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Digital Marketing Strategies of Sports Organizations in the Function of Increasing Citizen Participation in Sports and Recreation

Digitalne marketing strategije sportskih organizacija u funkciji povećanja participacije građana u sportu i rekreaciji

Nina Uremović, Mirjana Landika, Vanja Sredojević

Pan-European University Apeiron, Banja Luka, Bosnia and Herzegovina

Correspondence:
Nina Uremović
Pan-European University Apeiron, Banja Luka,
Bosnia and Herzegovina
nina.d.uremovic@apeiron-edu.eu

Panevropski univerzitet Apeiron, Banja Luka, Bosna i Hercegovina

Korespondencija:
Nina Uremović
Panevropski univerzitet Apeiron, Banja Luka,
Bosna i Hercegovina
nina.d.uremovic@apeiron-edu.eu

Abstract: *This paper analyzes the effect of modern digital marketing strategies of sports organizations on increasing the involvement of citizens in recreational activities. The focus is on multi-channel content distribution models (OTT and FAST), socialfirst approaches and AI-based personalization. The research is based on secondary data that are standardized and recombined into a simulated dataset of 20 units, which enables the application of basic statistical techniques. Descriptive analysis, Poisson GLM models, and nonparametric tests were applied to assess the impact of digital strategies on digital reach and audience response. The results of the Poisson GLM model show that FAST platforms have the strongest positive effect on the number of views (β = 0.4539; p = 0.0661), while OTT platforms have a moderate, but statistically insignificant contribution (β = 0.337; p = 0.1708). The number of digital channels shows a weak negative effect (β = –0.1123; p = 0.2055). Ttest does not confirm that AI personalization significantly affects the open rate (p = 0.8582). The findings indicate the existence of a positive, but limited statistically substantiated trend in favor of multichannel and FAST distribution models. Limitations arise from a small and simulated sample, which reduces the possibility of generalizing the results. However, the paper contributes to the literature by connecting digital platforms with the potential to increase the information and motivation of citizens in the field of recreational sports. In addition, the results of the research indicate that the effects of modern digital marketing strategies depend on the way they are integrated and optimized, and not exclusively on the number of channels used. Of particular importance is the quality of content and the adaptation of communication to specific target groups, which creates the preconditions for a long-term increase in the participation of citizens in sports and recreation.*

Keywords: *Digital marketing, sports management, AI in marketing, digital content management*

Sažetak: *Ovaj rad analizira efekat savremenih digitalnih marketinških strategija sportskih organizacija na povećanje uključenosti građana u rekreativne aktivnosti. Fokus je na multikanalnim modelima distribucije sadržaja (OTT i FAST), social-first pristupima i AI-zasnovanoj personalizaciji. Istraživanje se zasniva na sekundarnim podacima koji su standardizovani i rekombinovani u simulirani dataset od 20 jedinica, čime je omogućena primjena osnovnih statističkih tehnika. Primijenjeni su deskriptivna analiza, Poisson GLM modeli i neparametrijski testovi radi procjene uticaja digitalnih strategija na digitalni domet i reakcije publike. Rezultati Poisson GLM modela pokazuju da FAST platforme ostvaruju najsnažniji pozitivan efekat na broj pregleda (β = 0.4539; p = 0.0661), dok OTT platforme imaju umjeren, ali statistički neznačajan doprinos (β = 0.337; p = 0.1708). Broj digitalnih kanala pokazuje slab negativan efekat (β = –0.1123; p = 0.2055). T-test ne potvrđuje da AI-personalizacija značajno utiče na open rate (p = 0.8582). Nalazi ukazuju na postojanje pozitivnog, ali ograničeno statistički potkrijepljenog trenda u korist multikanalnih i FAST modela distribucije. Ograničenja proističu iz malog i simuliranog uzorka, što smanjuje mogućnost generalizacije rezultata. Ipak, rad doprinosi literaturi time što povezuje digitalne platforme sa potencijalom za povećanje informisanosti i motivacije građana u oblasti rekreativnog sporta. Dodatno, rezultati istraživanja ukazuju da efekti savremenih digitalnih marketing strategija zavise od načina njihove integracije i optimizacije, a ne isključivo od broja korišćenih kanala. Poseban značaj ima kvalitet sadržaja i prilagođavanje komunikacije specifičnim ciljnim grupama, čime se stvaraju preduslovi za dugoročno povećanje participacije građana u sportu i rekreaciji.*

Ključne riječi: *Digitalni marketing, sportski menadžment, AI u marketingu, upravljanje digitalnim sadržajem*

Introduction

The digital transformation of sport has significantly changed the way sports organizations interact with audiences. The upward trend in the use of social networks, dedicated applications, streaming services and datadriven technologies has led to digital engagement becoming a key indicator of the success of sports organizations. In this context, an important role is played by all interest groups with which clubs can communicate through various digital channels.

The subject of this scientific paper is the application of modern digital marketing strategies in the function of increasing the participation of citizens in sports and recreation. The purpose of the research is to analytically examine the way in which sports organizations use digital marketing, and in particular advanced digital strategies that contribute to increasing citizen participation in sport.

The research aims to offer a systematic overview of secondary data, identify key trends in digital sports marketing and point out how digital technologies affect citizens' behaviour when it comes to sport and recreation. The aim is also to use statistical tests to verify the credibility and accuracy of the hypotheses and to theoretically explain the impact of digital tactics and strategies on the behavior of citizens. The research problem of this paper stems from the fact that, despite the growth in the use of digital strategies in sports marketing, there is still not enough empirical evidence on which digital tactics actually increase citizen participation in sports and recreation.

The contemporary context of sport and recreation is increasingly marked by social challenges such as a decrease in physical activity, an increase in sedentary lifestyle and inadequate motivation of citizens to engage in organized or independent recreational activities. In this sense, digital marketing of sports organizations does not have an exclusively promotional function, but also a broader social role in informing, educating and motivating citizens to healthier lifestyle habits. The effective use of digital channels enables sports organizations to tailor messages to different target groups, connect with the local community and encourage long-term citizen participation in sports and recreation.

The paper presents one main and two auxiliary hypotheses. The empirical part of the paper is based on the analysis of secondary data sources and the application of statistical methods, including descriptive analysis, correlation tests and regression models. Microsoft Excel was used to process the data and perform statistical calculations.

Uvod

Digitalna transformacija sporta značajno je izmijenila način na koji sportske organizacije komuniciraju sa publikom. Trend rasta korišćenja društvenih mreža, namjenskih aplikacija, streaming servisa i data-driven tehnologija doveo je do toga da digitalni angažman postane ključni indikator uspješnosti sportskih organizacija. U tom kontekstu, važnu ulogu imaju sve interesne grupe sa kojima klubovi mogu da komuniciraju kroz različite digitalne kanale.

Predmet istraživanja ovog naučnog rada je primjena savremenih digitalnih marketing strategija u funkciji povećanja učešća građana u sportu i rekreaciji. Svrha istraživanja jeste da se analitički ispita način na koji sportske organizacije koriste digitalni marketing, a posebno napredne digitalne strategije koje doprinose povećanju participacije građana u sportu.

Istraživanje ima za cilj da ponudi sistemski pregled sekundarnih podataka, identifikuje ključne trendove u digitalnom sportskom marketingu i ukaže na to kako digitalne tehnologije utiču na ponašanje građana kada je u pitanju sport i rekreacija. Cilj je i da se statističkim testovima provjeri vjerodostojnost i tačnost postavljenih hipoteza te da se teoretski objasni uticaj digitalnih taktika i strategija na ponašanje građana. Istraživački problem ovog rada proizilazi iz činjenice da, uprkos rastu korišćenja digitalnih strategija u sportskom marketingu, još uvijek ne postoji dovoljno empirijskih dokaza o tome koje digitalne taktike zaista povećavaju participaciju građana u sportu i rekreaciji.

