of the previous century, the term of the tourist escort did not remain in the legal regulations, so the Law on Tourism from 1994 abolished the profession of tourist escorts and put their services to jurisdiction of the tourist guides.

Considering the stagnation of receptive tourism in the mentioned period, but also in the coming years, travel agencies focused their operations towards emitting tourism, which resulted in raising the needs for services of tourist escorts. Thus, The Law on Tourism from 2009[24] extended the term related to "services of tourist professions" to services of tourist guides, tourist escorts, tourist animators and the local tourist guides. Thus, after 15 years, this profession was re-regulated, and in 2010, the Rulebook on the Program and the Method of taking the Professional Exam for the Tourist Escort[25] was adopted. This Law practically confirmed that tourist guide and tourist escort are not the same professions and it explained the differences between them.

Every year since adopting this Law, a practice of the Ministry is to issue the Call for taking the Professional Exam for the Tourist Escort License. One of the reasons for taking this practice is reflected in a legal obligation faced in front of the

[22] Official Gazette of the Republic of Serbia, 10/78

[23] Official Gazette of the Republic of Serbia, 33/1979

[24] Official Gazette of the Republic of Serbia, 36/2009

[25] Official Gazette of the Republic of Serbia, 40/10

tour operators regarding the necessity to have licensed tourist escort on their tours with each group and in every transport vehicle. This requirement is in accordance with the aforementioned Law on Tourism that defined the tourist escort as a physical person that follows the tour group and performs different operational and technical tasks from the beginning of the travelling to the destination and back. Thus, a person that performs activities of tourist escort must possess the license issued by the Ministry of the Republic of Serbia, the tourism sector[26]. Also, in respect to this Law, a person that is accompanying the group of tourists within the travel organized by the foreign tour operator, with starting and ending the travel in the foreign country, is not considered as tourist escort.

As part of the elimination tests, candidates need to pass specific tests of psychological ability and foreign language, as well as different professional exams. Successfully passed theoretical part of the exam regarding the foreign language and tests in the field of agency and hotel business, information and guidance services, social system, regulations and tourist policy is a prerequisite for taking the practical part of the exam - guiding the tour in a foreign language. The Ministry issues a certificate as a proof of passed professional exam for the tourist escort, as well as a legitimation and a label mark for each of them.

For example, during the first years (2011 and 2013), 318 out of the total number of 400 candidates, passed the exam and obtained the license of tourist escort[27]. Considering the fact that licensing of tourist escorts in Serbia has been organized recently and that business ethics is not part of theoretical training and practical preparation of candidates for dealing with the mentioned profession, there is a question related to the amount and the manner of implementation and representation of ethics in the work of tourist escorts in our country.

3. Methodology

In order to collect as more precise data as possible about the attitudes and representation of business ethics in the work of tourist escorts in Serbia, this research was conducted throughout the interviews. The research was conducted during September of 2014 and the sample obtained ten respondents, precisely ten licensed tourist escorts. During the interviews, respondents answered the 18 questions divided into the three groups: questions regarding the general data of respondents, as well as questions about attitudes of Serbian tourist escorts regarding the business ethics and their work.

As the research was anonymous, the respondents were named as **Person 1, Person 2, Person 3** ... **Person 10**. Their answers will lead to the key results related

[26] Law on Tourism, Official Gazette of the Republic of Serbia, 36/2009

[27] Dedijer I. (2014): *Intervju o licenciranju turističkih pratilaca u Srbiji*, Beograd, Ministarstvo trgovine, turizma i telekomunikacija Republike Srbije.

to the problems that were defined at the beginning of the paper. Although the survey was conducted during the September, when tourist escorts are engaged in a lot amount of work (due to the ending of the summer season and the beginning of the student excursions), they were interested in contributing to the research. Besides the survey research, results are additionally complemented by results gained according to the field research on the basis of the working experience of one of the co-authors within the position of tourist escort.

4. Results

The questions asked throughout the interviews were answered by 10 tourist escorts from Serbia, with different gender structure, level of education, vocational qualifications, and the status of the employment and years of working tenure. Nine respondents are female (which is characteristic for the personnel structure in tourism), their age is between 25 and 43 years, while the average age of the sample is 29 years. Half of the respondents have a faculty education degree (basic studies: four-year studies), three respondents completed a master degree, one respondent completed a college (two-year studies), while one respondent gained a high school degree. Regarding the current status of the employment, half of the respondents are part-time employees, two respondents are seasonally employed, two are permanently employed and one is even registered as unemployed.

When it comes to details about the vocational qualifications and years of working tenure, seven out of ten respondents possess higher education (college, faculty or master) in the field of tourism, followed by one respondent with higher education in the field of geography, one respondent in the field of industrial management and one respondent with secondary vocational qualification with duration of four years, while the average working tenure of the respondents is four years.

The following text will provide questions and respondents' answers regarding the business ethics:

Question 1: Did you reach the basic knowledge on business ethics throughout the training for gaining the license of tourist escort (if yes, in which way)?

Person 1: No, I did not reach the basic knowledge on this topic;

Person 2: No, I did not reach the basic knowledge on this subject during the training for gaining the license of tourist escort;

Person 3: Yes, I think I did but in general it all depends on the lecturer and whether that person has appropriate capacity to explain the theory in a clear manner;

Person 4: No, I did not reach the basic knowledge on this subject throughout the training;

Person 5: No;

Person 6: No;

Person 7: No;

Person 8: Yes, mainly regarding the rights and duties when interacting with the passengers;

Person 9: Yes, on the basis of the course "Guidance in Tourism";

Person 10: Not throughout the training, but I was interested in learning about the rights and duties of the passengers, travel escorts and travel agencies, so I look for these information by myself.

Differences in respondents' answers pointed to inadequate establishment of professional training for preparing the tourist escorts regarding the content of business ethics.

Question 2: Do you think that the license of tourist escort might provide the ethical business behaviour and higher degree of responsibility in business environment? Seven respondents answered with YES, while three respondents answered with NO on this question.

Question 3: According to your opinion, in which way can the license shape the ethical behaviour of tourist escorts (as a state law document)?

Person 1: The license of tourist escort cannot shape the ethical behaviour; each individual will behave in accordance with personal ethical standards;

Person 2: The license of tourist escort might and must affect the ethical behaviour, in order to provide the highest level of service quality.

Person 3: As a citizen of a specific country, you have personal documents and rights in your country, you are also obliged to act in accordance with the rules prescribed for specific job position;

Person 4: I do not think that the license might shape the ethical behaviour of tourist escorts. I believe that it actually depends on personal moral values of each tourist escort, but also on the rules of appropriate behaviour, prescribed by the travel agency;

Person 5: I consider that the license of tourist escorts could shape their ethical behaviour;

Person 6: I believe that the license cannot shape the ethical behaviour, because we did not have any course regarding the business ethics throughout the licensing program;

Person 7: I consider it all depends on individual values. I also believe that tourist escorts would seriously understand the license as a document only if there is a law with regulations and penalties for unethical behaviour;

Person 8: It is necessary to prescribe appropriate document that will define the penalties for unethical behaviour;

Person 9: I do not think the license shapes the ethical behaviour of tourist escorts, due to the absence of prescribed sanctions for unethical behaviour;

Person 10: This issue is still not adequately regulated by the law in our country.

Question 4: Are the standards of business ethics transparent to employees in the agency where you are/were angaged in activities of the tourist escort and in which form: a) in written form, b) in verbal form. Seven respondents answered that some domestic travel agencies introduced them with their ethical standards and that these agencies also demanded from tourist escorts to adhere to these rules in the business; two respondents replied that neither one domestic travel agency they work for did not inform them regarding the possession of the ethical code and regarding the necessity to perform in respect to abiding the rules; while only one respondent answered that all domestic agencies, where this respondent was engaged in the position of the tourist escort, possessed the ethical code and introduced their employees with rights and duties regulated by it.

Regarding the form of the ethical code in which it was available and represented to employees by their supervisors, respondents answered in the following way: six of them responded that ethical code was represented in verbal form, while two respondents said that it existed and was available to employees in written form.

Question 5: If the ethical code is represented in the agency, it is usually focused on defining (multiple choices could be selected): the appearance of tourist escorts (primarily rules related to dressing), attitudes towards tourists, attitudes towards work and colleagues, attitudes towards business partners, attitudes towards property, attitudes towards environment, attitudes towards local population, other. Respondents' answers are represented in Table 1.

Table 1: *Respondents' answers regarding the terms defined by the ethical code*

Terms defined by the ethical code	Number of respondents' answers
Attitudes towards tourists	10
Appearance of tourist escorts	8
Attitudes towards work and colleagues	7
Attitudes towards business partners	4
Attitudes towards property	3
Attitudes towards local population	2
Attitudes towards environment	1

Source: *Data obtained through the research conducted in the form of the interviews*

Question 6: Did you have to forward false and incorrect information to tourists in order to protect the interest of the travel agency? Five respondents answered with YES and five respondents answered with NO.

Question 7: What would you expect a tourist to do after the end of the travelling, in a situation of your unprofessional (inappropriate, unpleasant) behaviour towards tourists during that travel?

Person 1: Tourist would not do anything, if he/she is satisfied with the whole service, while in the situation of existing the other objections, he/she would complain to everything;

Person 2: For the start, the tourist would complain to the supervisors of the agency and later he/she would publish his/her complaints on the Internet;

Person 3: Such behaviour is mainly followed by the complaint to the agency regarding the work of the tourist escort;

Person 4: Tourist would appeal to the agency and he/she would also publish his/her dissatisfaction throughout the media (Internet, press);

Person 5: Such behaviour would be followed by the complaint in verbal and written form;

Person 6: Tourist would complain to the agency, while the tourist escort would remain without the daily wage or further engagement in that agency;

Person 7: Tourist would express his/her dissatisfaction directly to the agency and, in some cases, tourist might refuse to pay the unpaid part of the arrangement;

Person 8: Tourist would complain to the agency regarding the work of the tourist escort;

Person 9: Tourist would complain to the agency, which is understandable;

Person 10: Tourist would complain to the agency and he/she would probably not decide to use the services of that agency again.

Question 8: Do you know (maybe you have heard it from your colleagues, or you were manipulated by specific traders...) that while operating the business tasks, some tourist escorts are focused on establishing contact with different traders or caterers and making the agreement with them to direct the travellers/tourists to consume their products/services for some kind of a compensation? Out of the total number of 10 respondents, all of them gave a positive answer.

Question 9: Do you know (maybe you have heard it from your colleagues or you have experienced it by yourself) that some tourist escorts often report lesser number of the passengers than the group actually counts when visiting a museum, gallery, etc. for following reasons: because they are forced to do that by the agency; because some of those sites do not count the exact number of visitor entries for group arrivals? Respondents are equally divided on this question.

Question 10: Whether the travel agency you work for established some kind of sanctions in the case of dissatisfaction with the engagement of tourist escorts and what does it actually mean?

Person 1: If they are dissatisfied with my work, they would stop my work engagement;

Person 2: If the agency is not satisfied, the management would organize a meeting related to inadequate behaviour of tourist escort. If tourist escort does not change his/her behaviour after the meeting, the agency will not continue with the cooperation;

Person 3: A warning and less frequent engagement of that tourist escort by the agency;

Person 4: I do not know. I have never been in such situation;

Person 5: Decrease in the number of departures and amount of daily wage or even getting fired;

Person 6: Unpaid work;

Person 7: No, it would simply interrupt the cooperation, without any previous suggestions or sanctions;

Person 8: Agencies are not applying sanctions, they are mainly oriented towards informative discussion regarding the mistake and finding the way to correct it;

Person 9: I did not work for such agencies, all the agencies, that I co-operated with, complied the obligations towards tourist escort and, if they are dissatisfied with provided services, they would simply stop working with that tourist escort;

Person 10: Yes, the management of the agency would have a talk with the tourist escort about the causes of dissatisfaction and, in the case of its repetition, the agency will stop cooperating with that tourist escort.

Question 11: Do you feel protected by your employer as the tourist escort in Serbia? Would the agency you work for be on your side in situation of possible complaints or manipulations of the passengers (describe the manner in which your employer would protect you)?

Person 1: They would stand behind me, if I am not guilty;

Person 2: It is debatable, large agencies, tour operators, would protect their tourist escorts, while smaller agencies would not. It is easier to change the employees than losing the passengers;

Person 3: I do not believe that employer will fully protect the tourist escort, perhaps only in the case of groundless complaints of the passengers;

Person 4: The agency was on my side for all groundless complaints;

Person 5: Probably yes, because I did not receive complaints regarding my work until now;

Person 6: The agency would not protect;

Person 7: Only in the case of groundless complaints;

Person 8: I do not know. I have never been in a similar situation;

Person 9: I believe that the agency would protect me only for the first time;

Person 10: Yes, I feel completely protected by the employer. Long-lasting work resulted in mutual trust. Employer would consider the facts and reasons for complaining, but in general the agency would protect my interest and take side of its employee.

Besides the survey research, as already mentioned, one of the co-authors worked on the position of tourist escort and according to this kind of field research, it could be said that tourist escorts are faced with numerous complaints of tourists, but the most frequent are those related to unfulfilled expectations and promises by the travel agency. It is not unusual for travel agencies to present the services in a different way in comparison with those that tourists really get at a specific destination. In that kind of situations, tourist escorts are first in line for expressing the tourists' dissatisfaction and, as representatives of concrete travel agency, they are responsible for resolving the situation in a manner that is considered as the most acceptable for tourists.

Besides the above-mentioned complaints, tourists often express their dissatisfaction regarding the hospitality and kindness of tourist escorts during the travel and they mostly express their dissatisfaction to travel agency in a written form. For these reasons, tourist escorts are often sanctioned by travel agencies, in the form of their redundant engagement, or even complete termination of engagement and business cooperation. Owners of travel agencies, or more precisely employers of tourist escorts, only in rare occasions are looking from tourist escorts to pay the penalties regarding the guests' complaints.

