

# Analytics for universities

CLIENT ANALYTICS FOR EDUCATIONAL PROGRAMS: STUDENT'S DIGITAL PROFILE



# GLOBAL AND LOCAL CONTEXT

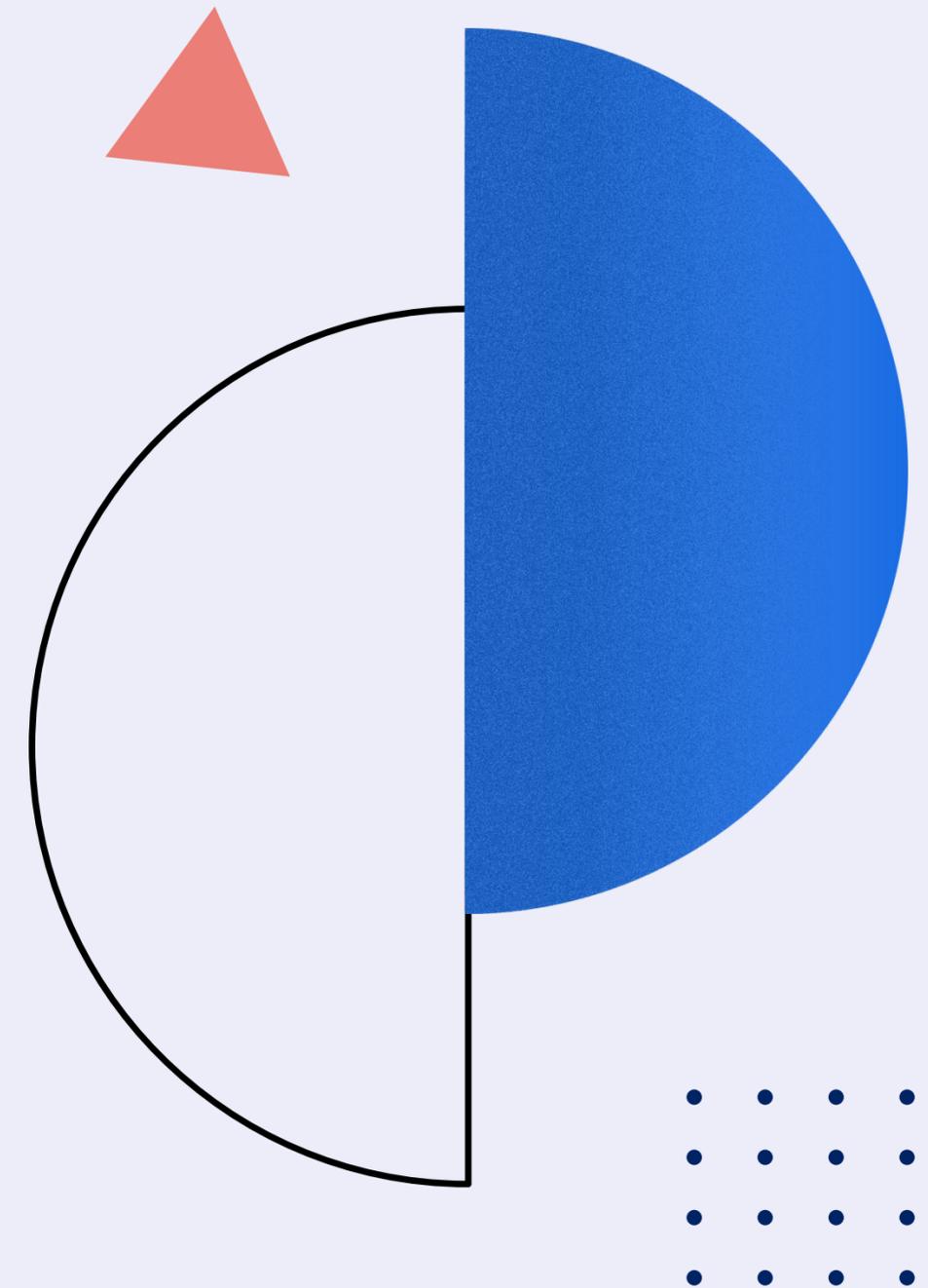
“When we asked university managers about the business insights most important to them, 42% said student drop-out prevention data was a priority, highlighting the pressure universities are under to address attrition.”

