

Emerging and Adaptable Tools for Facilitating Systematic Holistic Review in Medical School Admissions

Presented by: John Abbatico July 2023





Meet Our Presenter

John AbbaticoChief Product Officer

LINISON







Agenda

- 1. The Demographic Cliff
- 2. Holistic Admissions A Practical Pathway
- How to Use Data and Machine-Learning (ML) Tools to Achieve Desired Outcomes

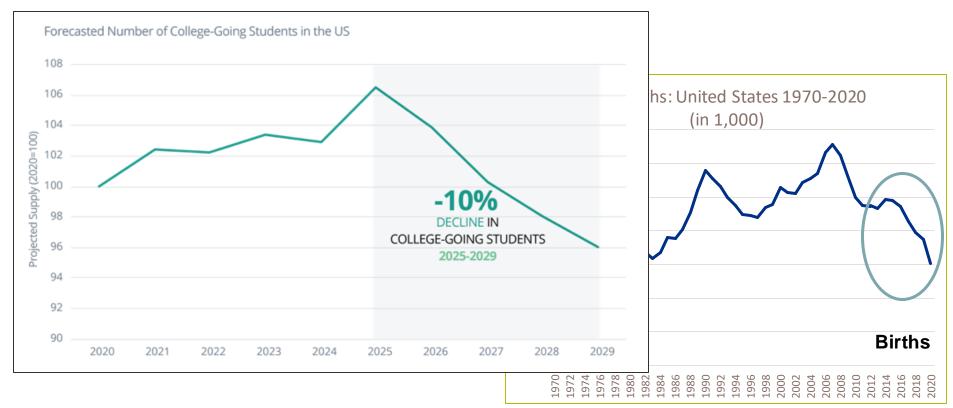




Shrinking Population



The Cliff is Here and Will Continue





The Future of the Student Pipeline is Uncertain

Other complicating factors:

- Pandemic-related issues
- International student uncertainty
- Test-optional implications (mix complication)
- Alternative career and educational paths





The Demographic Cliff: Complexities and Considerations

Complexities and Considerations







Holistic review becomes more important to *ensure the student* population reflects the broader society - races, culture, rural/urban, socioeconomics





Holistic Admissions: Needs and Challenges



Which kitchen do you think produces the best meals?







Why Holistic Admissions?

"Universities that have added non-cognitive variables to their admissions requirements are finding that these variables are associated with improved outcomes."

Individualized holistic review optimally reflects these common characteristics:

- Mission alignment
- Likely ability to succeed and thrive at a given institution
- Ability to enhance the educational experiences of peers
- Unique view of accomplishments and potential contributions of each applicant



Holistic Admissions and the SCOTUS Decision

In the courts: Students for Fair Admission v. Harvard and Students for Fair Admission v. University of North Carolina

The *Harvard* and *UNC* cases challenged the limited consideration of race and ethnicity in higher education admissions, the constitutionality of which has been upheld by the Supreme Court repeatedly for more than forty years.

In the Health Profession: A brief has been submitted to the U.S. Supreme Court in support of the limited consideration of an applicant's racial or ethnic background or experiences in higher education admissions



The Problem of Bias

Faculty experience admissions work as politically, cognitively, and procedurally difficult, because it positions them between impulses, principles, and pragmatism."

JULIE POSSELT, INSIDE GRADUATE ADMISSIONS, P.18



Overall Challenges:
Scalability and
Unbiased Holistic
Admissions



Scalability and bias issues at every step of the funnel



Use benchmarks rather than metrics to ensure people get a review





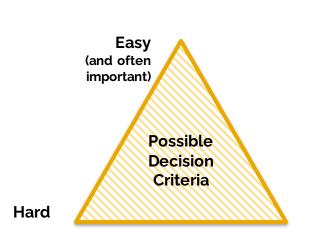


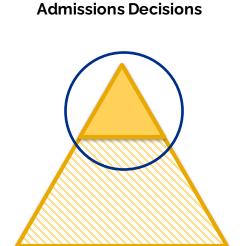
Using Data
Analytics for
Holistic Admissions