However, there is a question whether the complaints of tourists regarding the work of tourist escorts are true or they are only the result of tourists' attempt to manipulate in order to achieve some of their goals, mainly focused on gaining the financial prosperity. Certainly, there are tourist escorts who are often unprofessional towards their business and who even behave inappropriately towards tourists during the travel. The main motive of these tourist escorts is financial compensation for their work and they are usually not interested in a fact whether the tourists will receive the service of appropriate quality. On the other hand, there are also tourists who will express their dissatisfaction regarding the quality of working tasks conducted by tourist escorts and submit their complaints to the concrete agency without a realistic reason, in order to gain the arrangement for free of charge or with specific discount. Such cases are frequent and well known in practice and tourists of this profile usually have prepared scenario regarding the way in which they should perform to manipulate the agency.

Also, it is important to highlight the fact that, depending on the gravity of complaints expressed by tourists and in situations when the travel agency fails in resolving these problematic situations, it could be requested from YUTA to solve the problem on the basis of its arbitration[28]. YUTA also prescribed specific 'Travel guarantees', focused on the guarantees for quantity and quality of specific services prescribed by the contract with the travel agency. According to these 'YUTA travel guarantees', if the travel agency is closed before starting the travelling, the clients will get their money back within the five days, or they could travel with another travel agency that also poses the aforementioned travel guarantees. Also, if the client arrives at the destination and realizes that the agency did not provide the accommodation on that destination, YUTA could provide help in finding the other accommodation or in organizing the return to the country. However, it is important to bear in mind that all of the agencies that are members of YUTA are not a part of this program, but only those with the visible mark of 'YUTA travel guarantee' in the offices, catalogues and websites. Furthermore, if complaint expressed by tourist is more serious, or more precisely if it violates specific law or includes a commitment of some kind of criminal activity, then judicial authorities will also be involved in resolving the situation[29].

Thus, employers should work on strengthening the awareness of tourist escorts, but also the tourists in terms of ethical behavior. Representation of the ethical code in tourism could help in developing the awareness of tourism employees on business ethics and ethical behavior. On the other hand, tourists should also be better introduced with general travel conditions.

5. Conclusion

Business ethics in the field of conducting the business activities became a necessary process for realizing the purpose and goals of companies, consumers and the public. The basic moral norms and principles of ethics are the starting premises of any successful business cooperation. Global phenomenon - tourism, as a heterogeneous activity, could cause contact between a large number of business entities, and all of these relations could be particularly sensitive, if they are not based on the mentioned principles, especially if we have in mind that tourists are moving from the place of their permanent residence during their travels and that they have high expectations, due to the fact that they invested their free time and the money in travelling. Therefore, implementation of ethical business behaviour needs to be considered as an imperative for activities of tourist escorts, due to the necessity of providing the services in the form of tourism escorting, as the primary segment of tourism.

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[28] Zeljković David (2018): *Pravna zaštita potrošača u turizmu u propisima Republike Srbije* (master rad). Novi Sad, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo

[29] Official Gazette of Republic of Serbia, 2/2016

Thus, the starting point of this paper was the determination of the attitudes of tourist escorts in terms of the business ethics and its representation while performing the business tasks of tourist escorts in Serbia, as a relatively new and legally recognized profession in this country. Survey research conducted among the licensed travel escorts of Serbia showed that employers (travel agencies) in most cases do not possess the ethical code regarding the acceptable business conduct and that they mainly inform their employees about the principles of business behaviour in verbal form. This data shows that employers are not fully aware of the business ethics and the importance of its application in the business. Also, according to our results, it could be concluded that tourist escorts are not overly informed regarding the principles of business behaviour, as well as that they did not gain the education in the field of ethics during the training and passing the professional exam for licensing. This is pointing to the fact that the professional exam for the tourist escort is not appropriately conceived and comprehensible. However, travel escorts are often faced with different, unpredictable and undesirable situations throughout performing their business tasks, which is the reason why knowledge in the field of behaviour in respect to business ethics could greatly facilitate their work.

According to the opinion of Serbian tourist escorts, existing ethical codes of specific travel agencies are usually focused on attitudes towards tourists in the first place, then the personal appearance of tourist escorts, attitudes towards work and attitudes towards colleagues. Certainly, these claims represent a prerequisite for successful performance of activities and creation of high- quality tourist services, however, it is defeating that attitudes towards business partners, attitudes towards property and, finally, attitudes towards local population and attitudes towards environment are very low, although it is well known that implementation of ethics is of great importance in these areas.

Regarding the unpleasant situations that might arise when performing the business tasks, tourist escorts declared that such situations most often occur due to the negligence and irresponsibility of their supervisors, or they are caused by verbal conflicts with the travellers. Furthermore, most of the tourist escorts in Serbia feel unprotected by their employer. Similarly, the majority of employers do not have a rigorous form of sanctioning the tourist escorts in situations of dissatisfaction with their work, which would result in the license subtraction.

Summarizing the above-mentioned answers of tourist escorts gained through the interviews, it can be concluded that tourist escorts in Serbia do not possess sufficient knowledge in the field of ethical business behaviour and that those ethical business principles are not represented to them during the training for tourist escort licensing or during their work engagement. In order to improve the quality of services of tourist escorting in Serbia, it is primarily necessary to make specific corrections throughout the legislation and to involve business ethics in the course aimed at passing the professional exam for gaining the license of the tourist escort.

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TURISTIČKI PRATILAC I POSLOVNA ETIKA

Ovaj rad se bavi problematikom razvoja poslovne etike i profesije turistički pratilac. Polazna hipoteza ovog istraživanja je da poslovna etika u Srbiji nije dovoljno uređena, te da turistički pratioci u tom segmentu nisu još uvek adekvatno edukovani, odnosno da čitava profesija nije u dovoljnoj meri uređena i zaštićena. Za prikupljanje podataka korišćene su istorijska metoda i terensko istraživanje (rad koautora kao turistički pratilac) i anketno istraživanje. Prilikom obrade podataka i interpretacije rezultata upotrebljene su deskriptivna metoda, statistička, komparativna metoda i analitičko-sintetička metoda.

Ključne reči: *turistički pratilac, Srbija, turizam, poslovna etika*

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THE RELATIONSHIP BETWEEN WEBSITE MANAGEMENT AND SEARCH ENGINE OPTIMISATION

The main aim of the article is to explore if there is a synergy between proactive website management and better organic visibility of websites on Google, evidenced through their search engine optimisation (SEO) score. The analysis was conducted using 63 responses to an electronic survey completed in summer 2017 by Serbian cultural institutions of national importance. The dependent variable was the SEO score, whereas the independent variables were the existence of Google Analytics, the state of content freshness and social media activity. To examine the differences between the SEO score with respect to each independent variable, a t- test for independent samples was used. Higher SEO scores were recorded for websites that use web analytics, perform a weekly content update and use more than one social network, which combined contribute to the efforts to attract more online users, increase awareness of the institutional activities and strengthen its online brand visibility. Instead of using disparate online tools and channels in website management, the goal should be achieving synergy between web analytics, social media, content generation and SEO, which is contributing to the online value creation. The research findings can contribute to website managers for making better-informed decisions regarding their online strategies and resource allocation.

Keywords: *Website, Search Engine Optimisation, Web Analytics, Social Media, Management in Culture*

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Introduction

With the reduction in cultural budgets and the growing competition in the recreational marketspace, art and cultural institutions are facing increasing pressure to attract wider audiences, increase visitation, commercial use of services and overall visibility[1]. This requires the identification of opportunities such as online channels, to improve institutional awareness and expand its capacities for visitation[2]. As a result, visits to the cultural institutions' websites have become increasingly popular, and in some cases, the number of online visitors is even exceeding the number of physical ones[3]. Virtual visits do not only compensate for the decline in physical visits, but also lead to better-prepared visitors[4], or to the post-visit experience[5]. However, in less developed countries such as Serbia, management in arts and culture are not applied to their full potential, predominantly due to multiple tensions between artistic and managerial values, where website management is not an exception[6]. Websites are treated rather as a static channel for occasional dissemination of information about activities, with unclear organisational and functional managerial roles[7]. According to authors Skov and Ingwersen, the most common reasons for visiting the cultural institutions' websites belong to the motivational categories such as

1 Kotler, G. N.; Rentschler, R. (2003): *Creativity and interactivity: new ways to experience, market and manage museums*, paper presented at the 2003 Kenneth Myer lecture for the George Fairfax fellowship. Deakin University, Geelong

2 Pallas, J.; Economides A. A. (2008): Evaluation of art museums' websites worldwide, *Information Services & Use*, 28: 45–57.
Hume, M.; Mills, M. (2011): Building the sustainable iMuseum: is the virtual museum leaving our museums virtually empty? *International Journal of Nonprofit and Voluntary Sector Marketing,* 16: 275-289.
Skov, M.; Ingwersen, P. (2014): Museum Web search behaviour of special interest visitors, *Library & Information Science Research,* 36: 91-98.

3 Fantoni, S. F.; et al. (2012): Exploring the Relationship between Visitor Motivation and Engagement in Online Museum Audiences, paper presented in: *Museums and the Web 2012 proceedings*, San Diego, USA. https://www.museumsandtheweb.com/mw2012/papers/exploring_the_relationship_between_visitor_mot (30.12.2017)
Kabassi, K. (2017): Review: Evaluating websites of museums: State of the art, *Journal of Cultural Heritage,* 24: 184-196.

4 Voorbij, H. (2010): The use of web statistics in cultural heritage institutions, *Performance Measurement and Metrics*, 11(3): 266-279.

5 Marty, F. P. (2007): Museum Websites and Museum Visitors: Before and After the Museum Visit, *Museum Management & Curatorship,* 22(4): 337-360.

6 Yeh, J-T., Lin C-L. (2005): Museum Marketing and Strategy: Directors' Perception and Belief, *Journal of the American Academy of Business,* 6(2): 279–284.

7 Chow, S. A.; et al. (2014): The Website design and Usability of US Academic and public libraries, Findings from a Nationwide Study, *Reference & User Services Quarterly*, 53(3): 253–265.

gathering information to plan an upcoming visit, self-motivated or assigned research for specific content information, engaging in casual browsing and for making a transaction on the website (online shop)[8]. Cultural institutions that rely on old-school website management will be the losers in the post-digital communications age, as those institutions who are proactive in the areas of search engine optimization (SEO), the use of social media and web analytics tools will see more people through their doors[9]. SEO is especially important having in mind that the visitors' online activity is mostly focused on searching for information (about artists/performers and events), the search engines being the most common method of active discovery, even across older age groups[10].

Consequently, measuring only the number of physical visits provides an incomplete view of the total amount of use of the cultural institution and its resources. Thus, web analytics form a necessary complement to physical measures, even more so when physical visits are being replaced by web visits[11]. Web analytics provide simple statistics concerning the website, such as the number of visitors or sessions, the average number of page views per visitor, average page duration, most popular pages, bounce rates and referrers. Thus, it benefits from decentralised decision making, empowering website managers and IT administrators to create their own practices in monitoring and reporting about website performances[12]. Given the development of cultural institution services since the introduction of the internet, the measurement of unique visitors, time spent and interaction with the content will become an important part of their operations[13]. The most common analytical tool used today is Google Analytics, a free service offered by Google that generates detailed statistics about the visits to a website, telling the web manager how visitors found the site and how they interact with its content, allowing them to gain insight into how to improve the site's content and design[14].

8 Skov, M.; Ingwersen, P. (2014), 92.

9 Arts Council England; et al. (2010): Digital audiences: engagement with arts and culture online, http://webarchive.nationalarchives.gov.uk/20160204122036/http://www.artscouncil.org.uk/advice-and-guidance/browse-advice-and-guidance/digital-audiences-engagement-arts-and-culture-online (17.08.2017).

10 Ibid, 27.

11 Voorbij, H.

12 Lukić, J. (2014): The impact of information and communication technology on decision making process in the big data era", *Megatrend revija*, 11(2): 221-234.

13 Caldwell, N. (2005): The Whipple 'Time-clock' Experiment: Measurement of Visitor Engagement in a Small Museum, in AIMAC 2005 proceedings of the *8th International Conference on Arts and Cultural Management*, http://neumann.hec.ca/aimac2005/PDF_Text/Caldwell_Nial.pdf (18.01.2018).

14 Kaushik, A. (2009): *Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity*, Wiley.

Another component of proactive website management is frequent update of fresh and relevant content. In that respect, "content freshness" is defined as the rate which points out how fast a search engine updates its caches, reflecting the time lag between the cached version and the real version of a web page as appeared on the web. It is calculated by averaging the differences between the time when the tests take place and the time when the web search engines had last updated their indexes[15]. Major search engines use fresh content in their ranking algorithms, seeing them as a factor in information quality which contributes to a steady link growth and improvement of engagement metrics such as shares[16]. In 2011, Google announced that an important change to its ranking algorithm would be to valuate content freshness designed to give users the most up-to-date results in web search[17]. Thus, unlike many other sectors, content generation should not be an issue for cultural institutions, given the amount of content at their disposal.

Referring to the social media usage in arts and culture Kidd identified the three organizing frames[18]: the Marketing Frame (promoting the "face" of a cultural institution), the Inclusivity Frame (related to the notions of real and online "community") and the Collaborative Frame (promoting collaboration with the audience). The three most commonly adopted social media networks within the cultural sector are Facebook, Twitter and YouTube, whose aim is to promote the arts, to increase the audience involvement, to enable institutions to engage more efficiently in art advocacy, to provide arts education to the public and enable artistic collaboration, as well as to improve various management requests[19]. Thus, Padilla-Meléndez and Del Águila-Obra[20] found out that the combined effort of website presence and social media usage for cultural institutions is also contributing to their online value creation.

Plaza, B. (2011): Google Analytics for measuring website performance, *Tourism Management*, 32: 477-481.

15 Anagnostopoulos, I.; et al. (2010): Estimating evolution of freshness in Internet cache directories under the capture–recapture methodology, *Computer Networks*, 54(5): 741-765.

