



## Coupling the exponential growth of a learning institution with the multi-staged automation of evaluations via Blue

Farah Otaki & Vinayak Pareek

Strategy and Institutional Excellence (SIE)

Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU)



جامعة محمد بن راشد  
للطب والعلوم الصحية

MOHAMMED BIN RASHID UNIVERSITY  
OF MEDICINE AND HEALTH SCIENCES

# Overview:

- ❖ Description of MBRU and DAHC
- ❖ SIE and its functions
- ❖ Journey of automating Evaluations:
  1. Pre-automation Stage
  2. Foundation Stage
  3. Optimization Stage
  4. Sustainability Stage



# Our Degree Programs

## 🏛️ College of Medicine

- 🎓 Bachelor of Medicine and Bachelor of Surgery
- 🎓 MSc. in Biomedical Sciences
- 🎓 Ph.D. in Biomedical Sciences

## 🏛️ College of Nursing and Midwifery

- 🎓 MSc. in Cardiovascular Nursing
- 🎓 MSc. in Pediatric Nursing

## 🏛️ Hamdan Bin Mohammed College of Dental Medicine

- 🎓 MSc. in Endodontics
- 🎓 MSc. in Pediatric Dentistry
- 🎓 MSc. in Periodontology
- 🎓 MSc. In Prosthodontics
- 🎓 MSc. in Orthodontics



# Postgraduate Medical Education



## Dental

Training site: Dubai Dental Hospital

Endodontic Residency Program \*

Dental Internship Program



مستشفى  
دبي للأسنان  
Dubai Dental  
HOSPITAL



## Medical \*

- Pediatric Residency Program
- Child and Adolescent Psychiatry Fellowship Program
- Pediatric Neurology Residency Program
- Pediatrics Otolaryngology Fellowship Program
- Pediatric Surgery Fellowship Program
- Pediatric Orthopedic Surgery Fellowship Program



Al Jalila Children's  
Specialty Hospital

الجليلة للأطفال  
المستشفى التخصصي

\* Accredited by the Saudi Commission for Health Specialties and run in academic partnership with MBRU

# Our Faculty and Staff

**86**  
Faculty

**34**  
Nationalities



**23%**

UAE Nationals



**113**  
Staff

**52%**

Women



\* Numbers are for AY 2021-2022





# 430 Adjunct Faculty\*



\*primarily for the MBBS program

\* Numbers are for AY 21-22



Academic Year:  
2021-2022

**420**

Total Learners



**43**

Nationalities



**34%**

UAE Nationals



**76%**

Women





تبركت  
دفعة خليفة  
Congratulations  
Class Of Khalifa

# Our Alumni



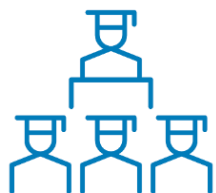
# 237

Total number of Alumni in AY 2021/2022\*



# 69%

UAE Nationals



# 110

New Graduates in AY 2021/2022\*



# 24

Nationalities





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# 'Class of Khalifa' 2022



# 110

Graduates

HBMCDM



# 54

MScBMS



# 6

MBBS



# 40

CONM



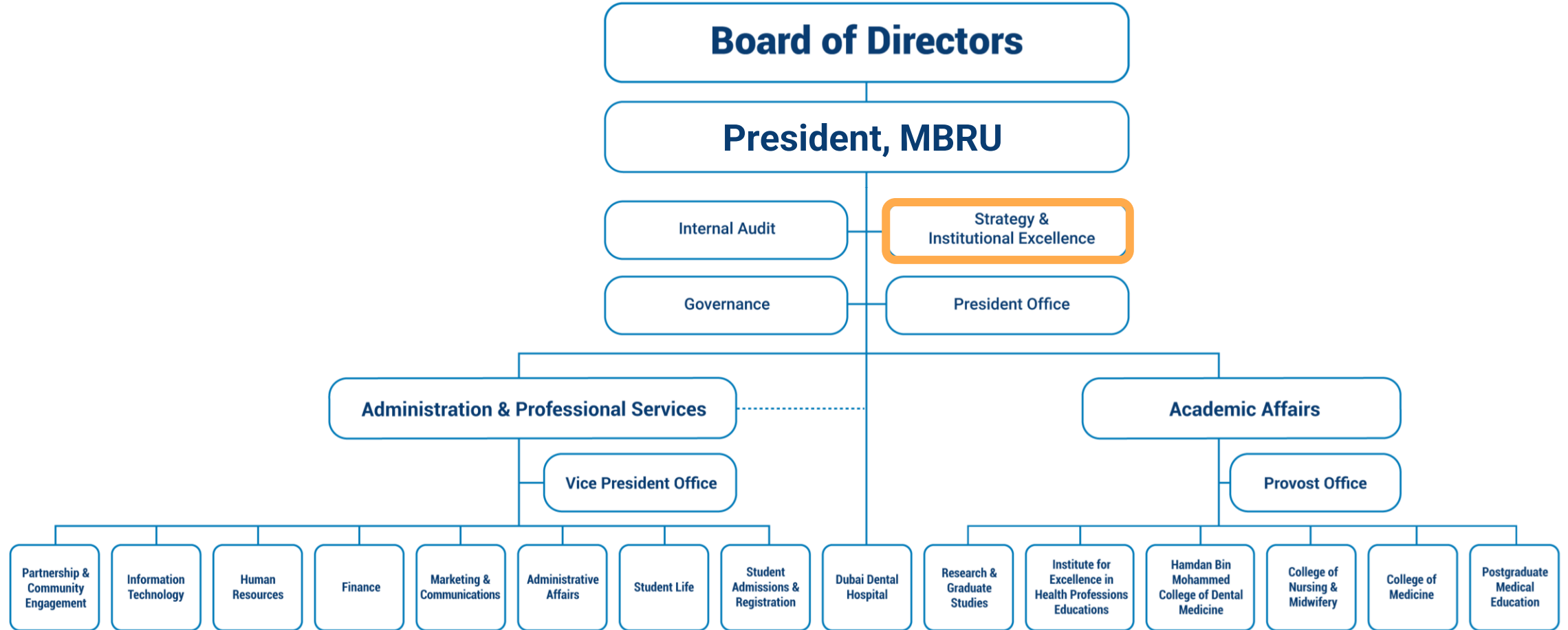
# 5

AJCH Fellowship  
program

# 3



# ORGANIZATIONAL STRUCTURE



RISE



**CWYWF**



# RISE Strategy 2022-2027



## Pillar 1 Education

### Reimagine Education

Develop a future ready curriculum by fostering innovation in teaching and learning.

### Impactful Reputation Building

Raise rankings, accreditations, and recognitions globally as an Integrated Academic Health System.

### Sustainable Portfolio of Programs

Launch diverse, unique, and lifelong learning opportunities that address current and future healthcare needs.

### Excellence in Learner Outcomes

Enhance learner success through a supportive and engaging learning environment.



## Pillar 2 Research

### Reimagine Research Partnerships

Increase collaborations, networks, and partnerships to advance research in health.

### Impactful Research Outcomes

Encourage research projects that are nationally aligned and address key health and education priorities.

### Sustainable Research Pipeline

Create a supportive research culture and invest in an ecosystem of innovation.

### Excellence in Applied Research

Emphasize patient-centered translational research for the benefit of humanity.



## Pillar 3 Care

### Reimagine Healthcare Journey

Improve patient experience and outcomes through research, data, and feedback.

### Impactful Community Projects

Expand community-based flagship projects for health awareness and prevention.

### Sustainable Alliances

Strengthen relationships with key stakeholders and leverage mutually beneficial opportunities.

### Excellence in Community Engagement

Promote inclusive outreach activities and service to improve population health.

## Enablers



### Reimagine Workforce Experience

Grow, manage, and inspire local and global talent.



### Impactful infrastructure

Invest in innovative digital and physical infrastructure to advance health education, research, and enterprise.



