



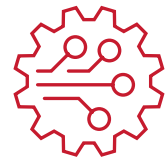
# Saudi Electronic University's Approach to Students, Faculty and Staff's Feedback

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SEU's Vice President of Planning, Development and Quality  
Riyadh, Kingdom of Saudi Arabia



# Content



Saudi Electronic  
University  
at a glance



SEU's Approach to  
Students, Faculty  
and Staff's Feedback



Machine Learning  
Platform



الجامعة السعودية الإلكترونية  
SAUDI ELECTRONIC UNIVERSITY  
2011-1432



# Saudi Electronic University at a glance



Saudi Electronic University (SEU) was launched on :2011

## The University awards :



**Bachelor's**



**graduate  
studies**

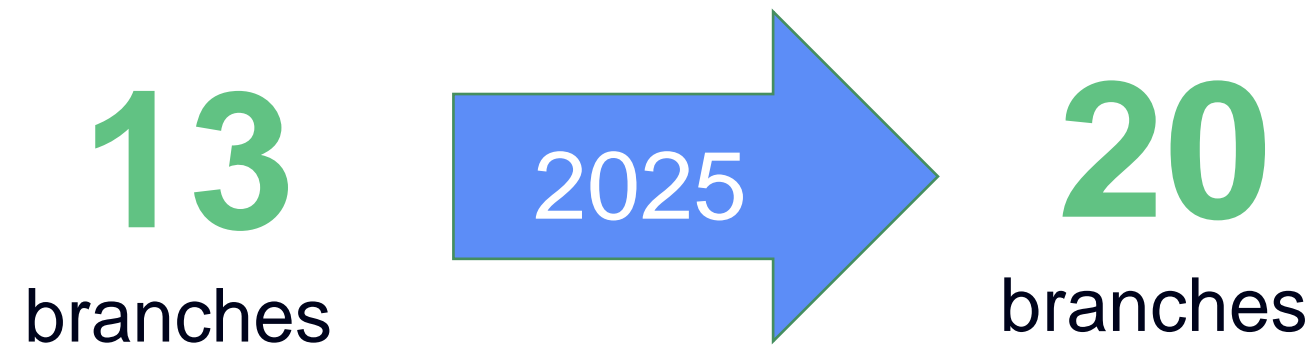


**life-long  
education**

Saudi Electronic University (SEU) was launched on :2011

## The university includes four colleges

- College of Administration and Finance Sciences
- College of Computer and Informatics
- College of Health Sciences
- College of Science and Theoretical Studies.



Best education models

Pioneer knowledge in cooperation with universities

long-life learning

# The University in Numbers



Colleges	Branches	Launched Year	<b>Active Students</b> 
4	13	2011	
Programs	Administrative Staff	Active Student	
19	791	37857	
Labs	Faculty	Total Graduates	
45	1057	9236	

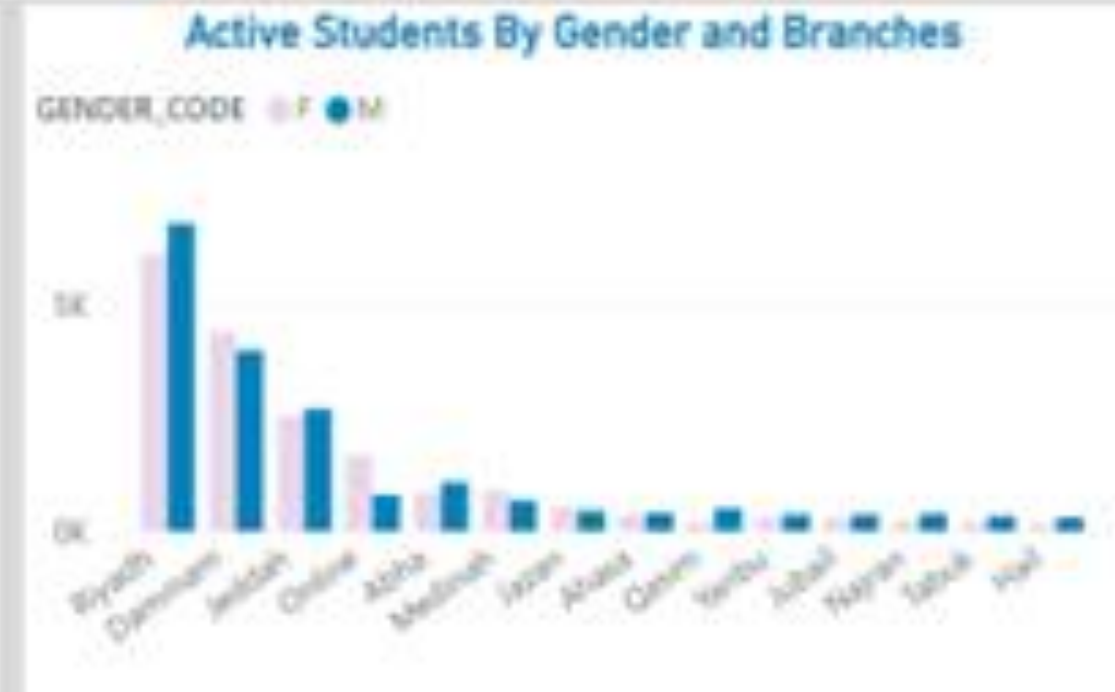
**THE University Impact Rankings**  
**600-401**

**Times Arab University Ranking**

**THE UNIVERSITY RANKING** Result end Nov

**QS Arab University Ranking**

**QS UNIVERSITY RANKINGS** Result end Nov  
 ARAB REGION





# Highlights of the University's Achievements



**SEU has obtained institutional accreditation** from the Education & Training Evaluation Commission as the first non-traditional educational institution



**The university was ranked in the ranking of 401-600** globally, and among the top 200 universities in quality of education



**SEU is the exclusive and only operator** in the Kingdom of the e-learning platform with more than 40 educational institutions and 2 million learners



**SEU ranked second in the employment of** its graduates compared to all public universities

The average salary SEU's graduate is the highest among all universities





# SEU Competitive Advantage



## Efficiency and Effectiveness

**74%** operation efficiency

**10%** utilization of physical assets



## Saudi Image

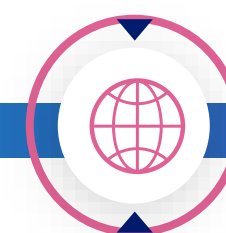
More than **10** years of e-learning experience

**77** countries access SEU's Arabic program



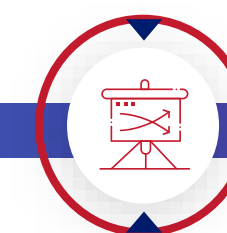
## Unique Target Audience

**62%** of students are older than 25 years



## Internationalization

**85%** of Master-level courses delivered by Colorado State University



## Strategic Positioning

**13** out of **20** targeted branches

**2.2** Mn users of SEU digital infrastructure





# Saudi Electronic University Graduates' Attributes



**Deep Discipline  
Knowledge and  
Application**



**Independent  
and lifelong  
learning**



**Critical Analysis  
and Problem  
Solving**



**Effective  
Communication**



**Digital and  
Information  
Literacy**



**Innovation and  
Entrepreneurship:**

# Saudi Electronic University strategic directions SEU 2021-2025



## Strategic Direction

- **Vision:** Lead the utilization of technology in education to contribute to national development
- **Mission:** Providing high-quality flexible education which utilizes technology and modern teaching methods to all segments of society, and contributing to the production, dissemination and utilization of knowledge to achieve social, cultural and economic development.
- **Purpose:** Empower learners to achieve their ambitions through the optimal application of technology and knowledge
- **Motto:** Pioneers of future learning

