A Roadmap to Financial Aid Leveraging and Optimizing Net Price

For a variety of reasons, many institutions are considering adjusting their *published tuition* or *net price*. Inevitably this process will include re-structuring the institutional awarding matrix or criteria. Universities may be adjusting their award strategy to enroll more students, making the shift to awarding without ACT or SAT test scores, or may even be restructuring due to an upcoming published price reset.

SightLine has developed a roadmap to guide colleges and universities in making pricing and awarding decisions. Our goal is to help colleges and universities make the most of their financial aid resources to enroll the right students and retain them.

Our eight steps for financial aid leveraging will help your institution answer the following questions:

How do we effectively award financial aid to enroll more of the right students at our institution?

How do we structure our awarding and messaging to be competitive within our market?

How does this strategy integrate with our mission of supporting certain student segments?

Do our awarding strategies match our university brand?

Can we identify a strategy to enroll more students while increasing net revenue?

Details on the eight-step roadmap are as follows:

1. **Quantify the regional market**

   The first, and sometimes most important step, is quantifying the market that your institution is competing in. This information will primarily come from IPEDS data and will help frame the context around tuition pricing and awarding decisions. This data should be specific to the institution type and geographic region. We recommend visualizing and summarizing metrics over time relating to published price, net price, discount rate, enrollment yield rate, and student caliber.

2. **Quantify the direct market**

   A key indicator to assess is whether your college or university enrollment yield rate is close to average compared to other institutions that have similar pricing and awarding structures. If your institution's enrollment yield rate is near or above average, this is a good indicator that branding, marketing, and communications are already on point and fine tuning the award structure could be the next step to increasing enrollment. If your institution's enrollment yield rate is below average, then we would also recommend assessing whether the college or university market position truly matches the existing brand and marketing message. An example of this scenario is represented in Figure 1 where the yield rate and

net price of an institution over the past decade are depicted with the black circles, overlain on the distribution of enrollment yield rates and net prices for all four-year, private institutions in the Midwest region.

3. **Identify differentiators relative to direct competitors**

We recommend that each institution maintains a list of anywhere between 30 to 50 direct competitors. Key metrics for each institution should be summarized and updated year over year as pricing or enrollment trends can change significantly. Visualizations of these metrics may help to identify differentiators that may support the growth and future planning of the institution's brand.
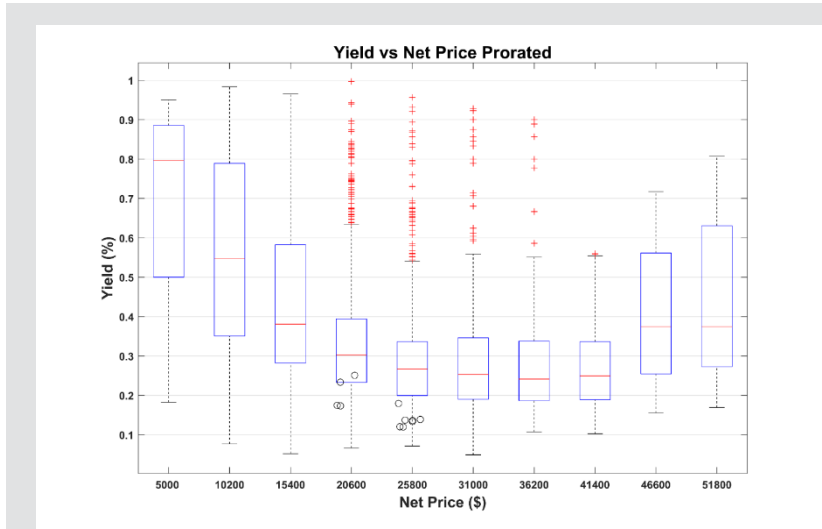

Figure 1. Enrollment yield rate versus net price for four-year institutions in the Midwest region.