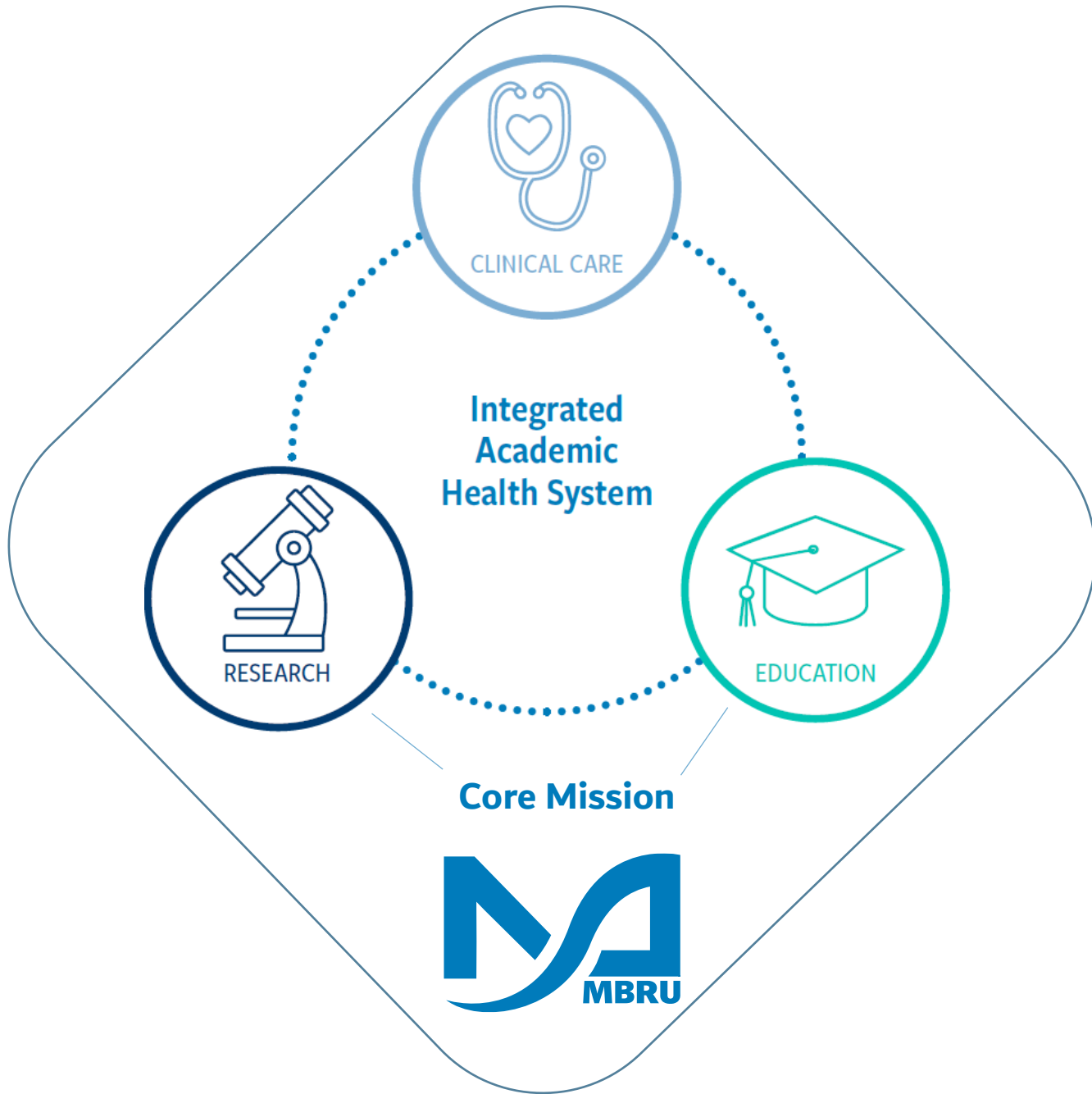
### Sustainable Advancement Model

Raise endowments, grants, and diverse revenue streams to ensure financial resilience.



### Excellence in Operations

Drive transformations through effective, innovative, and agile processes and systems.



مؤسسة دبي الصحية الأكاديمية  
Dubai Academic Health Corporation

# Dubai Academic Health Corporation: Vision, Mission and Values



## VISION

Together We Advance  
Health For Humanity



## MISSION

We serve to impact lives and shape the future of health through the integration of care, learning and discovery



## VALUES

**Primary Value**

**Patient First**

Respect

Excellence

Teamwork

Integrity

Empathy

## About DAHC



The Dubai Academic Health Corporation (DAHC) is a public entity, established as per the [Law \(13\) of 2021](#) issued by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.

### DAHC is comprised of the following entities:

#### ○ **Clinical Enterprise**

- Rashid Hospital
- Dubai Hospital
- Latifa Hospital
- Hatta Hospital
- Primary Health Centers
- Specialized Centers
- Medical Fitness Centers
- Al Jalila Children's Speciality Hospital
- Dubai Dental Hospital

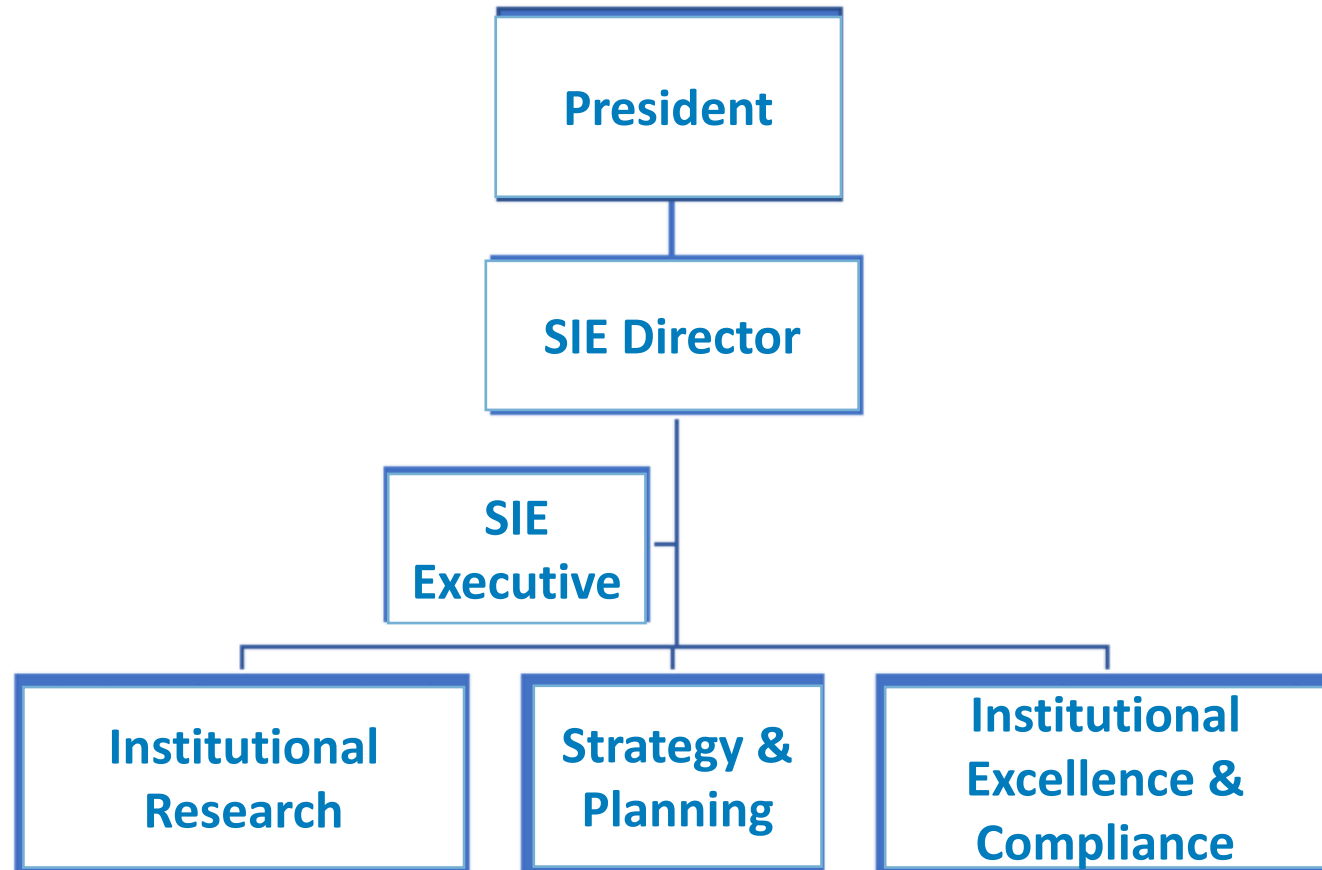
#### ○ **Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU)**

- Hamdan Bin Mohammed College of Dental Medicine
- College of Medicine
- College of Nursing and Midwifery
- Research and Graduate Studies
- Postgraduate Medical Education