### • Values:



Teamwork



Community Partnership



Innovation



Distinctiveness



Responsiveness

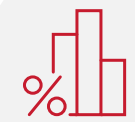


Institutional Commitment

# Education for National Development

- **SEU will provide nation-wide access to quality education that will contribute to social, cultural and economic growth, in the following:**
  - **Improves the national income** as well as per-capita income
  - **Make use of and contribute** to Science, Technology and Innovation
  - **Preserve and develop** nature and environment
  - **Develop the socio-economic** conditions of residence across the Kingdom
  - **Preserve, enrich and develop** the Saudi culture
  - **Promote sustainable development**

# Projected Impact by 2025



**21,000** highly qualified workers will enter the labor market

**700,000** members of the workforce will be upskilled and reskilled



**2000** new jobs will be created

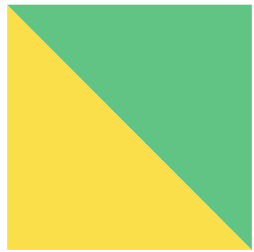
**SAR 9 Bn** will be added to GDP



**SAR 4 Bn** non-oil government revenues will be generated

**SAR 633 Mn** operation costs will be saved

# SEU 2021-2025 is centered around 5 Themes and 5 Goals



Learners Empowerment



E-learning Leadership



Digital Innovation  
Commercialization



Community  
Development



Financial  
Sustainability



## Theme

## Goals

## Objectives



Learners  
Empowerment



Provide **outstanding education** to **empower learners** to achieve their academic & professional aspirations



- Deliver **market-oriented** and **interdisciplinary** programs
- Improve the **academic environment**
- Develop teaching and learning **models and methods**
- Develop programs, curricula and teaching **evaluation system**
- Improve **student services**
- Attract **outstanding faculty members**
- Expand **learning opportunities**



E-learning Leadership



Build a **regional** leading role in **e-learning**



- Include in **global ranking** (index) system
- Obtain **certification and accreditations**
- Strengthen **local and international strategic partnerships**
- Expand **geographical presence** locally & regionally
- Develop a system to adopt, transfer & localize emerging **practices & technology in e-learning**
- Strengthen SEU **brand equity**



Digital Innovation  
Commercialization



Grow in **digital innovation** and **Techpreneurship**



- Strengthen the **entrepreneurial and innovation culture**
- Grow **applied scientific research** with focus on **e- disciplines**



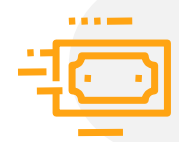
Community  
Development



Strengthen **engagement** with **communities** across the Kingdom



- Develop **partnerships** with **surrounding community**
- Strengthen SEU **consultancy services**



Financial  
Sustainability



Build a sustainable, efficient and effective institute to achieve **financial sustainability**



- Provide **unique value proposition for staff**
- Develop efficient administrative system and **optimize operations**
- Expand the university's **revenue streams**

# SEU BI System

To ensure transparency and access to information at any time Saudi Electronic University has a business intelligence system which is the only way source data in the university including faculty members, staff and students as well as dashboards to monitor projects, budgets.

This System was built internally and is connected to SEU's Data Warehouse to insure live update.

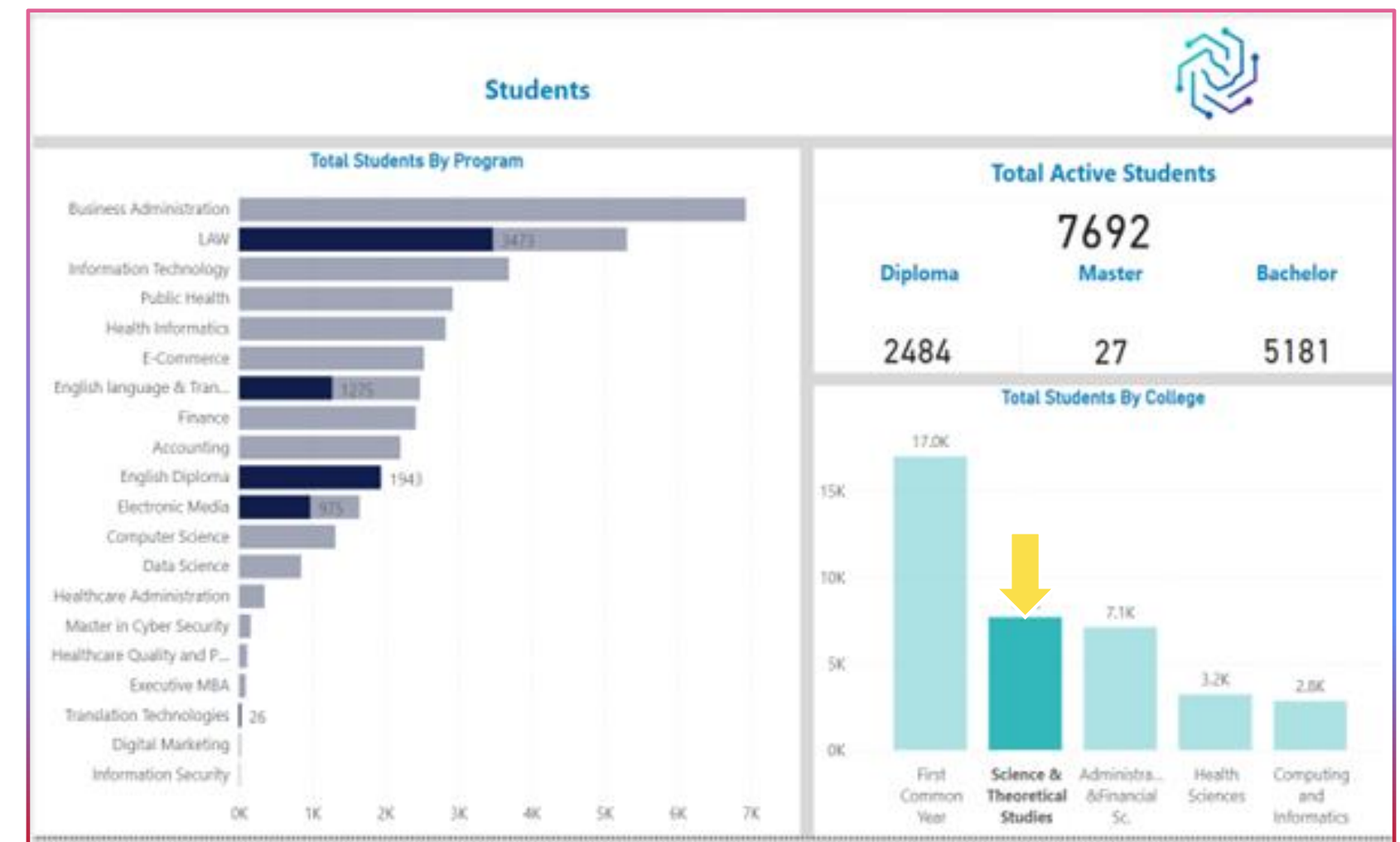
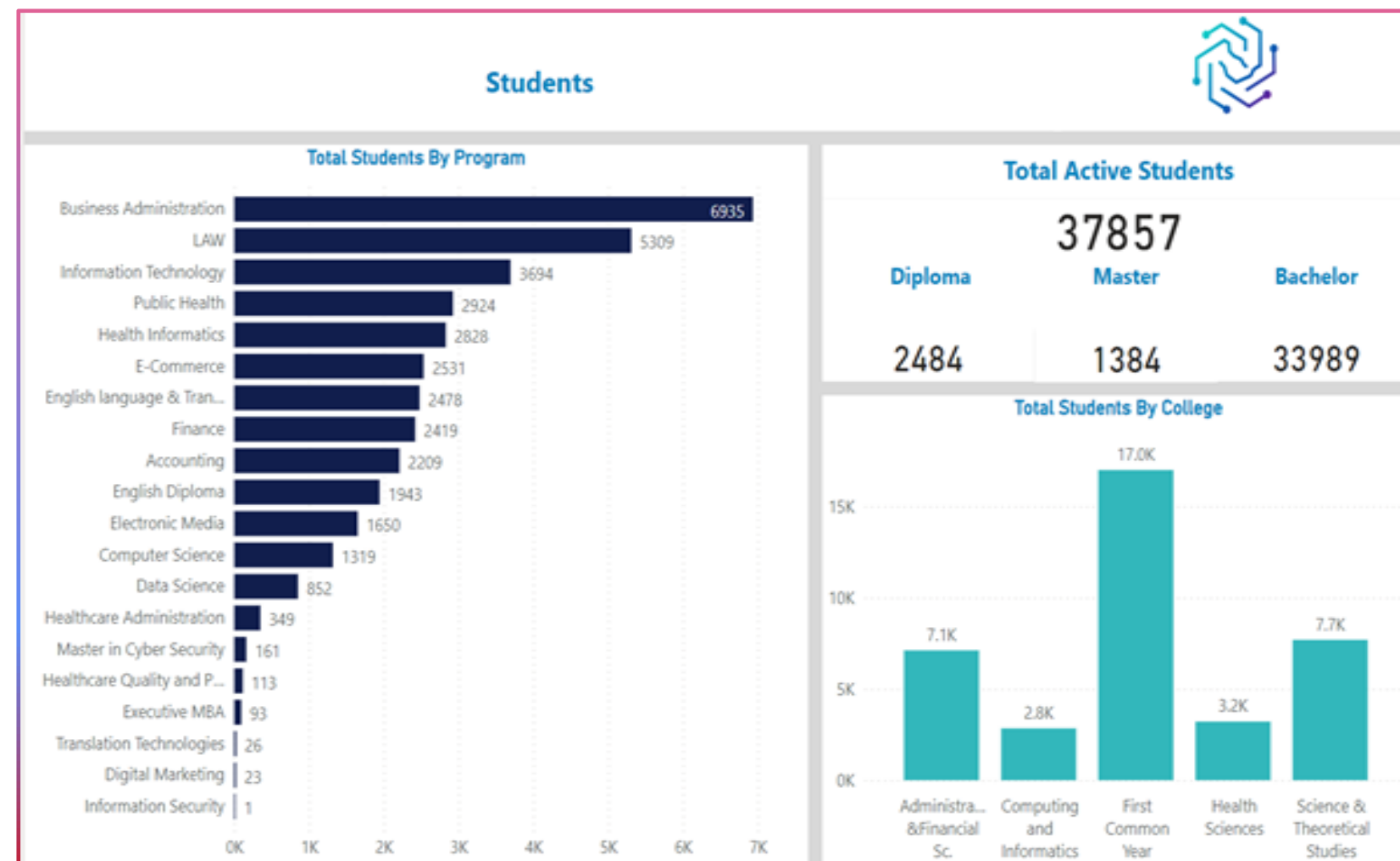




