



# OFFICE OF RESEARCH, INNOVATION & COMMERCIALIZATION (ORIC)

DOW UNIVERSITY OF HEALTH SCIENCES

## STRATEGIC PLAN (2024 – 2027)

Pioneering Excellence | Inspiring Innovation



**To Heal | To Educate | To Discover**

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## TABLE OF CONTENTS

|  |    |
|--|----|
| Director's Message.....  | 5  |
| Executive Summary.....   | 6  |
| About the Department.....  | 7  |
| Introduction & Overview.....                                     | 8  |
| Organogram.....  | 10 |
| Section I: Overview of the Strategic Planning Process.....       | 11 |
| Section II: Vision, Mission, and Values.....                     | 12 |
| Section III: Aspirational Institutions.....                      | 14 |
| Section IV: Strategic Goals.....                                 | 16 |
| Objectives, OKRs & KPIs.....                                     | 17 |
| Section V: Resource Planning for Achieving Strategic Goals.....  | 23 |
| Section VI: Implementation and Monitoring of Strategic Plan..... | 25 |
| Section VII: List of Appendices.....                             | 30 |
| A: SWOT Analysis.....  | 31 |
| B: TOWS Matrix.....  | 33 |

## DIRECTOR'S MESSAGE



The establishment of the Office of Research, Innovation & Commercialization (ORIC) at Dow University of Health Sciences in 2011, mandated by the Higher Education Commission of Pakistan (HEC), marked a significant step towards advancing our commitment to research excellence.

Our ongoing efforts have been directed at optimizing the functions of ORIC, aligning with the strategic goals of DUHS and HEC. The 2024-27 Strategic Plan is a collective outcome, integrating inputs from our dedicated ORIC staff and informed by a comprehensive assessment of previous years for continual improvement.

### Strategic Emphasis:

ORIC holds a pivotal position in supporting and facilitating DUHS's overarching strategic objectives. The 2024-27 Strategic Plan strongly emphasizes elevating research standards and fostering collaboration between academic and industry. The focus is on establishing robust public-private partnerships and integrating all departments with ORIC to enhance research support and facilitation.

### Capacity Building Programs:

Over the next three years, our capacity-building programs will revolve around enhancing the quality of research and increasing the annual publication of research papers. We are dedicated to nurturing public-private partnerships at both student and faculty levels, aiming to empower our academic community for meaningful contributions in the field of health sciences.

ORIC envisions leveraging emerging technologies like artificial intelligence (AI), blockchain, and big data analytics to transform research capabilities and establish DUHS as a global leader in health sciences innovation.

As we embark on this transformative journey, I encourage active participation from all stakeholders to collectively realize our vision of advancing research to new horizons.

**Dr. Kashif Shafique**

## EXECUTIVE SUMMARY

This strategic plan for the Office of Research, Innovation & Commercialization (ORIC) at Dow University of Health Sciences has been crafted through a collaborative, participatory approach involving stakeholders at all levels. The plan's development employed realistic and measurable goals, with vital contributions from stakeholders, particularly through SWOT analysis and self-assessment reports from previous years.

### Key Emphasis:

ORIC's significance within the university is underscored by its pivotal role in providing essential support for research and facilitating the commercialization of health innovations. This is achieved through strategic and public-private partnerships. A key focal point is the training and development of human resources in research, innovation, and commercialization, aiming to enhance the quality and quantity of innovative research and increase the number of commercialized projects and research paper publications.

It was discussed to prioritize the objectives of the ORIC strategic plan in line with the vision and goals of the university. The objectives were then clearly designed under the university's vision and the HEC guidelines with clear consideration of the challenges facing research and technology concerning the evolving trends both nationally and internationally.

The key emphasis endured with the comprehensive monitoring and evaluation of the overall performance concerning the KPIs and measurable outcomes as defined in the strategic plan. In essence, the strategic plan for ORIC reflects a collective commitment to advancing research, innovation, and commercialization at Dow University of Health Sciences. The plan leverages AI and machine learning for predictive analytics and blockchain for secure data management. The active involvement of stakeholders has been pivotal in shaping a roadmap that aligns with the university's broader goals and aspirations.

## ABOUT THE DEPARTMENT

With the establishment of DUHS, the Directorate of Research was introduced to foster a robust research culture within the institute. A variety of initiatives were implemented to enhance the progression of research at DUHS, including the facilitation of registration and approval of research proposals through Institutional Review Boards (IRB), the initiation of the Journal of Dow University of Health Sciences (JDUHS) for publication, and the encouragement of faculty research profiles through activities such as research poster competitions and annual research days. Additionally, the introduction of graded courses, degree programs, and periodic training sessions bolstered the understanding of research-based courses among faculty and students.

Since its inception, ORIC has developed policies to enhance activities related to innovation and commercialization at DUHS, offering comprehensive end-to-end services, ORIC covers research and development, innovations, commercialization, patents, collaborations, and the organization of seminars, symposiums, conferences, workshops, and research publication honorarium. Serving as the central point for all research-related activities, ORIC facilitates DUHS researchers, including faculty members and scholars, in promoting their research work both nationally and internationally.

## INTRODUCTION & OVERVIEW

ORIC has been constantly introducing new programs and opportunities annually, which include enhanced research training programs, SDGs conferences, and highly anticipated annual innovation competitions for students and faculty.

Furthermore, ORIC acts as a crucial link between industry and academia, providing a platform for universities to receive financial and strategic support. This collaboration significantly contributes to the research and development support of the industry, aligning DUHS with a broader landscape of innovation and knowledge exchange.

### Past Achievements/Progress:

#### HEC-ORIC self-assessment scorecard:

| Year    | Score Via Self-Assessment | Scores validated by HEC |
|---------|---------------------------|-------------------------|
| 2016-17 | 60                        | Late submission         |
| 2017-18 | 62                        | Late Submission         |
| 2018-19 | 68                        | 51                      |
| 2019-20 | 80                        | Not reported            |
| 2020-21 | 71                        | 45 (Covid Year)         |
| 2021-22 | 74.5                      | 69 (X Category)         |
| 2022-23 | 76                        | Pending                 |

### EXTRAMURAL FUNDING:

| Extramural funding (PKR millions/year) | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|------|------|------|------|------|------|
| Targets                                | 3.9  | 4.5  | 5    | 5.5  | 6    | 6.5  |
| Progress                               | 10   | 16.5 | 27.8 | 18   | 120  | 85   |