#### ○ **Al Jalila Foundation**



# SIE



# Interlinked Functions of SIE

Accreditations  
and Recognition

External  
Reporting

Policies and  
Procedures

Ratings and  
Ranking

Benchmarking

Quality  
Assurance

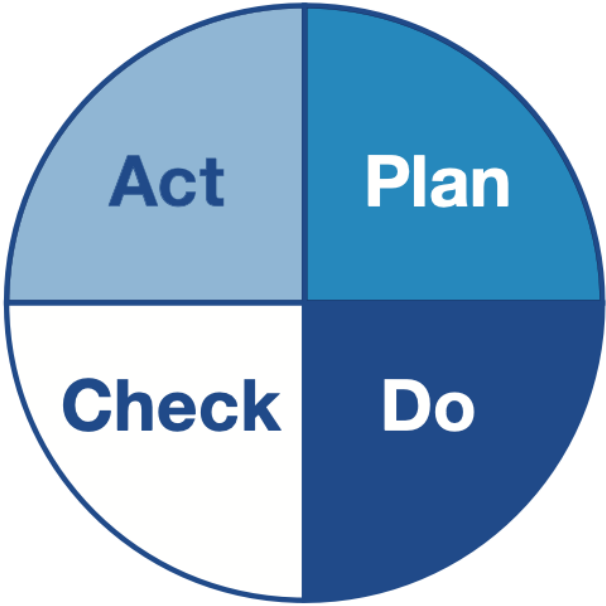
Reputation and  
Visibility

Strategic  
Planning

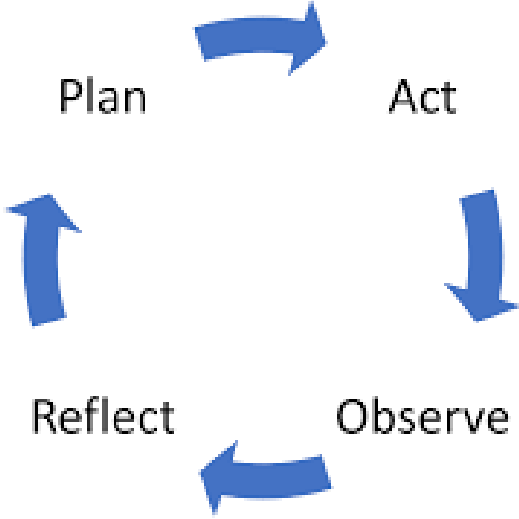
Institutional  
Research



# Institutional Research at MBRU

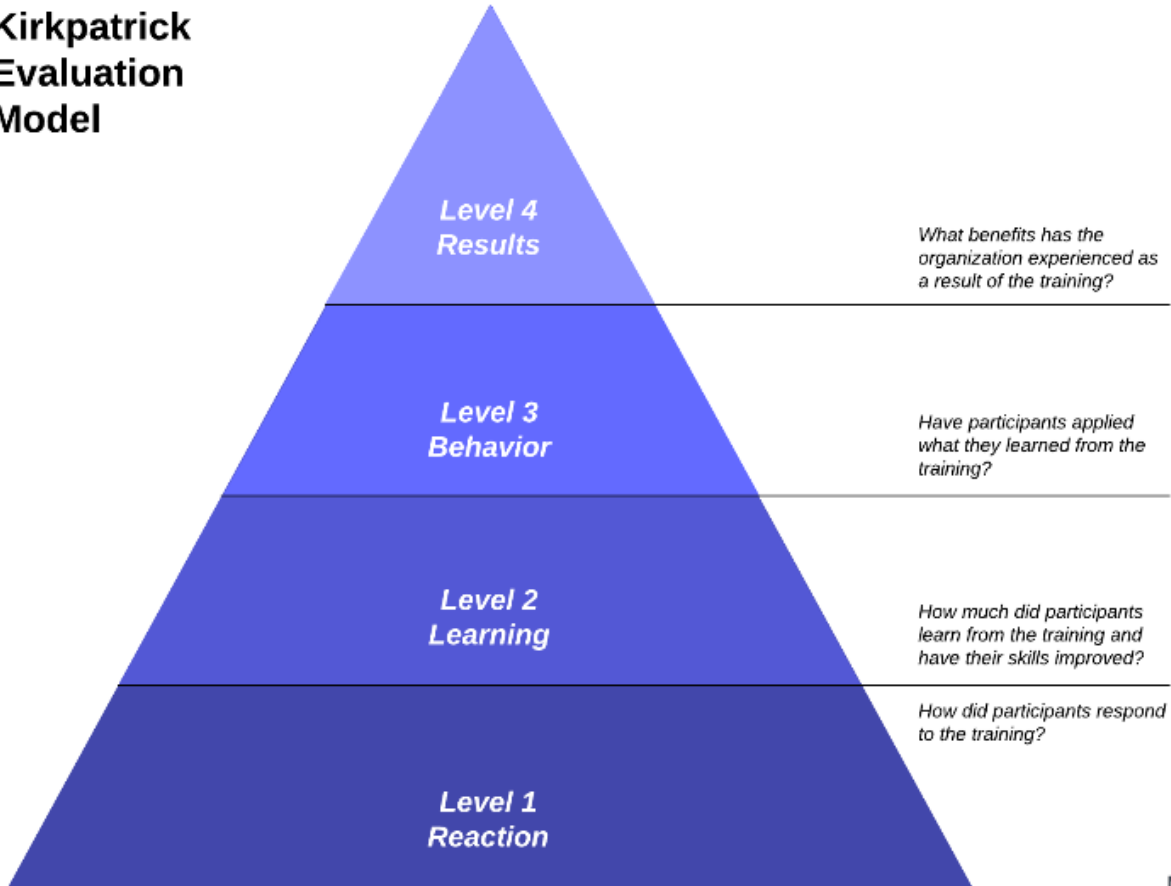


PDCA Cycle



Action Research

## Kirkpatrick Evaluation Model



Made in  
Lucidchart

# Evaluations at MBRU

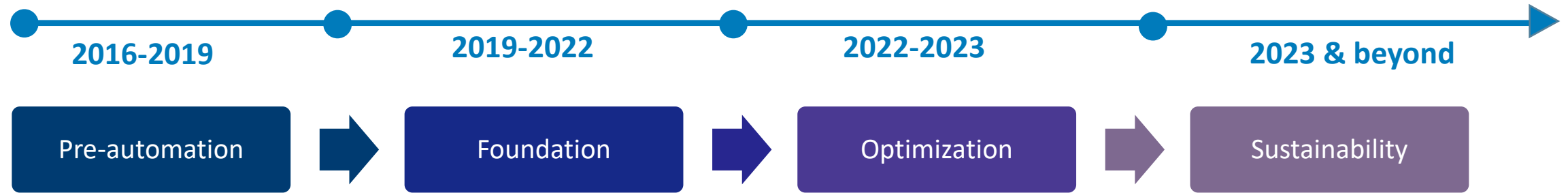
- A set of ongoing activities which form a cornerstone in MBRU's Institutional Research function
- Kirkpatrick Level 1: Capturing perception of stakeholders of learning experiences at/ in collaboration with MBRU



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# Evaluations at MBRU

To maximize the value of Blue and its scalability, MBRU adapted a multi-staged approach to automating Evaluations



# Stage I: Pre-automation

- 3 Academic Years: 2016-2017 through 2018-2019
- Outline the student journey
- Developing a homegrown Quality Assurance and Institutional Effectiveness framework



## Annex 8: Quality Assurance Manual

The institution develops and maintains a *Quality Assurance Manual* which includes the following:

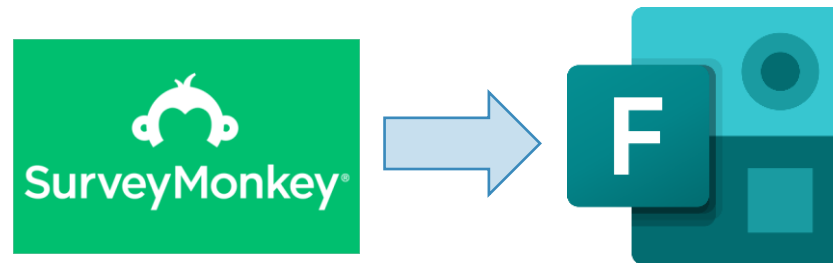
- a. the organization of the institution's Quality Assurance unit and its place on the organization chart;
- b. the roles of the Quality Assurance unit in strategic planning, operational planning and preparing annual reports;
- c. the role of the unit in ensuring that the institution, and individual program and operational units, conduct Self-Studies;
- d. the timetable for the periodic review and update of the mission, vision and strategic plans for the institution;
- e. KPIs to evaluate the performance of all units and services;
- f. the processes and established timetables used to evaluate all programs, courses, processes and services;
- g. the instruments to be used and the type of evidence to be collected and analysed;
- h. the entities responsible for each aspect of evaluation and quality assurance;
- i. the process for reviewing the results of evaluation in the development of approved action plans that include projections of required budgets and resources;
- j. the process for disseminating the results of evaluation, including what will be disseminated and to whom;
- k. the process for monitoring the implementation of improvement plans;
- l. provisions to ensure that the quality assurance mechanisms apply to branch campuses, joint degree programs and other collaborative arrangements, so that they are in compliance with policies and procedures of the UAE institution, the *SIL* and the *SPA* ;
- m. the process of benchmarking its quality and performance against best local and international practices.