The first three steps should put market context around adjusting internal institutional award structures and the impact that those changes may have on brand, positioning, and competitive advantages. For example, the university shown by the star in Figure 2, had one of the lowest discount rates within their direct market. They could consider building a brand centered around
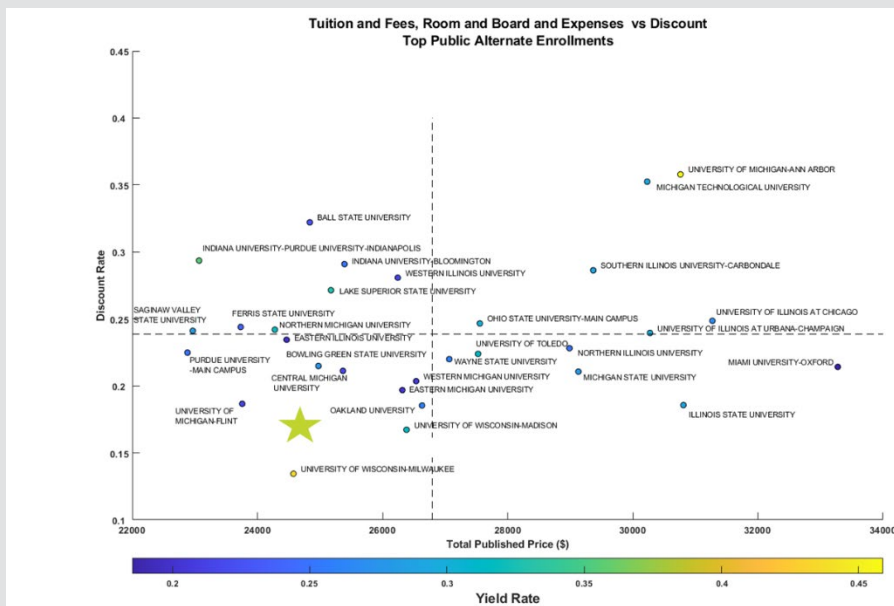

Figure 2. A four-quadrant plot of discount rate versus total published price for a particular university's direct competitors

price transparency to students. This could be supported by simplifying their current award structure so that students have clarity on their actual net price earlier in the enrollment process.

4. **Develop a probabilistic enrollment model**

Many institutions that SightLine partners with are familiar with predictive modeling and using student enrollment likelihood as a metric throughout the recruitment and enrollment process.
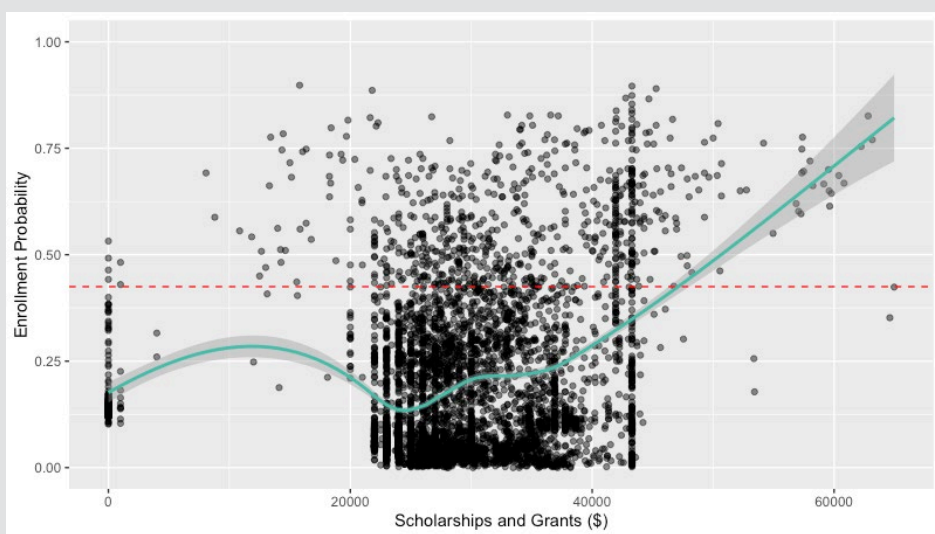

Figure 3. The average probability of enrolling versus total institutional scholarships and grants.

