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KPI4HE
ERASMUS+

"Establishment of National framework of Key Performance Indicators for good governance and quality towards inclusive, digital and green oriented higher education in Armenia" (KPI4HE)

Project#101128552

WP2-D2.1-D2 "Draft National Guide for Institutional Research and Strategic Planning (GIRSPA)"

"THE ROLE OF INSTITUTIONAL RESEARCH IN STRATEGIC PLANNING OF HIGHER EDUCATIONAL INSTITUTIONS IN ARMENIA: A PRACTICAL GUIDE"

Yerevan-2024

Co-funded by the Erasmus+ Programme of the European Union

Document Information

Deliverable title:	**WP2-D2.1-D2 "National Guide for Institutional Research and Strategic Planning (GIRSPA)" – Final version**
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Confirmation:	Approved by the KPI4HE project Governing Board Coordination meeting
Deliverable number:	2.1.
Work package:	2
Lead partner:	YSU-AM
Due date of deliverable:	31.08.2024
Submission date:	30.11.2024
Dissemination Level	Public
Reviewed by	approved by GB on 09.11.2024

Version	Date	Modified by	Modification reasons
V-1	18.06.2024	Discussion with P1-P9 during the Workshop at YSU	Structure of NG
V-2	01.08.2024	Prof. Marco Frascio, University of Genoa, IT Mr. Angelo Musaio. University of Genoa, IT (P12-UNIGE)	Draft National Guide for Institutional Research and Strategic Planning (GIRSPA)
V-1	28.09.2024	Discussion with P1-P12 during the Trainings in Oldenburg	Discusse the UNIGE version of DNG
V-2	14.10.2024	Discussion with P1-P9	Disscusion of the Draft NG
V-1	09.11.2024	Dr. Arsen Aproyan (P1-YSU)	Approved the final version of the National Guide for Institutional Research and Strategic Planning (GIRSPA)
V-2	10-25.11.2024	Translated in Armenian	

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THE ROLE OF INSTITUTIONAL RESEARCH IN STRATEGIC PLANNING OF HIGHER EDUCATIONAL INSTITUTIONS IN ARMENIA: A PRACTICAL GUIDE

Table of Contents

This project has been funded with support from the EC.
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Introduction

The primary purpose of this guide is to highlight the core principles and approaches for integrating institutional research into the strategic planning process. This integration is essential for identifying and formulating a comprehensive set of targets that enable HEIs to effectively implement, monitor, and evaluate their strategies. From a practical perspective, this interconnectedness is critical as it facilitates the development of clear and measurable Key Performance Indicators (KPIs), which serve as vital tools in strategic planning.

It is important to note that each institution, depending on its specific stage of development, must establish a unique set of KPIs that genuinely reflect its development needs rather than merely aligning nominally with existing standards. However, this does not imply that established standards, classifications, or KPI frameworks are irrelevant to the strategic planning process. On the contrary, the challenge for any HEI lies in achieving an optimal balance. This balance should account for:

- Global context: Incorporating indicators aligned with overarching trends and developments in higher education.
- National context: Factoring in local priorities and conditions, which may sometimes become the dominant influence shaping the institution's management logic.
- Institution-specific needs: Addressing the unique attributes of the HEI, including its traditions, available resources, educational and research organization, institutional status, and more.

This multi-faceted approach offers a structured way to develop KPIs that are not only functional and relevant but also contextually appropriate.

Purpose of the Manual

To support HEIs in achieving this integration and balance, the manual aims to address the following key questions:

- What aspects and areas does institutional research cover?
- What benefits can an institution derive from engaging in institutional research?
- What types of data form the foundation of institutional research?
- How does institutional research impact and enhance the strategic planning process?

By addressing these questions, the guide seeks to empower HEIs with the knowledge and tools required to align their institutional research and strategic planning processes effectively, fostering a data-driven and context-sensitive approach to higher education management.

Institutional research. Definition and typology

The term institutional research (IR) emerged in the 1950s in the United States and gradually gained prominence across Western countries. Its development paralleled the growing recognition of the need to analyze structural transformations within institutions as a reflection of the broader global changes following World War II.

This evolving field focused on understanding the functionality of institutions, their internal organization, communication patterns, and other factors influencing decision-making and implementation. As a result, IR became a critical component of decision support systems, emphasizing the collection and analysis of reliable data to establish a framework of causes and consequences, ultimately enabling effective solutions.

Given the dual capacity of IR to address both short-term operational challenges and long-term strategic issues, its role in the strategic planning of higher education institutions (HEIs) is particularly significant. IR provides a suite of tools, activities, and functions designed to tackle systemic, long-term processes with the goal of ensuring sustainable and qualitative improvements. By integrating IR into strategic planning, HEIs can better navigate complexities, drive informed decisions, and achieve their institutional missions more effectively.

As part of the HEI management system, Institutional Research (IR) can be understood as a comprehensive framework encompassing (a) processes, (b) tools, and (c) functions that collectively enable informed, data-driven decision-making.

IR as a Consolidation of Processes

IR integrates a series of interconnected processes that ensure a structured approach to gathering, analyzing, and applying data. These processes include:

Data Collection

1. Gathering essential data from reliable sources using effective and systematic collection methods.
2. Ensuring that the data aligns with the institution's strategic objectives and operational requirements.
3. Data Classification
4. Organizing and categorizing the collected data to define typologies and ensure consistency in the data collection process.

5. Facilitating comparative analysis and the assessment of trends over time by maintaining a coherent framework for data classification.
6. Identifying diverse data configurations to optimize the organization and flow of the analytical process.

Data Analysis

1. Interpreting the classified data based on strategic priorities, which guide the formulation of research questions.
2. Employing a combination of analytical methods tailored to HEI strategic planning, such as:
3. Comparative analysis: Identifying differences and similarities across contexts.
4. Contextual analysis: Understanding data within its broader institutional or external environment.
5. Quantitative analysis: Utilizing numerical data to identify patterns and inform decision-making.

Application of Analytical Results

1. Finalizing the decision-making framework, grounded in thorough analysis.
2. Justifying decisions through evidence-based reasoning, outlining expected outcomes, and defining measurable indicators for tracking progress.
3. Establishing verification mechanisms to facilitate ongoing assessment and adjustments where necessary.

By consolidating these processes, IR serves as a cornerstone for aligning institutional strategies with actionable insights, ensuring that HEIs make decisions that are not only informed but also sustainable and aligned with their long-term goals.

IR as a Set of Tools

The effective implementation of data collection, classification, and analysis relies on a robust set of tools and instruments. These tools ensure the sustainability and reliability of processes, create optimal conditions for work organization, and provide a structured framework for systematization. They can be broadly categorized into the following groups:

Regulative Tools

- Comprise policies and procedures essential for managing the collection, communication, and application of data.

- Establish rules and norms governing data usage, ensuring standardization, compliance, and ethical practices.

Institutional Tools

- Involve the structural setup of data flow within the institution.
- Define the sources of information, access levels, and mechanisms for information security.
- Include the creation of algorithms for organizing the information flow and building the capacity of staff involved in managing and analyzing data.

Digital Tools

- Incorporate all technological platforms that support data management and communication processes. These include:
- Data repositories: Centralized databases storing information on students, faculty, educational programs, research activities, finances, infrastructure, human resources, and digital archives.
- Internal communication and management platforms: Tools such as email systems, management software, and platforms for organizing the educational process (e.g., Learning Management Systems).
- External communication tools: Websites, official social media pages, and contact databases that facilitate tracking interactions with external audiences, categorized by typology.

By leveraging these tools across regulative, institutional, and digital domains, Institutional Research creates a comprehensive framework that supports efficient data-driven decision-making. This toolset ensures that data management is reliable, secure, and strategically aligned with the institution's broader goals.

IR as a function

Some researchers describe IR, as a specialized administrative function and fittingly styled its practitioners as organizational intelligence specialists.[1]

This perspective highlights the role of IR in enhancing the institution's ability to make informed decisions by systematically gathering, analyzing, and interpreting data.

Centralized vs. Decentralized IR

[1] The art and science of institutional research. Fincher, C. , Institutional research in transition. New Directions for Institutional Research, San Francisco, CA: Jossey- Bass, 1985

IR, as a function, can take either a centralized or decentralized approach, depending on the university's method of data collection, analysis, and application:

- **Centralized IR**

In this model, a dedicated unit is established specifically to conduct all IR activities.

The unit serves as the single hub for data collection, analysis, and strategic reporting, ensuring consistency, standardization, and alignment with the university's overall strategy.

This approach streamlines processes and avoids duplication of effort, making it ideal for institutions that prioritize efficiency and uniformity in decision-making.

- **Decentralized IR**

In this model, IR responsibilities are distributed across multiple units or departments, with each unit focusing on data collection and analysis relevant to its specific role.

A central IR unit, if present, assumes a coordinating role, overseeing the broader implementation of IR processes.

This model leverages the specialized expertise of individual units, fostering localized insights that are directly relevant to their operational areas.

- **The Meta-Level Analytical Opportunity**

The decentralized approach introduces a unique opportunity for the designated IR unit to operate on a meta-level:

The IR unit analyzes and synthesizes findings from other units, providing a holistic view of the institution's performance and trends.

By consolidating data from diverse sectors, the central unit can identify cross-cutting issues, correlations, and systemic patterns that might be overlooked in a purely centralized or unit-specific analysis.

This meta-level analysis supports strategic planning by highlighting interdependencies between units and aligning their efforts with the university's overarching goals.

Regardless of the approach, the effectiveness of IR depends on its alignment with the institution's strategic priorities, the quality of data, and the collaboration among units. While the centralized model emphasizes standardization, the decentralized model capitalizes on specialized insights and fosters a culture of shared responsibility for institutional data. Combining elements of both models can provide a balanced framework that ensures thorough, multi-level analysis and informed decision-making.

In summary, when a HEI effectively incorporates IR in its three core functions—data collection, classification, and analysis—the strategic planning process becomes significantly more data-driven and result-oriented. This not only enhances the precision and relevance of decision-making but also creates additional opportunities for long-term planning and sustainability.

