Spotlight: The Data and Business Intelligence Center

The Data and Business Intelligence Center optimizes the potential of organizational data by amassing, consolidating, and transforming it into knowledge to suit the needs and preferences of OUI employees.

In an age of digital transformation, the data extracted from diverse sources is consistently growing and gathering momentum. The OUI also gathers large quantities of data and information every day. In the fierce competition for every potential student, and given the effort to improve the retention of registered students, advanced data analysis is highly significant. Without a doubt, proper use of data is a "power multiplier" for operational information, granting organizations a competitive edge in the digital world.

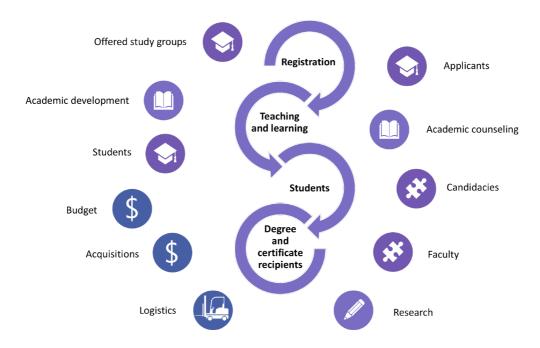
A multi-dimensional analysis of comprehensive data using business intelligence (BI) tools is central to effective investigation, resource concentration, and better decision-making processes. Upon entering the artificial intelligence (AI) domain last year, we made another giant leap towards data-based forecasts and motivation for action.

Over the years, the managerial concept of data-driven organization has become an OUI pillar. The OUI has set up a BI system (Maayan), defined procedures and standardized its organizational language, and opened the Data and Business Intelligence Center.

The Maayan Business Intelligence System

The Maayan system enables the integrative organization of all existing data to create a high-quality information and knowledge infrastructure for business, managerial, and strategic decision-making processes.

Maayan data is displayed in a simple, user-friendly manner, maintaining the same organizational truth and unified data display in all the system's content categories, some of which are displayed in the following diagram:





For additional information, see attached clip.

Following are examples of the Data and Organizational Business Center's activities this year:

Teaching during COVID-19

A large variety of designated dashboards added to the Maayan system helped manage the crisis. The dashboards provided a comprehensive real-time situation report about online teaching, learning, and management of online exams. In this way, OUI management could use Maayan data in order to make academic and administrative decisions based on past and current information, trends, and forecasts. The Maayan system won first place for this achievement at the IT Awards computing excellence competition, at which IT and digital divisions of numerous companies and organizations competed on groundbreaking projects.

Students

Improving student retention is a strategic goal of the OUI. To this end, the center worked with the Unit for Student Retention and academic departments to develop innovative data-based tools to present and analyze student performance from a broad academic perspective. All data for each student is gathered in one place. This data includes background, previous studies, exam and assignment grades, learning environment actions, use of learning materials, academic progress over the semesters, etc. These tools support decision-making processes and determination of strategic policies.

Sentiment analysis in course assessment surveys

A new development within the Maayan system allows sentiment analysis of open comments included in course assessment teaching surveys. This tool categorizes answers to the open-ended questions according to the main subjects they cover. This is useful in revealing general trends in student feedback, and enables topics that require further investigation to be directed, focused, and discussed.

Testing of methodologies and analysis tools

As in previous years, tools and advanced methods of information management and analysis were tested. Measures were taken to protect the information, extend the organizational database that is the foundation of the BI system, and assist in formulating organization-wide strategic and operational work processes related to data.

What next?

According to our long-range plan, students will soon have access to a comprehensive digital picture of their yearly studies across courses and learning tracks, with possible cross-course data analysis, in order to improve learning and retention.

Next year, a hackathon is planned for students, in order to offer them an additional method of brainstorming and to improve their understanding of needs towards developing core processes.