# Stage I: Pre-automation

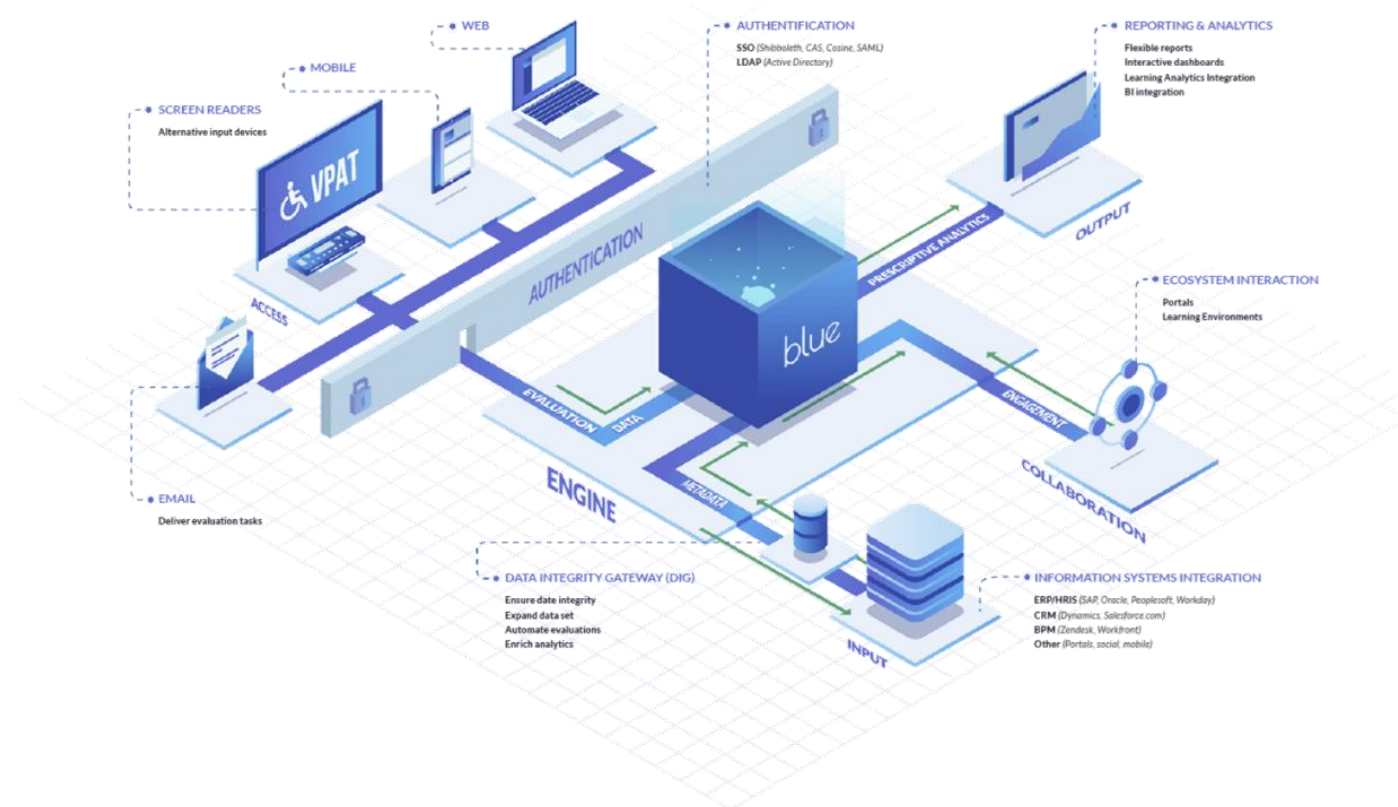
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- Crafting of processes around Evaluations
- Setting the stage for a sustainable collaboration between Strategy and Institutional Excellence (SIE) and Information Technology (IT) units within MBRU
- Establishing the need for automation



# Stage II: Foundation

- 3 Academic Years: 2019-2020 through 2021-2022
- Building rapport with the Blue Professional Services team
- Determining → addressing business/evaluation needs
- Becoming active members of Bluenotes community
- Evaluations during COVID-19





## Stage III: Optimization

- Academic Year 2022-2023
- SIE, IT, and Blue Professional Services triad
- Reflecting on a 3-year span of system utilization and on the evolved business/evaluation needs
- Benchmarking and Knowledge Sharing (in relation to Evaluations) with local and international universities
- Upgrading to Blue 8
- Further customizing the solutions and upscaling the system utilization
- Closing the loop with “Your Voice is Heard”



 • Your **VOICE**  
is **HEARD**

Strategy and Institutional Excellence team

Reflection on MSc in Dentistry Courses and Instructors Evaluation

# Common Courses



You said:	We did:
<ul style="list-style-type: none"><li>• Not all the objectives were covered through the CC510 course content</li></ul>	<ul style="list-style-type: none"><li>• CC510: We revised the course content of the Anatomy topics as stated in CLO1: “...the anatomical features of the head and neck region, and illustrate relevance to clinical practice...”</li></ul>
<ul style="list-style-type: none"><li>• The CC502 course objectives were not clearly communicated</li></ul>	<ul style="list-style-type: none"><li>• CC502: We better articulated the course objectives, showing clear linkage with the PLOs</li></ul>
<ul style="list-style-type: none"><li>• The CC503 grading criteria was not communicated upfront</li></ul>	<ul style="list-style-type: none"><li>• CC503: We shared the course grading criteria, that was approved by the curriculum committee, with the residents at the beginning of the semester</li></ul>
<ul style="list-style-type: none"><li>• The relevance of the content of the CC504 course (Molecular Biology), to the respective specialties, is not clear</li></ul>	<ul style="list-style-type: none"><li>• CC504: The course (Molecular Biology), along with another course :“Innovation, entrepreneurship, and leadership in dentistry“, will become electives. The latter course will be piloted next semester and offered in the academic year 2022-2023.</li></ul>

# Stage III: Optimization

- September 2022 through April 2023
- Key outputs:
  - Reorganization of projects and reports (into themes and categories)
  - **Clerkship Evaluation: Phase III MBBS and rotation-based internship**
  - Consolidation of evaluation:
    - “Stacked” program: MSc and PhD in BMS
    - Diverse courses of same programs (MSc in Dentistry)
  - Macro program-level reports
  - Hierarchy

## My Projects

Search

Category: All Status: All Language: All Show: Current Sort by Project

10 of 189 projects found 1 Go << < 1 2 3

0 project Selected on 189 projects

Al Jalila Children's Specialty Hospital Residency Electronic Multiple Mini Interviews- Administrator Feedback Form

End Date: Fri, Dec 31, 2021

Other Evaluations 2020-2021

Al Jalila Children's Specialty Hospital Residency Electronic Multiple Mini Interviews- Applicant Feedback Form

Category	Average
ing (General):	4.21
nce Learning):	4.18
nstructor Rating:	4.25

Item	Default	Identifier	Title
			Clinical
			Please consider your views of course: [SSNAME], as a whole.
	*		[SSNAME]- Course Evaluation:
	*		What could be improved in course: [SSNAME]?
			Page Break
			[CSFN] [CSLN]:
	*		[CSFN] [CSLN] - Instructor Evaluation:
			[CSFN] [CSLN] - List two teaching strengths of the instructor. Consider aspects such as: student interaction, attitude, values, and mentoring approach.
			[CSFN] [CSLN] - What practical suggestion do you have for the instructor to improve the overall his/her teaching approach?
			Didactic
			Please consider your views of course: [SSNAME], as a whole.
	*		[SSNAME]- Course Evaluation:
	*		[SSNAME]- Additional Questions:
	*		What did you enjoy most about course: [SSNAME]?
	*		What could be improved in course: [SSNAME]?
			Research
			Please consider your views of course: [SSNAME], as a whole.
	*		Evaluate your overall research experience, thus far, as part of the program.
			Select your primary advisor:
			Page Break
	*		Evaluation on Research Mentoring:
	*		In my research project, what helped me learn the most was:

# Stage III: Optimization

- Success factors:
  - Effective teamwork
  - Maintaining the momentum: Standing weekly meeting
  - Regular engagement of end-users (customization)
- Unexpected outputs (within MBRU):
  - Opening new communication channels and reinforcing existing ones
  - Paving the way for new processes
  - Identifying new business/ evaluation needs



# Stage III: Optimization



Required data inserted directly into blue



SIS (students, courses, & instructors)

Rotation Timetable



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SIS (students, courses, & instructors) + Course Sections = Rotations



# Stage IV: Sustainability

Academic Year 2023-  
2024 onwards...



