Designing the Future Arab National University for Maximizing Socio-Economic Impact

The QU Transformation Strategy Concept

Dr Hassan Al-Derham, President, Qatar University

IREG 2021 Conference: Effects of Ranking on Community and Society, November 15th
Session: Arabic Universities and their effect on the societies and communities for the transformation to better future
Outlines

• Part 1 (Big Picture)
  • Story of QU Transformation & Its Rationale (QU Visionary Response to: 1- internal challenges, 2- Stakeholders Perspectives, 3- International Trends, and 4- National Transformation Vision 2030) ... its all about QU second Quantum Leap ..

• Part 2 (QU Transformation Critical Components -> the Innovation Intensive Components*)
  • 1- QU Model of Transformative Education,
  • 2- Transformation & Socio-Economic Impact Catalyst Enabling Institutes,
  • 3- Innovation & Transformation Enabling Strategies (Digital Transformation, and Entrepreneurship & Innovation)

• Part 3 (QU Transformation Outputs & Next in Terms of Ranking Philosophy)
  • 1- Six Main Outputs of QU Transformation Maximizing QU Socio-Economic Impact on Qatar & Beyond
  • 2- Visualization Concept of QU Transformation Outputs
  • 3- Next in Terms of Ranking Philosophy
Part 1 (Big Picture)

Story of QU Transformation & Its Rationale..

(QU Visionary Response to: 1- internal challenges, 2- Stakeholders Perspectives, 3- International Trends, and 4- National Transformation Vision 2030) ... its all about QU second Quantum Leap (first leap was in reform started in 2003 ..)
Qatar University Snapshot

Qatar University: A National Success Story …

– A Diverse and Growing Student Body and Strong Alumni Network with more than 20,000 registered students from diverse backgrounds, about 12000+ are Qataris (accounting to 3% of the national population at anytime), and 50000+ Alumni

– Ten colleges including a state-of-the-art College of Medicine, and High Impact College of Engineering and College of Business

– The Largest Degree Provider with a broad range of internationally accredited undergraduate and postgraduate programs. First to develop graduate programs in Qatar

– Internationalized: ranked in the top 228 universities in the QS World Universities Ranking; 318 in THE Ranking, Ranked 2nd in the Arab world and Ranked 1st Globally in the THE list as the world’s most international university.

– A Research Platform with impressive number of publications and global partnerships and 15 R&D centers; attaining approx. 40%+ of all QNRF funds, producing 35+ of all publications in the country

– Strong College of Engineering ranked 126-150 internationally in Engineering & Technology, and 101-125 internationally in Computer Science
The DRIVERS of Initiation of QU Transformation Strategy Development in 2016

QU New Vision: To be regionally recognized for distinctive excellence in education and research, an institution of choice for students and scholars and a catalyst for the sustainable socio-economic development of Qatar.

National Transformation Vision 2030

New Vision for Transformation & Post Reform Quantum Leap by QU New President

International Trends

QU Internal Challenges

Stakeholders Perspectives

QUARANTAQ

QATAR UNIVERSITY
A Vision for Transformation: The Evolution of Qatar University Model...

Before 2002
Old University Model
Focused only on Education

2002-2016
Classical University Model
Appearing in several international rankings with classical three missions (Education, Research, and Service)

2016-2030
Transformative University Model
Intensive Innovation & Socio-Economic Impact

Incepted 2018-2022
Realized 2025-2030
1- Internal Challenges (The Strategic Context of QU Transformation)

A large segment of students academically at risk.

Almost 6 years on average for students to graduate (seven years for Qatari students)

Less than 30% of students enrolled in STEM programs are Qatari, highly demanded career in Qatar

Social and economic impact of research is minimal.

Decreasing number of Qatari male students

Low motivation of students

Decreasing number of Qatari faculty.

Significant gap between the learning outcomes of the high schools and admission requirements of the University

QU programs alignment with national needs requires improvement, cost efficiently need improvement

Significant gap between University graduates and the workplace needs

Accelerated and urgent needs for response for emergencies
2- Stakeholders Perspectives (The Strategic Context of QU Transformation)

Seek Distinctive Excellence in Education and Research, and enhance quality of societal engagement, as well as QU socio-economic development role in Qatar

Elevate Students Success with pathways encouraging elite ones and support those at risk

Offering Flexible programs responding to learners needs and national needs

Maximize Higher Education Access to Qataris

Having a main contributing role in shaping national public policy in matters related to grand challenges facing government, society, and economy of Qatar

