

Creating New Paradigms with Institution-Wide Analytics at UMUC



WCET Annual Meeting - October 2016

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Jack Neill, VP Client Services, HelioCampus



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Agenda

- About UMUC
- Evolution of Analytics at UMUC
- Platform and Process for Institutional Analytics
- Student Success Analytics
- Lessons Learned
- Looking Forward

About UMUC



One of 12 accredited, degree-granting institutions in the University System of Maryland

Pioneer in adult and distance education



Focus on the unique educational and professional development needs of adult students

More than 85,000 students worldwide

85K



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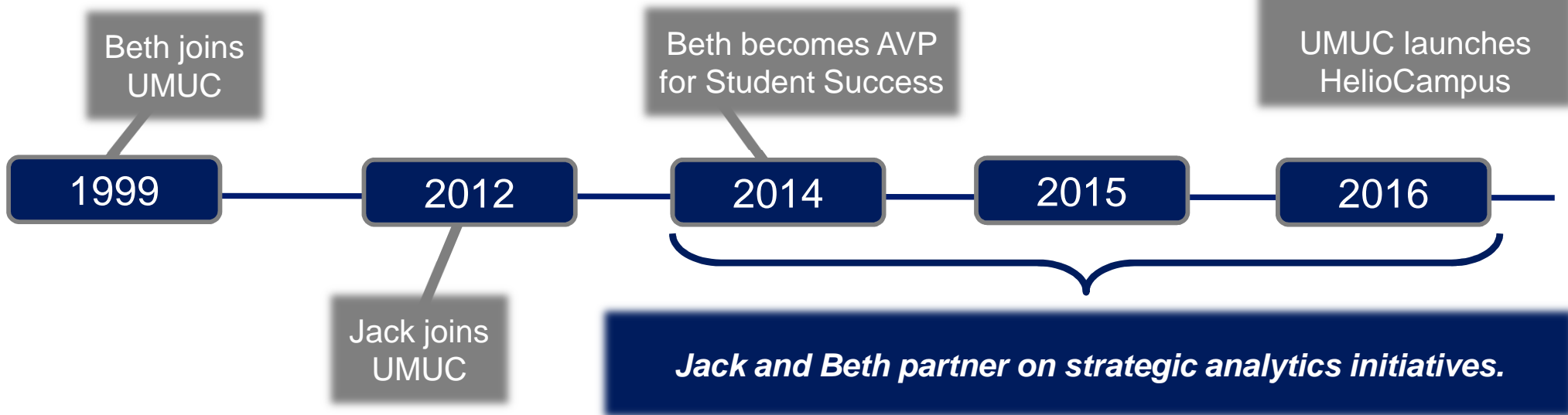
Introductions



Beth Mulherrin
Assistant Vice Provost, UMUC



UMUC launches
HelioCampus



Jack Neill
VP of Client Services at HelioCampus
formerly Sr. Director of Data Analysis, UMUC



Evolution of Analytics at UMUC

Drivers of Change at UMUC

“UMUC in 2012 was facing a ‘perfect storm’ in all of adult higher education—a storm that would only worsen with time.”