Trend analysis



Decentralization of Evaluations: cross-departmental assignments of Blue system administrators (upskilling)



Documents management

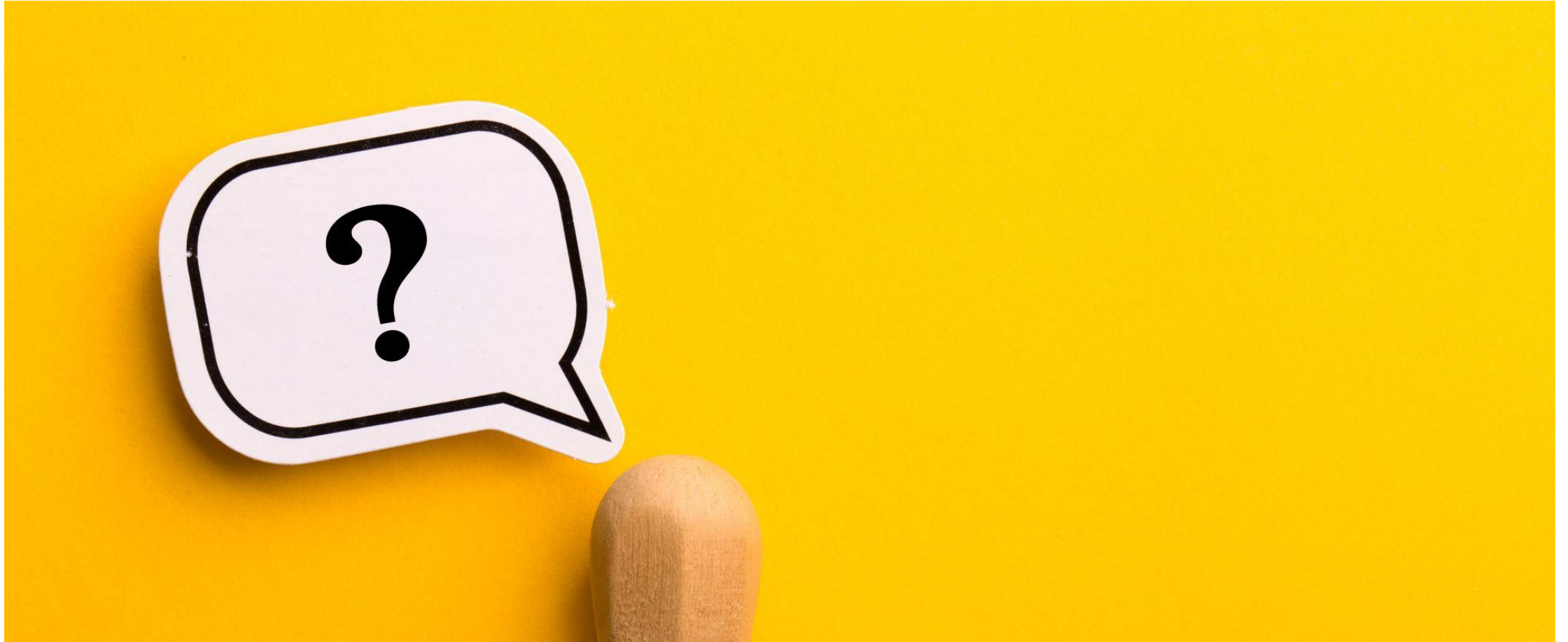


Maximize short- and long-term value for all relevant stakeholders (institutional development and knowledge sharing)



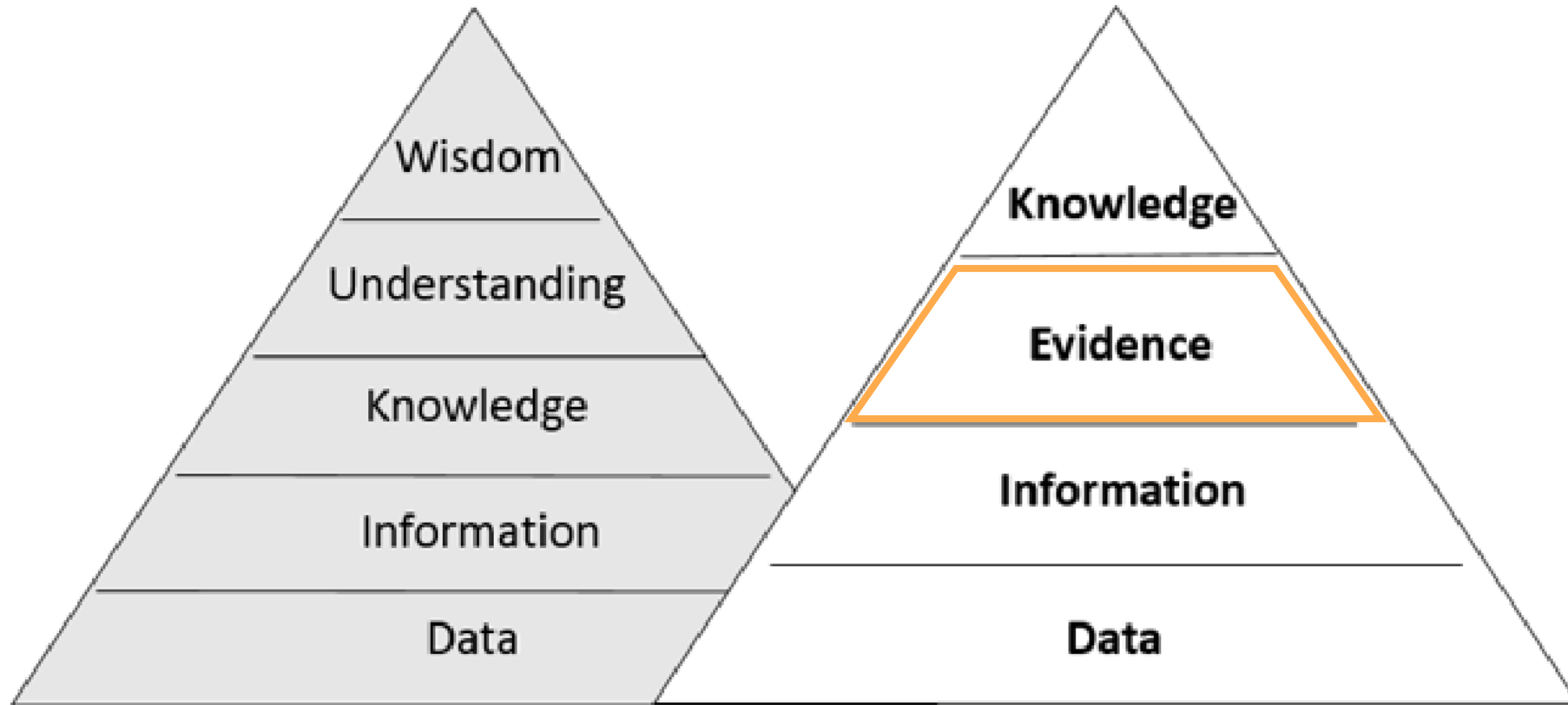
Use Blue to strengthen links across SIE functions