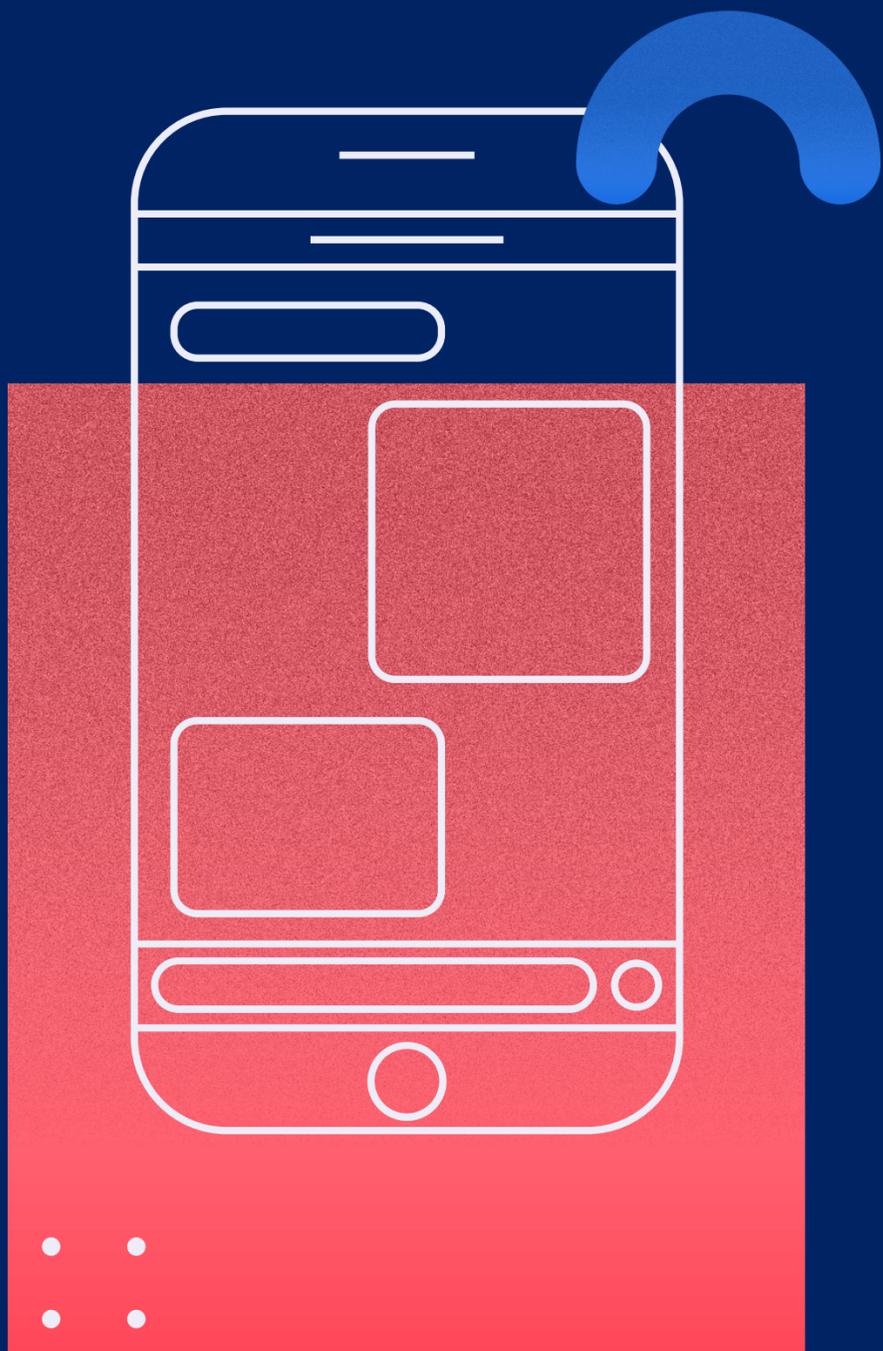
MHR Analytics, 2020

<https://www.mhranalytics.com/news/universities-struggle-to-understand-student-churn-factors/>

Only 10 out of 55 marketing bachelor students at Kyiv Mohyla Academy continued studying in the Master in Marketing Program.

