The Power of Collaboration: Leveraging a Strong Chief Information Officer & Chief Analytics Officer Partnership to Advance Analytics at an Institution

David Weil
Chief Information Officer
dweil@ithaca.edu

Dr. Yuko Mulugetta
Chief Analytics Officer
ymulugetta@ithaca.edu

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<tr>
<th>Rank</th>
<th>Issue</th>
<th>Details</th>
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<tr>
<td>1</td>
<td><strong>Information security</strong>: Developing a risk-based security strategy that keeps pace with security threats and challenges</td>
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<td>2</td>
<td><strong>Student success</strong>: Managing the system implementations and integrations that support multiple student success initiatives</td>
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<td>3</td>
<td><strong>Institution-wide IT strategy</strong>: Repositioning or reinforcing the role of IT leadership as an integral strategic partner of institutional leadership in achieving institutional missions</td>
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<td>4</td>
<td><strong>Data-enabled institutional culture</strong>: Using BI and analytics to inform the broad conversation and answer big questions</td>
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<td>5</td>
<td><strong>Student-centered institution</strong>: Understanding and advancing technology's role in defining the student experience on campus (from applicants to alumni)</td>
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<td>6</td>
<td><strong>Higher education affordability</strong>: Balancing and rightsizing IT priorities and budget to support IT-enabled institutional efficiencies and innovations in the context of institutional funding realities</td>
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<td>7</td>
<td><strong>IT staffing and organizational models</strong>: Ensuring adequate staffing capacity and staff retention in the face of retirements, new sourcing models, growing external competition, rising salaries, and the demands of technology initiatives on both IT and non-IT staff</td>
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<td>8</td>
<td>(tie) <strong>Data management and governance</strong>: Implementing effective institutional data governance practices</td>
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<td>8</td>
<td>(tie) <strong>Digital integrations</strong>: Ensuring system interoperability, scalability, and extensibility, as well as data integrity, standards, and governance, across multiple applications and platforms</td>
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<td>10</td>
<td><strong>Change leadership</strong>: Helping institutional constituents (including the IT staff) adapt to the increasing pace of technology change</td>
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CIO + CAO: Perspectives that each bring to the partnership
Chief Analytics Officer

- Data Science
- Importance of good data
- The questions that the institution is trying to answer
- Understanding the broader context for the challenges that the institution is facing
- The institution’s strategic direction
Chief Information Officer

- Technology
- How things fit together, flow of data
- The institution’s direction of technology and applications
- Higher Education IT trends and directions
- The institution’s strategic direction
- Sits at “crossroads” of the institution
CIO + CAO: Parallel Visions and Transformation Efforts
“The Shift”

**Former IR**
- Data Provider
- Data Focus
- Sr. Administrator Questions Focus
- Tactical Focus
- Historical Focus
- Few Strategic Discussion Opportunities

**New AIR**
- Strategic Partner
- Information Focus
- Student Success Questions Focus
- Strategic Focus
- Predictive Analytics
- More Strategic Discussion Opportunities

**Former IT**
- Service Provider
- Tactical Focus
- One-Size/Speed Fits All
- Technically Focus
- Reactive
- On-Site

**New IT**
- Service Broker
- Strategic Focus
- Bi-Modal
- Service Focus
- Proactive (Partnership)
- Cloud
The House of AIR

Culture of Data-Informed Decision Making for Student Success

- Student Success and Institutional Effectiveness
  - Effective Enrollment and Retention Management

- Enterprise Data Warehouse & Analytics
- Data Governance
Organizational Structures
Office of Analytics and Institutional Research Organizational Structure

- VP of Enrollment Management
  - Exec. Assistant to VP & CAO
  - Chief Analytics Officer
    - Assoc. Director
      - IR Focus
    - Statistical Modeler
    - Info Sys & Analytics Mgr.
    - Assoc. Director
      - Enrollment Planning Focus
  - Director of Admission
  - Director of SFS
  - Exec. Director of Career Services
  - Sr. Research Analyst
    - Survey, Alum, Data Gov
  - Research Associate
    - Survey, Data Culture
  - Sr. Research Analyst
    - Retention Focus
### Services and Functions

<table>
<thead>
<tr>
<th>Teaching &amp; Learning with Technology</th>
<th>Engagement &amp; Client Technologies</th>
<th>Applications &amp; Infrastructure</th>
<th>Information Security</th>
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<tr>
<td>Services and functions directly related to supporting faculty teaching, research, and students learning with technology</td>
<td>Services and functions related to client technologies, productivity tools and efficiencies, and interaction with our clients</td>
<td>Services and functions focused on the College’s core applications, technology and infrastructure</td>
<td>Services and functions related to protecting college information and systems from unauthorized activity</td>
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### Applications & Infrastructure
- Platform Services
- Client Support
- Client Technologies
- Project Management
- Network & Unified Communication
- BI Services

### Security Services
- Applications
- Platform Services
- Network & Unified Communication
- BI Services

### Teaching Support Services
- Teaching Support Services
- Student Engagement

### Client Support
- Client Support
- Client Technologies
- Project Management

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**65 Staff**
CIO + CAO: Working together to foster a data-informed culture
Data Management

- Created a college-wide Data Governance system
  - Led by the Office of Analytics and Institutional Research (AIR)
  - Significant involvement from IT
- Leverage Data Cookbook
- Integration of data across solutions
- Data Inventory and Security Audit
Technical Architecture and Strategy for Analytics and Data flow

- Partnered to explore options for creating an enterprise data warehouse (EDW)
- Jointly focused on cloud-based solutions strategy
- Developed Analytics Solutions including:
  - OBIEE, Tableau, R, Python, SageMaker and other analytics solutions in AWS
Technical Architecture and Strategy for Analytics and Data flow

- Collaborated to build EDW with HelioCampus in AWS
- Joint staff training and education initiatives
- Frequent joint IT BI-AIR meetings
Partnership sets the groundwork for successful key institutional initiatives

- Student Success including Yield, Retention, Graduation, and Alumni activities
- CRM
- ERP upgrades and replacement
- Security
- ...and many others
Lessons Learned
We are in it together – we need each other to succeed.

- Look out for each other
- Communication
- Joint resource planning
  - Staff resources
  - Funding Strategies

#Enterprise18
We Bring different perspectives

- We are involved in different conversations across the campus
- Complement each other
- Different networks (on-campus and off)
- Different professional organizations
Questions?

David Weil
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