Moreover, the establishment and systematic development of these IR functions within an HEI can be regarded as a critical element of institutional development. Institutional development itself is inherently tied to the successful implementation of the institution's strategy, as any comprehensive strategy must include provisions for organizational growth, adaptation, and continuous improvement.

Thus, the strategic impact of IR integration can be assessed in:

1. **Enhanced Decision-Making**
   - A robust IR framework ensures that decisions are based on reliable and comprehensive data, reducing reliance on assumptions or anecdotal evidence.
   - It fosters a culture of accountability and transparency; as strategic choices are justified through empirical evidence.
2. **Alignment with Institutional Goals**
   - By integrating IR into strategic planning, HEIs can better align their operations with their mission, vision, and long-term objectives.
   - IR provides the tools to monitor progress toward strategic goals, identify gaps, and make necessary adjustments.
3. **Capacity for Long-Term Planning**
   - With IR supporting the evaluation of internal and external trends, HEIs are better positioned to anticipate future challenges and opportunities.
   - This forward-looking capability allows institutions to design flexible and adaptive strategies that address both immediate needs and evolving priorities.
4. **Institutional Development as a Strategic Outcome**
   - The development of IR functions contributes to the institutional capacity-building necessary for sustained growth.

- IR-driven insights can inform areas such as resource allocation, academic program development, student support services, and research priorities, all of which are integral to institutional advancement.

In conclusion, IR is not just a tool for facilitating strategic planning but also an essential component of strategy execution. It ensures that institutional development is grounded in evidence, making it an indispensable asset for achieving academic excellence, operational efficiency, and long-term institutional success.

Strategic planning of the HEIs. Objectives and expectations

Strategic planning encompasses a wide array of definitions, approaches, and methodologies, both in general terms and within the specific context of higher education institutions (HEIs). Over time, the instability of external environments and the increasing likelihood of abrupt, transformative changes have significantly reduced the predictability of long-term planning. These shifts are closely linked to the rapid technological, socio-political, and economic developments of recent decades, which have created a complex web of interconnections between global processes. Events such as the COVID-19 pandemic, financial crises, regional conflicts, and other disruptions in one part of the world have demonstrated a ripple effect, influencing the global landscape and compelling governments, organizations, and societies to rethink priorities, reallocate resources, and redefine short-, medium-, and long-term goals.

In light of these profound transformations, strategic planning as a discipline has undergone a re-evaluation—not in terms of its necessity but in terms of its functionality and adaptability. Contemporary approaches emphasize an institution's capacity for flexibility, resilience, and responsiveness to rapid contextual changes. This shift prioritizes the ability to dynamically redistribute resources, reorganize structures, and maintain operations in new and often unpredictable environments. Moreover, there is a growing focus on proactive preparedness, ensuring that institutions are not only capable of responding to current challenges but are also equipped to anticipate and adapt to future disruptions.

For HEIs in particular, this evolving approach to strategic planning requires balancing long-term vision with short-term agility. Institutions must integrate mechanisms for continuous environmental scanning, stakeholder engagement, and scenario planning to ensure their strategies remain relevant and effective. This adaptive framework transforms strategic planning from a static, linear process into a dynamic, iterative cycle that aligns institutional objectives with the realities of an ever-changing global context.

In the case of Armenia, a country undergoing systemic transition shaped by its Soviet legacy, a complex regional environment, and a protracted conflict, higher education institutions (HEIs) face multiple layers of challenges that complicate the identification of long-term goals and clear developmental trajectories. These complexities often result in strategic planning processes that are largely declarative and ambiguous. This is not merely a consequence of institutional inefficiencies but is deeply rooted in structural issues, such as the lack of coordinated efforts to establish unified long-term strategic goals, systemic deficiencies in national-level data collection and analysis, and insufficient institutional capacities to adapt to the demands of the modern world. Consequently, the implicit strategic modus operandi for many Armenian HEIs has been

centered on preservation and institutional reproduction rather than innovation and transformation.

The current state of Armenian HEIs demands a comprehensive rethinking and reassessment of their context through the lenses of national, regional, and global dynamics that influence the country and its education system. Additionally, given Armenia's current political and socio-economic realities, determining the appropriate strategic planning paradigm is particularly challenging. A key dilemma emerges: should HEIs adopt an inductive approach, where specific ongoing processes are generalized to anticipate future developments, or a deductive approach, where a long-term vision is first defined, and strategies are then formulated to achieve it? Each of these paradigms has implications for how institutions set priorities and allocate resources.

These questions underscore the critical role of institutional research (IR) in the strategic planning processes of Armenian HEIs. Effective strategic planning in this context requires consolidated, well-analyzed data to provide a comprehensive understanding of the broader national, regional, and global trends shaping Armenia. This data-driven approach is essential for creating an accurate and actionable picture of the evolving environment, enabling institutions to define long-term goals and objectives that align with these realities.

Moreover, this situation highlights the necessity of integrating inductive and deductive approaches into strategic planning to ensure a balance between operational realities and visionary aspirations. By tailoring long-term strategies to current circumstances while maintaining flexibility to adapt to unforeseen changes, Armenian HEIs can transition from preservation-oriented practices to proactive, growth-focused planning. This reconfiguration of planning frameworks and methodologies is essential for enabling Armenian HEIs to not only respond effectively to contemporary challenges but also to position themselves as key contributors to national and regional development.

Assessing the major components of a higher education institution's (HEI) strategy through the lens of institutional research (IR) offers a powerful method for identifying key research dimensions that drive effective strategic planning. This exercise is particularly valuable in aligning strategic intent with actionable insights, ensuring that planning is grounded in evidence and context.

Key elements such as the institution's Mission and Vision, strategic goals and objectives, primary activity directions linked to these goals, and the expected qualitative and quantitative outcomes form the foundation of this process. Additionally, the baseline conditions, mechanisms for verifying planned results, and metrics for evaluating progress are integral in shaping the overall framework of IR within the strategic planning context. Together, these components enable the

development of a robust theory of change, which serves as a guiding structure for the HEI to achieve its long-term aspirations.

Expanded Framework for Integrating IR into Strategic Planning

1. Mission and Vision Alignment:

IR helps evaluate whether the institution's mission and vision are not only aspirational but also grounded in current realities and future possibilities. It examines how effectively they reflect institutional strengths, societal needs, and stakeholder expectations.

2. Strategic Goals and Objectives:

Institutional research ensures that strategic goals are specific, measurable, achievable, relevant, and time-bound (SMART). It assesses their alignment with broader national and global trends in higher education and evaluates their feasibility within the institution's resources and constraints.

3. Activity Directions and Priorities:

IR identifies critical areas for action, analyzing the potential impact and resource allocation for each. This ensures that activities are prioritized based on their ability to advance strategic goals effectively.

4. Baseline and Contextual Analysis:

Establishing a comprehensive baseline is crucial for measuring progress. IR collects and analyzes data on the institution’s current state across various dimensions, such as academic performance, financial stability, faculty capacity, and student satisfaction.

5. Verification Mechanisms:

IR designs robust mechanisms for tracking and verifying outcomes. These include key performance indicators (KPIs), feedback loops, and regular progress reports that provide actionable insights for mid-course corrections.

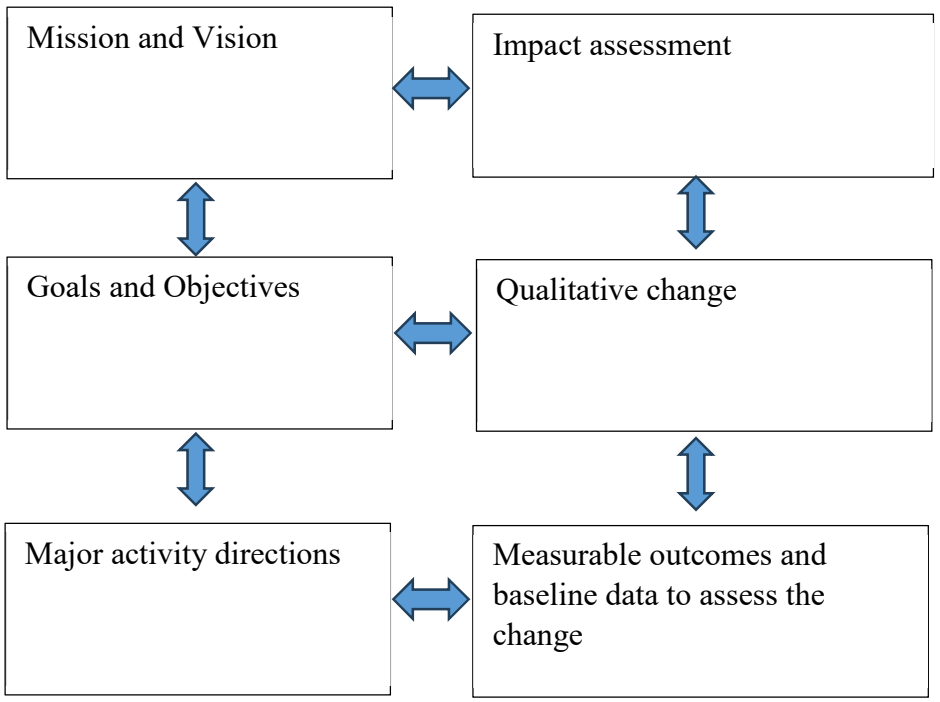
6. Expected Results and Theory of Change:

By defining clear qualitative and quantitative outcomes, IR helps articulate a theory of change—a logical framework that connects strategic activities to desired results, ensuring coherence and accountability throughout the implementation process.

The diagram referenced below illustrates the interconnected relationship between strategic planning and IR. It showcases how IR acts as the backbone of the planning process, providing the data and analytical tools necessary to ensure that strategies are not only well-designed but also executable and adaptive to changing circumstances.

