

STRATEGIC RETROSPECTIVE OF THE DEVELOPMENT OF THE UNIVERSITY OF MOSTAR (2017 – 2025): INTEGRATION, DIGITAL TRANSFORMATION AND INTERNATIONAL POSITIONING

Abstract

This paper aims to analytically present and scientifically interpret the transformational development of the University of Mostar (SUM) during 2017–2025, with a focus on institutional integration, digital transformation, international cooperation, scientific and publishing output, and infrastructural and biomedical development. The research is designed as a strategic retrospective study based on the analysis of institutional documents, quantitative indicators (number of projects, mobilities, publications, study programmes, doctoral candidates), and descriptive reports of organisational units.

During the analysed period, SUM underwent three phases of transformation: (1) structural and organisational reconstruction, (2) digital and international expansion, and (3) consolidation towards a European university model. Legal and financial integration, the establishment of new services and unified procedures, alongside budget stabilisation, created the conditions for significant growth in research, teaching, and project activities. The digital transformation, led by the Centre for Information Technologies (SUMIT), resulted in the establishment of an integrated digital ecosystem covering the full student lifecycle and institutional resource management, as well as the development of AI-based solutions and the SUM AI Centre, accompanied by strengthened cybersecurity capacities (SUM CERT).

ZORAN TOMIĆ *

UDK:

378.4 (497.6)"2017/2025"

378.4.014.3(497.6)"2017/2025"

378.4: 005.336 (497.6)"2017/2025"

Pregledni članak

Review article

DOI 10.47960/2831-0322.

2025.1-2.29.171

* prof. dr. sc. Zoran Tomić,
University of Mostar, BiH,
zoran.tomic@sum.ba

The international dimension of SUM's development is evidenced by a substantial increase in student mobility (1253 %) and staff mobility (1598 %), participation in 30 Erasmus+ projects, membership in 19 international networks, and involvement in prestigious European Universities initiatives. Scientific output has multiplied: 1,012 publications indexed in Web of Science with more than 9,800 citations, while doctoral studies and PRESSUM's integrated publishing ecosystem have consolidated SUM as a research-oriented institution.

In addition, the field of biomedicine has recorded exponential growth in study programmes and publications. At the same time, infrastructure (campuses in Mostar, Rodoč, and Široki Brijeg) has undergone one of the most extensive modernisation processes within the higher education sector in Bosnia and Herzegovina. Finally, systems of student support (Counselling Centre, Office for Students with Disabilities), quality assurance, public procurement, and public relations have contributed to the comprehensive transformation of SUM into a modern, internationally recognisable university, as confirmed by its global achievements in the WURI and THE Impact Rankings.

Keywords: University of Mostar; institutional integration; digital transformation; international cooperation; scientific output; doctoral studies; infrastructure; artificial intelligence; student support; WURI; THE Impact Rankings

1. Introduction

Over the past decade, higher education in Europe has been characterised by accelerated digital transformation, strengthened international cooperation, increased competition in global rankings, and growing pressure on universities to demonstrate measurable societal impact. Within this context, the University of Mostar (SUM), as one of eight public universities in Bosnia and Herzegovina and the only one offering instruction in Croatian, initiated a comprehensive institutional, academic, and organisational reform in 2017.

The starting point of this transformational cycle was the need to replace a loosely connected faculty model with an integrated university system capable of responding to the challenges of the European Higher Education Area, the digital economy, and global scientific competitiveness. At the same time, SUM had to preserve and strengthen its specific social role - safeguarding national, cultural and linguistic identity while fostering openness, multiculturalism and regional cooperation.

The period 2017-2025 is examined in this paper as a coherent transformational phase marked by three key stages:

1. *Structural and organisational reconstruction (2017-2020)* – legal integration, introduction of unified financial and governance procedures, stabilisation of operations, and establishment of new services.

2. *Digital and international expansion (2020-2023)* – development of digital systems and platforms, expansion of international cooperation, growth in mobility, and projects.
3. *Integration and consolidation towards a European university model (2023-2025)* – strengthening of the scientific and publishing ecosystem, enhancement of quality, positioning on global rankings, and deepening infrastructural investment.

The central thesis of the paper is that, through visionary leadership, systematic institutional integration, robust digital transformation, strategic scientific development, and intensive internationalisation, the University of Mostar has, within eight years, evolved from a regionally oriented institution into an internationally recognised innovation-driven university. This thesis is supported by quantitative indicators (projects, mobilities, publications, doctoral studies) and international recognitions, such as first place in the Visionary Leadership category of the WURI ranking and strong positions in the THE Impact Rankings and the QS Europe Rankings.