- Javier Miyares, President UMUC



**Financial
Pressures**

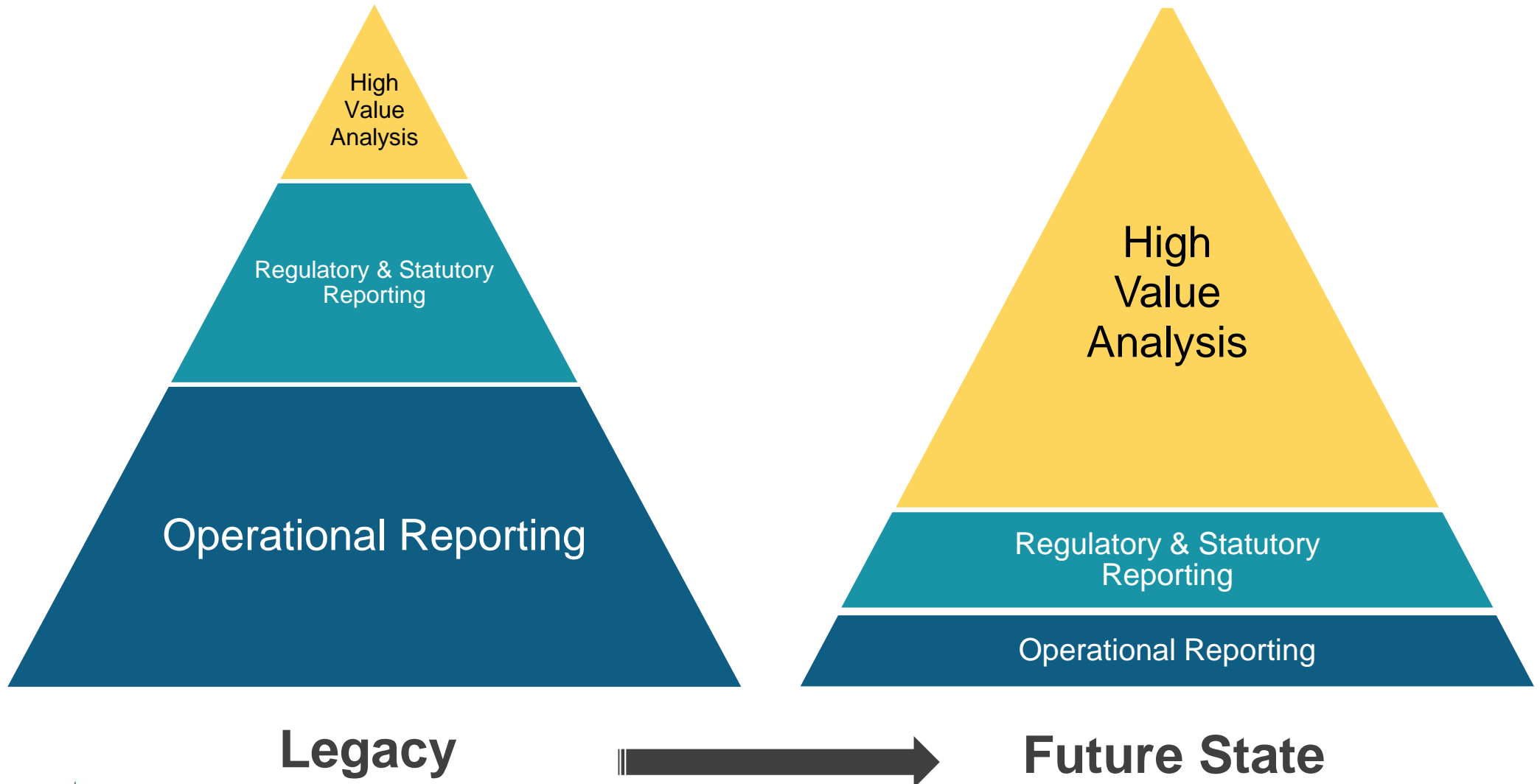


**Increased
Competition**



**Increasing Focus
on Student
Success**

Vision: Getting Value Out of Institutional Data



Evolution of Institution-Wide Analytics

LEGACY



CURRENT & FUTURE STATE

Looking Backwards

*Forward Looking
(Prescriptive)*

Longitudinal Reports

Real-Time Dashboards

Data Silos

Integrated Institutional Insights

External Reporting

Continuous Improvements

Building a Data Driven Culture

Transparency



Changed culture around availability of and visibility into information

(Data Driven) Performance Management



Process in place and data available for continuous improvement

Systematizing Institutional Data

Institutional Analytics

To support operational and financial decision making

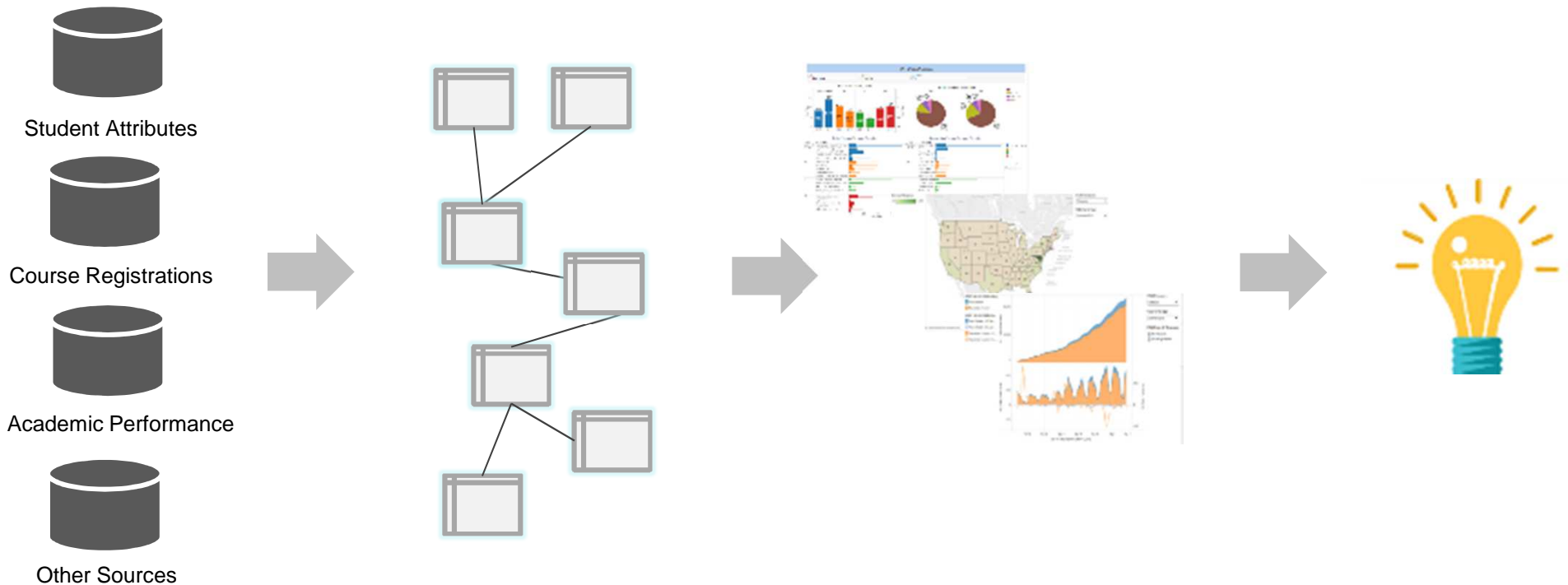
- Management Analytics
- Marketing Analytics
- Academic Program Health
- Enrollment Forecasting
- Prospect and Application Scoring