Enrollment results, NaUKMA, 2021

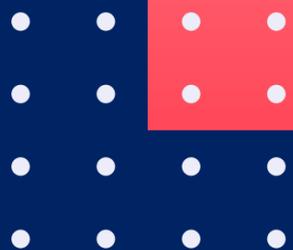




# WHAT SHOULD BE DONE?

Portfolio analysis of NaUKMA educational programs

A model to increase student lifetime value



# PREVIOUS RESEARCH RESULTS

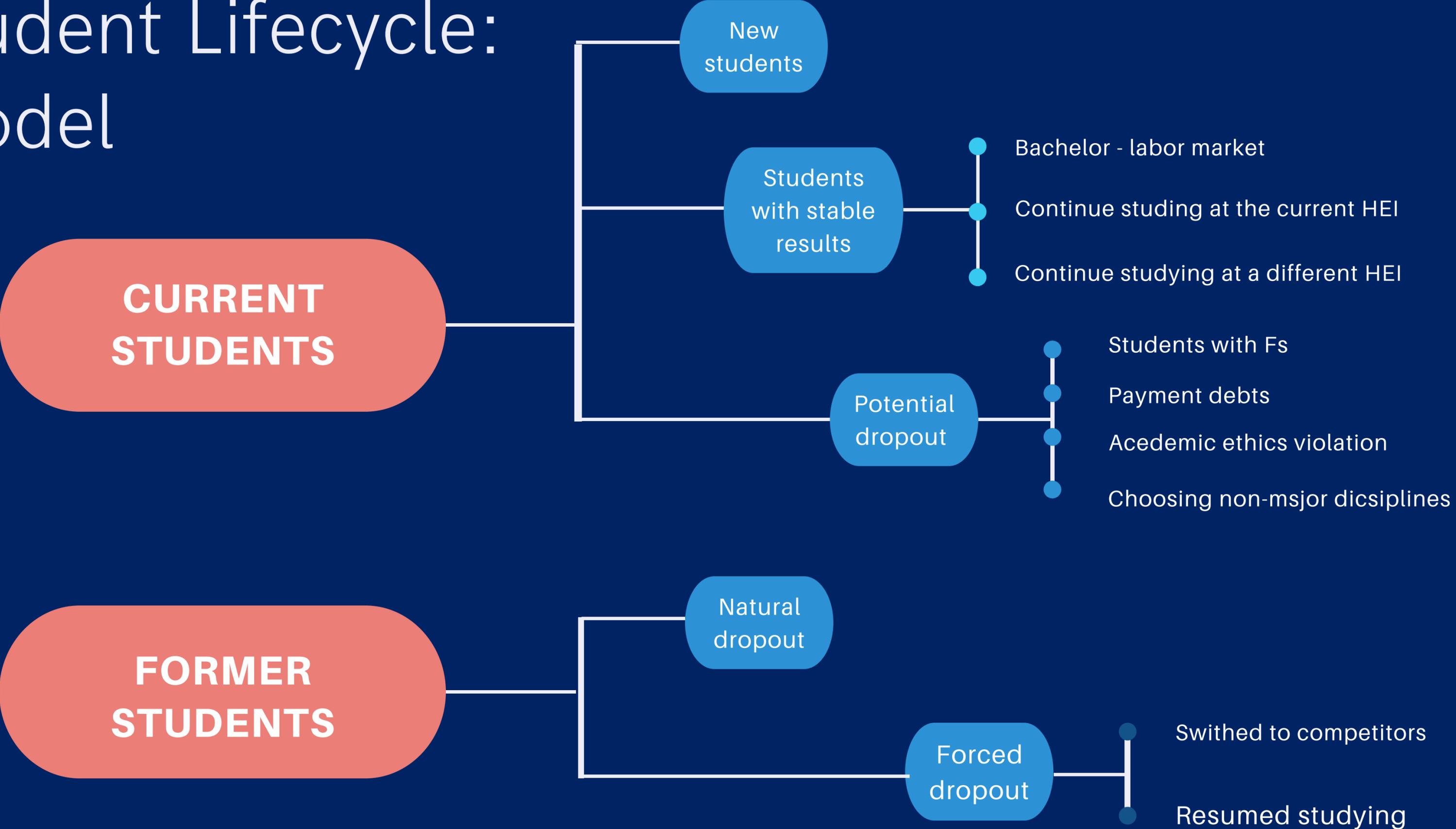
*"Student attrition is one of the most important problems for any school, private or public. In public education, a high attrition rate reflects poorly on the school, as it is wasting public taxes on students that do not finish their majors. In private education, it means the school revenue decreases considerably. Much work has been done on predicting churn rates in the Telecommunication industry; in this work, we use similar techniques to predict churn rates in education. We explore the data extensively and see the possible correlations between attrition and variables like entrance examination, a place where the students are from and grades up to the point of abandonment of the major."*

