Four Cornerstones to Transforming an IT Organization to meet the challenges of today and tomorrow
About this session

Abstract
Today's IT organization must be able to respond to current and future challenges facing IT and higher education. Learn how one institution transformed their IT operation by focusing on the four cornerstones of people, governance, strategy, and services, and created an innovative new organization and strategic plan in the process.

Desired Outcomes
• Understand a strategy for transforming an IT organization
• Think of different ways to structure IT
• Upon completion, participants will be knowledgeable of a framework for developing an IT Strategic Plan
June 2013
VP for Finance & Administration Retires after 30+ years as VP; New VP starts

August 2014
New CIO / AVP for Information Technology Services Starts

October 2015
ITS becomes Digital Instruction and Information Services; department reorganization

May 2016
2 New Directors start; full senior team in place for 1st time in 3 years

August 2015
IT Strategic Plan Approved

November 2014
“Transforming IT @ IC” planning effort starts
Assessing the IT organization

- 3 CIO's visit and assessment
- Search Consultant
- Campus Listening Tour
- Benchmark/Assessment – EDUCAUSE and reaching out to peers
- TechQual+ Survey
- IT Consultant visit
- Internal SWOT
Some of the findings

Need to bring new life to an old IT organization

- Lack of trust across community and from institution leadership
- Outdated Technology
- Lack of strategic plan
- History of customization
- No governance
- Lack of addressing staff performance issues
- Silos in IT organization
- Not responsive to campus needs
- Lack of focus on staff development
- ~20% of positions vacant
- Lack of IT operational efficiencies
- IT Staff Turnover
Defining the Four Cornerstones

- ORGANIZATION & PEOPLE
- STRATEGIC PLAN
- IT & PROJECT GOVERNANCE
- SERVICE CATALOG
## Deliberate Shift in Approach and Philosophy

<table>
<thead>
<tr>
<th>Old</th>
<th>New</th>
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</thead>
<tbody>
<tr>
<td>Service Provider</td>
<td>Service Broker</td>
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<tr>
<td>Tactical Focus</td>
<td>Strategic Focus</td>
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<tr>
<td>One-Size/Speed Fits All</td>
<td>Bi-Modal</td>
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<tr>
<td>Technically Focused</td>
<td>Service Focused</td>
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<tr>
<td>Reactive</td>
<td>Proactive (Partnership)</td>
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<tr>
<td>On-site</td>
<td>Cloud</td>
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Teaching and Learning with Technology

Technology services that support teaching, learning, and research

Engagement and Implementation

Our front door with the campus. Application implementation. Business Process Improvements

Architecture and Infrastructure

Operation of our on premise and cloud technology infrastructure.

Information Security

College-wide information security program

Staff Member ➔ Assoc. Director ➔ Director ➔ AVP
Marishya Weiss
Assistant to the AVP/CIO

Keith "Mac" McIntosh
AVP / CIO
Digital Instruction and Information Services

Assistant to the AVP/CIO
Marishya Weiss

Director of Teaching & Learning with Technology
VACANT*

Director of Engagement & Implementation
Dave Weil

Director of Architecture & Infrastructure
VACANT*

Director & ISO Information Security
Jason Youngers

*Vacant at time of restructuring
Looking at both IT Governance and IT Project Portfolio Management

• Goals:
  • Better alignment of IT resources and efforts with college priorities and needs
  • More transparency about decisions, processes and issues
  • Improved processes for managing IT projects and resources
  • Better alignment of IT project review and approval with college budgeting process
Previous Situation - Islands

- A few specific area steering committees
- Some Coordination Committees
- Other groups
3-Tier Governance Structure

1. **Institution-Wide Strategy**
   and Decision Making

2. **Specific Areas of Focus**
   Strategy and Planning

3. **Operational Coordination**
   Across Departments
Process to develop StratPlan

• Journey began prior to my arrival
• Shaped and informed by external and internal factors
• Inclusive and comprehensive process
• Create and implement a strategy which provides the framework for the college to transform
• Develop a roadmap for employing technology resources focused on institutional priorities
• Improve services and support
• Focus on campus communication and outreach
4 Themes, 17 Goals, 65 Objectives

Over 5 years

We will deliver innovative and effective technologies, resources and services to enhance teaching and learning. **3 Goals with a total of 15 Objectives.**

We will develop a premier contemporary organization, operations and infrastructure, to provide outstanding information technology, analytics and digital services to support and enable IC to fulfill its vision. **9 Goals with a total of 33 Objectives.**

We will provide technologies and services to enhance communication, partnerships and interactions between members of the campus community, and strengthen the connections between a student's curricular, co-curricular, and residential experiences. **2 Goals with a total of 6 Objectives.**