By systematically embedding IR into strategic planning, HEIs can move beyond abstract declarations and develop practical, evidence-based strategies. This integration creates a dynamic planning process that is continuously informed by research, fostering a culture of adaptability, accountability, and innovation.

Strategy development framework



Institutional research

1. Context analysis
   - global trends in education, research, technology, economy
   - National context (priorities on national level, strategies, legal framework)
   - HEI context (self-assessment)
2. Institutional assessment and comparative analysis of HEI capacities and ability to respond to the global and national challenges
3. Baseline data collection, identification of major tools necessary for data verification

Data collection. Sources, methods and applicability

The correlation between Institutional Research (IR) and strategic planning in higher education institutions (HEIs) is heavily influenced by effective data collection, processing, and utilization. This necessitates a systematic approach to managing data within HEIs, integrating it with a broader spectrum of external data. Such integration is crucial as external data significantly affects various aspects of institutional operations, including the organization of educational processes, research activities, infrastructure development, internal communication, and overall management.

To enhance the effectiveness of IR in strategic planning, data must be systematically categorized into two broad groups: **internal data** and **external data**.

Internal Data

Internal data encompasses information generated and circulated within the HEI. It can be further classified based on variables such as **functionality**, **source**, and **essence**:

1. **By Functionality**:
- **Education**: Data related to academic programs, student performance, enrollment trends, and curriculum development.
- **Research**: Information on publications, grants, patents, and collaborative projects.
- **Infrastructure**: Details on physical facilities, technology resources, and sustainability initiatives.
- **Human Capital**: Metrics on faculty and staff performance, recruitment, and professional development.
- **Management**: Organizational structure, governance processes, and decision-making workflows.
- **Financial**: Budget allocations, revenue streams, and cost management.
2. **By Source**:
- **Central**: Data collected and managed at the institutional level, such as overarching policies, centralized student records, and university-wide performance metrics.
- **Divisional**: Data originating from specific departments, faculties, or units, addressing localized operations or initiatives.
3. **By Essence**:
- **Qualitative**: Descriptive information, such as feedback, case studies, and policy analyses.
- **Quantitative**: Numerical data, including statistics, performance indicators, and survey results.

External Data

External data extends across multiple levels and dimensions, encompassing information from:

- **National Context**: Demographics, labor market trends, and governmental policies affecting higher education.
- **International and Global Trends**: Global rankings, international collaborations, and emerging technologies.
- **Stakeholder Input**: Feedback from alumni, employers, and community partners.

The proposed systematization framework emphasizes a structured methodology to streamline data integration for strategic decision-making. This approach enables HEI decision-makers to:

- **Align IR outcomes with strategic priorities**: Ensure that data analysis and insights directly inform the institution's goals and initiatives.
- **Facilitate cross-functional collaboration**: Encourage data sharing and consistency across departments for holistic planning.
- **Enhance agility**: Enable the institution to adapt to changing internal and external dynamics effectively.

By adopting this systematized approach, HEIs can optimize their IR processes and leverage data insights to drive strategic planning, ensuring sustainable growth and alignment with broader educational objectives.

The matrix below offers country specific approach for Armenian HEIs to organize IR and align its results to the strategic planning process.

Internal data	
Functionality	**Qualitative and quantitative data**
Education	1. Student Performance and Achievement • Grade Point Average (GPA): Average grades achieved by students across courses or semesters. • Exam Scores: Results of midterms, finals, and standardized tests. • Graduation Rates: Percentage of students who complete their degrees within the standard timeframe. • Retention Rates: Proportion of students who continue their studies from one academic year to the next. • Employment Rates: Percentage of graduates employed in their field within a specified timeframe after graduation. 2. Enrollment and Demographics • Enrollment Numbers: Total number of students enrolled in various programs or courses. • Student-to-Faculty Ratio: Number of students per faculty member, reflecting class size and teaching capacity. • Diversity Metrics: Percentage distribution of students by gender, ethnicity, nationality, or socioeconomic background. • Admission Statistics: Data on the number of applicants, acceptance rates, and yield rates (enrolled vs. accepted).

	2. Course and Program Data • Course Completion Rates: Percentage of students successfully completing individual courses. • Average Class Size: Number of students per course or section. • Program Duration: Average time taken by students to complete a degree program. • Dropout Rates: Proportion of students who leave a course or program before completion.

Research	1. Research Output Metrics • Publications: ✓ Number of peer-reviewed journal articles, conference papers, books, and book chapters published. ✓ Distribution of publications across disciplines or departments. • Citation Counts: ✓ Total number of citations received by the institution's research. ✓ Average citations per publication. • H-index: A metric combining productivity (number of publications) and impact (number of citations). • Co-authorship Rates: Proportion of papers with multiple authors, indicating collaboration. 2. Research Funding Metrics • Grant Acquisition: ✓ Total value and number of research grants awarded. ✓ Distribution of grants by source (government, private sector, international organizations). • Grant Success Rate: Percentage of grant applications that are successfully funded. • Funding per Faculty Member: Average research funding secured by individual researchers. 3. Collaboration Metrics • Institutional Collaborations: Number and scope of partnerships with other universities or research institutions. • Industry Collaborations: Number of projects and funding obtained through partnerships with industry. • International Research Activities: Proportion of research involving international partners or conducted abroad. • Joint Publications: Number of co-authored papers with external collaborators. 4. Student Involvement in Research • Graduate Research Output: Number of theses or dissertations completed by graduate students. • Undergraduate Participation: Number or percentage of undergraduates involved in research projects.

	• Research Fellowships: Number of fellowships or assistantships awarded to students. 5. Innovation and Technology Transfer • Patents: ✓ Number of patents filed and granted. ✓ Revenue generated from licensing patents. • Startups and Spin-offs: Number of companies created based on university research. • Technology Licenses: Number of technologies or intellectual properties licensed to external entities. 6. Research Quality and Impact • Journal Impact Factors: Average impact factor of journals in which faculty publish. • Altmetrics: Alternative impact measures, such as mentions in social media, news outlets, or policy documents. • Awards and Recognitions: Number of prestigious research awards or honors received by faculty or students. 7. Research Infrastructure Utilization • Lab and Facility Usage: Number of research projects conducted using institutional facilities. • Equipment and Resource Investments: Quantifiable investments in research tools and infrastructure. • Data Sharing and Repository Metrics: Usage statistics for institutional data repositories or shared research resources. 8. Research Engagement and Dissemination • Conference Participation: ✓ Number of presentations, keynote speeches, or posters delivered by faculty and students. ✓ Attendance rates at university-hosted research conferences. ✓ Workshops and Seminars: Number of events hosted or attended to disseminate research findings. 9. Societal and Economic Impact ✓ Policy Contributions: Number of research outputs cited in public policy documents or legislative initiatives.

	✓ Community Engagement Projects: Number of research projects addressing local or global societal challenges. ✓ Economic Impact Studies: Quantitative assessments of research impact on regional or national economies. 10. Benchmarking and Rankings ✓ Research Rankings: Institutional position in global or national rankings based on research indicators. ✓ Comparison Metrics: How the institution's research performance compares to peer universities.
Infrastructure	Physical Facilities • Total Campus Area: Square meters or acres of the university's land and buildings. • Building Space Allocation: Total and percentage of space allocated for different purposes (e.g., classrooms, laboratories, administrative offices, libraries, dormitories). • Classroom Capacity: Number of classrooms and their seating capacity, Average class size relative to classroom capacity. • Laboratory and Research Facilities: Number of laboratories and research centers, Percentage of specialized labs (e.g., chemistry, engineering, computer science). • Residential Facilities: Total number of dormitory units or beds available, Occupancy rates in student housing. Technological Infrastructure • Number of computers available for students and faculty. • Ratio of computers to students and faculty. • Network Infrastructure: • Total bandwidth capacity. • Number of Wi-Fi hotspots and coverage across the campus. • Total number of e-books, journals, and databases available through the library. • Usage statistics for online learning platforms and digital tools.

	Library and Learning Resources • Physical Library Resources: • Total number of books, journals, and other physical resources. • Average number of books per student. • Annual number of library visitors and borrowed items. • Study Spaces: Total seating capacity in library and study areas. Sports and Recreational Facilities • Sports Infrastructure • Total area dedicated to sports and recreation. • Number of students and staff using sports facilities weekly or monthly. • Clubs, fitness centers, and cultural activity spaces. 5. Accessibility and Sustainability • Accessibility Features: Number of ramps, elevators, and other accessibility features for individuals with disabilities. • Percentage of campus buildings compliant with accessibility standards. • Energy Efficiency: Total energy consumption (in kWh) and renewable energy percentage. • Water and Waste Management: Total water consumption and recycling rates. Quantity of waste generated and percentage recycled.
Management, Human Resources and Finances	1. Administrative Efficiency • Decision-Making Speed: • Average time taken to approve policies, budgets, or new programs. • Processing Times: Average time for handling administrative tasks (e.g., student admissions, financial aid applications, faculty hiring).

	• Policy Implementation Rates: Percentage of planned policies or initiatives successfully implemented within the intended timeframe. • Staff-to-Student Ratios: Number of administrative staff per student. 2. Financial Management • Budget Utilization: Percentage of allocated budget spent within a fiscal year. • Revenue Streams: Breakdown of income sources (tuition fees, government funding, research grants, donations, etc.). • Cost Efficiency: Cost per student for administrative services. • Surplus/Deficit: Year-end financial balance relative to budget projections. 3. Human Resources Management • Staffing Metrics: Total number of administrative staff and their distribution across departments. • Turnover rates among administrative staff. Training and Development: • Number of training sessions offered to administrative staff annually. • Percentage of staff participating in professional development programs. • Employee Satisfaction: Quantitative results from surveys assessing job satisfaction and workplace conditions. 4. Strategic Planning and Governance • Goal Achievement: Percentage of strategic plan objectives met within a specific timeframe. • Stakeholder Engagement: Number of meetings or consultations held with stakeholders (students, faculty, external partners) during policy formulation. • Governance Indicators: Number of governance committees and frequency of meetings. Attendance rates for key governance sessions. 5. Communication and Transparency • Response Times: Average time taken to respond to student, faculty, or stakeholder inquiries. • Information Accessibility: Number of reports or updates published annually (e.g., financial reports, strategic updates).