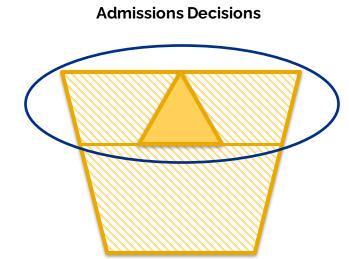


Advanced Analytics Can Make the "Hard" Easier

How We Make



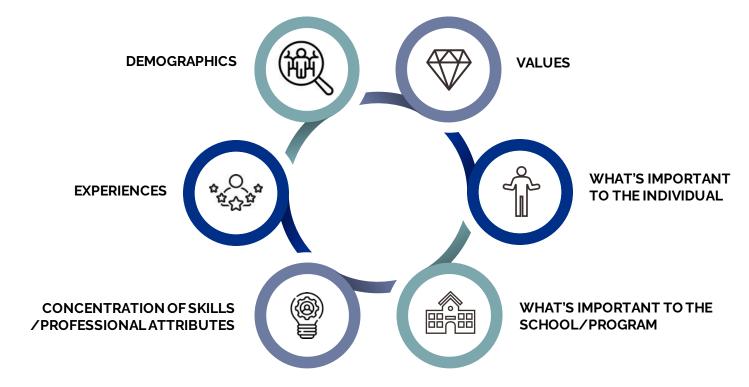




How We Should Make



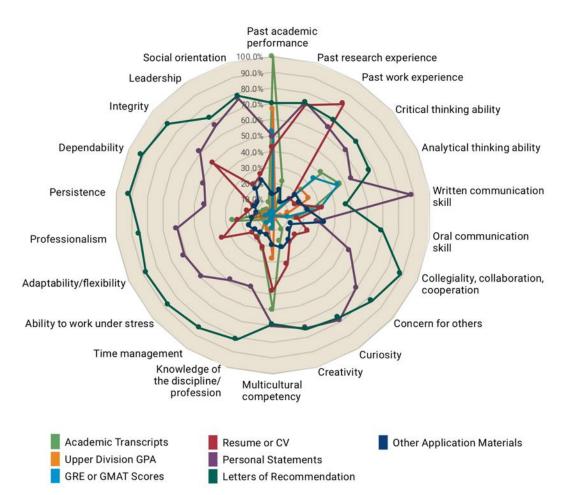
The Important Attributes to Consider



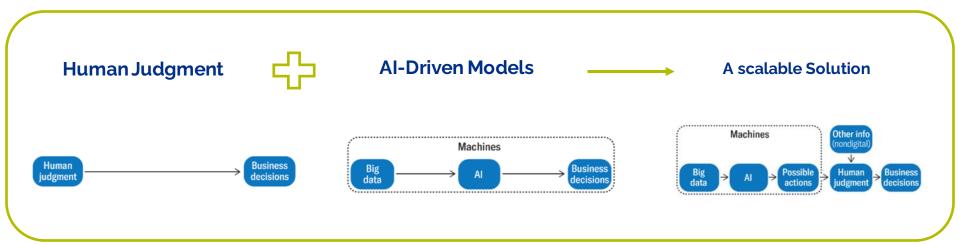


The Multidimensional Way We Would Like to See Each Candidate

Figure 7. Percentage Shares of Master's Programs Indicating the Use of Selected Application Materials to Weigh Applicants' Attributes



We Are Not Going to "Get There" Without Technology







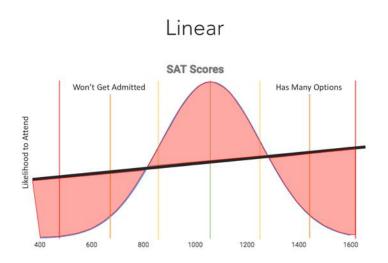
Al Powered Holistic Admissions

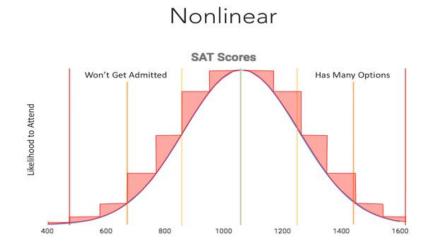
- All helps identify the data factors that historically have been drivers to the decision.
- Knowing this, we can introduce additional data to broaden the selection process and test for bias.





Holistic Admissions Demands Non-Linear Approach

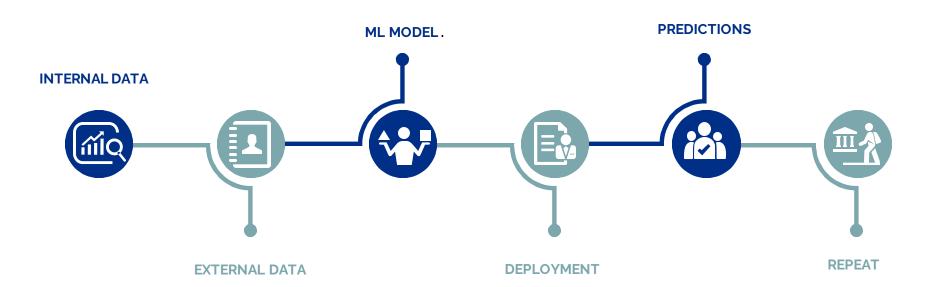




Liaison's Othot AI and Machine Learning: Our algorithms include many variables and more finite perspective on synergies.