We will leverage analytics, technology, and process innovations to advance the development of institutional strategy, improve business processes, increase operational effectiveness, reduce costs and to support continuous quality improvement. **3 Goals with a total of 11 Objectives.**
### Theme 1: Organization, Infrastructure, and Services
We will develop a premier contemporary organization, operations and infrastructure, to provide outstanding information technology, analytics and digital services to support and enable IC to fulfill its vision.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Objectives</th>
<th>Year</th>
<th>Run, Grow, Transform</th>
<th>Yield, Engagement, Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create a re-envisioned contemporary information technology, analytics and digital services organization.</td>
<td>Develop an organizational structure that focuses on core infrastructure services, customer support, teaching and learning, professional services, analytics, institutional reporting, and security.</td>
<td>X</td>
<td>X</td>
<td>G</td>
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<tr>
<td></td>
<td>Build an organization that focuses on brokering services that are core to supporting the college's mission; seek to leverage outsourced solutions and providers for non-core services.</td>
<td>X</td>
<td>X</td>
<td>G</td>
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<tr>
<td></td>
<td>Assess the pros and cons of an additional organizational change to address distributed IT support to the academic and administrative departments.</td>
<td>X</td>
<td></td>
<td>T</td>
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<tr>
<td>2. Develop an information technology governance model which will ensure that the work of the organization is aligned with the College’s goals and strategies.</td>
<td>Establish formal IT governance processes to guide IT strategic planning and decision making.</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Create project portfolio management processes and project lifecycle practices.</td>
<td>X</td>
<td></td>
<td>G</td>
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</tbody>
</table>

#### Year:
The Academic Year(s) we expect to be working on this objective.

#### Connection to IC’s Vision and Über Goals:
an indication if it impacts the three outcome measures: Yield, Engagement, and Gap, as defined in the college’s Vision and Über Goals.
<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
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<tbody>
<tr>
<td><strong>System Monitoring</strong></td>
<td><strong>IT Lifecycle</strong></td>
<td><strong>...</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>Reduce Customization &amp; Redundancy</strong></td>
<td><strong>Strengthen Application...</strong></td>
<td><strong>...</strong></td>
<td><strong>...</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>New Organization</strong></td>
<td><strong>Broker Services</strong></td>
<td><strong>Project Portfolio Governance</strong></td>
<td><strong>Service Catalog</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>Improve Campus Communication</strong></td>
<td><strong>Leverage Open Solutions</strong></td>
<td><strong>...</strong></td>
<td><strong>...</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>Improve Middleware Services</strong></td>
<td><strong>Automate IT Processes</strong></td>
<td><strong>Expand Outdoor WiFi</strong></td>
<td><strong>Any Device Anywhere Access</strong></td>
<td><strong>IT on Remote Campuses</strong></td>
</tr>
<tr>
<td><strong>Consider Other ORG Changes</strong></td>
<td><strong>LMS Governance</strong></td>
<td><strong>Evaluate Consolidating ERPs</strong></td>
<td><strong>IC Website Reengineering</strong></td>
<td><strong>SIS...</strong></td>
</tr>
<tr>
<td><strong>Expand Educational Support</strong></td>
<td><strong>Build BI Infrastruc...</strong></td>
<td><strong>Develop BC/DR Plan</strong></td>
<td><strong>Remote Access to Systems...</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>Lifetime Student Connection</strong></td>
<td><strong>Enhance...</strong></td>
<td><strong>Develop Tech Roadmap</strong></td>
<td><strong>Develop Secure Computing...</strong></td>
<td><strong>...</strong></td>
</tr>
<tr>
<td><strong>Enhanced...</strong></td>
<td><strong>Data Driven Financial Planning</strong></td>
<td><strong>Develop CRM</strong></td>
<td><strong>Implement Two-Factor Authentication</strong></td>
<td><strong>...</strong></td>
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<tr>
<td><strong>Leverage Data...</strong></td>
<td><strong>Use data to...</strong></td>
<td><strong>Evaluate Consolidating ERPs</strong></td>
<td><strong>Provide Unified Instructional Technology Services</strong></td>
<td><strong>...</strong></td>
</tr>
<tr>
<td><strong>Offer Business...</strong></td>
<td><strong>Leverage Data Financial Planning</strong></td>
<td><strong>Support Emerging Teaching &amp; Learning Approaches</strong></td>
<td><strong>Pilot Support for Experiential...</strong></td>
<td><strong>...</strong></td>
</tr>
<tr>
<td><strong>Leverage Open Source...</strong></td>
<td><strong>Learn...</strong></td>
<td><strong>Establish BI strategic Plan</strong></td>
<td><strong>Establish Analytics...</strong></td>
<td><strong>...</strong></td>
</tr>
<tr>
<td><strong>Run</strong></td>
<td><strong>Grow</strong></td>
<td><strong>Transform</strong></td>
<td><strong>n/a</strong></td>
<td><strong>n/a</strong></td>
</tr>
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Service Catalog

• Over the years we continually added services without assessing or eliminating old services
• People both inside and outside of the IT organization did not know what services we provided.
• The idea was to use the list of services to help inform the new organization design
• Researched what other schools were doing
EDUCAUSE ECAR Report: 
The Higher Education IT Services Catalog

The Higher Education IT Service Catalog
A Working Model for Comparison and Collaboration
ECAR Working Group Paper | April 10, 2015

ECAR working groups are where EDUCAUSE members come together to create solutions to today’s problems and provide insight into higher education IT’s tomorrow. Individual EDUCAUSE member institutions are invited to collaborate on projects that address core technology challenges and advance emerging technologies of importance to colleges and universities. More information can be found at the ECAR working groups website.