Play a wider and more proactive role in National Human Capital Development to accelerate national transformation into innovation & knowledge based economy guided by Qatar National Vision 2030

Enhance Optimization of resources for more outputs with less resources, and reduce dependence of governmental funds
3- International Trends (The Strategic Context of QU Transformation)

- Redefining the University Model for the future
- Addressing Competency Gap for World of Work
- Industrial Fourth Revolution Needs
- Entrepreneurial Transformation
- Digital Transformation
4- QU Response to National Transformation Vision 2030 (The Strategic Context of QU Transformation)

Qatar National Vision 2030

**Human development**
Develop all people to enable them to sustain a prosperous society

**Social development**
Develop just and caring society with high moral standards and active role in global development

**Economic development**
Develop competitive diversified economy to secure prosperity for all in present and future

**Environmental development**
Ensure harmony between economic growth, social development and environment

Institutional development and modernisation
Defining Three Dimensions of QU Transformation that Respond to QU Transformation Strategic Context and Leads to Maximizing QU Impact in Qatar

Digital is Enabler For Transformation in All Of the Three Dimensions

Maximize QU Impact on Qatar
Strategic Context of QU Transformation
(QU Response Visionary to: 2-Internal Challenges, 2- Stakeholders Perspectives, 3- International Trends, and 4- National Transformation Vision 2030)

Maximize QU Socio-Economic Impact on Qatar and Beyond

Cross Missions Innovation (in particular transformative innovation)

Maximize QU Socio-Economic Impact on Qatar and Beyond

Human Capital Development
(T&L Strategy)
(SE Strategy)

Research and Development
(Research and Knowledge Advancement Strategy)

Societal Development
(Engagement Strategy)

Economic Development
(E&I Strategy)

Digital Transformation
(DT Strategy)

Envisioned QU

Two New Transformative Missions, & Transformation of the Classical Three Missions

First Core Mission

Second Core Mission

Third Core Mission

Fourth Core Mission (New)

Fifth Core Mission (New)

Administration & Institutional Enablers
(Institutional Excellence Strategy)

**New Vision:** To be regionally recognized for distinctive excellence in education and research, an institution of choice for students and scholars and a catalyst for the sustainable socio-economic development of Qatar.

**Core Values**
- Excellence
- Integrity
- Diversity
- Social Responsibility
- Innovation
- Academic Freedom

**Goal 1 Statement (National Impact):** To proactively play a leading role in shaping and enabling the transformation of the Higher Education System in Qatar.

**Goal 2 Statement (Transforming Education):** To be regionally recognized for the provision of holistic education that is transformative, learner-centric, experiential, research-informed, competency-based, digitally enriched and entrepreneurial.

**Goal 3 Statement (Transforming Graduates):** To prepare graduates who are well rounded with attributes and values that maximize their impact.

**Goal 4 Statement (Transforming Research):** To excel in research, that is focused, relevant, measurable, solution oriented, impactful, collaborative, and advances knowledge and innovation.

**Goal 5 Statement (Transforming the Institute):** To be recognized as a benchmark for organizational and operational excellence, and sustainability.

**Goal 6 Statement (Transforming Engagement):** To foster effective engagement with local and international stakeholders to enrich education, strengthen research, impact socioeconomic development, and enhance visibility and image.

**Cross-Goal 7 Statement (Innovation and Transformation Enabling):** To develop and implement necessary enabling strategies, processes and capabilities for the holistic transformation of Qatar University and enable QU to maximize its national and global impact.

**Mission**
Qatar University is the national institution of higher education in Qatar. It provides high quality undergraduate and graduate programs that prepare competent graduates, destined to shape the future of Qatar. The university community has diverse and committed faculty who teach and conduct research, which addresses relevant local and regional challenges, advances knowledge, and contributes actively to addressing the needs and aspirations of society.
**New Vision:** To be regionally recognized for distinctive excellence in education and research, an institution of choice for students and scholars and a catalyst for the sustainable socio-economic development of Qatar.