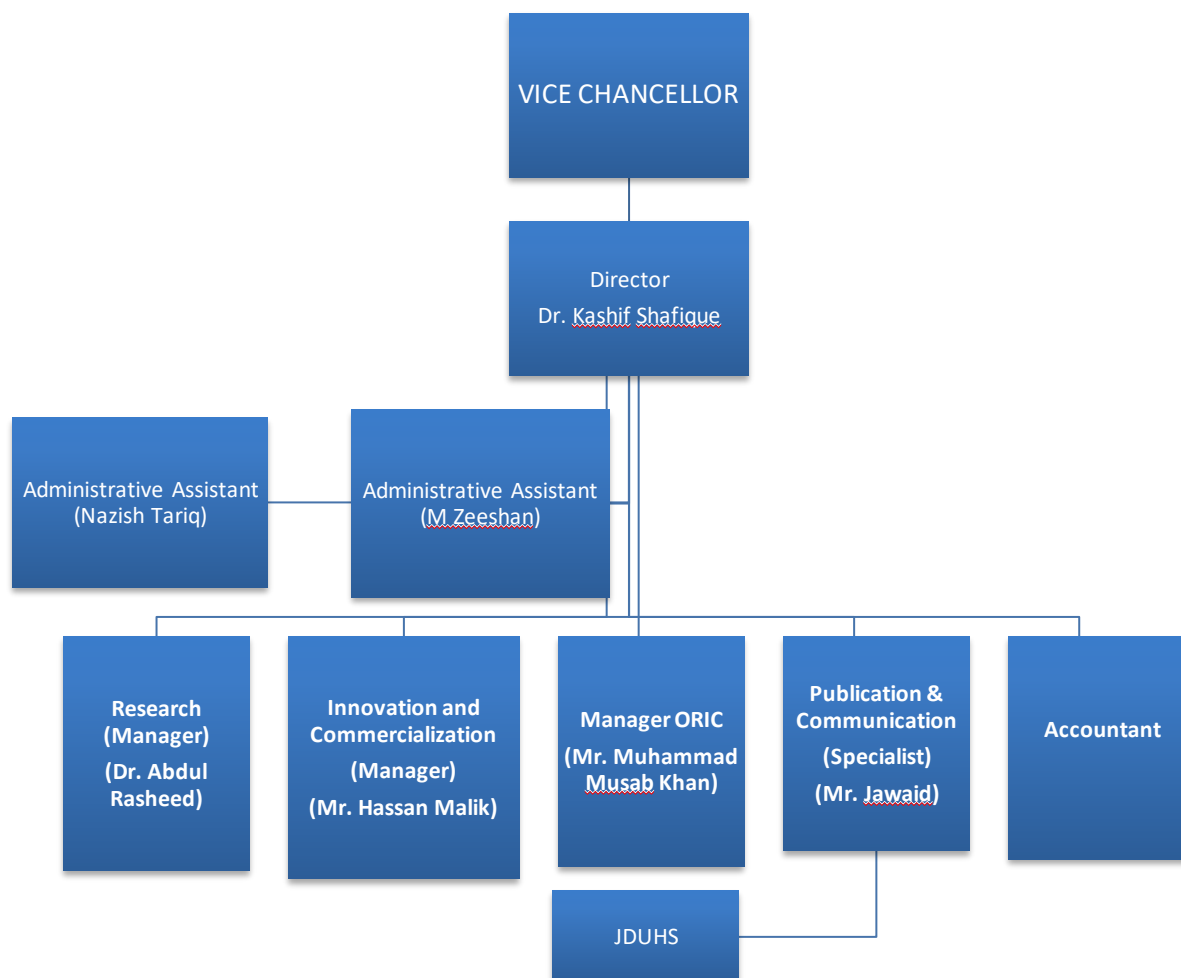
## PUBLICATIONS:

| Scientific Publications in Journals with Impact Factor | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|------|------|------|------|------|------|
| Targets  | 140  | 175  | 200  | 225  | 250  | 275  |
| Progress   | 216  | 336  | 236  | 344  | 248  | 604  |

## PUBLIC-PRIVATE PARTNERSHIPS:

| Public-private partnerships | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------------------|------|------|------|------|------|------|
| Targets                     | 2    | 3    | 4    | 4    | 6    | 8    |
| Progress                    | 2    | 4    | 5    | 4    | 6    | 7    |

## ORIC ORGANOGRAM



## **SECTION I: OVERVIEW OF THE STRATEGIC PLANNING PROCESS**

The strategic planning process for ORIC at DUHS is a structured approach aimed at fostering research excellence, innovation, and commercialization. It begins with aligning ORIC's objectives with DUHS's broader mission of academic and research advancement. Stakeholder engagement plays a key role, involving faculty, researchers, students, and industry partners through consultations, surveys, and strategic discussions to ensure a comprehensive and inclusive planning process.

A thorough situational analysis, including a SWOT assessment, is conducted to evaluate ORIC's strengths, weaknesses, opportunities, and challenges. External trends in research funding, intellectual property, and commercialization strategies are also examined to inform decision-making.

To translate the priorities into actionable outcomes, SMART goals are defined, supported by detailed action plans outlining initiatives, responsible entities, timelines, and resource requirements. The implementation phase ensures efficient allocation of research funds, grants, and technological resources, with ORIC taking a leading role in driving execution. Performance monitoring is conducted through Key Performance Indicators such as research publication output, patents filed, commercialization success rates, industry partnerships, and research training effectiveness.

A system of continuous evaluation and adaptation ensures that ORIC remains responsive to emerging trends and evolving institutional needs. Regular reviews and refinements of strategies maintain alignment with national and global research and innovation landscapes. By following this structured strategic planning approach, ORIC strengthens DUHS's research ecosystem, drives impactful innovation, and facilitates sustainable commercialization and industry engagement.

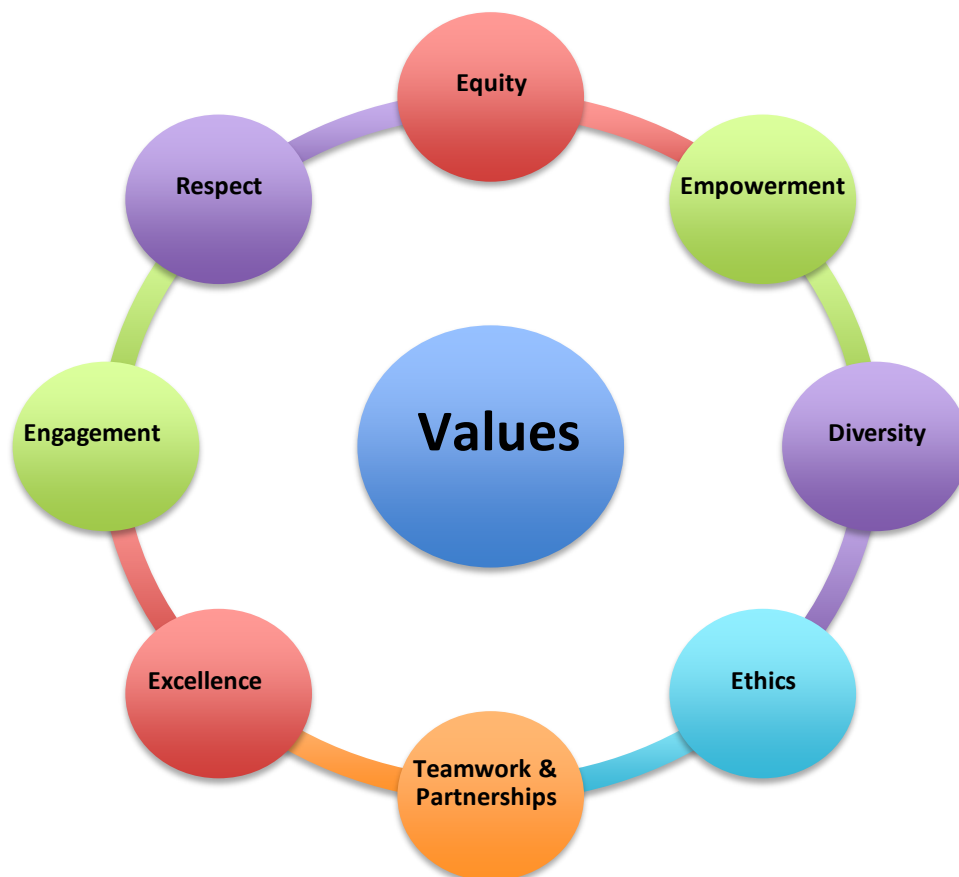
## SECTION II: VISION, MISSION & VALUES

### Vision:

To be a pre-eminent academic institution committed to changing and saving lives.