The objectives of the paper are to:

- synthesise the key development processes of SUM between 2017 and 2025,
- analyse their quantitative and qualitative effects, and
- interpret SUM's transformation within contemporary European higher education trends.

The paper is structured as follows: after the introduction, the materials and methods are presented, followed by extensive results organised into thematic sections (integration and governance, digital transformation, international cooperation, science and publishing, biomedicine, infrastructure, teaching and students, support and inclusion, public image and inter-institutional cooperation), and a concluding section focusing on SUM 2030 perspectives.

2. Materials and Methods

2.1. Research Design

The research is conceived as a retrospective strategic case study of a single university, focused on analysing an eight-year transformational period. It combines:

- *descriptive analysis*, used to quantify key development indicators, and
- *interpretative analysis*, placing these indicators within a broader institutional and European context.

Given that the study draws on an extensive corpus of internal data, it falls within the scope of institutional evaluation and *higher education policy studies*.

2.2. Data Sources

The main data corpus includes:

- concise annual reports of the University and its constituent units,

- strategic documents (Development Strategy, Digital Strategy, Strategy for University Journals, Intellectual Property Policy, etc.),
- data from the Office for International Relations (number of agreements, mobilities, networks, projects),
- data from the Project Office (number of projects, financial effects, structure of funding sources),
- bibliometric data (Web of Science, Scopus, citation metrics, structure of scientific output),
- data from the Centre for Doctoral Studies (number of doctoral candidates, doctoral programmes, defended dissertations),
- administrative databases (HRM, eEnrolment, eIndex, financial reporting),
- reports on infrastructural investments and property-legal regulation of campuses,
- data from the Student Counselling Centre and the Office for Students with Disabilities,
- data from the Public Procurement Service and the Public Relations Office.

All listed data have already been synthesised in documentation describing the University's development during the observed period; in this paper, they are additionally structured, interpreted, and integrated into a coherent scientific narrative.

2.3. Methods of Processing and Analysis

The following methods were applied:

1. *Document analysis*
 - examination of normative acts, strategies, regulations, and reports to identify key reform measures and turning points.
2. *Quantitative descriptive analysis*
 - processing numerical data (e.g., number of mobilities, projects, publications, doctoral studies, study programmes, first-year students, financial amounts), including calculation of percentage growth and comparison of periods before and after 2017.
3. *Thematic-categorical analysis*
 - grouping findings into thematic areas: integration and governance; digital transformation; internationalisation; science and publishing; biomedicine; infrastructure; students and teaching; support and inclusion; public communication; inter-institutional cooperation.
4. *Interpretative analysis*
 - interpreting identified trends within European standards and frameworks (ESG, Lisbon Recognition Convention, European Universities Initiative, open science, digital education).

Since the study examines a single university, the research does not aim for *statistical generalisation* across higher education institutions, but rather for

analytical generalisation, illustrating how an integrated set of institutional measures can transform a university's position within a relatively short period.

3. Results

3.1. Institutional Integration and Governance Transformation

The transformation of the University of Mostar began with a profound restructuring of the institution itself. The integration process, which lasted nearly eight years, encompassed legal, financial, organisational, academic, and social dimensions, gradually reshaping the way SUM functions as a unified entity. A key turning point occurred on 3 September 2018, when legal integration was completed: the University became a single legal entity with a consolidated balance sheet, centralised accounting, and a clearly defined system of accountability. This marked the formal abandonment of the loosely connected faculty model and laid the foundation for a unified, integrated university system.

Within this context, a new Regulation on Organisation and Systematisation was adopted, redefining the University's internal structure and enabling the establishment of several key services. The creation of the Planning and Analysis Office, the Human Resources Office, the Public Procurement Office, and the Intellectual Property Office was not merely an administrative upgrade, but a clear indication that the University was transitioning towards a professionalised, data-driven, and strategically guided governance model. These services became operational pillars of integration, allowing SUM to function as a coherent whole rather than a collection of autonomous units.

On the financial front, comprehensive reforms were implemented, without which further development would have been inconceivable. The introduction of a unified accounting system (EXPERT-CLOUD), the preparation of SUM's initial balance sheet, and the standardisation of key financial documents created the conditions for data comparability, expenditure control, and strategic planning. The financial restructuring of units with debt, stabilisation of liquidity, and regular salary payments restored confidence in the institution's financial stability. The Planning and Analysis Office, through hundreds of reports and dozens of detailed analyses, became a kind of "navigation centre" for the University: these documents served as an expert basis in negotiations with founders and in securing additional development funding. The introduction of a new coefficient system enabled a fairer distribution of resources among constituent units, reducing fragmentation and strengthening system cohesion.