# Active Student Dashboard

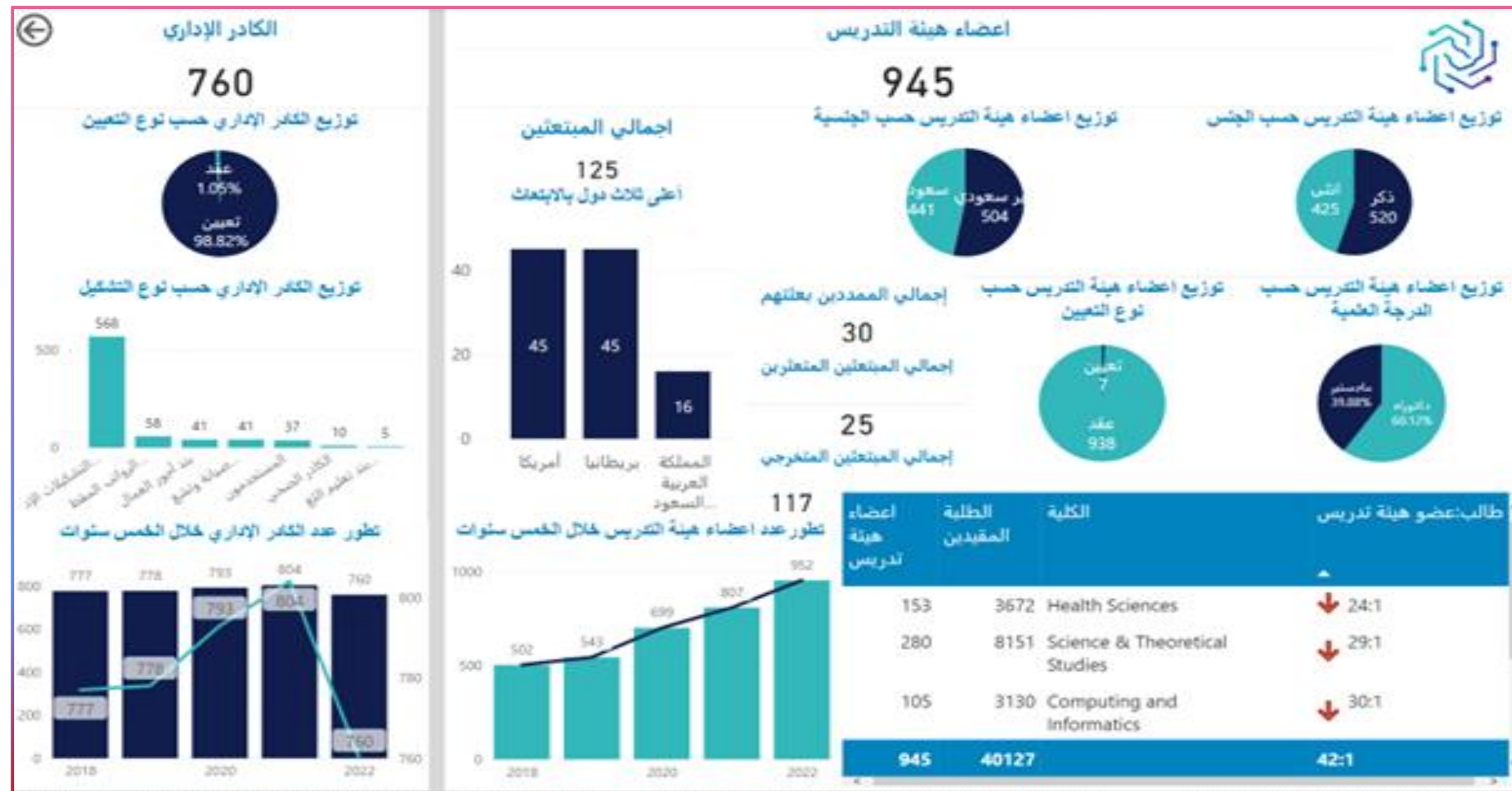


In This Dashboard information about students, including numbers , distributions, and gender.



