

Is Your Current Enrollment Management Consultant Delivering Value in These Five Key Areas?

eGuide

**If Not, It Might
Be Time to Switch
to a Predictive
Analytics Solution**

Othot

41%

Predictive analytics is not new to higher education. In fact, 41 percent of colleges and universities are using data for forecasting and predictive analytics.¹

If you're like a lot of schools that have relied on more "established" and traditional consulting firms, perhaps for many years, you might be wondering just how "advanced" your current advanced analytics approach is. You might be wondering if your institution's data is working as hard as it can for you, as the "insights" you're getting year after year are neither insightful nor actionable.

The unfortunate reality is the majority of analytics solutions and consultancies serving higher education today were not built to support today's environment. Yet companies in the private sector like Google, Amazon, and Netflix have been using innovation, technology, and artificial intelligence as a source of competitive advantage for years to both know their customers better and win in their respective marketplaces.

Why should higher ed apply this same approach?



Colleges and universities are under immense pressure to hit enrollment goals, even as budgets and the population of high school graduates decline. According to a recent survey of admissions professionals, 66 percent of admissions departments missed their enrollment targets,² and 70-80 percent of four-year institutions have either reduced or kept flat their recruitment and admissions budgets.

Higher ed institutions are being asked to hit their targets in an environment that is increasingly difficult. Many regions across the country are facing a declining local student population and shifting demographics. Future projections are looking even more bleak. At the same time, there is increased competition and limited resources. Enrollment management offices are grappling with these disruptive forces and challenges while also trying to engage students who demand a more personalized approach.

In these conditions, when it comes to analyzing data and gathering insights for enrollment, higher ed institutions need more than just a scorecard. They need a solution that takes advantage of today's technology and machine learning to provide insights at the individual student level. One that helps you to make informed decisions about what actions to take at every stage of the student lifecycle to bring about better, more precise outcomes.

What is Predictive Analytics for Enrollment that is built for today's higher education institution?

A predictive analytics solution for enrollment should answer the question, "What is the likelihood of a student to enroll?" with a percentage: "The student is 75 percent likely to enroll." Predictive analytics can also help an institution shape its class with characteristics that differ from its historic profile, for example, greater ethnic diversity or a higher academic profile.