16 Shepard, C. (2016): *10 Illustrations of How Fresh Content May Influence Google Rankings*, Moz blog, https://moz.com/blog/google-fresh-factor-new (27.03.2018).

17 Singhal, A. (2011): *Giving you fresher, more recent search results*, Google blog, https://googleblog.blogspot.rs/2011/11/giving-you-fresher-more-recent-search.html (20.02.2018).

18 Kidd Jenny (2011): "Enacting engagement online: framing social media use for the museum", *Information Technology & People*, 24(1), 66.

19 Thomson, K.; et al. (2013): Arts organizations and digital technologies, *Pew Research Center's Internet & American Life Project*. http://www.pewinternet.org/files/old-media/Files/Reports/2013/PIP_ArtsandTechnology_PDF.pdf (1.02.2018).

20 Padilla-Meléndez, A.; Del Águila-Obra, R. A. (2013): Web and social media usage by museums: Online value creation, *International Journal of Information Management*, 33(5): 892-898.

Bearing in mind limitations in cultural budget, both in Serbia and globally, the increase of web visits due of better optimized websites based on the natural search engine listings is considered as crucial to attract traffic to a website and therefore a desired strategy for managers of cultural institutions[21]. However, achieving high ranking is considered as difficult because search engines do not publicly release their ranking algorithms, nor disclose information regarding the factors used in ranking[22]. Google is said to employ more than 250 factors in its ranking algorithm, most of which are held as closely guarded secrets[23]. The process, as well as the activities, that website managers undertake to secure a top place on search engine result pages (SERP) is referred to as search engine optimization (SEO)[24]. One of the most important aspects of SEO is content creation, as it contributes to increased website traffic and number of external links treated as online recommendations. Thus, a website with regularly updated amounts of content invites more traffic to it and achieves a better search engine ranking position[25]. Finally, a growing technique for SEO is social media optimisation (SMO), which involves optimizing a site so that it becomes more visible in social media searches through generated engagement in terms of likes, shares and comments[26]. The relationship between websites and social media can be also examined vice versa - one of the indicators of the effective use of social media could be the number of webpages they refer to in their posts, contributing to website traffic from social channels[27].

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21 Dickinson, Z.; Smit, M. (2015): Being where the people are: the challenges and benefits of search engine visibility for public libraries, *Library Hi Tech News*, 32(10): 11-15.
Scott, D. (2015): White Hat Search Engine Optimization (SEO): Structured Web Data for Libraries, *Partnership: the Canadian Journal of Library and Information Practice and Research*, 10(1): 1-22.

22 Mavridis, T.; Symeonidis, L. A. (2015): Identifying valid search engine ranking factors in a Web 2.0 and Web 3.0 context for building efficient SEO mechanisms, *Engineering Applications of Artificial Intelligence,* 41: 75–91.
Luh C-J.; et al. (2016): Estimating Google's search engine ranking function from a search engine optimization perspective, *Online Information Review*, 40(2): 239.

23 ibid

24 Onaifo, D.; Rasmussen, D. (2013): Increasing libraries' content findability on the web with search engine optimization, *Library Hi Tech*, 31(1): 88.

25 ibid, 104

26 Suzić, B.; et al. (2016): Adoption of Social Media for Public Relations by Museums, *Central European Business Review*, 5(2): 5-16.

27 Anderson, L. M. (2004): *Metrics of success in art museums*, Getty Leadership Institute

2. Methodology

The aim of the research was to explore if tracking of website visitors and traffic with analytics tool, the state of content freshness and the social media activity, as components of proactive website management, are affecting the website SEO score on Google. For that purpose, an electronic questionnaire was submitted to website managers of Serbian cultural institutions during summer of 2017. The starting sample consisted of 74 cultural institutions from the register of the Serbian Ministry of Culture, which included public libraries, archives and museums of national importance. A valid electronic survey was delivered by 63 institutions (28 national libraries, 15 national museums and 20 historical archives), whilst the remaining responses came from 11 institutions that do not have a website. Among them, more than a half of the surveyed participants is in charge of content contribution and its placement on the website, whereas one-third is responsible for social networks and/or public relations (PR).

For the purpose of the research, besides the institutions not owning a website all the responses with "I don't know" were omitted, as they demonstrated lack of managerial knowledge about their websites. Thus, 40 institutions (or 64% of the primary data) remained for statistical analysis. Two survey sample questions (institutional name and website URL) and three close-end research questions for the examination of the proactive website management were stipulated, and coded as binary variables:

1. The use of web analytics tool - Google Analytics, for tracking and reporting on the website traffic, coded with 0 (non-use of Google Analytics) and 1 (use of Google Analytics);
2. The website content freshness, as an example of best SEO practice consisting of regular update of new and relevant content focusing on core pages (e.g. home page, category pages). Content freshness was valued with 1 (latest content was placed on the website last week) and 0 (content was placed last month/quarter/long time ago).
3. The social media activity, used to give cultural institutions a recognizable face on the internet, as an extension of their branding activity, and to disseminate a variety of information to the wider public[28]. Managing more than one social network was coded with 1, and 0 for using only Facebook, or without social media use.

In the second phase, the total SEO score of analysed websites was calculated and presented on a scale from 1-100, with 1-30 as deficient, 30-60 as good, 60-80 as very good, and over 80 as excellent performance.

[28] Kotler, G. N.; Rentschler, R.
Bountouri, L.; Giannakopoulos, G. (2014): The Use of Social Media in Archives, *Procedia - Social and Behavioural Sciences,* 147: 510-517.

To examine if there is a relationship between proactive website management and the SEO score of analysed websites, a t-test for independent samples was used. In that respect, the dependent variable was SEO score, whereas the independent variables were the usage of Google Analytics, the state of content freshness and the social media activity on multiple accounts. The research aim was to examine if the use of website analytics tool, regular content update and social media activity, as components of proactive website management, are contributing to the higher organic visibility of websites on search engines, evinced through better SEO score.

3. Results and Discussion

The SEO score for examined websites of Serbian cultural institutions, together with coded responses referring to the usage of Google Analytics, weekly ingestion of fresh content and managing more than one social media account, as indicators of proactive website management, are presented in Table 1. For the calculation of the SEO score, a popular SEO checker and website review tool Woorank[29] was used.

Table 1: *SEO score and components of website management for Serbian cultural institutions*

	Website address	SEO score	Google Analytics	Content freshness	Social media activity
1.	arhivzrenjanin.org.rs	35	0	0	0
2.	arhivja.org.rs	32	0	0	0
3.	biblioteka-sm.rs	44	0	0	0
4.	bibliotekaprokuplje.org.rs	33	0	0	0
5.	arhivkikinda.org.rs	28	0	0	0
6.	nbvrakic.org.rs	49	0	0	0
7.	arhivnis.co.rs	30	0	0	0
8.	arhivbc.rs	34	0	0	0
9.	subiblioteka.rs	35	0	1	0
10.	biblioteka-smederevo.org.rs	38	0	1	0
11.	vranjearhiv.com	32	0	1	0
12.	arhivyu.gov.rs	28	0	1	0
13.	bms.rs	37	0	1	0

[29] www.woorank.com

14.	arhivkraljevo.org.rs	50	0	1	0
15.	arhivzajecar.org.rs	54	0	1	0
16.	nbleskovac.org.rs	29	1	0	0
17.	mnmu.rs	40	1	0	0
18.	nbpi.org.rs	50	1	1	0
19.	arhiv-beograda.org	59	1	1	0
20.	biblioteka-uzice.rs	32	1	1	0
21.	nbss.rs	61	1	1	0
22.	arhivsabac.org.rs	30	0	0	1
23.	bibliotekaprokuplje.org.rs	33	0	1	1
24.	mpu.rs	39	0	1	1
25.	etnografskimuzej.rs	60	0	1	1
26.	muzejnt.rs	51	1	0	1
27.	bibliotekasabac.org.rs	54	1	1	1
28.	zrbiblio.rs	45	1	1	1
29.	jabooka.org.rs	49	1	1	1
30.	kv-biblio.org.rs	43	1	1	1
31.	nb.rs	51	1	1	1
32.	biblioso.org.rs	32	1	1	1
33.	mij.rs	67	1	1	1
34.	mpus.org.rs	61	1	1	1
35.	narodnimuzej.rs	56	1	1	1
36.	nbks.org.rs	56	1	1	1
37.	unilib.rs	59	1	1	1
38.	archives.org.rs	53	1	1	1
39.	muzejvojvodine.org.rs	49	1	1	1
40.	imus.org.rs	57	1	1	1

Note: SEO score calculated in November 2017.

Among the Serbian cultural institutions, we have recorded the insufficient awareness about the use of web analytics for tracking and reporting on the website traffic, as only one third of the respondents confirmed the usage of Google Analytics (30%)[30]. Next, the t-test for independent samples has shown

[30] For the rest of the cultural institutions, 42% doesn't deploy Google Analytics and 28% were not sure about it.

that there is a statistically significant difference in terms of the average value of the SEO score, in favor of those cultural institutions which are deploying Google Analytics ($\rho = 0.0003$). Therefore, it could be concluded that institutions with higher SEO score are proactively using Google Analytics for tracking and reporting on website traffic, as presented in Table 2.

Table 2: *The relationship between SEO score and Google Analytics*

Variable	Average SEO score (M)	Standard deviation (SD)	Sample size
Google Analytics: use	50.2	10.3	N1=21
Google Analytics: non-use	37.9	9.2	N0=19

Note: $t = 3.9551$, $df = 38$, $\rho = 0.0003$, standard error of difference = 3.096[31]

Regarding the state of the content freshness, the Serbian cultural institutions from our survey showed the strong awareness about the importance of new content generation, as two third of them are performing regular content updates on a weekly basis (66%)[32]. For examining the relationship between SEO score and content freshness, the t-test has also presented a statistically significant difference in terms of the average value of the SEO score ($\rho = 0.0022$) in favour of cultural institutions which are frequently updating their web content. Namely, institutions with weekly content update, have also a better SEO score (Table 3).

Table 3: *The relationship between SEO score and content freshness*

Variable	Average SEO score (M)	Standard deviation (SD)	Sample size
Content update: weekly	47.9	11.1	N1=28
Content update: monthly/quarterly/rare	36.3	7.9	N0=12

Note: $t = 3.2807$, $df = 38$, $\rho = 0.0022$, standard error of difference = 3.538

Finally, the Serbian cultural institutions showed some intense activity on social networks. Namely, nearly a half of the institutions are present on more than one social network, a positive finding which speaks about their desire to be engaged towards visitors and showcases the visibility of their conducted activities. The t-test has also confirmed a statistically significant difference in terms of the average value of the SEO score ($\rho = 0.0035$) in favour of cultural institutions which are active on more than one social network. Specifically,

31 Calculation tool: https://www.graphpad.com/quickcalcs/ttest1.cfm

32 For the rest of the cultural institutions; 10% last month, 9% last quarter and 15% long time ago.

institutions which manage more social networks have a higher SEO score (Table 4).

Table 4: *The relationship between SEO score and social media activity*

Variable	Average SEO score (M)	Standard deviation (SD)	Sample size
More than one social network	49.7	10.4	N1=19
Only Facebook/without social media use	39.5	10.3	N0=21

Note: $t = 3.1103$, $df = 38$, $\rho = 0.0035$, standard error of difference = 3.284

4. Conclusions and limitations

This exploratory research was aimed toward examining the relationship between proactive website management and the phenomenon of SEO as a mechanism for improving website visibility and findability in organic search results. The research has shown that activities such as using analytic tools for monitoring website traffic, content generation and deploying more social media accounts, pots retroactive positive feedback on the website SEO score. Combined, they contribute to the efforts toward attracting more online users, increase awareness of the institutional activities and strengthen its online brand visibility.

Having in mind the discovered link between proactive website management and its SEO score, the research findings can contribute to website managers for making better informed decisions regarding their online strategies and resource allocation. Instead of using disparate online channels, the ultimate goal should become their mutual synergy, which would contribute to the online value creation.

The conducted research has certain limitations. The sample size is relatively small and the data collection for this study was limited only to Serbian cultural institutions of national importance, therefore, any extrapolation of the findings must be done with caution. Besides, this study relies on a software tool in gathering information about the SEO score for examined websites, and the data might become non-accurate given their fluid nature.

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OSNOS IZMEĐU UPRAVLJANJA VEB SAJTOM I PROCESA OPTIMIZACIJE NA PRETRAŽIVAČU

Osnovni cilj članka je da se istraži da li postiji sinergija između proaktivnog upravljanja veb sajtom i boljoj organskoj vidljivosti veb sajtova na Gugl pretraživaču koja se ogleda kroz ostvareni rezultat u optimizaciji na internet pretraživačima (SEO). Analiza je sprovedena na osnovu 63 odgovora na elektronski upitnik sproveden tokom leta 2017. godine u kojem su učestvovale srpske ustanove kulture nacionalnog značaja. Kao zavisna varijabla koristio se ostvareni rezultat u optimizaciji veb sajta na pretraživaču, dok su nezavisne varijable bile korišćenje Gugl analitike, proaktivan unos novog veb sadržaja i aktivnosti na društvenim mrežama. Da bi se ispitale razlike između ostvarenog rezultata u optimizaciji veb sajta na pretraživaču u odnosu na pojedinačne nezavisne varijable, korišćen je t-test za nezavisne uzorke. Bolje rezultate u optimizaciji zabeležili su veb sajtovi koji koriste Gugl analitiku, nedeljno unose novi veb sadržaj i koriste više od jedne društvene mreže, koji kombinovano doprinose ciljevima privlačenja novih korisnika putem internet kanala, povećavaju svest o aktivnostima ustanove i jačaju vidljivost njenog brenda na internetu. Umesto korišćenja disperitetnih alatki i kanala u upravljanju veb sajtom, cilj treba da bude osvarenje uzajamne sinergije između veb analitike, društvenih mreža, generisanja sadržaja i optimizacije sajta na pretraživaču, koji dovode do stvaranja onlajn vrednosti. Nalazi istraživanja mogu koristiti menadžerima veb sajtova za donošenje bolje informisanih odluka vezano za strategiju nastupa na internetu i alokaciju resursa.