# What's Next?





# The Big Picture



# Layers of Evidence and Decision Making

Course Level

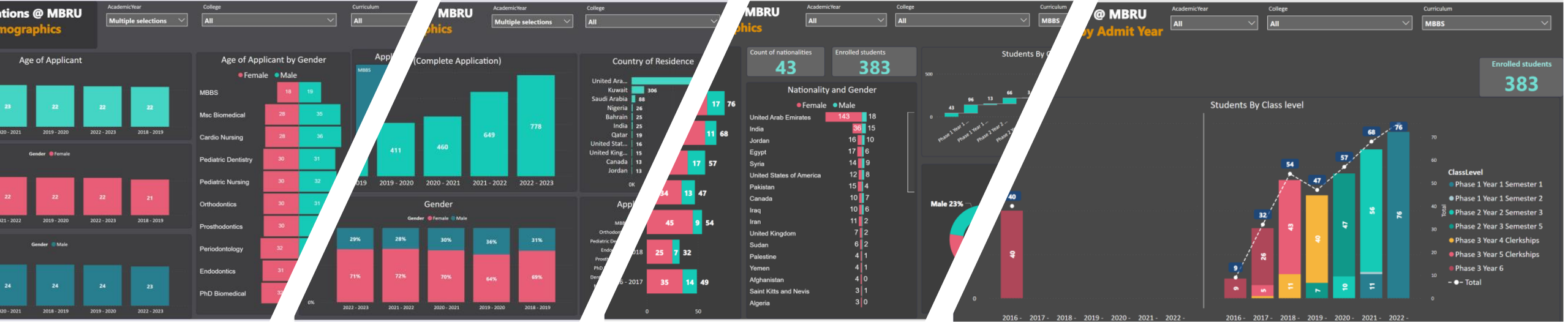
Program level

College Level

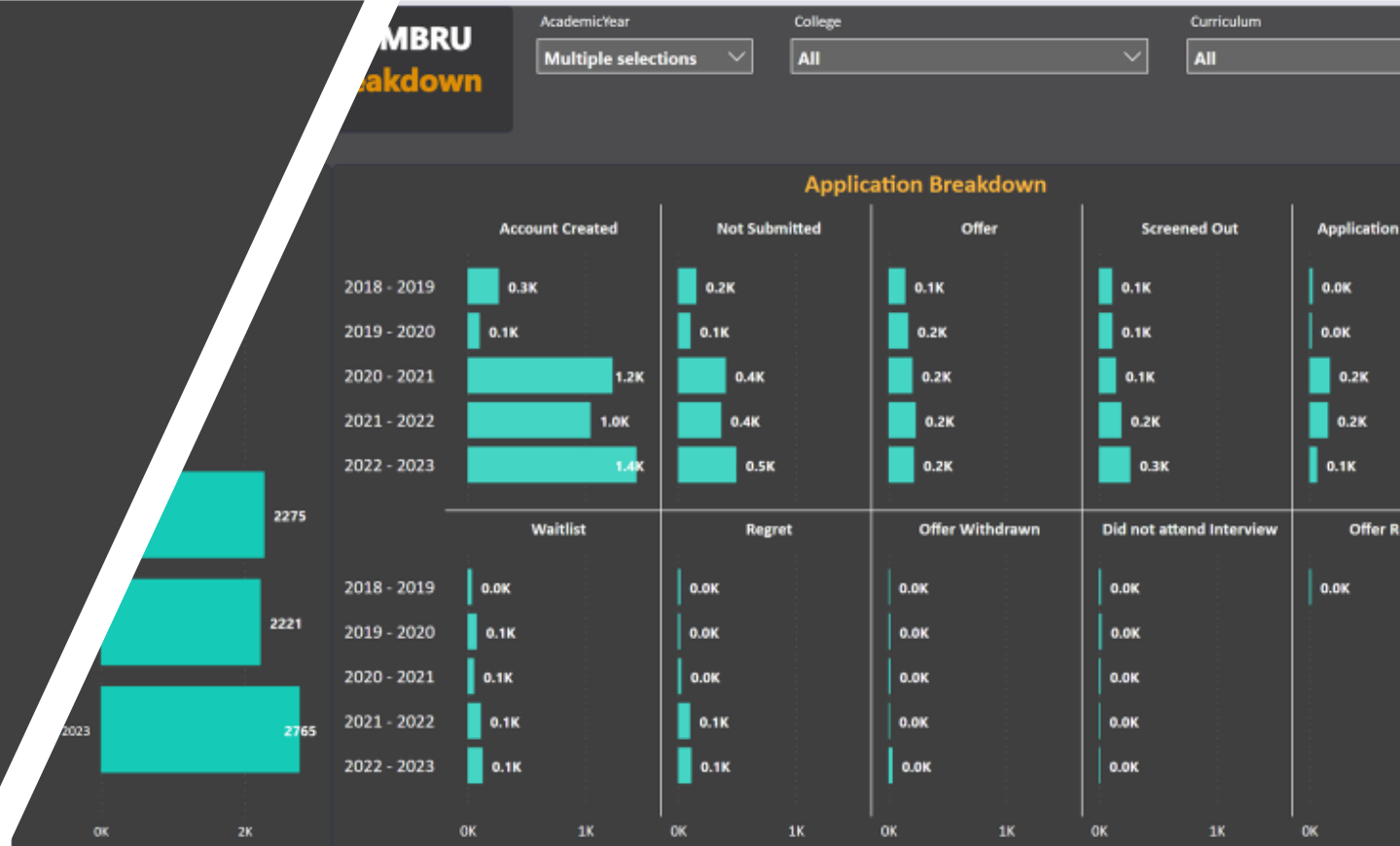
University level

Health System Level






A data driven culture



# Course Level – Course Coordinators

## Course Evaluations on a 5 Point Likert Scale

**Problem with Assessments**

	19-20	20-21	21-22		22-23
Q1	4.2	4.2	4.2		4.2
Q2	4.3	4.2	4.3		4.3
Q3	3.9	3.3	3.4	<b>Interventions</b>  <b>Teaching Aids</b> <b>Peer Support</b> <b>Office Hours</b> <b>Feedback</b> <b>Practice Exams</b>	4.0
Q4	3.6	3.8	3.7		4.1
Q5	4.3	4.3	4.3		4.3
Q6	4.4	4.3	4.4		4.4
Q7	4.0	4.0	4.1		4.1
Q8	4.1	4.1	4.0	4.0	
Q9	4.0	4.0	4.1	4.1	
Q10	4.0	4.0	4.0	3.6	



# Program Level – Program Chairs

**Problem with Classroom Engagement**

	Q1	Q2	Q3	Q4	Q5	Q6	Q6	Q7	Q8	Q9	Q10
Course 1	4.0	4.1	4.2	3.3	3.3	4.0	4.1	4.2	4.0	3.9	4.1
Course 2	4.2	4.3	4.0	3.7	3.7	4.2	4.3	4.0	4.0	3.9	4.3
Course 3	4.0	3.9	4.1	4.0	4.0	4.0	3.9	4.1	4.0	3.9	4.1
Course 4	4.0	4.1	4.2	3.8	3.8	4.0	3.9	4.0	3.9	4.1	4.0
Course 5	4.2	4.3	4.0	3.3	3.3	4.0	4.1	4.2	4.2	4.3	4.0



# College Level – Dean



Indicator	Formula	Endodontics	Pediatric Dentistry	Periodontics	Prosthodontics	Orthodontics	Overall
Course Evaluation: Didactic average rating (fall*)	Average score on all questions for the didactic learning track	4.18 (84%)	4.16 (83%)	4.41 (88%)	3.91 (78%)	4.55 (91%)	4.24 (85%)
Course Evaluation: Didactic average rating (Spring*)	Average score on all questions for the didactic learning track	4.25 (85%)	4.60 (92%)	4.13 (83%)	3.76 (75%)	4.28 (86%)	4.20 (84%)
Course Evaluation: Clinical average rating (fall*)	Average score on all questions for the clinical learning track	4.18 (84%)	4.75 (95%)	4.88 (98%)	4.28 (86%)	4.66 (93%)	4.55 (91%)
Course Evaluation: Clinical average rating (Spring*)	Average score on all questions for the clinical learning track	4.47 (89%)	4.91 (98%)	4.88 (98%)	3.80 (76%)	4.34 (87%)	4.48 (90%)
Course Evaluation: Research average rating (fall*)	Average score on all questions for the research learning track	4.42 (88%)	4.20 (84%)	4.27 (85%)	-	4.64 (93%)	4.38 (88%)
Course Evaluation: Research average rating (Spring*)	Average score on all questions for the research learning track	4.62 (92%)	4.79 (96%)	4.41 (88%)	4.30 (86%)	4.62 (92%)	4.55 (91%)