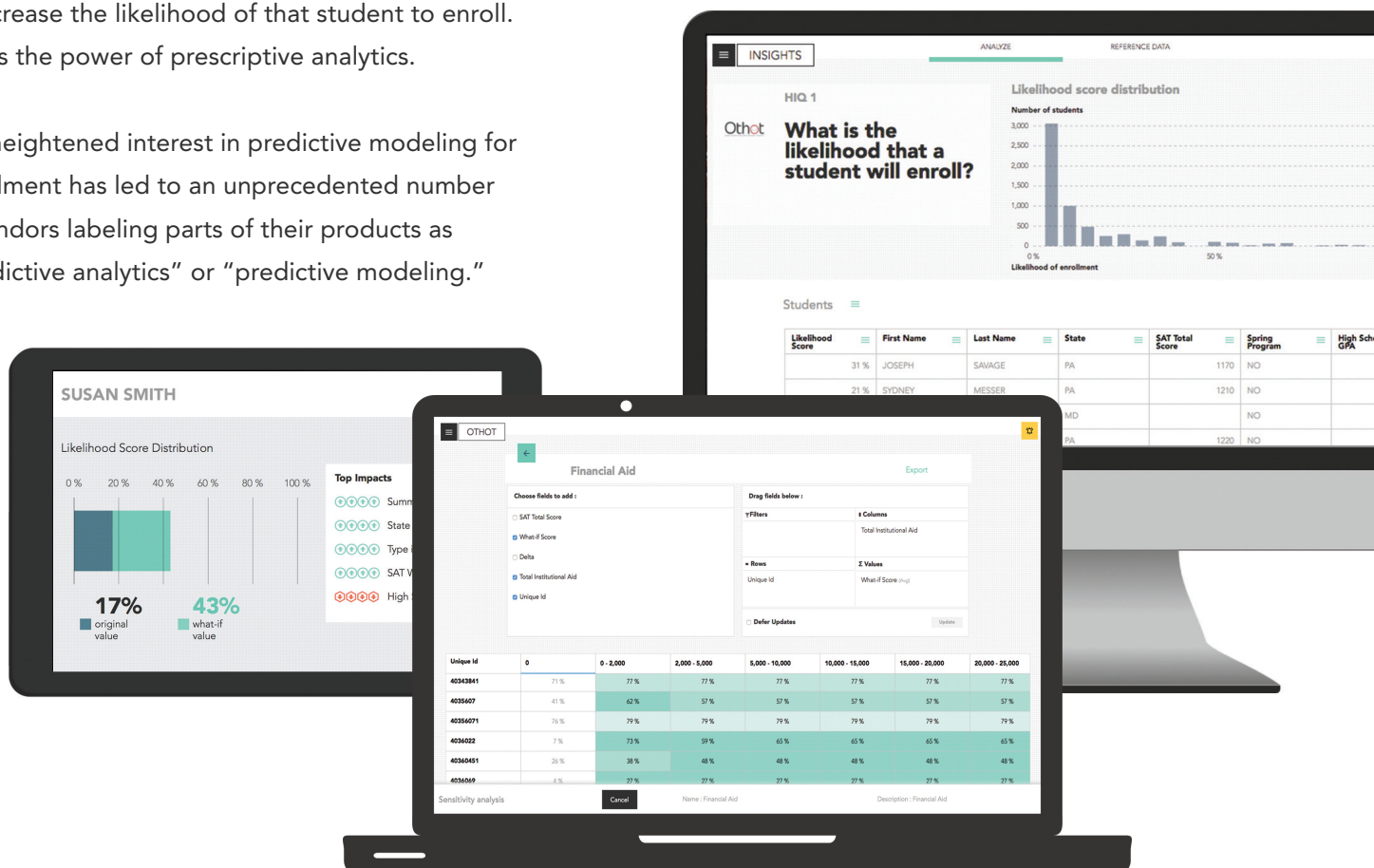
When you know which students are most likely to enroll and who to target, you can better plan and allocate your institution's marketing, recruitment, and financial aid dollars. This is arguably the highest purpose of any predictive analytics enrollment tool. When you can effectively use your data history and insights into the student's background and behaviors, you can determine the most effective actions to take to increase the likelihood of that student to enroll. This is the power of prescriptive analytics.

The heightened interest in predictive modeling for enrollment has led to an unprecedented number of vendors labeling parts of their products as "predictive analytics" or "predictive modeling."

Don't be fooled: Some of these so-called predictive analytics solutions actually serve another purpose - like CRM or prospect lists - or worse yet, rely on outdated approaches and antiquated technology.

Without an industry consensus for what constitutes predictive analytics, it can be difficult to distinguish among the offerings.

This guide is meant to help you to determine whether your enrollment management provider's predictive analytics tool has what you need to meet your goals and also reflects the most advanced data science available today.



THE FIVE AREAS

YOUR PREDICTIVE ANALYTICS SOLUTION SHOULD HAVE

If your predictive analytics solution doesn't deliver on these five areas, it might be time to upgrade your strategic enrollment plan to a predictive (and prescriptive) analytics solution.



1 It delivers probability scores that are dynamic, not static.

Purchasing prospect names with probability scoring is fairly common in the higher education market. There are also services that score an institution's list at the Inquiry or Applicant/Admit stages. The scores provided by these tools captures a static moment in time. However, during the 18- to 24-month enrollment lifecycle, a student's likelihood score can change both positively and negatively in response to marketing and recruitment activities.

An effective predictive analytics solution should be dynamic, updating the student's likelihood score at every touchpoint in each stage of the cycle. These scores should be available 24/7 to your team.

2 It enables you to target individual students through prediction scores.

A predictive analytics solution should provide probabilities for individual students. That probability should be based on both an institution's historical data and external factors, like census or geographical data.

The solution should create an individual record and profile page for each prospect on your list, plus list the key factors that influence his likelihood score.

With this type of information, you can make better data-driven decisions. You'll know which students to target and where you should spend your time and resources.