### Mission:

Providing outstanding patient-centered education, training, and clinical care informed by cutting-edge research and innovation, while generating and disseminating new knowledge.



## VALUES

- Customer Service
  - Put students first
- Empathy & Compassion
  - Understand before you judge
  - Be concerned for the sufferings and misfortunes of others
- Excellence
  - Be the best and commit to exceptional quality and service
- Innovation
  - Encourage curiosity, imagine, create, and share

- Teamwork
  - Engage and collaborate
- Integrity & Leadership
  - Be a role model and influence others to achieve their best
  - Have the courage to do the right thing
  - Hold yourself and others accountable
- Respect & Collegiality
  - Be kind
  - Listen to understand
  - Value different opinions

## **STATEMENT OF PURPOSE**

The Office of Research, Innovation, and Commercialization (ORIC) at DUHS aims to be the cornerstone of transformative research and innovation by integrating cutting-edge technologies, fostering global collaborations, and driving commercialization efforts to address critical healthcare challenges.”

### **SECTION III: ASPIRATIONAL INSTITUTIONS**

Outlining aspirational institutions of higher education with established ORICs provides our office with an opportunity not only to benchmark its performance but also to clearly articulate the path that it wishes to pursue and its ultimate destination. It provides both internal and external stakeholders with the tool to continually evaluate our institution's progress toward accomplishing its goals using objective and measurable parameters. Hence, ORIC has selected certain institutions as benchmark institutions.

The process of defining the aspirational institution was based on the list obtained from the HEC comprising of the established and notified ORICs as well as fully functional in the areas that are of potential development for ORIC-DUHS. Also, the defined institutions share moral values and mission with the Dow University of Health Sciences.

#### **REGIONAL:**

- **The Aga Khan University, Karachi**

The Aga Khan University in Karachi, the National University for Science & Technology (NUST) in Islamabad, and NED University in Karachi are identified as aspirational institutions for ORIC-DUHS due to their exemplary achievements in research, innovation, and commercialization. The Aga Khan University stands out for its impactful contributions to medical science, translating research into practical applications that significantly improve healthcare practices and outcomes.

- **National University for Science & Technology, Islamabad**

NUST in Islamabad has excelled in scientific research and technological innovation, with its ORIC fostering successful collaborations and the commercialization of research outcomes, positioning the university as a leader in research-driven initiatives.

- **NED University, Karachi**

NED University in Karachi has a notable history of achievements in engineering and technology, with its ORIC playing a key role in promoting an entrepreneurial culture and driving innovations with tangible societal impact.

#### **GLOBAL:**

- **Harvard University**

Harvard University is a global leader in research and innovation, renowned for its groundbreaking contributions across various fields, including healthcare, technology, and the sciences. With state-of-the-art research facilities and a collaborative environment, Harvard fosters interdisciplinary projects that drive discoveries and advancements. Its commitment to addressing global challenges has made it a hub for transformative ideas and cutting-edge solutions.

- **Broad Institute**

The Broad Institute is a premier research organization focused on advancing biomedical science and innovation. Collaboration between MIT and Harvard excels in genomics, disease research, and the development of new technologies to improve human health. Its interdisciplinary approach accelerates discoveries, fostering breakthroughs in precision medicine and transforming how diseases are understood and treated.

Recognizing these specific achievements, ORIC-DUHS seeks inspiration from these institutions to enhance its research, innovation, and commercialization efforts. The strategic plan focuses on addressing existing gaps and aligning practices to contribute to the overall advancement of ORIC-DUHS.

## SECTION IV: STRATEGIC GOALS

ORIC, considering the vision of the Dow University of Health Sciences and the guidelines of the HEC, aspires to gain pre-eminence in the selected areas of research, innovation & commercialization. To accomplish these objectives and to use our available resources most judiciously, we have identified the following strategic areas of emphasis:

**Goal 01: Training and development of ORIC staff and faculty**

**Objective 1:** Conduct annual workshops/trainings/seminars on research capacity building and commercialization

**Objective 2:** Arrange annual training for key ORIC personnel.

**Objective 3:** Organize workshops on all relevant steps of Patents – from searching to filing annually.

**Goal 2: Research Excellence**

**Objective 1:** Encourage interdisciplinary research through competitive intramural funding of outstanding research proposals

**Objective 2:** Increase the amount of extramural funding annually

**Objective 3:** Organize research awareness week comprising of research awareness seminars, poster competitions, and community engagement events annually.

**Goal 3: Foster an innovative and entrepreneurial ecosystem through enhanced research and support.**

**Objective 1:** Establish research links with other institutions, industry, and key stakeholders.

**Objective 2:** Create a digital and on-campus marketplace for students and faculty to promote innovation and entrepreneurship.

**Objective 3:** Design and promote short and long courses on entrepreneurship to improve the quality of FYPs, startups, and research projects.

**Goal 4: Drive commercially viable, groundbreaking projects for long-term sustainability.**

**Objective 1:** Initiate a forum comprising faculty, management, and students for industry-academia liaison.

**Objective 2:** Optimize income generation through DUHS initiatives such as DUBIC by renting chair spaces and offices to startups

**Objective 3:** Partner with tech companies to introduce AI-driven diagnostics and research solutions.

**Goal 5: Maximize publications output and quality through a strategic approach**

**Objective 1:** Improve the quality of published articles in JDUHS by effective marketing strategies and enhance its reach.