	• Website metrics (e.g., downloads of key documents, page views). • Complaint Resolution: Percentage of complaints resolved within a defined period. 6. Resource Allocation • Budget Allocation Breakdown: Proportion of funds allocated to academic, research, infrastructure, and administrative functions. • Space Utilization: Percentage of administrative office space used efficiently. • Equipment Availability: Ratio of technological tools (e.g., computers, software) to administrative staff. 7. Performance Metrics • KPI Achievement: Percentage of key performance indicators (KPIs) met in management-related areas. • Benchmarking: Comparison of management performance metrics with peer institutions. 8. Risk and Crisis Management • Incident Rates: Number of significant management-related issues (e.g., legal disputes, compliance violations). • Crisis Response Time: Average time taken to address emergencies or critical incidents. • Compliance Metrics: Percentage compliance with accreditation and legal standards. 9. Digital Transformation • System Utilization Rates: Proportion of administrative tasks completed using digital tools or platforms. • Automation Metrics: Percentage of processes automated (e.g., online registration, payroll). • IT Support Metrics: Average resolution time for IT-related issues reported by staff. 10. Stakeholder Feedback • Survey Results: Quantitative scores from stakeholder surveys on the effectiveness of university management. • Engagement Levels: Participation rates in university governance by students, faculty, and staff.

External data	
Context	**Qualitative and quantitative data**
National	1. Demographic Data • Population Statistics: Age distribution and trends, particularly focusing on the youth population. • Urban vs. rural population distribution. • Enrollment Projections: National trends in secondary school graduates eligible for higher education. • Socioeconomic Demographics: Income levels, employment rates, and educational attainment of the population. • Gender and ethnic diversity statistics. • Demand for skills and professions in various industries. • Employment rates for graduates by discipline or sector. • Projections of emerging industries and occupations. • Data on automation and its impact on required skills. • Unemployment Rates: Statistics segmented by age, education level, and region. 2. Economic and Financial Data • National Budget Allocations: Funding levels for education, research, and innovation. • Scholarships and financial aid programs available for students. • Economic Indicators: GDP growth, inflation rates, and investment trends. • Private Sector Investment: Data on partnerships between businesses and educational institutions. • Industry funding for research and development. 3. Policy and Regulatory Data • Education Policies: Government strategies and plans for higher education development. • Regulations affecting curriculum standards, accreditation, and quality assurance. • Research and Innovation Policies: National priorities for research funding and innovation incentives. • Compliance Requirements: Legal and administrative obligations for HEIs. • Policies on international student recruitment and mobility. 4. Education System Metrics

	• Enrollment Statistics: Number of students enrolled at the national level, by degree type and discipline. • Graduation and Retention Rates: Data on student success at a national scale. • Comparative Performance Metrics: Rankings and benchmarking data for HEIs nationwide. • Access and Equity Data: Statistics on underrepresented groups in higher education. 5. Research and Development Data • National Research Priorities: Key focus areas identified by government or funding agencies. • Funding Opportunities: Availability of national grants for academic research. • Research Output Metrics: National rankings for publication volume, citations, and patents. 6. Social and Cultural Data • Cultural Trends: Societal attitudes towards higher education and its perceived value. • Migration Data: Inflows and outflows of students and academics nationally and internationally.
Global	1. Global Education Trends • Enrollment Patterns: Global statistics on student enrollment by discipline and degree type. • Access and Equity: Data on disparities in higher education participation globally. • Emerging Disciplines: Insights into growth areas such as artificial intelligence, climate studies, and digital innovation. 2. Labor Market and Economic Data • Global Employment Trends: Demand for skills and professions across continents. • Key industries driving international job markets. • International Workforce Needs: Data on global gaps in expertise (e.g., STEM, healthcare, technology). • Economic Indicators: Regional and global GDP growth, trade dynamics, and investment flows affecting educational demand. 3. Research and Innovation Data • Global Research Priorities: International focus areas in research (e.g., sustainability, health, technology). • Funding Opportunities: Data on global research grants and funding sources (e.g., EU Horizon, UN research initiatives). • Collaboration Metrics: Number and success rates of international research partnerships. • Benchmarking Research Output: Global rankings of publication volume, citation impact, and patents.

	4. Technological and Digital Data • Global Technological Trends: Data on the integration of digital tools in education and research globally. • EdTech Adoption: Statistics on the usage and impact of global e-learning platforms. • Cybersecurity and IT Readiness: Information on global trends in data security and digital infrastructure for education. 5. Policy and Regulatory Data • International Education Policies: Global frameworks and agreements (e.g., Bologna Process, UNESCO initiatives). • Immigration Policies: Data on visa and work policies for international students and faculty. • Accreditation and Standards: Global accreditation criteria and quality assurance mechanisms. 6. Global Academic Rankings and Benchmarking • World University Rankings: Position of institutions in global rankings like QS, THE, or ARWU. • Competitor Analysis: Data on peer institutions worldwide, including enrollment, funding, and research output. • Regional Comparisons: Benchmarking against universities in specific regions or countries.

This indicative matrix provides a comprehensive framework enabling higher education institutions (HEIs) to align their institutional research (IR) activities with the specific requirements of their strategic planning processes. The underlying instrumentalization logic fosters a flexible approach, allowing each HEI to design and adapt its IR trajectory based on the unique demands of its strategic goals. This adaptability ensures that the IR framework is both dynamic and responsive to internal developments and external transformations.

Within this framework, the integration of IR into strategic planning unfolds as a sequential and iterative process. Each phase builds upon the insights derived from the preceding steps, creating a cycle of continuous improvement. For example, analyzing internal data may highlight the need to collect specific external information, while external data can, in turn, refine the analysis of internal trends. This reciprocal exchange between internal and external datasets ensures a holistic understanding of the institutional environment.

By facilitating the effective integration of diverse data sources, this approach supports a robust prioritization process. Combining internal insights with external context allows HEIs to make informed decisions, align resources strategically, and focus on goals that drive meaningful and sustainable progress in their strategic planning efforts.

Report in the framework of the Erasmus+ KA2 CBHE «KPI4HE» project

"Establishment of National framework of Key Performance Indicators for good governance and quality towards inclusive, digital and green oriented higher education in Armenia"

ERASMUS + CBHE project #101128552-2023

Work-package 2. Capacity building and elaboration of procedures and tools for Institutional Research (IR) and Strategic Planning (SP)

Deliverable 2.1
Draft of National Guide for IR and SP (GIRSPA)

Consultation guide

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September 2024

DRAWING-UP STRATEGIC PLAN FOR ARMENIAN UNIVERSITIES

INTRODUCTION

The University must design its own Strategic Planning and operational programming processes of the University, according to action promoted by the Rector, with the assistance of the competent Vice-Rector and Delegate for Strategic Planning and the involvement of all the Vice-Rectors and Delegates, taking due account guidelines and provisions of the Ministry.
This process leads to the approval of:

- **Strategic Plan** with a suggested duration of between three and six years, a planning document with a time horizon that should correspond to the duration of the Rector's mandate, containing the vision, mission, strategic lines and objectives with which the governance intends to address the challenges and opportunities posed by the social, economic and territorial context;
- **Multi-year Program** with a suggested duration of **three** years, a document in which the strategic objectives are broken down into actions, i.e. operational objectives for the reference period.

The possible update of the Three-Year Program 2022-2024 can be developed or introduce some innovations linked to regulatory changes introduced by the Ministry, with particular reference to the methods of monitoring objectives and actions, to changes in the sets of indicators for monitoring and self-assessment at university level, to changes requested by the Governing Bodies.

THE UNIVERSITY AT THE CENTER!

Armenian Universities (UNAM) at the center – University is not a self-referential statement but the recognition that complex challenges in life sciences, social and cultural transformations, ecological and digital transition, and basic sciences can only be won by taking advantage of the cultural capital and knowledge that all the components that populate the universities and centers of research contribute to accumulate every day.

UNAM at the center - because only if the activities of training, research and third mission are put into a system with institutions, bodies, businesses, and families who populate AM, UNAM will be able to contribute to giving an effective response to the many needs and questions that arise every day in the AM society.

UNAM at the center - means that by the University programmes, UNAM compete and collaborate with the best universities all over the world and, in such perspective, male and female students are trained, trying to attract the brightest minds.

UNAM at the center - is the vision that inspires this draft of strategic plan that illustrates the main directions of the actions that will be developed over the next considered periodic slot.

Auspice the Minister of Education, Science, Culture and Sport of Armenia
the Rector of Yerevan State University

STRATEGIC PLANNING AND THREE-YEAR PROGRAMMING

Methodological introduction

The Three-Year Program, to be adopted in order to pursue the effectiveness and quality of the services offered, contains the actions necessary to achieve the objectives identified in the Strategic Plan. These are correlated with implementation indicators and related annual and multi-year targets for the considered period (i.e. three years).

In the Three-Year Program, for the purposes of a systemic reading of the overall planning of the specific University, the programs with which the University contributes to achieving the objectives and actions consistent with the general guidelines and with the three-year programming of the Ministry must also be reported.

Therefore, the Three-Year Program operationally declines the strategic objectives of the Strategic Plan approved by the governing bodies of the University.

The Strategic Plan and the three-year Programs, therefore, represent the guide for the planning tools of the University's activity and of the operational structures (Schools, Departments), such as the planning of the educational offer, research and the third mission, the budget cycle, the staff needs planning, public works and jobs, the performance cycle for the administrative (if foreseen) and technical activity in support of the mission.

The strategic objectives and the operational actions - in which the former are set out - constitute general guidelines for the drafting of the budget forecast, which must at the same time ensure the economic and financial sustainability of the University's actions and an effective use of resources.