Parallel to financial consolidation, a thorough professionalisation of human resources took place. In cooperation with the Federal Employment Service, 63 new assistants were employed, revitalising the University's research and teaching capacity. Furthermore, 44 staff members received funding for doctoral studies in the Republic of Croatia, enabling rapid strengthening of research capacities through the acquisition of international qualifications. The total number of full-time employees

increased to 553, including 308 academic and 245 administrative and technical staff, supported by approximately one thousand external collaborators. This figure is not merely statistical; it reflects the scale of a system integrating research, teaching, administrative, and professional work.

Academic promotions - from assistant to full professor - occurred within a significantly more structured environment, and the digital HRM system enabled unified, transparent, and analytical monitoring of staff data, promotions, and workload. Human resources policy thus ceased to be a set of individual decisions and became a strategic instrument of institutional development.

Since 2019, a new quality assurance system has been developed in parallel. A Quality Policy Statement, Quality Assurance Regulation, Guide, and Manual were adopted, and a unified methodology for monitoring quality indicators at the University, constituent units, and study programme levels was introduced. Accreditation results clearly confirm the success of these changes: in the 2020 reaccreditation process, SUM achieved seven fully and three substantially met criteria, while in 2024, this improved to nine fully and one substantially met criteria. Consequently, SUM has become one of the highest-rated higher education institutions in Bosnia and Herzegovina in the field of quality assurance.

An important new component of this system is the Intellectual Property Office, established in 2024. The Office introduced an Intellectual Property Policy, which for the first time clearly defined rules for the protection, use, and commercialisation of innovations and copyrighted works at the University level. The initiation of trademark registration further strengthened the institutional identity and protected the SUM brand in both national and international contexts. In this way, quality management and intellectual capital management were integrated into a single framework - a hallmark of mature educational and research institutions.

3.2. Digital Transformation and Development of the AI Ecosystem

While legal and financial integration unfolded largely “behind the scenes”, the digital transformation of SUM became one of its most visible hallmarks. At the centre of this process is the Centre for Information Technologies (SUMIT), established in 2017. What began as a modest team responsible for technical support has evolved into the strategic core of the University’s digital transformation. Today, SUMIT coordinates a complex IT system that supports education, research, and governance: from eEnrolment and eIndex, through the SUMARUM platform and various AI tools, to systems for scientific repositories, human resource management, Senate operations, and document management.

SUMIT oversees more than 25 integrated systems that have been gradually connected into a unified digital ecosystem. This ecosystem is built on the concept of a single digital identity - eduID and SSO - allowing students and staff to authenticate once and access a broad range of services. From the very first step, the online application to study, students pass through a fully digitalised lifecycle: enrolment, course engagement, examinations, grade access, learning materials, interaction with

teachers, all the way to diploma issuance and diploma supplement. Administrative processes - from Senate work to HR records - also operate in a digital environment. In doing so, SUM has not only modernised its operations, but has created a framework for real-time analytics, a rarity even in far more developed systems.

Digital transformation has not been limited to software tools. Between 2021 and 2025, a new SUMIT building was constructed on the Rodoč Campus, architecturally and functionally embodying the University's digital shift. The building includes modern offices, training spaces, conference halls, a technology laboratory, and advanced server rooms. In parallel, a next-generation data centre is being developed, designed to meet high standards of security, scalability, and availability. Combined with a modernised network infrastructure - eduroam, VPN, optical connections, a multi-layer security architecture, and CERT functionality - SUM has created the technological preconditions for operating as a digitally sovereign institution.

A distinctive dimension of this digital transformation is its reach beyond the University campus. Through SUMIT, SUM has developed tools such as eDiary, eRegistry, and eEnrolment, which currently support tens of thousands of pupils and thousands of teachers in primary and secondary schools delivering instruction in the Croatian language in Bosnia and Herzegovina. Through projects with public administration - eID, registries, DMS, and integrations with state databases - the University has become a key partner of cantonal governments and ministries in public-sector digitalisation. In this way, SUM acts as a digital platform for society, rather than merely a user of external infrastructure.

Building upon this foundation, a specific artificial intelligence ecosystem has emerged. The SUM AI Centre, in only a few years of operation, has delivered visible results: from Smart Syllabi and AI assistants for eDiary to the MoStart WhatsApp chatbot, and the development of proprietary time-series models (HASPFFormer and SOFTS++). The Centre simultaneously strengthens the applied dimension - tools used by teachers, schools, and students - and the scientific dimension, publishing papers in international journals and participating in research projects. Its plans for the upcoming period, including building its own infrastructure for model training, developing a university language model, and intensifying participation in EU projects, clearly demonstrate that SUM views artificial intelligence as a strategic priority rather than a temporary trend.