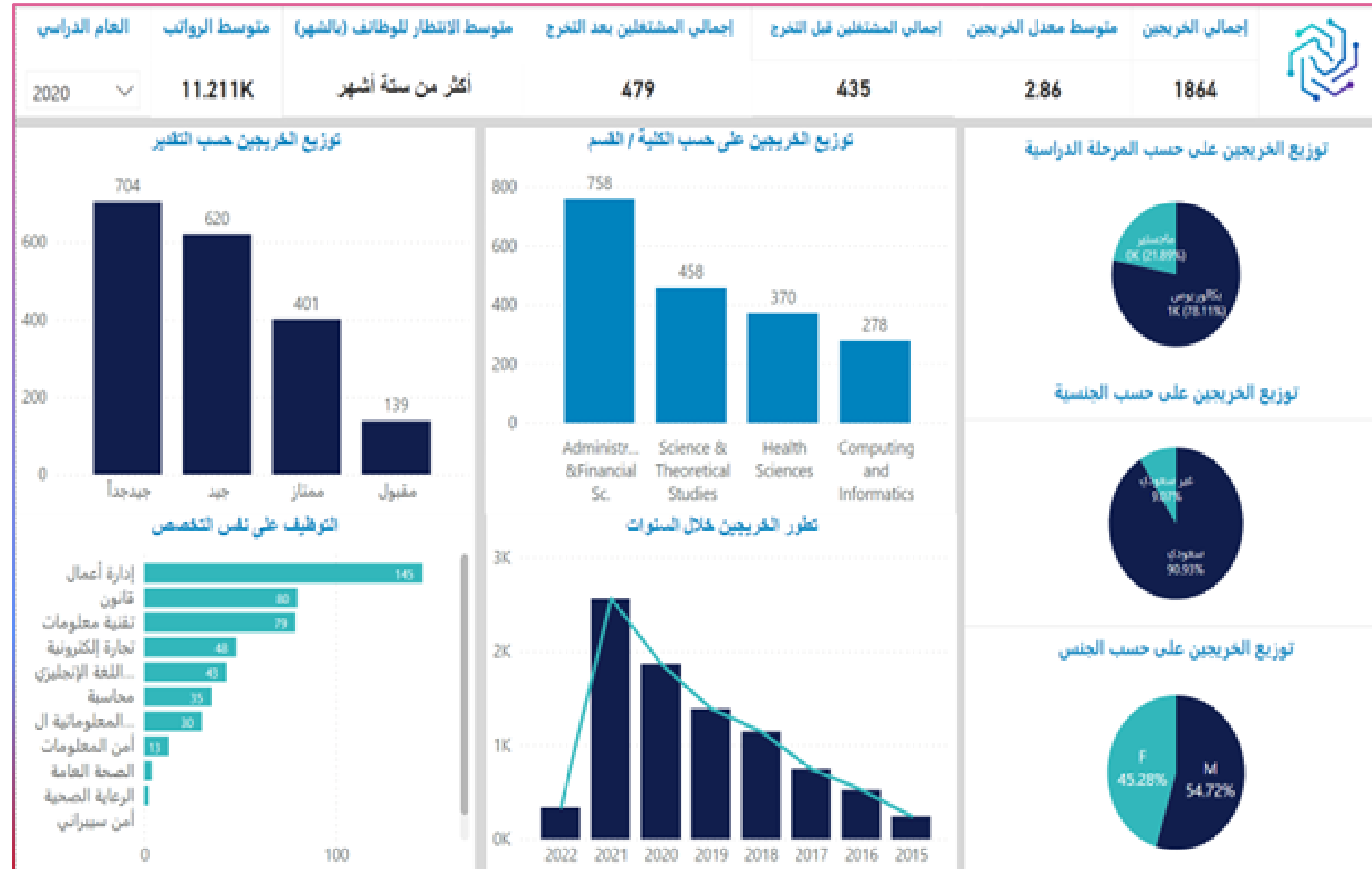


# Faculty and Staff Dashboards



General information in this dashboard could be found , including numbers of staff and admins in each entity, qualifications, grades, scholars etc...

# Employability Dashboard



**The Graduate Employment Index is one of the most prominent indicators that universities depend on to measure their performance.** Saudi Electronic University has dedicated a page on the Bi system measuring the percentage of graduate employment after 6 months of graduation, this page also shows the graduates GPA and shows their average salaries



# Employability Dashboard



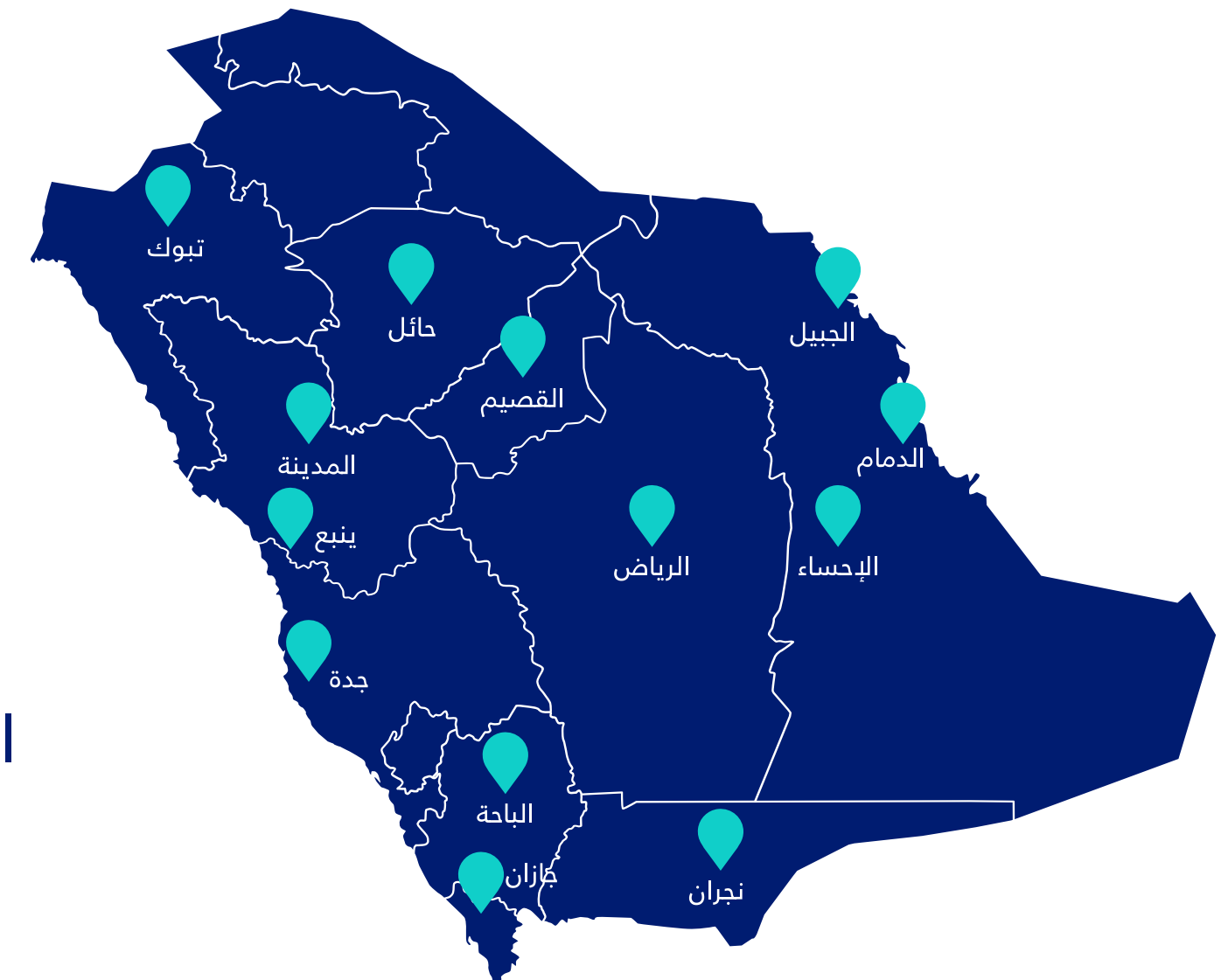


# SEU's Approach to Students, Faculty and Staff's Feedback



## The geographical spread of the Saudi Electronic University (SEU)

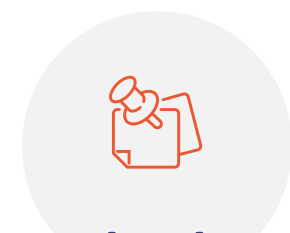
in more than 90% of the Kingdom's administrative areas, with 13 branches represents a unique competitive advantage. Maintaining high quality education across all campuses requires consistent feedback from all stakeholders.