Ključne reči: *Veb sajt, optimizacija veb sajta na pretraživaču, veb analitika, društvene mreže, menadžment u kulturi.*

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DINAMIKA ULAGANJA U INOVACIJE I NOVE TEHNOLOGIJE U VISOKOOBRAZOVNIM INSTITUCIJAMA****

U savremenim uslovima poslovanja inovacije i nove tehnologije imaju veliki značaj za razvoj visokoobrazovnih institucija. Velike promene su pod uticajem informaciono-komunikacionih tehnologija, Bolonjskog procesa, interneta, novih alata za unapređenje inovativnosti u obrazovanju i treningu. Ulaganje u nove tehnologije i inovacije je neophodno.

U ovom radu je kroz rezultate istraživanja i statističkom obradom prikazana i potvrđena dinamika uvodjenja inovacija i novih tehnologija na privatnim i državnim fakultetima u Republici Srbiji. Period koji je analiziran je od 2010-2017. godine. U posmatranom periodu ulaganje u inovacije i nove tehnologije iz godine u godinu raste. U istom periodu su prikazane i analizirane promene izazvane zahtevima studenata, trendovima na stranim fakultetima. Pored toga, obrađen je i uticaj konkurencije i dinamika uvođenja inovacija pod njihovim uticajem. Statističkom obradom podataka je potvrđeno da sve navedene promene utiču na visokoobrazovne institucije i da iz godine u godinu vrednost ulaganja raste.

Ključne reči: *inovacije, nove tehnologije, visokoobrazovne institucije, ulaganja.*

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1. Uvod

Inovacije i nove tehnologije su sve više zastupljene u visokoobrazovnim institucijama. Potreba za promenama u obrazovanju, izvođenju nastave, metodama, oblicima i načinu rada je konstantna i javlja se svuda u svetu. Vremenom postaje neophodno prevazilaženje nedostatka tradicionalne nastave, posebno u domenu individualizacije nastave i učenja, podizanje unutrašnje i spoljašnje motivacije, realnijeg i objektivnijeg vrednovanja znanja.

Nove tehnologije su dovele i do razvoja novih veština. Pored veština koje su potrebne za rad sa velikim brojem dostupnih informacija, onaj koji uči mora da poseduje dodatne veštine da reaguje na izazove digitalnog društva i izgradi protivtežu i dopunu nedostacima sopstvenog prirodnog stila učenja.

Visokoobrazovne institucije imaju veliki značaj i ulogu u društvu i privredi jedne zemlje. Razvoj tržišne ekonomije kroz savremene tendencije pokazuje da je obrazovanje i formiranje ljudskih resursa glavni prioritet nacionalne strategije i politike za društveni, ekonomski i tehnološki napredak. Ulaganje u obrazovanje ima investicioni karakter, koje mora da bude usklađeno sa potrebama privrede i društva. Razvoj privrede i društva se zasniva na znanju koje se oblikuje obrazovnim sistemom.[1] Iz tog razloga je neophodno ulagati u obrazovni sistem, u inovacije i nove tehnologije.

Nakon uvoda u ovom radu biće prikazane teoretske osnove i pravci razvoja koji se odnose na nove tehnologije i inovacije u visokoobrazovnim institucijama. Treći deo rada će prikazati rezultate istraživanja u poslednjih osam godina po pitanju ulaganja u inovacije i nove tehnologije na fakultetima u Republici Srbiji. Pored toga, uslediće i analiza pomenutog perioda po pitanju promena i inovacija koje su uvedene pod uticajem trenda na stranim fakultetima, zahtevima studenata i uticajem konkurencije. Na kraju će uslediti zaključna razmatranja.

2. Nove tehnologije i inovacije u visokoobrazovnim institucijama

Različiti faktori iz okruženja i uslovi u kojima rade visokoobrazovne institucije nameću potrebu za konstantnim uvođenjem novih programa razvoja koji se zasnivaju na inovacijama i novim tehnologijama. Inovacije se sve više uvode i dovode do boljih rezultata. Razvoj tehnologije i promene u načinu razmišljanja doveli su do velikih promena u svetu.[2] Sa razvojem komunikacionih tehnologija,

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1 Trifunovic, D., Tankosic, M. (2013): *The Reproduction of Knowledge Based on the Cooperation between Enterprises and Institutions of Higher Education,* WSEAS, Recent Researches in Applied Economics and Management - Volume II, Proceedings of the 5th International Conference on Applied Economics, Business and Development (AEBD '13), Crete Island, Greece, August 27-29, 2013, ISBN: 978-960-474-324-7, pp. 155-160.

2 Fangqi Xu, Rickards, T., Creative Management: A Predicted Development from Research into Creativity and Management, *Creativity and innovation management*, Vol. 16, No. 3, 2007

kompanije i visokoobrazovne institucije primenjuju nove metode i inovacije. Takodje, naglasak je na brzini inovacija.

Uspešne inovacije uključuju jednu ili više interakcija sledeće tri faze: pisanje novih ideja, izbor, uređivanje i marketing novih ideja, prihvatanje novih ideja na tržištu.[3] Inovacije vode ka promenama koje mogu da budu male ili velike, pa govorimo i o različitim vrstama inovacija. Inovacije mogu da budu: inkrementalne, radikalne, modularne, arhitekturne, održive, disruptivne, kontinuirane, diskontinuirane. Sve one vode ka primeni novog znanja da bi se ponudio novi proizvod koji traže kupci. Inovacija je invencija koja je upotrebljena u komercijalne svrhe. Ona je inspiracija i kreacija, preporod i pritisak na promene u procesu učenja i, ono najbolje, ona je i put otkrića. Prvo su se inovacije posmatrale kao proces rešavanja određenih, najčešće tehnoloških problema, da bi se sada vezivale za proces učenja. Inovacija se sada posmatra kao proces, proces za rešavanje problema; proces koji se prvenstveno javlja u komercijalnim preduzećima; interaktivni proces koji uključuje odnose između preduzeća sa različitim akterima, ali i u visokoobrazovnim institucijama.[4]

Uvođenje inovacija i novih tehnologija u visokobrzovnim institucijama su dovele do velikih promena. Revolucija informaciono-komunikacionih tehnologija(IKT) je centralna i pokretačka snaga, a dinamična promena u svim aspektima ljudskog postojanja je ključni nusproizvod trenutnog globalizacionog perioda IKT revolucije. Inovacije se povećavaju pod uticajem IKT.[5]

Veliki broj inovacija u visokoobrazovnim insitucijama se pokrenuo potpisivanjem Bolonjskog procesa. Inovacije koje su nastupile nakon potpisivanja su: Evropski sistem prenosa bodova (ESPB), ishodi učenja, dodatak diplomi, vrste i ciklusi studija, mobilnost i Bolonjski proces, ispit, obavezni i izborni predmet, finansiranje studija, priznavanje prethodnog učenja.[6]

Pored toga, internet je doveo do velikih promena i u visokoobrazovnim institucijama. Od 2003. godine internet je ostvario rast u krajnjim potrebama korisnika aplikacija, kao što su blogovi, viki, socijalne društvene mreže, pretraživači, akcijski sajtovi, igre, *Voice over IP*, i *peer – to - peer* usluge. Zajedno, oni se nazivaju socijalno računarstvo (ili*Web 2.0*), jer koriste internet konekciju da podrže povezivanje ljudi i sadržaja. Korisnik je sastavni deo i koproducent

[3] Chi-yue, C., Kwan, L., Y-Y., Culture and Creativity: A Process Model, *Management and Organization Review*, Vol. 6, No. 3, 2010, pp. 447–461.

[4] Komazec, G., Petrović-Lazarević, S. (2007): Upravljanje razvojem preduzeća, Megatrend univerzitet, Beograd, str. 247-260.

[5] Trifunovic, D., Tankosic, M. (2015): *The Introduction of Innovations Dynamics Influenced by the Information Communication Technology and the Implications on Marketing Strategies of Companies*, Advances in Environmental Science and Energy Planning, WSEAS, Tenerife, Canary Islands, Spain January 10-12, 2015, ISBN: 978-1-61804-280-4, str. 121-127

[6] Sursock, A., Smidt, H. (2010): *Trends 2010: A decade of change in European Higher Education,* EUA PUBLICATIONS, pp. 56

svih elemenata pruženih usluga, bez obzira da li će biti zadovoljen (*blog, viki, Flickr*), ukus/emocije (*Amazon, de.li.cious*), roba (*e-Bay*), kontakti (*My Space*), relevantnost (*Google page rank*), ugled (*e-Bay,TripAdvisor*), skladištenje/kapacitet servera (*P2P*), povezivanje (*wi-fi uređaja, mesh mreže*) ili inteligencija (poslovno društveno računarstvo).[7]

Web 2.0 ili društveno računarstvo, odnosi se na opseg ili aplikacije koje omogućavaju interakciju, saradnju i razmenu između korisnika. Ove aplikacije se koriste digitalno za blogovanje, saradnju (npr. *Viki)*, društvene mreže (npr. *My Space, Facebook*), multimedijalna deljenja (npr. *Flickr, You Tube*), socijalna označavanja (npr. *Deli.cio.us*) i društvene igre (npr. *Second Life*) .[8]

Društvene računarske aplikacije omogućavaju korisnicima da komuniciraju i sarađuju na različite načine i u različitim medijima, koji takođe pomažu da deluju zajedno i grade baze znanja koje odgovaraju njihovim specifičnim potrebama. [9]

Karakteristične osobine određenih kompjuterskih alata mogu se iskoristiti za pružanje inovativnih načina i metoda učenja koje bolje odražavaju materiju predmeta koji se proučava i time unapređuju proces učenja i ishod. Konkretno, društveni računarski sajtovi koji omogućavaju proizvodnju, objavljivanje, deljenje, i izmenu foto i video sadržaja mogu da podrže kreativnije i aktivnije angažovanje studenata u umetnosti, dizajnu, muzici, pisanju itd.[10]

Jedna od snaga alata društvenog računarstva leži u njihovom potencijalu da obezbede socijalno umrežavanje, spajajući ljude sa zajedničkim interesima i dozvoljavajući im da razmene znanja i intenziviraju saradnju . Ovo postojanje lako pristupnih i prilagodljivih alata koje obezbeđuju umrežavanje i izgradnju povezivanja je dovelo do povećanja platformi i portala za razmenu znanja među nastavnicima i istraživačima.[11]

Novi trendovi i pravci u obrazovanju nameću potrebu za stalnim ulaganjem u inovacije.

7 Redecker, C., Ala-Mutka, K.,Bacigalupo, M., Ferrari, A., Punie, Y. (2009): *Learning 2.0: The Impact of Web 2.0 Innovations on Education and Training in Europe,* Institute for Prospective Technological Studies, European Commission, pp. 19.

8 Pascu, C., Osimo, D., Turlea, G., Ulbrich, M., Punie, Y. and Burgelman, J-C. (2008): *Social computing -Implications for the EU innovation landscape*, Foresight 10 (1), 37-52.

9 Martin, O., Grant, L, Sayers S., Facer K. (2006): *Social software and learning.* Futurelab Opening Education Reports

10 Reid, A. (2008): *Portable Composition: iTunes University and Networked Pedagogies*, Computers and Composition 25, 61–78.

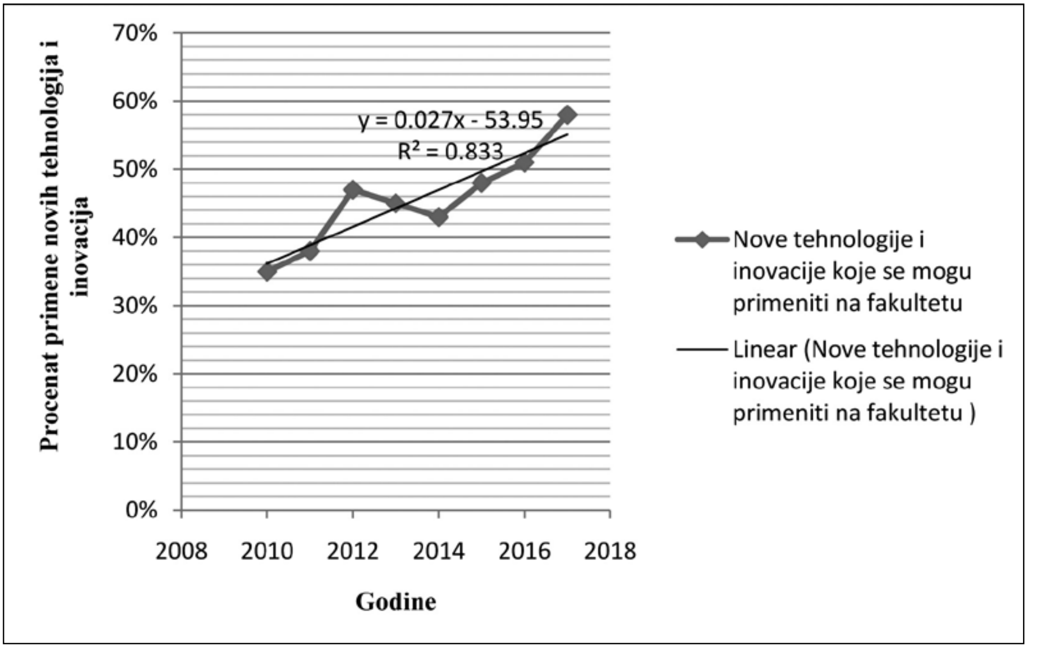
11 Cachia, R. (2008): *Social Computing: The Case of Online Social Networking*, EC JRC-IPTS Exploratory Research on Social Computing. JRC Scientific and Technical Reports, EUR 23565 EN

3. Metod i rezultati istraživanja

Istraživanje, čiji deo će biti korišćen u ovom radu, sprovedeno je na teritoriji Republike Srbije u periodu od januara do marta 2018. godine. Obuhvaćeno je 25 privatnih i državnih fakulteta. Posmatrana je dinamika u vremenskom periodu od 2010-2017. godine i predstavljena na grafičkim prikazima.