# Institutional Level – Provost



Indicator	Formula	MBBS	PHD	Biomedical (Non - Thesis)	CoNM Cardio- vascular	CoNM Pediatric	Endo- dontics	Pediatric Dentistry	Perio- dontics	Prosthodontics	Orthodontics	Overall
<b>Course Evaluations: average rating (fall*)</b>	Average score on all questions for programs' courses	4.16 (83%)	4.26 (85%)	4.78 (96%)	4.79 (96%)	4.83 (97%)	4.08 (82%)	4.27 (85%)	4.46 (89%)	<b>3.98</b> <b>(80%)</b>	4.60 (92%)	4.42 (88%)
<b>Course Evaluations: average rating (Spring*)</b>	Average score on all questions for programs' courses	<b>3.77</b> <b>(75%)</b>	4.20 (84%)	4.36 (87%)	4.53 (91%)	4.64 (93%)	4.24 (85%)	4.65 (93%)	4.27 (85%)	<b>3.76</b> <b>(75%)</b>	4.27 (85%)	4.27 (85%)
<b>Instructor Evaluation: average rating (fall*)</b>	Average score for all instructors teaching programs' courses	4.21 (84%)	4.27 (85%)	5 (100%)	4.8 (96%)	4.97 (99%)	4.34 (87%)	4.77 (95%)	4.94 (99%)	4.28 (86%)	4.61 (92%)	4.62 (92%)
<b>Instructor Evaluation: average rating (Spring*)</b>	Average score for all instructors teaching programs' courses	<b>3.73</b> <b>(75%)</b>	4.32 (86%)	4.65 (93%)	4.52 (90%)	4.71 (94%)	4.56 (91%)	4.93 (99%)	4.90 (98%)	<b>3.82</b> <b>(76%)</b>	4.37 (87%)	4.45 (89%)
<b>Distance Learning Evaluation: average rating (fall*)</b>	Average score on all questions for distance learning	4.14 (83%)	-	4.79 (96%)	4.67 (93%)	4.83 (97%)	-	-	-	-	-	4.61 (92%)
<b>Distance Learning Evaluation: average rating (Spring*)</b>	Average score on all questions for distance learning	<b>3.90</b> <b>(78%)</b>	4.10 (82%)	4.53 (91%)	4.33 (87%)	4.67 (93%)	-	-	-	-	-	4.31 (86%)
<b>Course and Instructor Evaluations: average rating AY 2021-2022</b>	Average score on all questions for both semesters	<b>3.99</b>	<b>4.23</b>	<b>4.69</b>	<b>4.61</b>	<b>4.78</b>	<b>4.31</b>	<b>4.66</b>	<b>4.64</b>	<b>3.96</b>	<b>4.46</b>	<b>4.45</b>



# RISE Strategy 2022-2027



## Pillar 1 Education

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### Impactful Reputation Building

Raise rankings, accreditations, and recognitions globally as an Integrated Academic Health System.

### Sustainable Portfolio of Programs

Launch diverse, unique, and lifelong learning opportunities that address current and future healthcare needs.

### Excellence in Learner Outcomes

Enhance learner success through a supportive and engaging learning environment.



## Pillar 2 Research

### Reimagine Research Partnerships

Increase collaborations, networks, and partnerships to advance research in health.

### Impactful Research Outcomes

Encourage research projects that are nationally aligned and address key health and education priorities.

### Sustainable Research Pipeline

Create a supportive research culture and invest in an ecosystem of innovation.

### Excellence in Applied Research

Emphasize patient-centered translational research for the benefit of humanity.



## Pillar 3 Care

### Reimagine Healthcare Journey

Improve patient experience and outcomes through research, data, and feedback.

### Impactful Community Projects

Expand community-based flagship projects for health awareness and prevention.

### Sustainable Alliances

Strengthen relationships with key stakeholders and leverage mutually beneficial opportunities.

### Excellence in Community Engagement

Promote inclusive outreach activities and service to improve population health.

## Enablers



### Reimagine Workforce Experience

Grow, manage, and inspire local and global talent.



### Impactful infrastructure

Invest in innovative digital and physical infrastructure to advance health education, research, and enterprise.



### Sustainable Advancement Model

Raise endowments, grants, and diverse revenue streams to ensure financial resilience.



### Excellence in Operations

Drive transformations through effective, innovative, and agile processes and systems.



# Indicators based on Feedback – on the CEO Dashboard



## Indicators

### Reimagine Education

Multidisciplinary courses  
**Learner satisfaction**  
Learner/Staff ratio

### Impactful Reputation Building

**CHEDS rating**  
Global recognitions  
QS rating and ranking

### Sustainable Portfolio of Programs

Number of learners  
Number of trained professionals  
Number and type of programs

### Excellence in Learner Outcomes

Graduation rate  
Employability rates  
Retention rate

## Indicators

### Reimagine Research Partnerships

Collaborations with top ranked Org.  
Research Investment from Partners

### Impactful Research Outcomes

Citations  
IP  
Awards and Recognitions

### Sustainable Research Pipeline

Research Productivity  
Research Funding  
Centers of Excellence

### Excellence in Applied Research

Patient based research projects  
Commercialization/ Start Ups  
Adjunct Researchers

## Indicators

### Reimagine Healthcare Journey

Improvement in patient outcomes  
**Patient Experience**

### Impactful Community Projects

Number of MBRU Flagship Projects  
Number of people served

### Sustainable Alliances

**Stakeholder Satisfaction**  
Joint Projects & initiatives

### Excellence in Community Engagement

Volunteering Hours  
Giving/ Philanthropy & Impact

## Indicators

### Reimagine Workforce Experience

**Workforce Satisfaction**  
Workforce retention  
Emiratization

### Impactful learning infrastructure

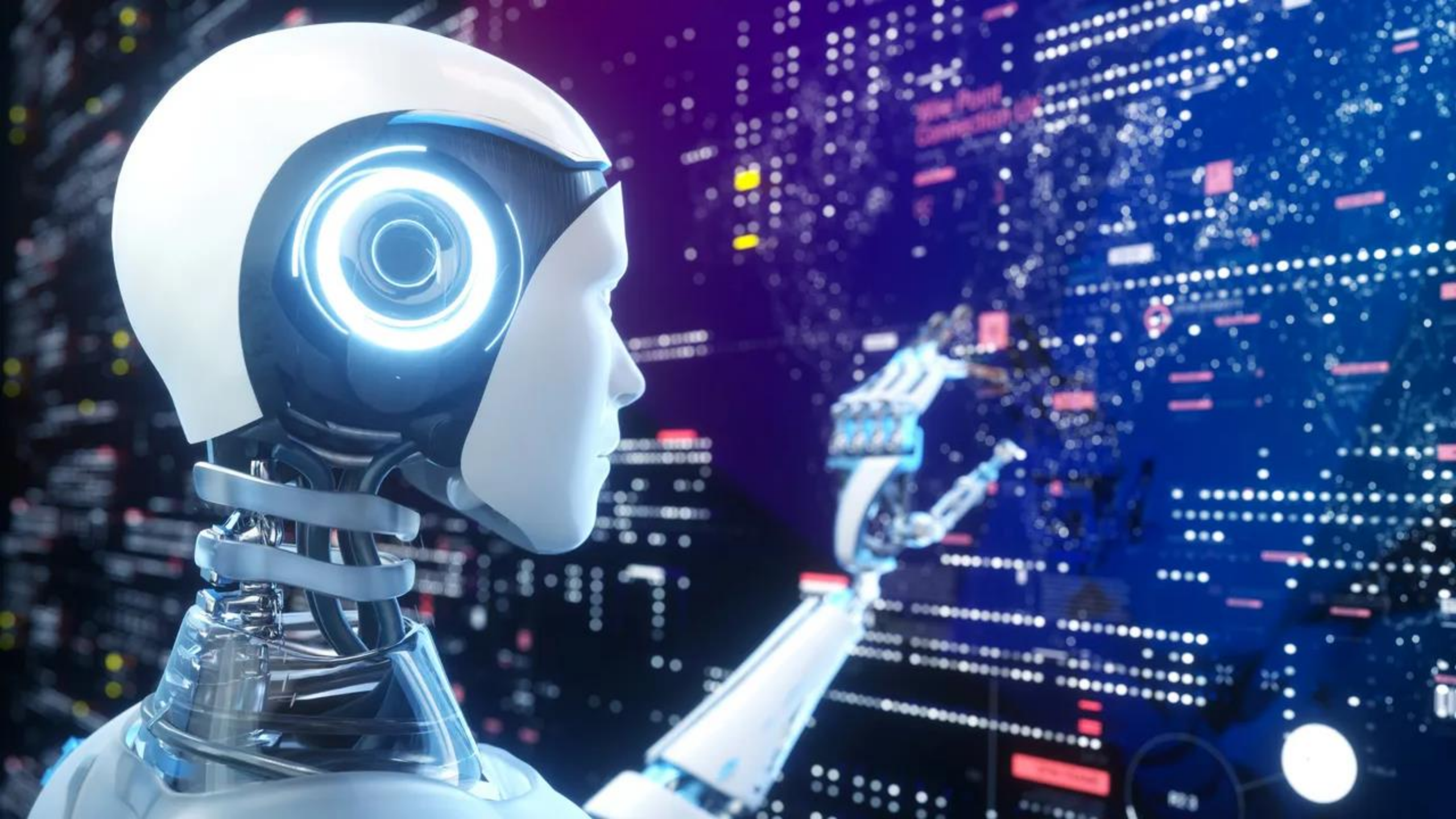
**Satisfaction with Facilities**  
Asset Utilization Rates