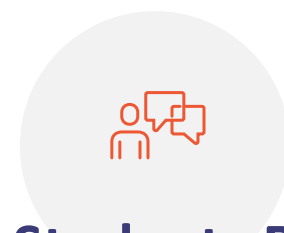


# Ways to listen to the voice of Stakeholders Feedback

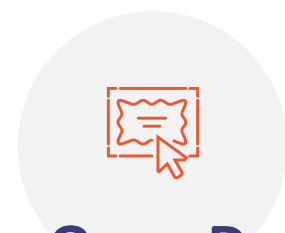
Several methods of communicating opinions are used, including Surveys, dialogues, open meetings, and Advisory Boards.



Chatbots



Students Rights  
Committee



Open Door  
Policy



Ticketing  
Systems



Open  
Meetings



Advisory  
Boards



Surveys

Surveys distributed cover quality of education, quality of the spatial environment, and services provided .In addition to employers' satisfaction with graduates. Namely:

- **Survey of Program Assessment**
- **Survey of Student Experience Assessment**
- **Survey of course assessment**
- **survey of facilities and services Satisfaction ( Students, Staff, Graduates , and Faculty)**
- **Satisfaction Survey of Employers with Graduates**
- **Training Needs Questionnaire**
- **Questionnaire on the quality of the procedures followed by the Saudi Electronic University during the Exams**
- **Community Service at Saudi Electronic University Surveys**





# The Saudi Electronic University

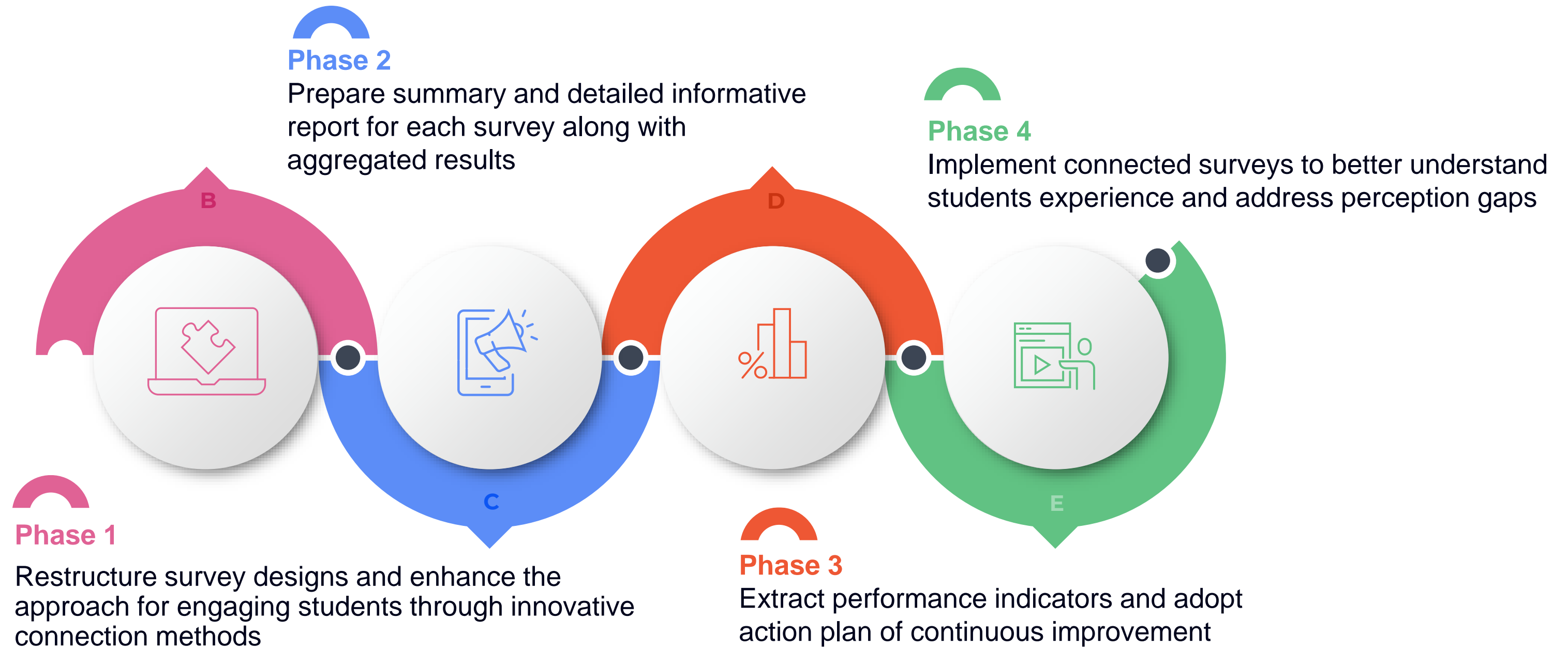
has implemented a survey ecosystem to disseminate, collect and analyze all data obtained through various feedback channels. SEU has setup a clear plan for discussing the survey data and closing the quality loop, which provides the management of the University with key insights to support decisions related to continuous quality improvement.





# Building Survey Ecosystem at SEU

Four Phased Approach to adopting a Cycle of Continuous Improvement





# ROADMAP - Path to Success & Expected Outcomes

**PHASE 1: 11/2022 – 02/2023**

- Upgrade to Blue 8
- Adjust all designs using new templates
- Revamp survey communication style

**PHASE 2: 12/2022 – 04/2023**

- Revamp reporting structure for summary & detailed reports
- Create aggregate and trend analysis reports
- Prepare informative management insights

**PHASE 3: 03/2023 – 08/2023**

- Extra hidden indicators through text analytics and machine learning
- Implement and measure action plan for continuous improvement

**PHASE 4: 06/2023 – 10/2023**

- Using NPS Score to connect stories to better understand students' experience
- Identify & address gaps in students' perception; implement clear path to success

**Connected Surveys**

2014 2015 2016 2017 2018 2019

**Text Analytics**

100,000

**Gender Perception**

**Enhanced Reporting**

**Trend Analysis**

2014 2015 2016 2017 2018 2019

**Performance Indicator**

**Student Retention**



# WE HEAR YOU


**Institutional Report - Summer Semester 41-42**

**Response ratio:**

Raters	Students
Responded	6455
Invited	16003
Response Ratio	40.34%

**Evaluation Summary:**

**Score Summary**



Competency	Average	Standard Deviation
Course assessment:	4.27	+/-0.89
Professor assessment	4.44	+/-0.84
General assessment	4.23	+/-0.87
Total Score	4.31	

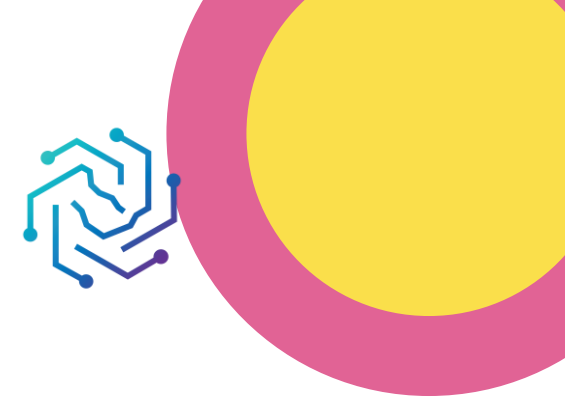
**Strengths and Areas of Improvement**

Top Questions		
1	My instructor(s) were fully committed to the delivery of the course. (Eg. classes started on time, instructor always present, material well prepared, etc)	4.52
2	The faculty member is familiar with the content of the course	4.49
3	The instructor uses blackboard tools effectively	4.47
Lowest Questions		
1	This course helped me develop my team work skills	4.11
2	This course helped me to improve my ability to think and solve problems rather than just memorize information	4.17
3	Overall, I am satisfied with the quality of this course.	4.22

Property of Saudi Electronic University 1/1

At the Vice Rectorate for Planning, Development and Quality, we resort to an escalation plan in case the authorities do not respond to the observations or do not submit an action plan and proposals

Saudi Electronic University uses feedback by sending periodic reports to colleges on student satisfaction in the educational environment and providing stakeholders with a mechanism to make an improvement action plan.