Savremeni kontekst sporta i rekareacije sve više je obilježen društvenim izazovima poput smanjenja fizičke aktivnosti, porasta sedentiranog načina života i neodgovarajuće motivacije građana za uključivanje u organizovane ili samostalne rekreativne aktivnosti. U tom smislu, digitalni marketing sportskih organizacija nema iskljućivo promotivnu funkciju, već i širu društvenu ulogu u informisanju edukaciji i motivisanju građana ka zdravijim životnim navikama. Efikasno korišćenje digitalnih kanala omogućava sportskim organizacijama da prilagode poruke različitim ciljnim grupama, povežu se sa lokalnom zajednicom i podstaknu dugoročnu participaciju građana usportu i rekreaciji.

Rad predstavlja jednu glavnu i dvije pomoćne hipoteze. Empiriski dio rada zasnovan je na analizi sekundarnih izvora podataka i primjeni statističkih metoda, uključujući deskriptivnu analizu, korelacione testove i regresione modele. Za obradu podataka i izvođenje statističkih izračuna korišten je Microsoft Excel.

Literature Review

The literature review includes key academic and industry sources that analyze contemporary digital strategies in sports marketing, with a particular focus on omnichannel models, socialfirst approaches, and AI personalization.

Digital marketing in the modern sports environment has become one of the key mechanisms for increasing citizen participation in recreation. Multi-channel distribution platforms such as OTT and FAST models significantly expand the availability of sports content to a wider population and stimulate interest in recreational activities (Markets, 2025). According to Deloitte Digital (2025), sports organizations that implement socialfirst strategies record a higher growth in overall digital reach, which affects citizens' awareness of sports programs and motivates them to engage in activities that contribute to health (Digital., 2025). Deloitte Digital's results are in line with industry trends that indicate that organizations with a pronounced social-first approach achieve more stable growth in digital reach compared to traditional promotional models.

Leite (2024) emphasizes that AI-based personalization strategies have significant potential in bringing sports content closer to different age groups of citizens, as they enable the creation of recommendations according to individual needs and interests. (Leite, 2024). However, most of the available work focuses on the potential of AIpersonalization, while empirical studies on its real impact on citizens' behavior are still lacking. SportsPro (2025) points out that promotional campaigns with video formats and real-time posts increase audience engagement and facilitate access to information about available recreational programs. (SportsPro, 2025) These results complement previous sources and indicate that different digital formats play a different role in increasing audience engagement.

The digitalization of the sports sector, as stated by Matić and Maksimović (2023), affects the transformation of the way recreational activities are planned and promoted, especially in the context of increasing awareness of the health benefits of physical activity. (Matić & Maksimović, 2023) Uremović, Landika and Sredojević (2025) add that the specifics of the promotional mix in sports have a strong impact on the perception of recreation in the population, because the emotional connection and experiential elements of the content affect citizens' decisions about participation in sports. (Uremović, Landika, & Sredojević, 2025)

Although the available literature points to the growth of the use of digital technologies in sports marketing, most papers primarily describe trends, while em-

Pregled literature

Pregled literature obuhvata ključne akademske i industrijske izvore koji analiziraju savremene digitalne strategije u sportskom marketingu, sa posebnim fokusom na multikanalne modele, social-first pristupe i AI-personalizaciju.

Digitalni marketing u savremenom sportskom okruženju postao je jedan od ključnih mehanizama za povećanje participacije građana u rekreaciji. Multikanalne distribucione platforme poput OTT i FAST modela značajno proširuju dostupnost sportskog sadržaja široj populaciji i podstiču interesovanje za rekreativne aktivnosti (Markets, 2025). Prema Deloitte Digital (2025), sportske organizacije koje primjenjuju social-first strategije bilježe veći rast ukupnog digitalnog dometa, što utiče na informisanost građana o sportskim programima i motiviše ih da se uključe u aktivnosti koje doprinose zdravlju (Digital., 2025). Rezultati Deloitte Digital u skladu su sa industrijskim trendovima koji ukazuju da organizacije s izraženim social-first pristupima ostvaruju stabilniji rast digitalnog dometa u odnosu na klasične promotivne modele.

Leite (2024) naglašava da AI-zasnovane personalizacione strategije imaju značajan potencijal u približavanju sportskih sadržaja različitim starosnim grupama građana, jer omogućavaju kreiranje preporuka prema individualnim potrebama i interesima. (Leite, 2024). Ipak, većina dostupnih radova fokusira se na potencijal AI-personalizacije, dok empirijskih studija o njenom stvarnom uticaju na ponašanje građana još uvijek nema dovoljno. SportsPro (2025) ističe da promotivne kampanje sa video formatima i real-time objavama povećavaju angažman publike i olakšavaju pristup informacijama o dostupnim rekreativnim programima. (SportsPro, 2025) Ovi rezultati dopunjuju prethodne izvore i ukazuju da različiti digitalni formati imaju različitu ulogu u povećanju angažmana publike.

Digitalizacija sportskog sektora, kako navode Matić i Maksimović (2023), utiče na transformaciju načina planiranja i promocije rekreativnih aktivnosti, posebno u kontekstu povećanja svijesti o zdravstvenim benefitima fizičke aktivnosti. (Matić & Maksimović, 2023) Uremović, Landika i Sredojević (2025) dodaju da specifičnosti promotivnog miksa u sportu imaju snažan uticaj na percepciju rekreacije u populaciji, jer emocionalna povezanost i iskustveni elementi sadržaja utiču na odluke građana o učešću u sportu. (Uremović, Landika, & Sredojević, 2025)

Iako dostupna literatura ukazuje na rast primjene digitalnih tehnologija u sportskom marketingu, većina ra-

pirical evidence on the direct impact of digital strategies on citizen engagement in sport remains limited. It is particularly noticeable that industry reports offer rich practical insights and examples of the application of digital tools, while academic papers rarely provide quantitative research on the effects of digital approaches on the recreational habits of the population. Therefore, it is necessary to systematically link industry and academic knowledge in order to better understand the extent to which datadriven approaches, AI personalization and multi-channel digital strategies contribute to citizens' participation in sport and the development of healthy habits.

Methodological Framework of the Research

The research combined exploratory and quantitative approaches, using secondary data as the primary source of information. This approach allows for a clear definition of the research design and a transparent presentation of the methods used. The sample of 20 units was formed by deliberately selecting the most relevant secondary sources available, including scientific papers, industry analyses, and market reports. The secondary data were partially standardized and recombined into a simulated dataset to allow the application of statistical tests and models, while maintaining values and relationships consistent with the findings in the literature.

Key variables (ER, reach, views, social-first share, number of channels, AI/personalization) are operationalized according to definitions commonly used in digital marketing and analytics of sports organizations.

In the course of writing this paper, the following methods were used:

- A method of content analysis, used to systematically review and interpret secondary data sources, including scientific papers, industry reports, and market analyses.
- A comparative method, used to compare the findings of different types of sources.
- A synthesis method for integrating various secondary data sources into a single theoretical and empirical framework.
- A method of descriptive analysis, used to describe and systematize key trends in digital marketing of sports organizations.
- Descriptive statistics, used to view the basic characteristics of a data set.
- Correlation analysis, although secondary in this paper, was used to preliminarily examine the relationships between variables.
- Multiple regression and Poisson GLM models were used to assess the impact of digital strategies on engagement rate and number of views.

dova prvenstveno opisuje trendove, dok empirijski dokazi o direktnom uticaju digitalnih strategija na uključivanje građana u sport ostaju ograničeni. Posebno je uočljivo da industrijski izvještaji nude bogate praktične uvide i primjere primjene digitalnih alata, dok akademski radovi rijetko pružaju kvantitativna istraživanja o efektima digitalnih pristupa na rekreativne navike stanovništva. Zbog toga je neophodno sistematsko povezivanje industrijskih i akademskih saznanja kako bi se preciznije razumjelo u kojoj mjeri data-driven pristupi, AI personalizacija i multikanalne digitalne strategije doprinose participaciji građana u sportu i razvoju zdravih navika.