Na grafiku 1 je prikaz ulaganja koje su sprovedene u visokoobrazovnim institucijama pod uticajem novih tehnologija i inovacija.

Grafik 1: *Ulaganje u nove tehnologije i inovacije u periodu od 2010–2017. godine*



Izvor: Ilustracija autora na osnovu istraživanja

Od svih promena koje su navedene najveći procenat fakulteta je navodio ovu promenu kao najznačajnijeg inicijatora promena u periodu od 2010-2017. godine. To potvrđuje i vrednost kvadratnog koeficijenta proste linearne korelacije:

$$y = 0{,}027x - 53{,}95$$

$$R^2 = 0{,}833$$

Vrednost ovog koeficijenta je 0,833 što znači da postoji direktna linearna veza i da zavisna promenljiva raste kada raste nezavisno promenljiva. U ovom slučaju zavisna promenljiva je procenat primene novih tehnologija i inovacija, nezavisna promenljiva su godine. To znači da primena novih tehnologija i inovacija raste iz godine u godinu. Rast primene novih tehnologija i inovacija vodi razvoju visokoobrazovnih institucija.

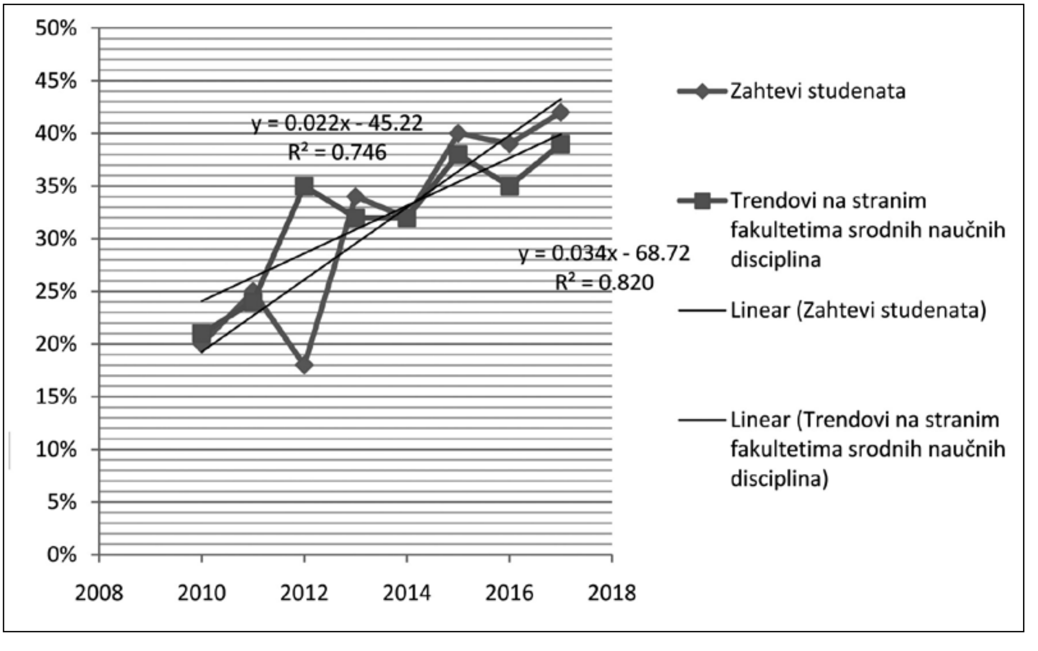
Trendovi na stranim fakultetima srodnih naučnih disciplina dosta utiču da dođe do promena u visokoobrazovnim institucijama, što potvrđuje i regresiona analiza prikazana na grafiku broj 2, a koja je dobijena po obrascu:

$$y = 0{,}034x - 68{,}72$$

$$R^2 = 0{,}820$$

Kvadrat koeficijenta proste linearne korelacije u ovom slučaju iznosi 0,820, što znači da postoji direktna linearna veza i da zavisna promenljiva raste kada raste nezavisno promenljiva tj. rast godina prati rast promena u visokoobrazovnim institucijama nastalih pod uticajem trendova na stranim fakultetima srodnih naučnih disciplina.

Grafik 2: *Promene uvedene pod uticajem studentskih zahteva i trendova na stranim fakultetima srodnih naučnih disciplina u periodu od 2010–2017. godine*



Izvor: Ilustracija autora na osnovu istraživanja

Druga promena koja je prikazana na ovom grafiku se odnosi na promene koje se dešavaju u visokoobrazovnim institucijama, a koje su nastale pod uticajem zahteva studenata.

Vrednost kvadratnog koeficijenta proste linearne korelacije u ovom slučaju dobijamo na sledeći način:

$$y = 0{,}022x - 45{,}22$$

$$R^2 = 0{,}746$$

Vrednost ovog koeficijenta je 0,746 što znači da postoji direktna linearna veza i da zavisna promenljiva raste kada raste nezavisno promenljiva, tj. da sa rastom godina rastu i promene u visokoobrazovnim institucijama koje su inicirane zahtevima studenata.

Uvođenje promena koje su inicirane zahtevima studenata je u skladu sa činjenicom da se organizacije i visokoobrazovne institucije sve više okreću ka korisniku i traže načine da što bolje zadovolje njegove potrebe.[12] Korisnici imaju aktivnu ulogu u stvaranju vrednosti što je u skladu sa novim konceptom zajedničkog stvaranja jedinstvene vrednosti sa korisnicima, i oni postaju novi izvor kompetencija u pogledu organizacije.[13] Nove ideje i potrebe korisnika utiču na stvaranje novih usluga.[14]

Merenje zadovoljstva korisnika, u ovom slučaju studenata, je tim teže što je njihovo mišljenje o usluzi potpuno subjektivno, zavisno od njihovih očekivanja i promenljivo u vremenu. Praksa pokazuje da 40% kupaca u prodavnicama robe široke potrošnje nikada se neće požaliti ili nešto reklamirati, već će otići na drugo mesto. Slična je situacija i sa drugim kategorijama korisnika, pa i u ovom slučaju sa studentima.[15] Prema jednoj istoj usluzi, dva korisnika će pokazati potpuno različite reakcije, u zavisnosti od upotrebe koju od nje očekuju. Isto tako, zadovoljstvo se i menja tokom vremena, pa uvažavanje zahteva studenata i uvođenje inovacija pod njihovim uticajem vode razvoju visokoobrazovnih institucija.

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12 Bulut, U., Trifunović, D., Bulut, I.(2013): *Role of knowledge and the consumer in the process of innovation*, International May Conference on Strategic Management - IMKSM2013, 24-26. May 2013, Bor, Serbia, Univerity of Belgrade, Technical Faculty in Bor, Management Department pp. 1122-1130.

13 Rakić, M., Rakić, B. (2012): Nova „Marketinška formula"- zajedničko stvaranje jedinstvene vrednosti sa potrošačima i personalizovani marketing, Megatrend revija, Beograd, Vol.9, No 4

14 Sheu D.D., Lee H.K. (2011): *A Proposed Process for Systematic Innovation*, International Journal of Production Research ,(49)3, 847-868.

15 Dubrovski D., *Fuzzy Logic and Management Mistakes in Contemporary Corporate Decision Making,* International Journal for Quality Research, No. 4

Važno je pomenuti i da pri inoviranju akcenat pre svega treba staviti na poboljšanje kvaliteta samih usluga. Jer, zadovoljstvo korisnika i profitabilnost usko su povezani sa kvalitetom proizvoda i usluga.

Korisnik procenjuje kvalitet usluga ili proizvoda[16], koji je uvek posledica poslovnog načina funkcionisanja sistema. Zato je od velikog značaja za unapređenje kvaliteta da poslovni sistem identifikuje svoje korisnike i istražuje njihove potrebe u cilju razvoja funkcija usluga u skladu sa ovim zahtevima, a potom organizuje funkcionisanje procesa u poslovnom sistemu, tako da su u stanju da isporuče planiran kvalitet. Kvalitet počinje sa korisnicima.[17]

Visokoobrazovne institucije proizvode dve vrste znanja: prva vrsta znanja za studente koja treba da im omogući da doprinesu budućim poslovnim sistemima i javnom sektoru gde će raditi, a druga vrsta znanja koja se stvara kroz naučna istraživanja koja bi trebalo da obezbede razvoj društva i nauke. Obe vrste znanja imaju svoje korisnike, odnosno uslove za njen kvalitet, koji treba da se poštuju u planiranju kvaliteta. Za one visokoškolske ustanove koje su posvećene kvalitetu, prvi korak bio bi priznanje da njihovi korisnici nisu samo studenti, a drugi korak bi bio da se razumeju potrebe svih grupa korisnika.[18]

Između planiranja kvaliteta i ocenjivanja kvaliteta je proces proizvodnje dobara i usluga koji je odgovoran za razliku između planiranih i procenjenih kvaliteta. Praćenje i merenje prethodno definisanih parametara u procesu proizvodnje je važno za sprečavanje nepoželjnog rezultata. Ali, postoje i papiri kojima država propisuje kritična pravila za uspostavljanje kvaliteta.[19]

Za poboljšanje kvaliteta neophodno je tragove neusaglašenosti analizirati kako bi pronašli njihov osnovni uzrok i implementirali korektivne akcije. Kvalitet se definiše kao zadovoljstvo kupaca[20], dok je prvi korak za njegovo postizanje eliminisanje grešaka i ne može se učiniti bez njihovog praćenja. Praćenje grešaka zahteva dodatno vreme, napore i finansijske investicije, ali efekti mogu biti mnogo veći i vode zadovoljstvu korisnika.[21]

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[16] Bitner, M.J. (1990) *Evaluating service encounters: The effects of physical surroundings and employee responses*, Journal of Marketing, Vol. 54, No. 2, pp.: 69-82

[17] Nwokah, N.G, Ezirim, A.C. (2010.): *Total quality marketing and impression management for effective insurance marketing*, International Research Journal of Finance and Economics, Iss. 38, pp. 94-103.

[18] Quinn, A., Lemay, G., Larsen, P., Johnson, D. M. (2009): Service quality in higher education, Total Quality Management & Business Excellence, Vol.20 Iss.2, pp.139-152.

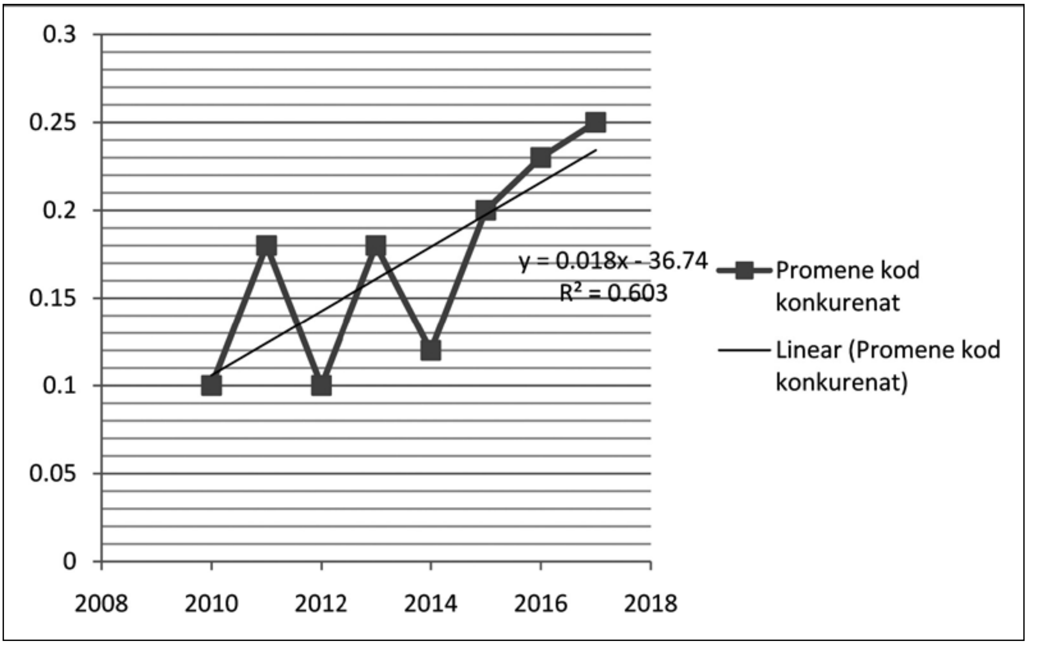
[19] Carlucci, D., Marr, B., Schiuma, G., (2004): *The knowledge value chain: how intellectual capital impacts on business performance*, International Journal of Technology Management, Vol. 27, No. 6/7, pp.: 575-590

[20] Gill, J. (2009): "Quality follows quality: add quality to the business and quality will multiply the profits", The TQM Journal, 21(5), 530-539.

[21] Aleksandra Živaljević, Dragana Trifunovic, Biljana Pejović (2016): Two Quality Evolutions – Industry vs. Health Care, Megatrend Review, vol. 13, No. 1, pp. 159-184. ISSN: 1820-3159.

Viši nivo kvaliteta ima za rezultat veće zadovoljstvo korisnika.[22] Primena totalnog kvaliteta je ključ za kreiranje vrednosti i zadovoljstva korisnika . Sprovođenje kvaliteta vodi razvoju visokoobrazovnih institucija.[23]

Grafik 3 : *Promene uvedene pod uticajem konkurencije u periodu od 2010–2017. godine*



Izvor: Ilustracija autora na osnovu istraživanja

Grafik 3 prikazuje koliki uticaj imaju promene koje su kod konkurenata. Najmanji procenti su u okviru ove promene, tako da promene kod konkurenata nemaju veliki uticaj na sprovođenje promena u visokoobrazovnim institucijama, ali se taj uticaj iz godine u godinu povećava. To potvrđuje i regresiona analiza koju dobijamo na sledeći način:

$$y = 0{,}018x - 36{,}74$$

$$R^2 = 0{,}603$$

[22] Kotler, P., Armstrong, G. (1996): *Principles of marketing*, Prentice Hall International

[23] Trifunović, D. (12.12.2013.) Uticaj interakcije visokoobrazovnih institucija i preduzeća na dinamiku privrednog razvoja putem kreiranja i transfera inovacija, doktorska disertacija, Zajednički program Fakulteta za poslovne studije i Fakulteta za međunarodnu ekonomiju, Megatrend univerzitet

Kvadrat koeficijenta korelacije u ovom slučaju iznosi 0,603 što znači da je stepen u kome je jedna pojava određena drugom pojavom manji u odnosu na prethodne slučajeve.