3 It enables you to act immediately and often, on the insights you're getting.

True predictive analytics provide actionable insights when you are sifting through 100,000 names to enroll 1,000 students.

The key is having granular accuracy on both the individual likelihood scores and rank order. Rank order accuracy refers to how often the solution is right when it says, "Susan is 80 percent likely to enroll, but Sam is only 20 percent likely to enroll." Did the solution correctly deduce that Susan is four times more likely than Sam? If the solution's individual and rank order accuracies are high, then you can be confident in your decision to spend more time, resources, and budget on Susan.

To illustrate, let's use the previous example. You're using a predictive modeling tool that has excellent aggregate accuracy and provides individual likelihood scores for each student. It projects that you'll meet your enrollment goal of 1,000. When you check the individual likelihood scores, you find no discernable rank order because the solution places every name in the "0 to 10 percent Likely to Enroll" bucket. You'll still need to market to 100,000 students to enroll 1,000. With rank order, you will be able to easily find the top 20,000 students out of the group that are really driving your 1,000 enrollment and focus more heavily on them.

Also, an analytics solution with more granular individual and rank-order accuracy will create more segmentation across the population resulting in a higher diversity of scores. You should see names across more probability buckets, like "25 to 50 percent" or "76 to 99 percent" likely to enroll, rather than overgeneralized averages. With this level of information, you know which students to target with your high-value campaigns.

4 It helps you to determine which actions to take to change certain outcomes.

Prescriptive analytics is one of the most exciting advances in data science because you can see what actions will have a high probability of changing the outcome. This has powerful implications for enrollment.

Your marketing campaigns, counselor outreach, and merit aid offers are designed to increase a student's likelihood to enroll, but big data teaches us that students respond differently to different types of incentives and outreach. Some students will be impacted negatively and some won't be impacted at all. With the prescriptive functionality, you can see which individual student's likelihood to enroll will increase and by how many percentage points and which students you can leave out of a campaign.



For example, your admissions counselors could use a prescriptive tool to simulate scenarios such as, “I’m at XYZ High School today. Which students should I meet face to face?” or “How much will this student’s likelihood increase if we offer \$5,000 in merit aid?” or a more complex scenario like, “I have \$1 million to give in merit aid to low-income students. Which students should receive the aid? How much should I give to each?”

Prescriptive analytics can help you get the maximum ROI for your marketing and financial dollars and ensure that your counselors are making the best use of their time and resources. Does your current enrollment management provider deliver on all of the above features? If not, it might be time to make the switch to Othot’s predictive and prescriptive analytics solution for enrollment. Here’s a side-by-side comparison of features Othot offers versus a leading enrollment and fundraising management consultancy.



5 It explains how it arrives at the decisions it makes.

Explainable artificial intelligence, or XAI, is artificial intelligence that is programmed to describe its purpose, rationale, and decision-making process in a way that can easily be understood by the average person.

XAI is not just about offering a prediction - it is about identifying prescriptions that can change outcomes.

Othot vs. the Leading Enrollment Management Provider

Features	Them	Othot
Machine Learning/Artificial Intelligence		x
Prescriptive “What-Ifs”		x
Real-time/Frequency		x
Student Lifecycle Management/Modeling		x
Financial Aid Optimization	x	x
Analytics Subject Matter Expert		x
“Perceived” Industry Expertise	x	
Multiservice Approach	x	x

A more robust predictive and prescriptive analytics solution can significantly impact your ability to meet enrollment targets. Knowing which 20 percent of your prospect list will produce 80 percent of your next class means knowing how to best spend your dollars and resources. Through the power of machine learning and technology, your institution will be able to better understand individual students and how specific resources and actions can engage and influence better outcomes.

At every stage of the student lifecycle, your decision making will be informed, both strategically and tactically, with greater precision.

¹KPMG 2015-2016 higher education industry outlook survey; <https://edtechmagazine.com/higher/article/2016/04/survey-data-and-analytics-higher-ed-can-be-one-two-punch>

²<https://www.insidehighered.com/news/survey/2017-survey-admissions-directors-pressure-all-around>

³NCES



Ready to make the switch?

**To learn about Othot's enrollment solutions,
call 412-458-4167 or email othotteam@Othot.com.**

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