Metodološki okvir istraživanja

Istraživanje je kombinovalo eksplorativni i kvantitativni pristup, uz primjenu sekundarnih podataka kao osnovnog izvora informacija. Ovakav pristup omogućava jasno definisanje dizajna istraživanja i transparentnu prezentaciju korištenih metoda. Uzorak od 20 jedinica formiran je namjernim odabirom najrelevantnijih dostupnih sekundarnih izvora uključujući naučne radove, industrijske analize i tržišne izvještaje. Sekundarni podaci su djelimično standardizovani i rekombinovani u simulirani dataset kako bi se omogućila primjena statističkih testova i modela, uz zadržavanje vrijednosti i odnosa koji su dosljedni nalazima iz literature.

Ključne varijable (ER, reach, views, social-first udio, broj kanala, AI/personalizacija) operacionalizovane su prema definicijama koje se uobičajeno primjenjuju u digitalnom marketingu i analitici sportskih organizacija.

U toku pisanja ovog rada koristile su se sljedeće metode:

- Metoda analize sadržaja, korištena za sistemsko pregledavanje i interpretaciju sekundarnih izvora podataka, uključujući naučne radove, industrijske izvještaje i tržišne analize.
- Komparativna metoda, korištena za poređenje nalaza različitih tipova izvora.
- Metoda sinteze, za integrisanje različitih sekundarnih izvora podataka u jedinstveni teorijski i empirijski okvir.
- Metoda deskriptivne analize, korištena za opisivanje i sistematizaciju ključnih trendova u digitalnom marketingu sportskih organizacija.
- Deskriptivna statistika, korištena za pregled osnovnih karakteristika skupa podataka.
- Korelaciona analiza, iako sekundarna u ovom radu, korištena je za preliminarno ispitivanje odnosa među varijablama.
- Višestruka regresija i Poisson GLM modeli korišteni su za procjenu uticaja digitalnih strategija na engagement rate i broj pregleda. Poisson

The Poisson GLM model was chosen because the dependent variable (number of views) is a numerical figure that is naturally modeled by the distribution of events.

- The T-test was used to assess the differences between groups that use and do not use AI/personalization, in accordance with standard digital marketing methods.
- The Kruskal-Wallis test was used due to deviations from normality in certain data groups and a small sample, which makes it a methodologically justified choice.

Statistical data processing was performed in Microsoft Excel, which was used to calculate descriptive indicators, regression models, and differences tests.

The methods used allow for a reliable and consistent assessment of the effects of digital strategies within the available sample, while respecting the limitations arising from the nature of secondary data.

The data used in the research was taken from industry reports such as Deloitte Digital (Digital., 2025) and market analysis by Research and Markets/Parks Associates on sports streaming. (Markets, 2025) These reports provide an overview of the performance of digital campaigns, OTT/FAST models, and audience behavior. The values were standardized and recombined into a simulated dataset to test the relationship between digital strategies and audience reactions. OR and CTR, as standard digital marketing metrics, are methodologically justified for use within secondary data.

The following table provides an overview of the dependent and independent variables and their role in the analysis.

GLM model je izabran zato što zavisna varijabla (broj pregleda) predstavlja brojčani podatak koji se prirodno modeluje distribucijom događaja.

- T-test je korišten za procjenu razlika između grupa koje koriste i ne koriste AI/personalizaciju, u skladu sa standardnim metodama digitalnog marketinga.
- Kruskal-Wallis test primijenjen je zbog odstupanja od normalnosti u pojedinim grupama podataka i malog uzorka, što ga čini metodološki opravdanim izborom.

Statistička obrada podataka izvršena je u programu Microsoft Excel, koji je korišten za izračunavanje deskriptivnih pokazatelja, regresionih modela i testova razlika.

Korištene metode omogućavaju pouzdanu i konzistentnu procjenu efekata digitalnih strategija u okviru dostupnog uzorka, uz uvažavanje ograničenja koja proizlaze iz prirode sekundarnih podataka.

Podaci korišteni u istraživanju preuzeti su iz industrijskih izvještaja kao što su Deloitte Digital (Digital., 2025) i tržišnih analiza Research and Markets / Parks Associates o sportskom streamingu. (Markets, 2025) Ovi izvještaji daju pregled performansi digitalnih kampanja, OTT/FAST modela i ponašanja publike. Vrijednosti su standardizovane i rekombinovane u simulirani dataset radi testiranja odnosa između digitalnih strategija i reakcija publike. OR i CTR, kao standardne metrike digitalnog marketinga, metodološki su opravdane za korištenje u okviru sekundarnih podataka.

U narednoj tabeli dat je prikaz zavisnih i nezavisnih varijabli i njihova uloga u analizi.

Table 1. *Dependent and Independent Variables*

Tabela 1. *Zavisne i nezavisne varijable*

Variable type / Tip varijable	*Variable name* / Naziv varijable	*Opis / operationalization* Opis / operacionalizacija	*Role in the analysis* / Uloga u analizi
Dependent / Zavisna	*Reach*	*Total digital reach of sports content; An indicator of citizens' awareness* / Ukupan digitalni domet sportskih sadržaja; indikator informisanosti građana	*Outcome Measurement Variable* / Mjerna varijabla ishoda
Dependent / Zavisna	*Views*	*Total number of views of sports and recreational digital content* / Ukupan broj pregleda sportskih i rekreativnih digitalnih sadržaja	*Dependent variable in the Poisson GLM model* / Zavisna varijabla u Poisson GLM modelu
Dependent / Zavisna	*Open Rate (OR)*	*Percentage of open digital campaigns* / Procenat otvorenih digitalnih kampanja	*A measurement variable of audience reaction* / Mjerna varijabla reakcije publike
Dependent / Zavisna	*Click-Through Rate (CTR)*	*Percentage of clicks on digital content* / Procenat klikova na digitalni sadržaj	*Active Engagement Indicator* / Indikator aktivnog angažmana
Independent / Nezavisna	*OTT presence* / OTT prisustvo	*Presence of sports content on OTT platforms (0=no, 1=yes)* / Prisustvo sportskih sadržaja na OTT platformama (0=ne, 1=da)	*Predictor variable* / Prediktorska varijabla
Independent / Nezavisna	*FAST presence* / FAST prisustvo	*Presence of sports content on FAST platforms (0=no, 1=yes)* / Prisustvo sportskih sadržaja na FAST platformama (0=ne, 1=da)	*Predictor variable* / Prediktorska varijabla
Independent / Nezavisna	*Number of digital channels* / Broj digitalnih kanala	*Total number of active digital channels* / Ukupan broj aktivnih digitalnih kanala	*Predictor variable* / Prediktorska varijabla

Independent / Nezavisna	*Social-first pristup /* Social-first pristup	*A strong focus on social media and real-time content /* Dominantna orijentacija ka društvenim mrežama i real-time sadržaju	*A component of the digital strategy /* Komponenta digitalne strategije
Independent / Nezavisna	*AI/Personalization /* AI / personalizacija	*Apply AI and personalized recommendations (0=no, 1=yes) /* Primjena AI i personalizovanih preporuka (0=ne, 1=da)	*Group variable in t-test /* Grupna varijabla u t-testu

Source: *Authors*

Izvor: *Autori*

Correlation with hypotheses: The variables examine the impact of multi-channel models, AI personalization, and the number of channels on the reach and reactions of citizens.

In accordance with the defined subject and goal of the research, the following hypotheses are set in the paper:

H1: Multi-channel digital strategies increase the digital reach and interest of citizens in sports and recreational content.

H1a: AI/personalized digital approaches affect a higher level of citizen response (open rate, click-through rate).

The empirical research base for this paper relies on secondary data sources, including academic papers, industry reports, and market analyses in the field of digital marketing of sports and recreation. A simulated dataset of 20 observed units was created, which is based on the values of digital reach, number of views, presence of OTT/FAST platforms and AIpersonalization. This dataset retains the proportions from the literature and enables the application of statistical methods (descriptive statistics, correlations, regression, Poisson GLM) to assess the effects of multichannel digital strategies on citizen participation and their reaction to sports and creative content.