The Strategic Plan explains the vision and mission of the University, identifying the strategic lines and objectives to face the challenges and obtain

the opportunities posed by the social, economic and territorial context, within the time horizon of the rector's mandate.
The opportunity for a shared context analysis activity (SWOT analysis) is repeated, which allows to focus on the strengths and areas for improvement of the University and the opportunities and obstacles coming from the reference scenario, a fundamental starting point for the identification of strategic lines and objectives consistent with international, national and regional agendas, responding to the actual needs of the community and sustainable with respect to the resources present in the University and their growth potential.
Consequently, in the Three-Year Program, the objectives outlined in the Strategic Plan are broken down into actions that, with a more limited time horizon, will guide the activities of the University in the different mission areas, identifying the interventions to be implemented, the resources allocated to them and the targets to be achieved.

The definition of elements oriented to an operationalization of the process of defining the Three-Year Program, requires a complex and shared process that involves, with different competences, multiple actors, and which will be the subject of the deliverable 2.2 “OMIR. Manual Draft Operations Manuals on Institutional Research”.

UNAM's strategic planning and (at least three)-year programming

The three-year Strategic Plan explains the vision and mission of UNAM by identifying the strategic lines and objectives, together with operational actions, to face challenges and seize opportunities posed by the socio-economic and territorial context during the term of the rectoral mandates.

A shared context analysis activity has to be carried out in order to make possible to focus on the University's strengths and areas for improvement, as well as on the opportunities and threats coming from the reference scenario, central starting point for the identification of strategic lines and objectives consistent with the international, Government's and macroregional agendas, responding to the actual needs of the community and sustainable with respect to the resources present in the University and to their growth potential.

The objectives identified in the Strategic Plan will be set out, within three-year programmes, in actions which, with a more limited time horizon, will guide the University's activities in the different mission areas, identifying the interventions to be carried out, the allocated resources and the targets to be achieved, and will be subject to continuous monitoring and annual reporting.

The Strategic Plan and the Three-Year Program serve as a guide for the other activity planning tools of the University and its fundamental structures, such as the planning of the training offer, of research and third mission activities, the budget cycle, the planning of personnel hiring, public works, the performance cycle for administrative and technical activities to support UNAM's mission.

The Five Strategic Lines

Each UNAM should implement actions aimed at participating and involving in the 2030 Agenda for Sustainable Development, adopted by UN in 2015. 17 world Sustainable Development Goals (SDGs) were agreed with the aim of "*peace and prosperity for people and the planet*" – while *"tackling climate change and working"* to preserve oceans and forests. The SDGs highlight the connections between the environmental, social and economic aspects of sustainable development. Sustainability is at the center of the SDGs.

Moreover, UNAM should pay attention to possible indirect actions becoming from the European Commission "Recovery and Resilience Plan", in the framework of the program "Next Generation EU", the European instrument designed to stimulate the post-pandemic Covid-19 recovery.
The action of the RRP is guided by objectives and actions linked to the three strategic axes shared at European level: i) digitalization and innovation, ii) ecological transition, and iii) social inclusion.
In particular, the RRP adopts among its objectives

- the digital modernization of communication infrastructures, of the public administration, and of the production system;
- the development of education and research, focusing on social inclusion and adaptation to the technological and environmental challenges of the future to boost growth.

The short titles of the 17 SDGs are:

1. No poverty	2. Zero hunger
3. Good health and well-being	4. Quality education
5. Gender equality	6. Clean water and sanitation
7. Affordable and clean energy	8. Decent work and economic growth
9. Industry, innovation and infrastructure	10. Reduced inequalities
11. Sustainable cities and communities	12. Responsible consumption and production
13. Climate action	14. Life below water
15. Life on land	16. Peace, justice and strong institutions
17. Partnerships for the goals	

Definition of the Strategic Lines

UNAM participates to the achievement of international and national objectives by developing its institutional missions along the following strategic lines:

A. **DIGITALISATION AND INNOVATION**
B. **SUSTAINABILITY**
C. **INCLUSION**
D. **INTERNATIONAL DIMENSION**
E. **QUALITY**

A. DIGITALISATION AND INNOVATION

The digitalization of services and processes is fundamental for a more efficient management of the University, to simplify technical-administrative procedures, and optimize the necessary commitment of the academic teaching and research community in the support to mission actions.

B. SUSTAINABILITY

Putting sustainability and well-being at the heart of university life allows the University to sign a pact of co-responsibility with future generations and become a guide and a demonstration example for the outside world. The University, through the integration of sustainability in the educational offer, research, and relations with the territory, aims at increasing knowledge and skills needed to contribute to a harmonious growth in the environmental, social, economic, and cultural dimension in line with the Sustainable Development Goals of the UN 2030 Agenda.

C. INCLUSION

In the education and employment framework, by means of its management policies, the University wishes to enhance the centrality of the "person" and the richness of diversity, promoting actions and behaviour aimed at accessibility, equity, and inclusion. It is necessary to identify and design all the necessary supports to effectively carry out educational and work activities, eliminating architectural and digital barriers and counteracting psychological and social barriers, promoting the full participation of the weakest in university life, and opposing all forms of discrimination.

D. INTERNATIONAL DIMENSION

The international dimension must increasingly characterize teaching, research and third mission activities, through the strengthening and synergic development of agreements with partners aimed at cooperation, the establishment of joint qualifications, student and faculty mobility, European and international research, the promotion of scientific and cultural exchanges, and the creation of global and cosmopolitan cultural and professional figures.

E. QUALITY

Quality is the degree by which the University achieves its teaching, research and third mission objectives, to prepare students for an active citizenship and their future role in society, to create a broad base of advanced knowledge, to participate and stimulate research and innovation.
The University deploys policies for quality in line with its strategic objectives, so that every actor involved in the processes is aware of its tasks, ensuring effectiveness, transparency and traceability/ publicity.

The University implements its strategies on three intervention scales.

SINGLE UNIVERSITY

The first dimension of intervention can only concern the internal Community to make the University a place in which it is pleasant and rewarding to study, work and do research, and which represents a responsible and transparent institution, ensuring participatory and representative processes at all levels.

TERRITORY

The Armenian Regions represent the territory to which fundamental attention is paid because it expresses the communities of immediate reference - both relative to the majority of the enrolled to the study programs, and to the economic and social activities with which each single UNAM shares daily collaborations. In addition, this is the scale to which most of the third mission and technology transfer activities refer.

NATIONAL AND INTERNATIONAL COMMUNITY

The national and international frameworks are obviously sources of inspiration for identifying the strategic lines of the University.

STRATEGIC GOALS

In order to achieve its mission, in line with its vision, the University identifies within the Strategic Plan, the Strategic Goals that it intends to pursue during the considered rectoral mandate.

The University, with the definition of the Strategic Goals, contributes to the achievement of the goals set by the international and national agendas, developing its institutional mission to achieve the objectives identified according to the aforesaid 5 strategic lines: digitalization and innovation, sustainability, inclusion, internationalization and quality.

A proposal for the definition of the Strategic Goals is the following.

The publication on the website of each University of both the Strategic Plan and the three-year Program 2022-2024 is suggested, for the purposes of publicity of administrative documents, dissemination and transparency.

LEARNING PROCESS AND SERVICES FOR STUDENTS

1. *Align the educational offer with future challenges and needs of society, also by enhancing the international dimension of teaching.*
2. *Ensure a youth-friendly environment and innovative, quality and inclusive teaching and support services adapted to the needs of female and male students and teachers.*
3. *Enhance aware choice of the university study path and related study programs, strengthen support services during studies, and facilitate placement of students and other actions aimed at accessing students to the labour market.*

RESEARCH

4. *Promote basic research projects in synergy with local, Armenian, EU, and international initiatives, fostering interdisciplinary research and* contamination *of knowledge and skills.*
5. *Strengthen applied research projects by enhancing the transformative contribution of innovation and by fostering the circulation of knowledge and skills.*
6. *Support the PhD programs, also by promoting innovative and industrial doctorates courses, supporting their international dimension. Pay attention to the opportunities promoted by Armenian / European Union / International scientific and technological research framework.*

THIRD MISSION

7. *Contribute to the development of society through the transfer of knowledge and technologies to the social and productive system, by capitalizing on the network of collaboration with other universities and research Institutions.*
8. *Promote the social and educational role of the University and enhance its historical, scientific, cultural, artistic, library, archival and museum heritage.*
9. *Promote actions and development processes for sustainability and inclusion, as well as the acquisition of cross-cutting skills for entrepreneurship and active citizenship.*

ORGANIZATION and RESOURCES

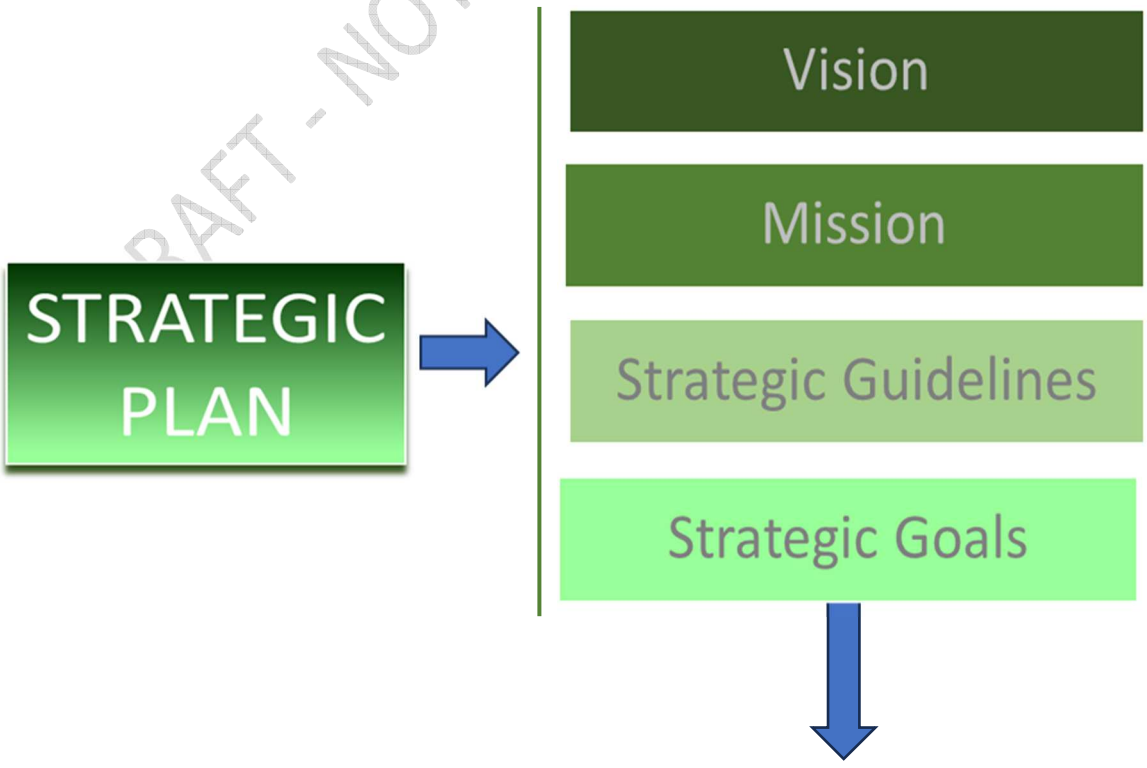
10. *Pursue the development of the organization, paying particular attention to the identification of the best relations and functional interconnections / interdependencies among the offices and in the perspective of simplifying and*