**Objective 2:** Reduce the rejection rate of manuscripts submitted to DUHS

**Objective 3:** Increasing the number of high impact factor publications.



## OBJECTIVES, OKRs & KPIs

| Goal 01: Training and development of ORIC staff and faculty   |  |  |   |   |                    |  |          |
|---|--|--|---|---|--------------------|--|----------|
| Goal Statement: Empower ORIC staff and faculty to proficiently support research, innovation, and commercialization activities by enhancing their capabilities |  |  |   |   |                    |  |          |
| Objectives & Key Results (OKRs)   |  |  |   |   |                    |  |          |
| Objective 1: Conduct annual workshops/trainings/seminars on research capacity building and commercialization  |  |  |   |   |                    |  |          |
| Objective   | Key Results  | KPI  | Measurement Method  | Target  | Person Responsible | Resource Requirement   | Timeline |
| Conduct annual workshops/trainings/seminars on research capacity building and commercialization.  | 5 workshops/seminars conducted annually.                 | Number of workshops/seminars held per year.                      | In the process of preparing the annual calendar for the next year                           | Target Q1 Identify key areas of focus, Target Q2 approved calendar of annual workshops  | M Musab Khan       | Experts  | Q4 2025  |
|   | 3 workshops on research capacity building                | Number of Workshops on research capacity building                | already planned workshops on topics including manuscript writing, grant writing, etc.       | Target Q1 Resource planning for the workshops, Target Q2 5 annual workshops/seminars organized  | Nazish Tariq       | Experts  | Q4 2025  |
| Objective 2: Arrange annual training for key ORIC personnel.  |  |  |   |   |                    |  |          |
| Objective   | Key Results  | KPI  | Measurement Method  | Target  | Person Responsible | Resource Requirement   | Timeline |
| Arrange annual training for key ORIC personnel.   | Enhanced knowledge of staff about their respective roles | Number of ORIC staff and faculty attending the training session. | Allocated budget for trainings  | Target Q1 Assessment of the staff performance/S WOT Analysis, Target Q2, Train 1 of the ORIC personnel considering their weaknesses and opportunities | Director ORIC      | Budget for international trainings                           | Yearly   |
| Objective 3: Organize workshops on all relevant steps of Patents – from searching to filing annually  |  |  |   |   |                    |  |          |
| Objective   | Key Results  | KPI  | Measurement Method  | Target  | Person Responsible | Resource Requirement   | Timeline |
| Organize workshops on all relevant steps of Patents – from searching to filing annually   | 3 patent workshops are held annually.                    | Number of patent-related workshops are conducted annually.       | Planned workshops with IPO office   | Resource planning for IP Workshops: Organize 2 workshops  | Nazish Tariq       | Patent expert/ Financial                                     | Yearly   |
|   | 4 patent applications annually                           | Number of patents filed annually                                 | Initiated MoU with Intellectual property firm to facilitate the patent applications process | MoU signing with IP consultants, 2 patent applications initiated  | M Musab Khan       | Approved budget for patent filing/Patent consultancy expense | Yearly   |

| Goal 02: Research Excellence  |   |  |   |  |                     |                                 |  |
|---|---|--|---|--|---------------------|---------------------------------|--|
| Goal Statement: Enhance research culture in the university to achieve excellence in research and development  |   |  |   |  |                     |                                 |  |
| Objectives & Key Results (OKRs)   |   |  |   |  |                     |                                 |  |
| Objective 1: [Encourage interdisciplinary research through competitive intramural funding of outstanding research proposals ]                           |   |  |   |  |                     |                                 |  |
| Objective   | Key Results   | KPI  | Measurement Method  | Target   | Person Responsible  | Resource Requirement            | Timeline   |
| Encourage interdisciplinary research through competitive intramural funding of outstanding research proposals.  | Increase in the number of intramural-funded projects by 50%                               | Number of funded projects approved                             | Assigned the ORIC team for effective allocation of budget for intramural funding opportunities with VCSFI as the benchmark initiative                   | Take new initiatives for external funding, allocate funds for intramural funding, and disseminate the information to the faculty, improve the number of funded projects by 25% | M Zeeshan           | ORIC designated staff for VCSFI | 50 % Increase in the Intramurally funded projects by Q4 2025       |
|   | Improved timely completion rate of the awarded projects                                   | Completed projects   | Working on further improvement in communication with awardees regarding timely completion of the projects   | [Specific target for the key result]   | M Zeeshan           | ORIC designated staff for VCSFI | Improve the timely completion of the projects up to 90% by Q4 2025 |
| Objective 2: Increase the number of extramural funding annually   |   |  |   |  |                     |                                 |  |
| Objective   | Key Results   | KPI  | Measurement Method  | Target   | Person Responsible  | Resource Requirement            | Timeline   |
| Increase the number of extramural funding annually  | 50% increase in extramural funding annually.  | Percentage increase in the total amount of extramural funding. | In talks with the industry partners for events support and participation  | Achieving a 50% increase in the research funding sources   | Jawaid Ali/M. Hasan | Marketing Budget                | Launch new awareness program in Q4 2025                            |
|   | Increase the funding sources and sustain the existing programs                            | The number of new funding sources secured.                     | Identified new programs for community engagement, hosting the Hult Prize international regional program in 2025. organizing an annual innovation event. | Initiate new partnerships/collaborations and announce 5 new programs of extramural research.   | Abdul Rasheed       |                                 | Organize 3 research awareness events by Q4, 2025                   |
| Objective 3: Organize research awareness week comprising of research awareness seminars, poster competitions, and community engagement events annually. |   |  |   |  |                     |                                 |  |
| Objective   | Key Results   | KPI  | Measurement Method  | Target   | Person Responsible  | Resource Requirement            | Timeline   |
| Organize research awareness week comprising of research awareness seminars, poster competitions, and community engagement                               | Increase in awareness activities to generate new ideas and enhance the research ecosystem | Number of research awareness events                            | In talks with the industry partners for events support and participation  | Identify potential industry partners for organizing awareness events, develop new industry links to organize academia-industry linkages events (1)                             | Jawaid Ali/M. Hasan | increase the allocated Budget   | Launch new awareness program in Q3 2025                            |

|                  |  |  |   |   |               |   |  |
|------------------|--|--|---|---|---------------|---|--|
| events annually. | Enhanced engagement of faculty, students, public, and external stakeholders through events | level of community participation in engagement events. | Identified new programs for community engagement, hosting the Hult Prize international regional program in 2025. organizing an annual innovation event. | Engage with key stakeholders to mutually address the challenges/problems by organizing a research and technology exhibition (1), organize awareness seminars/workshops for students and faculty (2) | Abdul Rasheed | ORIC marketing team and approved budget | Organize 3 research awareness events by Q4, 2025 |
|------------------|--|--|---|---|---------------|---|--|

