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# CASE STUDY: USE AI TO PROJECT FINANCIAL AID EXPENSES

Michigan Technological University



# **BUDGETING AT A GLANCE**

## Challenges

- Enrollment and retention are uncertain every year
- Estimating financial aid expenses for returning students is difficult and variable
- Typical expense projections have 8-10% margin of error compared to what is paid out
- Under- or over-allocating aid creates additional challenges

### Outcomes

- Use AI to accurately project financial aid expenses with less than 3% margin of error
- Reduce risk of over-committing funds, creating stability
- Efficiently re-allocate resources when under budget

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"The projections have been extremely accurate even through the most recent pandemic experience. I have been able to have Sightline include major shifts in our internal practices and the projections maintained accuracy. The projections are also always on time."

**Nicholas Stevens** CFO and Senior VP for Administration

# **OBJECTIVE**

Accurately estimate what will be paid out in institutional financial aid for continuing undergraduate students. At Michigan Tech, along with many four-year institutions, it is difficult to predict which students will return a year in advance, when budgets and expense estimates are due to be set. This financial uncertainty causes significant stress and can compromise the stability of an institution.

## **SOLUTION**

SightLine uses individual student level probabilistic models to predict which students will return each year and quantify how much institutional aid will be paid out to those students. The models assess student characteristics, behaviors, and academic progress for precise predictions with 97% accuracy. Estimates of the range of possible outcomes reduces risk, planning for the best- and worst-case scenarios. These forecasts support communication between budget and financial aid offices to stay on track in a financial aid cycle.

#### **ABOUT MICHIGAN TECH UNIVERSITY**

Michigan Tech University is a four-year public research university in the Midwest with over 7,000 students enrolled. Their graduates boast the ninth highest starting salaries in the country with jobs on the leading edge of technology. Michigan Tech began as a mining school in 1885, starting with just four faculty members and 23 students. They met the needs of the state of Michigan and the mining industry at the time. In modern day, they aim to meet the technological, economic, and social needs of the 21st century.

#### ABOUT SIGHTLINE

SightLine is a nationally certified Woman Owned Small Business using personalized consulting and advanced data analytics to increase enrollment, revenue, and retention for colleges and universities of all sizes.