Learning Analytics

To support the achievement of specific learning goals

- Classroom Engagement Metrics & Alerts
- Retention Analysis
- Student Risk & Persistence Scoring
- Adaptive Learning Technologies
- Faculty Engagement

Data Platform Overview



Connect

Data is replicated from source systems into a central platform

Model

Data is normalized and modeled for analysis

Visualize

Data is presented in a series of intuitive and interactive dashboards

Discover

Trends and opportunities for improvement are identified

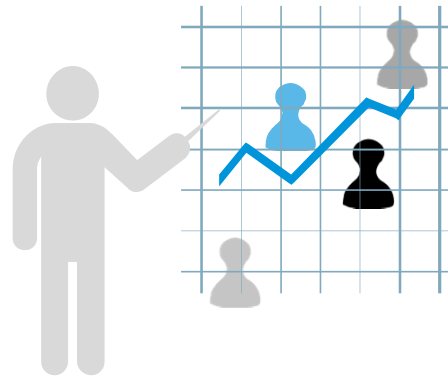
Facilitating Institutional Intelligence

EXPLORE



Explore and mine modeled data

EXPLAIN



Analyze and understand trends and their impact

EXECUTE



Make decisions based on targeted analysis and take action

Results: Efficiency, Outcomes & Decision Support



Institutional Efficiency - By looking at trends and digging deeper into related data, identify opportunities to reduce cost or shift resources.



Student Success - Having a complete picture of your data allows you to highlight and expand on success or focus on areas of improvement for student outcomes.



Decision Support - Use insight from the data platform to inform policy changes and measure the impact going forward.

Applying Analytics to Student Success

Data Challenges for Student Success Initiatives

Anecdotal evidence and *folklore*

Data requests *take too long*

Timely availability of data to assess results

“No Data” is often an excuse for *inaction*

Lack of shared understanding of student success metrics

Knowing *which students need the most help*

Trust/Data integrity issues

Don't know *if your efforts are having the desired effect*

Best Practices for Utilizing Data for Student Success

- 1 Create a **centralized data repository** and workflow for repeatable use
- 2 Follow a **framework** for data analysis
- 3 **Empower staff** to use data at all levels of the organization
- 4 **Evaluate** new and ongoing initiatives