| Goal 03: Enhance research and entrepreneurial support for both students and faculty, with the overarching goal of fostering an entrepreneurial and innovative ecosystem        |  |  |  |  |                                 |                                      |           |
|--|--|--|--|--|---------------------------------|--------------------------------------|-----------|
| Goal Statement: Enhance research and entrepreneurial support for both students and faculty, with the overarching goal of fostering an entrepreneurial and innovative ecosystem |  |  |  |  |                                 |                                      |           |
| Objectives & Key Results (OKRs)  |  |  |  |  |                                 |                                      |           |
| Objective 1: Establish research links with other institutions, industry, and key stakeholders.   |  |  |  |  |                                 |                                      |           |
| Objective  | Key Results  | KPI  | Measurement Method   | Target   | Person Responsible              | Resource Requirement                 | Timeline  |
| Establish research links with other institutions, industry, and key stakeholders.  | 10 new research partnerships/links are established annually. | Number of new research partnerships/links established annually | Leads generation through networking and outreach   | Devise an outreach strategy to explore new potential collaborations, and 4 new links established with industry/key stakeholders. | Abdul Rasheed/M Hasan Malik     | Outreach team for consistent efforts | Yearly    |
|  | 5 collaborative research projects with other HEIs            | Number of collaborative research projects with other HEIs      | In negotiations with 2 new HEIs, Jinnah University and Sohail University regarding research partnerships | Bi-monthly meetings with ORICs of other HEIs, 2 New research collaborations  | Abdul Rasheed/Nazish Tariq      | Outreach team for consistent efforts | Yearly    |
| Objective 2: Create a digital and on-campus marketplace for students and faculty to promote innovation and entrepreneurship.   |  |  |  |  |                                 |                                      |           |
| Objective  | Key Results  | KPI  | Measurement Method   | Target   | Person Responsible              | Resource Requirement                 | Timeline  |
| Create a digital and on-campus marketplace for students and faculty to promote innovation and entrepreneurship.  | Fully operational marketplace at the campus                  | Establishment of the marketplace                               | Already pitched the idea to the authorities  | Approval of the initiative/allocation of space/land, and the initiation of the establishment of the marketplace.                 | Muhammad Musab Khan/            | Land allocation and basic structure  | Quarterly |
|  | 10 products listed on the marketplace                        | Number of products listed on the marketplace.                  | planned event to identify/scout relevant products for the marketplace                                    | Scout relevant products for the marketplace, induct 5 products to be listed  | Muhammad Musab Khan/Hasan Malik | Website and application budget       | Yearly    |

| Objective 3: Design and promote short and long courses on entrepreneurship to improve the quality of FYPs, startups, and research projects |   |  |   |  |                          |                      |          |
|--|---|--|---|--|--------------------------|----------------------|----------|
| Objective  | Key Results                                   | KPI  | Measurement Method  | Target   | Person Responsible       | Resource Requirement | Timeline |
| Design and promote short and long courses on entrepreneurship to improve the quality of FYPs, startups, and research projects              | 3 short/long courses designed and implemented | Short-term courses designed, and workshops organized                         | Preparing the academic calendar of courses with DSDC incorporating entrepreneurship-focused courses | Identify internal/external experts as course facilitators, incorporate the courses in the academic calendar, Launch 1 short-term course                                  | M Musab Khan/Farhan Khan | ORIC/DSDC staff      | Yearly   |
|  | 1 long-term course developed                  | Long-term courses on entrepreneurship and related topics of key significance | Working on the course outline on advertising psychology   | Get feedback from the faculty and students with research projects/FYPs for needs assessment and course validation, Launch a comprehensive course on entrepreneurship (1) | M Musab Khan/Farhan Khan | ORIC/DSDC staff      | Yearly   |

| Goal 04: Purposefully foster groundbreaking projects and programs that bear considerable commercial relevance, ensuring sustained fiscal viability over the long term        |  |   |  |  |                          |                      |           |
|--|--|---|--|--|--------------------------|----------------------|-----------|
| Goal Statement: Purposefully foster groundbreaking projects and programs that bear considerable commercial relevance, ensuring sustained fiscal viability over the long term |  |   |  |  |                          |                      |           |
| Objectives & Key Results (OKRs)  |  |   |  |  |                          |                      |           |
| Objective 1: Initiate a forum comprising faculty, management, and students for industry-academia liaison.  |  |   |  |  |                          |                      |           |
| Objective  | Key Results  | KPI   | Measurement Method   | Target   | Person Responsible       | Resource Requirement | Timeline  |
| Initiate a forum comprising faculty, management, and students for industry-academia liaison.   | 3 quarterly meetings were conducted.               | Number of quarterly meetings conducted.                   | In the process of identifying the proactive students and dedicated faculty to notify the forum | formation of the industry-academia forum, Induct key stakeholders/corporate experts in the forum | Qurat-UI Ain             | ORIC Staff           | Quarterly |
|  | 3 industry-academia collaborations were initiated. | The number of industry-academia collaborations initiated. | In the process of MoU signing with 2 organizations   | 3-5 meetings with potential industry partners, 2 new liaisons achieved                           | M Hasan Malik/Musab Khan | ORIC Staff           | Quarterly |
|  | 3 consultancy opportunities were created.          | Create consultancy opportunities for faculty.             | Exploring new projects to maximize consultancy opportunities for the faculty                   | Initiate a new project with industry, 2 new consultancy opportunities created                    | M Hasan Malik/Musab Khan | Consultancy budget   | Yearly    |

| Objective 2: Optimize income generation through DUHS initiatives such as DUBIC by renting chair spaces and offices to startups |  |   |   |   |                               |                                    |           |
|--|--|---|---|---|-------------------------------|------------------------------------|-----------|
| Objective  | Key Results  | KPI   | Measurement Method  | Target  | Person Responsible            | Resource Requirement               | Timeline  |
| Optimize income generation through DUHS initiatives such as DUBIC by renting chair spaces and offices to startups              | 2 rental agreements  | No. of rental agreements signed                                   | identification and allocation of ample chair space  | Allocation of chair space for the purpose, 1 rental agreement   | Muhammad Musab Khan           | Marketing budget                   | Quarterly |
|  | Social media campaigns, digital marketing, and push strategy | Marketing of the facility/services                                | Submitted a proposal to HEC, currently in talks regarding the rental of chair space for freelancers | design and implement a social media marketing strategy, 4-5 applications for the chair space          | Muhammad Musab Khan/M Zeeshan |                                    | Quarterly |
| Objective 3: Partner with tech companies to introduce AI-driven diagnostics and research solutions.                            |  |   |   |   |                               |                                    |           |
| Objective  | Key Results  | KPI   | Measurement Method  | Target  | Person Responsible            | Resource Requirement               | Timeline  |
| Partner with tech companies to introduce AI-driven diagnostics and research solutions.   | 3 tech companies partnered.                                  | The number of tech companies partnered with.                      | 1 potential partnership initiated with EZShifa for AI diagnostics                                   | identify 2 potential tech partners, 1 partnership completed   | Hasan Malik                   | space allocation to EZShifa        | Quarterly |
|  | 4 AI-driven solutions implemented.                           | Several AI-driven solutions implemented.                          | Identified 2 VR solutions   | Identified and approved 2 VR solutions, 1 solution implemented  | Musab Khan/Farhan Khan        | Approved seed fund of 6M to launch | Quarterly |
|  | 2 M secured per annum  | Revenue Generated through AI-based solutions, e.g., VR simulators | Prepared feasibility report for the implementation of the solutions                                 | Initiate training in VR solutions for faculty and students, generate 200k revenue through VR training | Musab Khan/Hasan Malik        |                                    | Yearly    |