SUM CERT, a specialised cybersecurity centre, further reinforces the University's digital resilience. Its work is not limited to reactive incident response; it also undertakes preventive activities such as vulnerability assessments, continuous resource monitoring, and user training. The role of SUM CERT extends beyond the University: by supporting public and private institutions, the Centre contributes to creating a safer digital environment at the societal level. In this way, SUM's digital transformation is complemented by a security dimension, without which all other advancements would remain significantly more vulnerable.

3.3. International Positioning and the European Dimension

While the internal system was being reorganised and digitalised, the University of Mostar simultaneously strengthened its international profile. Over eight years, SUM has evolved from a relatively regionally focused institution into a globally connected academic actor. The number of international agreements has reached 335, divided almost equally between inter-university cooperation agreements and Erasmus+ mobility agreements. Partnerships now span 50 countries across five continents, and membership in 19 international university networks demonstrates that SUM participates in discussions and initiatives that extend beyond national frameworks.

Quantitatively, the most impressive indicator of international expansion is the explosive growth in mobility. Between 2015 and 2017, only 36 students and 60 staff members were employed, whereas from 2017 to 2025 this number increased to 487 students and 1,019 staff members - representing a 1,253% increase for students and a 1,598 % increase for staff. Behind these percentages lie concrete biographies and experiences: students and academic staff who spent part of their studies or work in Portugal, Spain, France, Norway, Estonia, Poland, Turkey, Italy, countries of Southeast Europe, as well as in Canada, the United States, Israel, India, Indonesia, Malaysia, Jordan, Argentina, Armenia, and Brazil. The establishment of the first agreements with universities in the United States, the United Kingdom, and Japan further expanded SUM's horizons.

This surge was not accidental. It was grounded in the systematic use of Erasmus+ and other European funding instruments. Between 2015 and 2025, 30 Erasmus+ projects were implemented, modernising study programmes, strengthening governance and administrative capacities, improving infrastructure, and accelerating the University's alignment with European standards. Particularly important is the role of the EUPeace Alliance within the European Universities Initiative, in which SUM is the first and only University from Bosnia and Herzegovina to receive the support of the European Commission. The award of the Erasmus Charter for Higher Education (2021–2027) further confirmed that the University meets high European standards in internationalisation.

SUM's international dimension is reflected not only in mobility and projects, but also in its teaching and research offer. Joint and international study programmes, such as the international joint doctoral programme in International Economic Relations and Management, the interdisciplinary doctoral programme in Educational and Communication Sciences, the doctoral programme "Information Management and ICT Applications", and the master's programme "Artificial Intelligence Applications", connect SUM with partners across Europe. Particularly noteworthy are the fully English-taught medical programme and the English-language doctoral programme in Civil Engineering, which open SUM to international students and position it among universities capable of delivering highly specialised programmes in foreign languages. More than 650 courses that may be delivered in a foreign language further confirm this capacity.

At the same time, membership in networks such as EUA, DRC, EUF, UniAdrion, BUA, IAU, PETRA-E, EUCEN, and AUF, as well as participation in the BRAUIC consortium, provides SUM with a platform for engagement in global initiatives. The establishment of the Nishan World Centre for Confucian Studies at the Faculty of Humanities and Social Sciences represents a particularly symbolic step: the University assumes the role of a bridge between Europe and China - not only in economics and politics, but also in science and culture.

3.4. Projects, Research, and Publishing

At the project, research, and publishing levels, the observed period demonstrates continuous growth and a gradual consolidation of SUM's research identity. Over the past five years, the University has implemented 268 projects: 223 have been completed and 43 are ongoing. The total realised funding of 15.83 million BAM - of which more than 95% originates from public sources - attests to the high quality of project proposals and SUM's competitiveness in national and international funding schemes. The most significant sources include Erasmus+, IPA funds, and various international programmes, with the Faculty of Medicine standing out with over 4 million BAM in secured funding, and FGAG being the constituent unit with the highest number of projects.

Research output has experienced exponential growth in the same period. The Web of Science database records 1,012 publications affiliated with SUM, while Scopus lists 1,371. Citation counts exceed 9,800 in Web of Science, and an increasing share of publications appears in top-tier journals (Q1 and Q2). The structure of research output confirms SUM's profile as a strong research institution, particularly in medicine and the natural sciences: more than half of the publications originate from medical and health sciences, approximately one third from natural sciences, with technical, biotechnical, social sciences, humanities, and the arts complementing the overall profile. This development is not merely the result of individual researcher efforts but reflects systematic investment in research infrastructure.

Doctoral studies occupy a central position within this system. The University currently offers 11 doctoral programmes with 585 active doctoral candidates (2024), and 176 doctoral dissertations were defended between 2020 and 2024. The establishment of the Centre for Doctoral Studies in 2023 and the adoption of a new Rulebook on Doctoral Studies harmonised admission, supervision, delivery, and evaluation criteria in line with ESG standards and European best practices. This created a clear research education pathway - from students' first research experiences to independent researchers and supervisors.