To ensure our orientation and the accuracy and quality of our work, we always compare our performance with previous years or with other educational bodies.



Saudi Electronic University has developed a system of business intelligence with certain KPIs which are measured on regular base. These KPIs are obtained from the Education & Training Evaluation Commission, and some strategic & operational KPIs.




**Each KPI has 3 values:**

- current value
- internal Benchmark
- External Benchmark



# Benchmarking at the Saudi Electronic University



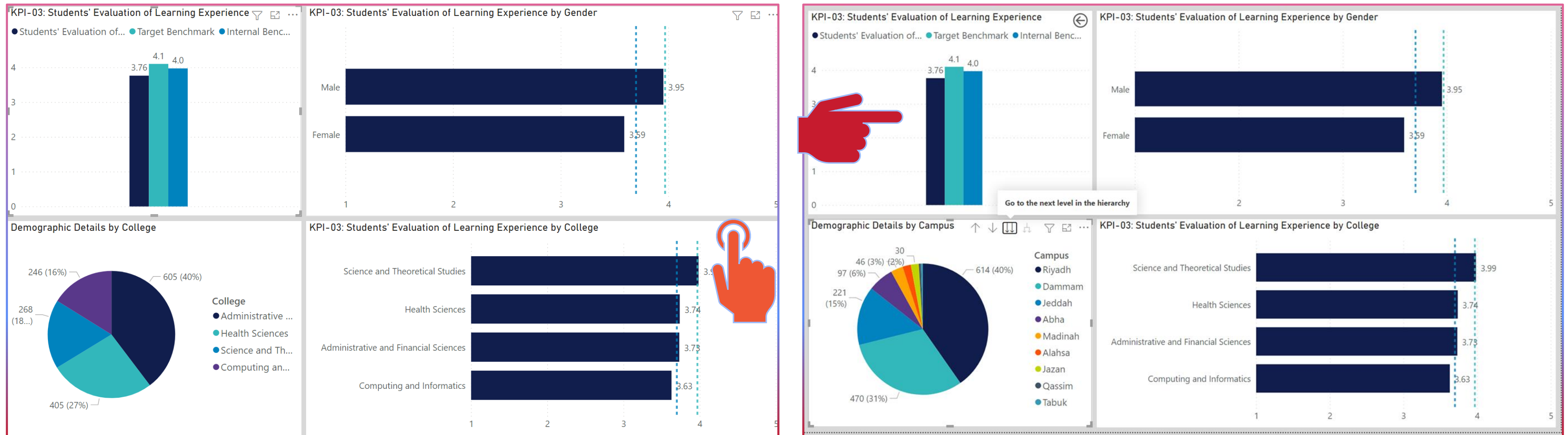
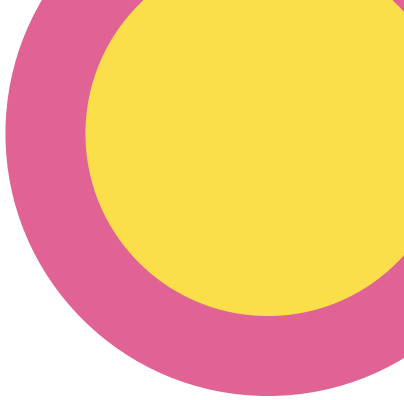
Mission, Vision & Planning	Governance & Leadership	Students	Faculty and Staff	Gender	College	 <b>26,512</b> Students	
KPI-01: Percentage of Achieved Indicators <b>10%</b> Benchmarks: N/A   20%	KPI-02: Proportion of Accredited Programs <b>0</b> Benchmarks: 0   4	KPI-11: Annual Expenditure Rate per Student <b>SR 13466</b> Benchmarks: 15,489.00   15,000.00	KPI-14: Ratio of Students to Teaching Staff <b>33:1</b> Benchmarks 36:1   25:1	All	All		
Teaching and Learning		KPI-12: Satisfaction with Offered Services <b>2.91</b> Benchmarks: 2.84   3.10	KPI-15: Proportion of Faculty with Doctorate <b>43%</b> Benchmarks: 38.20%   40.00%	All	All		<b>804</b> Faculty
KPI-03: Students' Evaluation of Learning Experience <b>3.76</b> Benchmarks: 3.97   4.10	KPI-07: Satisfaction with Learning Resources <b>3.21</b> Benchmarks: 3.69   3.70	KPI-13: Efficiency of the e-Learning System <b>26%</b> Benchmarks: 39.90%   50.00%	KPI-16: Proportion of Teaching Staff Leaving <b>-0.50%</b> Benchmarks: -3.00%   -2.00%	All	?		
KPI-04: First-Year Students Retention Rate <b>41%</b> Benchmarks: 45.90%   55.00%	KPI-08: Satisfaction with e-Learning <b>3.41</b> Benchmarks: 3.00   3.70	Institutional Resources	Community Partnership	Scientific Research and Innovation		KPI-19: Percentage of Publications of Faculty <b>24%</b> Benchmarks: 24.00%   30.00%	
KPI-05b: Graduates' Enrollment in Postgraduate <b>3.20%</b> Benchmarks: 1.71%   5.00%	KPI-09: Interaction with e-Learning Center <b>75%</b> Benchmarks: 70.30%   75.00%	KPI-17: Percentage of Self-Income of Institution <b>0.14%</b> Benchmarks: 0.15%   0.20%	KPI-25: Satisfaction with Community Services <b>N/A</b> Benchmarks: N/A   N/A	KPI-20: Published Research per Faculty Member <b>2:5</b> Benchmark: 2:5   1:2	KPI-22a: Number of Patents and Innovations <b>0</b> Benchmarks: 0.00   1.00		
KPI-06: Graduation Rate for Undergraduate Students <b>7.16%</b> Benchmarks: 12.00%   20.00%	KPI-10: Evaluation of Graduates' Proficiency <b>N/A</b> Benchmarks: 4.09   4.30	KPI-18: Satisfaction with Technical Services <b>3.46</b> Benchmarks: 3.76   4.00	KPI-26: Rate of Community Programs & Initiatives <b>N/A</b> Benchmarks: N/A   N/A	Citations Rate in Journals per Faculty <b>1:1</b> Benchmark: 1:1   4:1	KPI-23: Proportion of Dedicated Research Budget <b>1.22%</b> Benchmarks: 0.50%   1.00%		
						KPI-24: Proportion of External Research Funding <b>75%</b> Benchmarks: 50.00%   50.00%	