Student Retention Enterprise Framework



Retention Opportunity

Captured from multiple UMUC sources



Problem Analyzed

Diagnosed from existing body of knowledge: internal and external research



Hypotheses Generated

Use known indicators of success and other relevant data



Test and Learn

Levers pulled here

Measure success & ROI



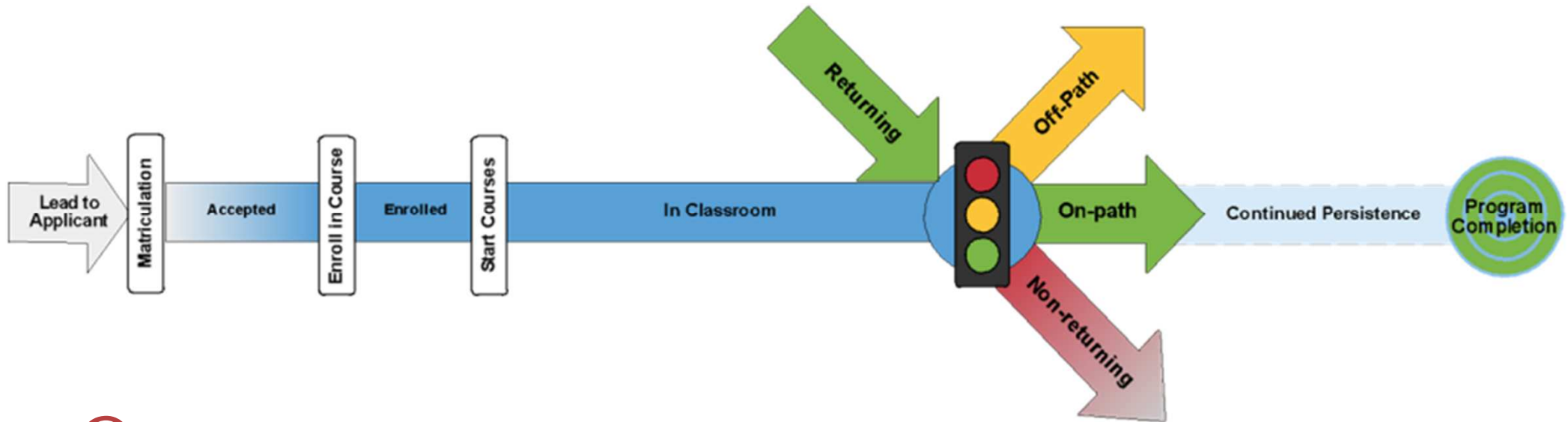
Operationalize or Re-create

Operationalize successful initiatives*

Sunset failures*

**Lessons Learned fed back to body of knowledge*

Retention Framework in Action



Retention Opportunity: Improve student persistence



Problem Analyzed: Predictor of success: student real-time (in classroom) performance



Hypothesis Generated: Right message at right time will drive student success & retention



Test & Learn Cycle: Send advising 'mindset message' to students who are at risk for not persisting

Lessons Learned

Myths	Reality
We know our students	Data sometimes tell a different story
Buy in happens automatically	Cultivation of buy in takes time
Everyone “gets” student success	Content experts may need hand holding
More data is better	Simple = actionable
Business and academic interests are not aligned	Analytics can be a catalyst for finding common ground
No big bang result = failure	Learning takes time

Asking and Answering the Most Pressing Questions

Which degree programs are driving demand, degree production and margin?

How do we optimize our admissions yield rate?

Are we meeting our access and diversity goals?

Do we know what our fully burdened cost per credit hour is?

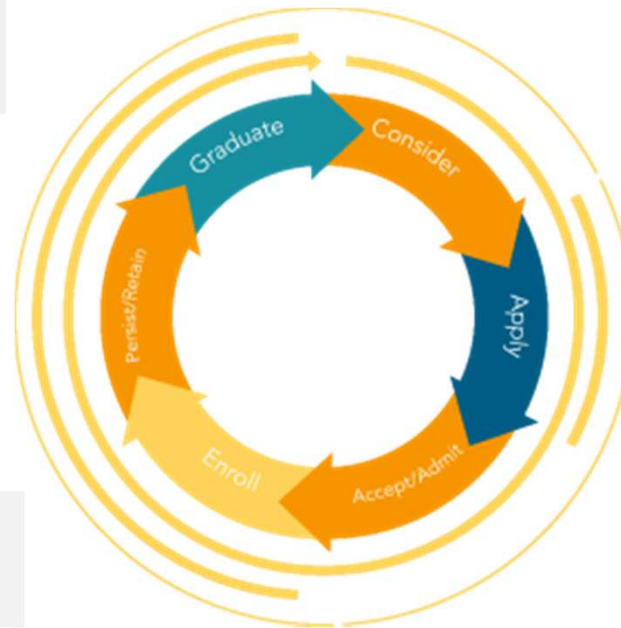
How can we break down students into sub-populations to better serve them?

How do we know the right treatment for the right student at the right time?

Are there obstacle courses that result in much higher non-persistence rates?

Are we discounting tuition for the right students?

What student attributes contribute the most to persistence and retention?



Looking Forward



Questions?

For more information on the HelioCampus & UMUC story, please visit:

<http://www.scoop.it/t/heliocampus-and-umuc>

- Institutional Analytics Is Hard Work: A Five-Year Journey (EDUCAUSE Review, August 2016)
- Making Analytics Accessible, Understandable, and Actionable (EDUCAUSE Review, October 2016)

Thank You

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