In publishing, the University of Mostar has developed one of the most coherent and advanced publishing ecosystems in the region. PRESSUM, the University publishing house established in 2019, has assumed responsibility for coordinating and developing all publishing activities. Through PRESSUM, a "five windows of scholarly communication" platform was created - SUMPAUK, VIDRA,

a research data repository, a system for books and e-books, and the SUM Register/Bibliography. Fifteen scientific journals, several of which are indexed in prestigious databases, cover a wide range of disciplines and provide domestic and international authors with high-quality publication channels.

The Journal Development Strategy 2023-2027 foresees further indexing, professionalisation of editorial boards, standardisation of OJS usage, and strengthening of international editorial structures. By introducing Turnitin as a standard tool for originality verification, SUM clearly affirmed that research integrity is valued as highly as research volume.

3.5. Exponential Growth in Biomedicine

Within the broader scientific and educational ecosystem, the biomedical field has experienced particularly dynamic development. Between 2021 and 2025, SUM established an almost complete vertical of biomedical education: the doctoral programme in Pharmaceutical Sciences was launched, new undergraduate programmes in Laboratory Biomedicine and Cosmetology were introduced, and existing programmes in medicine and health sciences were enhanced. This progression enables students to remain within a coherent biomedical ecosystem from their first year of study through to the doctoral level.

At the same time, biomedicine leads in research output. Between 2017 and 2025, 544 publications in the biomedical field were published in the Web of Science, with 6,694 citations in total. Clinical medicine stands out with 347 publications and 5,091 citations, while basic medical sciences has more than 100 publications. These figures indicate that SUM has not only followed global trends but has also generated internationally recognisable scientific contributions.

Scientific activity is further reflected in a rich schedule of conferences and academic events. The Mostar Pharmaceutical Days have become an annual scientific highlight, while a series of specialised symposia - from paediatrics and infectiology to nephrology, radiology, midwifery, nursing and perinatal medicine - bring together hundreds of experts. The Mostar School of Musculoskeletal Radiology and visits by distinguished scientists such as Prof. Ivan Đikić and Prof. Stipan Jonjić significantly enhance SUM's international visibility in the biomedical field. Additionally, the University has published 40 scientific books, textbooks, and manuals, and has developed three specialised biomedical journals that publish around 50 articles annually.

Teaching has been aligned with contemporary European standards, including the implementation of OSCE systems and standardised competency assessments. Interdisciplinary cooperation among the Faculty of Medicine, Faculty of Health Studies, and Faculty of Pharmacy has enabled the integration of clinical, laboratory, and public health research, as well as the development of joint teaching and research projects. Collectively, these achievements position SUM as a national leader in biomedicine and are increasing its international influence.

3.6. Infrastructure and Energy Transition

Parallel to the processes of integration, digital transformation, and research growth, the University of Mostar has undertaken one of the most extensive infrastructure modernisation initiatives within the higher education sector in Bosnia and Herzegovina. The period 2017-2025 has been marked by the renovation, reconstruction, and redesign of at least eight major facilities. The central campus in Mostar has acquired a new identity: SUMshop and Campus Caffe have become spaces for informal learning, social interaction and student culture; a new conference hall enables the organisation of international events aligned with SUM's scientific ambitions; while the media centre, sports field and park create a comprehensive environment in which students do not merely "attend classes", but live and develop within the campus. The establishment of a Central Student Office significantly simplified and modernised administrative interaction between students and the University.

At the same time, infrastructure development has been approached through the lens of energy sustainability. The installation of solar panels on key buildings, the introduction of electric vehicle charging stations, and the modernisation of lighting and security systems demonstrate that SUM perceives the energy transition not as an externally imposed obligation, but as an opportunity for long-term financial and environmental sustainability. Energy-efficient campuses have thus become part of the University's identity rather than a purely technical backdrop.

The Rodoč Campus, once a neglected industrial complex, is gradually transforming into one of the most promising university development centres. The new SUMIT building, the Museum of Modern Art, the University Archive, and the PRESSUM printing facility create a unique network of spaces where digital technology, art, administration, and science intersect. The renovation of sports, indoor, and swimming facilities, in cooperation with HŠK Zrinjski, opens opportunities for the development of specialised study programmes in sports, medical, and rehabilitation sciences, as well as for the organisation of sports activities and events. Landscaping, road reconstruction, and entrance design provide the campus with a distinctive, modern visual identity.