### Sustainable Advancement Model

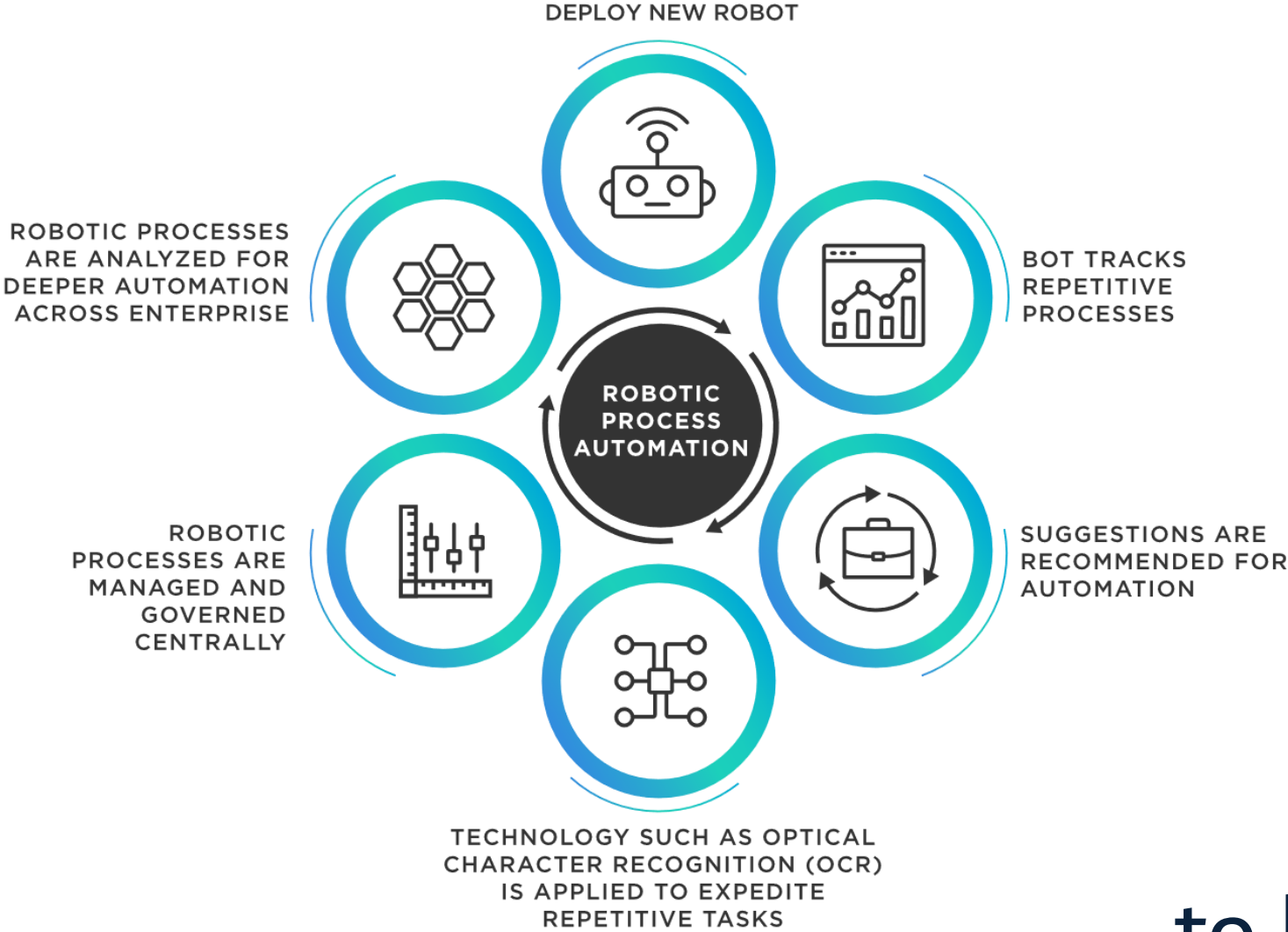
Total Endowments  
Non tuition Revenue  
Gross Margin

### Excellence in Operations

Cost Savings  
Smart Processes



# For next time ...



...to be continued

# Challenges for a changing system

Speed of Change Internally

Clinicians' vs Traditional Faculty

Benchmarking externally

Keeping up with learner expectations – every cohort is different

Retrospective evaluations – midterm vs end of semester

Manual Work and Value addition

Survey Fatigue and Response rate

Documenting and Presenting Evidence of Change to learners

Learning and teaching Modality: Clinical education – “Does one size fit all ?”

Consequentiality : Learners (Mandate) / Faculty (Performance)

Managing outliers

VFM

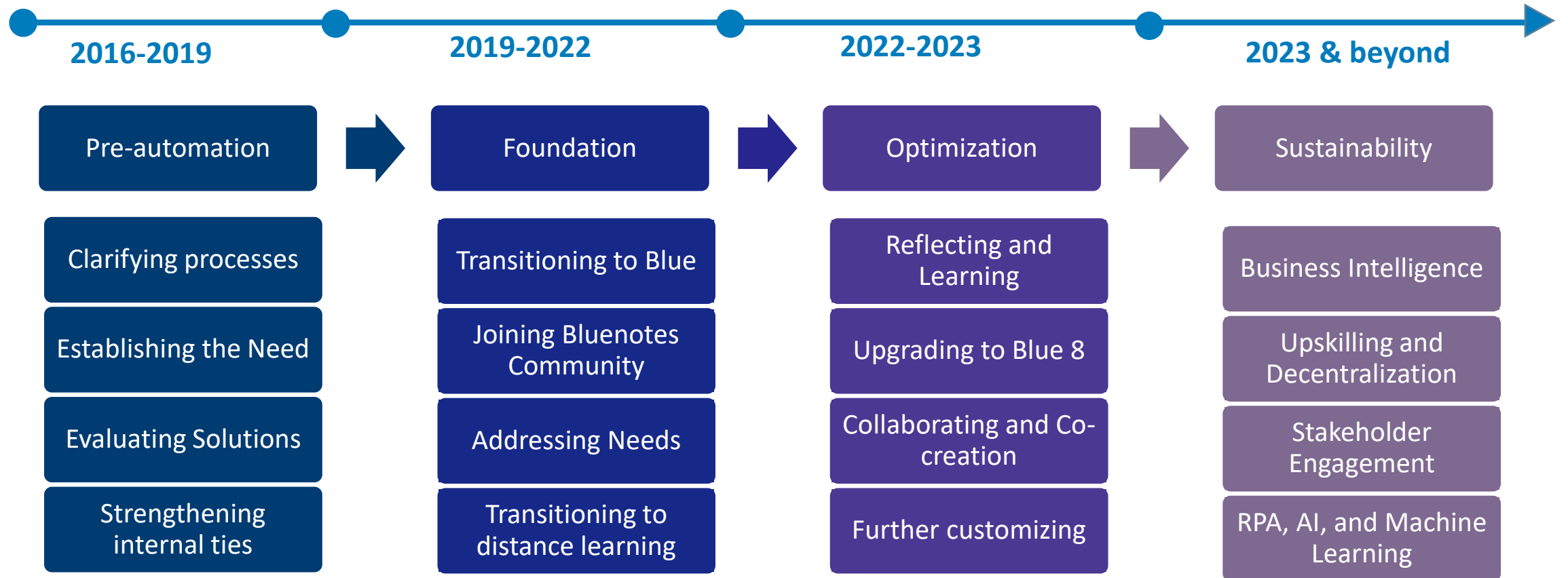
Accepting SWNBFS



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# Conclusion





# THANK YOU!

Reflections... Questions and Answers