| Goal 05: Devise and execute a comprehensive strategy aimed at maximizing publications while elevating the standard of quality in published works        |   |                                      |                    |  |                    |                      |                             |
|---|---|--------------------------------------|--------------------|--|--------------------|----------------------|-----------------------------|
| Goal Statement: Devise and execute a comprehensive strategy aimed at maximizing publications while elevating the standard of quality in published works |   |                                      |                    |  |                    |                      |                             |
| Objectives & Key Results (OKRs)   |   |                                      |                    |  |                    |                      |                             |
| Objective 1: Improve the quality of published articles in JDUHS by effective marketing strategies and enhance its reach.                                |   |                                      |                    |  |                    |                      |                             |
| Objective   | Key Results                                       | KPI                                  | Measurement Method | Target   | Person Responsible | Resource Requirement | Timeline                    |
| Improve the quality of published articles in JDUHS by effective marketing strategies and enhancing its reach.   | 10 percent improvement in the quality of articles | Implementation of marketing strategy | 90%                | Create engaging content about JDUHS, such as infographics, video testimonials from published authors, and highlights of impactful articles. Host workshops and webinars on manuscript preparation and journal submission for researchers. (5% improvement) | Muhammad Zakaiddin | ORIC STAFF           | 10 % improvement in Q4 2025 |

| Objective 2: Reduce the rejection rate of manuscripts submitted to JDUHS |   |   |                    |   |                          |                      |          |
|--|---|---|--------------------|---|--------------------------|----------------------|----------|
| Objective  | Key Results                                 | KPI   | Measurement Method | Target  | Person Responsible       | Resource Requirement | Timeline |
| Reduce the rejection rate of manuscripts submitted to JDUHS              | 10% reduction in manuscript rejection rate. | Manuscript rejection rate.                                | 80% Complete       | Create a standardized checklist for statistical evaluation during the peer-review process to ensure consistency in assessing manuscripts. Increase the quality and number of publications by assisting in statistical analysis of the papers potentially considered for publication in JDUHS. | Moatter Jahan Urf Maryam | ORIC STAFF           | Q4 2025  |
|  | 25 resubmissions after revision.            | Number of revisions submitted for resubmission.           |                    | Implement a fast-track review and publication process for exceptional papers to attract high-quality submissions. Work towards indexing JDUHS in more recognized databases like PubMed and Web of Science. (5% reduction)   | Syed Omair Adil          | ORIC STAFF           | Q4 2025  |
| Objective 3: Increasing the number of high-impact factor publications    |   |   |                    |   |                          |                      |          |
| Objective  | Key Results                                 | KPI   | Measurement Method | Target  | Person Responsible       | Resource Requirement | Timeline |
| Increasing the number of high-impact factor publications                 | 300+ high-impact factor publications        | Increase in the number of high-impact factor publications | 80% Complete       | 70-80 publications, 150-200 publications  | Qurat-UI Ain/Nazish      | ORIC STAFF           | Q4 2025  |

## SECTION V: RESOURCE PLANNING FOR ACHIEVING STRATEGIC GOALS

Successfully achieving the above-listed ORIC strategic goals is essential to the mission of DUHS. For the DUHS to achieve excellence in academics as well as administrative areas of success, the ORIC office is pivotal with its key functions comprising research support, innovation, and Commercialization, respectively.

The right identification, allocation, and mobilization of the resources will be the key to the achievement of the goals; therefore, the following is the resource plan for achieving the strategic goals.

| S No. | RESOURCES   | PRINCIPAL SOURCE              |
|-------|---|-------------------------------|
| 1     | <b>Human Resource</b>   |                               |
|       | <ul style="list-style-type: none"> <li>- Hiring adequate staff with relevant education and experience.</li> <li>- Upgradation of the existing staff</li> </ul>  | University                    |
| 2     | <b>Funding</b>  |                               |
|       | <ul style="list-style-type: none"> <li>- Allocation of budget for research and innovation funds and events</li> <li>- Intramural grant programs</li> <li>- Allocation of budget for publications, seed money for startups, and training for staff</li> </ul>                | University                    |
|       | <ul style="list-style-type: none"> <li>- Extramural funding and grant programs</li> </ul>   | Government/Industry           |
| 3     | <b>Infrastructure</b>   |                               |
|       | <ul style="list-style-type: none"> <li>- Allocation of space for new ventures and programs, for example (Marketplace)</li> </ul>  | University                    |
| 4     | <b>Training and Development</b>   |                               |
|       | <ul style="list-style-type: none"> <li>- Training programs for researchers on grant writing, research methodologies, ethics, compliance, and other relevant topics.</li> <li>- Training programs using AI tools and equipment</li> <li>- Development of a VR lab</li> </ul> | University                    |
|       | <ul style="list-style-type: none"> <li>- Training, workshops, and courses offered for staff (national/international)</li> </ul>   | HEC/Professional Associations |
| 5     | <b>Communication and Outreach</b>   |                               |
|       | <ul style="list-style-type: none"> <li>- Constitution of an outreach team for the promotion of programs and services</li> <li>- Social media (Facebook/LinkedIn) subscriptions for ads and promotions</li> </ul>  | University                    |
|       | <ul style="list-style-type: none"> <li>- Collaboration with external PR or communication firms for outreach campaigns</li> </ul>  | PR Agencies                   |

|   |  |  |
|---|--|--|
| 6 | <b>Assessment and Evaluation</b>   |  |
|   | - Self-assessment report for monitoring and planning   | University, HEC                                |
| 7 | <b>Software and Technology</b>   |  |
|   | - Purchasing of research software, AI tools, and subscriptions   | University                                     |
|   | - IT equipment: computers, multimedia, printers, and other office supplies                             | University                                     |
|   | - Development of Apps and websites for research, BIC, and startups                                     | External Vendors                               |
| 8 | <b>Compliance and SOPs</b>   |  |
|   | - Policies and procedures for revenue generation, for example Rent income from offices and chair space | University                                     |
|   | - External consultants for IP, commercialization, and investments                                      | Industry, HEC, Professionals                   |
| 9 | <b>Networking/Collaborations</b>   |  |
|   | - MOUs for research, innovation capacity building, etc.  | Industry/Professional organizations/Government |



## SECTION VI: IMPLEMENTATION AND MONITORING OF STRATEGIC PLAN

| Strategic Goals  | Implementation and Monitoring (KPIs)   |
|--|--|
| 1. Training and development of ORIC staff and faculty. | <ul style="list-style-type: none"> <li>• The ORIC Directorate will identify the relevant training for the ORIC staff.</li> <li>• Under the supervision of the Director ORIC, prepare an action plan for the academic year comprising all the key areas of capacity building specifically around intellectual property.</li> <li>• Allocation of appropriate budget to execute the workshops, staff training and seminars, etc. annually.</li> </ul> <p><b><u>Key Performance Indicators:</u></b></p> <ul style="list-style-type: none"> <li>✓ Begin with at least 5 annual workshops/trainings/seminars on research capacity building and commercialization, etc.</li> <li>✓ Arrange annual training for key ORIC personnel.</li> <li>✓ Workshops on all relevant steps of Patents – searching to filing annually.</li> <li>✓ Set realistic goals and objectives to ensure continued improvement stimulated by rewards and appraisals</li> </ul> <p><b><u>Responsibility:</u></b></p> <p>Muhammad Musab Khan(Lead) Manager ORIC<br/> M. Hasan Malik Manager Innovation and Com.<br/> M. Zeeshan Administrative Assistant<br/> Jawed Ali Communication Specialist</p> |