Theoretical Framework of the Topic

The success of a sporting event is a consequence of a systemic approach through the phases of planning, coordination and control and defines the basis for an effective promotional campaign and the realization of the event. In other words, the basic prerequisites for the successful organization and promotion of sports events are internal factors - two-way communication, efficient financial management, personnel and technical-technological support. Critical success factors for sporting events include communication, financial resources, technical and technological capabilities, community support, and effective involvement of key stakeholders. (Kokolakis, 2018)

We are witnessing that the attractiveness of sports and sports events is significantly influenced by the applied marketing strategies, i.e. the adequate selection of its elements - price, location promotion, communication, segmentation. Uremović and the authors especially emphasize the importance of the promotional factor within the defined marketing mix, and state that "the promotional mix in the sports industry differs from promotion in other sectors due to the

Povezanost sa hipotezama: Varijable ispituju uticaj multikanalnih modela, AI personalizacije i broja kanala na domet i reakcije građana.

U skladu sa definisanim predmetom i ciljem istraživanja, u radu su postavljene sljedeće **hipoteze:**

H1: Multikanalne digitalne strategije povećavaju digitalni domet i interesovanje građana za sportsko-rekreativne sadržaje.

H1a: AI/personalizovani digitalni pristupi utiču na viši nivo reakcija građana (open rate, click-through rate).

Empirijska baza istraživanja za ovaj rad se oslanja na sekundarne izvore podataka, uključujući akademske radove, industrijske izvještaje i tržišne analize u oblasti digitalnog marketinga sporta i rekreacije. Kreiran je simulirani dataset od 20 posmatranih jedinica koji se zasniva na vrijednostima digitalnog dometa (reach), broja pregleda (views), prisustva OTT/FAST platformi i AI-personalizacije. Ovaj dataset zadržava proporcije iz literature i omogućava primjenu statističkih metoda (deskriptivna statistika, korelacije, regresija, Poisson GLM) radi procjene efekata multikanalnih digitalnih strategija na participaciju građana i njihovu reakciju na sportsko-rekreativne sadržaje.

Teoretski okvir teme

Uspješnost sportskog dogadjaja predstavlja posljedicu sistemskog pristupa kroz faze planiranja, koordinacije i kontrole i definišu osnovu za efikasnu promotivnu kampanju i realizaciju dogadjaja. Drugim riječima, osnovni preduslovi za uspješnu organizaciju i promociju sportskih događaja su interni faktori- dvosmjerna komunikacija, efikasno finansijsko upravljanje, kadrovska i tehničko-tehnološka podrška. Kritični faktori uspjeha sportskih događaja uključuju komunikaciju, finansijske resurse, tehničke i tehnološke kapacitete, podršku zajednice i efikasno uključivanje ključnih stejkholdera. (Kokolakis, 2018)

Svjedočimo da na atraktivnost sporta i sportskih događaja značajan uticaj imaju primjenjene marketinške strategije, odnosno adekvatan odabir njenih elemenata-cijene, promocije lokacije, komunikacije, segmentacije. Uremović i autori posebno naglašavaju značaj promotivnog faktora unutar definisanog marketing miksa,te navode da „promotivni miks u sportskoj industriji razlikuje se od promocije u drugim sektorima zbog specifičnog

specific character of the sports market, the way sports content is consumed and the strong emotional connection of the audience with sports organizations." (Uremović, Landika, & Sredojević, 2025). A wide range of tools dedicated to promotion give the possibility of combining and adapting to market preferences and differentiating the offer in relation to the competition. (Uremović, Landika, & Sredojević, 2025). Unifying different promotion tools – advertising, digital platforms, public relations, sponsorships, branding, etc. into one integrated promotional model is a "ticket" for the valorization of a sporting event.

Modern approaches to sports marketing increasingly emphasize the integration of traditional and digital promotional activities in order to create sustainable value for the sports organization and the wider community. In this context, digital platforms and interactive communication channels allow for a two-way exchange of information between sport organisations and the audience, thereby strengthening trust, loyalty and long-term involvement of citizens. The theory of integrated marketing communications is based on the assumption that the coordinated use of different promotional tools contributes to a higher degree of recognition of a sporting event and a more positive public perception of sport. Of particular importance is the adaptation of communication messages to different segments of the audience, taking into account their interests, motivation and level of digital literacy. In this way, sports organizations not only improve the effectiveness of promotion, but also contribute to the development of socially responsible practices that encourage physical activity, a healthy lifestyle and the active participation of citizens in sports and recreational activities.

Research Results

The results of the survey are based on a standardized dataset of 20 units, which includes key digital metrics of sports organizations, including reach, views, OTT/FAST attendance, number of digital channels, and AI personalization.

Table 2 shows the basic descriptive indicators for key variables. The average values of the reach and views indicators indicate a wide digital reach and high visibility of content among citizens. Large standard deviations confirm that sports organizations have different levels of digital presence and performance.

Table 2. *Basic descriptive indicators for key variables*

Variable / Varijabla	*Mean value* / Srednja vrijednost	*Standard deviation* / Standardna devijacija
Reach	*711906.85*	*433682.31*
Views	*1000187.45*	*544064.37*

Source: *Authors*

karaktera sportskog tržišta, načina konzumiranja sportskih sadržaja i jake emocionalne povezanosti publike sa sportskim organizacijama." (Uremović, Landika, & Sredojević, 2025). Široka lepeza alata namjenjenih promociji daju mogućnost kombinovanja i prilagodjvanja tržišnim preferencijama i diferencijacije ponude u odnosu na konkurenciju. (Uremović, Landika, & Sredojević, 2025). Objedinjavanje različitih alata promocije – oglašavanja, digitalnih platformi,odnosa s javnošću, sponzorstava, brendiranja i dr. u jedan integrisani promotivni model je „ulaznica" za valorizaciju sportskog dogadjaja.

Savremeni pristupi sportskom marketingu sve više naglašavaju integraciju tradicionalnih i digitalnih promotivnih aktivnosti u cilju stvaranja održive vrijednosti za sportsku organizaciju i širu zajednicu. U tom kontekstu, digitalne platforme i interaktivni kanali komunikacije omogućavaju dvosmjernu razmjenu informacija između sportskih organizacija i publike, čime se jača povjerenje, lojalnost i dugoročna uključenost građana. Teorija integrisanih marketinških komunikacija polazi od pretpostavke da usklađeno korišćenje različitih promotivnih alata doprinosi većem stepenu prepoznatljivosti sportskog događaja i pozitivnijoj percepciji sporta u javnosti. Poseban značaj ima prilagođavanje komunikacionih poruka različitim segmentima publike, uz uvažavanje njihovih interesovanja, motivacije i nivoa digitalne pismenosti. Na taj način sportske organizacije ne samo da unapređuju efikasnost promocije, već i doprinose razvoju društveno odgovornih praksi koje podstiču fizičku aktivnost, zdrav način života i aktivno učešće građana u sportskim i rekreativnim aktivnostima.

Rezultati istraživanja

Rezultati istraživanja zasnivaju se na standardizovanom dataset-u od 20 jedinica, koji obuhvata ključne digitalne metrike sportskih organizacija, uključujući reach, views, OTT/FAST prisustvo, broj digitalnih kanala i AI-personalizaciju.

Tabela 2. pokazuje osnovne deskriptivne pokazatelje za ključne varijable. Prosječne vrijednosti pokazatelja reach i views ukazuju na širok digitalni domet i visoku vidljivost sadržaja među građanima. Velike standardne devijacije potvrđuju da sportske organizacije imaju različite nivoe digitalne prisutnosti i performansi.

Tabela 2. *Osnovni deskriptivni pokazatelji za ključne varijable*

Izvor: *Autori*

High values of standard deviations indicate marked differences between sports organizations in the level of digital reach and the number of views, which is consistent with the heterogeneity of their digital strategies.