**Mission**
Qatar University is the national institution of higher education in Qatar. It provides high quality undergraduate and graduate programs that prepare competent graduates, destined to shape the future of Qatar. The university community has diverse and committed faculty who teach and conduct research, which addresses relevant local and regional challenges, advances knowledge, and contributes actively to addressing the needs and aspirations of society.
Part 2 (QU Transformation Critical Components \[\rightarrow\] The Innovation Intensive Components*)

1- QU Model of Transformative Education,
2- Institutes for Enabling QU to be a catalyst for Transformation & Socio-Economic Impact in Qatar
3- Innovation & Transformation Enabling Strategies (Digital Transformation, and Entrepreneurship & Innovation)
A Spectrum of Innovation (or strategy): "Positioning QU Transformation Strategy"

- Incremental Innovation (or strategy)
- Transformative Innovation (or strategy)
- Disruptive Innovation (or strategy)

- Classical Planning Approach
- Agile Development And Execution Approach

QU Transformation Strategy
QU Transformation Component 1: QU Model of Transformative Education (digital is enabler of most of its descriptors) (e.g. Innovation Intensive model of higher education' qualification architecture, curriculum, delivery, and outputs)

Holistic Transformation in Programs Structure into a Graduate Attributes Guided Competency-Based Qualifications Framework with the Below Characters

Access  Success  Flexibility  Quality  Efficiency  National Capacity Building

Inclusive of State of the Art Education Excellence Framework with Content Knowledge, Skill, Attitude and Pedagogy Implementing the Below Descriptors

Learner Centric  Experiential  Research Informed  Competency Based  Digitally Enriched  Entrepreneurial

Within End-to-End Learner/Students Experience Framework, that Starts from School and Keep on After Graduation with the Below Experiences

Selection Experience  Admission Experience  On-Boarding Experience  Academic Experience  Campus Experience  Employability and Impact Experience  Alumni Experience  Life Long Learning Experience

Qu Smart Qualifications Framework

Qu Education Excellence Framework

Qu Students Experience Framework

From School

Distinctive Graduates

National Cadre that Competent, Entrepreneurial, and Leader

Continuous Personal Development
QU Transformation Component 2: Socio-Economic Impact Institutes/Platforms

Transformation & Socio-Economic Impact Catalyst Enabling Institutes

Qatar Society and Economy

Qatar University

QU Transformation Process for Maximizing its Role in the National Society and Economy

QU is a catalyst for socio-economic sustainable development in Qatar

Qatar Education Innovation & Transformation Institute

Qatar Innovation & Enterprise (or economic development) Institute

QU Knowledge Consulting and Advisory Group

Digital Transformation Institute

Qatar Interdisciplinary Research Innovation Institutes

QU Interface for supporting education ecosystem in Qatar

QU Interface for supporting I&E ecosystem in Qatar

QU Interface as an advisory and Think-Tank for Qatar

QU Interface for supporting National Digital Ecosystem

QU Interface Innovations, products, and solutions for National Grand Challenges

QU Transformation Component 2: Socio-Economic Impact Institutes/Platforms

Transformation & Socio-Economic Impact Catalyst Enabling Institutes

Qatar Society and Economy

Qatar University

QU Transformation Process for Maximizing its Role in the National Society and Economy

QU is a catalyst for socio-economic sustainable development in Qatar

Qatar Education Innovation & Transformation Institute

Qatar Innovation & Enterprise (or economic development) Institute

QU Knowledge Consulting and Advisory Group

Digital Transformation Institute

Qatar Interdisciplinary Research Innovation Institutes

QU Interface for supporting education ecosystem in Qatar

QU Interface for supporting I&E ecosystem in Qatar

QU Interface as an advisory and Think-Tank for Qatar

QU Interface for supporting National Digital Ecosystem

QU Interface Innovations, products, and solutions for National Grand Challenges

QU New Vision: To be regionally recognized for distinctive excellence in education and research, an institution of choice for students and scholars and a catalyst for the sustainable socio-economic development of Qatar
QU Transformation Component 3:
Innovation & Transformation Enabling Strategies: *Innovation & Entrepreneurship, and Digital Transformation*

**QU Six Strategic Goals**

- Teaching and Learning Strategy (G1 & G2)
- Students Experience Strategy (G3)
- Research & Knowledge Advancement Strategy (G4)
- Institutional Excellence Strategy (G5)
- Engagement Strategy (G6)
- Digital Transformation Strategy

**Core Strategies**

**Enabling Cross-Strategies**

Goal 7 (Cross)

Aligned with Qatar National Vision 2030
Aiming to transform Qatar into Innovation and Knowledge Based Economy

Objective 1
Objective 1
Objective 1
Objective 1
Objective X
Objective X
Objective X
Objective X
Innovation & Transformation Enabling Strategies: Digital Transformation, and Entrepreneurship & Innovation Strategies

**QU Entrepreneurship & Innovation Strategy Four Objectives**

1. Impacting National Innovation & Economy in Qatar
2. Innovation & Entrepreneurship Capabilities and Competency
3. From Innovation to New Startups and Ventures
4. Impacting National Digital Ecosystem in Qatar