4. Zaključak

Inovacije su generatori promena, pokretači samog razvoja čoveka (kao inovatora, preduzetnika), preduzeća, privrede i visokoobrazovnih institucija. Razvoj visokoobrazovnih institucija su pratile velike promene poslednjih nekoliko godina, koje su vodile novom pristupu obrazovanja zasnovanom na konstantnom inoviranju.

Inovacije u visokoobrazovnim institucijama su nastale i pod uticajem nove paradigme učenja, zbog mlađih generacija koje su odrasle okružene digitalnim medijima i imaju potpuno novi način učenja u odnosu na prethodne generacije.U poređenju sa prethodnim generacijama đaka oni su digitalno pismeni, misle više vizualno i nelinearno, praktikuju multitasking i preferiraju multimedijalna okruženja.[24] Web 2.0. ima značajan potencijal za unapređenje inovativnosti u formalnom obrazovanju i treningu. Takođe, tehnološke inovacije u obrazovanju omogućavaju da se karakteristične osobine određenih kompjuterskih alata mogu iskoristiti za pružanje inovativnih načina i metoda učenja koje bolje objašnjavaju materiju predmeta. Jedna od snaga alata društvenog računarstva leži u njihovom potencijalu da obezbedi socijalno umrežavanje, spajajući ljude sa zajedničkim interesima i dozvoljavajući im da razmene znanja i intenziviraju saradnju.[25]

Zaključci iz istraživačkog dela ovog rada su: da se iz godine u godinu povećavaju ulaganja u inovacije i nove tehnologije na fakultetima u Republici Srbiji, da se prate i implementiraju pozitivna iskustva i trendovi sa stranih fakulteta srodnih naučnih disciplina, da se uvažavaju studenti i da postoji određena dinamika uvođenja promena pod uticajem konkurenata.

[24] Francesc, P. (2006): *The new Millennium Learners: Challenging our Views on ICT and Learning*.OECD-CERI

[25] Cachia, R. (2008): *Social Computing: The Case of Online Social Networking*, EC JRC-IPTS Exploratory Research on Social Computing. JRC Scientific and Technical Reports, EUR 23565 EN

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INVESTMENT DYNAMICS IN INNOVATION AND NEW TECHNOLOGIES IN HIGHER EDUCATION INSTITUTIONS

In modern conditions of business, innovations and new technologies have a great significance for the development of highly educated institutions. Major changes are under the influence of information-communication technologies, the Bologna process, the Internet, new tools for improving innovation in education and training. Investing in new technologies and innovation is necessary.

In this paper, through the results of the research and the statistical processing, the dynamics of the introduction of innovations and new technologies are presented in private and state faculties in the Republic of Serbia. The period analyzed is between year 2010-2017. During the observed period, investment in innovation and new technologies is growing from year to year. During the same period, the changes caused by the demands of students and trends in foreign faculties were presented and analyzed. In addition, the impact of the competition and the dynamics of introducing innovations under their influence have been addressed. Statistical data processing has confirmed that all these changes affect the higher education institutions and that the value of the investment grows year after year.

Keywords: *innovation, new technologies, higher education institutions, investments.*

Ivan Novaković*

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MUTUAL RELATIONS BETWEEN TOURISM AND THE ENVIRONMENT

Ph.D Svetislav Milenković

Publisher - Faculty of Economics, University of Kragujevac, 2006.

The book entitled *”Mutual relations between tourism and the environment“* by Svetislav Milenković (full-time professor at the Faculty of Economics, University of Kragujevac) is a product of years of research on interconnectedness and mutual influence of tourism and the environment, particularly in relation to mass tourism.

The main subject of the study is a two-way flow between tourism and the environment, or to what extent tourism as a mass phenomenon causes changes in the environment and vice versa, what the significance of the environment is for the development of tourism, and how changes in the environment can be reflected in the further development of tourism.

The aim of the author has been to find out of what the overall relationship between tourism and the environment is like at each stage of its development, that is, whether tourism and the environment are in conflict, coexistence of symbiosis in the given stage of development.

The conclusion of the author is that the optimum balance of sustainable development in tourism must be provided, as well as the optimum balance of the sustainable development of the environment. According to the author, it calls for the new redistribution of the world's tourism resources into the regions with the highest number of new tourist destinations, and therefore for the redistribution of global tourism trends in general. The new redistribution should enable a complete market valuation of those tourist attractions that have so far been considered as only one element of tourist offer.

The author has used several scientific methods in his book including: induction and deduction, regional statistics, developmental-genetic method, comparative method, statistical and mathematical methods, system analysis and taxonomy, and ranking method.

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In the first chapter entitled *"Fundamental characteristics of modern tourism as an international business"* the author gives an overview of various definitions of tourism and tourist by several Serbian and foreign authors. Then he points out the specific characteristics of tourism as an economic subsystem, and provides a systematisation of its economic features and its economic impact on the economy of a country.

Tourism has become international business as indicated by the tables of the number of tourists and tourism revenues in major countries and macroeconomic regions.

The second chapter, entitled *"The environment-its characteristics and its importance"* is of crucial importance because it presents definitions of the environment, but also gives an account of views of contemporary economists on what sustainable economic development is and whether it is achievable at all. Two kinds of views, optimistic and pessimistic ones, are particularly expressed.

Pessimistic attitudes, as presented by the author, are based on the following criteria: there are two types of resources involved in the production process of each country, renewable and non-renewable sources. The number of inhabitants on the Earth is constantly growing, therefore there is an increasing demand for new products, which in turn causes an increase in production rate. Production is growing at an exponential rate that can not be sustained over a longer period of time because non-renewable resources are becoming scarce and renewable sources can not be regenerated in a short period of time. Production processes and waste products are returning into the environment and pollute it, and thus the environment and resources even more. According to pessimists, that kind of economic development is not sustainable over a longer period of time.

Contrary to pessimistic views, optimists find it possible to maintain high growth rates in the long term thanks to price mechanism, productivity growth, discovery of new resources, resource substitution and technical and technological progress.

To be honest, optimists also accept a limited ability to use the environment, but they call into question the importance of these limitations.

It is the author's conclusion that the optimists go too far in an attempt to justify the excessive exploitation of the environment and that, in view of the current development of civilisation, it should be preserved for the next generations.

In the third chapter entitled *"The basic characteristics of the relationship between tourism and the environment"* emphasis has been placed on the relationship between tourism and the environment that may vary from conflict over coexistence to symbiosis. The conflict, in terms of the relationship between tourism and the environment, implies that tourism is the cause of conflict in the nature and that it is not compatible with the environment, that is to say, it produces harmful effects on the environment. Coexistence implies that there is little contact between tourism and the environment and that both sides remain isolated in a way. The environment and tourism are in symbiosis when both sides benefit from each other, where natural attributes are preserved and development of tourism is achieved.

In this chapter, the author gives a systematic overview of positive and negative impacts of tourism on the environment.

Historically, until the 1960s tourism hadn't displayed characteristics of mass tourism, so not much importance had been paid to the impact of tourism on the environment. However, from the 1960s to the 1990s tourism took on distinct characteristics of mass tourism. During this period, most tourist destinations reported mainly negative effects of tourism on the environment, so it was a period of conflict between tourism and the environment.

There were also numerous attempts to determine the ”carrying capacity“ of the environment, as well as to develop different techniques for the quantitative determination of the impact of tourism on the environment.

These attempts were not entirely successful because both tourism and the environment are dynamic systems, and besides, it is very difficult to isolate the impact of tourism on the environment from the impact of other factors.

The author has come to a conclusion that the government should have the most important role in the protection of the environment through systematic adoption of regulations on protection of certain areas. In this way, the government ultimately protects tourists as well. Without the protection of the environment there is no development of tourism in the future, because the environment represents a base for the development of tourism.

In the fourth chapter, entitled *”Area as an environmental factor and its tourism value*“ the author presents various definitions of area by a large number of foreign authors. One of the most acceptable definitions implies that area is a dynamic structure and it includes relief, climate, flora and fauna i.e., natural elements and all the structures that people have built in a territory (settlements, buildings of all kinds, etc.). The author gives an overview of historical stages in the development of ares as well as a definition of a tourism area. A tourism area comprises the area of tourist demand, the area of deployment of traffic infrastructure and the area of tourist supply. A particular emphasis has been placed on the type of construction and manner of use of a tourism area (excessively dispersed construction, concentrated construction and high density).

The government should play an important role in planning tourism development in order to prevent competition between a number of municipalities within a region. This kind of planning should take on an international character as well. The Alps set a good example.

As the author points out, if construction of tourist facilities is planned in rural areas, then construction should start in the existing rural settlements. In this way the prevailing spirit of rural environment is preserved and money is saved by using the existing infrastructure.

In this section the author has presented forms of exploitation of the environment for recreational purposes (amusement parks, sports and recreational facilities, water surfaces and coastline, ski centers, green areas and forests, non-productive, that is, infertile areas and national parks).

Methods for qualitative and quantitative evaluation of a tourism area as an environmental factor have been developed. The author highlights the coefficient of economic attractiveness of tourism elements in the area expressed by the following equation:

$$K_p = \sqrt{\frac{K_1^2 + K_2^2 + \ldots + K_n^2}{n}}$$

wherein K_1, K_2, ... K_n represent coefficients of tourist valorisation of individual elements of the environment (eg. relief, water, forests, etc.) and ”n“ represents the number of observed elements of the environment. The resultant synthetic coefficient has its economic interpretation.

In the fifth chapter, entitled *”The structure of the atmosphere and the concept of air pollution*“ the author has presented definitions of the atmosphere and its structure. Special emphasis has been placed on climate change in the world. As the author points out, there are still no definite findings on the extent of anthropogenic activity, i.e., the impact of humans on climate change, and the extent of climate change as a result of the natural cycle.

It is indisputable that the man, through his activities (development of industrialisation, urbanisation and traffic), contributes to climate change. Around 42% of polluting particles in the atmosphere are generated by industry, 22% by traffic, 14% by power plants, 8% by forest fires, etc. Large amounts of carbon oxides, nitrogen oxides, sulfur oxides and solid particles that lead to the formation of acid rain are released into the atmosphere. Acid rain degrade the environment completely. They destroy the flora and fauna, but also anthropogenic achievements of previous generations. The destruction of the ozone layer occurs under the influence of hydrogen chloride. When it reaches the stratosphere, it decomposes under the influence of ultraviolet radiation and releases free halogen, which acts as a catalyst in ozone destruction. Reduction in the ozone layer results in an increase of ultraviolet radiation.

According to the author, the atmosphere affects tourism in several ways:

- it influences the distribution of tourist movements;
- it determines the types and forms of tourist facilities, tourist offer, structure of tourist supply and environmental costs;
- it affects the cost of external economy and the duration of the tourist season;
- all atmospheric disorders redistribute tourist destinations;
- it affects the form and type of tourist facilities and materials used for their construction.

The sixth chapter entitled *"Structure of the hydrosphere, the concept of water pollution and its impact on tourism activity"* is of crucial importance because it deals with the condition of the world's hydrological resources, problems of water pollution, forms of water resources and their impact on the development of tourism (aquifers, springs, wells, rivers, lakes, seas and oceans). This section particularly elaborates economic-ecological models for the assessment of the hydrosphere and its tourist influence.

In the seventh chapter, entitled *"The biosphere as an integral part of the environment and its tourist value"* the author elaborates basic components of the biosphere, basic pollutants of the biosphere as well as the economic and environmental evaluation of tourist values of the biosphere. Special emphasis has been placed on calculation and interpretation of the coefficient of tourist attractiveness of forests. He also provides a systematic review of the impact of the biosphere on the tourist industry.

The eighth chapter entitled *"Basics of urban ecology and its impact on tourism development"* presents a theoretical basis for understanding and evaluation of the condition of the urban environment. Emphasis has been placed on the impact of urban environment on tourism development. The number of cities with over one million inhabitants is constantly growing. By comparison, in 1900 there were 12 of them, in 1940 there were 42, in 1968 there were 68, in 2002 there were 202 and in 2005 there were 290. In addition, there is a constant tendency towards formation of giant urbanised areas.

Big cities are faced with environmental challenges on a daily basis due to the development of industrialisation, urbanisation and traffic. The human species had lived in nature for generations, and life in cities is causing a sense of the artificial environment and a tendency to return to nature. That is why large cities are becoming generators of sources of tourist demand. On the other hand, cities attract tourists from rural areas and their gravitational zones with their anthropogenic sights, and thus create contemporary forms of tourism. In this chapter, the author has placed special emphasis on portraying a contemporary urban-ecological picture of world-famous tourist attractions.

In the ninth chapter entitled *"Sustainable development and sustainable tourism as agents of global economic changes"* the author presents different definitions of sustainable development. There is not a universally accepted definition of sustainable development, but one of them is most often used in the literature. "Sustainable development is a kind of development that meets present needs without jeopardising the ability of future generations to meet their own needs". It is an integral economic, technological, social and cultural development in conformity with the needs to protect and improve the environment that allows current and future generations to meet their needs and improve the quality of life. Sustainable development implies exploitation of the environment up to the level which allows its reproduction.

According to the author, companies should take an active policy in the field of protection and improvement of the environment. An effective environmental policy should include: introduction of clean technologies, business activities that include prevention of environmental pollution, rational use of energy, production of non-hazardous products to public health and the environment, in a word, optimal use of environmental elements and responsible implementation, monitoring and control of the application of environmental standards.