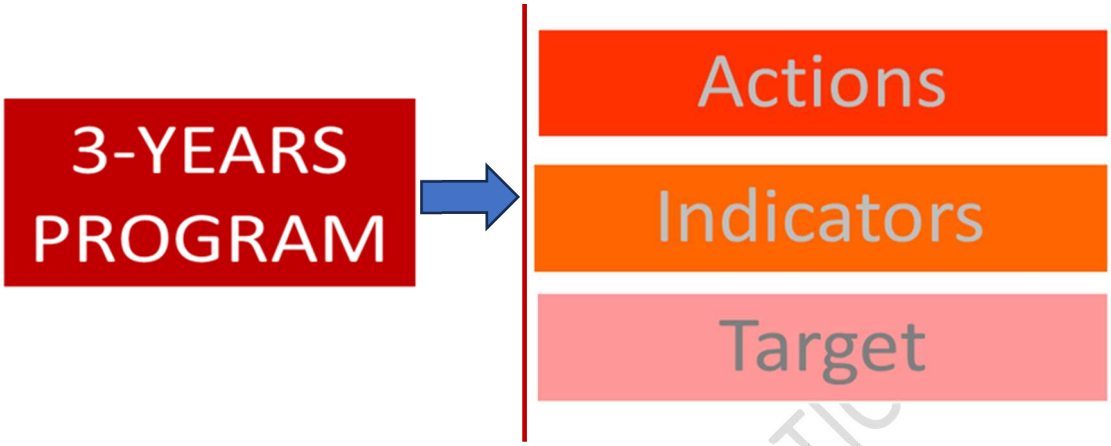
increasing the fluidity of processes, dematerializing and digitalizing procedures.

11. *Upgrading and designing spaces and infrastructure, ensuring safety, financial sustainability, and quality of services.*
12. *Optimize policies for the recruitment of teaching / technical / administrative staff and foster the development of skills in an inclusive and growing dimension.*

Strategic objectives will be pursued through the actions that will be declined in the three-year programs. They represent the medium- and short-term planning tools for the effective implementation of the University's institutional missions, and will be characterized by the strategic lines of digitalization / innovation, sustainability, inclusion, internationalization and quality, for different scales of intervention:

- internal, relating to the organization of each Armenian University;
- regional, i.e. the territory in which the UNAM campuses are located;
- and finally national / international, as a framework of cultural reference.





STRATEGIC GOAL FOR RESEARCH, GOALS 4 – 5 – 6

STRATEGIC GOAL 4 - Enhance basic research activities in synergy with local, national, European and international initiatives, by strengthening interdisciplinary research and the contamination of skills and knowledge.

Action 4.1 Stimulating research and participation in national, European and international projects.

The result will be achieved through internal calls for proposals to encourage and support national, European and global research.

Action 4.2 Improving communication of funding opportunities and increasing participation and success rates in competitive national and international research calls.

Expected results will be achieved by increasing the number of training courses for faculty and technical-administrative staff on research funding opportunities, elaboration and management of research projects.

Action 4.3 Strengthening of infrastructures and research support tools.

Expected results will be achieved by:

- increasing investment in research equipment, also shared among several departments and centers,
- monitoring the status of equipment and instrumental platforms.

Action 4.4 Boosting the quality of research and enhancing merit.

The result will be achieved by checking and possibly revising the rewarding criteria for the award of research funding of the University.

Action 4.5 Promoting the international dimension of research activities.

Expected results will be achieved by:

- increasing the number of applications for the title of Visiting Researcher,
- increasing the number of project proposals within the Erasmus+ Programme.

Action 4.6 Improving the knowledge of teaching staff and lecturers on ministerial evaluation criteria, rewarding conditions, and national and international ranking systems.

Expected results will be achieved by:

- implementing dissemination actions on current ministerial assessment criteria and rewarding conditions,
- dissemination actions on the concept of reputation, with special reference to national and international rankings.

STRATEGIC GOAL 5 - Strengthen applied research, by enhancing the transformative impact of innovation and by promoting the circulation of knowledge and skills.

Action 5.1 Promoting scientific production, the provision of research products and Open Science.

Expected results will be achieved by:

- information and support actions for publication, also in Open Access [1],
- increasing the capacity of transformative agreements,
- implementing Open Science [2] courses for doctoral students and 3rd cycle higher education support staff,

[1] **Open access (OA)** is a set of principles and a range of practices through which nominally copyrightable publications are delivered to readers free of access charges or other barriers. With open access strictly defined, or libre open access, barriers to copying or reuse are also reduced or removed by applying an open license for copyright, which regulates post-publication uses of the work.

[2] **Open science** is the movement to make scientific research (including publications, data, physical samples, and software) and its dissemination accessible to all levels of society, amateur or

- implementing actions for periodic monitoring of the delivery of scientific products on the "IRIS" repository [3].

These activities will also be carried out in connection with actions 4.4, 4.5 and 4.6.

Action 5.2 Promoting research results through information and dissemination activities.

Expected results will be achieved through the organization of workshops, conferences and events organized for the dissemination of research results and knowledge transfer.

These activities will also be carried out in connection with action 4.2.

Action 5.3 Strengthening the attractiveness of research for the territorial production system.

Expected results will be achieved by:

- organizing events/meetings with public and private Agencies aimed at promoting of European Research, also operating in collaboration with

professional. Open science is transparent and accessible knowledge that is shared and developed through collaborative networks. It encompasses practices such as publishing open research, campaigning for open access, encouraging scientists to practice open-notebook science (such as openly sharing data and code), broader dissemination and engagement in science and generally making it easier to publish, access and communicate scientific knowledge.
Usage of the term varies substantially across disciplines, with a notable prevalence in the STEM disciplines.

[3] **IRIS (Institutional Research Information System)** is a platform which collates and manages information on research data.
In accordance with international standards, IRIS serves as: i) the sole platform for the collation, validation and distribution (to the Lecturer Site and the departmental pages) of the university's research data; ii) a tool for analysing and evaluating research.
IRIS is interoperable: data is imported from the Administrative Department's databases and from external sources of a bibliographical/bibliometric natural (particularly WOS, Scopus and JCR for citations and Impact Factor).
Lecturers and researchers can insert/import publications, complete the details of the projects they are in charge of, flag up other scientific activities/initiatives or provide information on their scientific curriculum.

the Ministry, with the objective of supporting and promoting Armenian participation in the European Union research and innovation (R&I) programmes, by providing information, education and assistance services,
- partnerships with third parties,
- implementing actions to verify the R&D needs on the territory.

STRATEGIC GOAL 6 - Support the PhD programs, also by promoting innovative and industrial doctorates, and by fostering their international dimension.

Action 6.1 Strengthen the attractiveness of doctoral programs for the territorial, national and international production system.

Expected results will be achieved by:
- increasing the number of industrial doctoral fellowships,
- increasing the number of "international" doctoral fellowships, in collaboration with foreign universities and research bodies,
- increasing the number of languages for translation of the call for PhD candidates,
- increasing the number of international agreements for PhD programs in joint supervision (“cotutelle”).

Action 6.2 Promoting the interdisciplinary dimension of doctoral programs.

The result will be achieved by promoting a composition of the PhDs Committees in terms of membership from different disciplinary areas.

THE AREAS OF GOVERNANCE

- ✓ **T**raining
- ✓ **R**esearch
- ✓ **T**hird mission
- ✓ **I**nternational dimension
- ✓ **T**echnology transfer and relationships with businesses
- ✓ **S**ustainability
- ✓ **P**lanning
- ✓ **G**eneral and legal affairs
- ✓ Relationships with the **H**ealthcare System (if any)

Each Rector relies on of the collaboration of a "Rector's Team" composed by Vice Rectors and Delegates for each of the specific areas / topics in which the University top management is involved.
E.g. for Vice Rectors delegations: Deputy Vice-Rector; Sustainability; Research; Planning; General and Legal Affairs; Education, Third Mission including dissemination, public engagement and social impact; International Dimension; Relations with the Local Health System (if any); PhD and Relations with Businesses, Information and Telecommunications Technologies – ICT.
E.g. for appointment of Delegates: Quality assurance; Lifelong learning; Orientation and tutoring; Teaching innovation and faculty development; Relations with cultural institutions; Enhancement of museums and archives; Relations with students; International cooperation; International educational offer; University web radio and promotion of cinema in the university community; Operational support to decentralized / regional Campus; Strategic planning; Trade union relations; Development of sports activities in the university; Regional penitentiary university hub; Equal opportunities and inclusion; Territorial and polycentric university planning; University mobility manager; University energy; Technology transfer, patents and spin-

offs; Disciplinary proceedings of teachers; University inclusion of students with disabilities and specific learning disabilities (DSA); Thematic area "Dual Use Goods and Technologies"; Geological assessments and mitigation of hydrogeological risk; National and international rankings; Management and coordination of survey, computerization and keeping of the University real estate assets.