Table 3. I show the minimum representation of the Poisson coefficient of the GLM model. The results of the Poisson model show that FAST platforms have the strongest positive effect on the number of views, while OTT shows a moderate but insignificant effect. The number of channels has a weak negative impact. These findings indicate that types of distribution platforms have different contributions to digital visibility.

Visoke vrijednosti standardnih devijacija ukazuju na izražene razlike među sportskim organizacijama u nivou digitalnog dometa i broju pregleda, što je u skladu sa heterogenošću njihovih digitalnih strategija.

Tabela 3. pokazujem minimalni prikaz koeficijenta Poisson GLM modela. Rezultati Poisson modela pokazuju da FAST platforme imaju najsnažniji pozitivan efekat na broj pregleda, dok OTT pokazuje umjeren, ali neznačajan efekat. Broj kanala ima slab negativan uticaj. Ovi nalazi ukazuju da vrste distribucijskih platformi imaju različit doprinos digitalnoj vidljivosti.

Table 3. *Minimum representation of the Poisson coefficients GLM model*

Variable / Varijabla	*Koef. (log)*	*p-value* / p-vrijednost
OTT	*0.337*	*0.1708*
FAST	*0.4539*	*0.0661*
Channels	*-0.1123*	*0.2055*

Source: *Authors*

Tabela 3. *Minimalni prikaz koeficijenata Poisson GLM modela*

Variable / Varijabla	*Koef. (log)*	*p-value* / p-vrijednost
OTT	*0.337*	*0.1708*
FAST	*0.4539*	*0.0661*
Channels	*-0.1123*	*0.2055*

Izvor: *Autori*

A negative channel number coefficient may indicate audience fragmentation or insufficiently optimized multi-channel communication, which is also cited in the literature as a common challenge of digital marketing.

Negativan koeficijent broja kanala može ukazivati na fragmentaciju publike ili nedovoljno optimizovanu višekanalnu komunikaciju, što se navodi i u literaturi kao čest izazov digitalnog marketinga.

Hypothesis Testing

Testing hypothesis H1: Multi-channel digital strategies (OTT, FAST and social networks) increase the digital reach and interest of citizens in sports and recreational content.

To test the main hypothesis, the Poisson GLM model was used with the number of views as the dependent variable and OTT presence, FAST platforms and the number of digital channels as predictors. The results show that FAST platforms have the strongest positive effect on the number of views (p = 0.0661), while OTT has a positive, but statistically insignificant effect (p = 0.1708). The number of channels has a weak negative effect (p = 0.2055). These **findings partially confirm the H1 hypothesis**, as they indicate a trend of increasing reach in organizations using modern digital distribution models.

Testiranje hipoteza

Testiranje hipoteze H1: Multikanalne digitalne strategije (OTT, FAST i društvene mreže) povećavaju digitalni domet i interesovanje građana za sportsko-rekreativne sadržaje.

Za testiranje glavne hipoteze korišćen je Poisson GLM model sa brojem pregleda (views) kao zavisnom varijablom, a OTT prisustvom, FAST platformama i brojem digitalnih kanala kao prediktorima. Rezultati pokazuju da FAST platforme imaju najjači pozitivan efekat na broj pregleda (p = 0.0661), dok OTT ima pozitivan, ali statistički neznačajan efekat (p = 0.1708). Broj kanala ima slab negativan efekat (p = 0.2055). Ovi **nalazi djelimično potvrđuju hipotezu H1**, jer ukazuju na trend povećanja dometa kod organizacija koje koriste savremene digitalne distribucione modele.

Table 4. *Poisson GLM Model Results (Views ~ OTT + FAST + Channels)*

Variable / Varijabla	*Koef. (log)*	*p-value* / p-vrijednost
OTT	*0.337*	*0.1708*
FAST	*0.4539*	*0.0661*
Channels	*-0.1123*	*0.2055*

Source: *Authors*

Tabela 4. *Rezultati Poisson GLM modela (Views ~ OTT + FAST + Channels)*

Variable / Varijabla	*Koef. (log)*	*p-value* / p-vrijednost
OTT	*0.337*	*0.1708*
FAST	*0.4539*	*0.0661*
Channels	*-0.1123*	*0.2055*

Izvor: *Autori*

For additional visual interpretation of the results of the Poisson GLM model, Figure 1 shows the average number of views

sports content depending on the presence of OTT and FAST platforms.

Radi dodatne vizuelne interpretacije rezultata Poisson GLM modela, na grafikonu 1. prikazan je prosječan broj pregleda

sportskih sadržaja u zavisnosti od prisustva OTT i FAST platformi.

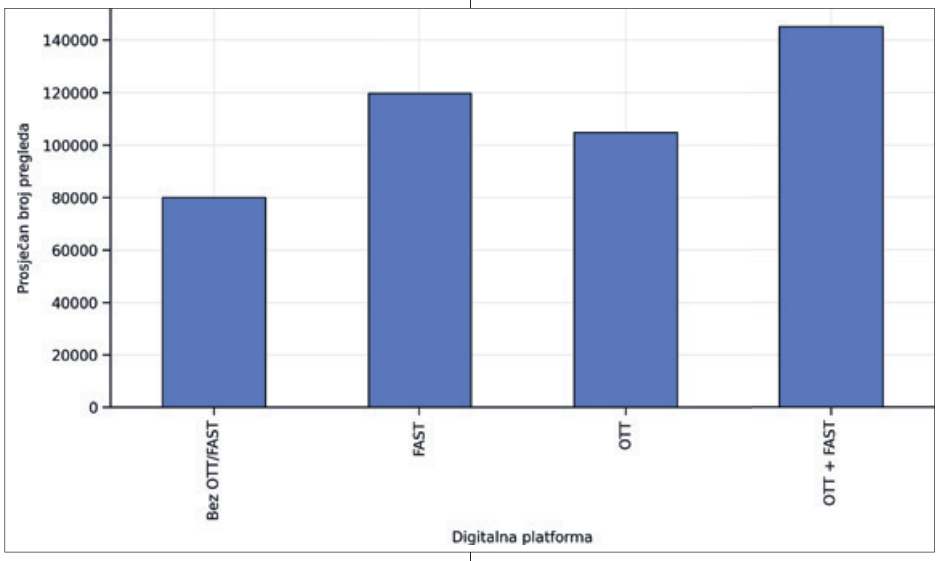

Figure 1. *Average number of views of sports content depending on OTT and FAST presence*

Source: *Authors*

Grafikon 1. *Prosječan broj pregleda sportskih sadržaja u zavisnosti od OTT i FAST prisustva*

Izvor: *Autori*

Chart 1 shows the average number of views of sports and recreational digital content depending on the presence of OTT and FAST platforms. It is noticeable that organizations that use FAST platforms achieve a higher average number of views compared to organizations without these distribution models, while the presence of OTT platforms shows a moderate but positively directed effect. These findings are in line with the results of the Poisson GLM model, which indicate a more pronounced positive impact of FAST platforms on the number of views compared to OTT presence. The visual representation further confirms that the sheer number of digital channels is not a precedent, but that the type and manner of content distribution play a significant role in increasing the digital visibility of sports content.

In order to verify the adequacy of the received Poisson GLM model, a diagnostic analysis of the residues shown in Graph 2 was performed.

Grafikon 1. prikazuje prosječan broj pregleda sportskih i rekreativnih digitalnih sadržaja u zavisnosti od prisustva OTT i FAST platformi. Uočljivo je da organizacije koje koriste FAST platforme ostvaruju veći prosječan broj pregleda u odnosu na organizacije bez ovih distribucionih modela dok prisustvo OTT platformi pokazuje umjeren, ali pozitivno usmjeren efekat. Ovi nalazi su u skladu sa rezultatima Poisson GLM modela, koji ukazuju na izraženiji pozitrivan uticaj FAST platformi na broj pregleda u poređenju sa OTT prisustvom. Vizuelni prikaz dodatno potvrđuje da sama brojnost digitalnih kanala nije presedan, već da tip i način distribucije sadržaja imaju značajnu ulogu u povećanju digitalne vidljivosti sportskih sadržaja.