Aguilar-Gonzalez, S., & Palafox, L. (2019). Prediction of student attrition using machine learning. doi:10.1007/978-3-030-33749-0\_18

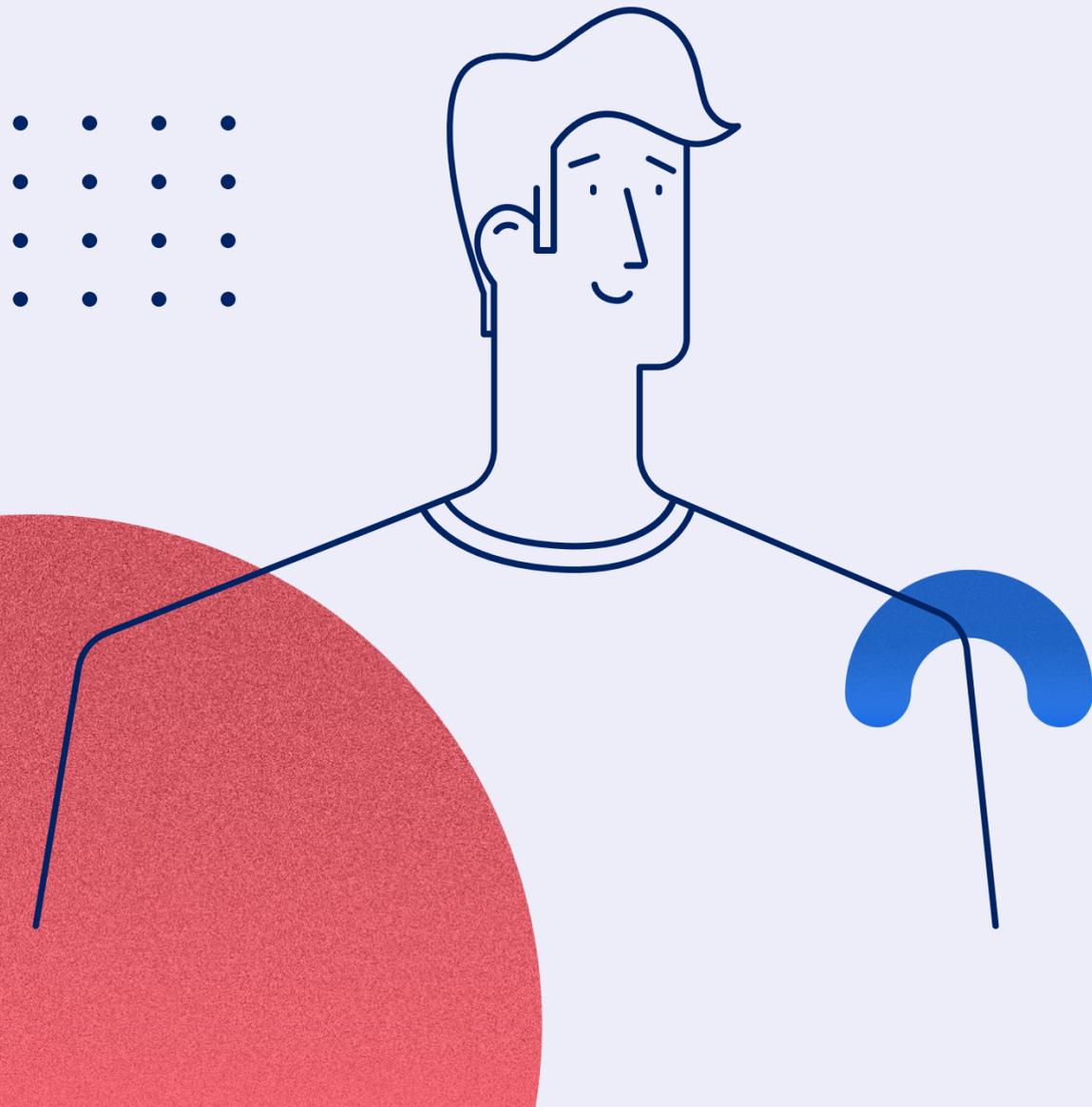
*"Research on school dropout extends from early 20th-century pioneers until now, marking trends of causes and prevention. However, specific dropout causes reported by students from several nationally representative studies have never been examined together, which, if done, could lead to a better understanding of the dropout problem. Push, pull, and falling out factors provide a framework for understanding dropouts. Push factors include school consequences on attendance or discipline. Pull factors include out-of-school enticements like jobs and family. Finally, falling out factors refer to disengagement in students not caused by school or outside pulling factors."*