| Strategic Goals        | Implementation and Monitoring (KPIs)   |
|------------------------|--|
| 2. Research Excellence | <ul style="list-style-type: none"> <li>• Frequent meetings with other HEIs and relevant entities with a composed agenda.</li> <li>• Identification of contemporary materials and tools to be incorporated into the entrepreneurship courses and workshops</li> <li>• Allocation of space at a key location in the OJHA campus for the marketplace</li> <li>• Adequate distribution and allocation of budget for annual events and other entrepreneurial support endeavors</li> </ul>   |
|                        | <p><b><u>Key Performance Indicators:</u></b></p> <ul style="list-style-type: none"> <li>✓ Establishment of research links with other Higher education institutions, industry, and key stakeholders.</li> <li>✓ Create a digital and on-campus marketplace for the students and faculty to promote innovation and entrepreneurship and execute marketing activities every month</li> <li>✓ Design and promote short and long courses on entrepreneurship and relevant subjects to improve the quality of FYPs, startups, and research projects.</li> <li>✓ Organize an annual research, innovation, and entrepreneurial exhibition and ideas competition to create a competitive environment for aspiring researchers and entrepreneurs</li> </ul> <p><b>Responsibility:</b><br/> Muhammad Musab Khan (lead)    Manager ORIC<br/> M. Hasan Malik                      Manager Innovation and Com.<br/> Qurrat ul Ain Masood            Liaison Officer<br/> Jawed Ali                              Communication Specialist</p> |

| Strategic Goals   | Implementation and Monitoring (KPIs)  |                      |                          |              |                    |            |                          |           |
|---|---|----------------------|--------------------------|--------------|--------------------|------------|--------------------------|-----------|
| <p>3. Foster an innovative and entrepreneurial ecosystem through enhanced research and support.</p> | <ul style="list-style-type: none"> <li>• Identification and circulation of all the relevant research opportunities to the faculty and students.</li> <li>• The Director ORIC will lead the intramural funding process under the VICE CHANCELLORS' SEED FUNDING INITIATIVE</li> <li>• All the necessary steps to be taken to ensure smooth and systematic compliance of all the research processes and procedures</li> <li>• Create a competitive environment and upscale the submissions for extramural funding opportunities.</li> </ul>   |                      |                          |              |                    |            |                          |           |
|   | <p><b><u>Key Performance Indicators:</u></b></p> <ul style="list-style-type: none"> <li>✓ Encourage interdisciplinary research through competitive intramural funding of outstanding research proposals – VICE CHANCELLORS' SEED FUNDING INITIATIVE</li> <li>✓ Increase the number of extramural funding by 15 % annually</li> <li>✓ Organize research week comprising research awareness seminars, poster competitions, and community engagement events annually</li> <li>✓ Develop and implement relevant policies to support the research process</li> <li>✓ Leverage AI to automate patent searches and enhance research proposal analytics</li> </ul> <p><b>Responsibility:</b></p> <table border="0"> <tr> <td>Abdul Rasheed (lead)</td> <td>Manager Research Support</td> </tr> <tr> <td>Nazish Tariq</td> <td>Research Associate</td> </tr> <tr> <td>M. Zeeshan</td> <td>Administrative Assistant</td> </tr> <tr> <td>Jawed Ali</td> <td>Communication Specialist</td> </tr> </table> | Abdul Rasheed (lead) | Manager Research Support | Nazish Tariq | Research Associate | M. Zeeshan | Administrative Assistant | Jawed Ali |
| Abdul Rasheed (lead)  | Manager Research Support  |                      |                          |              |                    |            |                          |           |
| Nazish Tariq  | Research Associate  |                      |                          |              |                    |            |                          |           |
| M. Zeeshan  | Administrative Assistant  |                      |                          |              |                    |            |                          |           |
| Jawed Ali   | Communication Specialist  |                      |                          |              |                    |            |                          |           |

| Strategic Goals  | Implementation and Monitoring (KPIs)  |                             |              |               |                 |                      |                          |           |
|--|---|-----------------------------|--------------|---------------|-----------------|----------------------|--------------------------|-----------|
| <p>4. Drive commercially viable, groundbreaking projects for long-term sustainability.</p> | <ul style="list-style-type: none"> <li>• ORIC Directorate will identify the relevant personnel for the formation of the forum.</li> <li>• Reach out to the top industry decision-makers and create an active advisory board/steering committee</li> <li>• Attain necessary approvals from the VC secretariat and disseminate the information through the registrar regarding revenue generation through rent, paid courses, and other programs.</li> <li>• Design a marketing strategy for the university technologies and startup, incorporate and assign a marketing team to carry out the tasks effectively.</li> <li>• Use the existing infrastructure for the Virtual labs and tech enhancement initiatives</li> </ul>   |                             |              |               |                 |                      |                          |           |
|  | <p><b><u>Key Performance Indicators:</u></b></p> <ul style="list-style-type: none"> <li>✓ Initiate a forum comprising all the potential contributors from faculty, management, and students for industry-academia liaison, innovation &amp; commercialization and hold quarterly meetings.</li> <li>✓ Optimize income generation through DUHS initiatives such as DUBIC by renting chair spaces and offices to startups</li> <li>✓ Establish an outreach team comprising relevant personnel from ORIC and relevant departments specifically for the marketing of research projects, capacity-building programs, and other potential services offered</li> <li>✓ Deployment of AI-based diagnostics and research solutions</li> </ul> <p><b><u>Responsibility:</u></b></p> <table border="0"> <tr> <td>Muhammad Hasan Malik (lead)</td> <td>Manager ORIC</td> </tr> <tr> <td>M. Musab Khan</td> <td>Manager IL &amp; TT</td> </tr> <tr> <td>Qurrat-ul-Ain Masood</td> <td>Administrative Assistant</td> </tr> <tr> <td>Jawed Ali</td> <td>Communication Specialist</td> </tr> </table> | Muhammad Hasan Malik (lead) | Manager ORIC | M. Musab Khan | Manager IL & TT | Qurrat-ul-Ain Masood | Administrative Assistant | Jawed Ali |
| Muhammad Hasan Malik (lead)  | Manager ORIC  |                             |              |               |                 |                      |                          |           |
| M. Musab Khan  | Manager IL & TT   |                             |              |               |                 |                      |                          |           |
| Qurrat-ul-Ain Masood   | Administrative Assistant  |                             |              |               |                 |                      |                          |           |
| Jawed Ali  | Communication Specialist  |                             |              |               |                 |                      |                          |           |

| Strategic Goals  | Implementation and Monitoring (KPIs)   |
|--|--|
| 5. Maximize publications output and quality through a strategic approach | <ul style="list-style-type: none"> <li>Analyze the existing database of the publications from the previous years to identify the gaps and areas for improvement.</li> <li>Reach out to the researchers with high potential and an adequate record of past publications.</li> <li>Set a benchmark for the quality of publications in high-impact factor journals</li> </ul>   |
|  | <p><b><u>Key Performance Indicators:</u></b></p> <ul style="list-style-type: none"> <li>✓ Improve the quality of published articles in JDUHS by effective marketing strategy and enhance its reach</li> <li>✓ Increasing the number of high-impact factor publications by 10 percent</li> <li>✓ Reduce the rejection rate of manuscripts submitted to JDUHS by 10% within the next year</li> </ul> <p><b><u>Responsibility:</u></b></p> <p>Syed Omair Adil (lead)    Managing Editor<br/>M Zaka Uddin                      Web Manager</p> |