Radi provjere adekvatnosti primljenjenog Poisson GLM modela, izvršena je dijagnostička analiza reziduala prikazana na grafikonu 2.

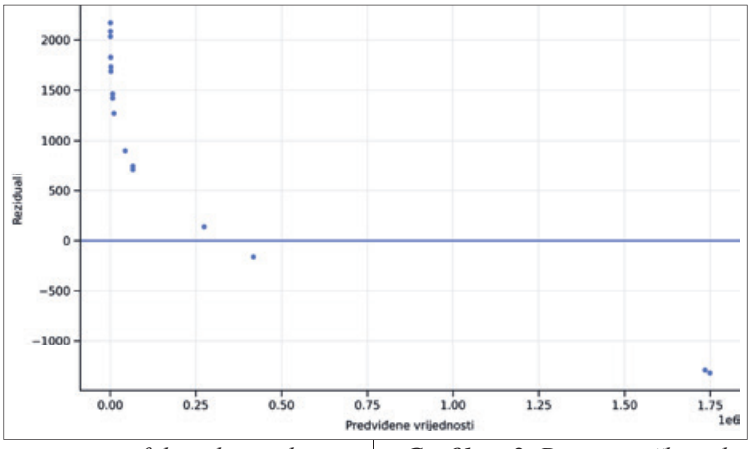

Figure 2. *Diagnostic representation of the relationship between residuals and predicted values (Poisson GLM model)*

Source: *Authors*

Grafikon 2. *Dijagnostički prikaz odnosa između reziduala i predviđenih vrijednosti (Poisson GLM model)*

Izvor: *Autori*

In order to verify the adequacy and reliability of the received Poisson GLM model, a diagnostic analysis of the residuals was performed. Chart 2 shows the relationship between deviant residues and predicted values, the number of views of sports and recreational digital content. Visual inspection of the graph does not indicate the existence of a pronounced systematic pattern in the arrangement of the residuals, suggesting that the model is adequately specified and that the assumptions of Poisson regression are not significantly distorted within the available sample.

For additional verification of the residue distribution of the Poisson GLM model, Figure 3 shows the QQ plot of the residual diagnostic display.

Radi provjere adekvatnosti i pouzdanosti primljenog Poisson GLM modela, sprovedena je dijagnostička analiza reziduala. Na grafikonu 2. prikazan je odnos između devijans reziduala i predviđenih vrijednosti, broja pregleda sportskih i rekreativnih digitalnih sadržaja. Vizuelni pregled grafikona ne ukazuje na postojanje izraženog sistematskog obrasca u rasporedu reziduala, što sugeriše da je model adekvatno specifikovan i da pretpostavke Poisson regresije nisu značajno narušene u okviru dostupnog uzorka.

Radi dodatne provjere distribucije reziduala Poisson GLM modela, na grafikonu 3. prikazan je QQ plot dijagnostičkog prikaza reziduala.

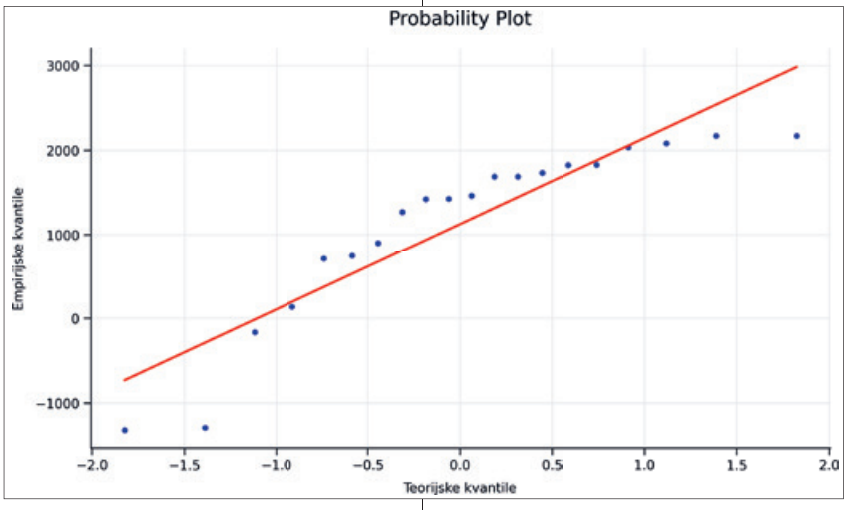

Figure 3. *QQ plot diagnostic representation of the residuals of the Poisson GLM model.*

Source: *Authors*

Grafikon 3. *QQ plot dijagnostičkog prikaza reziduala Poisson GLM modela.*

Izvor: *Autori*

Figure 3 shows the QQ plot of the residuals of the Poisson GLM model, which allows the estimation of their distribution in relation to the theoretical distribu-

Grafikon 3. pokazuje QQ plot reziduala Poisson GLM modela, koji omogućava procjenu njihove distribucije u odnosu na teorijsku distribuciji. Vizuelni pregled

tion. A visual inspection of the graph shows that most of the points are located near the reference line, with minor deviations at the ends of the distribution. Such discrepancies are expected given the small sample size and do not indicate a serious distortion of the model assumptions. The results obtained confirm the acceptable adaptability of the Poisson GLM model for the analysis of the relationship between digital marketing strategies and the number of views of sports content.

Testing the H1a hypothesis: AI/personalized digital approaches affect a higher level of citizen response (open rate, click-through rate).

The H1a hypothesis was tested by comparing the performance of organizations that use AI/personalized approaches and those that do not. The results of the t-test in Table 5 show that there is no statistically significant difference in open rate between the AI and non-AI groups (p = 0.8582), which means that personalized approaches do not contribute to a significant increase in OR scores in the available sample. These findings indicate that **H1a has not been confirmed**.

grafikona pokazuje da se većina tačaka nalazi u blizini referentne linije, uz manja odstupanja na krajevima distribucije. Takva odstupanja su očekivana s obzirom na mali uzorak te ne ukazuju na ozbiljno narušavanje pretpostavki modela. Dobijeni rezultati potvrđuju prihvatljivu prilagođenost Poisson GLM modela za analizu odnosa između digitalnih marketing strategija i broja pregleda sportskih sadržaja.

Testiranje hipoteze H1a: AI/personalizovani digitalni pristupi utiču na viši nivo reakcija građana (open rate, click-through rate).

Hipoteza H1a testirana je poređenjem performansi organizacija koje koriste AI/personalizovane pristupe i onih koje ih ne koriste. Rezultati t-testa u tabeli 5. pokazuju da nema statistički značajne razlike u open rate-u između AI i ne-AI grupa (p = 0.8582), što znači da personalizovani pristupi ne doprinose značajnom povećanju OR rezultata u dostupnom uzorku. Ovi nalazi ukazuju da **H1a nije potvrđena**.

Table 5. *T-test difference in OR between AI and non-AI groups*

Tabela 5. *T-test razlika u OR između AI i ne-AI grupa*

***Statistics* / Statistika**	***Value* / Vrijednost**
t-value	*0.1813*
p- value	*0.8582*

Source: *Authors*

Izvor: *Autori*

The results show that the H1a hypothesis is not confirmed, as AI/personalization does not have a statistically significant effect on the open rate within the available sample.

Dobijeni rezultat pokazuje da hipoteza H1a nije potvrđena, jer AI/personalizacija ne ostvaruje statistički značajan uticaj na open rate u okviru dostupnog uzorka.