Tourism is a subsystem of the economic system of a country. It consumes a large amount of natural resources and contributes to the pollution. Sustainable development and sustainable tourism represent the equilibrium ratio of production, consumption and the marginal utility of environmental elements in all intervals.

According to the author, sustainable tourism and sustainable development are complementary only to the point that defines tourism as a profitable activity that protects the land and environmental elements, beyond which sustainable tourism does not fit into a compatible sustainable development.

The author points out that you should never ask for full optimisation of the relationship between tourism and the environment, but you should demand the authorised growth of economic effects of up to 25% of environmental costs instead.

The tenth chapter entitled ”*Protected tourist areas and their economic significance*“ refers to the provision of systematic review of names, areas, total number of national parks and nature reserves in the territories of Europe, Africa, Asia, America, Australia and Oceania, Serbia and Montenegro and former Yugoslav republics. This chapter features various forms of tourism in protected natural areas, particularly in national parks.

The eleventh chapter entitled ”*Forms of nature protection in Serbia and Montenegro*“ refers to the analysis of national parks of Serbia and Montenegro as the most valuable forms of protected areas. Emphasis has been placed on prevention of basic features of national parks, then the analysis of tourist motives in them (the biosphere, zoosphere, hydrosphere) as well as the analysis of factors influencing their tourist evaluation. In addition to the analysis of national parks, certain surface areas have been analysed as leading areas in the development of hunting tourism. The author has particularly highlighted tourist features in protected areas of our country and in national parks in particular (stationary tourism, monovalent function, sports and recreational forms of tourism, a cultural and historical function, a transit tourist function, a scientific research function, development of eco-tourism and rural tourism and health function).

In the twelfth chapter entitled ”*Forms of evaluation of environmental elements in protected areas and their impact on tourism*“ the author provides an overview of a large number of tables of typical indicators of tourist values of national parks in Europe, Africa, Asia, North and Central America, South America, Australia and Oceania and former Yugoslav republics. Emphasis has been placed on the analysis of biosphere, zoosphere and other forms of tourist motives.

The thirteenth chapter entitled *"Eco-tourism as the most vital form of exploitation of environmental elements"* is of crucial importance, because it gives an overview of various definitions of eco-tourism mainly by foreign authors.

In this chapter, the author gives an overview of the most important eco-tourist motives, then possible eco-touristic activities implemented by tour operators, followed by an overview of basic principles of reimbursement policy and consumption in eco-tourism, and a review of the cost-to-revenue ratio in eco-tourism. Emphasis has been placed on the production of eco-food as a part of the tourism product in an eco-tourist area of Serbia.

The fourteenth chapter entitled *"Basics of economic policy in tourism and the environment"* is important in the sense that it provides a theoretical basis for understanding the role and importance of economic and environmental policies in the economy of a country. The author has provided a systematised explanation of instruments of tourist and environmental policies. All these instruments are divided into three major groups: market based instruments (environmental ethics, conditional decisions, certificates), then fiscal market instruments (public investment, environmental expenditure, subsidies) and non-market administrative instruments (recommendations, satisfaction, authorisation, instruments for extension of the tourist season, the investment precalculations of environmental endurance of tourism development, spatial, that is, regional planning, regulations, etc.).

The author points out that the management of environmental policies is still a debatable issue, because in different countries the influence of tourism on the overall economic development may vary. For example, in the countries where tourism development is based on the preserved elements of the environment and where the protected area covers more than 40% of the national territory, tourism development as an integral part of a well-designed environmental policy comes to the forefront. In the countries that are ranked as top destinations, the relations between tourism and the environment are treated as a single unit of economic policy, and therefore it is the general tendency to put the instruments of such policy, such as certificates and international quality marks, above other parts of economic policy.

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Primer: Shaw N. Malcolm

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Primer: Simma Bruno, Alston Philip

Ako je više od 3 autora rada, navodi se prezime i ime samo prvog autora i dodaje se kurzivom (italikom) et al. (od *et alia*).

Primer: Henkin Louis *et. al. (1993)*: *International Law: cases and Materials*, St. Paul. Minn.

3. Strane. - Kada se navodi određena strana (knjige, članka), ona se navodi samo brojem bez ikakvih dodataka (s., str., p., pp., стр., S., i sl.).

Primer: Akehurst Michael (1984): *A Modern Introduction to International Law*, London, 9.

4. Fusnote. - Kada se navodi fusnota, iza broja strane piše se skraćenica „fn“ i onda navodi broj citirane fusnote.

Primer: Akehurst Michael (1984): *A Modern Introduction to International Law*, London, 9, fn 2.

5. Ponovno citiranje istog rada. - Kada se rad koji je već citiran ponovo navodi, to se vrši tako što se navodi prezime i ime autora, pa iza toga, razdvojeno zapetom, stranica koja se citira. Sve bez korišćenja op. cit., nav. delo i slično.

Primer: Akehurst Michael, 15.

Ako je navedeno nekoliko radova istog autora, navodi se prezime i ime autora, u zagradi godina u kojoj je odnosni rad objavljen i strana.

Primer: Akehurst Michael (1984), 15.

Ako je navedeno nekoliko radova istog autora objavljenih u istoj godini, radovi se u spisku korišćene literature (koji se obavezno daje na kraju rada) iza godine publikovanja dopunski obeležavaju latiničnim slovima „a“, „b“, „c“ itd. i tako navode kod citiranja u fusnotama.

Primer: Akehurst Michael (1984a), 15.

6. Ponovno citiranje prethodno citiranog rada. - Ako se citira podatak sa iste strane istog dela koje je citirano u prethodnoj fusnoti, koristi se samo latinična skraćenica Ibid. (od ibidem), bez navođenja bilo kakvih drugih podataka.

Primer: Ibid.

Ako se citira podatak iz dela koje je citirano u prethodnoj fusnoti, ali sa različite strane, navodi se Ibid , a zatim zapeta i broj strane.

Primer: Ibid, 54.

7. Strana imena. - U radovima koji se predaju na srpskom jeziku, strana imena se transkribuju na srpski jezik, kako se izgovaraju, a prilikom prvog pominjanja u tekstu njihovo ime i prezime navode se u zagradi u izvornom obliku.

Primer: Tomas Hobs (Thomas Hobbes)

2. Knjige

1. Opšte. - Knjige se navode na sledeći način: 1) prezime autora, 2) njegovo ime, 3) godina izdanja (u zagradi), 4) dve tačke, 5) naziv knjige kurzivom (italikom), 6) mesto izdanja kurentom (obično), 7) strana (bez ikakvih dodataka), 8) fusnota koja se citira.

Ako se navodi i izdavač, piše se kurentom (obično) pre mesta izdanja.

Primer: Scott V. Shirley (2010): *International Law in World Politics,* Lynne Rienner Publishers Inc., Boulder – London, 71, fn 45.

2. Više izdanja. - Ako knjiga ima više izdanja može se (ne mora) navesti broj izdanja u superskriptu.

Primer: Scott V. Shirley (2010^2): *International Law in World Politics*, Lynne Rienner Publishers Inc., Boulder - London (objašnjenje: 2010^2 - drugo izdanje, objavljeno 2010)

3. Urednici. - Ako knjiga ima jednog ili više urednika, prvo se navode prezimena i imena urednika, razdvojena zapetama, zatim naznaka „(ur.)“ odnosno „ed.“ ili (ako ih je više) „eds.“, pa godina izdanja u zagradi, dvotačka, naziv knjige kurzivom (italikom), i mesto.

Primer: Besson Samantha, Tasioulas John (eds.) (2010): *The Philosophy of International Law,* Oxford.

Ako je broj urednika veći od tri, navode se podaci samo za prvog urednika, zatim se posle zapete navodi „et al.“ i posle toga se navodi „ur.“.

Primer: Hamilton P. *et al.* (eds.) (1999): *The Permanent Court of Arbitration: International Arbitration and Dispute Resolution*, Kluwer International, The Hague-London-Boston.

4. Poglavlje u knjizi. - Poglavlje u knjizi koja ima urednika navodi se tako što se: 1) navode prezime i ime autora, 2) godina izdanja u zagradi, 3) dve tačke, 4) naziv poglavlja kurentom (pod navodnicama), 5) zapeta, 6) brojevi strana koje se citiraju, 7) „u“ odn. „in“, 8) prezime i ime urednika, 9) „(ur.)“ odn. „(eds.)“, 10) naziv knjige u kojoj je citirano delo, kurzivom (italikom) i 11) mesto izdanja.

Primer: Buchanan Allen (2010): “The Legitimacy of International Law”, 79-96, in: Besson Samantha, Tasioulas John (eds.): *The Philosophy of International Law*, Oxford.

3. Članci

1. Opšte. - Članci se navode na sledeći način: 1) prezime autora, 2) ime autora, 3) godina izdanja, 4) dve tačke, 5) naziv članka kurentom (obično) pod navodnicama, 6) naziv časopisa (zbornika i sl.) kurzivom (italikom), 7) broj i godište spojeni kosom crtom, 8) broj strane (bez ikakvih dodataka), 9) broj citirane fusnote.

Primer: Osakwe Chris (1971): "Contemporary Soviet Doctrine on the Juridical Nature of Universal International Organizations", *American Journal of International Law* 3/1971, 502, fn 1.

2. Skraćenica naziva časopisa. - Ako je naziv časopisa (zbornika i sl.) dug, prilikom prvog citiranja u zagradi sa navodi skraćenica pod kojom će se časopis (zbornik i sl.) nadalje pojavljivati.

Primer: Osakwe Chris (1971): "Contemporary Soviet Doctrine on the Juridical Nature of Universal International Organizations", *American Journal of International Law* (*AJIL*) 3/1971, 502-521.

4. Propisi

1. Opšte. - Propisi se navode na sledeći način: 1) naziv propisa se navodi u kurentu (obično), 2) kurzivom (italikom) navodi se glasilo u kojem je propis objavljen, 3) na kraju se navodi broj i godina glasila u kojem je propis objavljen.

Primer: Zakon o osnovama uređenja službi bezbednosti Republike Srbije, *Službeni glasnik Republike Srbije*, 116/2007.

2. Ponovno pominjanje propisa. - Ako se propis pominje kasnije, prilikom njegovog prvog pominjanja navodi se u zagradi njegov skraćeni naziv, s tim da se ispred skraćenog naziva stavlja objašnjenje „u daljem tekstu".

Primer: Zakon o osnovama uređenja službi bezbednosti Republike Srbije (u daljem tekstu: Zakon o službama bezbednosti), *Službeni glasnik Republike Srbije*, 116/2007.

3. Izmene i dopune. - Ako je propis naknadno menjan i dopunjavan, navode se jedan za drugim brojevi i godine glasila u kojima su objavljeni izvorni tekst odn. izmene i dopune.

Primer: Zakon o osnovama uređenja službi bezbednosti Republike Srbije, *Službeni glasnik Republike Srbije*, 116/2007, 72/2012.

4. Članovi, stavovi i tačke propisa. - Članovi, stavovi, tačke (alineje) itd. propisa navode se kroz kosu crtu, tako što se prvo navodi broj člana, zatim stava, pa alineje itd.

Primer: Konvencija UN o pravu mora (1982) čl. 1/1/5/a/i.

5. Tekstovi sa interneta

Citiranje tekstova sa interneta treba da sadrži: 1) ime autora citiranog teksta (ako je reč o autorskom tekstu), 2) naziv citiranog teksta pod navodnicima, 3) podatke o tome gde je tekst objavljen (ako je objavljen u papirnoj verziji), 4) internet stranicu, 5) datum pristupa stranici.

Primer: Bradley A. Curtis, Gulati Mitu: "Withdrawing from International Custom", *The Yale Law Journal* 2/2010, 233-241, http://yalelawjournal.org/images/pdfs/912.pdf (18.11.2012).

GENERAL INFORMATION ON THE JOURNAL AND THE INSTRUCTIONS FOR AUTHORS

I. GENERAL INFORMATION ON THE JOURNAL

1. General. – "Megatrend Review" is the scientific journal published by Megatrend University (Megatrend univerzitet).

According to the classification of Ministry of Education, Science and Technological Development of the Republic of Serbia, the journal is ranked amongst the leading national scientific journals in Serbia (M52).

"Megatrend Review" journal has been published since 2004 in Serbian and English language. It is open to all high-quality papers and authors from around the world. It has an international Editorial Board and international Publishing Council. Trough international exchange it reaches readers beyond the borders of Serbia.

"Megatrend Review" journal is a multidisciplinary journal in the fields of social sciences. Papers on following scientific fields are published:

- Economics
- Law
- Politics and Security
- Management and Marketing
- International Relations
- Public Policies
- Information Society

2. Reviews. – Each paper is reviewed by two reviewers. Paper that has received two positive reviews will be published according to standard categorization of the scientific journals: original scientific paper, review scientific article, expert article, preliminary report or overview, translation and book review..

The categorization of the paper is determined by the reviewers and Editor in chief. If there is any doubt regarding the categorisation, the given higher category will be applied.

In case that one of the reviewers suggests that the paper should be published and the other that it should not, the paper is going to be given to the third reviewer whose decision is final.

3. Anonymity of the authors and reviewers. – Editorial of the "Megatrend review" journal abides by the rule on mutual anonymity between authors and reviewers. Further, if the author is not satisfied with the reviews of the paper, he / she, has the right to receive the reviews.

II. PAPER ORIGINALITY AND FIGHTING AGAINS PLAGIARISM

We kindly ask the authors to take into consideration the following:

1. Written confirmation that the work is original. - When submitting a manuscript the author is required to confirm in writing that his/her paper is original and that it has not been published elsewhere. The paper that is sent without this written confirmation by the author, will not be accepted.

2. The paper that has previously been published elsewhere. - If for any reason the author submits the paper that has already been published elsewhere (abroad, in a foreign language), he/she is obliged to specify where the paper was published (the journal, issue and number, the number of pages) and enclose the written consent of the editorial board of the journal in which the paper was originally published. If these requirements are met, and editors conclude that the paper is for some reason of particular interest and should therefore be published, it will be published with indication where it was published first and that it is republished in "Megatrend Review" with permission.