Colleges and universities may choose to have SightLine develop a new predictive model to assess accuracy compared to their current model or to get a new perspective on what factors impact their student enrollment. When developing a new enrollment model, we go through a rigorous process of testing a wide variety of model types from logistic regression through more complex artificial intelligence and machine learning methods. We select the most accurate model for each institution's data.
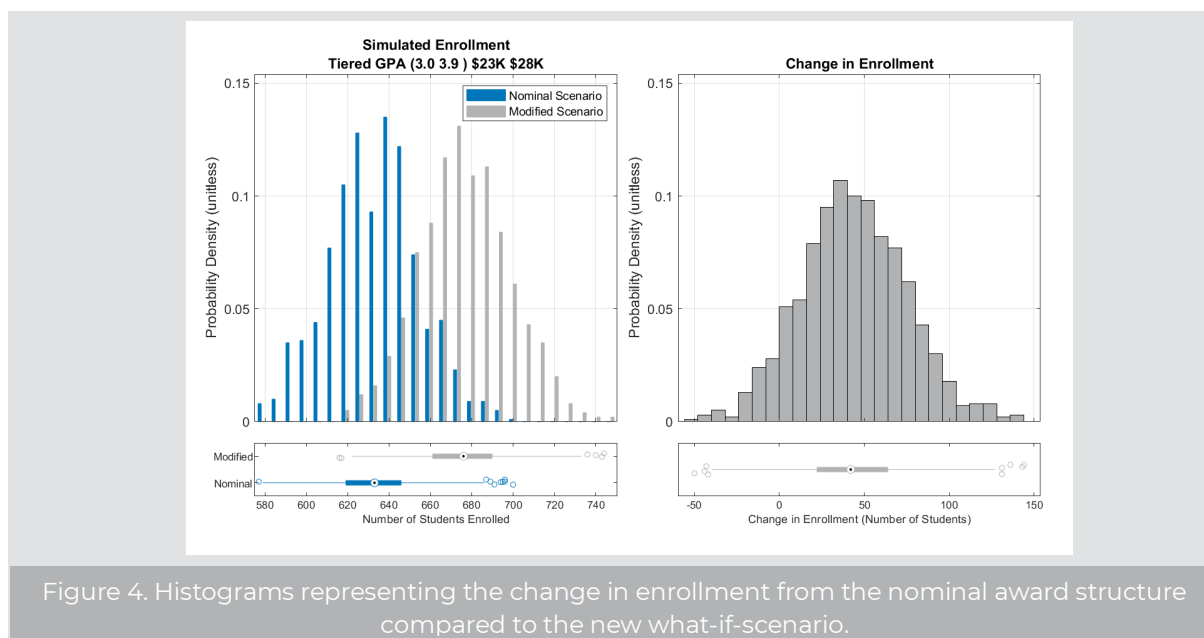
5. **Adjust award structure and simulate *what-if-scenarios***

Once an enrollment model is developed and validated, SightLine will work with university leaders to develop new awarding structures to test out. These are considered *what-if-scenarios*. We adjust the financial inputs (fig. 3) in the actual data and make new predictions with the previously developed enrollment model, to estimate how many students would have enrolled as compared to the nominal scenario.

6. **Quantify the range of possible outcomes from top scenarios**

For each new scenario or awarding structure, we use statistical simulation methods to estimate the range of possible outcomes that may occur. This is a very important step for risk management in making these awarding decisions. If the award matrix is adjusted, there is statistical uncertainty around the impact of the outcome. For example, this institution with a new award structure may be most likely to enroll about 45 more students, but they could potentially lose students or enroll more than 100 (fig. 4). This could have significant impacts on net revenue as well. This result is demonstrated below with an overly simplified awarding scenario where students with between a 3.0 and a 3.9 high school GPA were offered $23K in institutional scholarships and grants, and students with greater than a 3.0 high school GPA were offered $28K.

Financial Aid Leveraging

Figure 4. Histograms representing the change in enrollment from the nominal award structure compared to the new what-if-scenario.

7. Select the best awarding strategy to meet institutional goals

When developing a new awarding matrix, we want to verify with as much certainty as possible that the college or university is likely to meet their overall enrollment goals. But we also need to ensure they will increase revenue enough to cover overhead costs for each new student that enrolls. Additionally, we need to verify that the institution will continue to enroll and support strategic or underserved student segments. The new award structure should not be conflicting with strategic initiatives. We also verify that the new award structure does not negatively impact the quality or caliber of the incoming student body. All these criteria should be considered when selecting a final award structure to implement in the next enrollment cycle.

8. Visualize and communicate findings to key stakeholders

Finally, by the end of this process, we are able to demonstrate that we collaboratively went through a rigorous process to test different awarding *what-if-scenarios*. We considered the variety of outcomes that could be impacted by award adjustments, such as net revenue, student caliber and experience, and retention. We also verify through the data that we are not treating certain student segments inequitably and with the new awarding structure-this should be considered carefully. The overall process, results, decision criteria, and the new award structure should be clearly communicated to all university groups that will be involved with implementing new awarding structures. The teams who are sending out award letters or have hands-on time with students need to be accepting of these decisions for a successful transition.

Interested in learning more? Contact us to see how SightLine's data modeling can help your institution.

About SightLine: SightLine is a boutique analytics firm, providing easy to interpret, student-centric predictive analytics solutions without the need for complex software. We support colleges and universities throughout the entire student lifecycle, using data to answer the complex questions that institutions have about how to support students.