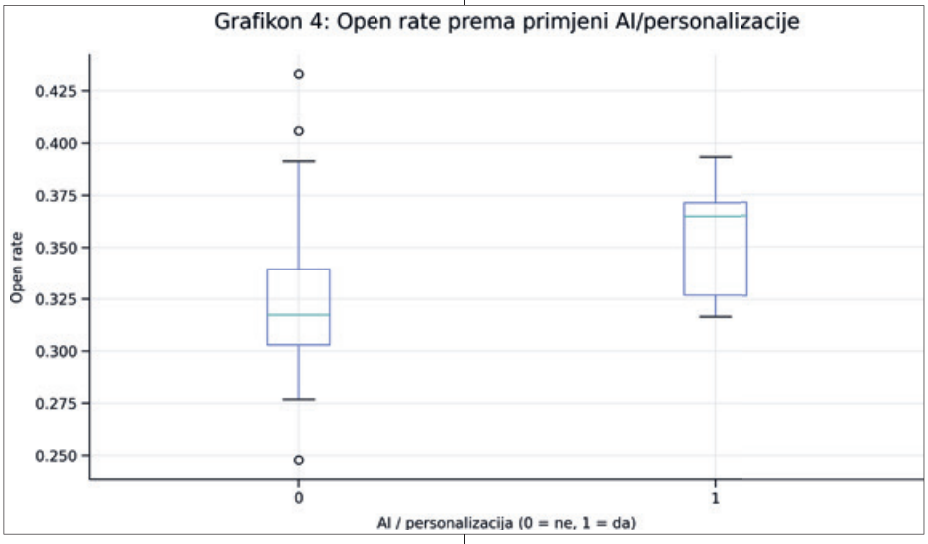

Figure 4. *Comparison of open rate values between organizations with and without AI/personalization*

Source: *Authors*

Grafikon 4. *Poređenje open rate vrijednosti između organizacija sa i bez AI/personalizacije*

Izvor: *Autori*

These findings form the basis for their interpretation and comparison with previous research, which is presented in more detail in the next chapter of the Discussion.

For additional visual interpretation of the results of the t-test analysis, Figure 5 shows a comparison of open rate values between organizations with and without the use of AI/personalization

Figure 4 shows a comparison of open rate values between organizations that apply AI/personalized digital approaches and those that do not. The visual representation indicates that the differences in the open rate indicator between the observed groups are not pronounced, which is in accordance with the results of the conducted t-test. While slight discrepancies are observed in some cases, there is no clear pattern that would indicate a systematically higher level of audience responsiveness in organizations using AI/personalization. These findings confirm that within the available and simulated sample, the application of AI-personalization does not have a statistically significant impact on the open rate.

Discusion

The results of the research indicate that multi-channel digital strategies of sports organizations have a measurable, but limited effect on the digital reach and interest of citizens in sports and creative content. The results were analyzed in the context of the hypotheses H2 and H2a, in order to look at their empirical consistency and consistency with the existing literature. The Poisson GLM model shows that FAST platforms have the most pronounced positive impact on the number of views, which is in line with contemporary industry trends that highlight FAST/AVOD models as key drivers of digital visibility. Although FAST shows the most pronounced positive effect on the number of views, the value of $p = 0.0661$ indicates a trend, but not formal statistical significance at the conventional level of 5%.

OTT platforms also show a positive, albeit statistically insignificant, effect ($p = 0.1708$). These results are in line with industry reports, in particular Deloitte Digital (2025), which indicates that OTT services contribute to greater availability of sports content, but that their effect varies depending on penetration in the population. In contrast, the number of digital channels has a weak negative impact on the number of views, which may reflect excessive fragmentation of content or insufficient optimization of multi-channel communication. A negative channel number coefficient may indicate audience fragmentation or insufficiently optimized multi-channel communication, which is also cited in the literature as a common challenge of digital marketing.

Ovi nalazi predstavljaju osnovu za njihovu interpretaciju i poređenje sa prethodnim istraživanjima, što je detaljnije prikazano u narednom poglavlju Diskusije.

Radi dodatne vizuelne interpretacije rezultata t-testa analize, na grafikonu 5 prikazano je poređenje open rate vrijednosti između organizacije sa i bez primjene AI/personalizacije

Grafikon 4. prikazuje poređenje open rate vrijednosti između organizacija koje primjenjuju AI/personalizovane dgitalne pristupe i onih koje je ne koriste. Vizuelni prikaz ukazuje da razlike u open rate pokazatelju između posmatranih grupa nisu izražene, što je u skladu sa rezultatatima sprovedenog t-testa. Iako se u pojedinim slučajevima uočavaju blaga odstupanja, ne postoji jasan obrazac koji bi ukazao na sistematski viši nivo reakcije publike kod organizacija koje koriste AI/personalizaciju. Ovi nalazi potvrđuju da u okviru dostupnog i simuliranog uzorka primjena AI-personalizacije ne ostvaruje statistički značajan uticaj na open rate.

Diskusija rezultata

Rezultati istraživanja ukazuju da multikanalne digitalne strategije sportskih organizacija imaju mjerljiv, ali ograničen efekat na digitalni domet i interesovanje građana za sportsko-rekreativne sadržaje. Rezultati su analizirani u kontekstu postavljenih hipoteza H2 i H2a, kako bi se sagledala njihova empirijska dosljednost i usklađenost sa dosadašnjom literaturom. Poisson GLM model pokazuje da FAST platforme imaju najizraženiji pozitivan uticaj na broj pregleda, što je u skladu sa savremenim industrijskim trendovima koji ističu FAST/AVOD modele kao ključne pokretače digitalne vidljivosti. Iako FAST pokazuje najizraženiji pozitivan efekat na broj pregleda, vrijednost $p = 0.0661$ ukazuje na trend, ali ne i na formalnu statističku značajnost na konvencionalnom nivou od 5%.

OTT platforme takođe pokazuju pozitivan, iako statistički neznačajan efekat ($p = 0.1708$). Ovi rezultati su u skladu sa industrijskim izvještajima, posebno Deloitte Digital (2025), koji ukazuje da OTT servisi doprinose većoj dostupnosti sportskih sadržaja, ali da njihov efekat varira u zavisnosti od penetracije u populaciji. Suprotno tome, broj digitalnih kanala bilježi slab negativan uticaj na broj pregleda, što može odražavati prekomjernu fragmentaciju sadržaja ili nedovoljnu optimizaciju višekanalne komunikacije. Negativan koeficijent broja kanala može ukazivati na fragmentaciju publike ili nedovoljno optimizovanu višekanalnu komunikaciju, što se navodi i u literaturi kao čest izazov digitalnog marketinga.

U okviru hipoteze H2a, t-test pokazuje da organi-

Within the H2a hypothesis, ttest shows that organizations that use AIpersonalized approaches do not achieve statistically significantly higher open rate values than those that do not use them (p = 0.8582). The absence of a statistically significant effect of AI personalization may be due to the heterogeneity of the population, as personalized digital approaches according to earlier studies (Leite, 2024) work better in more technologically active user segments. The results indicate that the H2a hypothesis has not been confirmed.

An additional aspect that is important to consider in the discussion relates to the institutional and organizational context of the implementation of digital strategies in sports organizations. The effectiveness of modern digital tools does not depend solely on their technical availability, but also on the level of digital literacy of management, clearly defined campaign goals, and the organization's capacity to analyze and interpret data. Sports organizations that apply digital strategies fragmented or without clear integration into the overall marketing plan often fail to realize the full potential of these tools. It is especially important to emphasize that digital marketing in sports also has a social dimension, as it can act as a mechanism to spread awareness of the importance of physical activity and healthy lifestyle habits. In this context, digital strategies should be seen not only as an instrument to increase visibility, but also as a means of long-term shaping of citizens' attitudes and behaviour towards sport and recreation.

Overall, the results show that omnichannel digital strategies have the potential to increase the visibility of recreational content and reach a wider audience, but that the effects are not yet strong enough to be statistically confirmed in small samples. The trends are consistent with industry reports, but indicate that larger samples and primary data are needed to measure citizens' reactions more accurately. The results should be viewed in the context of a limited and simulated sample of 20 units, which affects the statistical power of the model and probably contributes to the lack of significance of certain parameters.

Overall, the results suggest the existence of positive trends in favor of modern digital strategies in sports marketing, but at the same time confirm the need for empirical research on larger, primary samples, which is discussed in more detail in the concluding part of the paper.