Current Value

Target benchmark

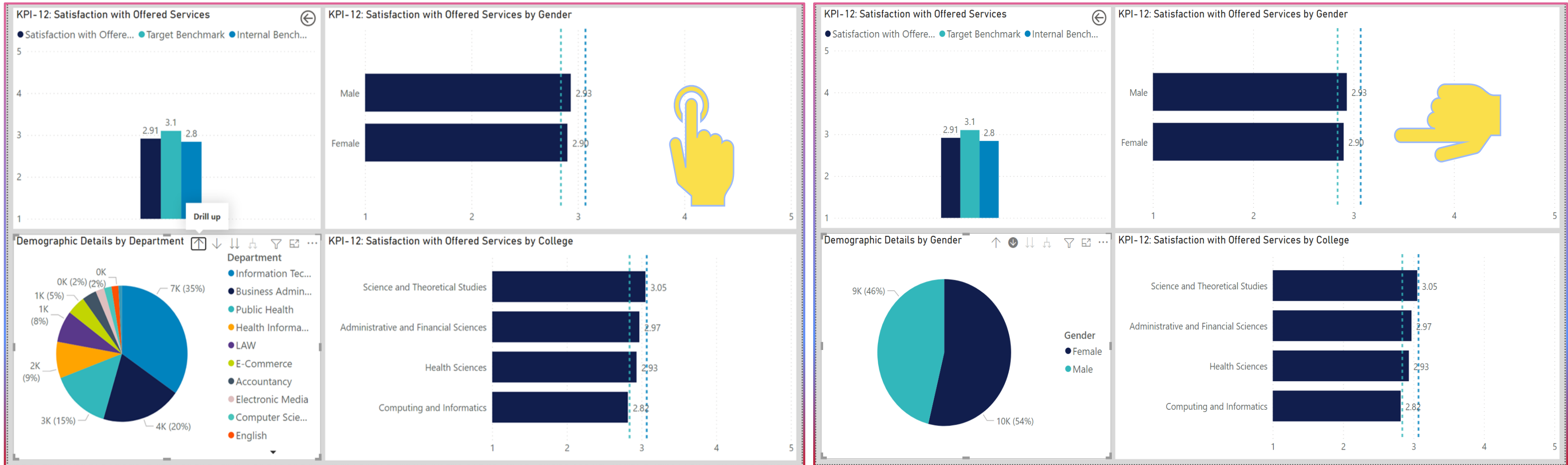
Internal benchmark

# The different levels of comparison are illustrated by: Colleges, Departments, Gender and Branches





# Each decision maker gets the authority to see the results





# BlueML



## Machine Learning Platform

AI solutions specifically designed to analyze the student experience



# The Age of Students Expressing Their Opinions



**Students Feedback**



**Increasing Comments**



**Notes and comments are disorganized**



**Reputation of the university**



# Unstructured data is inappropriate and usually requires an expert to analyze and interpret it



The vast majority of new data that is created today is unstructured as observations and comments



It can be said that unstructured data is the most valuable and insightful type of data that is difficult to decipher unstructured data and translate into usable insights.



Unstructured data is difficult to understand because, unlike structured data, there is no predefined data model.

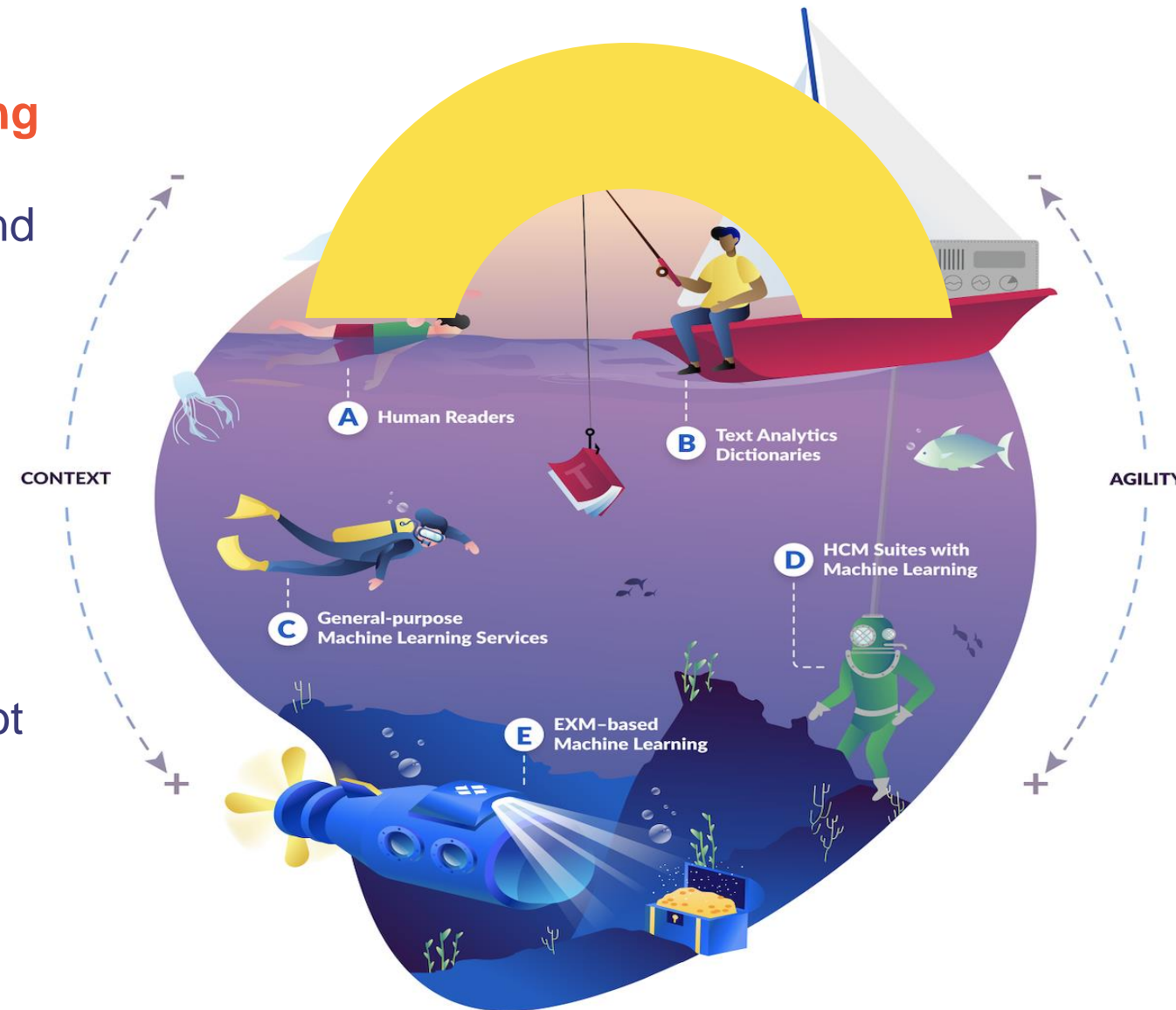


# BlueML : Machine Learning Platform



**Tailor-made machine learning** models are used to analyze a student's study journey and find out their opinions

**You no longer have to read** every comment and you will not miss to gain key ideas from open comments



**Welcome to the era of** machine learning models and artificial intelligence

**Models will continue to learn** and evolve over time, giving you the richest insights possible

# Advanced detection models in machine learning and artificial intelligence



**Sentiment analysis**



**Emotional analysis**



**Recommendations**



**Predictive analytics**



**Classification**



# Example of the Application of ML and AI at SEU



Student feedback and feedback derived from a questionnaire measuring student satisfaction with professors and courses

## Statistics on the questionnaire



**Comments and opinions** from more than 6,000 students about 3,000 courses and professors.



**More than 15,000** comments to be read.



**This data** represents only one term.



**Thousands of** other students can be urged to express their opinions.



**This data was analyzed** through the Automated Intelligence platform





# Example of ML and AI Analytics in SEU's Surveys



What a Human Reads: Hours to Read  
Thousands of Individual Comments

Comments: Positive Negative Neutral Ambiguous Recommendations  
**24** **100%** **0%** **0%** **0%** **0**

Search for keywords, connect them with "OR" or "]"... 24 comments  Show categorized topics Previous Page 1 of 1 Next

The Professor is Amazing, She Explaining Every Thing in Simple Way and Give Us Examples, What I Like About this CORSE is the Assignments are Related to the Lectures and It is Kind of Practice.  
Explanations / Quality Teaching style / Explanations Teaching component / Teaching style Teaching component Examples / Relevance Teaching delivery / Examples  
Teaching component / Teaching delivery Teaching component Professor/instructor / Quality Persons / Professor/instructor Persons Professor/instructor / Temperament  
Persons / Professor/instructor Persons Assignment / Agreeableness/Approachability Assessment & evaluation / Assignment Course component / Assessment & evaluation Course component  
Assignment / Relevance Assessment & evaluation / Assignment Course component / Assessment & evaluation Course component