A fundamentally different, yet equally important infrastructural advancement concerns property and legal reform. The University has parcelled more than two million square metres of land, precisely mapped and registered over fifty buildings, and recorded them in land registries. Few universities in the region possess such a clearly regulated property and legal campus status. This process enables future investments - from laboratories and centres of excellence to student dormitories - without the risks associated with legal uncertainty.

SUM further strengthens its cultural and artistic identity through the renovation of the Academy of Fine Arts in Široki Brijeg. Modernised studios, workshops and exhibition spaces position the Academy among the best-equipped art institutions in the region and provide the University as a whole with a visible and recognisable cultural dimension.

3.7. Teaching, Students, and the Third Mission

The transformation of SUM would not be complete without profound changes in teaching and in students' positions within the system. The University currently offers 158 study programmes at all levels - from undergraduate to doctoral - and between 2017/18 and 2024/25, 34 new programmes were introduced, including international, interdisciplinary and online programmes. The comprehensive revision of all first- and second-cycle study programmes has a dual significance: on the one hand, it aligned programme content with new scientific knowledge and labour market needs; on the other, it clearly linked programmes to European standards through learning outcomes and ECTS workload. The development of a bilingual register of study programmes in Croatian and English further strengthened transparency and international accessibility of the study offer. Pedagogical standards have been defined through a set of key documents - the Rulebook on Studies, the Rulebook on the Adoption and Revision of Study Programmes, the Guide for Curriculum Development, and manuals on higher education pedagogy and teaching competencies. The development of the SUMARUM (Moodle) platform and the integration of SUM TV into teaching proved particularly valuable during the COVID-19 pandemic, when the University rapidly established a sustainable online education system. This experiential capital has remained permanent: digital teaching is no longer an exception, but an integral part of everyday academic practice.

A significant qualitative advancement has been achieved in the field of recognition of qualifications and prior learning. By aligning with the Lisbon Recognition Convention, SUM adopted the Rulebook on the Recognition of Educational Qualifications and Study Periods and the Rulebook on the Equivalence of Pre-Bologna Degrees. Even more important is the 2023 Rulebook on the Recognition of Non-formal and Informal Learning - the first such document at a higher education institution in Bosnia and Herzegovina. Through this step, the University clearly acknowledged that competencies can be acquired outside traditional classrooms, opening the door to more flexible and inclusive learning pathways.

Professional practice has become an integral part of study programmes, rather than an optional supplement. The Rulebook on Teaching Bases enabled the signing of more than 150 agreements with hospitals, schools, social welfare institutions, companies, and other organisations that provide students with practical experience. At the University level, approximately 200 elective courses are offered annually, with an increasing number taught in English. This enables students to build a personalised "competence portfolio" that extends beyond a single discipline.

The University's third mission - lifelong learning and social engagement - has been realised through the SUM Academy and the Centre for Lifelong Learning. By the 2024/25 academic year, fifteen lifelong learning programmes had been adopted or revised, attended by nearly 700 participants, half of whom were SUM employees and half were members of the wider community. The TRAIN+

programme, with more than 327 participants, has become a recognised model of systematic teacher education in didactics, methodology, research, and communication competencies.

Enrolment data confirm that these developments are recognised by society. In the 2024/25 academic year, 2,058 first-year students enrolled, a 19% increase compared to the previous year and the highest number since 2018/19. Students are not merely recipients of services, but active participants in governance: they have representatives in the Senate and take part in numerous committees and councils, from quality assurance to the election of the Rector.

3.8. Student Support, Mental Health, and Inclusion

The University's transformation gains additional depth when viewed through the lens of student support and inclusion. The Student Counselling Centre, which initially functioned as a modest service for a limited number of students, developed between 2017 and 2025 into a professional, programme-based unit. Formally organised as a unit of the Faculty of Humanities and Social Sciences, it provides individual and group counselling, psychotherapeutic support, preventive programmes, and educational activities. Staff and collaborators of the Centre have undergone additional training in various psychotherapeutic approaches - from Gestalt to cognitive-behavioural therapy - to respond to increasingly complex student needs related to stress, anxiety, adjustment, burnout, and other challenges of modern life. Hundreds of counselling sessions, dozens of workshops, and public events demonstrate that mental health has become an integral component of the University, rather than a private concern of individuals.

The Office for Students with Disabilities has developed in parallel, though in its own specific direction. From an advisory service, it has evolved into a robust institutional mechanism for inclusion, with clearly defined rules, procedures, and infrastructure. The adoption of the Rulebook on the Study of Students with Disabilities in 2020, the creation of the Guide for Students with Disabilities, the introduction of online registration and university identification cards, as well as a series of infrastructural adaptations - ramps, elevators, Braille signage, communication boards and an accessible website - demonstrate that SUM does not perceive inclusion as a declarative obligation but as a practical task. The installation of an elevator at the Faculty of Mechanical Engineering, Computing and Electrical Engineering in 2025 symbolically marked the completion of one cycle of these efforts.