Introduction

Although every college and university is unique, higher education technology service organizations have many goals, challenges, and opportunities in common. One of these challenges is how best to represent the services we provide, in a format that is intelligible to, and resonates with, our community while also serving as an effective structure for service operations and improvement. The IT service catalog is in many ways the front door of IT and provides the foundation for our IT service management capabilities. It is important to note the more general term “service catalog” is widely used, partly because it offers a useful framework for publishing all manner of service information, including human resources, benefits, finance, facilities, and other service areas. This paper is about the IT service catalog, and wherever this paper mentions a service catalog, it should be understood to mean an IT service catalog; where it has a wider meaning, this will be made explicit.

The implementation of a service catalog is an important step in transforming from a technology-oriented organization into a service-oriented organization and enables the organizational focus to shift from technology components to services that facilitate university outcomes. It is a vehicle used to communicate and provide clarity to constituents about the IT services available to them, to help improve customer relations by sharing information and setting expectations, and to improve service portfolio planning so IT investments and activities better align with university needs. To date, however, there has not been a standard model across higher education. The number of institutions offering a service catalog has grown, but for institutions just starting work in this area, developing a catalog can be a lengthy and difficult process.

The model service catalog presented in this paper identifies IT services and associated taxonomies common across many higher education institutions and incorporates components successfully used in existing service catalogs. Use of this model by a higher education institution may help jump-start a service catalog initiative and enable its rapid adoption.

http://www.educause.edu/ecar/ecar-working-groups/it-services-and-management
Services Catalog

- Followed a formal process to identify and catalog all of the services that we provided
- Cataloged into the following categories
  - External Services - Services we provide for the campus
  - Foundational Services – Internal services, often needed to support the external services
  - Processes – enable the above
  - Resources – needed for the above
- Sorted them by theme
- Looked for services to eliminate, rethink
Created a big spreadsheet that became the basis for further work and analysis.

**Pink** - IT Service we provide. Directly consumed by end-user and something they ask for and recognize.

**Yellow** - IT Provider Service - A technical service or component that enables an IT Service.

**Blue** - Process
Lessons learned
<table>
<thead>
<tr>
<th>Organization and People</th>
<th>IT &amp; Project Governance</th>
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<tbody>
<tr>
<td>• Hard to transform with 50% vacancies at the senior team level</td>
<td>• This is a culture change, takes time to get buy-in.</td>
</tr>
<tr>
<td>• More emphasis on change management and culture</td>
<td>• Ensuring you have the necessary buy-in before you execute, especially at the leadership level</td>
</tr>
<tr>
<td>• Ensure you have the right talent in the right positions</td>
<td>• Takes time to engage with college governance groups</td>
</tr>
<tr>
<td>• Phase organizational changes</td>
<td>• Structure meetings so that they are at the appropriate level for the people in the room</td>
</tr>
<tr>
<td>• Don’t prematurely eliminate positions before new processes and efficiencies are in place</td>
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<table>
<thead>
<tr>
<th>Service Catalog</th>
<th>Strategic Plan</th>
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<tbody>
<tr>
<td>• Needs an owner</td>
<td>• It can be done in a compressed timeframe</td>
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<tr>
<td>• We underestimated the amount of effort this would take</td>
<td>• Helped to unify the department</td>
</tr>
<tr>
<td>• Hard to define the “level” for defining a service</td>
<td>• Ensure that SME’s are included in issues related to their work</td>
</tr>
<tr>
<td></td>
<td>• Developing the plan is only the first step, need to shift effort to developing Implementation Plan and executing</td>
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</table>
What would we do different?

• Include front-line staff more in discussions about designing new organization and updated job descriptions
• Expressly delay some of the changes until new leaders are in place
• Hire outside consultant to lead / coordinate strategic planning effort

What worked well

• Compressed timeframe
• Defining the transformation as having different components: Organization & People, Governance, Strategic Plan, Services
A year later...

• StratPlan is guiding our work, budgeting and planning efforts.

• The senior team believes in the core elements of “the shift” in philosophy and approach, and it is successfully guiding our leadership and thought processes.

• The organization is still not settled, still needs a bit more refinement
  • More work is needed to review and revise job descriptions to match industry norms and standards

• Service Catalog work stalled due to other focuses

• IT Governance is s-l-o-w-l-y starting up, but there seems to be interest and support
TRANSFORMING IT

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