## SECTION VII: LIST OF APPENDICES

| No. | DESCRIPTION   |
|-----|---------------|
| A   | SWOT ANALYSIS |
| B   | TOWS MATRIX   |

## APPENDIX A: SWOT ANALYSIS

| STRENGTHS   | OPPORTUNITIES  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Infrastructure (Building/ Office supplies equipment).</li> <li>2. Expertise in Research Innovation (Faculty Commercialization).</li> <li>3. Industry Linkage/Accessibility due to the Brand name and credibility of DUHS.</li> <li>4. Manpower is Adequate to run the operations.</li> <li>5. Stable/ Supportive Governance</li> <li>6. Data of Students and Faculty is easily accessible.</li> <li>7. Journal Indexing (Article publication, Commercial Impact newsletter, Changes Conference)</li> <li>8. Publication Support from the University.</li> <li>9. HEC Category of the University</li> <li>10. Access to specialized equipment or databases, aiding researchers in their work.</li> <li>11. Open access medical Journal which is recognized by HEC and PMDC. The journal has international indexation including SCOPUS. Moreover, the journal has no article processing or acceptance charges.</li> <li>12. Increasing number of students and faculty marketable projects.</li> <li>13. Financial ability to incorporate AI tools,</li> </ol> | <ol style="list-style-type: none"> <li>1. Market gap for new products and services.</li> <li>2. Forum for academia / Industry liaison, Innovation, and commercialization.</li> <li>3. Consultancy services for industry and other HEIs.</li> <li>4. DUBIC can generate income by renting chair space and offices for startups.</li> <li>5. Training programs for industry.</li> <li>6. International conferences.</li> <li>7. Platform for Workshops.</li> <li>8. Research-based short courses continuously.</li> <li>9. AI-driven blockchains for data analytics and AI-based service enhancements.</li> <li>10. The journal can collaborate with researchers and institutions globally to enhance its reach and diversity of contributions.</li> <li>11. Aspiring DUHS students could benefit from a regular entrepreneurship course offered.</li> <li>12. Promote social entrepreneurship and innovation in medical healthcare delivery to address Indigenous health issues in our society.</li> <li>13. Integration of existing patent databases by using AI tools for global patent protection</li> </ol> |

| <p>support equipment, and high-tech initiatives</p> <p>14. Utilize existing resources/infrastructure for tech labs and virtual/digital labs</p>  |  |
|--|--|
| WEAKNESSES   | THREATS  |
| <ol style="list-style-type: none"> <li>1. Effective and relevant policies for employee compensation and benefits/ reward system.</li> <li>2. Lack of Independent and decentralized financial procedures.</li> <li>3. Lack of Relevant staff per the functions of ORIC and BIC</li> <li>4. Faculty does not have access to various research databases/journal subscriptions for accessing the article.</li> <li>5. The rejection rate of manuscripts submitted to JDUHS is higher. The journal is striving hard for good-quality papers.</li> </ol> | <ol style="list-style-type: none"> <li>1. Private university ORICs with easy access to industry and swift compliance.</li> <li>2. We will be behind if we do not focus on new advanced research techniques using AI and big data.</li> <li>3. JDUHS is still not indexed to reputable databases such as Web of Science and PubMed, because of which JDUHS is facing challenges in publishing high-quality papers and its online presence.</li> </ol> |



## APPENDIX B: TOWS MATRIX

| OPPORTUNITIES (O)   | THREATS (T)   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Market gap for new products and services</li> <li>2. Forum for academia / Industry liaison, Innovation, and commercialization.</li> <li>3. Consultancy services for industry and other HEIs.</li> <li>4. DUBIC can generate income by renting chair space and offices for startups.</li> <li>5. Training programs for industry and international conferences.</li> <li>6. Research-based short courses continuously.</li> <li>7. AI DRIVEN Data Analysis services.</li> <li>8. The journal can collaborate with researchers and institutions globally to enhance its reach and diversity of contributions.</li> <li>9. Promote social entrepreneurship and innovation in medical healthcare delivery to address Indigenous health issues in our society.</li> <li>10. Use existing infrastructure to introduce virtual labs for collaborative research</li> </ol> | <ol style="list-style-type: none"> <li>1. Private university ORICs with easy access to industry and swift compliance.</li> <li>2. We will be behind if we do not focus on new advanced research techniques using AI and big data.</li> <li>3. JDUHS is still not indexed in reputable databases such as Web of Science and PubMed.</li> </ol> |

| STRENGTHS (S)  | SO  | ST  |
|--|---|---|
| <ol style="list-style-type: none"> <li>1. Infrastructure (Building/ Office supplies equipment).</li> <li>2. Expertise in Research Innovation (Faculty Commercialization).</li> <li>3. Industry Linkage/Accessibility due to Brand name and credibility of DUHS</li> <li>4. Manpower is Adequate to run the operations.</li> <li>5. Stable/ Supportive Governance.</li> <li>6. Data of Students and Faculty is easily accessible.</li> <li>7. Publication Support from the University.</li> <li>8. HEC Category of the University</li> <li>9. Access to specialized equipment or databases, aiding researchers in their work.</li> <li>10. Open access medical Journal which is recognized by HEC and PMDC. The journal has international indexation including SCOPUS. No article processing or acceptance charges.</li> <li>11. Increasing number of students and faculty marketable projects</li> </ol> | <ol style="list-style-type: none"> <li>1. Devise and execute a comprehensive strategy aimed at maximizing publications while elevating the standard of quality in published works.</li> <li>2. Partner with tech companies to introduce AI-driven diagnostics and research solutions</li> </ol> | <ol style="list-style-type: none"> <li>1. Enhance research and entrepreneurial support for both students and faculty, with the overarching goal of fostering an entrepreneurial and innovative ecosystem</li> </ol> |

| WEAKNESSES (W)   | WO  | WT   |
|--|---|--|
| <ol style="list-style-type: none"> <li>1. Effective and relevant policies for employee compensation and benefits/ reward system.</li> <li>2. Lack of Independent and decentralized financial procedures.</li> <li>3. Lack of Relevant staff following the functions of ORIC and BIC.</li> <li>4. Faculty does not have access to various research databases/journal subscriptions for accessing articles.</li> <li>5. The rejection rate of manuscripts submitted to JDUHS is higher. The journal is striving hard for good-quality papers.</li> </ol> | <ol style="list-style-type: none"> <li>1. Enhance the research culture in the university to achieve excellence in research and development.</li> <li>2. Empower faculty and ORIC staff to support research, innovation, and commercialization activities by enhancing their capabilities and independence.</li> </ol> | <ol style="list-style-type: none"> <li>1. Purposefully foster groundbreaking projects and programs that bear considerable commercial relevance, ensuring sustained fiscal viability over the long period.</li> </ol> |