Doll, J. J., Eslami, Z., & Walters, L. (2013). Understanding Why Students Drop Out of High School, According to Their Own Reports... <https://doi.org/10.1177/2158244013503834>

# Student Lifecycle: Model



# STUDENT LIFECYCLE: RESULTS



Department level: creating student-oriented trajectories and programs, introducing innovative educational services.

University level: Institutional research department, Student relationship management (SRM), increasing efficiency of cooperation across departments (dean offices, departments, HR, Students office, Employment office, etc.)

Student level: building individual trajectory for a lifelong learning, increasing alumni community

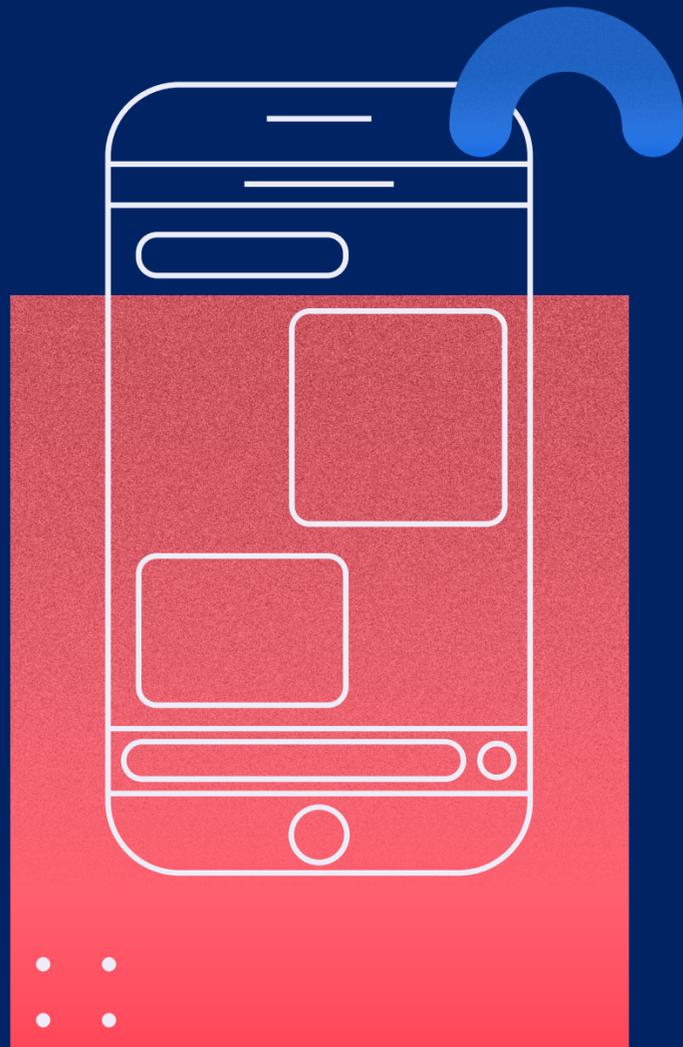
National level: University management KPIs, public budget spending efficiency, closing labour market gaps

# Portfolio Analysis

26

40

# PORTFOLIO ANALYSIS: RESULTS



Defining strategic development directions for University departments

Improving education plans

Building an efficient programs portfolio

Improving higher education standards

Creating an effective enrollement funnel

# Data

to be collected

**> 200**

paramet

**> 30**

categories



# Next steps

- 01** Collecting secondary NaUKMA data (including Moodle data)

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- 02** Creating digital student profile and education progress dashboard

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- 03** Hosting a round-table discussion on students analytics (October, 2022)

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- 04** Inviting partners to proceed with Institutional Research department

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# **Our team**