The composition of the Rector's Team (list of the Vice Rectors and Delegates) should be published on the university website with details of the Rector Decrees of appointment.

University by numbers (referred to specific Academic Year)

Students

- XXX Enrolled in first (Bachelor's) and second (Master's) level programmes
- XXX PhD students
- XXX Medical interns (if any)
- XXX Graduates

Training offer

- XXX Bachelor's and Master's degree programmes
- XXX Postgraduate courses (specialization courses after Bac or Masters' programmes)
- XXX Doctoral programmes
- XXX Medical specialty schools (if any)

Research and technological transfer

- XXX Active international research projects
- XXX Active research projects funded / promoted by European Commission
- XXX Active national research projects
- XXX AMD X in research revenues
- XXX AMD X commercial incomes
- XXX Active spin-offs
- XXX Active patents

International dimension

- XXX International Students enrolled in I and II level study programmes
- XXX Students involved in Erasmus+ programmes (X out, Y in)
- XXX International study programmes
- XXX Agreements for the award of double degree

- XXX "Jean Monnet" Chairs
- XXX UNESCO Chairs

XXX Professors
XXX Assistants / Researchers
XXX Research Fellows
XXX Technical-administrative, library and health system personnel
XXX Foreign languages teachers

XXX Departments
XXX Schools
XXX School for "higher studies" (if any)
XXX School libraries
XXX Center of excellence
XXX University strategic centers
XXX Service centers
XXX Interuniversity research centers

X SCHOOLS – XX DEPARTMENTS *(listed under each School)*:

SCHOOL OF MATHEMATICS, PHYSICAL AND NATURAL SCIENCES

- …….
- ……
- ……

SCHOOL OF MEDICAL AND PHARMACEUTICAL SCIENCES

- …….
- …….
- ……

SCHOOL OF SOCIAL SCIENCES AND HUMANITIES

- ……
- ……
- ……..
- ……

POLYTECHNIC SCHOOL

- [examples] Informatics, Bioengineering, Robotics and Systems Engineering
- Civil, chemical, environmental engineering
- Mechanical, energy, management, and transport engineering
- Naval, electrical, electronic and telecommunications engineering
- Architecture and Design

STRATEGIC CENTRES:

Centre of XXXXXXXXXX

Centre for yyyyyyyyyyyyy

CENTRES OF EXCELLENCE:

Xxxxxxxxxx

"HIGHER STUDIES" SCHOOL:

Xxxxxxxxxx

SERVICE CENTRES:

- ICT center
- for Regional Campuses
- ……..

“Widespread” multicentric University

One of the peculiarities that can distinguishes UNAMs is the territorial approach based on its presence in all the Armenian main cities, which makes them as “Regional Universities”.

This multicentric structure can follow and uphold, through teaching activities and research, the specific local development vocations. UNAM should strengthen such peculiarity in the future, by increasing the characterization of the territorial Campuses, which, together with the development of residential areas and services, will be able to attract more students.

The current territorial campuses, that we could define “living labs”, offer the possibility of experimenting new approaches of interaction among all the people who work in and with the University, allowing their scalability across the whole University, once positively validated in smaller realities.

The complex of university structures that Armenia has at its disposal on each of its provinces represents a cultural, economic, social system and environment capable of enhancing the energies of the territory and its communities, an added value for establishing a close relationship with medium-sized cities, fostering innovative interventions, encouraging new models of integration and synergic development between the academic community and the territory.

Focus on every person!

Inclusion, equal chances and the well-being of every individual of the University community are implemented by means of actual and effective actions aimed at enhancing the diversity of roles and counteracting any form of discrimination involving those who study and/or work at the University, offering services to support the persons and promote work-life balance.

UNAM has to offer students various support services upon their entry to the university, targeted tutoring actions during the study period and, after degree award, support to promote their employability. A free counselling service should be available at the University: a team of psychologists and psychotherapists expert in issues affecting young adults in general and in learning processes. UNAM has to guarantee support and tutoring services to students with disabilities or with specific learning disorders, providing specific technical equipment and teaching materials. UNAM also has to foresee measures to support families with children, stipulate agreements with care structures for all the members of the university community, and implement fee policies aimed at guaranteeing the right to study. The attention of the University to the well-being and development of the person is also to be confirmed by the activities of the project that could be called "University of the Third Age", by means UNAM operates in favour of older people that are now far from the world of work and free from professional commitments, offering them not only new interests and intellectual stimuli, but also opportunities for socialization.

Furthermore, a Penitentiary University Center (PUP) could be set-up, so that UNAM performs its social and educational role also with detained people, in compliance with the re-education and reinstatement function of the penalty foreseen by constitutional provisions. For the supervision and implementation of activities for inclusion, equal opportunities and well-being, UNAM should rely on some boards, such as: Committee for Equal Opportunities for promoting equal opportunities, welfare of workers and against discrimination; Committee for the inclusion of students with DSA (disabilities and specific learning disorders).

UNAM for Sport

Sports activity in eah University should be carried out by a “SUC”, Sport University Centre”, an Amateur Sports Association affiliated with National Associations / Armenian University Sports Center.

SUC should manage the university sports facilities of the complex of Valletta Puggia. Each Strategic Plan should contain a description of the different sports halls, people accommodation, services provided by each hall (e.g.: fitness, martial arts, weight room).

Each University should set-up an initiative titled e.g. "UNAM for champions", also in order to implement possible European Commission actions and guidelines related to university careers of elite athletes and pursues the objective of facilitating balance between their study and sports commitments.

UNAM'S STAKEHOLDERS

The University action is set-up according to a permanent and responsible dialogue with several stakeholders, meant as interested parties or interest bearers.

Students and their families

Male and female students are the primary recipients of university activities. Satisfying the needs of students does not only depend on the study programs, but also on the services offered for their inclusion in the study and research community of the University and in the local context.

The University's interlocutors also include the students' families, as they are crucial in supporting their university careers and interested in the expected related socio-cultural benefits.

The school framework

The University, in addition to being a primary institution for the training of schoolteachers of all levels, operates in synergy with schools to offer pupils direct knowledge of the university world, by orientation activities and simulations of the tests aimed at verifying their initial preparation and, for programs with attendance limited by law, open days and guided tours, training for orientation and the acquisition of transversal skills. Teachers hold classes and seminars on scientific and cultural topics in secondary schools. The University participates in joint projects and organizes scientific events aimed at students of all levels.

The scientific community

The University develops its education and Research & Technology Transfer - R&TT activities in continuous relationship with the network of Armenian, Macroregional and foreign universities and research institutions; therefore,

it acts as an important link between the Ligurian social and productive system and the national and international scientific community. These relationships concern both education, for developing joint training initiatives, student and teaching staff mobility, and R&TT for partnerships in Armenian, European and international projects.

The social and productive system

The University constantly seeks significant relationships with the world of business, of cooperation, the third sector and professional associations, to intensify interactions in the fields of research, education, and training / VET activities. The collaboration with the industrial domain of the regional territory is aimed at stimulating growth and innovation, also through the set up and support of start-ups and spin-offs, the development of new enabling technologies and of internship / placement activities for students and graduates.

The institutions

The University maintains ongoing relationships with national and international public institutions, the Minister and the European Commission primarily, to promote optimal positioning in the national and European panorama.

The local communities

The University actively participates in the life of the local territory, acting as a factor of stimulus and growth, through active listening, transfer of knowledge and skills, and participation in the planning of interventions to improve the overall quality of life of the citizens. In this perspective, it aims to strengthen and qualify relationships with local institutions, in particular the Armenian Regional Governments, the Municipalities of Yerevan and the other main Armenian cities, and the local Health System Authorities.

UNAM staff

Finally, the University builds relationships with the people who work there on daily basis and in various roles, in particular teachers and technical, administrative, library and social-health system personnel, to enhance their contribution to university life and encourage their personal and professional development.

The international, Government's and territorial agendas

Each UNAM contributes to the achievement of the common objectives set by the agendas of international organizations, by national plans and ministerial guidelines, in coherence with the strategic plans of the Region and local authorities.

UNITED NATIONS AGENDA 2030 AND SUSTAINABLE DEVELOPMENT GOALS

EUROPEAN UNION. PRE-ADHESION POLICY AND ERASMUS+ PROGRAMME

PRESIDENCY OF THE ARMENIA MINISTERS COUNCIL

ARMENIAN MINISTRY OF HIGHER EDUCATION

YEREVAN AND OTHER REGIONAL GOVERNMENT

VISION

The current historical period has favoured a deep reflection on the need to shape a new relationship between Humanity and the Planet, where Knowledge, which enriches human capital and makes people resilient in the face of difficulties and ready for positive change, and Research are the main tools for addressing and solving the great challenges of society and the world.

The University, therefore, plays a central role in the development and disclosure of the evolutionary lines that should be the basis of coordinated and organic responses, provided by institutions to ensure a solid and prosperous future for new generations.

Each UNAM commits to encourage continuous and productive dialogue with local authorities, with the socio-economic actors of the territory, with the world of school, with young people and their families to promote higher education as a tool for social growth and for the dissemination, with openness and accessible language, of the results of studies and research conducted in different areas of specialization, as key factors for progress and competitiveness of the whole Armenian system.

Change and development today pass through the concepts of Innovation, Cluster and Knowledge Economy.

Each UNAM should be ready for these strategic challenges, illustrated in the UN 2030 Agenda and in line with the Recovery and Resilience Facility promoted by the European Commission, centrepiece of the so-called "NextGenerationEU" <https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility_en>.