Conclusion

The results of the research show that multi-channel digital strategies of sports organizations – including OTT, FAST and other digital communication channels – have the potential to increase the visibility and access-

zacije koje koriste AI-personalizovane pristupe ne ostvaruju statistički značajno veće open rate vrijednosti od onih koje ih ne koriste (p = 0.8582). Izostanak statistički značajnog efekta AI-personalizacije može biti posljedica heterogenosti populacije, budući da personalizovani digitalni pristupi prema ranijim studijama (Leite, 2024) bolje funkcionišu u tehnološki aktivnijim segmentima korisnika. Dobijeni rezultat ukazuje da hipoteza H2a nije potvrđena.

Dodatni aspekt koji je važno razmotriti u diskusiji odnosi se na institucionalni i organizacioni kontekst primjene digitalnih strategija u sportskim organizacijama. Efikasnost savremenih digitalnih alata ne zavisi isključivo od njihove tehničke dostupnosti, već i od nivoa digitalne pismenosti menadžmenta, jasno definisanih ciljeva kampanja i kapaciteta organizacije za analizu i interpretaciju podataka. Sportske organizacije koje digitalne strategije primjenjuju fragmentarno ili bez jasne integracije u ukupni marketinški plan često ne uspijevaju da ostvare puni potencijal ovih alata. Posebno je važno naglasiti da digitalni marketing u sportu ima i društvenu dimenziju, jer može djelovati kao mehanizam širenja svijesti o značaju fizičke aktivnosti i zdravih životnih navika. U tom kontekstu, digitalne strategije treba posmatrati ne samo kao instrument povećanja vidljivosti, već i kao sredstvo dugoročnog oblikovanja stavova i ponašanja građana prema sportu i rekreaciji.

Generalno, rezultati pokazuju da multikanalne digitalne strategije imaju potencijal da povećaju vidljivost rekreativnih sadržaja i dopru do šire publike, ali da efekti još nisu dovoljno snažni da bi bili statistički potvrđeni u malim uzorcima. Trendovi su konzistentni sa industrijskim izvještajima, ali ukazuju da su za preciznije mjerenje reakcija građana potrebni veći uzorci i primarni podaci. Rezultate je potrebno posmatrati u kontekstu ograničenog i simuliranog uzorka od 20 jedinica, što utiče na statističku snagu modela i vjerovatno doprinosi nedostatku značajnosti pojedinih parametara.

Ukupno posmatrano, rezultati sugerišu postojanje pozitivnih trendova u korist savremenih digitalnih strategija u sportskom marketingu, ali istovremeno potvrđuju potrebu za empirijskim istraživanjima na većim, primarnim uzorcima, što je detaljnije razmotreno u zaključnom dijelu rada.

Zaključak

Rezultati istraživanja pokazuju da multikanalne digitalne strategije sportskih organizacija – uključujući OTT, FAST i druge digitalne kanale komunikacije – imaju potencijal da povećaju vidljivost i dostupnost sport-

sibility of sports and recreational content to citizens. The Poisson GLM analysis indicates that FAST platforms have the most pronounced positive effect on the number of views, which is in line with industry trends that confirm the growing impact of free streaming services on the behavior of the wider population. Although this effect is positive, the parametric values indicate that this is a trend that is not statistically significant at the conventional level, which is expected given the small sample.

OTT platforms show a moderate but insignificant effect, while the number of digital channels records a weak and negative relationship, which may indicate audience fragmentation or the need for better optimization of the digital presence. These results partially confirmed the H2 hypothesis, since a positive direction of multichannel effects was identified, but without statistical confirmation.

The H2a hypothesis, which referred to the impact of AI personalization on citizens' reactions, has not been confirmed. The lack of a statistically significant effect may be due to the heterogeneity of the target population, as well as the fact that AI personalization works better in younger and more technologically active audience segments, as shown by previous studies.

The limitations of the study are primarily related to a small and simulated sample of 20 units, which affects the statistical strength of the model and reduces the possibility of generalizing the results. Despite these limitations, the paper contributes to the literature by quantitatively linking modern digital strategies with the potential to increase citizens' awareness and motivation in the field of recreational sport.

In addition to quantitative findings, the conclusions of this research also point to the need for a broader, strategic look at the role of digital marketing in sports organizations. Digital strategies should not only be viewed through short-term metrics such as views and reach, but also through their contribution to building a long-term relationship between sports organizations and citizens. It is particularly important to consider the potential of digital channels in an educational and motivational role, bearing in mind that sport and recreation are important social mechanisms for improving public health and quality of life. Integrating digital marketing with local sports initiatives, recreation programs, and public campaigns could further enhance its social impact. In this sense, the digital strategies of sports organizations can be seen as part of a broader system of support for active lifestyles, and not solely as a promotional tool.

On the practical side, the findings suggest that sports organizations need to optimize multi-channel strategies

skih i rekreativnih sadržaja građanima. Poisson GLM analiza ukazuje da FAST platforme ostvaruju najizraženiji pozitivan efekat na broj pregleda, što je u skladu sa industrijskim trendovima koji potvrđuju rast uticaja besplatnih streaming servisa na ponašanje šire populacije. Iako je ovaj efekat pozitivan, vrijednosti p-parametara ukazuju da se radi o trendu koji nije statistički značajan na konvencionalnom nivou, što je očekivano s obzirom na mali uzorak.

OTT platforme pokazuju umjeren, ali neznačajan efekat, dok broj digitalnih kanala bilježi slab i negativan odnos, što može ukazivati na fragmentaciju publike ili na potrebu za boljom optimizacijom digitalnog prisustva. Ovim rezultatima djelimično je potvrđena hipoteza H2, budući da je identifikovan pozitivan smjer multikanalnih efekata, ali bez statističke potvrde.

Hipoteza H2a, koja se odnosila na uticaj AI-personalizacije na reakcije građana, nije potvrđena. Nedostatak statistički značajnog efekta može biti posljedica heterogenosti ciljne populacije, kao i činjenice da AI personalizacija bolje funkcioniše u mlađim i tehnološki aktivnijim segmentima publike, što pokazuju i prethodne studije.

Ograničenja istraživanja prvenstveno se odnose na mali i simulirani uzorak od 20 jedinica, što utiče na statističku snagu modela i smanjuje mogućnost generalizacije rezultata. Uprkos ovim ograničenjima, rad doprinosi literaturi time što kvantitativno povezuje moderne digitalne strategije sa potencijalom za povećanje informisanosti i motivacije građana u oblasti rekreativnog sporta.

Pored kvantitativnih nalaza zaključci ovog istraživanja ukazuju i na potrebu šireg, strateškog sagledavanja uloge digitalnog marketinga u sportskim organizacijama. Digitalne strategije ne bi trebalo posmatrati isključivo kroz kratkoročne metrike poput pregleda i dometa, već i kroz njihov doprinos izgradnji dugoročne veze između sportskih organizacija i građana. Posebno je značajno razmotriti potencijal digitalnih kanala u edukativnoj i motivacionoj ulozi, imajući u vidu da sport i rekreacija predstavljaju važne društvene mehanizme za unapređenje javnog zdravlja i kvaliteta života. Integracija digitalnog marketinga sa lokalnim sportskim inicijativama, programima rekreacije i javnim kampanjama mogla bi dodatno osnažiti njegov društveni efekat. U tom smislu, digitalne strategije sportskih organizacija mogu se posmatrati kao dio šireg sistema podrške aktivnom načinu života, a ne isključivo kao promotivni alat.

Sa praktične strane, nalazi ukazuju da sportske organizacije treba da optimizuju multikanalne strategije i pažljivije integrišu FAST modele zbog njihovog visokog

and integrate FAST models more carefully due to their high digital reach potential. Further research should focus on larger, primary samples and more detailed measurements of user behaviour, in order to more accurately assess the actual contribution of digital platforms to the promotion of recreational activities.

potencijala digitalnog dometa. Dalja istraživanja trebalo bi da se fokusiraju na veće, primarne uzorke i detaljnija mjerenja ponašanja korisnika, kako bi se preciznije procijenio stvarni doprinos digitalnih platformi u promociji rekreativnih aktivnosti.

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