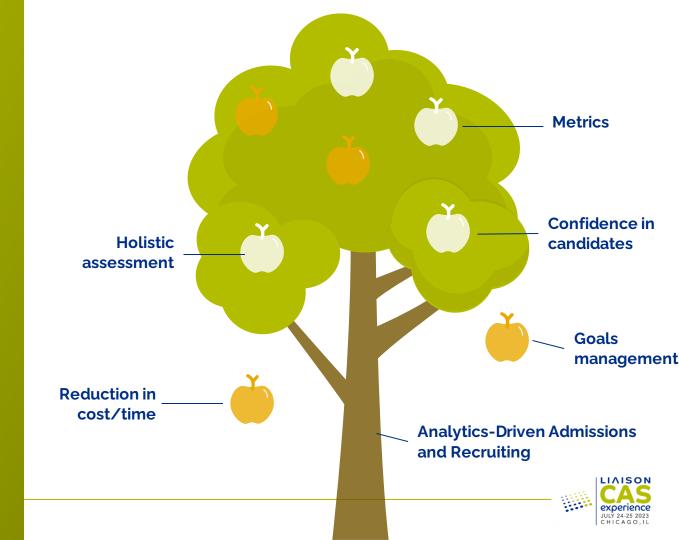


How We Scale





The Fruit of the Analytics-Driven Process

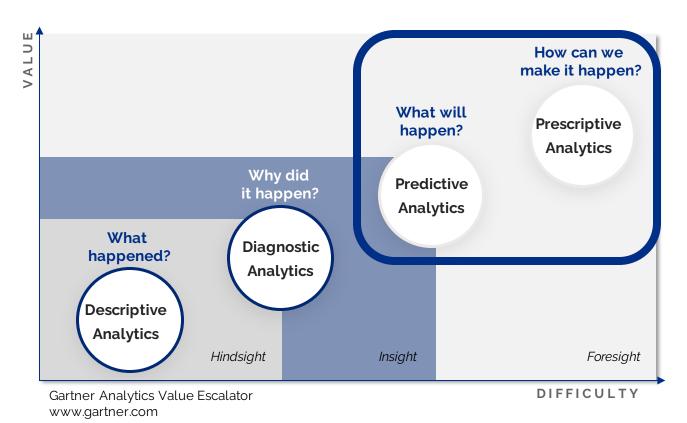




Machine Learning to Optimize Admissions



The Emergence of AI and ML as Decision Drivers





How It Works



LEARN

PREDICT BEHAVIOR





PRESCRIBE

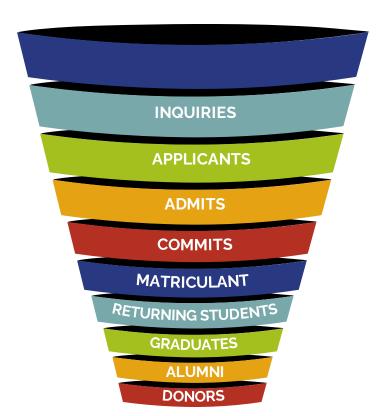






Very Different Tools and Solutions Are Emerging







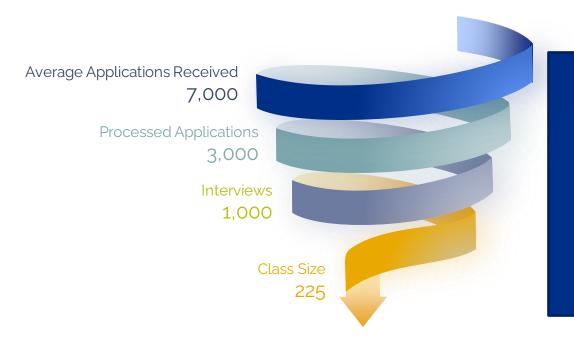






Real-World Implications

Highly Competitive Programs, Like Medical



- Reduce the number of Interviews
- Decrease the burden on staff
- Don't miss a great candidate
 - Holistic review!
- Increase the probability of student success



Strategically Using the Othot ML Platform: Yield as an Example

HIQ:

Likelihood Score Distribution

Number of Students

1,200
1,000
800
400
200
0 % 50 % 100 %
Likelihood of Enrollment

Focus on Individuals:

Geography

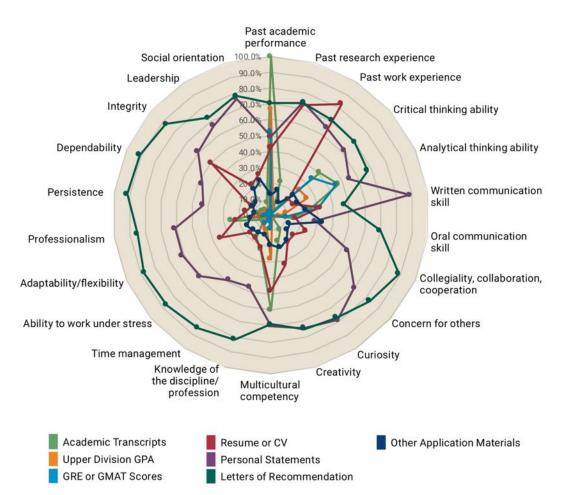
Diversity

Holistic Attributes

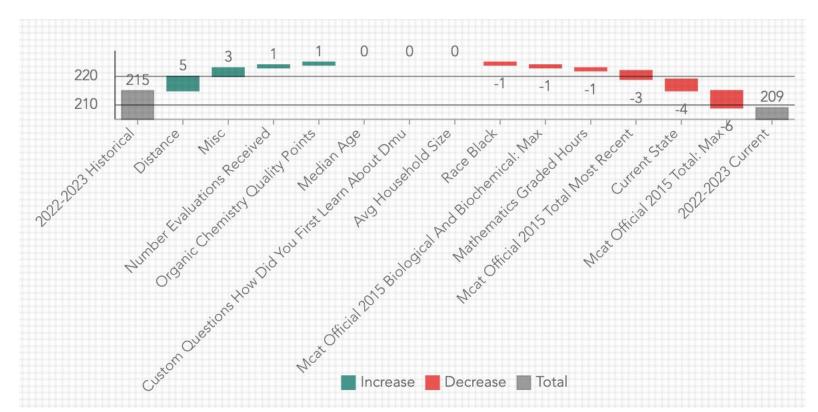


Focus on Individuals

Figure 7. Percentage Shares of Master's Programs Indicating the Use of Selected Application Materials to Weigh Applicants' Attributes

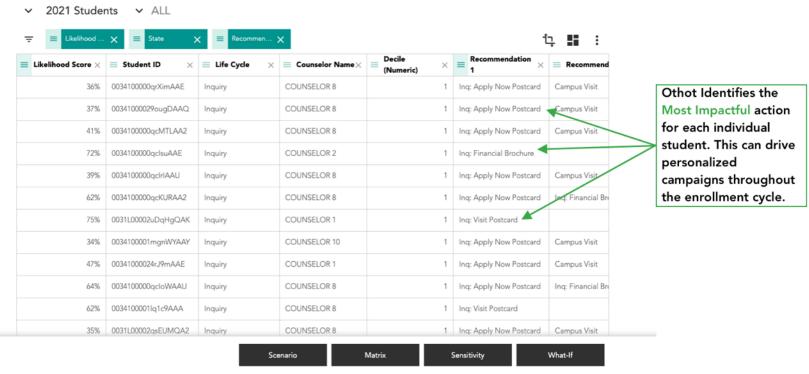


Explainable AI Increases Trust and Usability



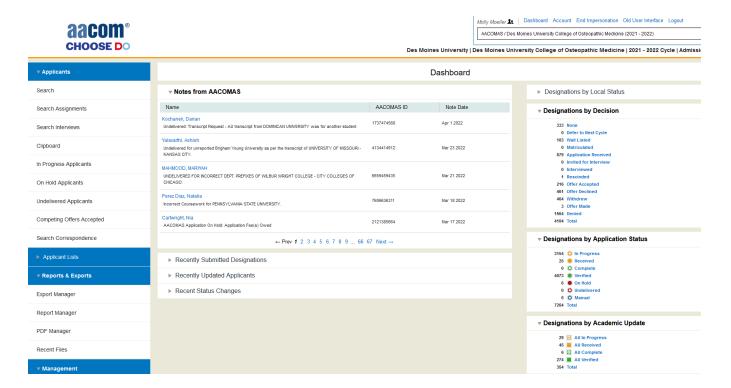


Next Best Actions to Help Achieve Desired Outcomes





Speed-to-Value: Models Directly from CAS Data







Food for Thought

- Holistic admissions is on the critical path to achieving our missions.
- Technology (AI/MI) is a critical tool to scalable holistic admissions and helps reduce bias.
- The fruit of an Othot-driven admissions process includes:
 - reduced review/interview resources.
 - improved likelihood of student and program success.
 - confidence in yielding the students we admit.







Thank You

John Abbatico Chief Product Officer **Liaison**

jabbatico@liaisonedu.com

A data analytics- and insights-driven approach to holistic admissions