Each UNAM could act as a driver of territorial growth, interacting with international and local realities to promote synergic or multidisciplinary actions, with a high socio-economic impact, fostering the creation of a regional context highly suitable for university development. The University leads effective processes in all the sectors identified by the aforesaid

"NextGenerationEU" as drivers of recovery, growth, and greater social cohesion.
There are two keystone elements in this interaction: the multi-Campus approach and the cultural value that has always characterized the University and that, never as nowadays, is functional to the development of soft and specialist skills and to the production of new competence and professionalism.

Moreover, each UNAM, at the center of the dynamics of territorial development benefits of the international connections already established by the institutional and productive bodies with which it dialogues and, at the same time, plays as a link between the Region and the International framework, mainly European Commission, in the various forms in which university international dimension takes place, encouraging the development of partnerships and projects with demonstrative and social impact on the cities involved.

The growth of a society is complete only if economic development and cultural enrichment are matched by a proportionate increase in civil liability and equal treatment. UNAM intends to foster these values, promoting methods and environments of work, study and sharing of cultural heritage that are inclusive and encourage dialogue among all the academic components.

MISSION

Each UNAM has to define its mission.
Armenian Universities are public institution that, by implementing the principles protected in the Armenian Constitution, contributes to the progress of knowledge, respecting the scientific and teaching autonomy of teachers, the freedom and dignity of all the ones that work and study within the University.

The University covers many fields of knowledge and develops its activities, in line with the guidelines of the Ministry and the National Agency competent for Evaluation of the University and Research System, in the field of Self-Evaluation, Evaluation and Accreditation of the Armenian University System ("AUS") and Research Evaluation ("RQE").

As a public body, the activities are aimed at meeting the needs of stakeholders, with the awareness of having to make the best use of the human and instrumental resources available, as well as the funding by the Government, the institutions, and the inter-national companies, and of course the contributions/fees paid by the students.

The goal is to perform the University institutional role in the future scenario:

- enhancing the University's generalist nature as an open, international, and multicultural community of students, teachers, and staff, able to face present and future challenges thanks to the knowledge acquired,
- contributing to the development of knowledge, the sharing of cultural heritage, the economic and social well-being of the territory and the country, through a multidisciplinary approach in education, research and third mission,
- strengthening the University reputation at national and international level, point of reference for various strategic areas of specialization,

- pursuing inclusion, gender equality, quality of processes and outcomes.

The mission of the University is carried out along the following lines, with particular attention to International Dimension that represents a transversal path to them, in the common dimension of Quality that permeates the entire process of planning and action of the University.

HIGHER EDUCATION AND SERVICES FOR STUDENTS

The task of the University is the transmission of knowledge through the qualified education of students: to this purpose, the University carries out many didactic and training activities with attention to innovative methodologies. The University offers educational workshops, classrooms, and libraries, and offers guidance, study support measures and services for enrolment, during the study period, and upon degree award.

RESEARCH

The University considers it central to develop knowledge through basic and applied research to meet the needs of progress and social well-being. Basic research is a fundamental element of competitiveness for the country and a key element for developing applied research, whose operational results are transferred to the social and productive system.

THIRD MISSION

The University is an essential scientific and cultural reference point for local realities and globalized society. Thus, it contributes to social, cultural, and economic development through direct application and exploitation of knowledge, as well as lifelong learning and actions involving the population and all the actors in the society.

THE ANALYSIS OF CONTEXT

An analysis of the internal and external context has to be carried out for the definition of the strategic objectives and actions.
The analysis can be summarized in the construction of the S.W.O.T. matrix that evidences the Strengths and Weaknesses, as well as the Opportunities and Threats of the environment in which the University operates.
The analysis can then be deepened for specific areas of the three-year plan.

Elements to be considered in the carrying out of the S.W.O.T. analysis

Although there is a significant number of specialized universities in Armenia and therefore not many "generalist" universities, multi-disciplinarity is one of the characteristics that traditionally distinguishes Higher Education Institutions and that allows students to choose any discipline.

Together with this characteristic, it is appropriate to consider the strategic choice of opening decentralized Campuses in other regions, to make the relationship with the territory even more concrete, thus giving life to "polycentric" universities.

Increasing attention must be paid to didactic innovation and faculty development, dedicating various activities to them; furthermore, the planning skills and competences must be evaluated to promote the digital transition by having significant IT infrastructures.

These choices can be appreciated by the student component, with surveys of the perceived quality of the didactic activity and other services offered by the University, also thanks to the consolidation of an internal Quality Assurance system.

It is hoped that a strong point will be provided by the numbers relating to the employment rate of graduates, comparator between different HEIs at a national level.

Each HEI must implement targeted actions for a conscious choice and to reduce dropouts through orientation actions and specific support for students during the first year, promoting targeted specialized tutoring activities. Thanks to the strong synergy with multi-sector companies and with the territory, with local and national bodies, each HEI must be able to offer a wide range of placement and job orientation services.

Each HEI must carefully test its positioning in the national ranking on internationalization and therefore indirectly test its ability to attract students from all continents.

The strengths in the field of research and technology transfer must also be demonstrated by the number of scholarships offered and the ranking of the PhD, i.e. the third level of the HE, by the range of patents in the portfolio, by the consolidated experience in technology transfer that materializes in the support of entrepreneurial initiatives and the creation of spin-offs, by the ability of the University to network with companies.

If the specific HEI has a rich architectural, cultural, scientific, artistic and environmental heritage, the openness to the public must be tested and the functioning of an active and appreciated Library System must also be considered.

It is hoped that, over time, the HEI has implemented a rich offer of lifelong learning activities, postgraduate courses and advanced courses and courses for seniors, as well as to stand out for the promotion of university studies in penitentiary institution.

A critical element of the HEI may be the low attractiveness towards students residing in other regions, which cannot be explained only by the insufficient offer of residential facilities and which is accompanied by a significant exodus of students towards other regions.

Other critical elements may be the rather high average age of the staff (both for teachers and for technical-administrative staff), which explains the low propensity for digitalization. On the digitalization front, a general change of

pace is needed, both to simplify internal processes and to improve the usability of the services offered to students.

If the HEI has a highly valuable building heritage, it is necessary to test whether this requires significant investments to adapt it to the performance of teaching and research activities, evaluating management costs and the need for continuous maintenance. The need for planning the restoration of the real estate heritage may therefore be identified, linking it to a restructuring of the teaching and study spaces, and the presence of students and teachers.

Another point that needs improvement concerns the possible limited ability to attract funding from the private sector, also to further intensify the relationships between the multiple structures of the HEI and the economic realities of the territory, which adds to the now constant trend of decreasing state funding.

It is also necessary to ensure a systemic control of the multiple third mission activities in which the University is engaged, improving the ability to communicate and enhance the human skills and resources of the HEI, both externally and internally, strengthening the sense of community and the active involvement of the student components.

The connection with the regional school system, which provides cycles of meetings on the strategies to adopt in relation to the respective expectations, must be tested in order to strengthen the vocational orientation of the students, in order to allow them to successfully undertake the chosen degree course.

Furthermore, the growing demand for training provided in *blended* or distance form will make it possible to enhance the experience acquired during the pandemic crisis.

At national and international level, the strengthening of collaboration networks and alliances with other universities and research centers, as well as participation in the network of European universities will allow each HEI to offer an effective response to the growing demand for innovation, first of all cultural, posed by the processes of ecological transition and digitalization

of the country, enhancing, even indirectly, the funding opportunities offered by the programming of the European Commission.

A great opportunity is represented for the HEI by the intellectual and professional heritage of its professors, researchers and technical-administrative staff, which must be recognized and enhanced while respecting the different roles in order to strengthen the synergy. The context in which it operates offers many opportunities, but at the same time poses important critical issues in the pursuit of strategic objectives.

Other elements to be considered are the possible demographic decline, the aging of the population, together with logistical-infrastructural deficiencies and accessibility that characterize the territory. These elements can significantly limit the attractiveness of the HEI and represent a brake on the numerical growth of members and the rapid diffusion of innovations.

Furthermore, the competition between HEIs is intensifying, and it is increasingly played not only on the quality of teaching and research but also on the ability to create an integrated territory-university system.

Strengths - Opportunities - Weaknesses - Threats

- ☐ Multidisciplinary and polycentric University.
- ☐ Increasing attention to innovation and digitization.
- ☐ Student satisfaction for teaching and support, guidance, mentoring, and placement.
- ☐ Excellent positioning for international dimension.
- ☐ Graduates' employment rates above national average.
- ☐ Wide range of PhD programs.
- ☐ Consolidated experience in the technological transfer.
- ☐ Rich architectural, cultural, scientific, artistic, and environmental heritage.

- ☐ Strengthened synergies in territorial relations.
- ☐ Favourable territorial context.
- ☐ Regional transport system of strategic relevance.
- ☐ Significant presence of companies in driving technological sectors.
- ☐ Strengthening of the cooperation network with other universities and research centers.
- ☐ Enhancement of interdisciplinary centers.
- ☐ Strong demand for innovation from the territory.
- ☐ Ministerial actions promoting ties with the world of school education.
- ☐ New European and national programming.
- ☐ Enhancement of the staff professionalism of the staff.

- ☐ Poor student attractiveness from other Countries / regions.
- ☐ Shortage of residential facilities.
- ☐ High average age of staff.
- ☐ Low index of digitization.
- ☐ High operating and maintenance costs of spaces and need for large-scale regeneration.
- ☐ Limited enhancement of movable property value.
- ☐ Limited ability to attract funding by the private domain.
- ☐ Need to systematize third mission activities.
- ☐ Improvable ability to communicate and enhance university competence and resources.
- ☐ Limited capacity to involve students.

- ☐ Demographic crisis and ageing population.
- ☐ Logistic and infrastructural deficiencies, and poor accessibility.
- ☐ Increasing competition at university national level.

- ☐ Continuously evolving regulatory framework.
- ☐ Uncertainty about the amount and timing of Government's financial support assignments.
- ☐ Limited private investment in Research & Development.

Co-funded by the European Union

KPI4HE project is funded by European Union (EU) through the Erasmus+ Programme, under Grant Agreement no. 101128552-2023.
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