I really Liked the Assignments of the Simple and Fun.  
Assignment / Agreeableness/Approachability Assessment & evaluation / Assignment Course component / Assessment & evaluation Course component

The doctor, who was assigned to this article, carries a wonderful, wonderful, wonderful style, Dr. Aziza Al -Saadi, thank you and thank you  
Professor/instructor / Quality Persons / Professor/instructor Persons Assignment / Agreeableness/Approachability Assessment & evaluation / Assignment  
Course component / Assessment & evaluation Course component

Duties and tests after each chapter helped me a lot  
Assignment / Helpfulness & support Assessment & evaluation / Assignment Course component / Assessment & evaluation Course component Assessment/exams/quizzes / Helpfulness & support  
Assessment & evaluation / Assessment/exams/quizzes Course component / Assessment & evaluation Course component

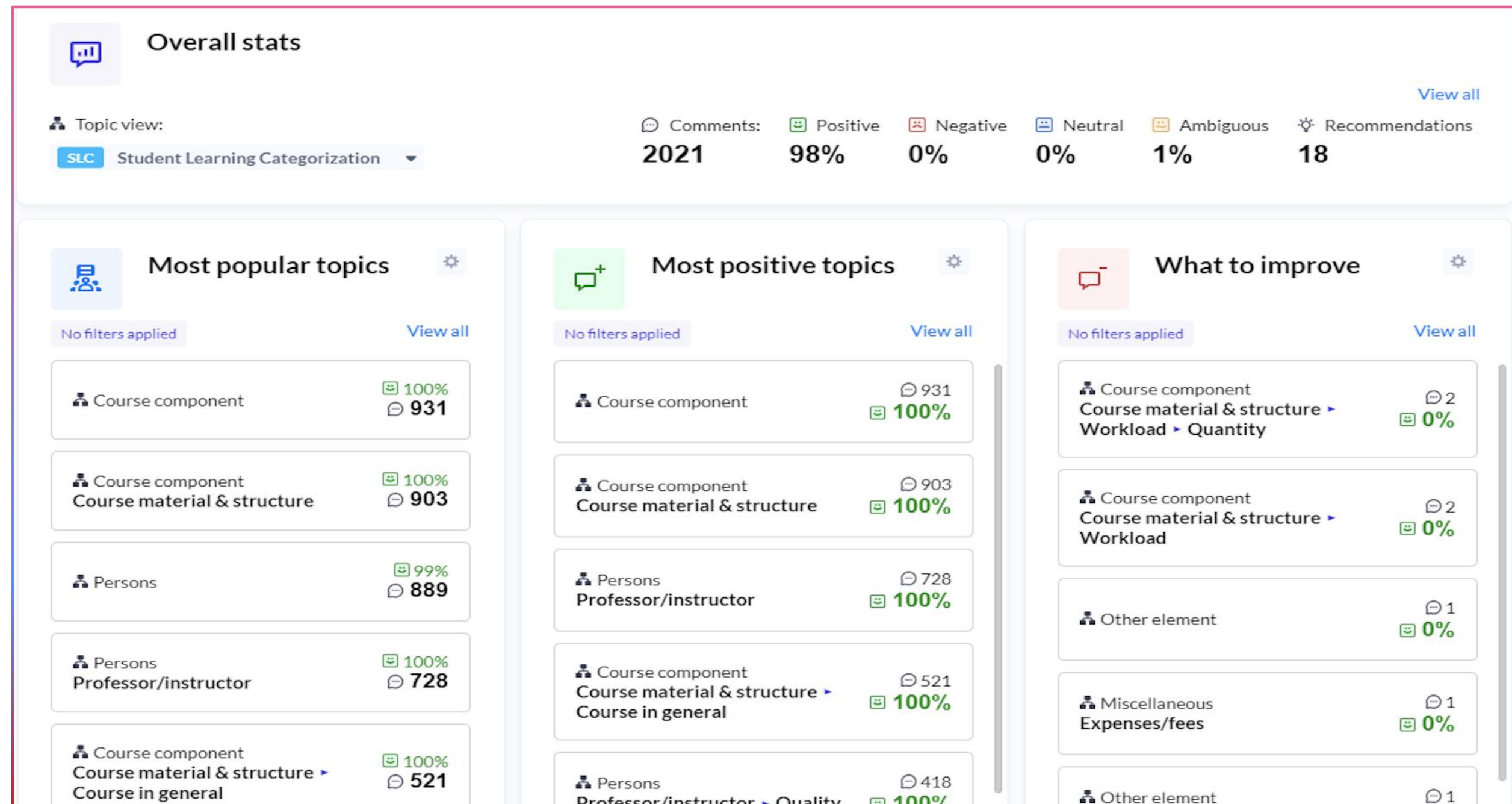
Topics and methods of thinking, and questions directly, and the distribution of tests, I mean, we will study first -hand  
Assessment/exams/quizzes / Structuredness Assessment & evaluation / Assessment/exams/quizzes Course component / Assessment & evaluation Course component

The Assignment Realily Help Me to Improve with the Course  
Assignment / Helpfulness & support Assessment & evaluation / Assignment Course component / Assessment & evaluation Course component

What AI reads by automatically  
filtering comments



# Structured ML and AI statistics to get quick insights into student feedback





# Classifications of ML and AI and Analysis of Student Feedback

Translated Survey of course assessment for 1st semester 42-43

Dashboard > Topic View

SLC Add filters

Topics	Comments	Positive	Negative	Neutral	Ambiguous	Recommendations	Sentiments
+ Course component	931	1272	3	0	0	0	100%
+ Persons	889	1269	3	0	8	0	99%
+ Teaching component	379	402	1	0	39	0	91%
+ Miscellaneous	70	59	7	0	5	11	83%
+ Learning outcomes	24	24	0	0	0	0	100%
+ Learning environment	11	11	0	0	0	0	100%
+ Other element	1	0	1	0	0	0	100%



Each attribute of the students' educational experience can be broken down into more precise titles to understand students' opinions.



Dashboard > Topic View

SLC Add filters

Topics	Comments	Positive	Negative	Neutral	Ambiguous	Recommendations	Sentiments
- Course component	931	1272	3	0	0	0	😊 100%
- Course material & structure	903	1230	3	0	0	0	😊 100%
+ Course in general	521	767	0	0	0	0	😊 100%
+ Course content/concept	400	455	0	0	0	0	😊 100%
+ Course material	4	4	0	0	0	0	😊 100%
+ Projects	3	4	0	0	0	0	😊 100%
+ Workload	2	0	2	0	0	0	😞 100%
+ Readings	1	0	1	0	0	0	😞 100%
- Assessment & evaluation	24	29	0	0	0	0	😊 100%
+ Assessment/exams/quizzes	14	14	0	0	0	0	😊 100%
+ Assignment	13	15	0	0	0	0	😊 100%
- Practical learning	12	13	0	0	0	0	😊 100%
+ Practical aspects	11	11	0	0	0	0	😊 100%
+ Labs	1	1	0	0	0	0	😊 100%
+ Group work/activities	1	1	0	0	0	0	😊 100%



# Identify unique experiences and challenges for specific students' real-time conclusions through the ML platform

Translated Survey of course assessment for 1st semester 42-43

Dashboard > Topic View > Comments

SLC Add filters

Comments: Positive 98% Negative 0% Neutral 0% Ambiguous 1% Recommendations 18

Search for keywords, connect them with "OR" or "|"... 5 out of 2021 comments

Education for your social, professional and educational life Help me change myself for the best

Better distance education

Better distance education

I hope you accept withdrawal because I can't pay



**This course has made** a real impact on the life of this student.



**Few students took the time to express** the need to improve the distance and online learning experience. It's important to delve deeper into the specific aspects that need to be improved.



**This student cannot pay for his** education and may leave the university



BlueML



explorance.



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2011-1432

Thank You