A total of 61 registered students with disabilities have used the Office's services, with the number of beneficiaries exceeding the number of formally registered users. The Office is also active in regional networks, participating in initiatives such as "Mostar – City of Inclusion" and projects aimed at aligning standards with European practices. Collectively, these efforts form a mosaic of an inclusive university culture in which diversity is not a barrier, but a starting point for development.

3.9. Public Image, Media, and Communication

A university undergoing such a comprehensive transformation must inevitably develop a new model of communication with its environment. The Public Relations Office has become one of the key actors in defining and conveying SUM's identity. More than 2.2 million unique visitors to the official website, a substantial increase in social media reach, and regular international visibility through translated news demonstrate that the University strategically and actively utilises digital communication channels.

The development of university media - SUM TV, SUM Radio, the SOVA portal, and the Universitas Mostariensis newspaper - has further expanded communication capacities. These channels serve not only for news dissemination, but also for the production of original, high-quality content on science, education, culture, sport, and student life. Journalism and public relations students gain practical skills through engagement in these media, while the University simultaneously builds an archive of its own development.

SUM TV stands out as a strategic resource. Established during the pandemic as a platform for broadcasting teaching content, it is now integrated into the e-learning system and functions as the University's digital amphitheatre. Video lectures, recorded classes, panel discussions, documentary reports, and event broadcasts enable knowledge to reach beyond the classroom and beyond the city. The television channel thus serves concurrently as an educational platform, a communication tool, and a media literacy laboratory, linking technology, pedagogy, and public visibility into a unified system.

3.10. Inter-institutional Cooperation and Public Procurement

Finally, but no less importantly, the transformation of SUM rests upon a strong network of inter-institutional relationships and professionalised logistical systems such as public procurement. Cooperation with the Ministry of Science and Education of the Republic of Croatia, particularly in co-financing teaching and doctoral studies, has enabled Croatian universities to become more deeply involved in the development of SUM's academic staff. Partnerships with cantonal governments in Bosnia and Herzegovina - Central Bosnia, Herzegovina, Posavina, and others - have opened opportunities to establish off-campus study programmes, develop local educational centres, and align study programmes with regional labour market needs. Active participation in the Rectors' Conferences of Bosnia and Herzegovina and Croatia has further strengthened SUM's position as an important voice in regional higher education policy.

On the other hand, the Public Procurement Service, established in 2018, has ensured that numerous development projects and investments were implemented in accordance with legal and ethical standards. Between 2018 and 2025, 1,374 procurement procedures were conducted, with contract values exceeding 35 million BAM. Centralised procurement planning, unified procedures, and systematic staff

training have enabled the rational use of public funds and reduced the risk of irregularities. Public procurement has thus become an invisible but essential support mechanism for all processes - from digitalisation and infrastructure development to laboratory equipment and research project implementation.

4. Conclusion

The strategic retrospective of the 2017-2025 period clearly demonstrates that the University of Mostar has undergone one of the most profound transformations in its history. Within a relatively short timeframe, SUM has evolved from a regionally oriented institution, challenged by internal fragmentation and limited resources, into an internationally visible, digitally mature, and scientifically strong university that participates on equal footing within the European Higher Education Area.

Legal, financial, and organisational integration proved to be a necessary precondition for all subsequent advancements. It enabled professional management, a stable budget, and rational resource allocation. Within this framework, the digital transformation led by SUMIT did not consist merely of implementing several tools, but of developing a comprehensive digital ecosystem encompassing the student lifecycle, scientific production, and governance processes. A particularly significant strategic shift is reflected in the development of artificial intelligence and cybersecurity through the SUM AI Centre and SUM CERT, positioning SUM among regional pioneers.

At the international level, the growth in cooperation agreements, mobilities, projects, and network memberships, as well as its rankings on global lists (WURI, THE Impact Rankings, QS Europe Rankings), confirms that the University has moved beyond national boundaries and become a recognised actor in the European and global academic landscape. The research and publishing ecosystem, characterised by increased publication output, citations, doctoral studies, and professionalised publishing, has strengthened SUM's identity as a research-oriented university.

Biomedical development, infrastructural modernisation of the campuses in Mostar, Rodoč, and Široki Brijeg, the energy transition, and substantial investment in teaching, student support, mental health, and inclusion demonstrate that the transformation did not occur solely at the "top" of the system but permeated everyday academic life. The Public Relations Office, SUM TV, SUM Radio, SOVA, and Universitas Mostariensis have built a new public identity for the University, making its achievements visible to wider audiences and documenting its developmental trajectory.