However, if the paper has already been published elsewhere, and also submitted for publication in "Megatrend Review" with no information about previous publication, the paper will not be published. In addition, as a sanction for unfairness, in the next issue of "Megatrend Review" the information that a particular author has unfairly tried to re-publish the same paper will be published in a special section. Apart from that, the papers by the same author will not be published in "Megatrend Review" in the future.

3. Plagiarism. - Should the editors of "Megatrend Review" journal or through reviewers discover that the paper submitted for publication is plagiarism, in a special section of its next issue the information that a particular author has plagiarized a paper will be published, and the original paper from which the plagiarism is taken will be cited. In addition, the papers by the same author will not be published in "Megatrend Review" in the future. If necessary, the author whose paper has been copied or the editorial board of the journal that has published the original paper will be notified.

III. INSTRUCTIONS FOR AUTHORS

The papers are to be prepared in accordance with the following instructions:

1. The Manuscript

The manuscript is submitted in electronic form (MS Word). Page size: A4, font Times New Roman (size 12 pt for text including abstract, line spacing: single. The papers written in Serbian language are submitted in Serbian Latin script. The papers are submitted to the following e-mail address: **megatrendrevija@megatrend.edu.rs**

The paper should be accompanied by the written Author's Statement of originality signed by the author (written, signed and scanned).

Precondition for the paper to be accepted for the reviewing procedure is that it fully satisfies technical criteria according to the instructions given here. Also, the paper must meet the criteria regarding the language (Serbian and English) and spelling. The paper has to be proofread before submission

2. Number of authors

As a rule, papers written only by one author are preferable for publication (an author as an individual). However, if consider justified, , according to current Rules of Procedure, the Method of Evaluation and Quantitative Expression of Scientific Research Results of the Researchers (*Pravilnik o postupku, načinu vrednovanja i kvantitativnom iskazivanju naučnoistraživačkih rezultata istraživača*, Službeni glasnik RS no. 24/2016 and 21/2017), editors can decide to publish papers written by co-authors, but not more than three.

3. Language

The text is submitted in Serbian or English language. If accepted, it will be published in the language in which it was submitted.

Exceptionally, the editors will decide that the text submitted in Serbian language is to be translated and published in English, or vice versa.

4. Volume

The paper should approximately have 30.000 characters, including spaces (one author's sheet). Alternatively, it could be shorter or longer, the number of characters with spaces not being smaller than 20,000 nor bigger than 45,000.

Due to particularly justified reasons (the special social importance of the topic, the co-authorship of a number of internationally recognized scientists, etc.) the editorial board could exceptionally allow the publication of an article of a larger volume, but not larger than 2.5 author's sheets (75,000 characters).

5. Tables and Formulae

The tables should only be made by means of table tools in MS Word. The tables must have titles and be numbered in Arabic numerals.

The formulae should be written by means of the equation editor in MS Word.

6. Graphs, Figures and Photographs

Graphs and figures can be submitted drawn on paper or in electronic form. When the graphs and figures are submitted in electronic form, they should be in one of the following formats: EPS, AI, EPS, TIF or JPG. If the author uses these or uses a specific program, it is necessary to agree on the format with the technical editor. **Graphs and figures should not be made in MS Word!**

Photographs must be sharp, in good contrast and undamaged. The authors are not advised to scan the images themselves, but to leave this sensitive job to the editorial office.

If the version on the paper does not include graphs, figures and photographs, the spaces must be clearly marked where they should be inserted. The markings in the text must match the ones in the submitted photos (or files).

Graphs, figures and photographs must have the signatures and be numbered in Arabic numerals.

7. Organization of manuscript

The article must contain the following elements, in the following order:

1 Information about the author – Name and surname, title of the author, name of the institution where the author is employed (affiliation) and the author's e-mail address.

2. Title of the paper. – The title should be clear and precise.

3. Abstract. – This is a brief presentation of the article content, which contains the research goal, methods, results, and main conclusions. It should be in the same language in which the paper was written. In terms of volume, it should contain 100 to 250 words or 4 to 8 sentences, or a third to half of the printed page. It stands between the title and keywords, after which the text of the article follows.

4. Key words. – The terms or phrases which best describe the content of the article. It is allowed to write up to five words, i.e. phrases.

5. Text of the article. – The central part is the text of the article in which the author uses appropriate tools while processing the writing of a scientific paper.

6. List of used literature. – After the text of the article, the list of used literature is specified in alphabetical order by authors' last name.

The list is given according to the Citation instructions, with the year of publication coming right after the author's, i.e. editor's name. At the end of the information on an article or a paper in the collection of papers, the pages of the cited paper are given.

Examples:

- *A book:* Akehurst Michael (1984): *A Modern Introduction to International Law,* London

- *A chapter in the book by several authors:* Buchanan Allen (2010): "The Legitimacy of International Law", 79-96, in: Besson Samantha, Tasioulas John (eds.): *The Philosophy of International Law,* Oxford

- *A paper*: Osakwe Chris (1971): "Contemporary Soviet Doctrine on the Juridical Nature of Universal International Organizations", *American Journal of International Law* 3/1971, 502-521

The papers by the same author are specified in chronological order. If several papers have been written by the same author and published in the same year, the year of publication is accompanied by the letters "a", "b", "c" etc.

Examples:

- Cassese Antonio (1999a): "Ex iniuriaiusoritur. Are We Mowing towards International Legitimation of Forcible Humanitarian Countermeasures in the World Community?",*European Journal of International Law,* 1/1999, 23-30

- Cassese Antonio (1999b): "A Follow-Up: Forcible Humanitarian Countermeasures and OpinioNecessitatis", *European Journal of International Law,* 4/1999, 791-799

7. Summary. – Summary is written at the very end of the text i.e. It can be the same as the abstract, but could also be wider in extent , yet no longer than one page. If the paper is written in Serbian language, the summary in English language should also be submitted.

8. The levels of the titles. - Depending on the text, the titles can have different levels. Therefore the following method is used for marking different title levels:

1. The First Level Title
(centre align, regular, bold, Arabic numerals)

1.1 The second level title
(centre align, italic, Arabic numerals)

1.1.1. The third level title
(Above the beginning of the paragraph, italic, Arabic numerals.)

To achieve complete clarity about the title levels, authors are advised to refer to the past issues of "Megatrend Review" journal available in PDF forms, under Archive, or contact the Editorial secretary via e-mail.

Depending on the specific characteristics of the text, and with the aim of achieving clarity of the paper's structure, the editorial office reserves the right to edit the titles in a slightly different way, leaving the original heading divisions.

9. Citations. – The used literature is to be cited according to the instructions for citations given below.

10. The address of the Editorial Board. – The papers are submitted via e-mail to the following address: **megatrendrevija@megatrend.edu.rs**

Editorial Board
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Megatrend University / Megatrend univerzitet
Bulevar maršala Tolbuhina 8
11070 Belgrade, Serbia
Telephone: + 381 11 220-31-50

IV. INSTRUCTIONS FOR CITATIONS

1. General rules

1. Name of the author. - In writing author's name, surname is written before the first name. If there is the middle name/letter, it is written between surname and the first name.

Example: Shaw N. Malcolm

2. Several authors. – Names of the several authors are separated by commas.

Example: Simma Bruno, Alston Philip

If there are more than three authors, only the first author's surname and first name are specified, followed by the italicized et al. words (et alia).

Example: Henkin Louis *et. al.* (1993): International Law: *Cases and Materials,* St. Paul. Minn.

3. Pages. – When a particular page is specified (of the book or the paper), it s number is written without any additions (p., pg., p., page, etc.).

Example: Akehurst Michael (1984): *A Modern Introduction to International Law,* London, 9.

4. Footnotes. – When a footnote is given, after the number of the page, the sign "fn" is written, followed by the number of the footnote.

Example: AkehurstMichae (1984)l: *A Modern Introduction to International Law,* London, 9, fn 2.

5. The repeated citation of the same article. – When an article that has been cited before is recited, the author's surname and first name are specified, followed by the cited page, separated by a comma, without using *op. cit.* etc.

Example: Akehurst Michael, 15.

If several papers by the same author are specified, the author's surname and first name are stated, followed by the brackets with the year when the paper has been published and followed by the number of the page.

Example: Akehurst Michael (1984), 15.

When specifying several papers written by the same author, published in the same year, papers are specified in the literature list (which is always given at the end of the paper) by adding Latin letters “a”, “b”, “c”, etc to each paper. They are also stated as such when cited in footnotes.

Example: Akehurst Michael (1984a), 15.

6. Recitation of the previously cited article. - If a piece of data from the same page of the same paper cited in the previous footnote is cited again, only the Latin abbreviation Ibid. (from *ibidem*) is used without giving any other data.

Example: Ibid.

If a piece of data cited in the previous footnote is cited again, but from a different page, the Latin abbreviation Ibid. is used, followed by a comma and the number of the page.

Example: Ibid, 54.

7. Foreign names. – In papers submitted in Serbian language, foreign names are transcribed, i.e. written as they are pronounced in Serbian, and when first mentioned in the text, the author’s surname and first name are given in their original form within the brackets.

Example: Tomas Hobs (Thomas Hobbes)

2. Books

1. General. – The books are cited in the following way:

1) author’s surname, 2) author’s first name, 3) the year of publication in brackets, 4) colon, 5) title of the book in italics, 6) place of the publication in lowercase (ordinary letters), 7) number of the page (without any additions), 8) footnote which is being cited.

If the information on the publisher is given as well, it is written in lowercase (ordinary letters) before the place of the publication.

Example: Scott V. Shirley (2010): *International Law in World Politics,* Lynne Rienner Publishers Inc., Boulder – London, 71, fn 45.

2. Several editions. – If a book has several editions the number of the edition need/need not be specified in the superscript.

Example: Scott V. Shirley (2010^2): *International Law in World Politics*, Lynne Rienner Publishers Inc., Boulder - London (explanation: 2010^2 - second edition, published 2010)

3. Editors. – If a book has one or more editors, the editors’ surnames and first names are given first, separated by commas, then the sign “ed”, or “eds” is written if there are more of them, followed by the title of the book in italics, and finally the place and year of publication.

Example: Besson Samantha, Tasioulas John (eds.) (2010): *The Philosophy of International Law,* Oxford.

If there are more than three editors, the data only for the first editor is given followed by a comma, then "et al.", and finally "ed.".

Example: Hamilton P. *et al.* (eds.) (1999): *The Permanent Court of Arbitration: International Arbitration and Dispute Resolution*, Kluwer International, The Hague-London-Boston.

4. Chapters in a book. – A chapter in a book with an editor is cited by giving the following: 1) authors surname and name, 2) year of publication in brackets, 3) colon, 4) title of the chapter in lowercase (under inverted commas), 5) comma 6) number of pages that are cited, 7) "in", 8) editor's surname and name, 9) "(eds.)", 10) title of the book in which the cited text is in lowercase (in italics) and 11) place of publication.

Example: Buchanan Allen (2010): "The Legitimacy of International Law", 79-96, in: Besson Samantha, Tasioulas John (eds.): *The Philosophy of International Law*, Oxford.

3. Articles

1. General. – The articles are cited in the following way: 1) author's surname, 2) author's name, 3) year of publication in brackets, 4) colon, 5) title of the article in lowercase in ordinary letters under inverted commas, 6) title of the journal (book of proceedings, etc.) in italics, 7) issue and year separated by a slash, 8) number of the page (without any additions), 9) number of the cited footnote.

Example: Osakwe Chris (1971): "Contemporary Soviet Doctrine on the Juridical Nature of Universal International Organizations", *American Journal of International Law* 3/1971, 502, fn 1.

2. The abbreviation of the journal title. – If the title of the journal (collection of papers etc.) is a long one, when cited for the first time its abbreviation is given in brackets, which is later used when the same journal (book of proceedings, etc.) is cited again.

Example: Osakwe Chris (1971): "Contemporary Soviet Doctrine on the Juridical Nature of Universal International Organizations", *American Journal of International Law* (*AJIL*) 3/1971, 502-521.

4. Regulations

1. General. – Regulations are cited in the following way: 1) title of the regulation is given in lowercase (in general letters), 2) journal/magazine in which the regulation is published is given in italics, 3) number of the issue and the year in which the journal is published are given at the end.

Example: Zakon o osnovama uređenja službi bezbednosti Republike Srbije, *Službeni glasnik Republike Srbije*, 116/2007.

2. If the regulations are re-mentioned. – If a regulation is mentioned again later in the text, at the place where it appears for the first time its short title is given within the brackets, with the words "hereinafter referred to as" preceding it.

Example: Zakon o osnovama uređenja službi bezbednosti Republike Srbije (u daljem tekstu: Zakon o službama bezbednosti), *Službeni glasnik Republike Srbije*, 116/2007.

3. Amendments. – If a regulation has been changed and amended, one by one, the numbers of issues and year of the journals are given in the original text, i.e. amendments were published.

Example: Zakon o osnovama uređenja službi bezbednosti Republike Srbije, *Službeni glasnik Republike Srbije*, 116/2007, 72/2012.

4. Articles, paragraphs and items of regulations. – Articles, paragraphs and items of regulations are written separated by a slash, the number of the article comes first, followed by the number of the paragraph, and finally that of the item, etc.

Example: UN Convention on the Law of the Sea (1982) čl. 1/1/5/a/i.

5. The Internet texts

The citation of the text from the Internet should contain: 1) name of the author of the cited text (if it is the author's text), 2) title of the cited text under inverted commas, 3) data on where the text was published (if it is published in a printed version), 4) internet page, 5) date of the access to the page.

Example: Bradley A. Curtis, Gulati Mitu: "Withdrawing from International Custom", *The Yale Law Journal* 2/2010, 233-241, http://yalelawjournal.org/images/pdfs/912.pdf (18.11.2012).

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