**QU Digital Transformation Strategy Four Objectives**

1. Digital Transformation mindset, Culture, and Competency
2. Digital Enterprise and Smart Campus
3. Digitalizing Academic, Research, Students, Health, Strategy, and President Office Sectors
4. Innovation and Entrepreneurship as Mindset & Cultural Trait
Maximize QU Socio-Economic Impact on Qatar and Beyond

Envisioned QU

Strategic Context of QU Transformation – Putting it All Together for Maximizing QU Socio-Economic Impact (QU Visionary Response to: 2-Internal Challenges, 2- Stakeholders Perspectives, 3- International Trends, and 4- National Transformation Vision 2030)
Part 3 (QU Transformation Outputs & Next)

1- Six Main Outputs of QU Transformation Maximizing QU Socio-Economic Impact on Qatar & Beyond
2- Visualization Concept of QU Transformation Outputs
Holistic View of QU Transformation Outputs and the National and Global Impact of the University

**QU Transformation Journey Inputs**

1. Strategic & Political support
2. Transformative execution frameworks and distinctive execution action roadmaps
3. Competent execution teams, units, and emerging structures
4. Continuous strategic alignment throughout the execution phase with key internal and national stakeholders in government, society, business, and industry (alignment with visions, plans, initiatives, etc.)
5. Attracting relevant international experts known for distinctive excellence globally in the areas of QU transformation
6. Funding and resources support

**QU Transformation Journey Outputs**

**OUTPUT 1 → QU National Capacity Building Leap (Quantitative and Qualitative):** In alignment with QNV 2030 Human Capital Development Pillar, achieving a leap in maximizing access of national students to QU (including entry from schools, and unconventional groups such as professionals, married females, and military and police individuals). Achieving a quantitative leap in Qataris following STEM fields. Significantly increasing the number of Qataris on graduate studies (MSc and PhD), in particular for the domains of related directly to development and sustaining Innovation and Knowledge Based Economy/Society (iKBES) in Qatar

**OUTPUT 2 → QU Transformative Education and Graduates, and Learner-Centric Institution:** In alignment with QNV 2030 Human Capital Development Pillar, Achieving distinctive transformation in QU qualifications model, programs flexibility, university entry and graduation pathways, curriculum content and pedagogy, and end-to-end students experience. Grooming learners in the University to graduate next generation national leaders, entrepreneurs, and professionally competent cadre who will contribute to distinctive contribution to Qatar socio-economic development in line with the Four Pillars of Qatar National Vision 2030.

**OUTPUT 3 → QU Sustainable and Digital Transformation:** In alignment with national digital transformation efforts with MOTC (Ministry of transportation and communications), Increasing institutional efficiency and effectiveness, achieving holistic digital transformation in education and all QU sectors and core functions, and implementing QU Digital and Smart Campus

**OUTPUT 4 → QU Entrepreneurial and Economic Development Transformation:** In line with QNV 2030 Economic Development pillar; increasing the number of QU startups and commercialization outputs, as well as number none governmental revenue streams from QU assets and QU innovation and knowledge outputs.

**OUTPUT 5 → QU Distinctive Societal Engagement and National Think-Tank Role:** In line with QNV 2030 Societal Development Pillar, achieving a leap in QU national societal engagement and development matters (e.g. providing expert consulting and advisory services, executive life long learning programs, forming a national knowledge house for public and national policies development, maximizing the transfer of research outputs into socio-economic implementations, contribution to national digital, innovation, and entrepreneurial ecosystems, etc.). Acting as National Think-Tank through higher levels of engagement in formulating and execution of National Development Strategies (NDS) and Initiatives derived from Qatar National Vision 2030.

**OUTPUT 6 → QU International Distinction, Ranking, and State Soft Power Arm Role:** Advancing the QU ranking into the top 200 Universities. QU is participating in international movement for 21st century University transformation, and QU transformation models are exemplar for other Universities. QU develops new Qatar State Soft-Power Tools in form of educational, research, innovation, socio-economic, and political programs/initiatives that serves the general directions of the state external affairs and politics.
QU Transformation Outputs Visualization, ASU as example of a strategic roadmap...

Many activities, all actions **integrated and aligned** towards the greater **Shared Vision**...
QU Transformation Impact on QU Ranking Philosophy

• We consider the QU Transformation process as a vehicle for maximizing QU socio-economic impact.

• We believe that this by default will result in improved ranking as a by product.

• This has been the experience of other Universities like Arizona State University, where their mission aimed for maximizing socio-economic impact, and then the advanced ranking they got was a by product.