The synthesis of these processes is embodied in the programme *Revolutionizing Education through Visionary Leadership: Driving Digital Transformation and AI Innovation*, through which SUM achieved the first place globally in the category *Visionary Leadership* in the 2025 WURI ranking. This

recognition does not merely reflect the success of a single programme, but confirms that the University possesses anticipatory capacity, organisational courage and strategic discipline. SUM is not an institution that passively reacts to change, but one that actively generates it.

Viewed through the lens of the SUM 2030 vision, the University of Mostar enters the new decade as a digitally mature, research-oriented, and internationally networked institution, a regional centre for innovation and artificial intelligence, and a bridge between the local community and the global academic sphere. The experience of SUM demonstrates that a mid-sized university located outside major metropolitan centres can - through a clear vision, an integrated system, digital transformation, scientific growth, and international cooperation - achieve globally visible, measurable results.

In this way, the University of Mostar has become a reference model of transformation for higher education institutions in the region and beyond, and a relevant contributor to discussions on the University of the future: an institution that simultaneously preserves identity and openness, produces knowledge and shares it within an open scientific community, and responsibly manages resources while guiding society toward a digitally and socially sustainable future.

STRATEŠKA RETROSPEKTIVA RAZVOJA SVEUČILIŠTA U MOSTARU (2017. - 2025.): INTEGRACIJA, DIGITALNA TRANSFORMACIJA I MEĐUNARODNO POZICIONIRANJE

Sažetak

Cilj ovoga rada jest analitički prikazati i znanstveno interpretirati transformacijski razvoj Sveučilišta u Mostaru (SUM) u razdoblju od 2017. do 2025. godine, s posebnim naglaskom na institucionalnu integraciju, digitalnu transformaciju, međunarodnu suradnju, znanstvenu i izdavačku djelatnost te infrastrukturni i biomedicinski razvoj. Istraživanje je koncipirano kao strateška retrospektivna studija utemeljena na analizi institucionalnih dokumenata, kvantitativnih pokazatelja (broj projekata, mobilnosti, publikacija, studijskih programa, doktoranada) te opisnih izvješća organizacijskih jedinica.

Tijekom analiziranoga razdoblja, SUM je prošao kroz tri faze transformacije: (1) strukturno i organizacijsko preuređenje, (2) digitalnu i međunarodnu ekspanziju te (3) konsolidaciju prema modelu europskoga sveučilišta. Pravna i financijska integracija, uspostava novih službi i jedinstvenih procedura, uz stabilizaciju proračuna, stvorili su uvjete za značajan rast u istraživačkim, nastavnim i projektnim aktivnostima. Digitalna transformacija, predvođena Centrom za informacijske tehnologije Sveučilišta u Mostaru (SUMIT), rezultirala je uspostavom integriranoga digitalnoga ekosustava koji obuhvaća cjelokupan studentski ciklus i upravljanje institucionalnim resursima, kao i razvojem rješenja temeljenih na umjetnoj inteligenciji te SUM Centra za umjetnu inteligenciju, uz istovremeno jačanje kapaciteta kibernetičke sigurnosti (SUM CERT).

Međunarodnu dimenziju razvoja SUM-a potvrđuje značajan porast mobilnosti studenata (1253 %) i zaposlenika (1598 %), sudjelovanje u 30 Erasmus+ projekata, članstvo u 19 međunarodnih mreža te uključenost u prestižne inicijative Europskih sveučilišta. Zabilježen je višestruki porast znanstvene produkcije: 1.012 publikacije indeksirane u *Web of Science* s više od 9.800 citata, dok su doktorski studiji i integrirani izdavački ekosustav PRESSUM učvrstili SUM kao instituciju usmjerenu na istraživanje.

Osim toga, područje biomedicine zabilježilo je eksponencijalan rast studijskih programa i publikacija. Istovremeno, infrastruktura (kampusi u Mostaru, Rodoču i Širokom Brijegu) je prošla kroz jedan od najposebnijih procesa modernizacije u sektoru visokoga obrazovanja u Bosni i Hercegovini. Na kraju, sustavi podrške studentima (Savjetovalište, Ured za studente s invaliditetom), osiguranje kvalitete, javna nabava i odnosi s javnošću pridonijeli su sveobuhvatnoj transformaciji SUM-a u moderno, međunarodno prepoznatljivo sveučilište, što potvrđuju i njegovi globalni uspjesi na ljestvicama WURI te THE Impact Rankings.

Ključne riječi: Sveučilište u Mostaru; institucionalna integracija; digitalna transformacija; međunarodna suradnja; znanstvena djelatnost; doktorski studiji; infrastruktura; umjetna inteligencija; podrška studentima; WURI; THE Impact Rankings